



The Food Stamp Program is a central component of American policy to reduce 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 1999, the program served just over 18 million people in an average month at a total annual cost of nearly \$16 billion. The average monthly food stamp benefit was about \$170 per household.

Although the costs of the Food Stamp Program and other assistance programs are scrutinized during 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 been a standard for assessing the program's performance for over 15 years. Recent studies have also examined participation rates for socioeconomic and demographic subgroups of the national population (Castner and

Cody 1999) and participation rates for States (Schirm 1998). The Food and Nutrition Service's Strategic Plan for 2000 to 2005 calls for continued monitoring of rates and includes a performance target to "increase the rate of . . . program participation among eligible people."

This document presents estimates of food stamp participation rates for States as of September 1997. It also presents estimates of how State participation rates changed between September 1994 and September 1997. These estimates can be used to assess recent program performance, determine whether performance has been improving or deteriorating, and focus efforts to improve performance. The estimates can also be used to help understand the effects of the strong economy and expanding job



opportunities, as well as the very early consequences of welfare reform and the Food Stamp Program changes that were brought about by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193).

Participation Rates in 1997

In September 1997, about 62 percent of eligible people in the United States received food stamps. Participation rates varied widely from State to State, however. Estimated rates ranged between 45 percent in Nevada and 92 percent in West Virginia. Sixteen States had participation rates that were significantly higher than the national rate, and 12 States had participation rates that were significantly lower than the national rate. Among the regions, the Mid-Atlantic Region had the highest participation rate. Its 68 percent rate was six percentage points higher than the national rate and significantly higher (in a statistical sense) than the rates for all of the other regions, except the Mountain Plains Region. The Western Region had the lowest participation rate, at 56 percent. This rate was six percentage points below the national rate and significantly lower than any other regional rate. (See the last page of this document for a map showing the boundaries of the regions that were established for administering federal nutrition programs.)

Changes Since 1994

Nationwide, the food stamp participation rate fell by nine percentage points – from 71 percent to 62 percent – between September 1994 and September 1997. Participation rates fell in every region of the country and all but five States (the District of Columbia, Oklahoma, Hawaii, West Virginia, and Alaska).

Among the States, Arizona's participation rate fell the most – by 22 percentage points, from 73 percent to 51 percent – while Oklahoma's and the District of Columbia's participation rates rose the most – by 8 and 10 percentage points, respectively. For 30 States, the 1997 participation rate was significantly lower than the 1994 rate, and the decline in each State's rate was at least seven percentage points. Only in Oklahoma was the participation rate significantly higher in 1997 than in 1994. For every region, the participation rate fell significantly. The Western Region, which had the lowest participation rate in 1994 and in 1997, had the smallest decline during the period, at five percentage points. However, the decrease in the Western Region's participation rate was not significantly smaller than the decreases of seven to eight percentage points in the Mountain Plains, Mid-Atlantic, and Southeast Regions. The decreases in participation rates for all of the regions except the Western Region were within four percentage points of each other and not substantially different. Nevertheless, the variation in regional participation rates diminished between 1994 and 1997. In contrast, the variation in State rates grew over the same period, suggesting that differences among States within regions generally became larger.

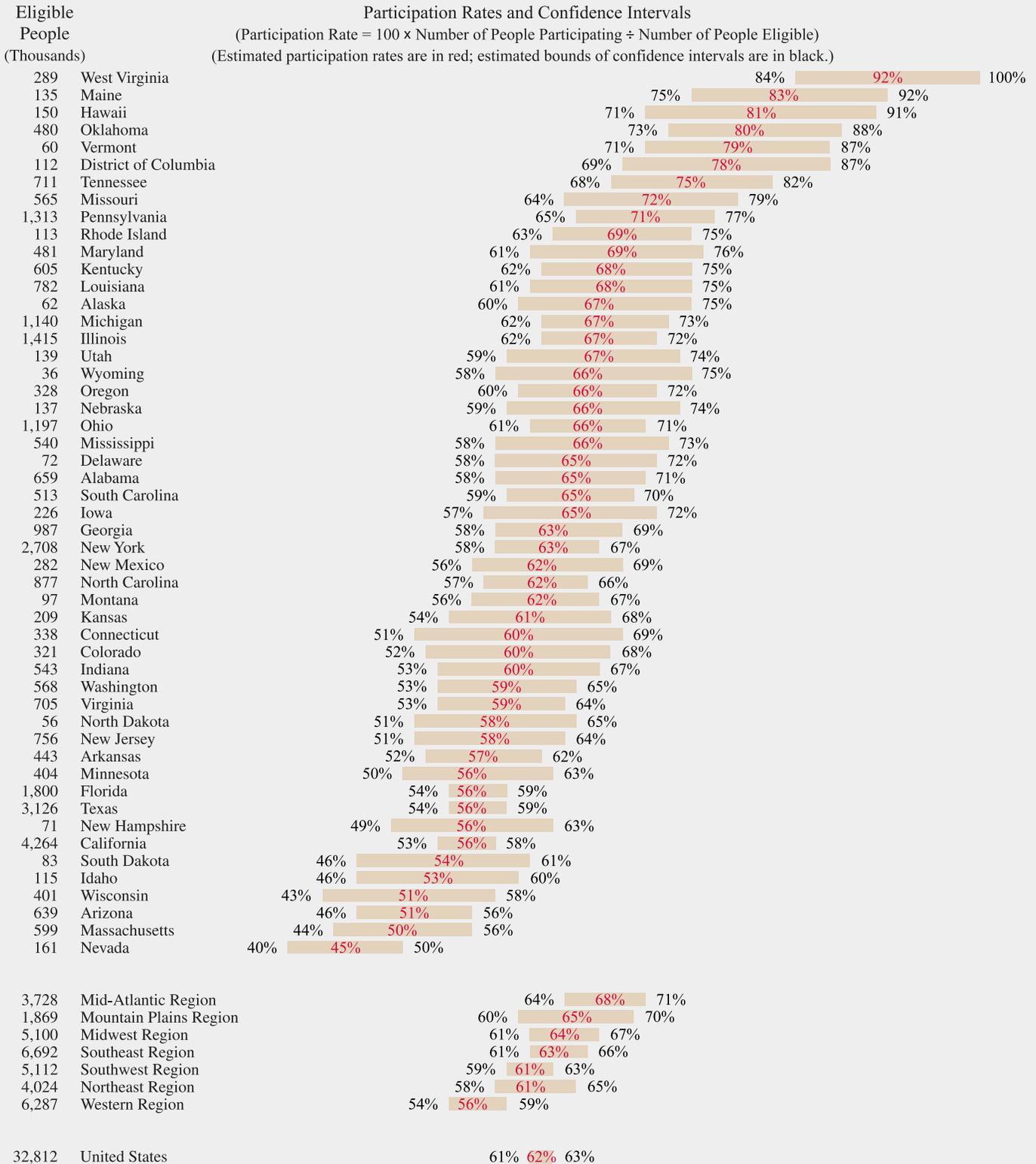
The Forces of Change

Many factors have contributed to the decline in food stamp participation rates, although how much each factor has contributed is uncertain. The strong economy has surely made a substantial

contribution by improving work and earnings prospects for low-income families. Another contributing factor is the Personal Responsibility and Work Opportunity Reconciliation Act, which became law in August 1996. This law ended the entitlement to welfare and replaced the Aid to Families with Dependent Children program with the work-oriented Temporary Assistance for Needy Families block grant. The law also included important changes to Food Stamp Program rules, limiting participation by legal noncitizens and unemployed, able-bodied adults without dependent children. (See the last page of this document for a summary of the key food stamp provisions of the law.)

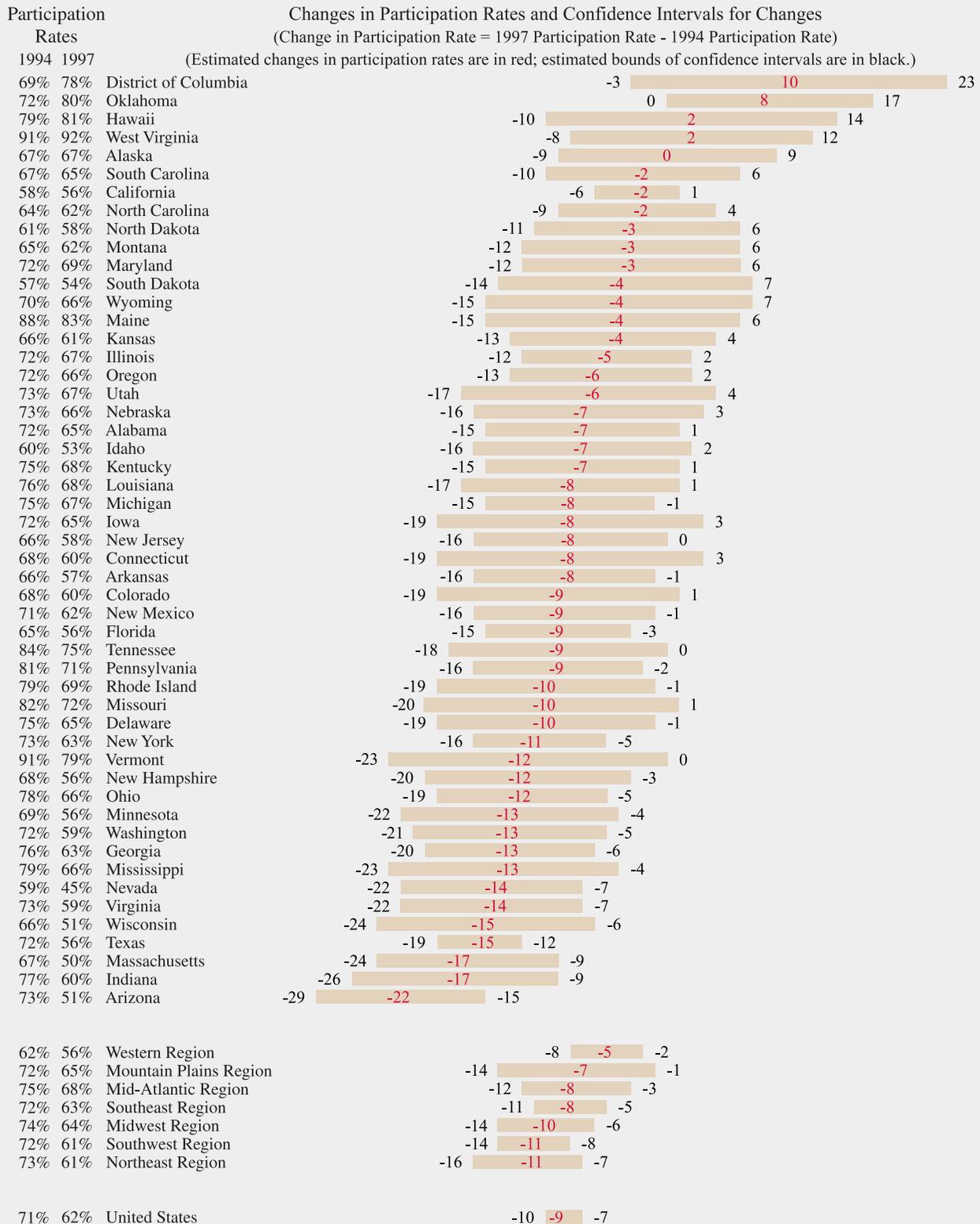
Between September 1994 and September 1997, the number of people receiving welfare fell by 30 percent nationwide, while the national food stamp participation rate fell by nine percentage points. After all the attention to welfare reform in recent years, it might be tempting to conclude that the falling welfare caseload somehow caused the decline in the food stamp participation rate. The estimates reported here cannot support this or other strong causal inferences, but they do suggest that the effects of welfare reform and falling welfare caseloads on food stamp participation rates are complex. For instance, among the 10 States with the largest reductions in welfare caseloads, some had relatively large reductions in food stamp participation rates; others had moderate to relatively small reductions. Likewise, among the 10 States

How Many Were Eligible in September 1997? 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 Indiana's participation rate was 60 percent in September 1997, the true rate may have been higher or lower. However, the chances are 90 in 100 that the true rate was between 53 and 67 percent.

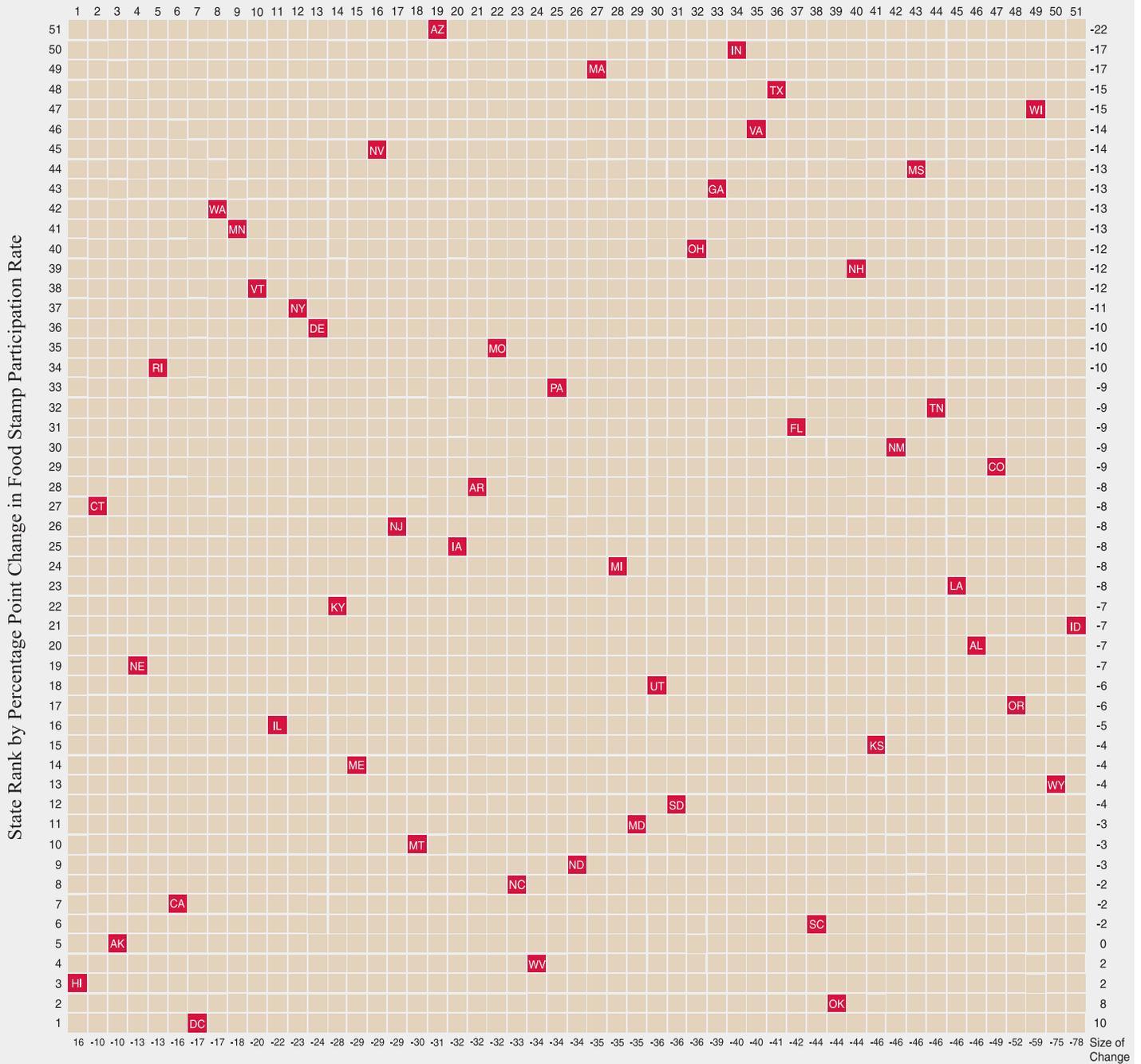
How Did Participation Rates Change Between September 1994 and September 1997?



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 change in the participation rate falls within the estimated bounds. Differences between the estimated changes in red and the values obtained by subtracting the 1994 rates at the left of the page from the adjacent 1997 rates are due to rounding.

Changes in Food Stamp Participation Rates Have Been Only Weakly Associated with Contemporaneous Changes in Welfare Caseloads

State Rank by Percentage Change in Welfare Caseload



States are ranked from largest increase (rank equals 1) to largest decrease (rank equals 51) between September 1994 and September 1997. Thus, Hawaii, for example, had the largest increase in welfare caseload and the third largest increase in food stamp participation rate. The District of Columbia had the largest increase in food stamp participation rate and the seventh smallest decrease in welfare caseload (counting Hawaii, the only State that had an increase in caseload, as one of the six States with smaller decreases). Idaho had the largest decrease in welfare caseload, while Arizona had the largest decrease in food stamp participation rate. Welfare caseloads in September 1994 and September 1997 are the numbers of persons receiving, respectively, Aid to Families with Dependent Children and Temporary Assistance for Needy Families. Welfare caseload figures were obtained from the U.S. Department of Health and Human Services, Administration for Children and Families.

with the smallest reductions in welfare caseloads, some had the smallest reductions or small increases in participation rates; others had relatively large reductions.

When policymakers focus on States where welfare or food stamp caseloads have fallen the most, they should, perhaps, be concerned less about the reduced caseloads and more about how the States achieved the reductions and why food stamp participation rates fell a lot or relatively little. For example, when a State's economic growth or successful policies move many people receiving assistance into jobs and from lower- to higher-paying jobs, the need for nutrition assistance and the amount of food stamp benefits for which such people qualify may decrease markedly. A falling food stamp participation rate in that State deserves some attention, especially to determine whether very many people leaving the program still have a substantial need for assistance. However, a greater concern is a falling participation rate in another State where a much smaller fraction of former welfare and food stamp recipients are employed and on paths to higher earnings. If we are to determine where falling food stamp participation rates are most troubling, and if we are to understand how economic growth, welfare reform, and other factors contribute to falling rates, we must carefully analyze State policies, program operations, and economic conditions, as well as what happens to people who are no longer receiving assistance.

State Comparisons

All of 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 1997 show whether a State's participation rate was probably at the top, at the bottom, or in the middle of the distribution. West Virginia, Maine, Hawaii, Oklahoma, Vermont, the District of Columbia, and Tennessee were very likely at the top, with higher rates than most other States. In contrast, Nevada, Massachusetts, and Arizona almost surely had lower rates than nearly all of the other States. Wisconsin, Idaho, South Dakota, California, New Hampshire, Texas, Florida, Minnesota, and Arkansas probably fell in the bottom half of the distribution.

The estimates of changes in participation rates between two years are relatively less precise than the estimates of rates for a single year. Although there are few statistically significant differences among States, it does appear that the District of Columbia and Oklahoma probably had about the largest increases in participation rates between 1994 and 1997, while Arizona had about the largest decline in its participation rate.

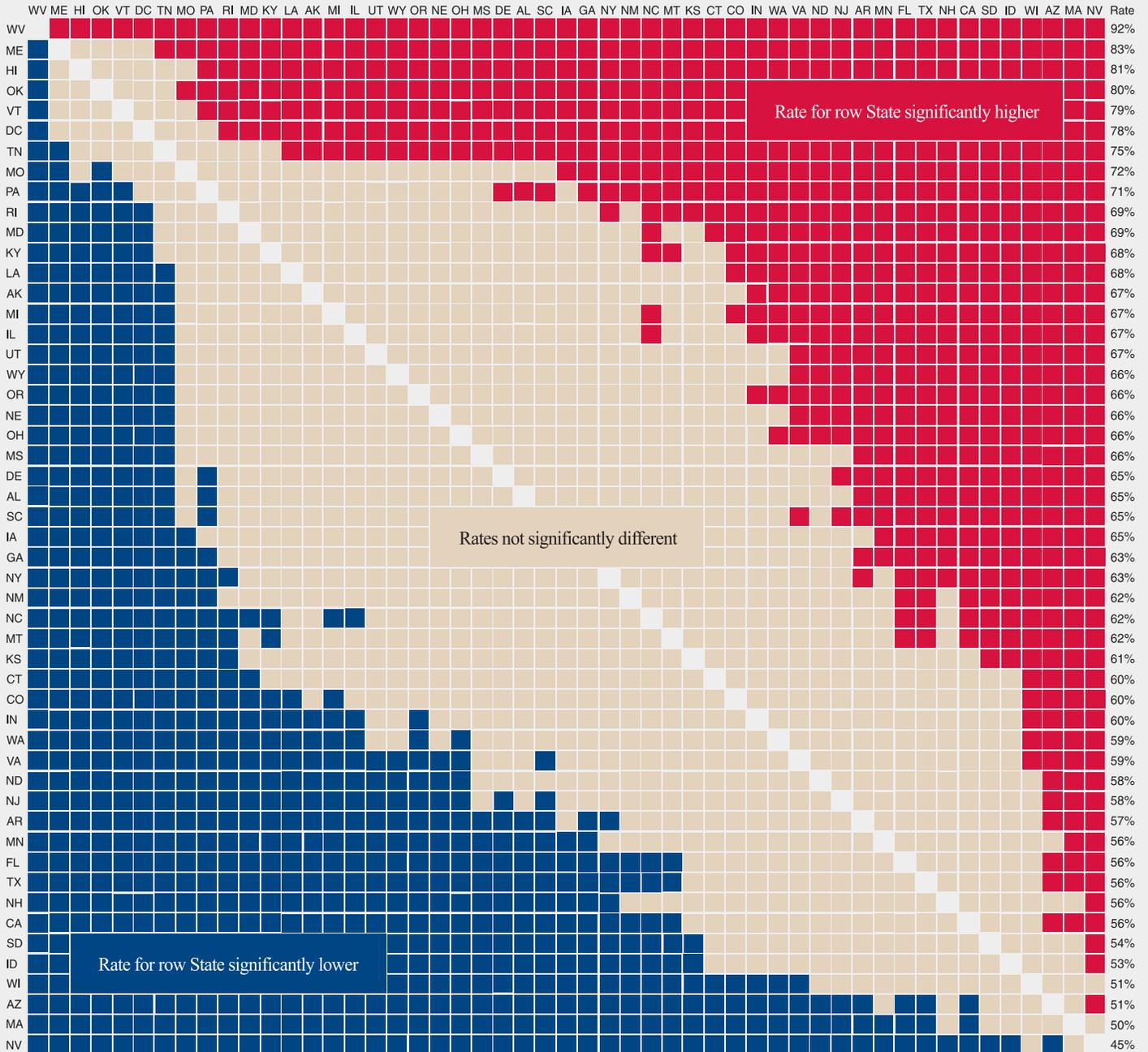
Estimation Method

The estimates presented here were derived using shrinkage estimation methods (Schirm 2000). 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 predictions were based on observed indicators of socioeconomic conditions, such as per capita income and 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.

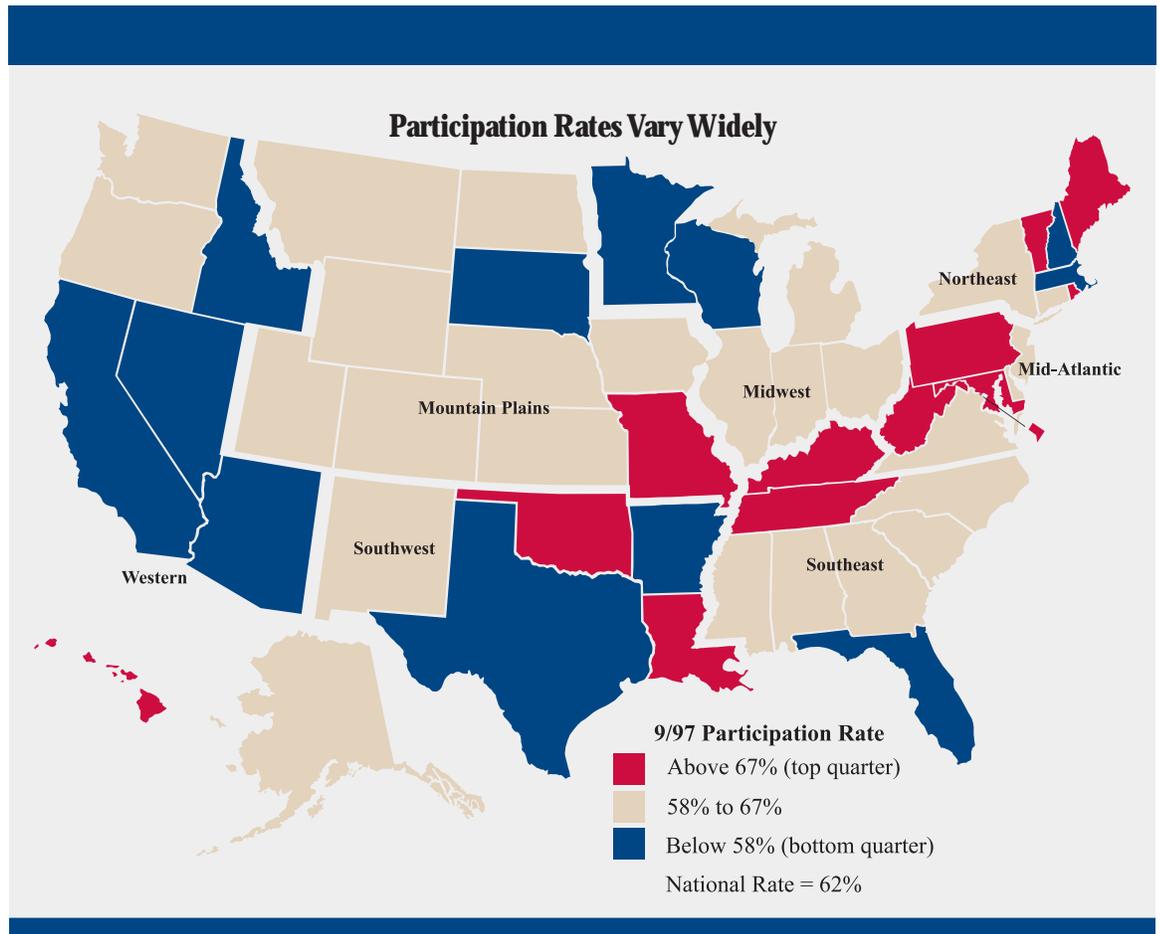
The shrinkage estimates of participation rates for 1994 that were used to derive the estimates of changes in rates between 1994 and 1997 are different from the estimated rates for 1994 that were presented in Schirm (1998). The main reason for differences between the two sets of estimates for 1994 is that the estimates in Schirm (1998) pertain to January, while the estimates in this document pertain to September. The different seasonal effects associated with these two months substantially account for the differences in estimated rates for several States. Other differences are attributable to improvements in data and methods. An improvement in the estimation method accounts for the difference between the September 1997 national participation rate of 62 percent reported in this document and the 63 percent figure reported previously in Castner and Cody (1999).

How Did Your State Compare with Other States in September 1997?



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 Iowa, the State in the middle of the distribution, as an example, we see that it has a significantly lower participation rate than 8 other States (West Virginia, Maine, Hawaii, Oklahoma, Vermont, the District of Columbia, Tennessee, and Missouri) and a significantly higher rate than 11 other States (Minnesota, Florida, Texas, New Hampshire, California, South Dakota, Idaho, Wisconsin, Arizona, Massachusetts, and Nevada). Its rate is neither significantly higher nor significantly lower than the rates for the other 31 States, suggesting that Iowa is probably in the broad center of the distribution, unlike, for example, West Virginia and Nevada, 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 are at least 10 percentage points, and all of them are at least 5 percentage points, a difference that seems important as well as significant.



References

Castner, Laura, and Scott Cody. "Trends in Food Stamp Program Participation Rates: Focus on September 1997." In *Current Perspectives on Food Stamp Program Participation*. Alexandria, VA: Food and Nutrition Service, U.S. Department of Agriculture, November 1999.

Schirm, Allen L. "Empirical Bayes Shrinkage Estimates of State Food Stamp Participation Rates for 1994-1997." Washington, DC: Mathematica Policy Research, Inc., 2000.

Schirm, Allen L. "Reaching Those in Need: How Effective Is the Food Stamp Program?" Alexandria, VA: Food and Nutrition Service, U.S. Department of Agriculture, August 1998.

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

- Limited participation by legal noncitizens.
- Provided short-term assistance to unemployed, able-bodied adults ages 18 to 50 with no dependent children and linked longer-term assistance to working or participating in a work program.
- Reduced benefits and limited future growth in benefits.
- Expanded state administrative authority.

Subsequently, the Balanced Budget Act of 1997 increased funds for employment and training of unemployed, able-bodied adults with no dependent children. The Agricultural Research, Extension and Education Reform Act of 1998 restored benefits as of November 1, 1998, to permanent resident aliens who were living in the United States on August 22, 1996, and were over age 64 on that date, or are now disabled or under age 18.