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Number 25

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# Characteristics of Low-Income Households With Very Low Food Security

## An Analysis of the USDA GPRA Food Security Indicator

Mark Nord



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# Characteristics of Low-Income Households With Very Low Food Security

## An Analysis of the USDA GPRA Food Security Indicator

**Mark Nord**

### Abstract

This bulletin describes characteristics of low-income households that had very low food security in 2005. The U.S. Department of Agriculture monitors the food security of low-income households to assess how effectively the Government's domestic nutrition assistance programs meet the needs of their target populations. In 2005, 12.6 percent of low-income households—those with annual incomes less than 130 percent of the Federal poverty line—had very low food security. USDA seeks to reduce that prevalence rate as one of its strategic planning goals established under the Government Performance and Results Act (GPRA). To achieve the USDA food security target, the food security of households with incomes that are less than 130 percent of the poverty line (less than \$26,000 annual income for a family of two adults and two children) will need to surpass the current level of food security of households with incomes in the range of 130 to 150 percent of the poverty line (\$26,000 to \$30,000).

**Keywords:** food and nutrition assistance, food security, Government Performance and Results Act, GPRA, Federal poverty line

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## Summary

The U.S. Department of Agriculture monitors the prevalence of “very low food security” among low-income households as a measure of how well the Government’s domestic nutrition assistance programs are meeting the needs of their target populations. Very low food security in a household means that at times during the year, food intake of one or more household members is reduced and normal eating patterns disrupted because the household lacks sufficient money and other resources for food.

### What Is the Issue?

USDA set a goal of reducing the prevalence of very low food security among low-income households to 7.4 percent or below by 2007 as part of its 2002-07 strategic plan, developed in connection with the Government Performance and Results Act (GPRA). In 2005, the prevalence of very low food security among low-income households stood at 12.6 percent, up from 10.9 percent in 2000. Reversing this trend may require changes in nutrition-assistance policies and programs. Information about the composition, location, employment, education, and other characteristics of households with very low food security may provide important insights to guide these policy and program changes and improve the food security of economically vulnerable households.

### What Did the Study Find?

To achieve the USDA food security target, the food security of households with incomes that are less than 130 percent of the poverty line will need to surpass the current level of food security of households with incomes in the range of 130 to 150 percent of the poverty line. In 2005, when the data used in this study were collected, the poverty line for a household of four made up of two adults and two children was \$19,806.

Nearly half of low-income households with very low food security had one or more members employed. Just over half received assistance from one or more of the three largest Federal nutrition assistance programs—the Food Stamp Program, the National School Lunch Program, and the Special Supplemental Nutrition Program for Women, Infants, and Children. The prevalence of very low food security among households receiving food stamps during the study period was more than double the USDA target, and for households that had recently left the Food Stamp Program, the prevalence rate of very low food security was nearly three times the target.

Low-income households with very low food security included disproportionately large shares of men ages 19-64 living alone, households headed by non-Hispanic Blacks, and households with adult members who were unemployed or disabled.

These profiles of low-income households with very low food security suggest that households’ food security depends on a number of demographic, economic, geographic, and household structural factors. Achieving the GPRA food security objective may depend not only on improving the

effectiveness and accessibility of nutrition assistance programs, but also on improving other key household circumstances.

## **How Was the Study Conducted?**

Data on households' food security as well as their economic and demographic characteristics were provided by the nationally representative Current Population Survey Food Security Supplement for 2005. The prevalence of very low food security was calculated for low-income households (annual income less than 130 percent of the poverty line) in selected demographic and economic groups.

## Introduction

The U.S. Department of Agriculture (USDA) monitors the food security of the Nation's households—their consistent access to enough food for active healthy living—as part of its responsibility for administering the Federal Government's domestic nutrition assistance programs. These programs are intended to provide children and needy families better access to food and a more healthful diet. Food security statistics provide information about the need for the programs and the extent to which they are meeting those needs in the target populations.

A food security statistic of particular salience to USDA is the prevalence rate of very low food security among households with incomes that are less than 130 percent of the Federal poverty line.<sup>1</sup> Food insecurity, which includes low food security and very low food security, is the lack of access to adequate food because of insufficient money and other resources for food. Very low food security is a severe range of food insecurity characterized by reduced food intake and disrupted eating patterns for one or more household members.<sup>2</sup> USDA's nutrition assistance programs are intended to alleviate food insecurity in order to avert the severe outcomes that characterize very low food security. USDA gives particular attention to households with annual incomes that are less than 130 percent of the poverty line because that income range approximates the target population for the Food Stamp Program. Also, schoolchildren in these households are eligible for free meals under the National School Lunch Program (and the National School Breakfast Program where it is available). If these households meet categorical requirements, they are also eligible for benefits under the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), which has a somewhat higher income eligibility cutoff (185 percent of the Federal poverty line).

USDA set a goal of reducing the prevalence of very low food security among low-income households to 7.4 percent or below by 2007 as part of its 2002-07 strategic plan, developed under the Government Performance and Results Act (GPRA) (U.S. Department of Agriculture, 2002, p. 18). GPRA provides a framework for assessing the performance of government programs and allocating government resources based on the extent to which programs achieve their intended results. USDA's GPRA food security objective was developed in the context of a broader and longer term U.S. Government objective of reducing by half the rate of food insecurity in the country from 1995 to 2010.<sup>3</sup>

In 2000, the most recent year for which food security statistics were available at the time the GPRA target was set, 10.9 percent of low-income households had very low food security. Achieving the 2007 goal would have required a reduction of 3.5 percentage points or about one-third of the 2000 level. However, from 2000 to 2005, the prevalence of very low food security among low-income households, rather than declining, grew to 12.6 percent (fig. 1; Nord et al., 2006).

The challenge represented by the GPRA goal can be appreciated by examining the prevalence of very low food security among households with incomes in ranges above 130 percent of the poverty line (fig. 2). On average, during the period 2003-05, 7.7 percent of households with incomes between 130 and 150 percent of the poverty line had very low food security. To achieve the GPRA goal of 7.4 percent, then, the food security of households

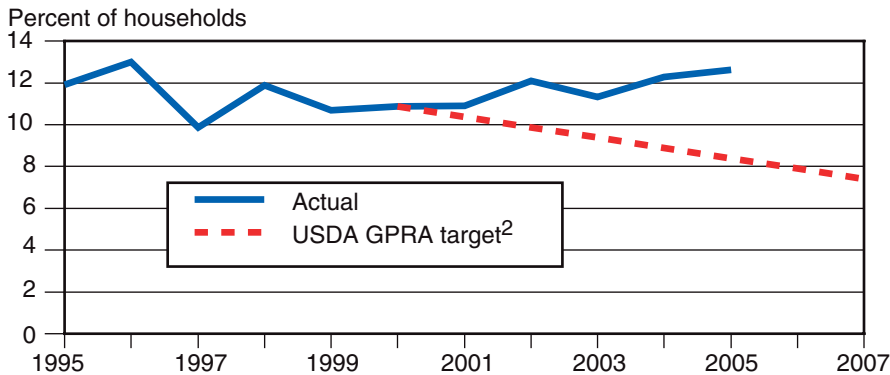
<sup>1</sup>In 2005, the Federal poverty line for a family of two adults and two children was \$19,806; 130 percent of that poverty line was \$25,748.

<sup>2</sup>Prior to 2006, USDA described households in this severe range of food insecurity as "food insecure with hunger." The new label, "very low food security" was introduced following a review of food security measurement methods by the Committee on National Statistics of the National Academies (National Research Council, 2006). Further information about the Committee on National Statistics review and the reasons for the change in reporting language is provided in the appendix.

<sup>3</sup>The U.S. Government's food security objective is embodied in Healthy People 2010, an initiative coordinated by the U.S. Department of Health and Human Services (U.S. Department of Health and Human Services, 2000, p. 19-44). The objective represents one of several steps taken by the Government in response to the 1996 World Food Summit, at which participating countries committed to reducing by half the number of undernourished people worldwide by 2015. The USDA GPRA food security target, although consistent with these broader goals, is focused more narrowly on the low-income population targeted by USDA's nutrition assistance programs. It is an intermediate target for the end of the current strategic planning period (2007) that would be on track to achieving a 2010 target of 5.9 percent—or half of the 1995 prevalence.



Figure 1  
**USDA GPRA food security indicator: Percentage of low-income households with very low food security<sup>1</sup>**

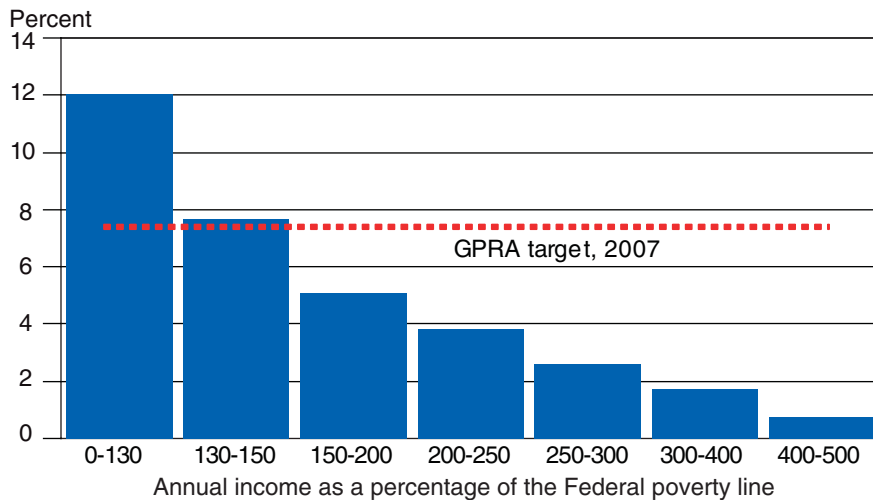


<sup>1</sup>In this bulletin, low-income households are those with annual incomes less than 130 percent of the Federal poverty line. In 2005, the poverty line for a family of two adults and two children was \$19,806.

<sup>2</sup>This target was set in 2002 using the most recent available statistics, for 2000, as a baseline.

Source: Calculated by ERS using Current Population Survey Food Security Supplement data.

Figure 2  
**Prevalence of very low food security by income relative to the poverty line, average 2003-05<sup>1</sup>**



<sup>1</sup>In 2005, the Federal poverty line for a family of two adults and two children was \$19,806.

Source: Calculated by ERS using Current Population Survey Food Security Supplement data.

in the lowest income range will have to equal or slightly exceed that of households with incomes in the 130-to-150-percent-of-poverty range. Improving the food security of low-income households to this extent may be a daunting task, considering that about half of the households with incomes below 130 percent of the poverty line already receive assistance from one or more of the Federal nutrition assistance programs.

To depict more fully the meaning of the 2005 very-low-food-security statistic and the challenges of reducing it, this bulletin describes in detail the households that comprised the USDA GPRA food security indicator in 2005—the more than 2.2 million low-income households with very low food security.<sup>4</sup> Information about the composition, location, employment, education, and other characteristics of these households provides an important knowledge base for the Congress and USDA as they consider policies and programs to improve the food security of low-income households.

<sup>4</sup> The absolute number of households with very low food security is understated by this statistic. About 19 percent of all households in the CPS-FSS did not provide income information. Among these, 468,000 households had very low food security. Although evidence suggests that households not reporting income were disproportionately in higher income ranges, it is likely that some of those with very low food security had incomes less than 130 percent of the poverty line. All statistics presented in this report exclude households that did not report income.



## **Food Security Statistics May Not Perfectly Reflect the Performance of Nutrition Assistance Programs**

Changes in the prevalence of very low food security among low-income households may reflect factors other than, or in addition to, the performance of nutrition assistance programs. Food security statistics provide information about unmet food needs and can provide insight into the performance of nutrition assistance programs. But trends in food security statistics must be interpreted in the context of other factors that affect households' access to adequate food, such as changes in the distribution of income across the low-income range, changes in noncash assistance that low-income households receive, and changes in other basic household needs.

For example, the Earned Income Tax Credit and programs that provide assistance for housing, energy, and medical needs of low-income households may contribute to their food security. Changes in any of those programs may cause changes in the prevalence of very low food security, and such changes must be taken into account in order to correctly interpret changes in the GPRA food security indicator. Factors such as these were not taken into account in this bulletin, but it would be important to do so in a full assessment of progress toward USDA's food security objective.

## Data and Presentation

The statistics depicted in the following graphics are based on data from the Current Population Survey Food Security Supplement for 2005. The CPS-FSS is the nationally representative survey of some 50,000 households on which USDA bases its annual food security reports. Two charts are presented for each of nine selected sets of demographic and economic characteristics. A pie chart depicts the makeup of low-income households with very low food security (that is, households in the numerator of the USDA GPRA food security indicator) vis-à-vis that set of characteristics. A bar chart shows the prevalence rate of very low food security among low-income households within each category. The larger sections of each pie chart indicate subpopulations in which improvements in food security would result in proportionally large improvement in the USDA GPRA food security indicator. The bar charts indicate which subpopulations already meet the food security objective. In combination, the two charts provide insight into whether a specific subpopulation's large share in the USDA GPRA food security indicator results from unusually poor food security within that subpopulation or from the subpopulation being over-represented in the low-income population as a whole.

Further details on measurement and analysis of households' food security and economic and demographic characteristics are provided in the appendix.

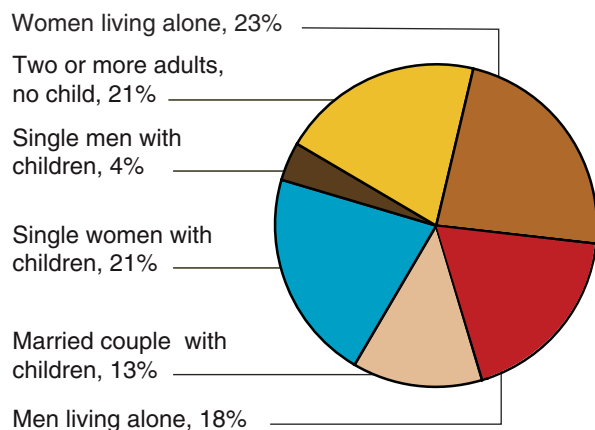
## Household Composition

One in four of the households in the GPRA food security indicator consisted of single parents with children—mostly single women with children (fig. 3). Just over 12 percent of low-income households with children headed by single women and 16 percent of those headed by single men had very low food security at some time in 2005. Individuals living alone comprised 41 percent of the indicator—23 percent were women living alone and 18 percent were men living alone. A large majority of these singles were ages 64 and under (see next section). None of the household composition categories had a rate lower than the 7.4 percent target.

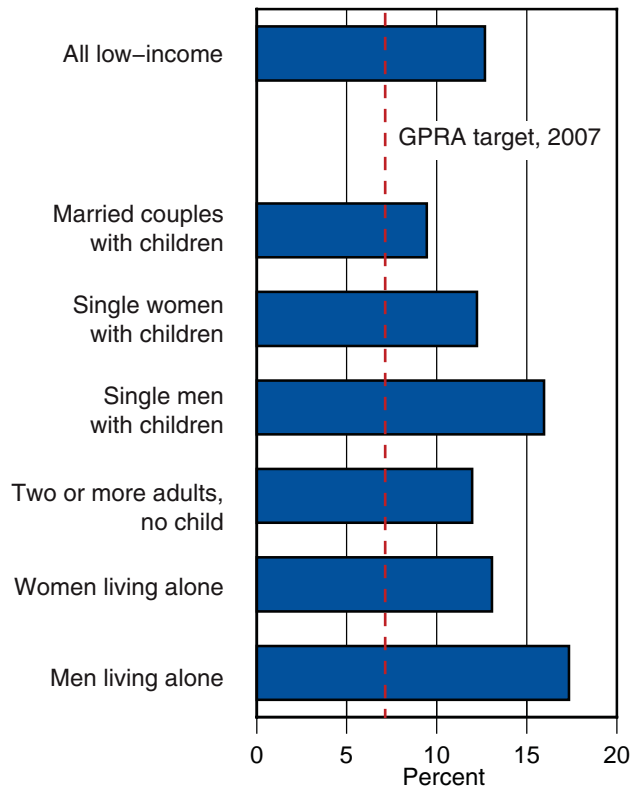
Figure 3

### The USDA GPRA food security indicator, by household composition

#### Household composition of low-income households with very low food security



#### Prevalence of very low food security among low-income households



Source: Calculated by ERS using data from the December 2005 Current Population Survey Food Security Supplement.

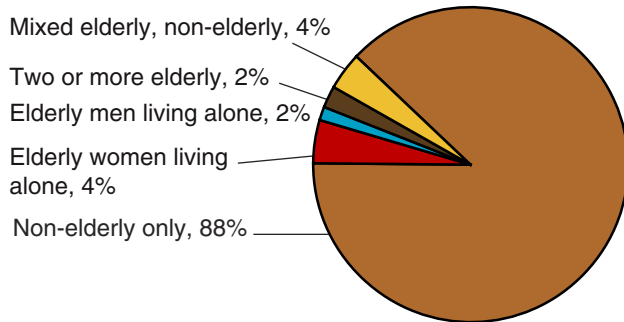
## Presence of Elderly

Elderly persons (age 65 and older) were relatively more food secure than younger persons (fig. 4). Only 12 percent of households in the GPRAs food security indicator included any elderly person and only 8 percent consisted exclusively of elderly persons. Furthermore, all categories of low-income households that included any elderly persons had rates of very low food security near or below the 7.4 percent target.

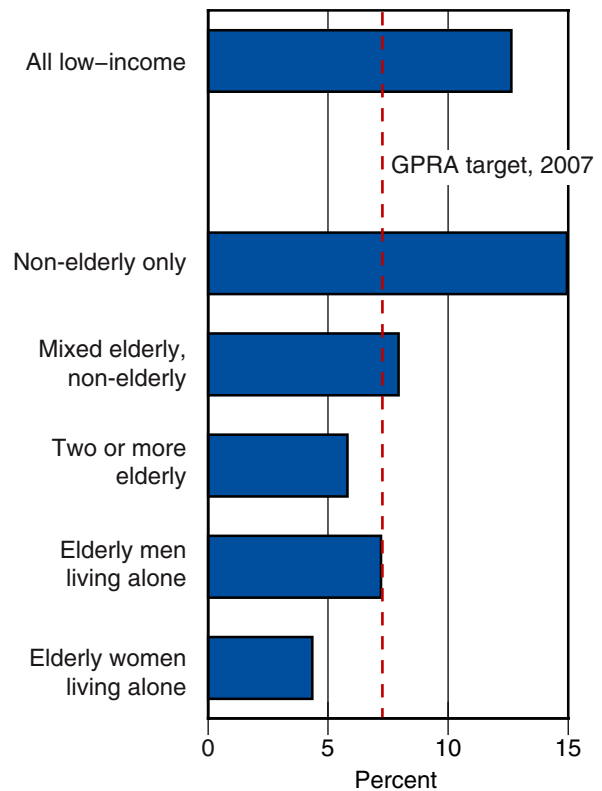
Figure 4

### The USDA GPRAs food security indicator, by presence of elderly<sup>1</sup>

#### Presence of elderly in low-income households with very low food security



#### Prevalence of very low food security among low-income households



<sup>1</sup> Elderly in this analysis refers to persons aged 65 and older.

Source: Calculated by ERS using data from the December 2005 Current Population Survey Food Security Supplement.

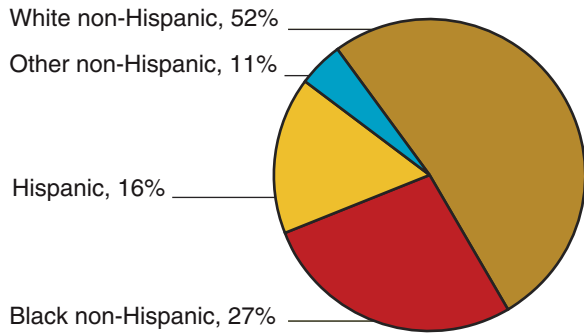
## Race and Hispanic Ethnicity

White non-Hispanic households comprised more than half of all low-income households with very low food security in 2005 (fig. 5). Black non-Hispanics comprised 27 percent and Hispanics 16 percent. The prevalence of very low food security was substantially higher among low-income Black households than among other low-income households, but rates for all groups were above the 7.4 percent target.

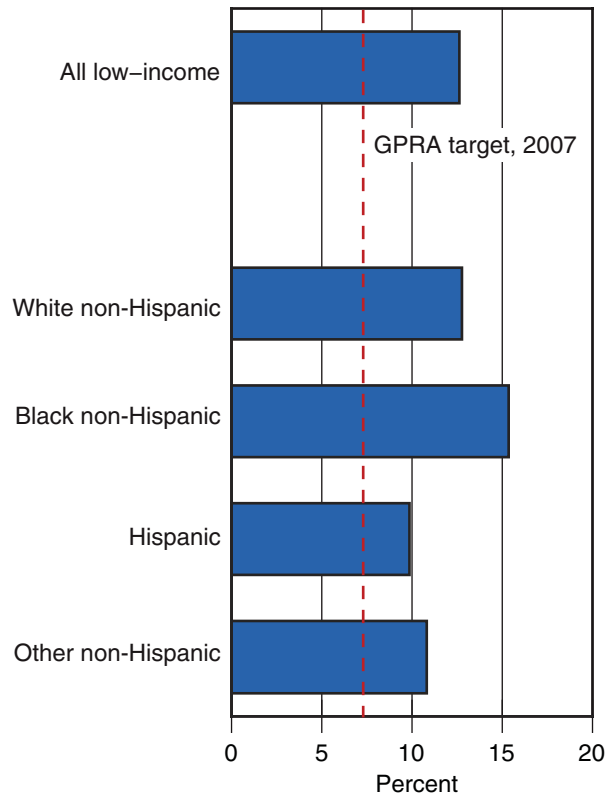
Figure 5

### The USDA GPRA food security indicator, by race and Hispanic ethnicity

**Race and Hispanic ethnicity of low-income households with very low food security**



**Prevalence of very low food security among low-income households**



Source: Calculated by ERS using data from the December 2005 Current Population Survey Food Security Supplement.

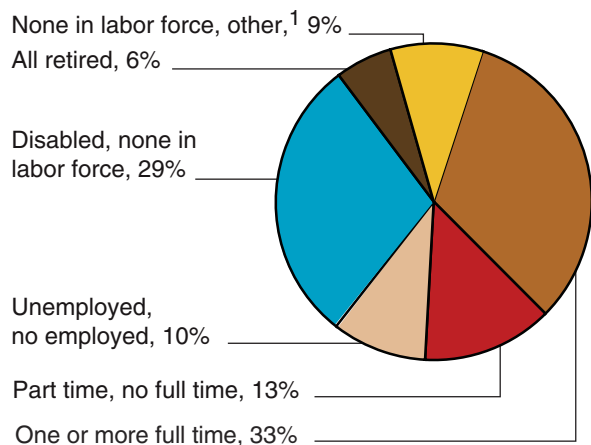
## Employment

One in three of the households in the GPRA food security indicator had at least one member employed full-time during the reference week prior to the survey, and another 13 percent had a part-time worker (fig. 6). More than one in four households in the GPRA food security indicator had at least one working-age adult who was out of the labor force because of a disability and had no adult member in the labor force. Those households had the highest rate of very low food security (23 percent), followed by households that had at least one unemployed member (i.e., not employed during the reference week, and looking for work) and no employed member (18 percent).

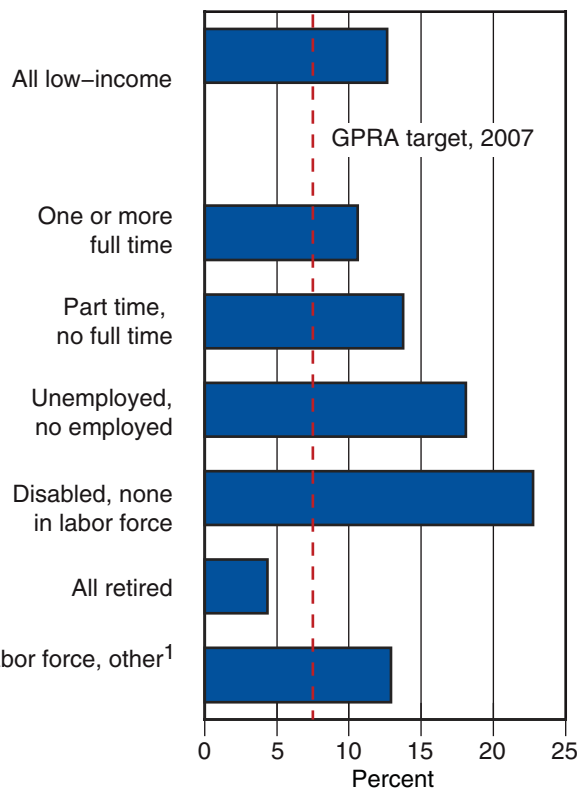
Figure 6

### The USDA GPRA food security indicator, by employment of adults in the household

#### Employment and unemployment in low-income households with very low food security



#### Prevalence of very low food security among low-income households



<sup>1</sup> No adult in the household is employed, unemployed looking for work, disabled, or retired.

Source: Calculated by ERS using data from the December 2005 Current Population Survey Food Security Supplement.

## Education

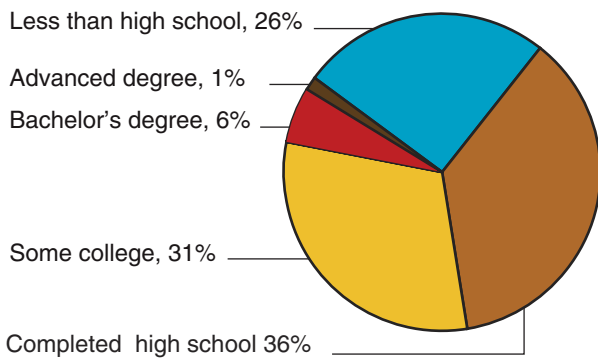
Almost two-thirds of the households in the GPRA food security indicator lacked an adult with education beyond high school, including 26 percent in which no adult had completed high school (fig. 7). Only 7 percent had an adult with a bachelor's degree or higher, although 31 percent had at least some college or technical or vocational training. Prevalence rates of very low food security exceeded 12 percent in all categories except households with college graduates or holders of advanced degrees. Only in the latter category was the rate near the GPRA target.<sup>5</sup>

<sup>5</sup> These comparisons represent only a small proportion of the protective effect of education on food security. Most of that effect is mediated through increasing incomes. This analysis includes only the small proportions of households with more highly educated members that nevertheless have low incomes.

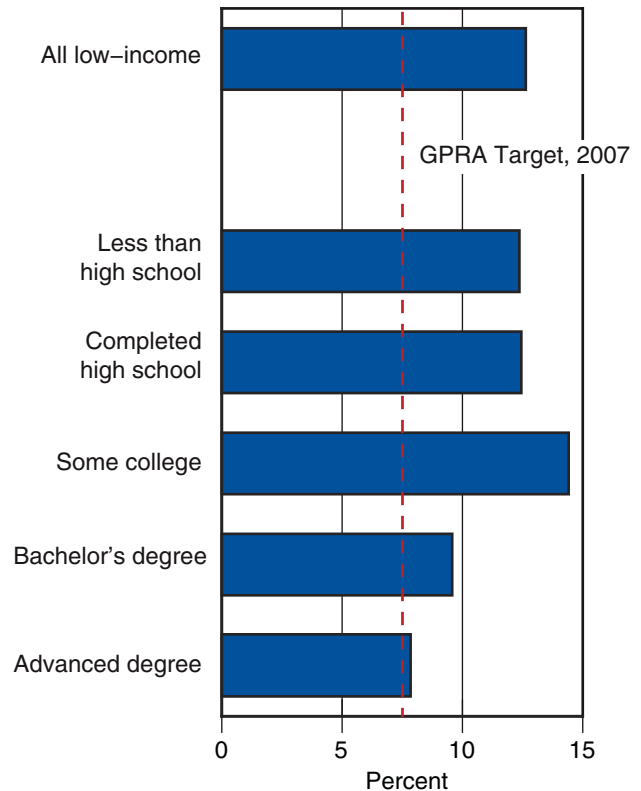
Figure 7

### The USDA GPRA food security indicator, by education of the most highly educated adult in the household

**Educational attainment in low-income households with very low food security**



**Prevalence of very low food security among low-income households**



Source: Calculated by ERS using data from the December 2005 Current Population Survey Food Security Supplement.



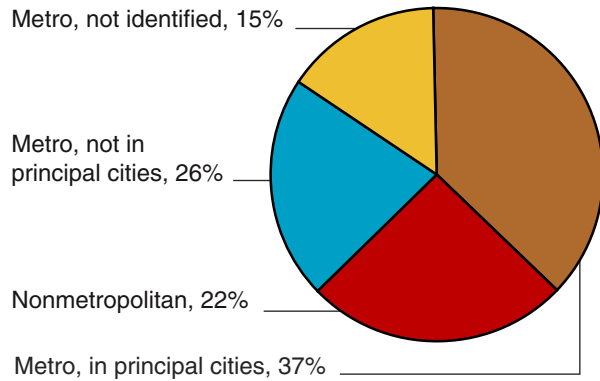
## Metropolitan Residence

Prevalence rates of very low food security among low-income households did not differ greatly across metropolitan statistical area residence categories (fig. 8). The rate was somewhat lower among low-income households in suburban and exurban areas (“Metro, not in principal cities”) than in other metropolitan residence categories.

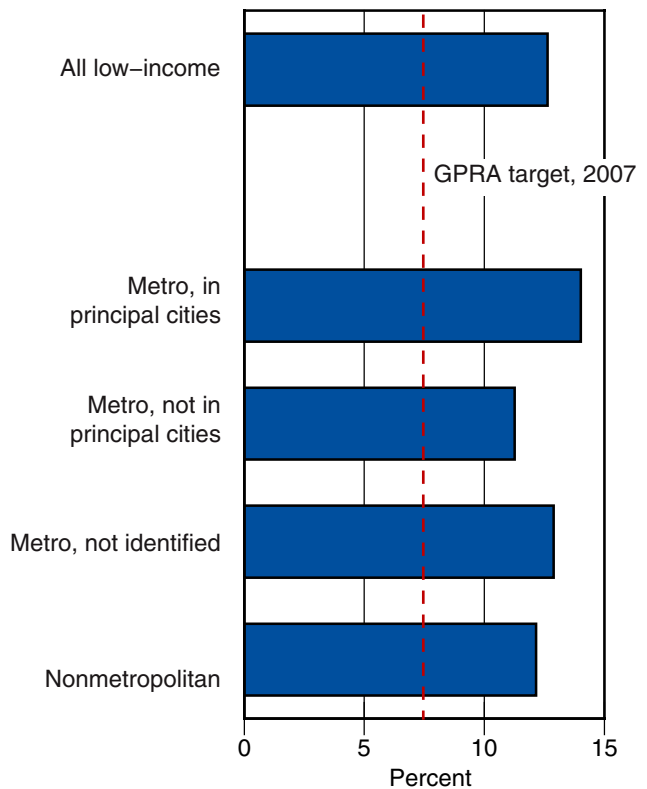
Figure 8

### The USDA GPRA food security indicator, by metropolitan area residence

Metropolitan/nonmetropolitan residence of low-income households with very low food security



Prevalence of very low food security among low-income households



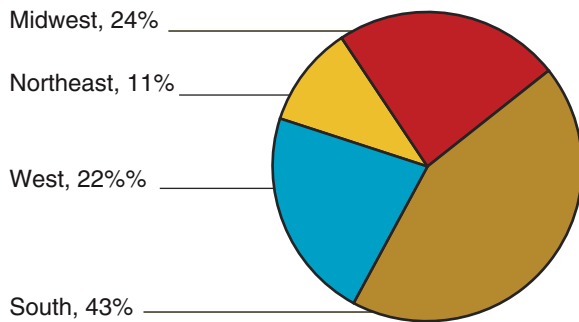
Source: Calculated by ERS using data from the December 2005 Current Population Survey Food Security Supplement.

## Census Regions

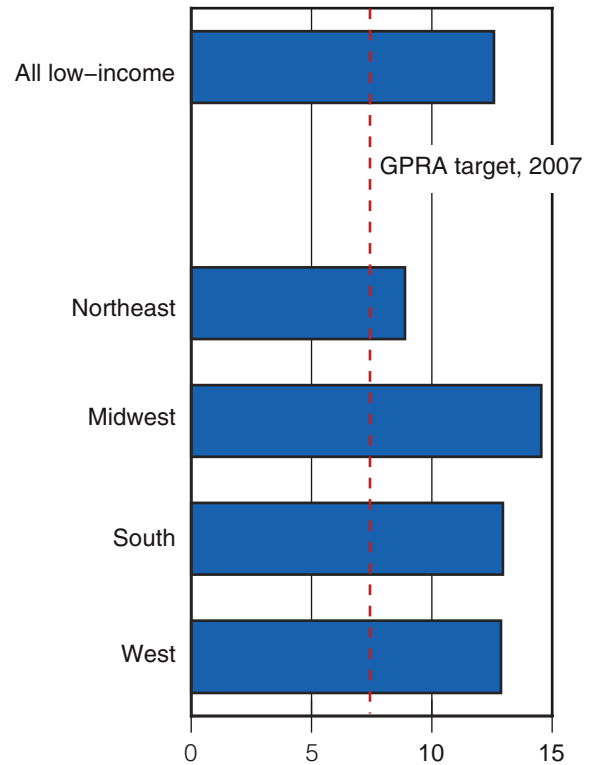
Forty-three percent of low-income households with very low food security were located in the South Census Region (fig. 9). The South's relatively large share was due mainly to the disproportionate share of low-income households located in this region. The prevalence rate of very low food security among low-income households in the South was lower than that in the Midwest, similar to that in the West, and was near the national average. The proportion of households with very low food security was smallest in the Northeast, but even there, the proportion was larger than the target of 7.4 percent.

Figure 9  
**The USDA GPRA food security indicator, by census region**

**Regional breakdown of low-income households with very low food security**



**Prevalence of very low food security among low-income households**



Source: Calculated by ERS using data from the December 2004 and December 2005 Current Population Survey Food Security Supplements.

## Participation in Nutrition Assistance Programs

For the final two analyses, both food security and participation in nutrition assistance programs were assessed for the 30-day period prior to the survey rather than for the prior 12 months.<sup>6</sup> This shorter reference period provides greater assurance that measured conditions were contemporaneous. Statistics from 2 years, 2004 and 2005, were averaged for these comparisons to provide sufficient numbers of interviewed households in the smallest groups. Comparisons to the GPRA target must, however, take into account the fact that prevalence rates of very low food security are generally smaller by about 25 percent when assessed over this shorter reference period. Given the current relationship between prevalence of very low food security measured over 12 months and 30 days, a prevalence of 5.6 percent on the 30-day measure would correspond approximately with the target of 7.4 percent on the 12-month measure.

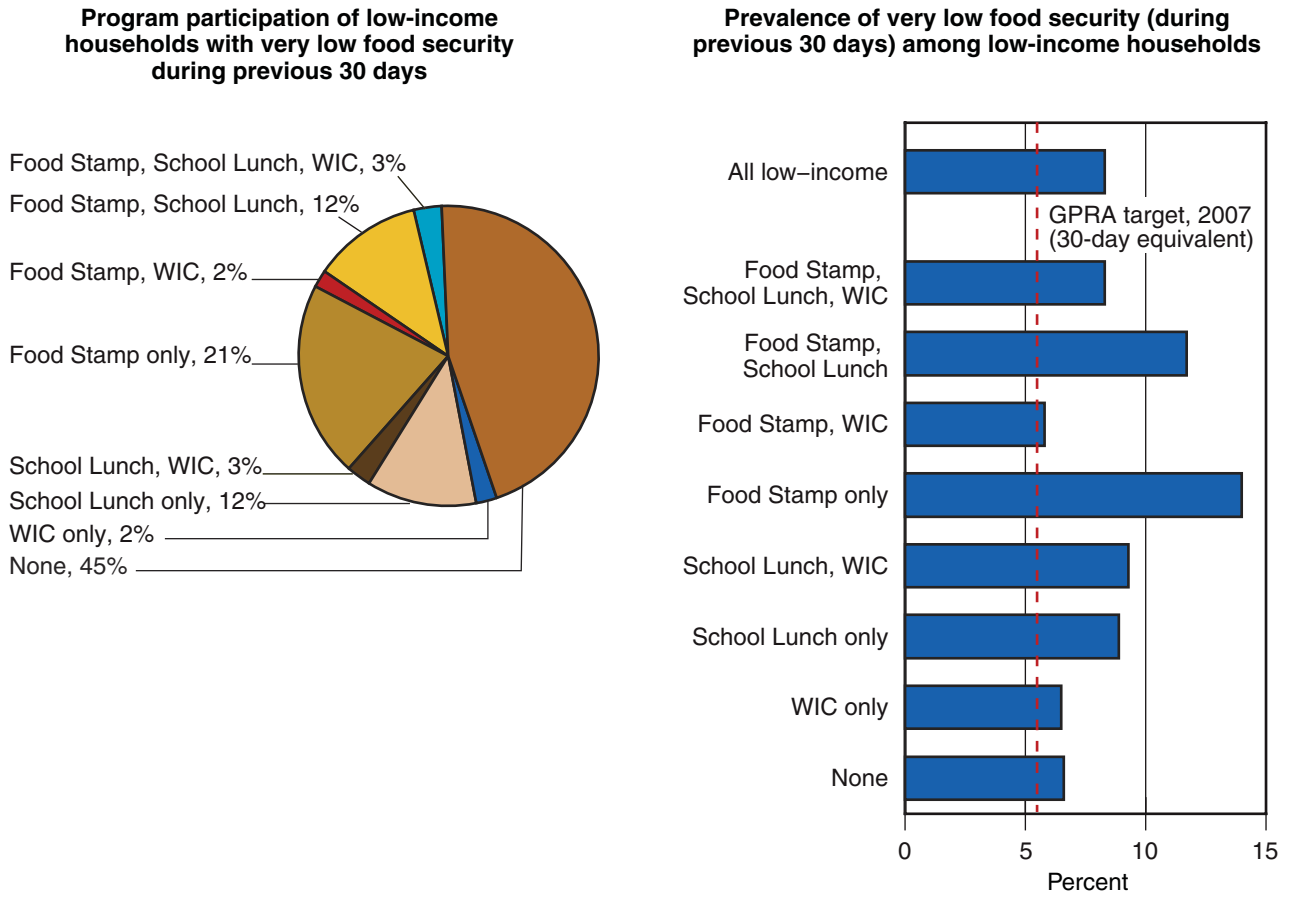
Food program participation is generally under-reported in household surveys such as the Current Population Survey-Food Security Supplement. Although this may be less true for households with very low food security, it is nevertheless likely that program participation is understated in these statistics.

Over half of the households in the GPRA food insecurity indicator reported receiving assistance from one or more of the three largest Federal nutrition assistance programs (fig. 10). The Food Stamp Program reached the largest share (38 percent), followed by the School Lunch Program (30 percent) and WIC (10 percent), and there was substantial overlap in program coverage. Households that received only food stamps had the highest prevalence of very low food security—about 14 percent. Four other categories, including those that received assistance from all three programs, had prevalence rates substantially above the 5.6-percent target (the 30-day rate equivalent to a 7.4-percent annual rate). These statistics suggest effective targeting of the programs on the most economically vulnerable households. However, they also raise questions about whether the programs provide enough benefits to improve households' food security to the extent needed to achieve the GPRA target. Among households that participated in any of the programs, only those that participated in WIC but not school lunch had a prevalence of very low food security near the target rate. Households that received no assistance were less likely to have very low food security than those in most recipient categories. Nevertheless, their rate of very low food security was also somewhat higher than the 5.6 percent of households corresponding to the GPRA target.

<sup>6</sup> USDA's food security survey collects information on households' food security during both the 12-month period and 30-day period prior to the survey.

Figure 10

**The USDA GPRR food security indicator (30 days) by participation in nutrition assistance programs during previous 30 days (average 2004-05)**



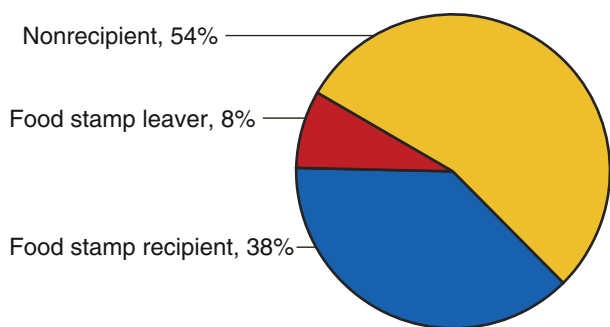
Source: Calculated by ERS using data from the December 2004 and December 2005 Current Population Survey Food Security Supplements.

Recent food stamp “leavers” comprised 8 percent of the GPRA food security indicator (fig. 11). These households received food stamps at some time during the year, but left the program prior to the 30-day period immediately preceding the food security survey. Over 16 percent of them had very low food security.

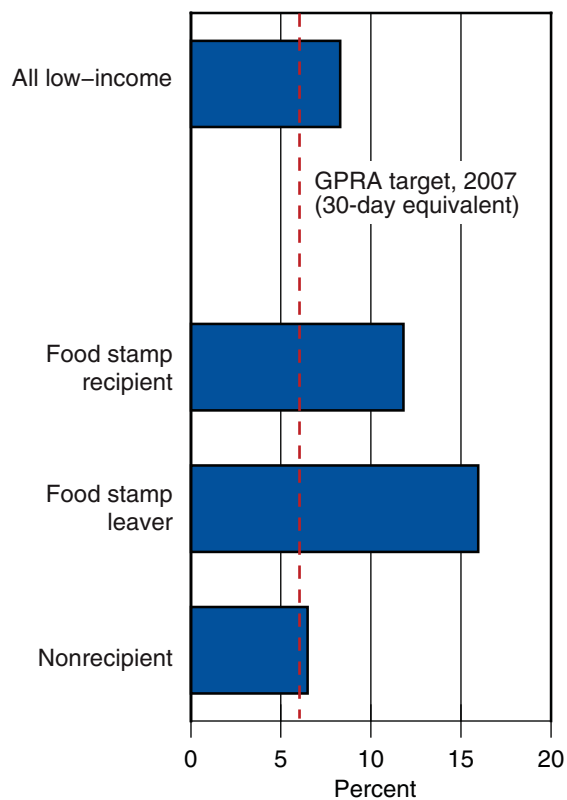
Figure 11

**The USDA GPRA food security indicator (30-day), by Food Stamp Program participation status (average 2004-05)**

**Food stamp participation status of low-income households with very low food security during the previous 30 days**



**Prevalence of very low food security (during the previous 30 days) among low-income households**



Source: Calculated by ERS using data from the December 2004 and December 2005 Current Population Survey Food Security Supplements.

## Summary and Questions

These profiles of low-income households with very low food security suggest that households' food security depends on a number of demographic, economic, geographic, and household structural factors. Achieving the GPRA food security objective may depend not only on improving the effectiveness and accessibility of nutrition assistance programs, but also on improving other key household circumstances.

For example, a substantial majority of the able-bodied low-income population—even among those with very low food security—is employed or looking for work. However, low levels of education and a high unemployment rate make it difficult for many of these households to maintain stable wage income at levels adequate to meet basic household needs, including adequate food. Many of the government policies and programs that affect these conditions lie outside the realm of nutrition assistance. Yet nutrition assistance programs have a complementary role to play in addressing these conditions because the programs can function as work supports, job-transition supports, and education and training supports. Maintaining and strengthening these functions of the nutrition assistance programs will likely contribute to achieving the GPRA food security objective.

Work-limiting disability affects one in four households in the GPRA food security indicator. To clarify the implications of this statistic to the nutrition assistance programs, further research is needed to answer several questions:

- To what extent could improved work supports increase the employability of individuals with disabilities in these low-income households?
- To what extent are they enrolled in disability assistance programs for which they qualify?
- Does the high prevalence of very low food security reflect their ineligibility for disability assistance or their inability or unwillingness to access those programs, or do they participate but receive insufficient support to maintain food security?

Maintaining and strengthening the extent to which nutrition assistance programs support households with work-limiting disabilities may be important strategies for achieving the GPRA food security objective.

Finally, it may be important to understand better why the prevalence of very low food security exceeds the GPRA objective in households that receive nutrition assistance. The prevalence of very low food security among households receiving food stamps during the study period was more than double the GPRA objective, and for households that had recently left the Food Stamp Program, it was nearly three times the GPRA objective. Even among households that received assistance from all three of the largest USDA nutrition assistance programs, the prevalence of very low food security exceeded the GPRA food security target by nearly 90 percent. In order to increase the effectiveness of the nutrition assistance programs at promoting food security in participating households, further research may be needed on how those households manage their food resources and food supplies, and how, when, and through what processes shortfalls occur.

## References

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## Appendix

### Statistical Details: Measures and Sample Sizes

#### *The Survey and Survey Weights*

The Current Population Survey Food Security Supplement (CPS-FSS) is an annual survey of about 50,000 households, selected to be representative of the civilian, noninstitutionalized population at national and State levels. Weights provided by the Census Bureau indicate how many households are represented by each interviewed household. Those weights were used in all analyses so the statistics presented are national estimates. The CPS defines a household as all persons living in the same house or apartment.

#### *Food Security*

USDA assesses the food security of households in the annual food security survey by their responses to a series of questions about behaviors, conditions, and experiences that are related to households' food access. The questions cover a wide range of severity of food access problems, from worrying that food would run out to not eating for a whole day. Each question specifies a lack of money as the reason for the behavior or condition in question so that reduced food intake due to voluntary fasting or dieting does not affect the measure.

Each household is classified in one of four categories based on the number of food-insecure conditions it reports. Households without children are asked 10 questions about food-insecure conditions. High food security is indicated if no food-insecure conditions are reported, marginal food security is indicated by 1 to 2 conditions, low food security by 3 to 5 conditions, and very low food security by 6 to 10 conditions. The classification of households with children reflects the same conditions among adults but also takes into account additional questions about food conditions of the children.

Households with low food security report primarily conditions indicating anxiety about their food situation and reduced quality, variety, or desirability of their diets. Most report little or no reduction in food intake. Households with very low food security report multiple indications of disrupted eating patterns and reduced food intake in addition to the conditions reported by households with low food security. A list of the questions in the food security survey module and other information on food security measurement is available at [www.ers.usda.gov/briefing/foodsecurity/](http://www.ers.usda.gov/briefing/foodsecurity/).

The principal measure of food insecurity assesses conditions over the 12 months prior to the survey. Each question used to calculate the scale asks whether the condition occurred at any time during the last 12 months. A second measure, assessing food insecurity during the 30 days prior to the survey, is used to assess associations of food insecurity with receipt of nutrition assistance. The 30-day measure of very low food security is based on a set of follow-up questions to the 12-month questions. If a household respon-

dent reports that a condition occurred during the previous 12 months, he or she is then asked if it occurred during the previous 30 days.

Very low food security—the primary focus of this bulletin—was described as “food insecurity with hunger” in earlier years, and the USDA GPRA food security objective used that language. USDA introduced the new label in response to recommendations by an expert panel convened by the Committee on National Statistics (CNSTAT) of the National Academies. The methods used to assess households’ food security remained unchanged, so statistics for very low food security are directly comparable with those for food insecurity with hunger in previous years.

The CNSTAT panel, convened at the request of USDA, recommended that USDA make a clear and explicit distinction between food insecurity and hunger. Food insecurity is a household-level economic and social condition of limited or uncertain access to adequate food. Hunger, according to the panel, is an individual-level physiological condition that may result from food insecurity. The word “hunger,” the panel stated in its final report, “...should refer to a potential consequence of food insecurity that, because of prolonged, involuntary lack of food, results in discomfort, illness, weakness, or pain that goes beyond the usual uneasy sensation.”

The CNSTAT panel recommended that USDA consider alternate labels to convey the severity of food insecurity without using the word “hunger,” since hunger, in the sense envisioned by the panel, is not adequately assessed in the food security survey.<sup>7</sup> USDA concurred with this recommendation and, accordingly, introduced the new labels “low food security” and “very low food security.”

A summary of the CNSTAT panel’s report, *Food Insecurity and Hunger in the United States: An Assessment of the Measure*, and link to the full text are available at: <http://www.ers.usda.gov/Briefing/FoodSecurity/NASsummary.htm>.

### ***Annual Income Relative to the Poverty Line***

Annual income, in the CPS, is reported in ranges. The midpoint of each household’s reported income range was divided by the Census Bureau’s poverty threshold for families with the corresponding numbers of adults and children to calculate the income-to-poverty ratio for the household. About 19 percent of households did not report income. These were omitted from all analyses. Nonincome characteristics of these households suggest that they were disproportionately in higher income ranges, so their omission is not likely to bias the statistics presented in this report substantially.

### ***Household Composition and Presence of Elderly***

Persons aged 0-17 were classified as children unless they were the household reference person or spouse of the reference person. (The household reference person in the CPS is one of the individuals in whose name the residence is owned or rented.) Elderly persons were identified as those age 65 or greater.

<sup>7</sup> The CNSTAT panel also recommended that new methods be developed to measure hunger and that a national assessment of hunger be conducted using an appropriate survey of individuals rather than a survey of households. USDA is exploring the feasibility of developing such a measure.

The primary family in a household classified as “single women with children” and “single men with children” was headed by a woman or man with no spouse present. Some of these households did, however, include other adults—most commonly a family member or unmarried partner of the household reference person. Households classified as “men living alone” and “women living alone” consisted of only one person.

### ***Race and Hispanic Ethnicity***

Race and Hispanic ethnicity are collected separately in the CPS, and respondents may select multiple races. Households were classified based on the reported race and ethnicity of the household reference person. Those classified as “Black, non-Hispanic” and “White non-Hispanic” reported only a single race. Those reporting more than one race and not reporting Hispanic ethnicity were classified as “Other non-Hispanic.”

### ***Employment and Labor Force Participation***

The employment and labor force status of each adult in the household during the reference week (roughly the week prior to the survey) was calculated from the CPS monthly labor-force recode (PEMLR), and full-time/part-time work status (PRWKSTAT). PEMLR and PRWKSTAT are, in turn, based on a detailed series of questions about the employment, working hours, unemployment, job search, and reasons for not working of each adult in the household. Status categories were:

- (1) employed full-time
- (2) employed part-time (less than 35 hours per week, whether because of economic or noneconomic reasons)
- (3) unemployed (looking for work or on layoff)
- (4) not in labor force because of disability
- (5) not in labor force because retired
- (6) not in labor force for other reasons (i.e., not because of disability or retirement).

Employment at the household level was based on the employment status of the adult with the lowest-numbered status. Thus, for example, a household was classified as “Disabled, none in the labor force” only if at least one adult in the household was not in the labor force due to a disability and no adult in the household was employed full-time, employed part-time, or unemployed and looking for work.

### ***Education***

Education was summarized at the household level as the educational attainment of the most highly educated adult in the household. “Less than high school” refers to any level less than a high school diploma or general equiv-

agency diploma (GED). “Completed high school” indicates attainment of a high school diploma or GED but no formal education beyond high school. “Some college” indicates formal studies beyond high school such as vocational, technical, college, or university courses, but lacking a 4-year college degree. “Bachelor” indicates attainment of a four-year college degree and may include further studies if they did not result in an advanced degree.

### ***Metropolitan Area Residence and Census Regions***

Residence relative to metropolitan areas was based on the revised system of metropolitan definitions adopted by the Office of Management and Budget in 2003, based on the 2000 Decennial Census population and commuting data. The category “principal cities” corresponds approximately to the incorporated areas of the cities comprising the main center(s) of a metropolitan area. Residence “not in principal cities” refers both to suburban areas and to smaller cities and exurban areas in surrounding counties that are densely populated and closely linked to the metropolitan area by daily commuting. Residence inside or outside of principal cities is not identified for some households, in order to avoid possible breach of confidentiality.

Analysis by region was based on the standard regions defined by the U.S. Census Bureau.

### ***Participation in Nutrition Assistance Programs***

Respondents in the CPS-FSS were asked about participation in selected Federal nutrition assistance programs if they were, or may have been, categorically eligible for the program. Respondents were asked about receipt of WIC and free or reduced-price school lunches during the 30 days prior to the survey. Information on food stamp receipt was collected with reference to both the previous 12 months and the previous 30 days. The 30-day food stamp participation information was used in the multiple-program analysis.

It is important to keep in mind that many households would not have been eligible for WIC or school meals. A large majority of the low-income households in these analyses would have been eligible for food stamps, but some proportion would have been ineligible due to asset ownership, immigration status, or restrictions of benefits to able-bodied adults without dependents (ABAWDs). The CPS does not collect sufficient information to fully assess food program eligibility, but analysis of household structure and citizenship status (not shown) suggests that 5-10 percent of low-income households with very low food security and no food stamp receipt may have been ineligible due to immigration or ABAWD status.

Information on food stamp receipt during the 12-month and 30-day periods prior to the survey was combined to identify recent food stamp leavers. Households that received food stamps at some time in the previous 12 months, but not in the previous 30 days, were classified as recent leavers.

## ***Analysis Sample Sizes***

The reliability of estimates based on samples of households depends on the number of households interviewed. Sample sizes for all subpopulations described in this report exceeded 500 households with the following exceptions:

- Single men with children: 213
- Two or more elderly: 269
- Elderly men living alone: 287
- Other non-Hispanic: 478
- Unemployed, no employed: 445
- Advanced degree: 157
- Food stamp, school lunch, and WIC: 198
- Food stamp and WIC: 179
- School lunch and WIC: 150
- WIC only: 193
- Food stamp leaver: 284