

# Understanding Poverty



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## Measuring Poverty

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Many agree that the official measure of poverty in the United States is flawed. The official measure is based on cash income, and the thresholds for measuring poverty are based on outdated data. Experts have recommended an alternative measure of poverty that includes all family resources net of taxes and nondiscretionary expenses and updates the thresholds to reflect current spending patterns (Citro and Michael 1995; Iceland 2005). Representative Jim McDermott (D-WA) and Senator Chris Dodd (D-CT) have co-sponsored the Measuring American Poverty (MAP) Act, which recommends a modern poverty measure based on this alternative.

- **The official measure of poverty includes pretax cash income sources in its definition, and it uses a threshold based on a subsistence food budget times three.** The measure was developed in 1963 and is based on spending patterns observed in a 1955 consumption survey. The thresholds represent nationwide spending averages, adjusted for inflation. The thresholds vary by family size, number of children, and whether the family is headed by an older adult. The official measure assumes that adults age 65 and older need less money to support their basic needs than younger adults.
  - In 2006, a family consisting of one adult and one child was considered poor if its cash income fell below \$13,896, and a family of two adults and two children was considered poor if its income fell below \$20,444.<sup>1</sup>
  - In 2006, a family consisting of two elderly adults was considered poor if its cash income fell below \$12,186.
- **The alternative measure of poverty developed by the National Academy of Sciences (NAS) in 1995 uses a definition that includes both cash and in-kind income and subtracts taxes and nondiscretionary work-related and out-of-pocket health expenses.** Specifically, the alternative measure recommends the following calculation for a family's resources:
  - + Cash income (earnings, government assistance from disability and welfare programs, and income generated from assets);
  - + Capital gains;
  - + Values of benefits received from the Supplemental Nutrition Assistance Program (SNAP) (formerly Food Stamps), the Women Infants and Children

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<sup>1</sup> Comparable thresholds for 2008, the latest available, are \$14,840 for a family of one adult and one child, \$21,834 for a family of two adults and two children, and \$13,014 for a family of two elderly adults. We focus on the 2006 thresholds above for ease of comparison with estimates of poverty using the alternative measures for Minnesota completed using the American Community Survey (ACS).

- Program (WIC), the Low Income Home Energy Assistance Program (LIHEAP), housing assistance, and free and reduced-price school lunch
- Federal income taxes, state income taxes, and payroll taxes;
- + Refundable federal and state tax credits;
- Work-related expenses (out of pocket child care expenses, transportation);
- Child support payments; and
- Out-of-pocket health expenses.<sup>2</sup>

- **Poverty thresholds based on NAS recommendations represent approximately the 33rd percentile of what families spend on food, clothing, shelter, and utilities plus a little more for necessary personal and household supplies.** The Census Bureau calculates NAS based thresholds using the most recent three years of Consumer Expenditures Survey data. Adjustments for state and urban/rural status are made using the fair market rental values provided each year by the U.S. Department of Housing and Urban Development (HUD). Thresholds that include out-of-pocket medical expenses vary by elderly or nonelderly status, health status, and type of health insurance (Short 2001).

**Table 1. Alternative Thresholds for Nonelderly Family of Two Adults and Two Children, Nation and Minnesota, 2006, by Inclusion of Out-of-Pocket Medical Expenses in Threshold**

	Nation	Urban Minnesota	Rural Minnesota
Without medical expenses	21,818	22,763	18,772
With medical expenses <sup>a</sup>	23,935	24,972	20,593

Source: Census Bureau FCSU-CE and FCSUM-CE thresholds, [http://www.census.gov/hhes/www/povmeas/web\\_tab5\\_povertythres2008.xls](http://www.census.gov/hhes/www/povmeas/web_tab5_povertythres2008.xls).

Notes: The FCSU-CE and FCSUM-CE thresholds are adjusted for state and urban/rural status using geographic adjustments obtained from the Census Bureau.

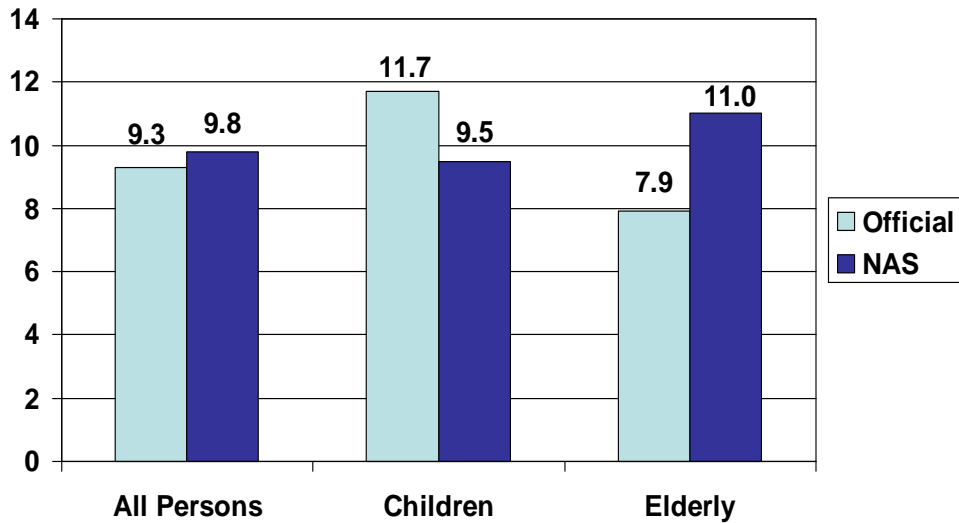
a. The thresholds shown here are for privately insured families in good health.

- **The alternative poverty measure produces different poverty rate estimates than the official measure, and differences vary by family type.** Whether a family is classified as poor by one measure and not by another can be affected by where a family lives, and whether the family receives in-kind assistance, pays taxes, or has nondiscretionary expenses. A recent Urban Institute analysis estimates the following relative poverty rates for Minnesota under the official and NAS definitions, using data from the 2006 American Community Survey (ACS).<sup>3</sup>

<sup>2</sup> Census provides optional thresholds that include these expenses as an alternative to deducting out-of-pocket expenses from income.

<sup>3</sup> The analysis uses the ACS because it provides much larger state samples than the Annual Social and Economic Supplement to the CPS, the survey traditionally used for the annual measure of poverty. The 2006 ACS provides an unweighted sample of 52,219 people for the state of Minnesota—more than nine times the annual sample provided by the CPS. The NAS poverty measure requires numerous imputations to correct for underreporting and to add information unavailable in survey data. We use the Transfer Income

**Figure 1. Poverty Rate in Minnesota in 2006, Official vs. NAS**



*Source:* Zedlewski, Giannarelli, Wheaton, and Morton (forthcoming).

*Note:* NAS poverty is calculated using NAS thresholds that incorporate geographic variation and included medical out-of-pocket expenses.

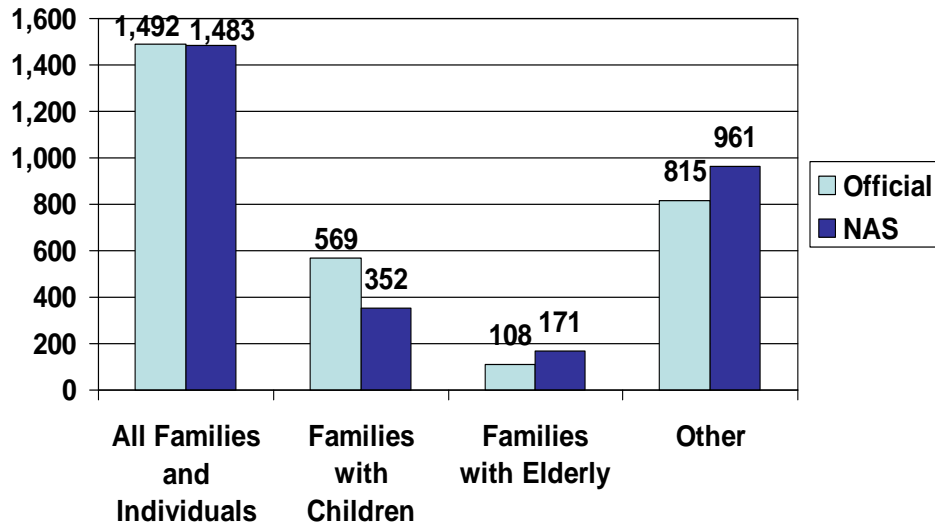
As shown, the NAS measure of poverty indicates a lower rate of poverty for children and a higher rate of poverty for older adults in Minnesota compared with the official rates. Children have lower poverty rates under the NAS measure because they are more likely to be in families that receive in-kind assistance and refundable tax credits. Older adults have higher poverty rates under the NAS measure due to their higher-than-average health care costs compared with younger people, and because the NAS thresholds assume older adults have the same level of non-health-related needs as younger adults.

These patterns may vary by locality—for example, Giannarelli and Zedlewski (2009) find a slightly higher NAS child poverty rate in Connecticut compared with the official rate, and Levitan et al. (2008) find little difference in New York City child poverty rates between the two definitions. Different assumptions regarding housing could also affect alternative poverty rates. For example, lower thresholds for families who own a house without a mortgage would reduce poverty rates among those that own homes, particularly affecting older adults who more often own their homes free and clear (Short and O’Hara 2008).

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Model, Version 3 to perform these imputations. See Zedlewski, Giannarelli, and Wheaton (forthcoming) for further details.

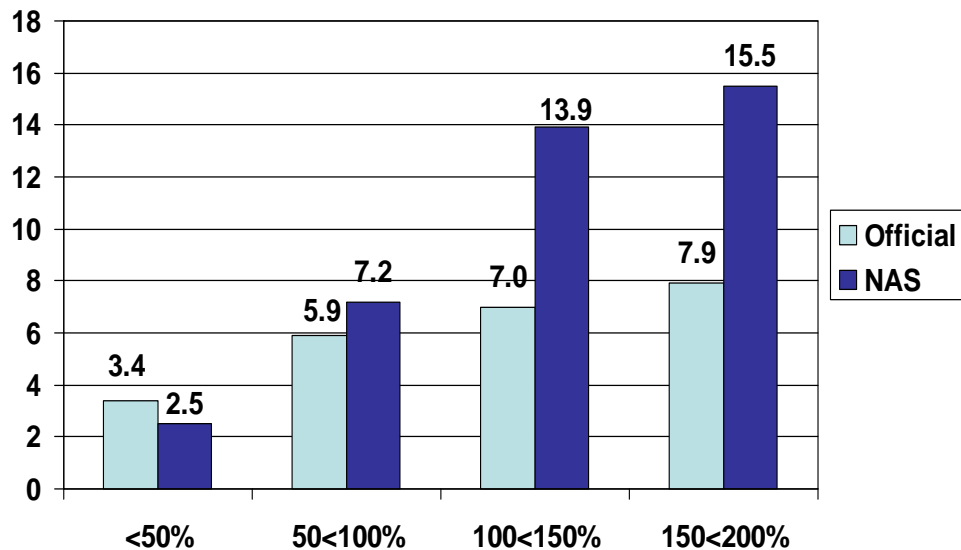
**Figure 2. Poverty Gap in Minnesota in 2006, Official vs. NAS (\$ millions)**



Source: Zedlewski, Giannarelli, Wheaton, and Morton (forthcoming)

The poverty gap shows the additional resources that would be needed to lift all poor families up to the poverty threshold and provides a useful measure for assessing the depth of poverty and the effectiveness of policy. While the official and NAS measures estimate similar overall poverty gaps in Minnesota, the gap for families with children is much lower using the NAS definition, but is higher for elderly-headed families and nonelderly families and individuals without children.

**Figure 3. Poverty in Minnesota in 2006, Official vs. NAS**



Source: Zedlewski, Giannarelli, Wheaton, and Morton (forthcoming)

Compared with the official definition, the share of persons living in deep poverty (less than 50 percent of the poverty level) is lower under the NAS definition. The decline occurs because the NAS definition counts some of the key benefit programs that target very low income families, such as SNAP benefits. In contrast, a much greater share of persons live just above the poverty threshold (between 100 and 150 percent of the poverty level) than the official definition suggests. Relatively fewer families receive benefits not counted in the official poverty measure in this income range (between \$24,972 and \$37,458 for an urban Minnesota family of four). At the same time, the combination of taxes, child care, and other work related expenses included in the NAS poverty measure pulls some moderate-income working families into the near-poor category.

- **Because the NAS measure includes near-cash benefits and taxes, it can be used to show the effects of near-cash benefits and taxes on poverty.**<sup>4</sup> For example, Zedlewski, Giannarelli, Wheaton, and Morton (forthcoming) estimate that increasing the SNAP participation rate to 85 percent in Minnesota would decrease the NAS poverty rate from 9.8 to 9.2 percent.
- **The MAP Act recommends developing a single “modern poverty measure” and calls for improving the data available for the poverty measure.** The alternative poverty measure as recommended by the MAP Act would not change family eligibility for benefits (which is often based on the official measure of poverty), nor would it change federal assistance to the states currently based on official poverty rates.
- **The NAS alternative poverty measure is still under study.** Some experts recommend lower thresholds for families that own a home without a mortgage, for example. Iceland (2005) summarizes much of the research completed to evaluate the new measure of poverty as well as expert opinion on its various elements.
- **Some experts recommend other measures of family well being.** For example, European countries tend to use a relative measure of poverty. A comparable measure in the United States could be a share of median income (Blank and Greenberg 2008). Others argue that poverty should indicate whether a family can afford a basic needs budget. Considerable work has been undertaken in the states and by Wider Opportunities for Women (2008) to estimate needs standards by state and for younger and older families.

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<sup>4</sup> See, for example, CAP 2007; Levitan et al. 2008; LCEP 2009; Sherman 2009; Zedlewski, Giannarelli, and Wheaton forthcoming; and Zedlewski, Giannarelli, and Wheaton, and Morton forthcoming.

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