United States Department of Agriculture

Reaching Those in Need: Estimates of State Supplemental Nutrition Assistance Program Participation Rates in 2022

The Supplemental Nutrition Assistance Program (SNAP) helps eligible individuals with low incomes buy food to feed themselves and their households. SNAP is the largest of the domestic nutrition assistance programs administered by the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA). During fiscal year 2024, the program served 41 million people in an average month and provided over $114 billion in benefits.

The SNAP participation rates presented in this research brief are estimates of the percentage of people eligible for SNAP benefits under Federal income and resource rules who participate in the program. State SNAP participation rate estimates can be used to assess recent program performance and focus efforts to improve access. Vigil and Rahimi (2024) examined national SNAP participation rates and rates for socioeconomic and demographic subgroups. This research brief presents estimates of State SNAP participation rates for fiscal year 2022 and revised rates for fiscal year 2020.

The COVID-19 public health emergency affected the quality of the data used to estimate SNAP participation rates from March 2020 through June 2021. As a result, the fiscal year 2020 participation rates reflect the pre-pandemic period of October 2019 through February 2020 and we did not estimate participation rates for fiscal year 2021 due to inadequate data for most of that year.

Because of seasonality both in the data and introduced by our methodology, using 5 months rather than 12 months of fiscal year 2020 data resulted in an underestimate of SNAP participation rates (Vigil and Rahimi 2024). In addition, because of the smaller sample size for fiscal year 2020, this research brief does not include estimates of SNAP participation rates for any State subgroups, such as people in households with earnings.

Participation rates in fiscal year 2022

An estimated 88 percent of eligible people received SNAP benefits in fiscal year 2022. However, participation rates varied widely from State to State. In 19 States and the District of Columbia, the rates were statistically significantly higher than the national rate, while in 19 States, the rates were significantly lower.

Participation rates also varied among the regions. The Midwest Region had the highest participation rate at 98 percent, which was significantly higher than the rates for the other regions. The Southwestern Region's participation rate of 80 percent was significantly lower than the other regions. (See the last page of this brief for a map showing regional boundaries.)

State comparisons

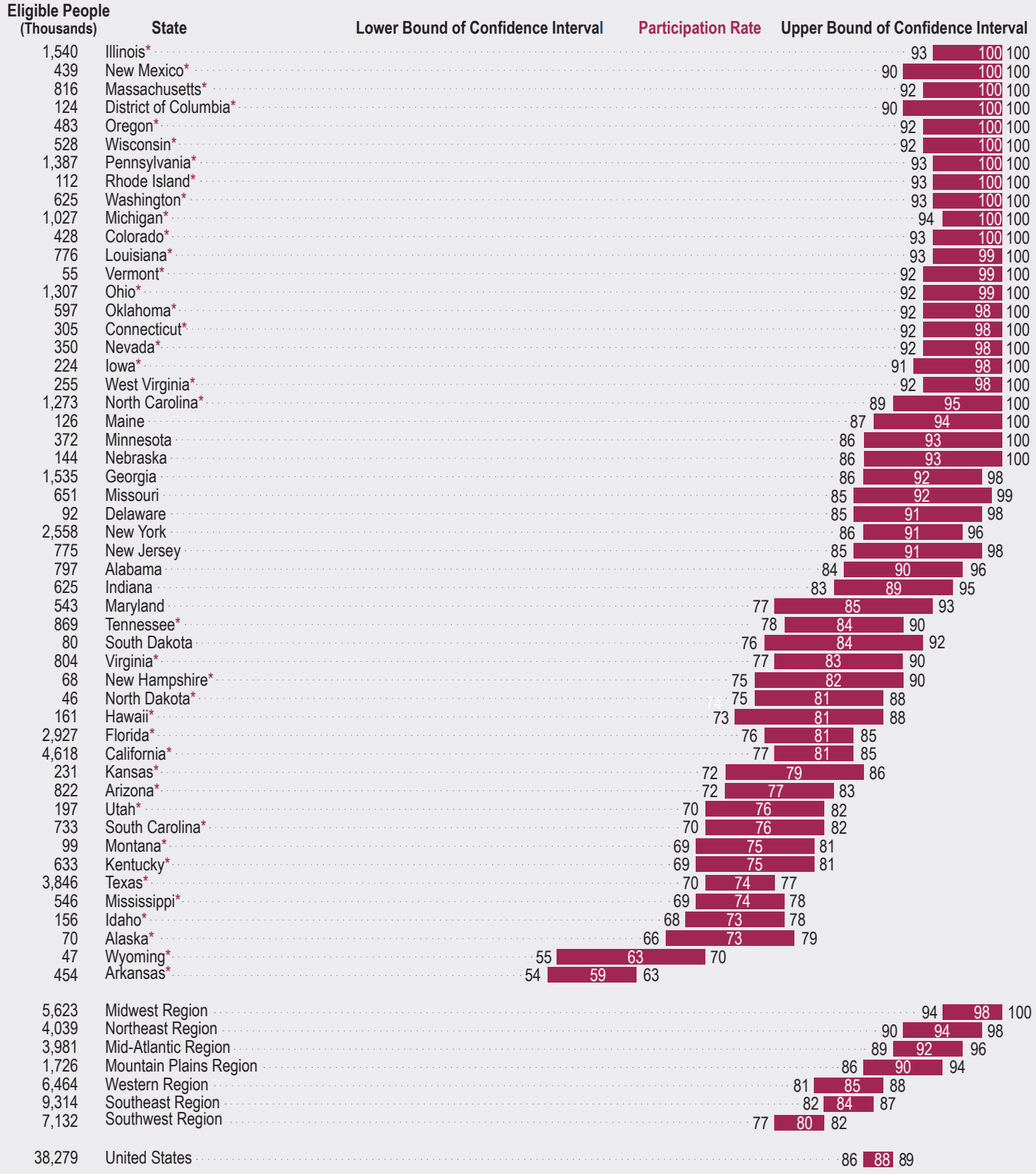
The estimated SNAP participation rates presented here were based on fairly small samples of households in each State. Although there is substantial uncertainty associated with the estimates for some States and with comparisons among different States, these estimates show whether a State's participation rate was probably at the top, at the bottom, or in the middle of the distribution. In fiscal year 2022, Illinois, New Mexico, Massachusetts, and the District of Columbia were very likely at the top, with higher rates than all other States. In contrast, Arkansas and Wyoming likely had lower rates than the other States.

By Karen Cunnyngham • Mathematica • February 2025

How many people were eligible in 2022? What percentage participated?

Participation rates and confidence intervals (percentage)

(Estimated participation rates are shown in the red bars; estimated bounds of confidence intervals are shown in black.)
An asterisk (*) indicates that the State's participation rate was significantly different from the national rate.



Eligible People (Thousands)	State	Lower Bound of Confidence Interval	Participation Rate	Upper Bound of Confidence Interval
1,540	Illinois*	93	100	100
439	New Mexico*	90	100	100
816	Massachusetts*	92	100	100
124	District of Columbia*	90	100	100
483	Oregon*	92	100	100
528	Wisconsin*	92	100	100
1,387	Pennsylvania*	93	100	100
112	Rhode Island*	93	100	100
625	Washington*	93	100	100
1,027	Michigan*	94	100	100
428	Colorado*	93	100	100
776	Louisiana*	93	99	100
55	Vermont*	92	99	100
1,307	Ohio*	92	99	100
597	Oklahoma*	92	98	100
305	Connecticut*	92	98	100
350	Nevada*	92	98	100
224	Iowa*	91	98	100
255	West Virginia*	92	98	100
1,273	North Carolina*	89	95	100
126	Maine	87	94	100
372	Minnesota	86	93	100
144	Nebraska	86	93	100
1,535	Georgia	86	92	98
651	Missouri	85	92	99
92	Delaware	85	91	98
2,558	New York	86	91	96
775	New Jersey	85	91	98
797	Alabama	84	90	96
625	Indiana	83	89	95
543	Maryland	77	85	93
869	Tennessee*	78	84	90
80	South Dakota	76	84	92
804	Virginia*	77	83	90
68	New Hampshire*	75	82	90
46	North Dakota*	75	81	88
161	Hawaii*	73	81	88
2,927	Florida*	76	81	85
4,618	California*	77	81	85
231	Kansas*	72	79	86
822	Arizona*	72	77	83
197	Utah*	70	76	82
733	South Carolina*	70	76	82
99	Montana*	69	75	81
633	Kentucky*	69	75	81
3,846	Texas*	70	74	77
546	Mississippi*	69	74	78
156	Idaho*	68	73	78
70	Alaska*	66	73	79
47	Wyoming*	55	63	70
454	Arkansas*	54	59	63
5,623	Midwest Region	94	98	100
4,039	Northeast Region	90	94	98
3,981	Mid-Atlantic Region	89	92	96
1,726	Mountain Plains Region	86	90	94
6,464	Western Region	81	85	88
9,314	Southeast Region	82	84	87
7,132	Southwest Region	77	80	82
38,279	United States	86	88	89

A confidence interval expresses our level of certainty 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, although our best estimate is that New York's participation rate was 91 percent in 2022, the true rate might have been higher or lower. However, the chances are 90 in 100 that the true rate was between 86 percent and 96 percent.

See the Estimation method section for information on participation rates of 100 percent.

How a State compares with other States can fluctuate over time due to both statistical variability in estimated rates and true changes in rates. The statistical variability is great enough that a large change in a State's rate from the year before should be interpreted cautiously, as should differences between the rates of that State and other States. It might be incorrect to conclude that program performance in the State has improved or deteriorated dramatically.

Despite this uncertainty, the estimated participation rates suggest that some States have been consistently in the top or bottom of the distribution in recent years. In both 2020 and 2022, the District of Columbia, Illinois, Massachusetts, New Mexico, Oregon, Pennsylvania, and Wisconsin had significantly higher participation rates than two-thirds of the States. Connecticut, Rhode Island, Vermont, and Washington had significantly higher rates than half of the States. Arizona, California, Florida, Kansas, North Dakota, and Texas had significantly lower rates than half of the States in both years, while Arkansas, Kentucky, Mississippi, South Carolina, and Wyoming had significantly lower rates than two-thirds of the States.

Estimation method

We derived the estimates presented here by using shrinkage estimation methods that improve precision when sample sizes are small (Cunnyngham 2025). The shrinkage estimator averages direct sample estimates of participation rates with predictions from a regression model using data for all States, both years, and both all eligible people and people in households with earnings to derive each estimate.

We obtained the direct sample estimates by applying SNAP eligibility rules to households in the Current Population Survey Annual Social and Economic Supplement to estimate numbers of eligible people and by using SNAP administrative data to estimate numbers of participating people. Vigil and Rahimi (2024) describe the methods we used to derive the direct sample estimates. The estimates include people in households that pass all applicable Federal SNAP income and resource tests or where all members receive cash public assistance. They do not include people eligible solely through State categorical eligibility policies.

The regression predictions of participation rates drew on data from the American Community Survey, individual tax returns, population estimates, and administrative records, and were based on indicators of socioeconomic conditions, such as the percentage of the State population receiving SNAP benefits. Because of differences between the years being estimated, the regression model differs slightly from the one developed for Cunnyngham (2023). The regression model developed for this year's report was chosen for its strong predictive ability for both years and its consistency with the model developed for the prior report.

The shrinkage estimates presented here are substantially more precise than the direct sample estimates (Cunnyngham 2025). Estimates for fiscal year 2020 differ from estimates presented in Cunnyngham (2023) because of differences in the fiscal years being jointly estimated and the regression model.

Estimated participation rates of 100 percent are the result of differences between the data used to estimate the number of eligible people and the data used to estimate the number of participants; they should not be interpreted to mean that every eligible person participated in SNAP. Using different data sources to estimate rate denominators and numerators can result in a preliminary estimate of eligible people in a particular State that is lower than the corresponding estimate of participants, leading to a

Estimates of participation rates (percentage)		
State	**2020**	**2022**
Significantly higher rate than half of the other States		
Connecticut	93	98
District of Columbia	96	100
Illinois	100	100
Massachusetts	100	100
New Mexico	100	100
Oregon	100	100
Pennsylvania	100	100
Rhode Island	100	100
Vermont	96	99
Washington	100	100
Wisconsin	97	100
Alabama	88	90
Alaska	81	73
Colorado	80	100
Delaware	96	91
Georgia	76	92
Hawaii	85	81
Idaho	83	73
Indiana	76	89
Iowa	89	98
Louisiana	87	99
Maine	85	94
Maryland	91	85
Michigan	84	100
Minnesota	80	93
Missouri	86	92
Montana	78	75
Nebraska	84	93
Nevada	89	98
New Hampshire	81	82
New Jersey	80	91
New York	84	91
North Carolina	73	95
Ohio	85	99
Oklahoma	89	98
South Dakota	83	84
Tennessee	87	84
Utah	78	76
Virginia	79	83
West Virginia	91	98
Significantly lower rate than half of the other States		
Arizona	73	77
Arkansas	64	59
California	67	81
Florida	77	81
Kansas	67	79
Kentucky	65	75
Mississippi	63	74
North Dakota	67	81
South Carolina	72	76
Texas	74	74
Wyoming	52	63

participation rate that exceeds 100 percent. We capped participation rates at 100 percent by adjusting estimates of eligible people so that no State had fewer eligible people than participants. Cunnyngham (2025) provides details on how we made the adjustments.

Because the Current Population Survey does not collect data on participation in the Food Distribution Program on Indian Reservations, we did not adjust the estimates presented here to reflect the fact that participants in that program were not eligible to receive SNAP benefits at the same time (Vigil and Rahimi 2024). The Food Distribution Program on Indian Reservations served about 45,000 people in fiscal year 2022, so the effects of such adjustments would be negligible in almost all States.

Region	2020	2022
Mid-Atlantic Region	90	92
Midwest Region	88	98
Mountain Plains Region	80	90
Northeast Region	88	94
Southeast Region	76	84
Southwest Region	77	80
Western Region	75	85
United States	**81**	**88**

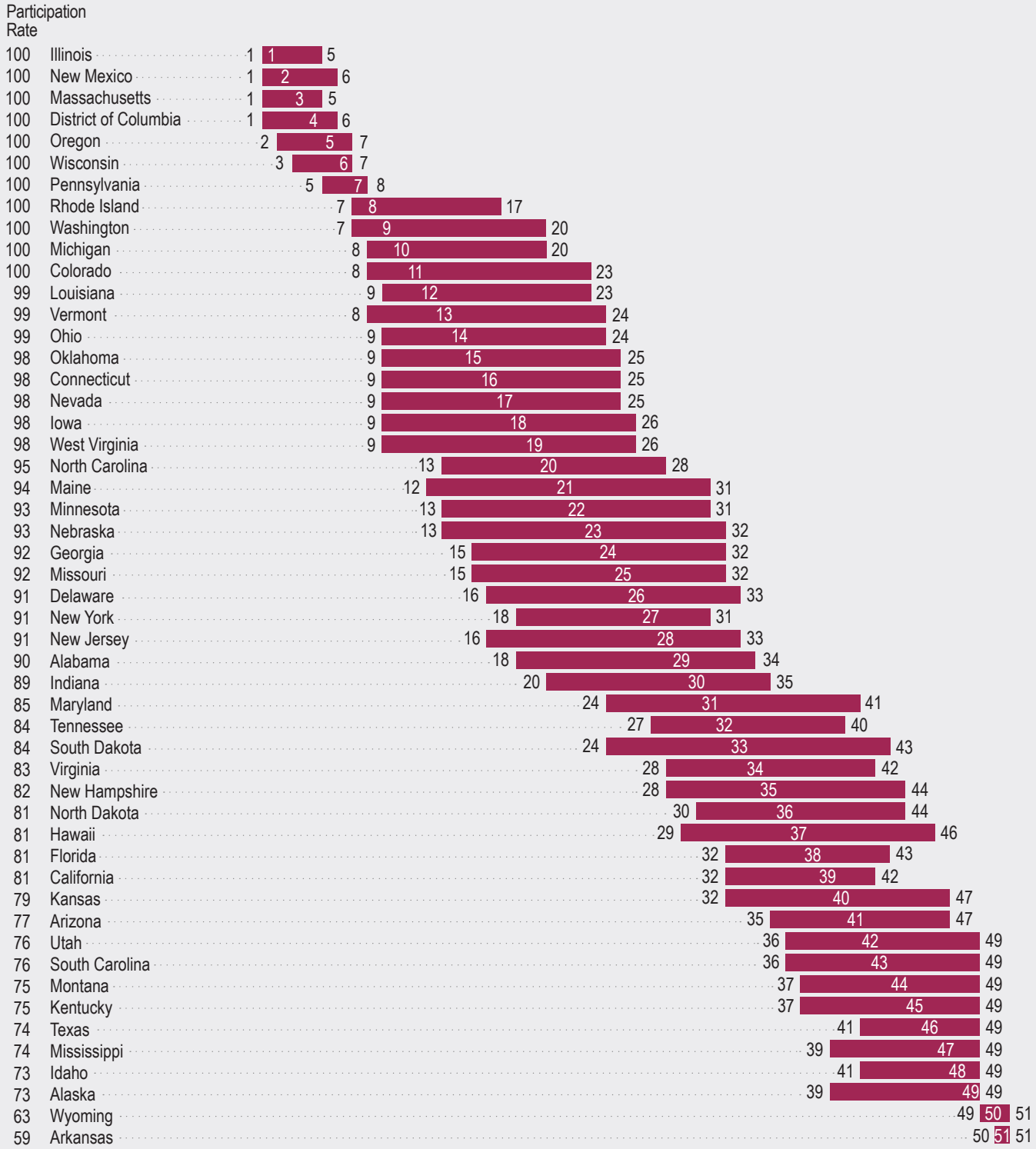
There is substantial uncertainty associated with most of these estimates. Cunnyngham (2025) presents confidence intervals for the 2020 estimates. These confidence intervals are generally about as wide as the confidence intervals for the 2022 estimates in the figure on page 2.

See the Estimation method section for information on participation rates of 100 percent.

How did your State rank in 2022

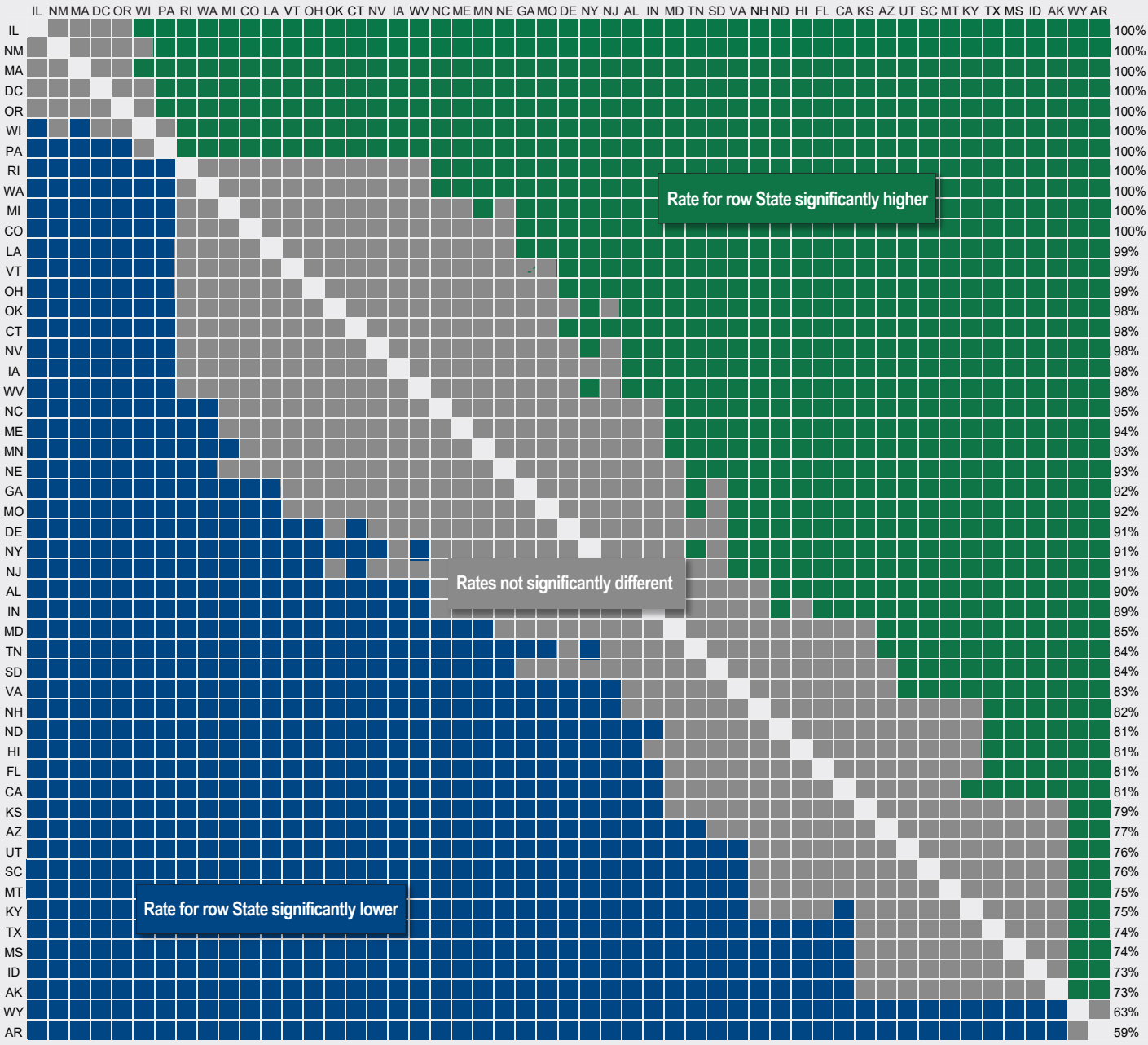
Rank and confidence intervals

(Estimated ranks are shown in the red bars; 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, although our best estimate is that Delaware had the 26th highest participation rate in 2022, the true rank might have been higher or lower. However, the chances are 90 in 100 that Delaware's true rank was between 16 and 33 among the States. To determine how Delaware or your State compares with any other State, see the chart on page 6.

How did your State compare with other States in 2022 for all eligible people?

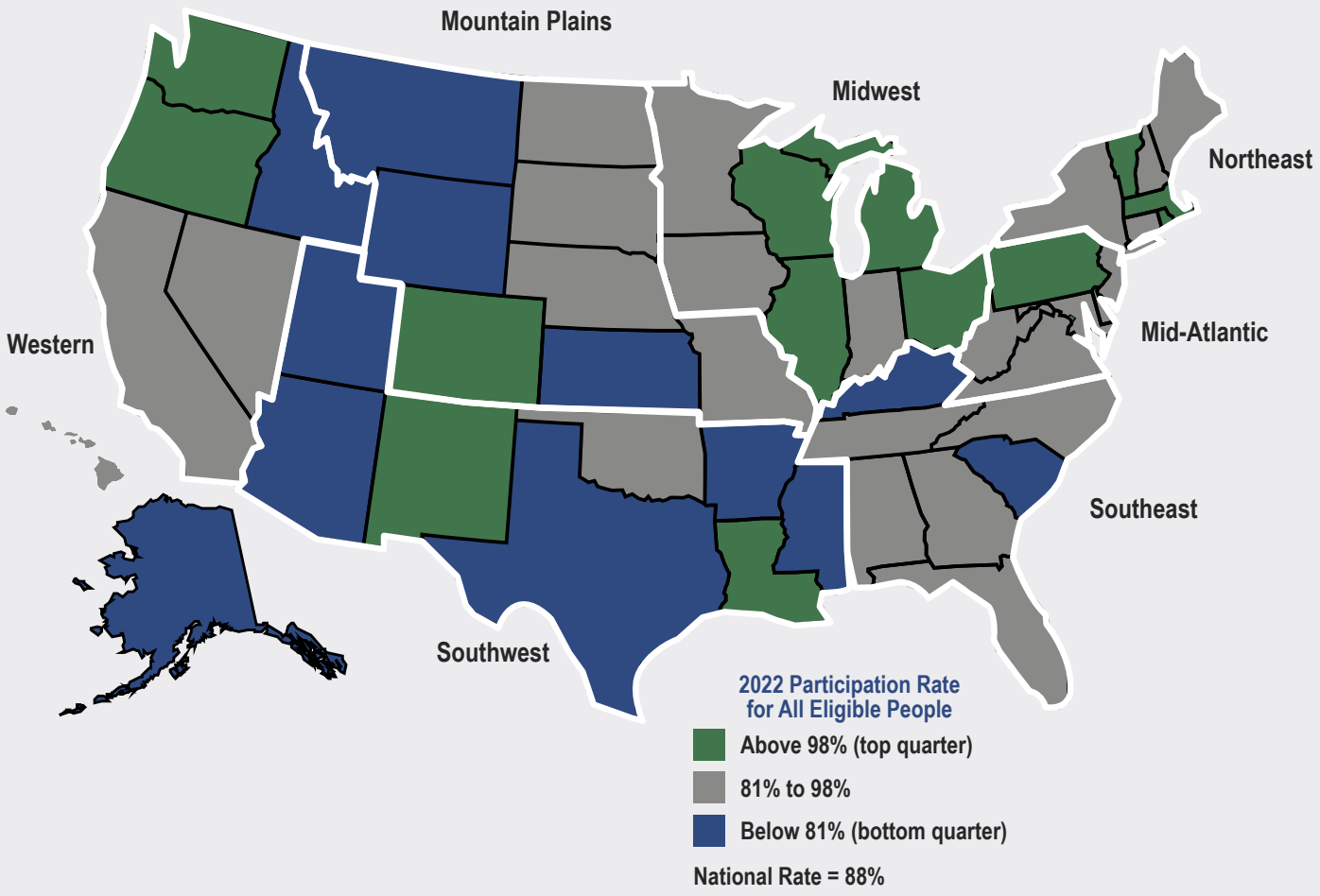


This figure can be used to determine whether there is a statistically significant difference between two States' participation rates. Find the row for the first State of interest at the left of the figure and the column for the second State of interest at the top of the figure. If the box where the row and column intersect is green or blue, there is at least a 90 percent chance that one of the States has a higher true participation rate than the other. A green box indicates that the first State (the row State) likely has the higher participation rate, while a blue box indicates that the second State (the column State) likely has the higher rate. If the box is gray, there is less than a 90 percent chance but more than a 10 percent chance that one State has a higher true rate than the other; thus, we would conclude that neither estimated rate is significantly higher.

Taking Delaware, the State in the middle of the distribution, as an example, we see that it had a significantly lower participation rate than the District of Columbia and 14 States (Illinois, New Mexico, Massachusetts, Oregon, Wisconsin, Pennsylvania, Rhode Island, Washington, Michigan, Colorado, Louisiana, Vermont, Ohio, and Connecticut) and a significantly higher rate than 18 States (Arkansas, Wyoming, Alaska, Idaho, Mississippi, Texas, Kentucky, Montana, South Carolina, Utah, Arizona, Kansas, California, Florida, Hawaii, North Dakota, New Hampshire, and Virginia). Its rate was neither significantly higher nor significantly lower than the rates for the other 17 States. This suggests that Delaware is probably in the broad center of the distribution, unlike, for example, Illinois and Arkansas, 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 12 percentage points, a difference that seems important as well as significant, and each was at least 6 percentage points.

See the Estimation method section for information on participation rates of 100 percent.

Estimates of participation rates varied widely



References

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Cunnyngham, Karen. "Empirical Bayes Shrinkage Estimates of State Supplemental Nutrition Assistance Program Participation Rates: Fiscal Year 2020 and Fiscal Year 2022." Prepared by Mathematica, Contract No. 12-3198-23-F-0047. U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, February 2025. https://www.mathematica.org/publications/estimates-of-state-supplemental-nutrition-assistance-program-participation-rates-in-2020-and-2022

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