

## Reaching Those in Need:

# STATE SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM PARTICIPATION RATES IN 2010



## FOOD AND NUTRITION SERVICE



This document presents estimates of SNAP participation rates for all eligible people and for the working poor by States for fiscal year 2010. These estimates can be used to assess recent program performance and focus efforts to improve access.

### Participation Rates in 2010

As reported in Eslami et al. (2012), 75 percent of eligible people in the United States received SNAP benefits in fiscal year 2010. Participation rates varied widely from State to State, however. Twenty-four States had rates that were significantly higher (in a statistical sense) than the national rate, and 10 States had rates that were significantly lower. Among the regions, the Midwest Region had the highest participation rate. Its 82 percent rate was significantly higher than the rates for all of the other regions except the Southeast Region. The Western Region's participation rate of 66 percent was significantly lower than the rates for all of the other regions. (See the last page for a map showing regional boundaries.)

In 2010, 65 percent of eligible working poor in the United States participated in SNAP, but as with participation rates for all eligible people, rates for the working poor varied widely across States. Twenty-four States had rates for the working poor that were significantly higher than the national rate for the working poor, and 9 States had rates that were significantly lower.



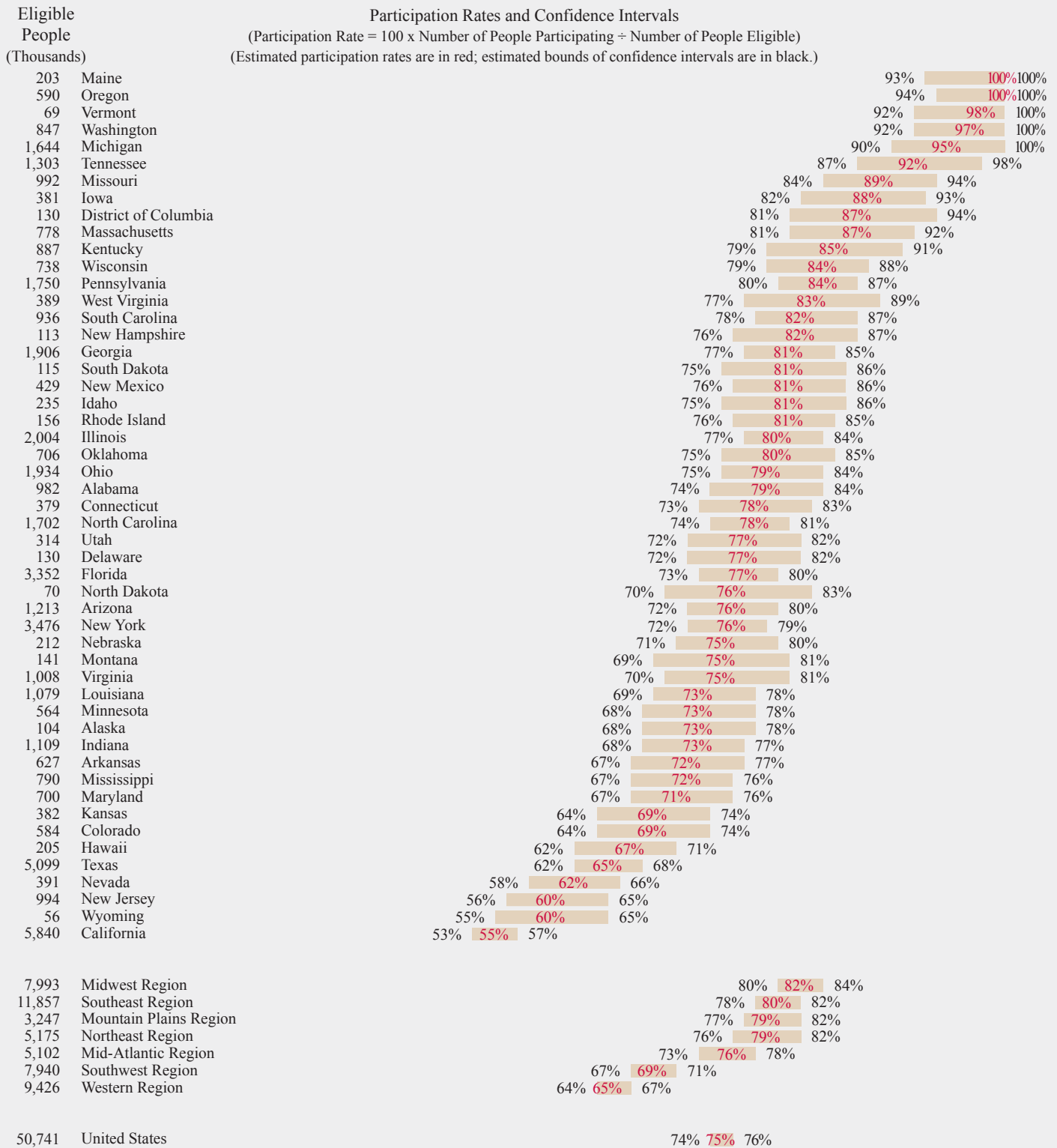
The Supplemental Nutrition Assistance Program (SNAP) is a central component of American policy to alleviate hunger and poverty. The program's main purpose is "to permit low-income households to obtain a more nutritious diet...by increasing their purchasing power" (Food and Nutrition Act of 2008). SNAP 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 2012, the program served over 46 million people in an average month at a total annual cost of over \$74 billion in benefits.

The national SNAP participation rate is the percentage of eligible people in the United States who actually participate in the program.

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. Forty-four million people received benefits in an average month in 2011. Eighteen million—41 percent—lived in households that had income from earnings, up from 30 percent of all participants 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.

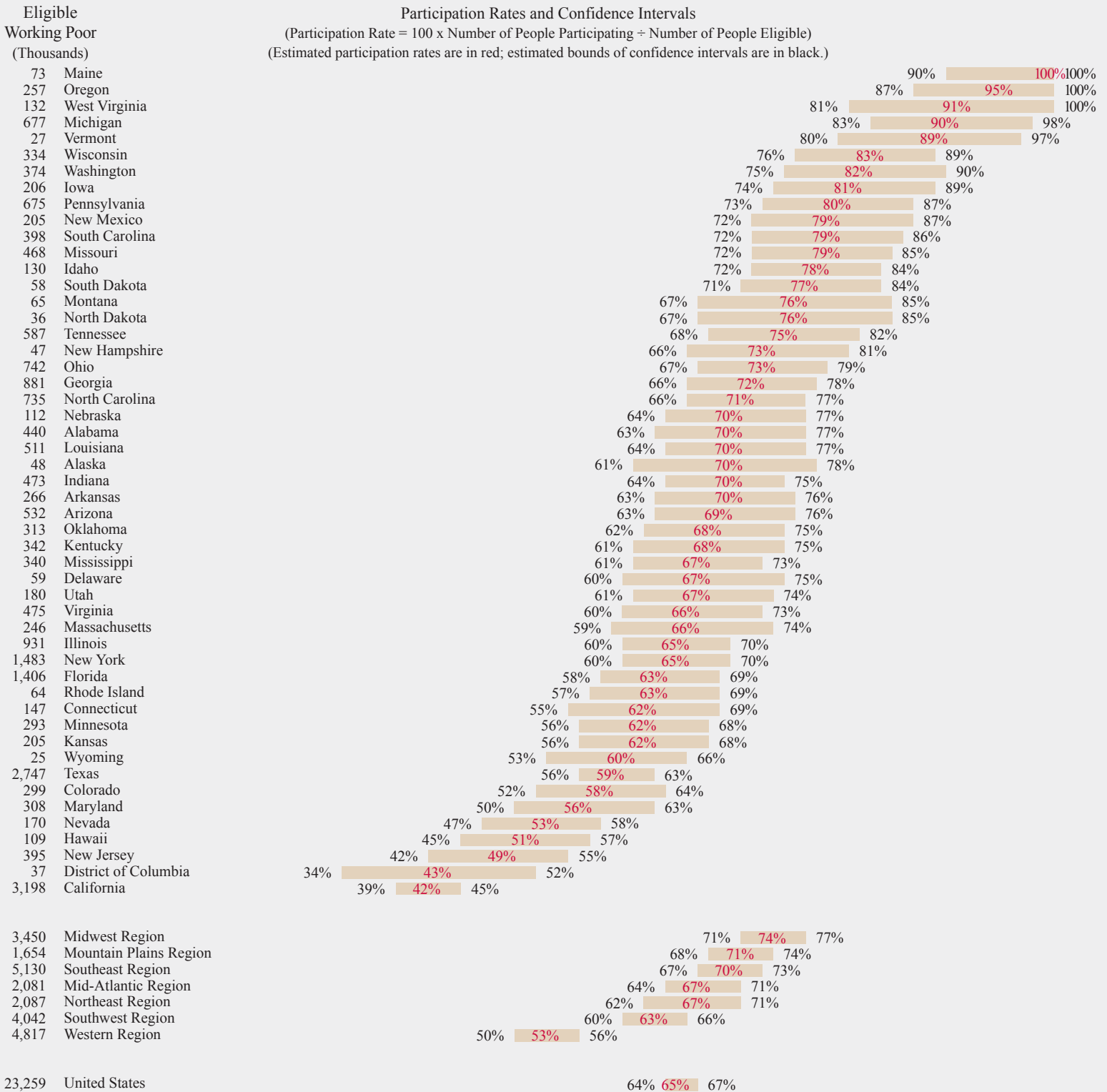
Recent studies have examined national participation rates as well as participation rates for socioeconomic and demographic subgroups (Eslami et al. 2012), and State rates for all eligible people and for the working poor (Cunyngham 2011).

## How Many Were Eligible in 2010? 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 Nebraska's participation rate was 75 percent in 2010, the true rate may have been higher or lower. However, the chances are 90 in 100 that the true rate was between 71 and 80 percent.

## How Many Working Poor Were Eligible in 2010? 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 Arizona's working poor participation rate was 69 percent in 2010, the true rate may have been higher or lower. However, the chances are 90 in 100 that the true rate was between 63 and 76 percent.

While 75 percent of all eligible people in the United States participated in 2010, only 65 percent of the eligible working poor participated, a significant difference of 10 percentage points. In 33 States, the participation rate for the working poor in 2010 was—like the national rate for the working poor—significantly lower than the rate for all eligible people. In 10 of these States, the difference between the rate for the working poor and the rate for all eligible people was significantly greater than the 10 percentage points difference between the national rates. 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 2010 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. Maine and Oregon were very likely at the top, with higher rates for all eligible people than all other States. In contrast, California likely had a lower rate than other 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 2010. Maine and Oregon were very likely ranked at the top, with higher rates for the working poor than most States. In contrast, California and

the District of Columbia 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 been fairly consistently in the top or bottom of the distribution of rates in recent years. In all 3 years from 2008 to 2010, Iowa, Maine, Michigan, Missouri, Oregon, Tennessee, Vermont, and Washington, had significantly higher participation rates for all eligible people than two-thirds of the States. An additional 2 States—Kentucky and Pennsylvania—and the District of Columbia had significantly higher rates than half of the States. Kansas had significantly lower rates than half of the States in all 3 years, while California, Colorado, New Jersey, Nevada, Texas, 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, they do not exactly match. Five

States (Indiana, Montana, Wisconsin, West Virginia, 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. In contrast, 7 States—Connecticut, Illinois, Kentucky, Massachusetts, Rhode Island, Tennessee, and Washington—and the District of Columbia are ranked significantly lower 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.

### Estimation Method

The estimates presented here were derived using shrinkage estimation methods developed to improve precision when sample sizes are small, as they are for most states in the Current Population Survey (Cunningham, Castner, and Sukasih 2012, and Cunningham, Castner, and Sukasih forthcoming). Drawing on data from the Current Population Survey, the American Community Survey, and administrative records, the shrinkage estimator averaged direct sample estimates of participation rates with predictions from a regression model. The direct sample estimates were obtained by applying SNAP eligibility rules to households in the Current Population Survey to estimate numbers of eligible people and by using SNAP administrative data to estimate numbers of participating people. Eslami et al. (2012) presents details on the estimation methods used to derive the direct sample estimates. The regression predictions of participation rates were based on observed indicators of socio-

## Participation Rates

	All Eligible People			Working Poor		
	2008	2009	2010	2008	2009	2010
Alabama	67%	71%	79%	58%	63%	70%
Alaska	69%	66%	73%	61%	64%	70%
Arizona	60%	61%	76%	53%	55%	69%
Arkansas	73%	69%	72%	69%	67%	70%
California	48%	49%	55%	30%	33%	42%
Colorado	52%	54%	69%	39%	39%	58%
Connecticut	66%	70%	78%	47%	53%	62%
Delaware	67%	73%	77%	57%	63%	67%
District of Columbia	77%	83%	87%	30%	35%	43%
Florida	59%	64%	77%	44%	49%	63%
Georgia	62%	69%	81%	53%	59%	72%
Hawaii	64%	65%	67%	47%	51%	51%
Idaho	61%	63%	81%	57%	59%	78%
Illinois	79%	75%	80%	60%	58%	65%
Indiana	65%	65%	73%	62%	63%	70%
Iowa	81%	84%	88%	71%	76%	81%
Kansas	58%	61%	69%	47%	47%	62%
Kentucky	82%	82%	85%	63%	63%	68%
Louisiana	72%	74%	73%	64%	70%	70%
Maine	100%	100%	100%	95%	98%	100%
Maryland	59%	65%	71%	43%	51%	56%
Massachusetts	72%	77%	87%	49%	55%	66%
Michigan	84%	82%	95%	78%	79%	90%
Minnesota	61%	64%	73%	45%	48%	62%
Mississippi	65%	67%	72%	58%	63%	67%
Missouri	85%	84%	89%	75%	72%	79%
Montana	70%	65%	75%	69%	64%	76%
Nebraska	66%	69%	75%	56%	60%	70%
Nevada	50%	56%	62%	37%	47%	53%
New Hampshire	68%	72%	82%	55%	60%	73%
New Jersey	51%	54%	60%	37%	42%	49%
New Mexico	66%	73%	81%	59%	68%	79%
New York	64%	66%	76%	49%	54%	65%
North Carolina	65%	69%	78%	57%	59%	71%
North Dakota	71%	71%	76%	67%	67%	76%
Ohio	72%	73%	79%	65%	68%	73%
Oklahoma	70%	72%	80%	55%	60%	68%
Oregon	92%	98%	100%	77%	84%	95%
Pennsylvania	78%	77%	84%	71%	72%	80%
Rhode Island	63%	65%	81%	41%	48%	63%
South Carolina	74%	76%	82%	69%	71%	79%
South Dakota	64%	69%	81%	58%	64%	77%
Tennessee	83%	87%	92%	67%	71%	75%
Texas	56%	57%	65%	46%	47%	59%
Utah	62%	64%	77%	51%	50%	67%
Vermont	88%	92%	98%	77%	80%	89%
Virginia	65%	67%	75%	55%	55%	66%
Washington	81%	88%	97%	64%	72%	82%
West Virginia	85%	87%	83%	89%	95%	91%
Wisconsin	66%	73%	84%	64%	72%	83%
Wyoming	52%	53%	60%	50%	52%	60%
Mid-Atlantic Region	68%	70%	76%	56%	60%	67%
Midwest Region	74%	74%	82%	64%	66%	74%
Mountain Plains Region	70%	70%	79%	59%	58%	71%
Northeast Region	67%	70%	79%	51%	56%	67%
Southeast Region	67%	71%	80%	56%	60%	70%
Southwest Region	62%	62%	69%	51%	53%	63%
Western Region	56%	58%	65%	39%	42%	53%

There is substantial uncertainty associated with most of these estimates. Confidence intervals that measure the uncertainty in the estimates for 2008 and 2009 are presented in Cunningham, Castner, and Sukasih (forthcoming). These confidence intervals are generally about as wide as the confidence intervals that are presented in this document for the 2010 estimates.

economic conditions, such as the percentage of the total State population receiving SNAP benefits. The shrinkage estimates presented here are substantially more precise than the direct sample estimates from the Current Population Survey.

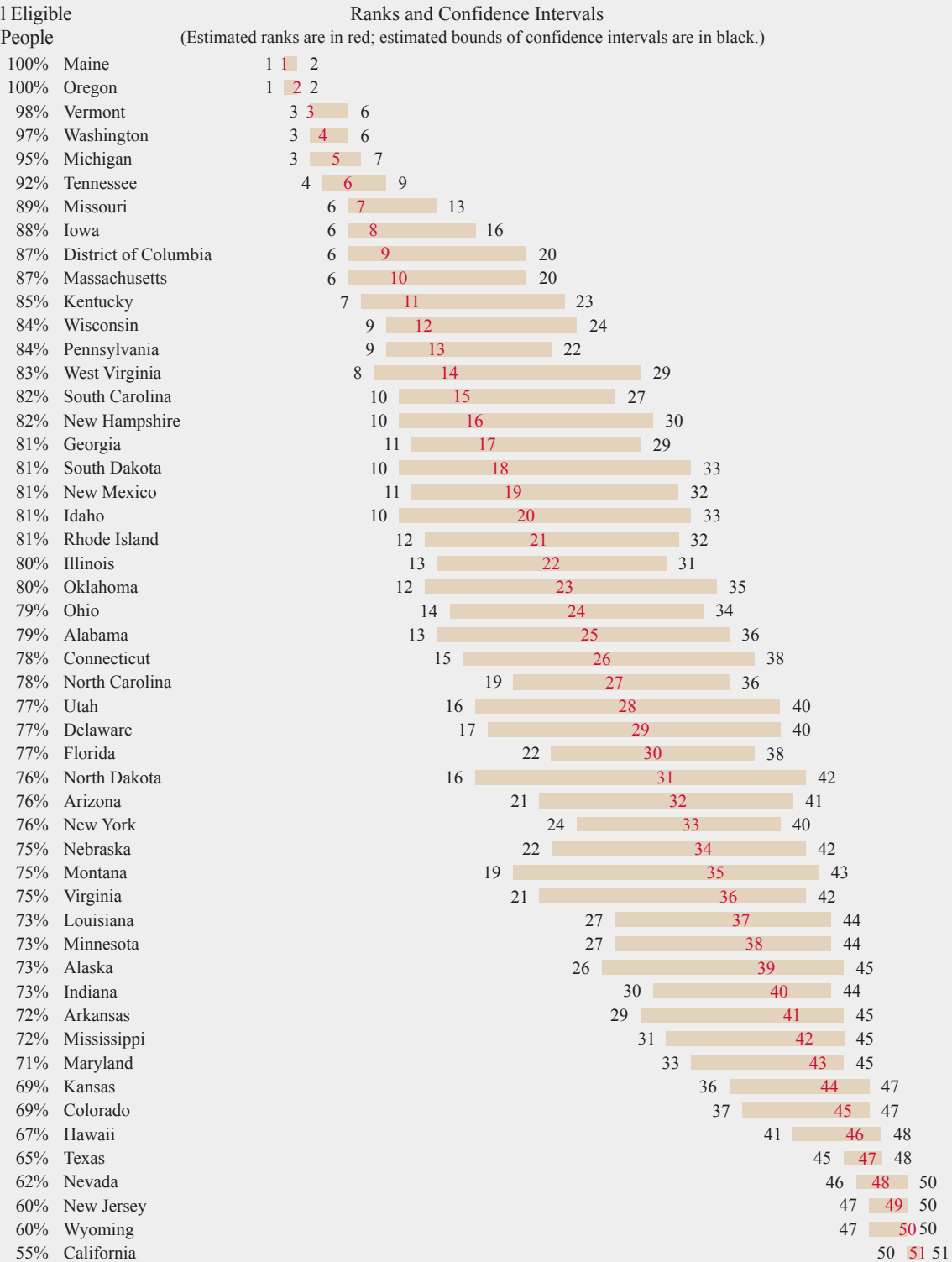
The estimates for all eligible people include individuals in households that pass all applicable federal SNAP income and asset tests or in which all members receive cash public assistance. People eligible solely through State categorical eligibility policies are not included in the estimates presented here. The estimates for eligible working poor include people who are eligible for SNAP as defined above and live in a household in which a member earns money from a job.

The direct sample estimates differ methodologically from estimates developed for prior reports. The motivation for the methodological improvements was to better address differences between the data used to estimate the number of participants and the data used to estimate the number of eligible individuals.

Because the Current Population Survey does 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 SNAP benefits at the same time (Eslami et al. 2012). The Food Distribution Program on Indian Reservations served about 85,000 people in 2010, 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 SNAP, the estimates of eligible people

## How Did Your State Rank in 2010?

Participation  
Rate for  
All Eligible  
People



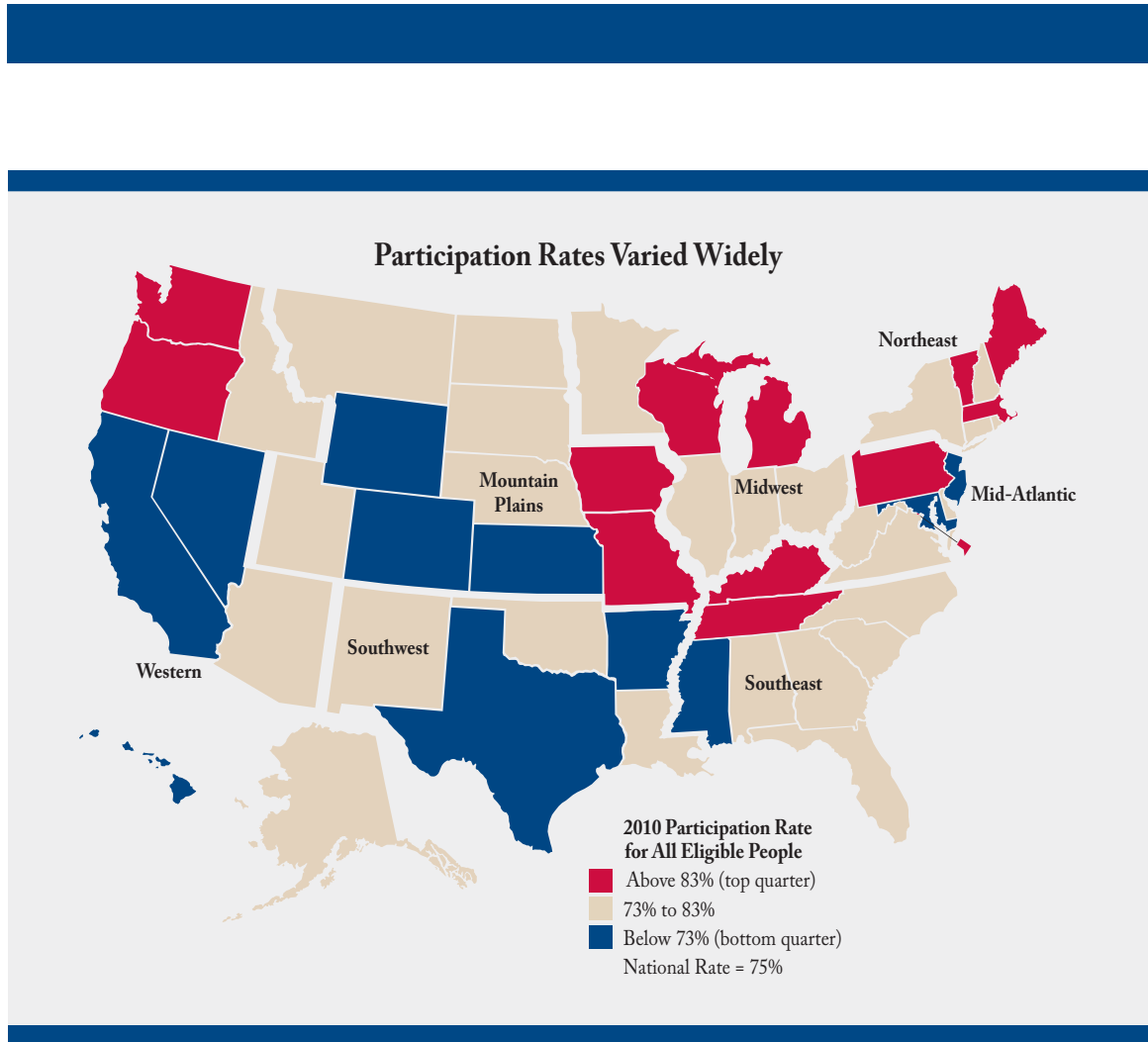
A confidence interval expresses our uncertainty about the true value of a State's rank. Each interval displayed here is a 90-percent confidence interval. One interpretation of such an interval is that there is a 90-percent chance that the true rank falls within the estimated bounds. For example, while our best estimate is that Connecticut had the 26<sup>th</sup> highest participation rate in 2010, the true rank may have been higher or lower. However, the chances are 90 in 100 that the true rank was between 15 and 38 among all of the States. To determine how Connecticut or your State compares with any other State, see the chart on page 7.





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were adjusted using available data to reflect the fact that Supplemental Security Income recipients in California are not legally eligible to receive SNAP benefits because they receive cash instead.<sup>1</sup> It might be useful in some other contexts, however, to consider participation rates among those eligible for SNAP benefits or a cash substitute.

<sup>1</sup>About 1.3 million Supplemental Security Income recipients in California receive a small food assistance benefit through the State supplement. In the absence of the state rule excluding these individuals from receiving SNAP benefits, slightly less than half this number would become eligible for SNAP under current program rules.

**References**

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