Reaching Those in Need:

HOW EFFECTIVE IS THE FOOD STAMP PROGRAM?

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The Food Stamp Program is a central component of American policy to reduce poverty and hunger. 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 1997, the program served about 23 million people in an average month at a total annual cost of nearly $20 billion. The average monthly food stamp benefit was just over $170 per household.

Although the cost of the Food Stamp Program and other assistance programs has been at the center of recent federal budget debates, the Government Performance and Results Act calls for policymakers to pay close attention to the effects of programs, not just total dollars spent. 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 long been a standard for assessing the program's performance (see, for example, Stavrianos 1997).

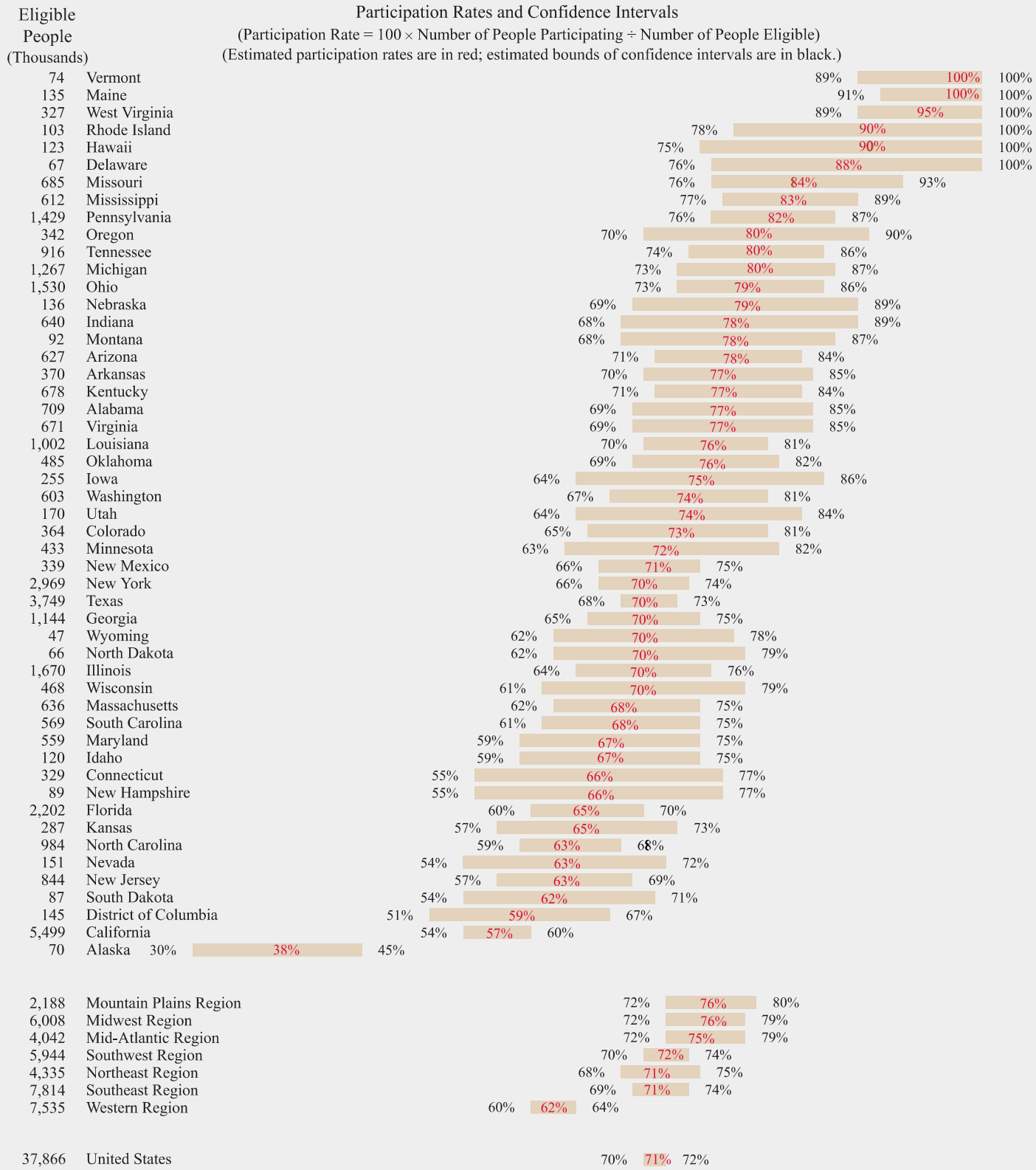
This document presents the first widely released estimates of food stamp participation rates for States. These estimates can be used to focus efforts to improve program performance. They also provide a benchmark to help understand the consequences of welfare reform for the Food Stamp Program. The participation rates, which pertain to January 1994, provide one indicator of how effectively each State was serving eligible people before the program changes that were brought about by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193). See the last page for a list of the key food stamp provisions of the act.

Food Stamp Participation Rates for States

In January 1994, about 71 percent of eligible people in the United States received food stamps. Participation rates varied widely from State to State, however. Estimated rates ranged between 38 percent in Alaska and 100 percent in Vermont and Maine. Although there were some large differences in State participation rates within most regions, there were also discernible patterns across regions. The highest regional participation rates were in the Mountain Plains, Midwest, and Mid-Atlantic Regions. Their 75 to 76 percent rates were significantly higher (in a statistical sense) than the 71 to 72 percent rates in the Southwest, Northeast, and Southeast Regions. The Western Region had the lowest participation rate, at 62 percent. This rate was nine percentage points below the national rate and significantly lower than any other regional rate. See the last page for a map showing regional boundaries.

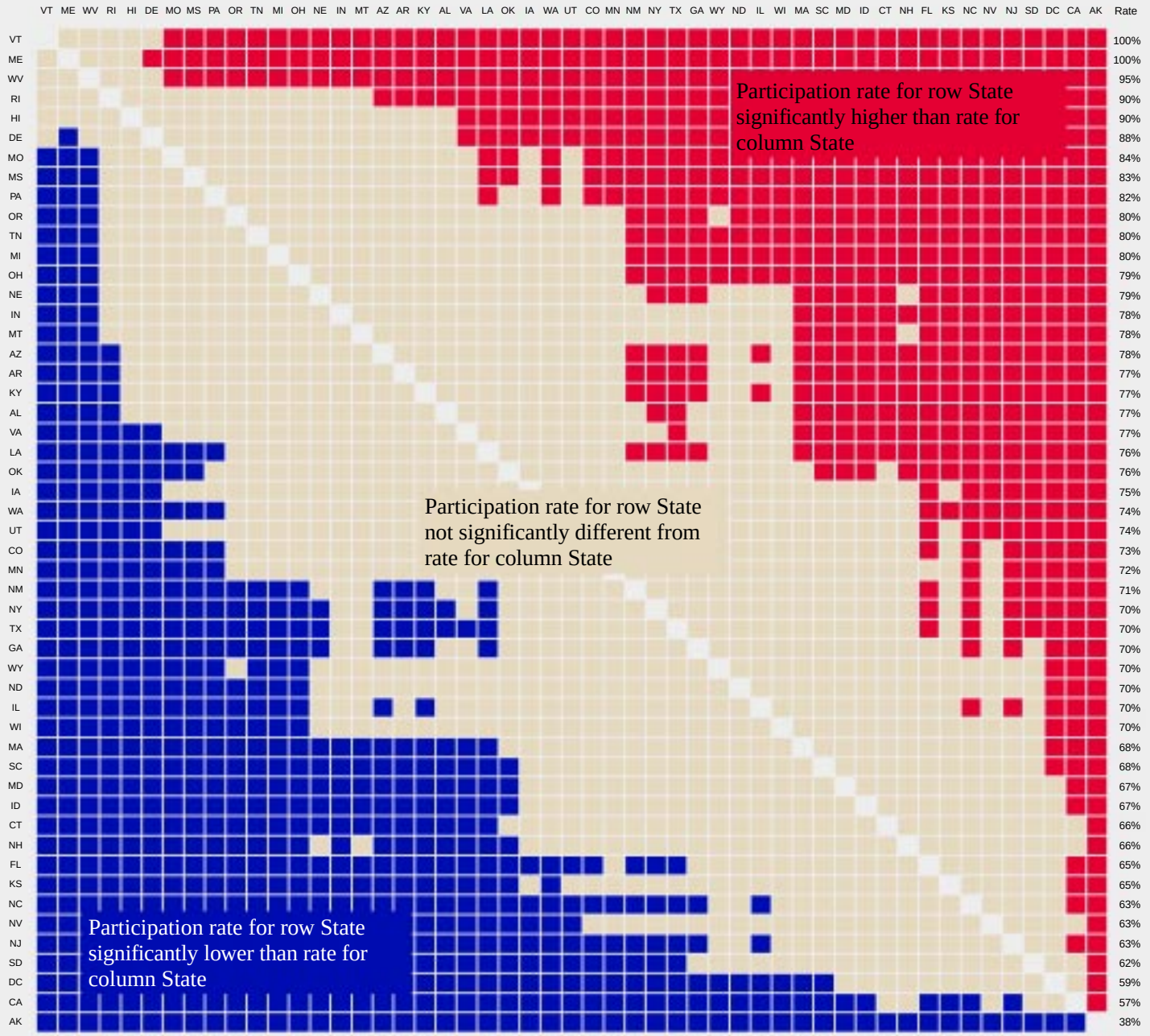
All of the estimated participation rates presented here are based on fairly small samples of households in each State. Even after application of the shrinkage estimation methods described later, there is substantial uncertainty associated with the estimates for some States and with comparisons of estimates from different States. Nevertheless, the estimates show whether a State's participation rate probably fell at the top, at the bottom, or in the middle of the distribution. Vermont, Maine, West Virginia, Rhode Island, Hawaii, Delaware, Missouri, Mississippi, and Pennsylvania were very likely at the top, with higher rates than most other States. In contrast, Alaska almost surely had a lower rate than all other States. California, the District of Columbia, South Dakota, New Jersey, Nevada,

How Many Were Eligible in January 1994? What Percentage Participated?



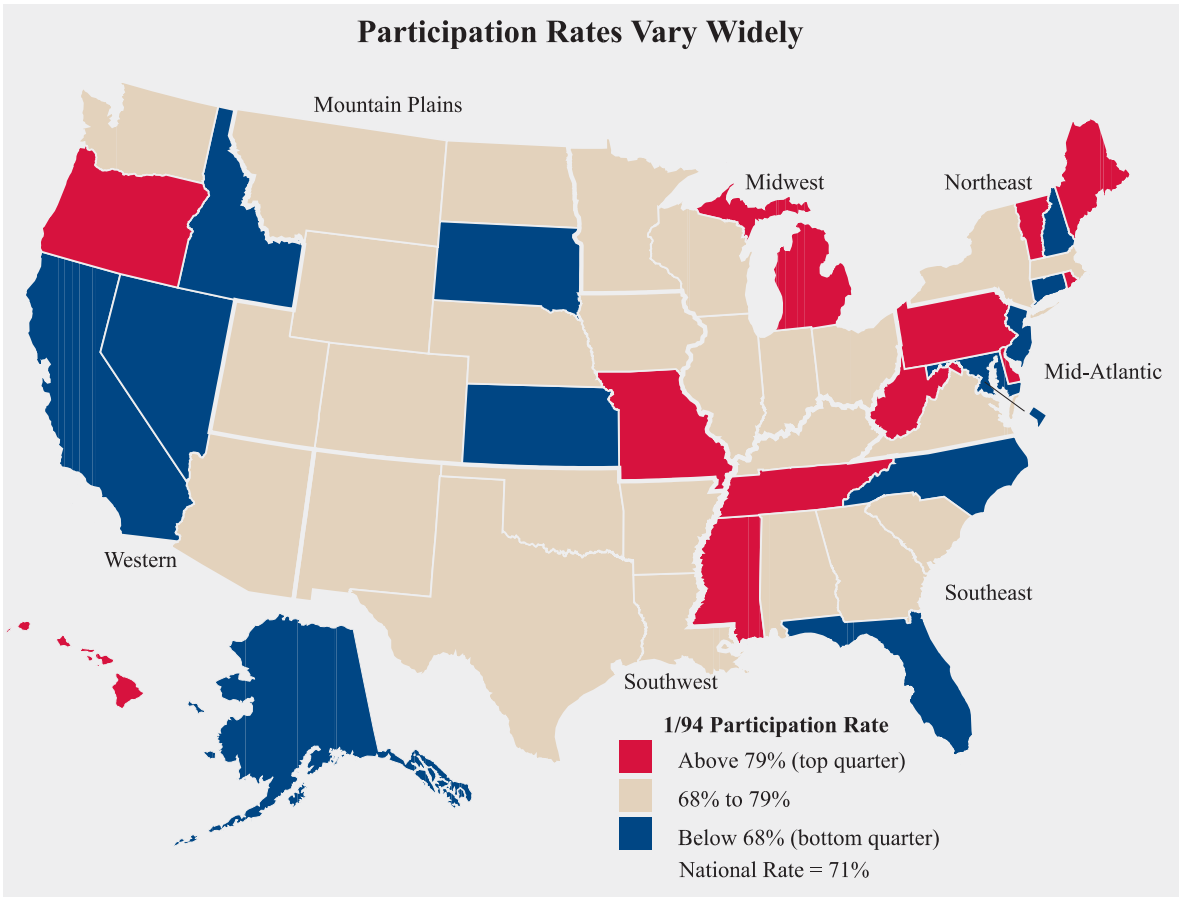
A confidence interval expresses our uncertainty about the true value of a participation rate. Each interval displayed here is a 90 percent confidence interval. One interpretation of such an interval is that there is a 90 percent chance that the true participation rate falls within the estimated bounds. For example, while our best estimate is that Virginia's participation rate was 77 percent in January 1994, the true rate may have been higher or lower. However, the chances are 90 in 100 that the true rate was between 69 and 85 percent.

How Does Your State Compare with Other States?



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 Utah, the State in the middle of the distribution, as an example, we see that it has a significantly lower participation rate than six other States (Vermont, Maine, West Virginia, Rhode Island, Hawaii, and Delaware) and a significantly higher rate than eight other States (Florida, North Carolina, Nevada, New Jersey, South Dakota, the District of Columbia, California, and Alaska). Its rate is neither significantly higher nor significantly lower than the rates for the other 36 States, suggesting that Utah is probably in the broad center of the distribution, unlike, for example, Vermont and Alaska, which are 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 exceed ten percentage points, and all of them are at least five percentage points, a difference that seems important as well as significant.



North Carolina, Kansas, and Florida probably fell in the bottom half of the distribution.

Estimation Method

The estimates presented here were derived using shrinkage estimation methods (Schirm and DiCarlo 1998). Drawing on data from the Current Population Survey, the Survey of Income and Program Participation, the decennial census, and administrative records, the shrinkage estimator averaged sample estimates of food stamp eligibles in each State with predictions from a regression model. The predictions were based on observed indicators of socioeconomic conditions, including levels of participation in government programs, such as the National School Lunch Program and the Aid to Families with Dependent Children program. 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.

References

Schirm, Allen L., and John V. DiCarlo. "Using Bayesian Shrinkage Methods to Derive State Estimates of Poverty, Food Stamp Program Eligibility, and Food Stamp Program Participation." Washington, DC: Mathematica Policy Research, Inc., 1998.

Stavrianos, Michael. "Food Stamp Program Participation Rates: January 1994." In *Current Perspectives on Food Stamp Program Participation.* Alexandria, VA: Food and Consumer Service, U.S. Department of Agriculture, March 1997.

The key food stamp provisions of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 do the following:

- Limit participation by legal noncitizens.
- Provide short-term assistance to unemployed, able-bodied adults ages 18 to 50 with no dependent children and link longer-term assistance to working or participating in a work program.
- Reduce benefits and limit future growth in benefits.
- Expand State administrative authority.

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