

HALF OF LOW-INCOME PEOPLE NOT RECEIVING FOOD STAMPS

August 2007

In 2004, 12.6 million American households were food insecure. At some point during the year, they did not have access to enough food for an active, healthy life. The Food Stamp Program since 1964 has been the first line of defense in the fight against food insecurity and hunger.

This new analysis of 2004 countylevel data and statistics focuses on the distribution of Food Stamp benefits. Research findings include:

- Half of all low-income people did not receive Food Stamp Program benefits.
- Counties with lower poverty rates and higher median household incomes had lower percentages of low-income people that were Food Stamp recipients.²
- A significant number of counties, 13.2 percent, had below-average percentages of low-income people benefiting from Food Stamps, yet had above-average poverty rates.
- The rural South had the highest percentage of enrollment in the Food Stamp Program and more than half of all children were eligible for lunches through the National School Lunch Program.

The reasons for some counties having a small percentage of low-income people in the Food Stamp Program are varied and include the stigma of government benefits, eligibility rules, and lack of information about the benefits.

The statistics produced for this analysis, which include the percentage of low-income people receiving Food Stamp benefits, the average monthly benefit per recipient, and the percentage of children in

the National School Lunch Program, are available for every county in the country from 1998-2004 on the NPP Database at http://database.nationalpriorities.org. The analysis is based on data and statistics from the Census Bureau's Small Area Income and Poverty Estimates, Census 2000, and the Bureau of Economic Analysis.

According to the U.S. Department of Agriculture, around 60 percent of eligible people participated in the Food Stamp Program in 2004. However, the eligibility criteria of the program cuts off many low-income people from receiving benefits, so the USDA figure does not address what proportion of low-income people are actually being reached. Since the Food Stamp Program sets an income-eligibility limit of 130 percent of the poverty level, this study uses that threshold, as opposed to the poverty level, to define "low-income." For a family of three, the income limit for low-income was \$19,767.

Food Insecurity Extensive

In spite of the wealth of the United States, the problem of hunger and food insecurity continues. In 2004, 11.9 percent of American households were food insecure, including 35.1 million people, 12.4 million of which were children.⁴

While the problem is still severe, it would be worse if not for the many food and nutrition services run by the U.S. Department of Agriculture. The Food Stamp Program is the largest of the federal food and nutrition programs.

In 2004, the Food Stamp Program cost \$28.6 billion, or 1.2 percent of total federal spending⁵ and served 23.2 million

National Priorities Project (NPP) is a 501(c)(3) research organization that analyzes and clarifies federal data so that people can understand and influence how their tax dollars are spent. Located in Northampton, MA, since 1983, NPP focuses on the impact of federal spending and other policies at the national, state, congressional district and local levels.

people.⁶ Yet, 50 percent of all low-income people did not receive benefits. At \$86 per person, \$3 per day, the average monthly benefit made it difficult to procure a nutritious diet.

People in Poorer Counties More Likely to Receive Benefits

In 2004, a low-income person in a county with a high poverty rate was more likely to be enrolled in the Food Stamp Program than a person in a lower poverty rate county. The counties with at least 1,000 in total population, and the smallest percentages of low-income people receiving Food Stamp benefits are listed in Appendix 1. Counties with at least 50,000 people and the lowest percentages were Hunterdon County, New Jersey (11 percent), Putnam County, New York (15 percent), and Geauga County, Ohio (15 percent). In these counties, at least 85 percent of low-income people did not receive Food Stamp benefits. See Appendix 2.

In spite of high poverty rates, however, some counties had a low percentage of people receiving benefits. For example, Riley County, Kansas had 15.6 percent of people living in poverty compared to a national average of 12.7 percent⁷, yet only 17 percent of low-income people benefited from the program. In total, 13.2 percent of all counties had above-average poverty rates yet below-average rates of

low-income people receiving Food Stamps. Living in these counties were 11 million low-income people.

Large, urban counties showed similar patterns. In the 37 counties that had at least one million in population, nine had above-average poverty rates. For example, Queens County, New York had a poverty rate of 15 percent, but only 34 percent of the low-income population received Food Stamps. See Appendix 3.

The analysis was extended to the relationship between the level of economic stress in each county, and the proportion of low-income people served by the Food Stamp Program. Each county was characterized according to the U.S. Department of Agriculture county typology codes for the following economic stressors:8

- Housing stress, where 30 percent or more of households had one or more poor housing conditions such as the lack of complete plumbing or more than one person per room.
- Low-education, where one-fourth or more residents aged 25 – 64 years old had neither a high school diploma nor GED.
- Low-employment, where less than 65 percent of residents aged 21-64 years old were employed.
- Persistent poverty, where 20 percent or more residents were poor as measured by each of the last four censuses.

Figure 1: Economic Hardships (Stressors)

Number of stressors	Number of counties	Percentage of Low-Income People Receiving Food Stamps	Poverty Rate	Percentage of Low- Income People	Percentage of Children Eligible for National School	Range of County Median Household Income
	1 527	40.40/	10 50/	1 = 40/	Lunch	#24 42E #046E9
0	1,527	48.4%	10.5%	15.4%	31.5%	\$24,435 - \$94658
1	1,036	47.1%	12.6%	17.8%	39.0%	\$23,821 - \$75,514
2	235	50.8%	16.9%	23.5%	57.4%	\$22,910 - \$46,971
3	191	64.2%	21.3%	28.2%	50.9%	\$19,491 - \$43,072
4	95	70.7%	26.0%	34.4%	61.3%	\$17,787 - \$33,959
5	26	84.8%	28.5%	36.4%	86.0%	\$18,377 - \$28,830

 Population loss, where the number of residents declined both between the 1980 and 1990 censuses and between the 1990 and 2000 censuses.

The more economic stressors a county faced, the more likely it was to have a larger percentage of its low-income population enrolled in the Food Stamps Program, compared to a county with fewer stressors. See Figure 1.

Children in counties with more hardships were also more likely to be eligible for the National School Lunch Program as shown in Figure 1.

Even though counties with populations suffering from more economic hardships were more likely to receive Food Stamps, some low-income people in those counties were not receiving benefits. Counties with five economic hardships had 15 percent of the low-income population without Food Stamps.

Rural Poor Better Served than Urban

Rural America had a higher poverty rate at 14.3 percent than urban areas at 12.3 percent.⁹ The national poverty rate in

2004 was 12.7 percent.¹⁰ Rural areas had higher rates of low-income people benefiting from the Food Stamp Program, 56.1 percent compared to 48.8 percent in urban areas. Rural areas also had a larger percentage of children in the National School Lunch Program as shown in Figure 2.

South Poorest Region, Southern Rural Population More Likely to Receive Benefits

The distribution of Food Stamps at the regional level indicates that the rural South had the highest rate of low-income people receiving Food Stamps at 60.4 percent. The rural South also had by far the highest poverty rate and nearly one in four people was low-income. Children in these counties were also more likely to be eligible for the National School Lunch Program. See Figure 2.

The urban Northeast region had the lowest proportion of low-income people that were Food Stamp recipients followed closely by the urban West at 45.5 percent and 45.7 percent, respectively.

Breaking the urban-rural pattern of the other regions, the Midwest had a higher

Figure 2: Food Stamp	Recipients by	Region and l	Urban/Rural	l Designation
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	Percentage of Low-		Percentage of	Percentage of
	Income People with	Poverty Rate	Low-Income	Children/National
	Food Stamps		People	School Lunch Program
National	50.2%	12.7%	17.9%	38.2%
Urban	48.8%	12.3%	17.4%	36.9%
Rural	56.1%	14.3%	20.7%	44.4%
South	52.1%	14.0%	20.0%	44.6%
Urban	49.4%	13.2%	18.8%	41.9%
Rural	60.4%	17.2%	24.4%	54.9%
Midwest	53.8%	11.4%	16.3%	32.9%
Urban	54.8%	11.4%	16.0%	32.4%
Rural	50.9%	11.6%	17.3%	34.5%
Northeast	45.9%	11.6%	15.8%	22.3%
Urban	45.5%	11.6%	15.7%	21.5%
Rural	49.7%	11.1%	16.5%	30.6%
West	46.6%	12.5%	17.7%	41.7%
Urban	45.7%	12.4%	17.5%	41.8%
Rural	53.0%	13.2%	19.4%	40.9%

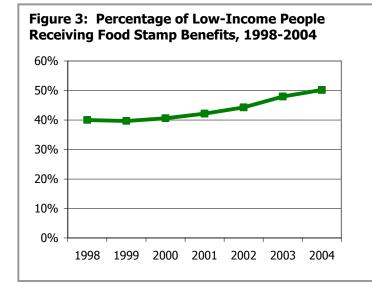
proportion of low-income people receiving Food Stamps in urban areas (54.8 percent) than in rural areas (50.9 percent).

Nevada, Wyoming, and Utah Top the List

The states with the smallest proportion of low-income people receiving Food Stamp benefits were Nevada (32.3 percent), Wyoming and Utah. The states that had the highest rates of low-income people in the Food Stamp Program were the District of Columbia (71.8 percent), Missouri, and Tennessee. See Appendix 4.

Almost all states followed the national trend of increasing numbers and percentages of low-income people participating in the Food Stamp Program. Much of this increase can be attributed to changes in eligibility rules legislated in 2002. The Farm Bill of 2002, which included reauthorization of the Food Stamp Program, provided states with options to simplify the program, and indexed the standard deduction on income for inflation and to vary with household size.

By this time, many states had implemented Electronic Benefits Transfer systems which were mandated in 1996. These systems enable Food Stamp beneficiaries to appear to be using debit



cards, blending in with other shoppers and reducing the stigma attached to government benefits. All states implemented them as of June 2004.

Three states, Hawaii, Rhode Island, and Connecticut had declines in the proportion of low-income people participating in the program between 2000 and 2004. See Appendix 4.

Moving Forward

The reasons for low-income people not participating in the Food Stamp Program vary and include:

Eligibility: Restrictions on legal immigrants, limitations on countable assets, and the frequency with which a person must certify that s/he still qualifies, as well as other eligibility rules, can and do prevent poor and low-income people from signing up for Food Stamp benefits. For example, half of the population of Queens County, New York was foreign born, according to the last Census compared to a national average of 11 percent.¹¹ The low rate of low-income population enrolled in the Food Stamp Program is likely to be explained mostly by this factor even though it had a poverty rate well above average. Many of the foreignborn population may not have lived in the country for more than five years as required

by Food Stamp Program eligibility rules.

Stigma: In a wealthy society, being poor and needing assistance carries a stigma. In areas with lower poverty rates and higher median household income levels, it is likely that government benefits are more stigmatized. Where a "critical mass" of beneficiaries require and make use of government programs, it is likely that there is less stigma. This factor likely explains the correlations found in this analysis.

Informal networks: Counties with high poverty rates, and/or more economic stressors, are also likely to have better developed informal networks

- family, friends and neighbors - that share information about how to access government benefits. It is much easier to access a benefit if the information on how to access the benefit is readily available.

Other barriers: Applying for Food Stamp benefits and the re-certification process (periodically proving that one is still eligible) may pose additional barriers. One study found that most eligible nonparticipants surveyed cited a lack of knowledge and support in the application process. 12 Where a person's perceived benefits are low or unknown, and accessing alternatives such as a food bank seems easier, these types of barriers may not be worth tackling. A person or family who perceives their situation as temporary may also be reluctant to go through the application process.

Relaxing eligibility criteria will undoubtedly allow the program to reach more low-income families. Targeting additional funding on outreach can also help, particularly where participation in government benefit programs is low.

More on Methodology

The number of low-income people was calculated at county-level by using the Census Bureau's Small Area Income and Poverty Estimates (SAIPE) for the number of people at or below poverty. We then calculated county-level ratios of the population living at 130 percent of the poverty level or below using Census 2000 (SF3) data relative to those at or below the poverty threshold. We then applied those ratios to the SAIPE statistics to estimate "low-income" people, or people living at or below 130 percent of the poverty level by county.

County-level Food Stamp recipient data are from the SAIPE program. SAIPE uses counts of the participants for the month of July. (No annualized or other months are

available except by asking every single state for the data.)

These participant data do not include numbers of people participating in the Food Distribution Program on Indian Reservations (FDPIR), an alternative to Food Stamps. To ensure compatibility with our denominator (the number of low-income people), the number of recipients of the FDPIR program were added to Food Stamp recipient numbers at the county level, since people on Indian Reservations are included in SAIPE's poverty estimates in their county of residence. FDPIR numbers were obtained by Indian Tribal Organization (ITO), from the Food and Nutrition Service of the USDA.

These numbers were then allocated to counties based on the location of the reservations served. For reservations that cross county or state lines, FDPIR participant numbers were allocated to counties based on the proportion of the reservation population living in each county according to the 2000 Census (SF1).

We made an additional adjustment to California recipient numbers. In California, Supplementary Security Income/State Supplementary Payment (SSI/SSP) recipients are not eligible to participate in the Food Stamp Program since they receive a monetary allowance for food. We assumed that 80 percent of SSI/SSP recipients would have otherwise

For each county, the formula is:

FSR + FDPIR Number of Low-Income People

Except in California, where the following formula was applied:

 $FSR + FDPIR + (0.8)SSI_{CA}$ Number of Low-Income People

FSR: Food Stamp Recipients

FDPIR: Food Distribution Program on Indian Reservations Low-Income: At or below 130% of the poverty level

SSI_{CA}: Supplementary Security Income/State Supplementary Payment

recipients in California

applied and received Food Stamps.¹³ We then added 80 percent of the number of SSI/SSP recipients for each California county to the number of county-level Food Stamp recipients. SSI/SSP data were obtained from the Bureau of Economic Analysis.

data (not in this report, but available on the NPP Database at http://database.nationalpriorities.org) were obtained, by county, from the Regional Economic Information System of the Bureau of Economic Analysis. Recipients in this calculation refer only to Food Stamp recipients, and do not include Indian

Food Stamp benefits per recipient

The Bureau of Economic Analysis' county codes were used in all cases. In SAIPE data, county codes for Virginia include both independent cities and their surrounding counties. We combined Virginia cities and counties from SAIPE to ensure compatibility with the codes of the Bureau of Economic Analysis.

Reservations or Supplemental Security Income recipients due to data limitations.

Resources

Bartlett, S. and N. Burstein, 'Eligible nonparticipants,' Food Stamp Access Study, Economic Research Service, May, 2004.

Castner, L.A., A.L. Schirm. 'Empirical Bayes shrinkage estimates of state Food Stamp participation rates in 2002 and 2003 for all eligible people and the working poor, final report,' July 2006.

Food and Research Action Center. 'Food Stamp access in urban America: A city-by-city snapshot,' revised April 2006.

Food and Research Action Center. 'Get ready for Food Stamp reauthorization changes in your state,' revised August 2002.

Nord, M., M. Andrews, and S. Carlson. 2005. "Household Food Security in the United States, 2004," Economic Research Report, No 11. USDA: Washington, DC.

Seto, E.Y., J. Stiles and H.E. Brady. 'California's Food Stamp participation rate, 1999-2001: Impact of family composition and benefits for aged and disabled,' UC DATA, University of California, Berkeley, 2003.

Smith, K., P. Salant. 'Rural America depends on the Food Stamp Program to make ends meet,' Carsey Institute, Fall 2005.

Wolkwitz, K. 'Trends in Food Stamp Program participation rates: 1999 to 2005,' Food and Nutrition Service, U.S. Department of Agriculture, June 2007.

Appendix 1: Top 25 Counties with at Least 1,000 in Population Least Served by the Food Stamp Program According to the Percentage of Low-Income People Receiving Food Stamp Benefits.

State	County	Rank	Percentage of Low-Income People Receiving Food Stamp Benefits, 2004	Percentage of People in Poverty, 2004	Percentage of People with Low- Income, 2004		
TX	Glasscock County	1	4.1%	7.3%	11.1%		
CO	Pitkin County	2	5.6%	4.6%	6.4%		
NE	Hayes County	3	6.2%	9.3%	15.6%		
MA	Nantucket County	4	7.3%	4.5%	6.1%		
ID	Blaine County	5	7.5%	5.9%	10.7%		
CO	Summit County	6	8.7%	5.9%	8.8%		
NE	Sioux County	7	9.0%	9.1%	12.2%		
SD	Faulk County	8	9.1%	10.0%	13.5%		
WY	Teton County	9	9.4%	4.9%	6.5%		
CO	Eagle County	10	9.9%	6.0%	8.4%		
MT	Garfield County	11	10.0%	10.7%	14.3%		
NV	Storey County	12	10.8%	5.1%	7.9%		
NJ	Hunterdon County	13	11.1%	3.1%	4.6%		
ID	Camas County	14	11.7%	7.3%	14.7%		
SD	Haakon County	15	11.9%	9.9%	14.7%		
NV	Eureka County	16	12.3%	9.0%	12.0%		
TX	Irion County	17	12.4%	8.3%	16.6%		
UT	Summit County	18	12.4%	5.3%	8.1%		
SD	Edmunds County	19	12.5%	9.8%	14.1%		
SD	Hanson County	20	12.6%	8.3%	10.9%		
SD	Harding County	21	12.8%	11.5%	15.8%		
UT	Morgan County	22	12.8%	4.6%	7.7%		
SD	Campbell County	23	12.8%	11.0%	17.3%		
TX	Hartley County	24	12.8%	9.1%	15.7%		
SD	Potter County	25	12.9%	9.5%	15.1%		

Appendix 2: Top 25 Counties with at Least 50,000 in Population Least Served by the Food Stamp Program According to the Percentage of Low-Income People Receiving Food Stamp Benefits.

State	County	Rank	Percentage of Low-Income People Receiving Food Stamp	Percentage of People in Poverty, 2004	Percentage of People with Low- Income, 2004
			Benefits, 2004		
NJ	Hunterdon County	1	11.1%	3.1%	4.6%
NY	Putnam County	2	14.9%	4.5%	6.1%
ОН	Geauga County	3	15.2%	5.5%	9.1%
NJ	Morris County	4	15.8%	4.1%	5.5%
KS	Riley County	5	17.2%	15.6%	20.0%
TX	Randall County	6	17.7%	8.0%	12.1%
WI	Waukesha County	7	18.8%	4.8%	7.3%
WI	Ozaukee County	8	19.0%	4.5%	7.2%
GA	Forsyth County	9	19.1%	5.5%	7.8%
NY	Nassau County	10	19.3%	6.2%	9.0%
NJ	Bergen County	11	19.9%	5.7%	8.3%
NJ	Sussex County	12	20.2%	4.4%	6.1%
WI	St. Croix County	13	20.2%	5.1%	8.2%
KS	Johnson County	14	20.4%	5.4%	8.0%
NJ	Somerset County	15	21.7%	4.3%	6.3%
IL	McHenry County	16	22.2%	4.5%	6.8%
VA	Arlington County	17	22.2%	7.1%	9.8%
NJ	Middlesex County	18	22.2%	6.9%	9.8%
MN	Carver County	19	23.0%	3.9%	5.9%
VA	York County	20	23.3%	4.8%	8.3%
VA	Fairfax County	21	23.7%	5.3%	7.6%
CT	Tolland County	22	23.8%	5.8%	8.5%
CO	Boulder County	23	23.8%	9.8%	13.5%
OH	Warren County	24	23.9%	5.3%	8.1%
NY	Suffolk County	25	23.9%	7.0%	9.9%

Appendix 3: Counties with at Least 1,000,000 in Population Least Served by the Food Stamp Program According to the Percentage of Low-Income People Receiving Food Stamp Benefits.

State	County	Rank	Percentage of Low-Income People Receiving Food Stamp Benefits, 2004	Percentage of People in Poverty, 2004	Percentage of People with Low- Income, 2004
NY	Nassau County	1	19.3%	6.2%	9.0%
VA	Fairfax County	2	23.7%	5.3%	7.6%
NY	Suffolk County	3	23.9%	7.0%	9.9%
MA	Middlesex County	4	25.1%	8.1%	11.3%
CA	Orange County	5	29.3%	10.2%	15.1%
FL	Palm Beach County	6	29.6%	10.1%	14.4%
FL	Broward County	7	32.2%	11.6%	16.2%
NV	Clark County	8	32.8%	11.6%	16.7%
CA	San Diego County	9	33.6%	10.9%	15.6%
NY	Queens County	10	33.9%	15.0%	20.4%
CA	Riverside County	11	35.2%	11.9%	17.2%
TX	Harris County	12	35.3%	16.8%	23.7%
TX	Dallas County	13	35.4%	17.0%	24.3%
MI	Oakland County	14	38.5%	7.8%	11.0%
TX	Tarrant County	15	39.0%	12.8%	18.3%
AZ	Maricopa County	16	39.8%	13.3%	18.9%
CA	Contra Costa County	17	41.2%	7.8%	11.0%
CA	Los Angeles County	18	42.7%	16.7%	23.4%
WA	King County	19	42.7%	10.0%	13.7%
FL	Orange County	20	43.1%	12.6%	18.0%
CA	San Bernardino County	21	45.2%	15.4%	21.9%
CA	Santa Clara County	22	46.3%	8.4%	11.6%
MN	Hennepin County	23	48.5%	9.3%	13.1%
TX	Bexar County	24	49.0%	17.3%	24.4%
NY	New York County	25	49.5%	18.8%	23.8%
CA	Alameda County	26	50.1%	11.1%	15.0%
FL	Hillsborough County	27	52.5%	11.8%	16.4%
NY	Kings County	28	53.4%	23.8%	30.3%
PA	Allegheny County	29	53.6%	11.4%	15.7%
FL	Miami-Dade County	30	55.7%	17.1%	23.8%
IL	Cook County	31	57.6%	15.2%	20.5%
ОН	Franklin County	32	58.3%	13.1%	17.7%
CA	Sacramento County	33	61.5%	13.6%	18.8%
NY	Bronx County	34	63.5%	28.2%	34.5%
ОН	Cuyahoga County	35	65.6%	15.0%	20.3%
MI	Wayne County	36	67.7%	18.8%	24.6%
PA	Philadelphia County	37	75.6%	21.6%	27.7%

Appendix 4: Percentage of Low-Income People Receiving Food Stamp Benefits in 2004 by State.

State	Rank	Percentage of Low-Income People Receiving Food Stamp Benefits, 2004	Percentage Point Change, From 2000 to 2004	Percentage of People in Poverty, 2004	Percentage of People with Low-Income, 2004
United States	-	50.2%	9.5%	12.9%	17.9%
Nevada	1	32.3%	8.4%	11.1%	16.1%
Wyoming	2	35.0%	2.8%	10.3%	15.2%
Utah	3	35.2%	7.9%	10.0%	15.4%
Colorado	4	36.6%	9.1%	10.1%	14.7%
Idaho	5	38.7%	11.3%	10.1%	17.5%
New Jersey	6	38.9%	3.2%	8.1%	11.6%
Wisconsin	7	40.0%	6.3%	12.4%	15.8%
Kansas	8	40.4%	4.9%	11.6%	16.3%
Maryland	9	40.4%	4.3%	10.0%	12.8%
New Hampshire	10	40.8%	6.9%	5.6%	9.8%
Massachusetts	11	41.2%	11.2%	9.3%	13.7%
Florida	12	43.2%	10.5%	11.9%	17.0%
Minnesota	13	43.7%	3.4%	7.1%	11.8%
California	14	44.2%	2.1%	13.4%	18.7%
Iowa	15	44.4%	9.4%	11.0%	15.6%
Nebraska	16	46.0%	9.5%	9.7%	14.9%
Rhode Island	17	46.1%	-3.4%	11.6%	15.8%
Arizona	18	46.1%	14.1%	14.5%	20.7%
Connecticut	19	46.2%	-0.4%	10.1%	12.7%
Montana	20	46.8%	7.6%	14.5%	19.6%
North Carolina	21	47.1%	10.8%	14.7%	19.7%
Texas	22	47.2%	16.0%	16.6%	22.8%
North Dakota	23	47.3%	3.6%	9.8%	15.8%
Virginia	24	47.5%	10.4%	9.5%	13.7%
New York	25	47.5%	5.6%	15.2%	19.3%
South Dakota	26	48.2%	0.3%	13.7%	18.7%
Washington	27	50.0%	11.4%	11.5%	16.2%
Mississippi	28	51.3%	7.5%	18.8%	26.2%
Alaska	29	52.0%	14.2%	9.3%	14.8%
Alabama	30	53.1%	6.9%	17.0%	22.1%
Georgia	31	53.3%	13.2%	13.2%	19.2%
Pennsylvania	32	53.3%	6.5%	11.6%	15.8%
Delaware	33	53.7%	20.8%	9.1%	13.5%
Ohio	34	53.7%	12.9%	11.7%	16.4%
Illinois	35	55.1%	7.0%	12.4%	16.5%
Indiana	36	55.2%	12.4%	11.8%	16.2%

Appendix 4 (CON'T): Percentage of Low-Income People Receiving Food Stamp Benefits in 2004 by State.

State	Rank	Percentage of Low- Income People Receiving Food Stamp Benefits, 2004	Percentage Point Change, From 2000 to 2004	Percentage of People in Poverty, 2004	Percentage of People with Low- Income, 2004
New Mexico	37	55.7%	15.1%	16.6%	23.3%
Vermont	38	55.8%	7.2%	8.0%	13.1%
Michigan	39	58.9%	12.1%	13.6%	17.5%
South Carolina	40	59.3%	16.0%	15.0%	20.9%
Hawaii	41	60.1%	-6.1%	8.8%	12.5%
Arkansas	42	60.6%	16.0%	15.4%	22.3%
Kentucky	43	61.0%	7.2%	17.8%	22.6%
Louisiana	44	64.6%	13.9%	16.7%	25.6%
Oregon	45	64.7%	13.7%	12.0%	18.5%
Oklahoma	46	65.1%	22.0%	10.8%	20.2%
West Virginia	47	65.3%	7.3%	14.3%	22.4%
Maine	48	67.1%	11.9%	11.9%	17.1%
Tennessee	49	67.9%	17.1%	16.0%	21.2%
Missouri	50	71.5%	18.2%	12.3%	18.6%
District of Columbia	51	71.8%	6.5%	16.9%	22.9%

 $^{^{1}}$ Nord, M., M. Andrews, and S. Carlson. 2005. "Household Food Security in the United States, 2004," Economic Research Report, No 11. USDA: Washington, DC.

² This Pearson correlation coefficient was statistically significant at the 0.01 level.

³ Four counties were not included due to incomplete data or changing boundaries.

⁴ Nord, M., M. Andrews, and S. Carlson. 2005. "Household Food Security in the United States, 2004," Economic Research Report, No 11. USDA: Washington, DC.

 $^{^5}$ Office of Management and Budget, *Budget of the U.S. Government, FY2008*. Proposed spending on the Food Stamp program in fiscal year 2008 is \$36.8 billion.

 $^{^6}$ Wolkwitz, K. Trends in Food Stamp Program participation rates: 1999 to 2005,' Food and Nutrition Service, U.S. Department of Agriculture, June 2007.

⁷ The national poverty rate in 2004 was 12.9%, according to the Current Population Survey, but to be consistent, we used the national average as calculated with the SAIPE data.

⁸ The counties are identified as to whether or not they have each economic stressor, not the degree. The 2004 County Typology Codes are available from the U.S. Department of Agriculture, Economic Research Service at http://www.ers.usda.gov/Briefing/Rurality/Typology/.

⁹ Counties are identified according to the Rural-Urban Continuum Codes published by the Economic Research Service of the U.S. Department of Agriculture available at http://www.ers.usda.gov/Briefing/Rurality/RuralUrbCon/. Counties are classified as "metro" (urban) and "nonmetro" (rural). About 83% of the population lives in metropolitan (urban) counties.

¹⁰ The national poverty rate in 2004 was 12.9%, according to the Current Population Survey, but to be consistent, we used the national average as calculated with the SAIPE data.

¹¹ Place of birth by citizenship status, P21, Census 2000 (SF3).

¹² Bartlett, S. and N. Burstein, 'Eligible nonparticipants,' Food Stamp Access Study, Economic Research Service, May, 2004.

 $^{^{13}}$ A 2003 study by UC DATA at the University of California, Berkeley estimated this as an eligibility ratio. It is likely, based on this analysis, that fewer than 80 percent would enroll, but we used this figure as a conservative assumption.