

STATE FOOD STAMP PARTICIPATION RATES IN 2004



FOOD AND NUTRITION SERVICE



and live in households in which someone earns income from a job—by easing the transition from dependence on public assistance to self-sufficiency. Of the 25 million people who received food stamps in an average month in 2005, almost 10 million—40 percent—lived in households that had income from earnings, up from 30 percent of all food stamp recipients in 1996, the year in 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 (Barrett and Poikolainen 2006), rates for all eligible people for States (Castner and Schirm 2005), and rates for the working poor for States (Castner and Schirm 2006b). This document presents estimates of food stamp participation rates for all eligible people and for the working poor for States for fiscal year 2004. These estimates can be used to assess recent program performance and focus efforts to improve performance.



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 2006, the program served 26 million people in an average month at a total annual cost of over \$29 billion in benefits, excluding disaster assistance provided in October and November 2005 as a result of hurricanes.

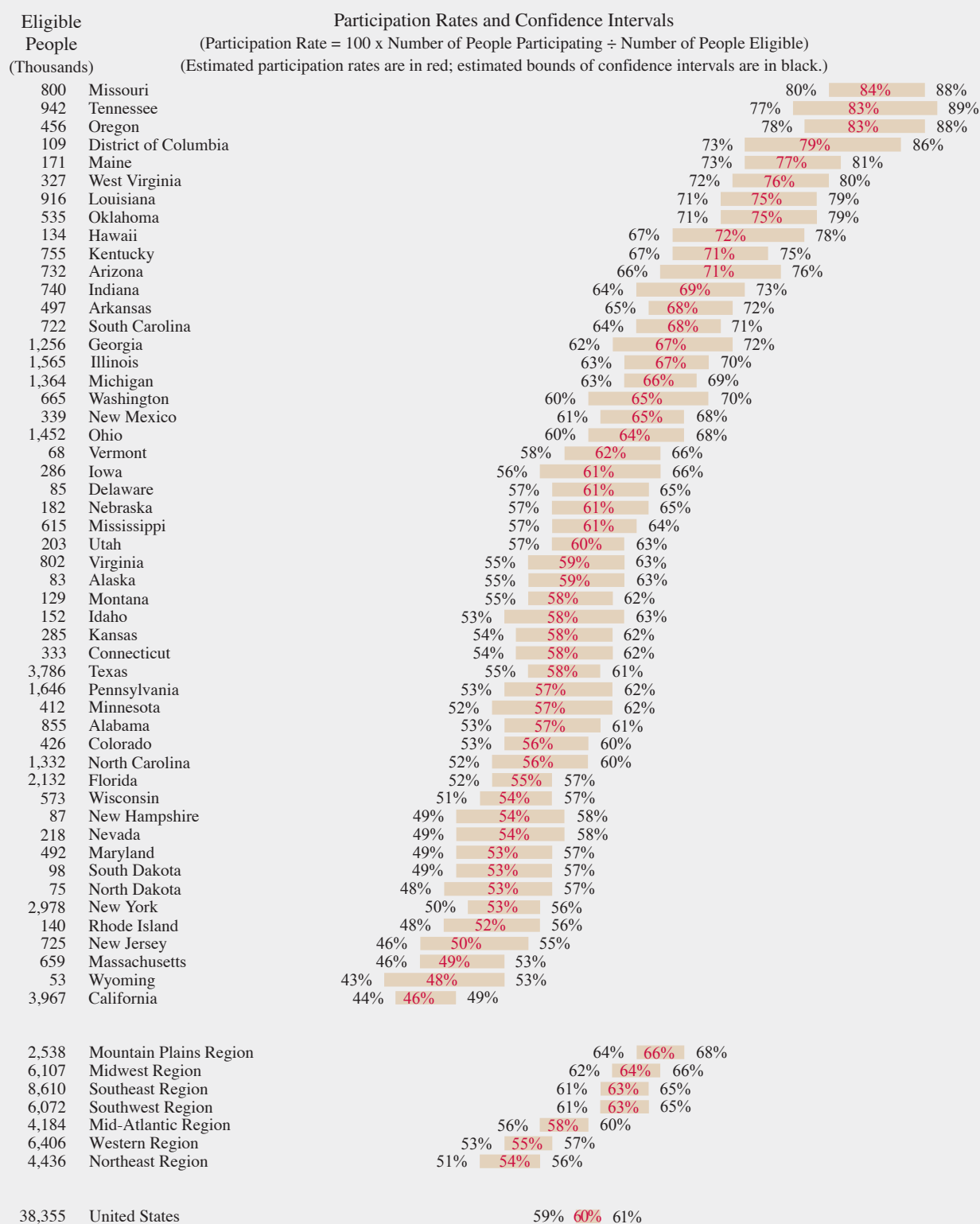
The Government Performance and Results Act of 1993 calls for policymakers to assess the effects of programs, and one important measure of a program's performance is its ability to reach its target population. The national food stamp participation rate—the percentage of eligible people in the United States who actually participate in the program—has been a standard for assessing performance for about 25 years. The U. S. Department of Agriculture's budget request for fiscal year 2007 includes a performance target to reach 68 percent of the eligible population by 2010.

The Food Stamp Program provides an important support for the "working poor"—people who are eligible for the Food Stamp Program

Participation Rates in 2004

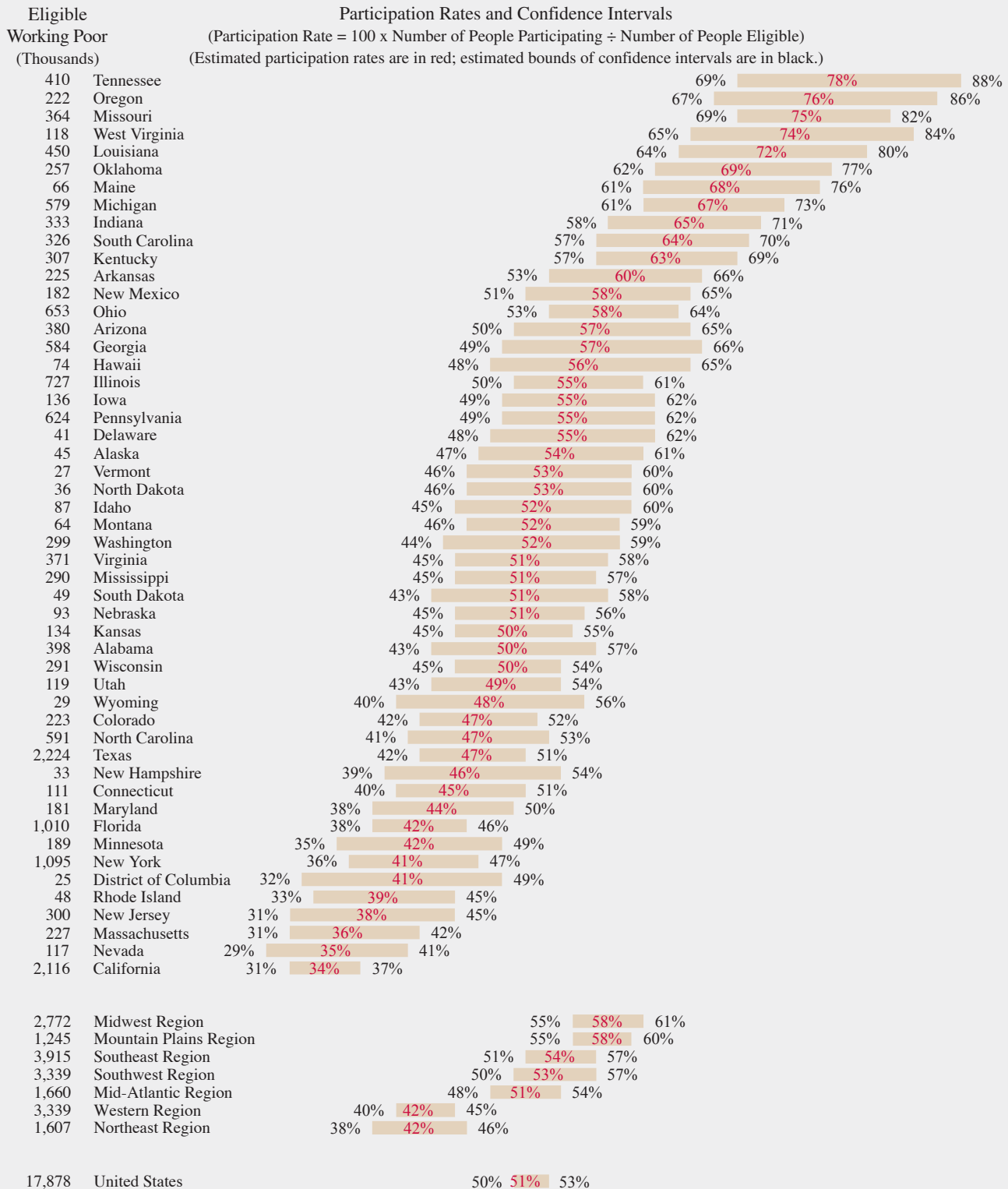
About 60 percent of eligible people in the United States received food stamp benefits in fiscal year 2004. Participation rates varied widely from State to State, however. Twenty States had rates that were significantly higher (in a statistical sense) than the national rate, and 17 States had rates that were significantly lower. Among the regions, the Mountain Plains Region had the highest participation rate. Its

How Many Were Eligible in 2004? 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 Alaska's participation rate was 59 percent in 2004, the true rate may have been higher or lower. However, the chances are 90 in 100 that the true rate was between 55 and 63 percent.

How Many Working Poor Were Eligible in 2004? 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 Alabama's working poor participation rate was 50 percent in 2004, the true rate may have been higher or lower. However, the chances are 90 in 100 that the true rate was between 43 and 57 percent.

66-percent rate was significantly higher than the rates for all of the other regions. The Northeast and Western Regions' participation rates, at 54 percent and 55 percent, were significantly lower than the rates for all of the other regions. (See the last page for a map showing regional boundaries.)

In 2004, 51 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. Fifteen States had rates for the working poor that were significantly higher than the national rate, and 13 States had rates that were significantly lower.

While 60 percent of all eligible people in the United States participated in 2004, only 51 percent of the eligible working poor participated, a significant difference of 9 percentage points. In 36 States, the participation rate for the working poor in 2004 was—like the national rate for the working poor—significantly lower than the rate for all eligible people; in 10 of these States, the rate for the working poor was more than 9 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 2004 show whether a State's partici-

pation rate for all eligible people was probably at the top, at the bottom, or in the middle of the distribution. Missouri, Tennessee, Oregon, and the District of Columbia were very likely at the top, with higher rates for all eligible people than most States. In contrast, Massachusetts, California, and Wyoming likely had lower rates 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 2004. Tennessee, Oregon, and Missouri were very likely ranked at the top, with higher rates for the working poor than most States. In contrast, California, Nevada, and Massachusetts 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 2002 to 2004, Missouri, Tennessee, Oregon, Maine, West Virginia, Louisiana, Hawaii, and Kentucky had significantly higher participation rates for all eligible people than two-thirds of the States, while the District of Columbia, Oklahoma, Indiana, Arkansas, Illinois, and Michigan had significantly higher rates than half of the

States. Colorado, North Carolina, Florida, New Hampshire, Nevada, Maryland, South Dakota, North Dakota, New York, and California had significantly lower rates than half of the States in all 3 years, while New Jersey, Massachusetts, 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. Five States (North Dakota, Wyoming, Pennsylvania, Michigan, and Wisconsin) 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 3 States (Washington, Hawaii, and Minnesota) and the District of Columbia are ranked significantly lower.

Estimation Method

The estimates presented here were derived using shrinkage estimation methods (Castner and Schirm 2006a, and Cunyningham, 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 households in the Current Population Survey to estimate numbers of

Participation Rates

	All Eligible People			Working Poor		
	2002	2003	2004	2002	2003	2004
Alabama	55%	55%	57%	50%	49%	50%
Alaska	59%	62%	59%	54%	64%	54%
Arizona	58%	66%	71%	48%	48%	57%
Arkansas	59%	61%	68%	53%	58%	60%
California	47%	45%	46%	33%	34%	34%
Colorado	46%	49%	56%	37%	38%	47%
Connecticut	56%	53%	58%	41%	45%	45%
Delaware	49%	53%	61%	42%	47%	55%
District of Columbia	63%	68%	79%	37%	40%	41%
Florida	48%	48%	55%	41%	39%	42%
Georgia	59%	64%	67%	48%	50%	57%
Hawaii	77%	70%	72%	62%	54%	56%
Idaho	49%	53%	58%	42%	46%	52%
Illinois	59%	61%	67%	51%	52%	55%
Indiana	66%	65%	69%	60%	62%	65%
Iowa	54%	57%	61%	44%	45%	55%
Kansas	51%	54%	58%	44%	50%	50%
Kentucky	64%	68%	71%	59%	62%	63%
Louisiana	66%	70%	75%	69%	68%	72%
Maine	66%	75%	77%	59%	65%	68%
Maryland	48%	49%	53%	38%	40%	44%
Massachusetts	38%	42%	49%	23%	29%	36%
Michigan	60%	63%	66%	62%	66%	67%
Minnesota	58%	60%	57%	39%	43%	42%
Mississippi	57%	60%	61%	51%	48%	51%
Missouri	70%	77%	84%	64%	69%	75%
Montana	48%	49%	58%	45%	44%	52%
Nebraska	56%	55%	61%	43%	45%	51%
Nevada	41%	45%	54%	24%	29%	35%
New Hampshire	48%	49%	54%	39%	41%	46%
New Jersey	45%	46%	50%	27%	34%	38%
New Mexico	53%	53%	65%	48%	46%	58%
New York	51%	47%	53%	41%	41%	41%
North Carolina	47%	48%	56%	40%	44%	47%
North Dakota	48%	50%	53%	49%	50%	53%
Ohio	57%	62%	64%	50%	56%	58%
Oklahoma	60%	69%	75%	58%	64%	69%
Oregon	76%	81%	83%	77%	78%	76%
Pennsylvania	53%	52%	57%	51%	54%	55%
Rhode Island	52%	52%	52%	37%	35%	39%
South Carolina	57%	65%	68%	55%	62%	64%
South Dakota	50%	50%	53%	47%	44%	51%
Tennessee	70%	83%	83%	65%	74%	78%
Texas	47%	48%	58%	38%	38%	47%
Utah	47%	52%	60%	36%	40%	49%
Vermont	59%	59%	62%	51%	53%	53%
Virginia	53%	55%	59%	44%	43%	51%
Washington	56%	60%	65%	39%	42%	52%
West Virginia	70%	71%	76%	76%	72%	74%
Wisconsin	49%	52%	54%	46%	54%	50%
Wyoming	43%	43%	48%	40%	43%	48%
Northeast Region	50%	48%	54%	39%	41%	42%
Mid-Atlantic Region	52%	53%	58%	45%	47%	51%
Southeast Region	55%	59%	63%	48%	50%	54%
Midwest Region	59%	61%	64%	53%	57%	58%
Southwest Region	53%	55%	63%	45%	46%	53%
Mountain Plains Region	56%	59%	66%	48%	50%	58%
Western Region	52%	52%	55%	39%	40%	42%
United States	54%	56%	60%	45%	47%	51%

There is substantial uncertainty associated with most of these estimates. Confidence intervals that measure the uncertainty in the estimates for 2002 and 2003 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 2004 estimates.

eligible people and eligible working poor, while estimating numbers of participating people and participating working poor from food stamp administrative data. The “working poor” are defined as people who are eligible for food stamps and live in a household in which a member earns 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 benefits.

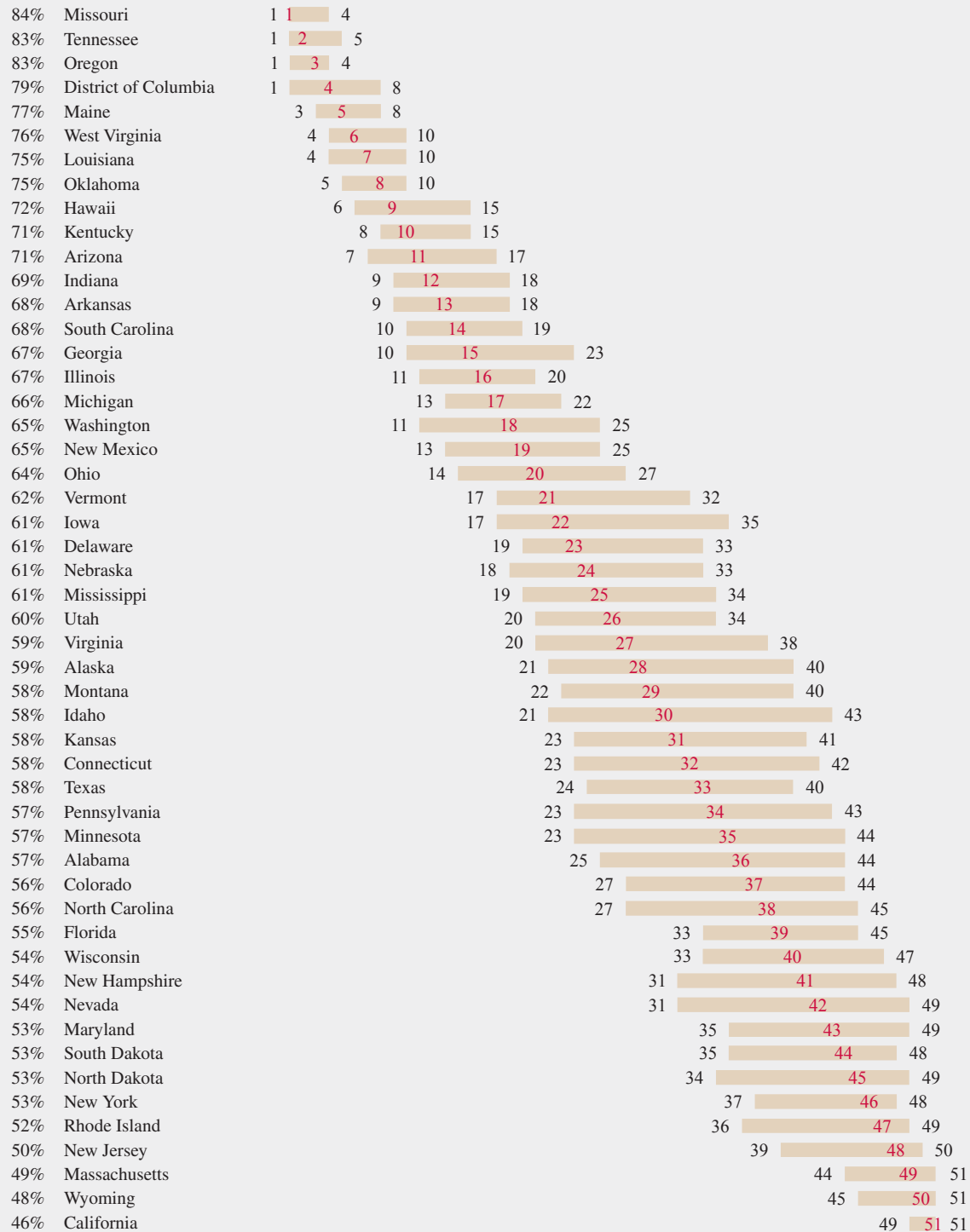
Shrinkage estimates are substantially more precise than direct sample estimates from the Current Population Survey or the Survey of Income and Program Participation, the leading sources of data used to estimate program eligibility. Because these surveys do not collect data on participation in the Food Distribution Program on Indian Reservations, the estimates presented here are not adjusted to reflect the fact that participants in that program are not eligible to receive food stamp benefits at the same time (Barrett and Poikolainen 2006). The Food Distribution Program on Indian Reservations served about 104,000 people in 2004, 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 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 stamp benefits because they receive cash instead. It might be useful in some other contexts, however, to consider participation rates among those eligible for food stamp benefits or a cash substitute.

How Did Your State Rank in 2004?

Participation
Rate for
All Eligible
People

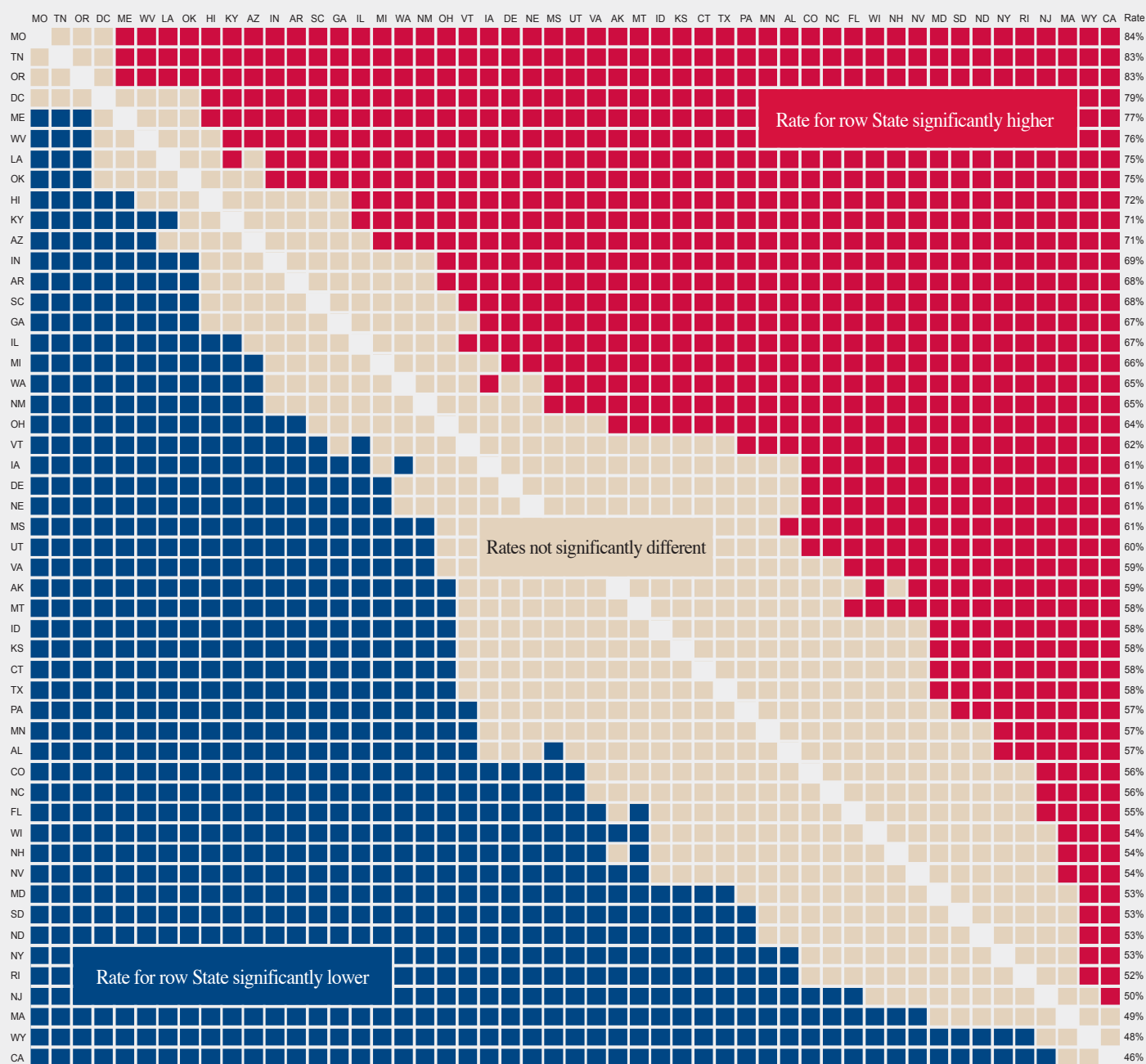
Ranks and Confidence Intervals

(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 Utah had the 26th highest participation rate in 2004, the true rank may have been higher or lower. However, the chances are 90 in 100 that the true rank was between 20 and 34 among all of the States. To determine how Utah or your State compares with any other State, see the chart on page 7.

How Did Your State Compare with Other States in 2004?



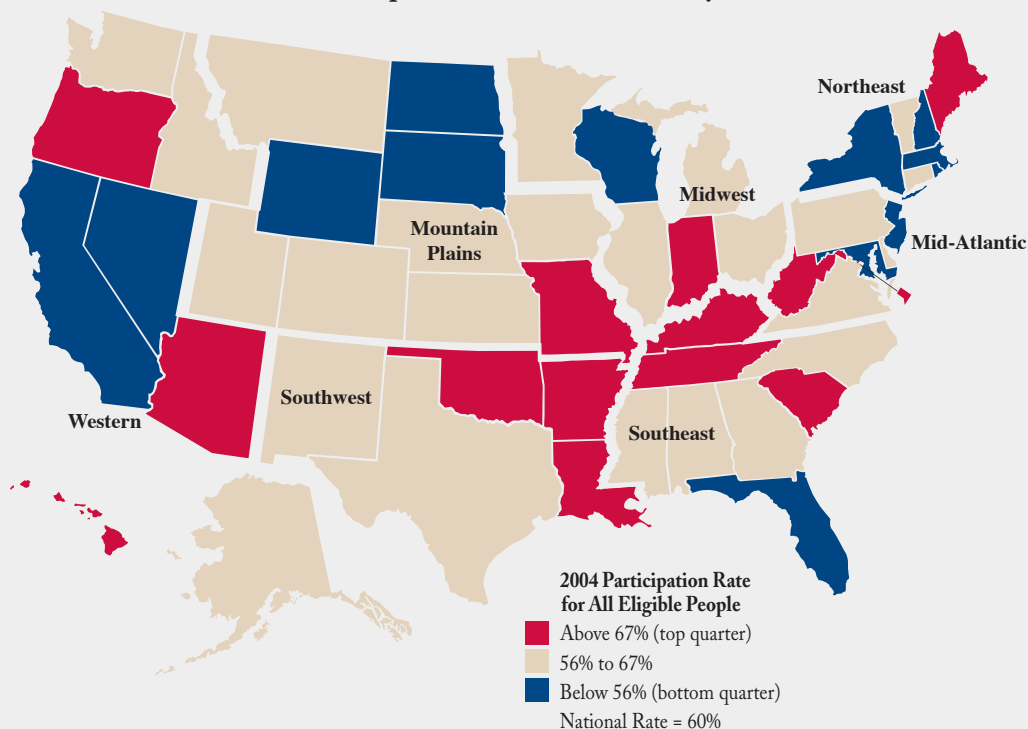
Whether one State has a significantly higher participation rate for all eligible people than a second State can be determined from this figure by finding the row for the first State at the left of the figure and the column for the second State at the top of the figure. If the box where the row and column 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 Utah, the State in the middle of the distribution, as an example, we see that it had a significantly lower participation rate than 19 other States (Missouri, Tennessee, Oregon, the District of Columbia, Maine, West Virginia, Louisiana, Oklahoma, Hawaii, Kentucky, Arizona, Indiana, Arkansas, South Carolina, Georgia, Illinois, Michigan, Washington, and New Mexico) and a significantly higher rate than 15 other States (California, Wyoming, Massachusetts, New Jersey, Rhode Island, New York, North Dakota, South Dakota, Maryland, Nevada, New Hampshire, Wisconsin, Florida, North Carolina, and Colorado). Its rate was neither significantly higher nor significantly lower than the rates for the other 16 States, suggesting that Utah 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 are eligible for the Food Stamp Program, no data are available to estimate the number of people who would fail the program's income tests but are categorically eligible for food stamp benefits through participation in noncash public assistance programs. Therefore, because such people cannot be included in estimates of eligible people, they have also been excluded from the estimates of participating people. Barrett and Poikolainen (2006) present details on the methods used to estimate the numbers of eligible and participating people used in deriving the participation rates presented here.

References

Barrett, Allison, and Anni Poikolainen. "Food Stamp Program Participation Rates: 2004." In *Current Perspectives on Food Stamp Program Participation*. Alexandria, VA: Food and Nutrition Service, U.S. Department of Agriculture, June 2006.

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