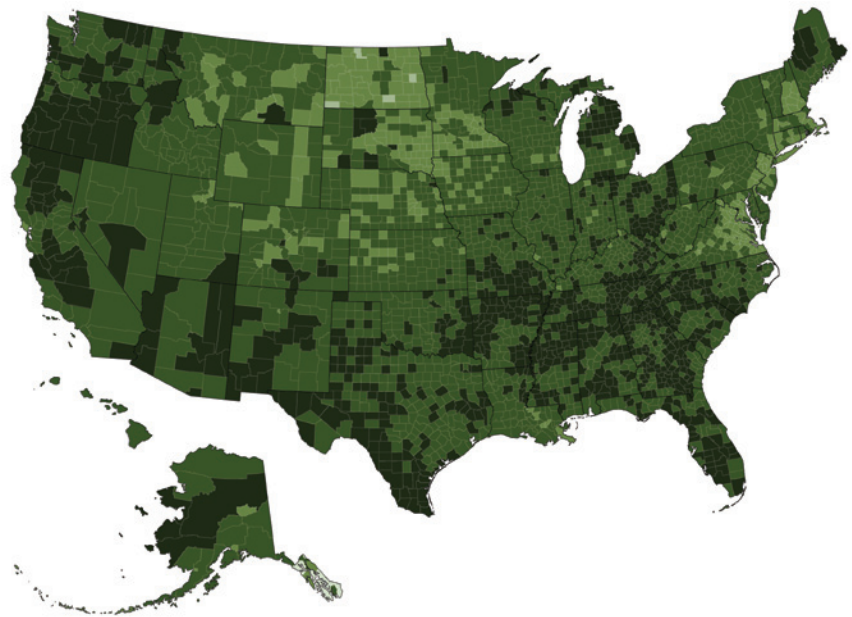




# MAP THE MEAL GAP

## CHILD FOOD INSECURITY 2011



A Report on County Level  
Child Food Insecurity in  
the United States in 2009



## GLOSSARY OF KEY TERMS

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**AMERICAN COMMUNITY SURVEY (ACS)** The ACS is a sample survey of three million addresses administered by the Census Bureau. In order to provide valid estimates for areas with small populations, the data for *Map the Meal Gap* was collected and averaged over a five-year period.

**AVERAGE MEAL COST** The national average amount of money spent per week on food by food secure people, as estimated in the **Current Population Survey**, divided by 21 (assuming three meals eaten per day).

**CHILD FOOD INSECURITY RATE (CFI rate)** The approximate percentage of children (under 18 years old) living in households in the U.S. that experienced food insecurity at some point during the year. The child food insecurity measures reflected in this study are derived from the same set of questions used by the USDA to establish the extent of food insecurity in households with children at the national level. “Child food insecurity” and “CFI” are used interchangeably throughout this report.

**CURRENT POPULATION SURVEY (CPS)** A nationally representative survey conducted by the Census Bureau for the Bureau of Labor Statistics providing employment, income, **food insecurity** and poverty statistics. Households are selected to be representative of civilian households at the state and national levels. The CPS does not include information on individuals living in group quarters, including nursing homes or assisted living facilities.

**EMERGENCY FOOD ASSISTANCE** Charitable feeding programs whose services are provided to people in times of need. Emergency food programs include food pantries, soup kitchens and shelters.

**FEDERAL NUTRITION PROGRAM THRESHOLD** The point at which a household's income is deemed too high to allow for eligibility for federal nutrition programs such as the National School Lunch Program (NSLP) or the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).

**FOOD BANK** A charitable organization that solicits, receives, inventories and distributes donated food and grocery products pursuant to industry and appropriate regulatory standards. The products are distributed to charitable human-service agencies, which provide the products directly to clients through various programs.

**FOOD BUDGET SHORTFALL** The weekly (or annualized) additional dollars **food insecure** people report needing to meet their food needs, as assessed in the **Current Population Survey**.

**FOOD INSECURITY** A condition assessed in the **Current Population Survey** and represented in USDA food security reports. It is the household-level economic and social condition of limited or uncertain access to adequate food.

**FOOD INSECURITY RATE** The percentage of the population that experienced **food insecurity** at some point during the year.

**THE MEAL GAP** A conversion of the total annual **food budget shortfall** in a specified area divided by the **weighted cost per meal** in that area. The meal gap number represents the translation of the **food budget shortfall** into a number of meals.

**METROPOLITAN/MICROPOLITAN** Metropolitan areas contain a core urban area of 50,000 or more residents and micropolitan areas contain a core urban area of at least 10,000 (but less than 50,000) residents, as defined by the U.S. Office of Management and Budget (OMB). Each metropolitan or micropolitan area consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core. In this report, rural counties are those that are neither represented as metropolitan or micropolitan by the OMB.

**PERCENT OF POVERTY LINE** A multiple of the federally established poverty guideline, which varies based on household size. These percentages are often used to set **federal nutrition program thresholds** for eligibility.

**PRICE INDEX** A number used to indicate relative differences in prices across geographies. In the case of this report, the index for any particular county is equal to the cost of a standard market basket of goods in that county divided by the average market basket cost across the U.S. See also: *Map the Meal Gap 2011: An Overview* on page 3.

**WEIGHTED COST PER MEAL** A local estimate of meal costs calculated by multiplying the **average meal cost** by the appropriate food cost **price index**.

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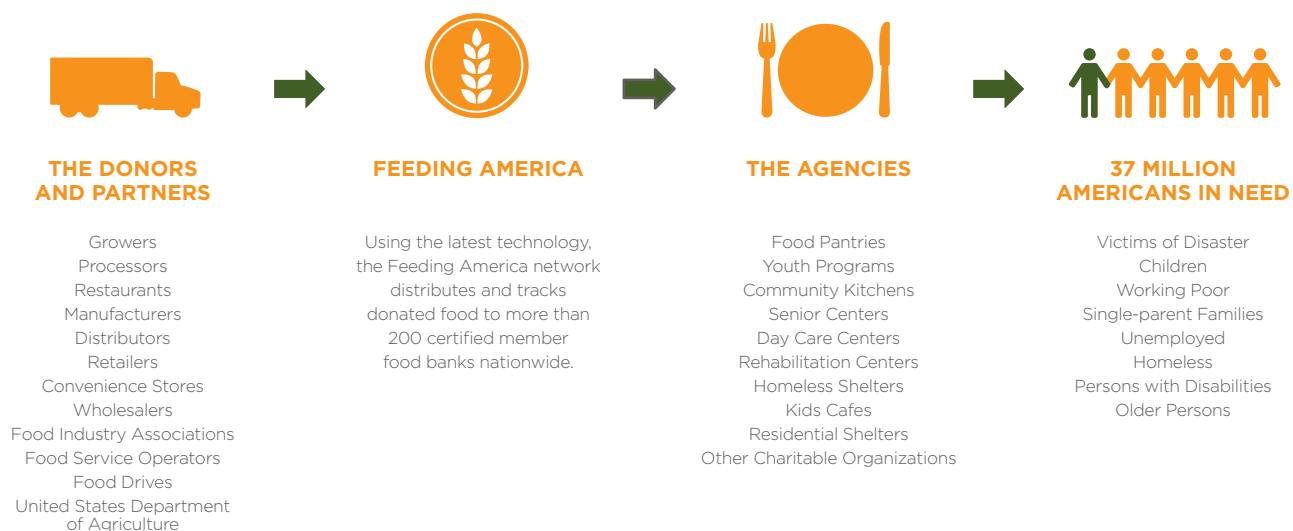
# About Feeding America

Feeding America is the nation's network of more than 200 food banks and the largest hunger-relief charity in the United States. Each year, Feeding America secures and distributes three billion pounds of food and grocery products through 61,000 agencies nationwide. Our agency network provides emergency food assistance to an estimated 37 million Americans in need annually.

Our strength is derived from our member food banks, which serve all fifty states, the District of Columbia and Puerto Rico, reaching nearly all metropolitan, suburban and rural communities. Hunger does not discriminate and neither does

the Feeding America network—our members serve people regardless of their race, age or religion. For more than 30 years, our members have been assisting low-income people who struggle to meet their daily food needs.

## HOW WE WORK





## About *Map the Meal Gap: Child Food Insecurity 2011*

At Feeding America, our mission is to feed America's hungry through a nationwide network of member food banks and engage our country in the fight to end hunger. In order to address the problem of hunger, we must first understand it. With the generous support of the ConAgra Foods Foundation, Feeding America undertook the *Map the Meal Gap: Child Food Insecurity 2011* project to learn more about the face of childhood hunger at the local level. By understanding the population in need, communities can better identify strategies for reaching the families and children who need food assistance.

In November of 2010, the Economic Research Service at the United States Department of Agriculture (USDA) released its most recent report on food insecurity, indicating that 50 million people in the United States are living in food insecure households, 17 million of whom are children.<sup>1</sup> While the magnitude of the problem is clear, national and even state estimates of food insecurity can mask the nuances that exist at the local level. In March 2011, Feeding America released *Map the Meal Gap* to the public, providing

a first time look at food insecurity at the county and congressional district levels (see inset *Map the Meal Gap 2011: An Overview*). Recognizing that children are particularly vulnerable to the economic challenges facing families today, Feeding America sought to replicate the food insecurity model used in the *Map the Meal Gap* study to reflect the need among children. In the past, Feeding America has conducted research in an effort to learn more about child food insecurity across the country. Beginning in 2009, the

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<sup>1</sup> Nord, M., A. Coleman-Jensen, M. Andrews & S. Carlson. *Household Food Security in the United States, 2009*. USDA ERS: 2010.

ConAgra Foods Foundation supported annual reports that included state-level estimates of child food insecurity based on three-year averages. With the Map the Meal Gap methodology developed by Dr. Craig Gundersen, an internationally-renowned expert on food insecurity, we are now able to develop annual estimates of child food insecurity (CFI)<sup>2</sup> rates at the county and congressional district levels. Additionally, this study provides information on the proportions of the food

insecure child population above and below the income threshold for most government child nutrition programs, and an overview of food cost variation alongside CFI rates. This report summarizes findings from an analysis of child food insecurity at the state, county and congressional district levels, and will serve as a starting point for annual updates to this data. This study was generously funded by the ConAgra Foods Foundation.

## Map the Meal Gap 2011: An Overview

As previously mentioned, Feeding America released *Map the Meal Gap* in March 2011, providing a first-time look at community-level food insecurity across the country. The goal of the study is to provide a clearer picture of the need for food at the local level, so that charitable organizations and governments can tailor their programs to best fit those needs. The study resulted in new information about community-level need, described below.

The findings of *Map the Meal Gap* are based on statistics collected by the U.S. Department of Agriculture and the U.S. Census Bureau, and a food price analysis generously provided by The Nielsen Company. The study was supported by the Howard G. Buffett Foundation. More information on *Map the Meal Gap* can be found on the Feeding America website at [feedingamerica.org/mapthegap](http://feedingamerica.org/mapthegap).

Findings at geographic levels <sup>3</sup>	State	County	Congressional District
<u>Food insecurity</u> estimates	•	•	•
A breakdown of the food insecurity estimates based on <u>federal nutrition program thresholds</u>	•	•	•
Estimated <u>food budget shortfall</u> that food insecure individuals report experiencing	•	•	
The food budget shortfall converted into an estimate of meals needed, or the <u>meal gap</u>	•	•	
<u>Weighted cost per meal</u> to illustrate food price variation across the country	•	•	

<sup>2</sup> "Child food insecurity" and "CFI" will be used interchangeably throughout this report.

<sup>3</sup> See Glossary of Key Terms for full definitions of underlined items.





## About Child Food Insecurity in the United States

The USDA reports that nearly one in four children in the United States is living in a food insecure household, or a household where the members are unable “to consistently access the adequate amount of nutritious food necessary for a healthy life. Households with children experience food insecurity at significantly higher rates than the population in general: 21.3% of households with children are characterized as food insecure versus 14.7% of all households.<sup>4</sup>

A key cause of food insecurity in the United States is the lack of sufficient resources to cover the cost of food in addition to meeting other basic needs.<sup>5</sup> The Great Recession pushed national unemployment to its highest levels in more than 20 years, and in 2009 there were 43.6 million people in the U.S. living in households with incomes below the poverty threshold, including 15.5 million children (approximately one in five).<sup>6,7</sup> Although the U.S. economy officially reached the “trough” of The Great Recession in June of 2009,

the number of unemployed workers remains nearly double pre-recession levels (see Chart 1).<sup>8</sup>

The Map the Meal Gap study examined the relationships between food insecurity, unemployment and poverty and found that areas with higher unemployment rates have higher food insecurity rates, all else equal. Specifically, the Map the Meal Gap research showed that when looking at all persons, a one percentage point increase in the

<sup>4</sup> Nord, et al. *Household Food Security in the United States, 2009*. USDA ERS: 2010.

<sup>5</sup> *ibid.*

<sup>6</sup> U.S. Census Bureau. *Current Population Survey—Annual Social and Economic Supplement 2009*. 2010.

<sup>7</sup> DeNavas-Walt, C., Proctor, B.D. & Lee, C.H. *Income, Poverty, and Health Insurance Coverage in the United States: 2009*. U.S. Census Bureau: 2010.

<sup>8</sup> National Bureau of Economic Research. *Business Cycle Expansions and Contractions*. [nber.org/cycles.html](http://nber.org/cycles.html) 2011.

unemployment rate leads to a 0.78 percentage point increase in the food insecurity rate, on average. In contrast, a one percentage point increase in the poverty rate leads to a 0.23 percentage point increase in the food insecurity rate. When looking at food insecurity among children, poverty and unemployment have an even greater effect. A one percentage point increase in the poverty rate leads to a 0.37 percentage point increase in the CFI rate, while a one percentage

point increase in the unemployment rate leads to a 0.92 percentage point increase in the CFI rate.<sup>9</sup>

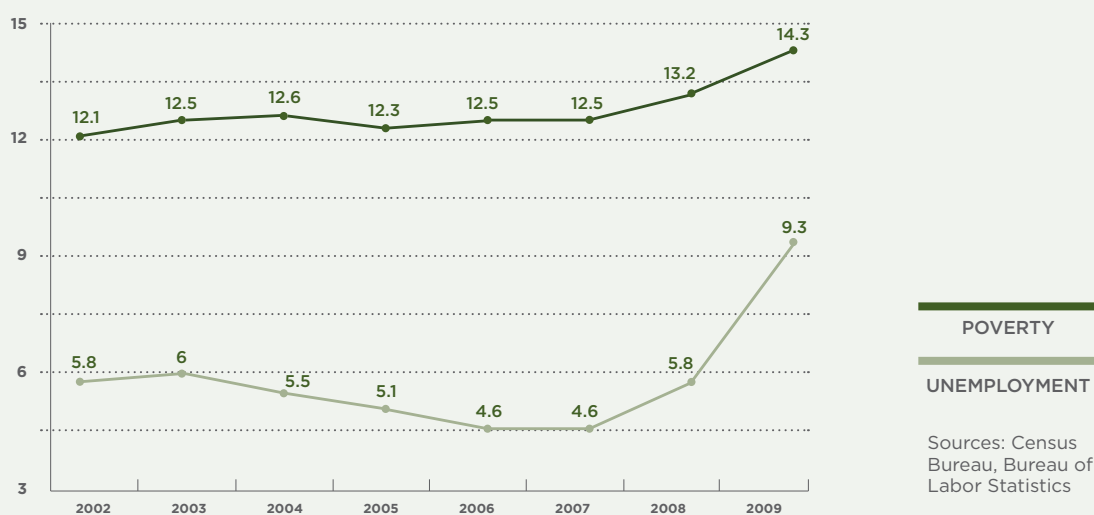
Evidence suggests that it will be at least several more years before the economy recovers,<sup>10,11</sup> and low income families often take longer to reach their pre-recession income levels than those with higher incomes. This leaves food insecure children exposed to continued risk of hunger as their families struggle to make ends meet in the face of high unemployment and poverty.

## EMERGENCY FOOD ASSISTANCE AND THE GOVERNMENT SAFETY NET

As food insecurity persists, the number of families turning to the food assistance safety net is increasing. In 2009, nearly one in every five children in the United States lived in a family that received emergency food assistance through food pantries, kitchens and/or shelters within the Feeding America network. This represents approximately 14 million children nationwide, more than 3 million of whom were age five and

under.<sup>12</sup> Additionally, need for emergency food assistance grew substantially since it was last assessed in 2006—there was a 50% increase in the number of children being served by the Feeding America network between 2006 and 2009—as families began relying more heavily on the emergency food network to help address their needs.<sup>13</sup>

CHART 1: INDIVIDUAL POVERTY AND UNEMPLOYMENT RATE TRENDS



<sup>9</sup> Gundersen, C., E. Waxman, E. Engelhard & J. Brown. *Map the Meal Gap: Food Insecurity Estimates at the County Level*. Feeding America: 2011.

<sup>10</sup> Monea, E. & I. Sawhill. *Simulating the Effect of the Great Recession on Poverty*. The Brookings Institution: 2009.

<sup>11</sup> Center on Budget and Policy Priorities. *Chartbook: The Legacy of the Great Recession*. 2011.

<sup>12</sup> Cohen, R., J. Mabli, F. Potter & Z. Zhao. *Hunger in America 2010*. Mathematica Policy Research, Feeding America: 2010.

<sup>13</sup> *ibid.*

While charitable food assistance plays a critical role in helping families meet their food needs, the first line of defense against hunger is enrollment in federal nutrition programs. There are a number of programs targeted to children or families (see page 7 for more information about these resources). The Supplemental Nutrition Assistance Program (SNAP, formerly the Food Stamp Program) provides electronic benefit cards to households to purchase groceries. In federal fiscal year 2009, 48% of all SNAP participants were children.<sup>14,15</sup> The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides a nutritious food package to pregnant, breastfeeding and postpartum women and their infants and children up to age five. In federal fiscal year 2009, 9.1 million women, infants and children participated in WIC. The National School Lunch Program (NSLP), School Breakfast Program (SBP) and Summer Food Service Program (SFSP) provide meals to low-income children in school and during school breaks.

Over 101,000 schools operate NSLP. During federal fiscal year 2009, 19.5 million low-income children received free or reduced-price meals through NSLP.

Eligibility for these and other federal nutrition assistance programs is based on income criteria. These criteria require that households have incomes at or below a specified multiple of the federal poverty guideline, which varies based on household size. Persons are eligible for SNAP if they live in households with incomes less than 130% of the poverty guideline. For the programs targeted specifically to children (WIC, NSLP and SBP), eligibility for benefits is typically set higher, at 185% of the poverty line.<sup>16</sup> As an example of applying these eligibility rules, the 2009 poverty guideline for a family of four in the lower 48 states was a pre-tax income of \$22,050.<sup>17</sup> A family of this size would have to be earning less than \$40,793 ( $\$22,050 \times 185\%$ ) in order to qualify for WIC and less than \$28,655 to qualify for SNAP.

## Child Food Insecurity Methodological Overview

Annually, the Census Bureau conducts the Current Population Survey's (CPS) Annual Social and Economic Supplement to collect nationally-representative data assessing food insecurity among households and makes this data publicly available. *Map the Meal Gap: Child Food Insecurity 2011* aggregates this information from the CPS to the state level. With this state-level information, the relationship between children living in food insecure households and key indicators of food insecurity is assessed. The following indicators were used: unemployment rates, child poverty rates, family median income and percent African American children and Hispanic children. These variables were selected because they are associated with food insecurity and are publicly available at the county, congressional district and state levels through CPS, Bureau of Labor Statistics, American Community Survey (ACS), and, in the case of congressional

districts, ProximityOne. In addition, the model controls for state-specific and year-specific factors.

Based on the state-level relationships that exist between the variables described above and food insecurity, county and congressional district-level estimates of children in food insecure households were derived. The county-level results were aggregated to provide the state-level estimates. Estimates were also developed to sort food insecure children into categories based on household income: above and below 185% of the poverty line. This "income banding" of the food insecure child population was prepared using ACS data at the county and congressional district levels. Detailed information about the methodology can be found in a separate technical brief available on our website.

<sup>14</sup> Leftin, J., A. Gothro, E. Eslami. *Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2009*. USDA, Office of Analysis, Nutrition and Evaluation: 2010.

<sup>15</sup> The federal fiscal year starts October 1 each year and ends September 30. 2009 is used because Map the Meal Gap data reflect 2009.

<sup>16</sup> These rates can vary by state. SNAP gross income eligibility thresholds, for example, range from 130% to 200% of the poverty line.

<sup>17</sup> U.S. Department of Health and Human Services. *The 2009 HHS Poverty Guidelines*. 2011.



## Government Nutrition Assistance Targeting Families with Children

Program	General Eligibility	Benefit
<b>SNAP</b>	Households with gross income at or below 130% of the FPL (can vary by state) and net income at or below 100% of the FPL with limited assets.	Electronic benefit cards to purchase groceries; monthly benefit size varies according to household size and income.
<b>WIC</b>	Pregnant, breastfeeding and postpartum women and their infants and children up to age 5 with household income below 185% of the FPL.	Checks, vouchers, or electronic benefit transfer cards to purchase specific items in food packages that vary by age of children and status of mother.
<b>NSLP and SBP</b>	Lunch is available in nearly all public and many private schools; breakfast is available in some schools. Meals are free if family income is below 130% of the FPL; reduced price if income is below 185%.	Reimburses schools for meal costs.
<b>CACFP</b>	The Child and Adult Care Food Program (CACFP) provides meals and snacks to children in certain nonresidential child care centers, family or group day care, after-school programs in low-income areas and emergency shelters.	CACFP reimburses costs of local providers.
<b>SFSP</b>	The Summer Food Service Program (SFSP) provides meals and snacks to low-income children during summer break and when schools are closed for vacation.	SFSP reimburses costs of local providers.

**SNAP:** Supplemental Nutrition Assistance Program    **WIC:** Special Supplemental Nutrition Program for Women, Infants, and Children  
**NSLP:** National School Lunch Program    **SBP:** School Breakfast Program    **FPL:** Federal Poverty Line

In recognition of the importance of federal food assistance programs, *Map the Meal Gap: Child Food Insecurity 2011* developed CFI estimates broken down by whether a child is in a household with income above or below 185% of the poverty line, the typical WIC and NSLP cutoff. These breakouts provide insight into the safety net resources that may be available to food insecure children and their families, as well as the children who are unable to qualify for needed assistance. Millions of food insecure children in America are

in households with incomes above the eligibility threshold for food assistance programs.

These data consequently enable state and local legislators, food banks, and other community leaders to tailor efforts to best address the need within their own communities and understand where they can strengthen the safety net to ensure no child suffers. Children's vulnerability to recessions and other economic shifts depend largely on the strength of the social safety net.



## Child Food Insecurity: Findings

The results of the *Map the Meal Gap: Child Food Insecurity 2011* research indicate that children are at risk of hunger in every county in the United States. County-level CFI rates ranged from a low of seven percent of children in 2009 to a high of over 50%. Food insecurity rates among households with children are substantially higher than those found in the general population.

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The following summarizes key findings from state, county and congressional district-level child food insecurity results. This analysis focuses on income and regional variation illuminated by the results. Unlike *Map the Meal Gap 2011*, which focused on food insecurity overall, additional demographic analyses are not provided here due to the smaller numbers used in this study.

A complete printable, interactive map of county-level child food insecurity can be found online at [feedingamerica.org/mapthegap](http://feedingamerica.org/mapthegap). Downloadable CFI information for congressional districts is also available.

## STATE ESTIMATES

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State-level estimates of child food insecurity are presented in Table 1 (see pages 10-11). Note that these estimates are not directly comparable to the results of the previously released Feeding America study, *Child Food Insecurity in the United States: 2006-2008*,<sup>18</sup> because they were obtained using a different methodology and timeframe. The Map the Meal Gap methodology enables us to estimate food insecurity annually, rather than averaged over a three-year period; the state rates presented in this report reflect data collected in 2009.

The CFI rates among states are considerably higher than the overall food insecurity rates, a phenomenon observed at the national level in the annual USDA report and at the county and congressional district levels in this study. The state

CFI rates range from a low of 13% percent in North Dakota to approximately 30% in Oregon (Washington, DC is even higher at 32%). Even in the most food secure state, more than one in ten children is struggling with hunger. Consistent with the original Map the Meal Gap study, 18 of the 20 states with the highest CFI rates also have the highest-ranked overall food insecurity rates. These 18 high-need states are dispersed throughout the U.S., representing all areas of the country except New England and Middle Atlantic regions. States in the New England and Middle Atlantic regions, however, have high absolute numbers of children living in food insecure households. New York State, for example, is home to over one million children in need.

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<sup>18</sup> Cook, J. Feeding America: 2010.

TABLE 1: CHILD FOOD INSECURITY IN 2009 BY STATE

Rank	State	Total Child Population (Under 18)	Child Food Insecurity Rate	Number of Children Living in Food Insecure Households	Overall Food Insecurity Rate
	U.S. <sup>19</sup>	74,207,000	23.2%	17,197,000	16.6%
1	DC	113,992	32.3%	36,870	15.8%
2	OR	864,528	29.2%	252,510	16.8%
3	AZ	1,672,668	28.8%	482,340	17.4%
4	AR	701,180	28.6%	200,290	17.8%
5	TX	6,633,114	28.2%	1,871,660	17.8%
6	GA	2,514,344	27.9%	702,520	17.8%
7	MS	764,132	27.7%	211,340	19.9%
7	NV	658,560	27.7%	182,710	16.1%
9	SC	1,061,344	27.6%	292,840	18.3%
10	FL	4,054,773	27.5%	1,116,260	17.1%
11	CA	9,439,758	27.3%	2,580,080	16.7%
11	NC	2,206,086	27.3%	603,250	18.2%
11	NM	504,021	27.3%	137,720	17.1%
14	TN	1,475,030	26.9%	396,470	17.3%
15	OK	900,968	26.7%	240,740	17.1%
16	AL	1,123,783	26.6%	299,390	17.8%
17	OH	2,760,889	26.5%	731,040	17.1%
18	MI	2,438,971	25.4%	618,910	18.2%
19	MO	1,431,156	24.8%	354,520	16.8%
20	WA	1,547,473	24.7%	382,860	14.8%
21	ME	279,726	24.6%	68,950	15.1%
22	IN	1,586,528	24.5%	388,640	16.2%
23	KY	1,010,436	24.1%	243,920	16.8%
24	RI	233,662	23.7%	55,390	15.6%
25	ID	406,502	23.4%	95,150	15.8%

<sup>19</sup> National-level statistics: Nord, et al. *Household Food Security in the United States, 2009*. USDA ERS: 2010.

Rank	State	Total Child Population (Under 18)	Child Food Insecurity Rate	Number of Children Living in Food Insecure Households	Overall Food Insecurity Rate
26	IL	3,193,120	23.3%	745,310	14.7%
27	CO	1,196,662	22.7%	271,660	14.3%
28	KS	698,449	22.6%	158,040	14.3%
28	WI	1,320,307	22.6%	297,870	13.1%
30	NY	4,498,282	22.4%	1,006,390	13.5%
31	LA	1,114,366	22.1%	246,720	14.6%
32	WV	386,828	22.0%	85,200	14.0%
33	MT	219,699	21.8%	48,000	13.8%
34	AK	179,703	21.2%	38,090	13.5%
35	PA	2,812,741	20.9%	588,370	13.5%
36	HI	289,288	20.8%	60,250	12.7%
37	NE	445,985	20.7%	92,360	11.8%
37	UT	825,489	20.7%	170,760	15.1%
37	VT	131,019	20.7%	27,160	13.3%
40	IA	709,911	20.6%	146,000	12.8%
40	WY	125,969	20.6%	25,940	12.1%
42	DE	205,229	19.7%	40,520	12.2%
43	SD	196,399	19.6%	38,440	11.6%
44	NJ	2,072,283	19.0%	394,240	12.7%
45	CT	822,120	18.9%	155,560	12.3%
46	MN	1,262,333	18.3%	231,100	11.2%
47	MA	1,449,926	18.1%	262,650	11.2%
48	MD	1,366,297	17.8%	242,910	11.6%
49	VA	1,831,470	17.6%	321,490	11.8%
50	NH	298,180	15.6%	46,400	10.0%
51	ND	143,384	12.7%	18,270	7.8%

## COUNTY ESTIMATES

While state-level information provides a clearer picture of child food insecurity in the U.S. than a national average, the estimates at the county level show that the problem is much more pervasive in specific communities. In each of those counties that fall into the top 10% for the highest child food insecurity rates (N=314), or “high CFI counties,” more than one-third of the children are struggling with food insecurity (ranging from 33% to more than 50%). In addition to having high child food insecurity rates, these counties are very poor in comparison to the rest of the nation. An average of 34% of children in each of these counties live in poverty compared to an average of 21% in all U.S. counties. They also suffer from low median incomes and high unemployment rates (see Table 2). The highest CFI rates are found in two counties in Texas: Zavala and Starr counties, both located very near the border of Mexico. These counties are estimated to have CFI rates of 52% and 50% respectively. In fact, 51 counties across the nation have higher CFI rates than the highest

reported county-level food insecurity rate for the general population, which is 38% in Wilcox County, Alabama.

Additionally, child food insecurity is more pervasive in rural areas. Sixty percent of high CFI counties are classified as rural, compared to 43% of counties in the U.S. (see Table 3).

Thirty-one states are represented in the group of high CFI counties. Counties with high CFI rates are concentrated in the East South Central, South Atlantic and West South Central regions. None of the counties in the New England census region fall into the high CFI counties, but it should be noted that approximately 15% (10 out of 67) of those counties have child food insecurity rates above the average of all U.S. counties (26%). Arizona, Tennessee, Georgia and Alabama lead the nation with the highest percentage of counties (more than 30%) in the high CFI group (see Chart 2 on page 14).

**TABLE 2: FOOD INSECURITY AND INDICATORS AMONG COUNTIES WITH THE HIGHEST RATES OF CHILD FOOD INSECURITY (UNWEIGHTED AVERAGES)**

County Grouping	Average of CFI Rates	Average of Child Poverty Rates	Average of Median Incomes	Average of Unemployment Rates	Average of Overall Food Insecurity Rates
High CFI Counties	36.1%	34.0%	\$33,400	13.5%	22.1%
All U.S. Counties	25.8%	20.8%	\$43,442	9.0%	16.2%



**TABLE 3: DISTRIBUTION OF HIGH CHILD FOOD INSECURITY COUNTIES BY METROPOLITAN CLASSIFICATION**

County Type	High Child Food Insecurity Rate Counties	All Counties
Non-metro/Rural	60.0%	43.0%
Metropolitan	25.5%	35.1%
Micropolitan	14.5%	21.9%
U.S. TOTAL	100.0%	100.0%

### COUNTIES WITH THE LARGEST NUMBERS OF FOOD INSECURE CHILDREN

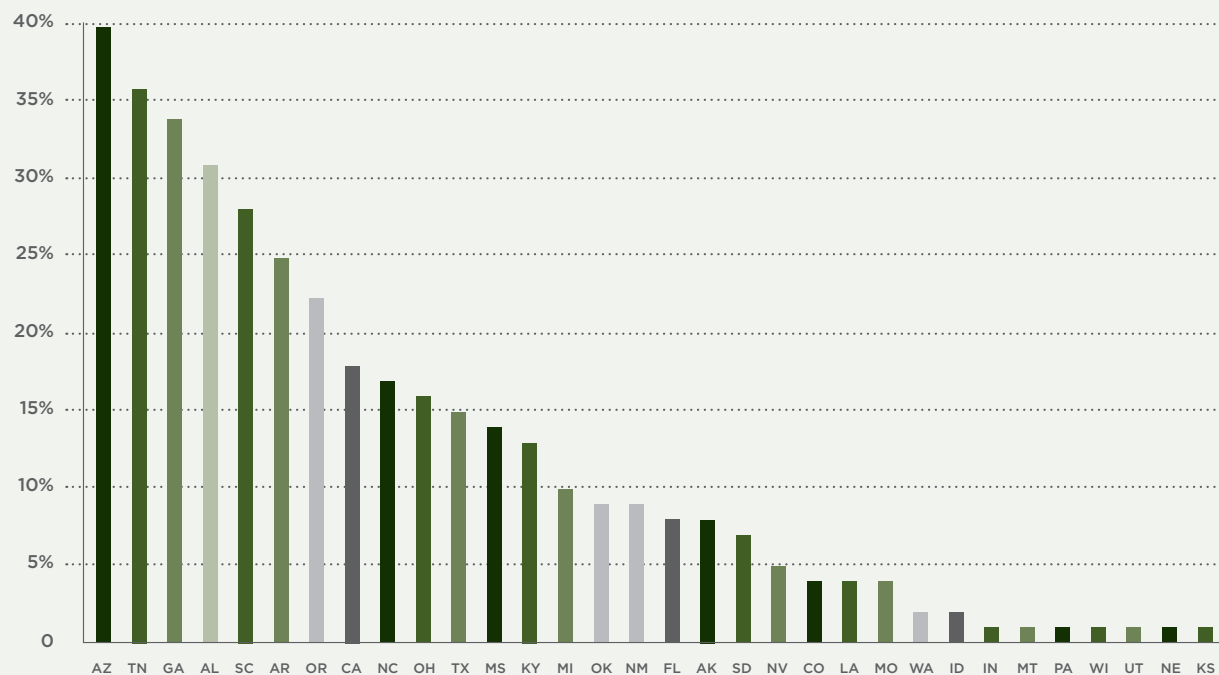
There are 19 counties with more than 100,000 food insecure children (see Table 4 on page 15). Three of these counties—Kings, Queens and Bronx—are located within the New York City metropolitan area; we considered all five of the counties comprising the New York metro area collectively for this analysis. Although county CFI rates are important indicators of need, larger metropolitan areas with lower food insecurity rates still face challenges due to the sheer number of food insecure children. Of the counties that are home to more than 100,000 food insecure children, only one of these (Hidalgo, TX) is also among the top 10% of counties for high CFI rates. Hidalgo County has a CFI rate of 44%, and is near Starr and Zavala counties along the border of

Mexico; Starr and Zavala have the highest rates of child food insecurity in the nation.

The average of the CFI rates in counties with more than 100,000 food insecure children is 28%, the average of the child poverty rates is 23%, and the average of the unemployment rates is 10%. Each of these indicators is higher than the averages of all U.S. counties (26%, 21% and 9%, respectively), despite the fact that these counties may be perceived as less disadvantaged than counties with much higher rates of food insecurity.

Although their rates of child food insecurity may appear lower, these counties face real challenges in addressing the need in their communities.

**CHART 2: PERCENT OF COUNTIES WITH HIGH CHILD FOOD INSECURITY RATES, BY STATE<sup>20</sup>**



## CHILD FOOD INSECURITY IN CONGRESSIONAL DISTRICTS

Looking at child food insecurity across congressional districts provides another way to highlight the high rates of children at risk of hunger across the United States. Child food insecurity rates range from an estimated low of 13% (more than 18,000 children) in North Dakota to 42% (more than 101,000 children) in the 15th district in Texas.<sup>21</sup> Not surprisingly, the 15th district in Texas is near to counties with the highest rates of CFI. The largest estimated number of food insecure children across all districts is

101,680 children (or 41% of all children) in the 4th district of Arizona, where Phoenix is located. The congressional districts with the highest rates of CFI (top 10% among all districts, N=44) have CFI rates of 34% on average, compared to 25% of children in the average district. These districts are also very poor; the average of the poverty rates across these districts is nearly 22%, compared to approximately 14% in the average congressional district.

<sup>20</sup> Counties that fall into the top 10% for highest child food insecurity rates are considered high child food insecurity (CFI) counties in this report.

<sup>21</sup> North Dakota consists of one "at-large" district that encompasses the entire state. The state rate is used here for consistency.

TABLE 4: COUNTIES WITH MORE THAN 100,000 FOOD INSECURE CHILDREN

State	County (Metro Area)	Number of Children Living in Food Insecure Households	Child Food Insecurity Rate
CA	Los Angeles	734,490	28.8%
NY	New York (five boroughs, collectively)	478,550	25.2%
TX	Harris (Houston)	307,570	27.2%
IL	Cook (Chicago)	304,610	23.5%
AZ	Maricopa (Phoenix)	286,560	27.1%
TX	Dallas	187,310	27.9%
CA	Orange	177,650	23.4%
CA	San Diego	177,560	24.2%
CA	San Bernardino	175,670	28.9%
CA	Riverside	172,400	28.7%
FL	Miami-Dade	170,070	29.5%
MI	Wayne (Detroit)	140,190	26.9%
NV	Clark (Las Vegas)	132,350	27.6%
TX	Bexar (San Antonio)	129,590	29.2%
TX	Tarrant (Fort Worth)	121,890	25.3%
TX	Hidalgo	110,990	43.5%
CA	Santa Clara	100,170	23.6%



## Child Food Insecurity: Income Band and Food Price Variation

Eligibility for many food assistance programs, as mentioned previously, is tied to multiples of the federal poverty guidelines. Breaking down our child food insecurity rates by household income provides context for determining what federal and state programs are available to help food insecure children and what gaps are left to be filled by private emergency food assistance. In addition, food prices are vitally important to low-income households. While price increases may be easily borne by middle and upper-income households, food is a larger component of low-income households' budgets, and any price increase can have a disproportionate impact. We analyze both of these issues in depth in this section.

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## ASSESSING NEED BY INCOME BAND

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Because of commonly used program eligibility measures, *Map the Meal Gap: Child Food Insecurity 2011* estimates the proportion of food insecure children who fall into income brackets reflecting federal nutrition program thresholds.

Eighty-six percent (N=2,691) of all counties in the U.S. have a majority of food insecure children living in households with incomes at or below 185% of the federal poverty line. Among the high CFI counties (top 10%), nearly all (98%) of the food insecure population lives in households with incomes that place them below 185% of the poverty line. Consequently, the overwhelming majority of food insecure children in these counties are likely eligible to receive assistance from child nutrition programs.

Households with incomes above 185% of the federal poverty level have fewer government resources available to help meet their needs. Although a large number of food insecure households are also poor, it is important to note that food insecurity and need exist

outside of the federal definition of poverty. As discussed above, unemployment is a strong indicator of food insecurity.

For some counties, there is a high proportion of food insecure children living above 185% of the poverty line, in spite of county CFI rates significantly higher than the national average. In Lumpkin, Georgia, more than one in three (33%) children is food insecure, but 59% of those food insecure children come from households with incomes that render them ineligible for most child nutrition programs. The same is true for 51% of food insecure children living in Swain, North Carolina, which has a CFI rate of 36%. Both of these counties have experienced dramatic increases in unemployment between 2008 and 2009 (from under eight percent to over 11%), which have likely caused families who were not previously food insecure to struggle. Despite the fact that these counties are among the neediest in the U.S., a majority of their food insecure children live in families that do not have access to the government food safety net.

## FOOD PRICE VARIATION AND CHILD FOOD INSECURITY

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The food price analysis in *Map the Meal Gap 2011*, supported by The Nielsen Company, demonstrated that the actual prices paid at the register for a standard market basket of grocery items vary widely across the continental U.S. In many cases, incomes are not proportionately higher in those areas with high food prices—a challenge often overlooked in policy discussions. In this report, the price variation results are considered alongside

CFI rates to highlight counties where food cost may place an additional burden on families struggling to meet their needs.

There are 36 counties that fall into the top 10% categories for both child food insecurity and food cost. The weighted cost per meal in these counties is \$3.08, 21% above the national average of \$2.54. The maximum per-meal cost for this group is \$4.18

in Valley, Idaho and the lowest is \$2.89 in Fannin, Georgia. The higher-than-average meal cost in these counties is particularly notable because the average of these counties' household median incomes (\$32,459) is well below the average of all U.S. counties (\$43,442). These counties also struggle with high poverty rates (average of these 36 counties' rates is 26%) and high unemployment rates (average is 14%). Additionally, on average, more than one in every five individuals in each of these counties is food insecure and 37% of the children are living in food insecure households.

The overwhelming majority of the high cost/high CFI counties are in non-metropolitan or "rural" areas (81% of this group versus 43% of all counties in the U.S.) and they are most often found in Alabama, Mississippi and Tennessee (20 of the 36 counties). However, there are also counties in Western states that experience both higher-than-

average meal costs and high child food insecurity, including some in California, Colorado, New Mexico, Oregon and Utah. No counties are represented in the high cost/high CFI group from the Midwest or Northeast regions. Overall, the counties in this group are relatively small in population; the largest county in this group—and the only one with a child population of over 100,000—is Madera, California. Madera County had a 2009 child population of 144,795 and an estimated food insecure child population of over 14,000 (34%). This predominantly Latino community in central California pays 20% more than average per meal, at \$3.04.

As food insecure families with children struggle with limited food budgets, the burden placed on them by high food costs in their area can stretch them to their limits, forcing them to make difficult choices.





## Child Food Insecurity: Implications

Feeding America undertook this research to gain a clearer understanding of child food insecurity at the local level. The findings demonstrate a profound need for food assistance among children in every part of the country. The data also demonstrate that federal child nutrition programs are not currently reaching all food insecure children.

Although food insecurity is harmful to any individual, food insecurity is particularly devastating among children due to their increased vulnerability and the potential for long-term consequences. Several studies have demonstrated that food insecurity impacts cognitive development among young children and is linked to poorer school performance in older children. Other data show the health

consequences of food insecurity among children, including increased illness and higher associated health costs.

The structural foundation for cognitive functioning is laid in early childhood, creating the underlying circuitry on which more complex processes are built. This foundation can be greatly affected by

food insecurity. Inadequate nutrition can permanently alter a child's brain architecture and stunt their intellectual capacity, affecting the child's learning, social interaction, and productivity. Children who do not receive what they need for strong, healthy brain development during early childhood may never recover their lost potential for cognitive growth and eventual contributions to society.<sup>22</sup>

The consequences and costs of child hunger make addressing this issue an economic and societal imperative. Resources targeted at combating child food insecurity are an important investment not just for the individual child, but for society as a whole. The *Map the Meal Gap: Child Food Insecurity 2011* data suggest several focus areas for policymakers and program administrators to more effectively address child food insecurity. Federal nutrition programs play a critical role in reducing the prevalence of food insecurity among children in the United States. While SNAP is not a child nutrition program per se, because half of all participants are children, the program continues to serve as the first line of defense against child hunger. The National School Lunch, School Breakfast, Summer Food Service, and Child and Adult Care Food Programs (CACFP) may also reduce child food insecurity by serving children in school and day care settings, after school, and during the summer. WIC improves nutrition by targeting young, low-income children at nutritional risk. Together these programs weave a comprehensive nutritional safety net that reach children where they live, learn and play.

Federal nutrition programs are only effective if they reach children in need of food. Existing child nutrition programs could do much more to address food insecurity among children simply by improving participation rates among underserved children. For example, WIC participation is high among infants (81% of eligible infants), but

significantly lower for children ages one through four (47%).<sup>23</sup> Similarly, compared to the 20.6 million children receiving free or reduced-price lunches each school day in 2010, only 9.7 million received breakfast and just 2.3 million received assistance through the Summer Food Service Program.<sup>24</sup> Greater SFSP flexibility, improved coordination between nutrition programs and similar policy proposals that better connect eligible children with existing federal nutrition programs would go a long way to reducing food insecurity among children.

Efforts should also be focused on improving access to programs. For example, there are only 38 summer food sites for every 100 school lunch programs. As a result, just a fraction of the children receiving free or reduced-price lunches during the school year are getting the meals and snacks they are eligible for during the summer. In rural areas, this gap is exacerbated by transportation difficulties in accessing program sites. Consistent with existing research about greater access difficulties in rural areas, our findings reveal that child food insecurity is higher in nonmetro counties. Several policy opportunities exist to improve program delivery in these areas, such as expanding mobile SFSP to reach children in rural communities and other low-access areas.

Finally, millions of food insecure households in the United States have incomes that render them ineligible for any federal food assistance programs. *Map the Meal Gap: Child Food Insecurity 2011* reveals that many counties have large proportions of food insecure children who may not be eligible for federal nutrition programs like School Lunch, Summer Food Service, CACFP and WIC. In these areas, additional resources should be provided to support charitable feeding efforts in order to reach children in need of food assistance who do not qualify for federal programs.

<sup>22</sup> National Scientific Council on the Developing Child. *The Science of Early Childhood Development: Closing the Gap Between What We Know and What We Do*. Center for the Developing Child, Harvard University: 2007.

<sup>23</sup> Harper, E., J. Hirschman, J. Malbi, S. Nelson & K. Hourihan. *WIC Eligibles and Coverage, 1994 to 2007: Estimates of the Population of Women, Infants and Children Eligible for WIC Benefits*. USDA, Food and Nutrition Service: 2009.

<sup>24</sup> USDA, FNS participation data. <http://www.fns.usda.gov/pd/cnpmain.htm>.

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