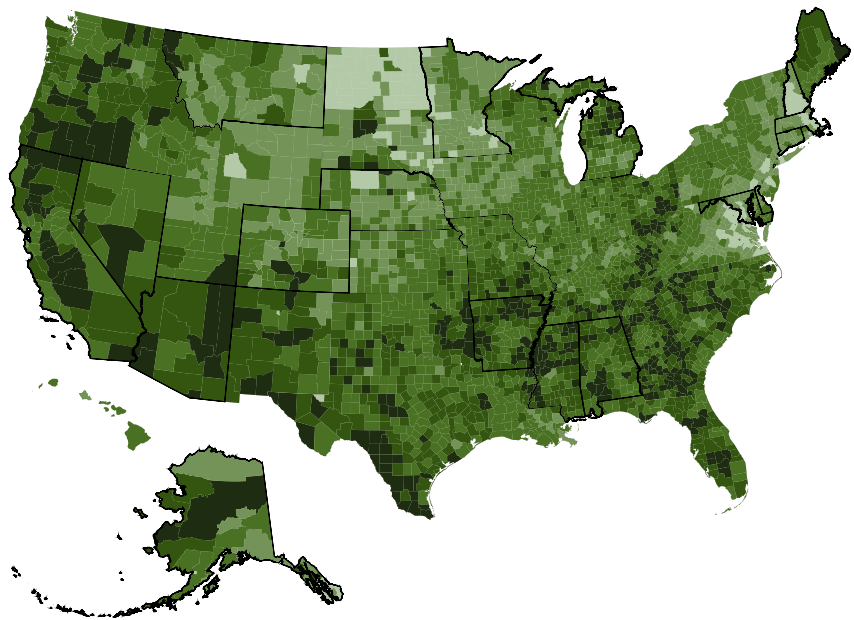




MAP THE MEAL GAP

CHILD FOOD INSECURITY 2012



A Report on County and Congressional
District Level Child Food Insecurity
in the United States in 2010



GLOSSARY OF KEY TERMS

AGENCY A charitable organization that provides the food supplied by a food bank or food-rescue organization directly to clients in need, through various types of programs.

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

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.

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.

RATIO OF INCOME TO THE POVERTY LINE These ratios are used to set **federal nutrition program** thresholds for eligibility, such as the **SNAP threshold**.

PRICE INDEX / LOCAL COST OF FOOD 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: 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**.

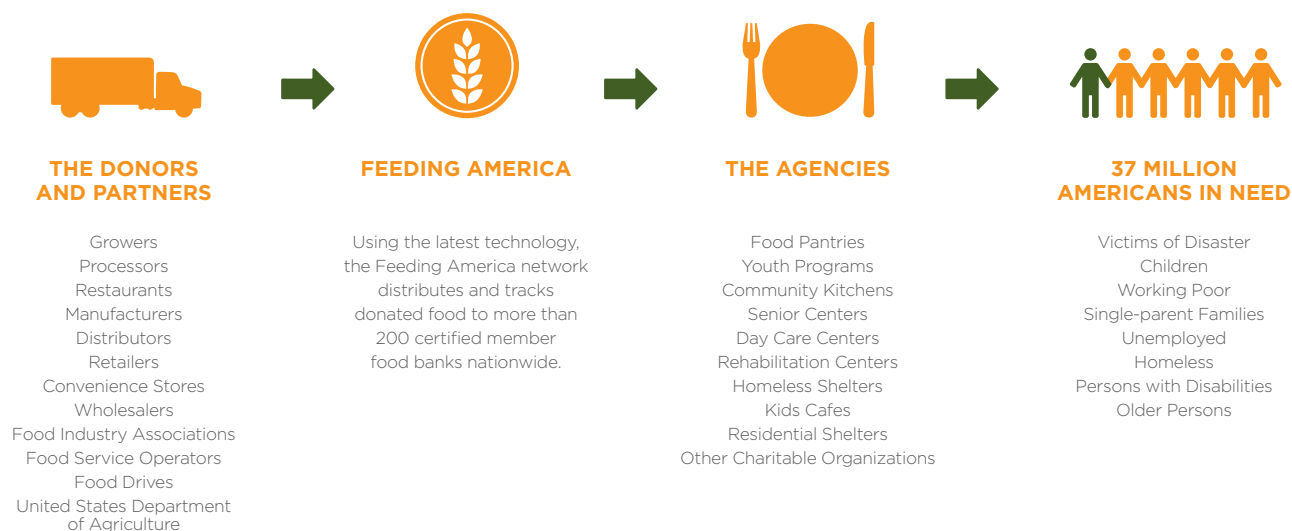
About Feeding America

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 2012*

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* project for the second year to continue learning 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 September of 2011, the Economic Research Service at the United States Department of Agriculture (USDA) released its most recent report on food insecurity, indicating that nearly 49 million people in the United States are living in food insecure households, more than 16 million of whom are children (Coleman-Jensen et al. 2011). While the magnitude of the problem is clear, national and even state estimates of food insecurity can mask

the variation that exists at the local level. Recognizing that children are particularly vulnerable to the economic challenges facing families today, Feeding America has replicated the food insecurity model first used in the *Map the Meal Gap 2011* study to reflect the need among children using the most recent food insecurity and Current Population Survey data (see inset *Map the Meal Gap: An Overview*). 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 ConAgra Foods Foundation supported annual reports that included state-level estimates of child food insecurity based on three-year averages.¹ Using the *Map the Meal Gap* methodology developed by Dr. Craig Gundersen, an internationally-renowned expert

on food insecurity, we are also able to develop annual estimates of child food insecurity (CFI)² 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.

Map the Meal Gap: An Overview

As previously mentioned, Feeding America first released *Map the Meal Gap* in March 2011, providing a first-time look at community-level food insecurity across the country. In September 2011, the *Map the Meal Gap* methodology was applied specifically to data on households' children. This is the second consecutive iteration of the study. The goal of *Map the Meal Gap* 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 findings of *Map the Meal Gap* are based on statistics collected by the U.S. Department of Agriculture, U.S. Bureau of Labor 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. The additional child-specific data analysis presented in this brief was generously funded by the ConAgra Foods Foundation. More information on *Map the Meal Gap* can be found on the Feeding America website at feedingamerica.org/mapthegap.

Findings at geographic levels	State	County	Congressional District
Overall and child <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	•	•	

¹ 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* because they were obtained using a different methodology and timeframe.

² Child food insecurity" and "CFI" will be used interchangeably throughout this report.



About Child Food Insecurity in the United States

The USDA reports that more than one in five children in the United States are 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. This is seen in the most recent report from USDA regarding food insecurity which showed that 20% of households with children are characterized as food insecure versus less than 15% of all households (Coleman-Jensen et al. 2011).

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 (Coleman-Jensen et al. 2011). The Great Recession pushed national unemployment to its highest levels in more than 20 years, and in 2010 there were 46.2 million people in the U.S. living in households with incomes below the poverty threshold, including 16.4 million or more than one in five children

(Current Population Survey; DeNavas-Walt et al. 2011). Although the U.S. economy officially reached the trough of The Great Recession in June of 2009, the unemployment rate (see Chart 1) remains well above pre-recession levels (Business Cycle Expansions).

The *Map the Meal Gap* study examined the effect of the unemployment rate, the poverty rate, and

other factors (e.g., median income) on food insecurity. As expected, all else equal, higher unemployment rates are associated with higher rates of food insecurity. When looking at the full population, a one percentage point increase in the unemployment rate leads to a 0.67 percentage point increase in the overall food insecurity rate (Gundersen et al. 2012). When looking only at children, a one percentage point increase in the unemployment rate leads to a 0.78 percent increase in the child food insecurity rate. The corresponding effects of a one percentage point increase in the poverty rate and child poverty rate on food insecurity among the full population and among children are increases of 0.25 percentage points and 0.33 percentage points, respectively.

Another way to look at the relative effect of unemployment and poverty is by considering the percent change in food insecurity due to a one percent increase in each. These are evaluated at

the mean values for unemployment and poverty. In this case, as shown in the Executive Summary, the relative effect of unemployment is higher than poverty for the full population. However, the reverse holds true for child food insecurity rates. For children, a one percent increase in the unemployment and poverty rate leads to a 0.23 and 0.28 percent increase in the child food insecurity rate, respectively. In other words, the relative effect of poverty is higher than unemployment on child food insecurity rates.

Evidence (Monea & Sawhill 2011) suggests that it will be at least several more years before the economy recovers, 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.

CHART 1: INDIVIDUAL POVERTY AND UNEMPLOYMENT RATE TRENDS, 2002 TO 2010



EMERGENCY FOOD ASSISTANCE AND THE GOVERNMENT SAFETY NET

Due to the continuing persistence of food insecurity, the number of families turning to the food assistance safety net remains at record levels. 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 (Cohen et al. 2010). 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 2005 and 2009—as families began relying more heavily on the emergency food network to help address their needs (Cohen et al. 2010).

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 geared to children or families (see page 8 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 2010³ (the year analyzed in this report), 47% (nearly 19 million children) of all SNAP participants were children (Eslami et al. 2011). 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 2010, 9.1 million women, infants and children participated in WIC (USDA, FNS 2011). 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 and during federal fiscal year 2010, 20.6 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. In most states, persons are eligible for SNAP if they live in households with incomes less than 130% of the federal 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.⁴ As an example of applying these eligibility rules, the 2010 U.S. Health and Human Services poverty guideline for a family of four in the lower 48 states was a pre-tax income of \$22,050. A family of this size would have to be earning less than \$40,793 (\$22,050 * 185%) in order to qualify for WIC and less than \$28,655 to qualify for SNAP.

³ The federal fiscal year starts October 1 each year and ends September 30. 2010 is used because *Map the Meal Gap* data reflects 2010.

⁴ These rates can vary by state. SNAP gross income eligibility thresholds, for example, range from 130% to 200% of the poverty line.

Child Food Insecurity Methodological Overview

Every year, the Current Population Survey (CPS) has a December Supplement which collects nationally-representative data assessing food insecurity among households. The Census Bureau (who manages the CPS) makes this data publicly available. *Map the Meal Gap: Child Food Insecurity 2012* aggregates this information from the 2001 through 2010 CPS to the state level. With this state-level information, the relationship between the proportion of children in any state living in food insecure households and key indicators of food insecurity is assessed. The following indicators were used: unemployment rates, child poverty rates, median income for families with children 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, and the American Community Survey (ACS). 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. Estimates were also developed to sort food insecure children into categories based on household income. The categories are based on eligibility for the National School Lunch Program, School Breakfast Program, and WIC, which means the categories are 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 level.

Because congressional district level data was derived from the 2010 ACS, we aggregated this data to estimate the one-year state food insecurity rates instead of using the county food insecurity rates which were derived from the 2006-2010. ACS

GOVERNMENT NUTRITION ASSISTANCE TARGETING FAMILIES WITH CHILDREN

In recognition of the importance of federal food assistance programs, *Map the Meal Gap: Child Food Insecurity 2012* provides CFI estimates broken down by household income: either 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 do not qualify for assistance. Millions of food insecure children in America are in households with incomes above the eligibility threshold for food assistance programs.

These data can 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 on the strength of the social safety net. (See page 8 for a listing of government nutrition assistance programs.)

Government Nutrition Assistance Targeting Families with Children

Program	General Eligibility	Benefit
SNAP	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.
WIC	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.
NSLP and SBP	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 meals.
CACFP	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 local providers.
SFSP	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 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



Child Food Insecurity: Findings

The results of the *Map the Meal Gap: Child Food Insecurity 2012* research indicates that children are at risk of hunger in every county in the United States. County-level CFI rates in 2010 ranged from a low of five percent of children to a high of nearly 50%. Food insecurity rates among households with children are substantially higher than those found in the general population where county-level food insecurity rates ranged from 5% to 37%.

The following summarizes key findings from state, county and congressional district level child food insecurity results, including an analysis of trends in county child food insecurity rates between 2009 and 2010. These analyses focus on income and geographic variations illuminated by the results.

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

TABLE 1: CHILD FOOD INSECURITY IN 2010 BY STATE

Rank	State	Total Child Population (Under 18) ⁵	Child Food Insecurity Rate	Number of Children Living in Food Insecure Households	Overall Food Insecurity Rate
	U.S.	74,165,000	21.6%	16,208,000	16.1%
1	DC	100,353	30.7%	30,850	16.5%
2	OR	852,442	29.0%	247,380	17.5%
3	AZ	1,606,108	29.0%	466,010	19.0%
4	NM	511,975	28.7%	146,940	18.5%
5	FL	3,936,572	28.4%	1,117,730	19.2%
6	MS	743,088	28.3%	210,350	21.8%
7	GA	2,457,873	28.3%	694,530	19.9%
8	NV	655,955	28.2%	184,890	17.5%
9	AR	699,403	27.8%	194,460	19.2%
10	NC	2,251,648	27.6%	621,650	19.6%
11	TX	6,800,902	27.1%	1,845,670	18.5%
12	SC	1,065,290	27.1%	288,640	18.8%
13	CA	9,157,681	26.8%	2,453,770	17.1%
14	AL	1,120,468	26.7%	298,960	19.2%
15	OK	916,217	26.6%	244,050	17.7%
16	OH	2,675,006	25.9%	693,110	18.1%
17	TN	1,469,563	25.1%	368,490	17.6%
18	MI	2,296,548	24.8%	568,890	19.0%
19	WA	1,559,990	24.2%	378,020	15.9%
20	LA	1,098,598	23.1%	253,750	16.7%
21	ID	423,333	22.8%	96,660	17.0%
22	ME	268,046	22.8%	61,020	14.9%
23	MO	1,391,495	22.7%	316,450	17.1%
24	IN	1,576,511	22.7%	358,120	16.2%
25	KS	714,624	22.7%	162,030	15.0%
26	KY	1,000,440	22.7%	226,790	17.3%

TABLE 1: CHILD FOOD INSECURITY IN 2010 BY STATE (CONTINUED)

Rank	State	Total Child Population (Under 18)	Child Food Insecurity Rate	Number of Children Living in Food Insecure Households	Overall Food Insecurity Rate
27	IL	3,086,916	22.2%	684,960	15.0%
28	CO	1,213,411	22.1%	268,650	15.5%
29	UT	862,300	22.0%	189,540	17.0%
30	HI	297,573	21.7%	64,430	14.0%
31	RI	221,694	21.5%	47,660	15.3%
32	NE	450,755	21.5%	96,700	13.3%
33	WI	1,309,886	21.4%	279,920	13.3%
34	NY	4,242,462	21.3%	902,070	14.2%
35	WV	376,073	21.1%	79,360	14.7%
36	MT	218,461	20.9%	45,700	14.5%
37	VT	126,885	20.5%	25,960	14.1%
38	PA	2,740,484	20.3%	555,110	14.6%
39	AK	184,174	19.9%	36,670	14.6%
40	IA	709,670	19.5%	138,340	13.4%
41	CT	805,841	18.8%	151,530	13.8%
42	NJ	2,039,064	18.6%	380,170	13.5%
43	WY	134,536	18.6%	25,060	12.2%
44	DE	202,599	18.4%	37,240	12.8%
45	SD	197,999	17.9%	35,450	12.6%
46	MD	1,329,061	17.8%	236,560	12.8%
47	MA	1,400,124	16.8%	235,480	12.3%
48	MN	1,266,102	16.7%	212,050	11.5%
49	VA	1,828,009	16.4%	300,430	12.4%
50	NH	281,750	14.3%	40,400	10.9%
51	ND	148,619	10.6%	15,780	7.7%

⁵ The total child population is an aggregation of the child population (from whom poverty status is determined) for congressional districts in each state. This data comes from the 2010 American Community Survey, U.S. Census Bureau.

STATE ESTIMATES

State level estimates of child food insecurity are considerably higher than the overall food insecurity rates, a phenomenon observed at the national level in the annual USDA report and mirrored at the county and congressional district levels in this study. State-level estimates of child food insecurity are presented in Table 1 (see pages 10-11). The state CFI rates range from a low of 11% in North Dakota to a high of 29% in Arizona and Oregon (The District of Columbia is even higher at 31%). Even in the most food secure state, nearly one in ten children is struggling with

hunger. Consistent with the original *Map the Meal Gap* study, 17 of the 20 states with the highest CFI rates also have the highest-ranked overall food insecurity rates. These 17 high-need states are dispersed throughout the U.S., representing all areas of the country except New England, Mid-Atlantic, and the West North Central regions. Some states in the New England region, however, have high absolute numbers of children living in food insecure households because they are densely populated. For example, New York State is home to over 900,000 children in need.

TRENDS IN COUNTY CHILD FOOD INSECURITY RATES BETWEEN 2009 AND 2010

The 2010 *Map the Meal Gap* CFI report provides a first-time opportunity to look at trends between 2009 and 2010. Differences between the two years were compared to identify any notable shifts in child food insecurity rates at the county level. County-level estimates of CFI may be less stable from year to year than those at the state or national level due to smaller geographies, particularly in counties with very small child populations. Efforts are taken to guard against unexpected fluctuations that can occur by using the five-year averages from the American Community Survey for key variables, including child poverty, median income among families with children, and the percent of the child population that is African American or Hispanic. However, the other key variable in the model—unemployment—is based on a one-year average estimate for each county as reported by the Bureau of Labor Statistics. The model looks at the relationship between all of these variables

and the rate of child food insecurity as reported by USDA in order to generate the estimates

Nationally, food insecurity rates for households with children declined slightly from 23% in 2009 to 22% 2010 (Coleman-Jensen et al. 2011). Consistent with this, many counties also experienced declines in food insecurity. In what follows, we concentrate on counties that had marked changes in food insecurity from 2009 to 2010, namely 94 counties that experienced changes in child food insecurity rates above or below six percentage points.

In 23 of the counties that experienced decreases of 6 percentage points or more, the unemployment rate also decreased by a substantial amount. For example, in Elkhart, Indiana, the unemployment rate decreased from 18% in 2009 to 14% in 2010. The child food insecurity rate also decreased from 33% in 2009 to 26% in 2010. While the decline in the child food insecurity rate is considerable,

the absolute number of food insecure children is still high, with over 141,000 food insecure children living in this one county. Half of these 23 counties are located in Tennessee where the number of food insecure children range from a low of 3,700 in Clay, Tennessee to a high of 42,300 children in Greene, Tennessee.

In 58 counties, the poverty rate declined by a substantial amount, also influencing the decline in the child food insecurity rates. For example, the child poverty rate in Decatur, Tennessee, decreased from 43% in 2009 to 28% in 2010, as did the child food insecurity rate, which decreased more than 11 percentage points to 29% in 2010. It's important to recognize that while this child food insecurity rate is extremely high, the absolute number of food insecure children is less than 1,000 because of the small child population in this county.

In the remaining counties, there were multiple factors that led to the decline. These factors included a combination of declines in both unemployment and the child poverty rate that influenced the child food insecurity rates.

There were only two counties that experienced an increase in their child food insecurity rates greater than 6 percentage points: Loup, Nebraska and Quitman, Georgia. Both of these counties are very small in population, with only 40 food insecure children in Loup, Nebraska and 190 in Quitman, Georgia. In both counties, the unemployment and poverty rates increased substantially from 2009 to 2010. Child poverty rates increased by more than 22% in both counties with nearly half of the child population living at or below the federal poverty line in 2010.

The following sections explore the county level findings in greater detail.

COUNTY ESTIMATES

State-level information provides a clearer picture of child food insecurity in the U.S. than a national average, and the estimates at the county level further demonstrate 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=324), or “high CFI counties,” nearly one-third of the children are struggling with food insecurity (ranging from 30% to 49%). 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 36% 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, both located near the Mexican border. These counties are estimated to have CFI rates of 49% and 45%, respectively. In fact, 19 counties across the nation have higher CFI rates than the highest reported county-level food insecurity

rate for the general population, which is 37% in Holmes County, Mississippi.

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

Thirty-three 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 group, but it should be noted that approximately 18% (12 out of 67) of those New England counties still have child food insecurity rates above the average of all U.S. counties (23%). Arizona, Georgia, Mississippi, and California lead the nation with the highest percentage of their counties in the high CFI group (more than 30% of the counties in these states (see Chart 2 on page 16).

TABLE 2: FOOD INSECURITY AND INDICATORS AMONG COUNTIES WITH THE HIGHEST RATES OF CHILD FOOD INSECURITY (UNWEIGHTED AVERAGES), 2010

County Grouping	Average of CFI Rates	Average of Child Poverty Rates	Average of Median Incomes ⁶	Average of Unemployment Rates	Average of Overall Food Insecurity Rates
High CFI Counties	32.4%	36.3%	\$40,677	13.0%	21.3%
All U.S. Counties	23.1%	21.3%	\$54,278	9.2%	15.6%

⁶ Among families with children

TABLE 3: DISTRIBUTION OF HIGH CHILD FOOD INSECURITY COUNTIES BY METROPOLITAN CLASSIFICATION, 2010

County Type	High Child Food Insecurity Rate Counties	All U.S. Counties
Non-metro/Rural	60.8%	43.1%
Metropolitan	13.0%	35.0%
Micropolitan	26.2%	21.9%
U.S. Total	100.0%	100.0%

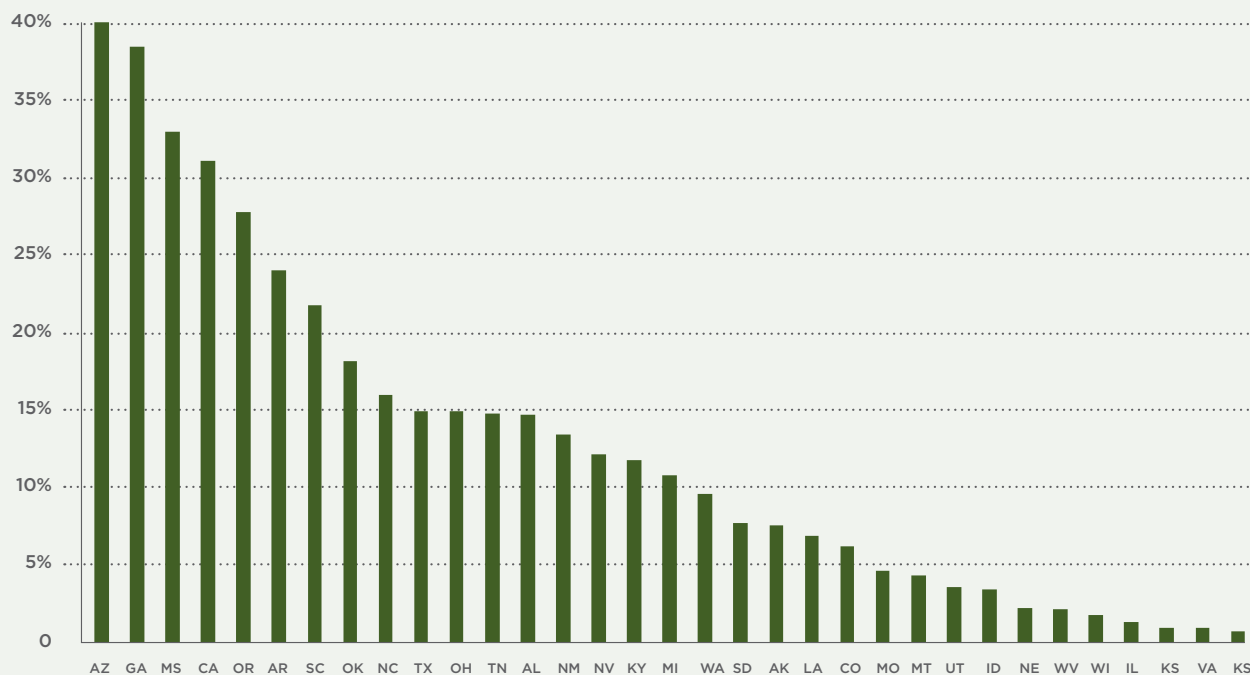
COUNTIES WITH THE LARGEST NUMBERS OF FOOD INSECURE CHILDREN

Although the child food insecurity rate is one important indicator of high level of need, even counties with more modest rates may still be home to large numbers of children whose families are struggling with food insecurity. There are 17 counties in the U.S. with more than 100,000 food insecure children (see Table 4 on page 17). Two of these counties—Kings and Bronx—are located within the New York City metropolitan area; we considered all five of the counties collectively which comprise the New York metro area for this analysis. 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 40%, and is near Starr and Zavala counties along the border of Mexico.

The average child food insecurity rates in counties with more than 100,000 food insecure children is 26%, the average of the child poverty rates is 25%, and the average of the unemployment rates is 11%. Each of these indicators is higher than the averages of all U.S. counties in 2010 (23%, 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, the counties with more than 100,000 food insecure children face real challenges in addressing the need in their communities because of the sheer number of children who may need assistance.

CHART 2: PERCENT OF COUNTIES WITH HIGH CHILD FOOD INSECURITY RATES, BY STATE, 2010⁷



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 11% (nearly 16,000 children) in North Dakota⁸ to 39% (more than 90,000 children) in the 20th district in California. The largest estimated number of food insecure children across all districts is 98,000 children (or 34% of all children) in the 28th district of Texas, on the border where Laredo is located.

The congressional districts with the highest rates of CFI (top 10% among all districts, N=44) have CFI rates of 33% on average, compared to 24% of children in the average district. These districts are also very poor; the average of the child poverty rates across these districts is 24%, compared to approximately 16% in the average congressional district.

⁷ Counties that fall into the top 10% for highest child food insecurity rates are considered high child food insecurity (CFI) counties in this report.

⁸ North Dakota consists of one "at-large" district that encompasses the entire state.

TABLE 4: COUNTIES WITH MORE THAN 100,000 FOOD INSECURE CHILDREN, 2010

State	County (Metro Area)	Number of Children Living in Food Insecure Households	Child Food Insecurity Rate
CA	Los Angeles	643,640	26.6%
NY	New York (five boroughs, collectively)	395,680	22.5%
TX	Harris (Houston)	280,630	25.5%
IL	Cook (Chicago)	259,420	21.0%
AZ	Maricopa (Phoenix)	244,970	24.8%
TX	Dallas	165,240	25.9%
CA	Riverside	161,640	26.9%
CA	San Diego	159,400	22.5%
CA	San Bernardino	158,880	27.0%
CA	Orange	155,210	21.3%
FL	Miami-Dade	149,960	27.8%
NV	Clark (Las Vegas)	127,250	26.9%
TX	Bexar (San Antonio)	118,570	26.8%
TX	Tarrant (Fort Worth)	113,980	23.5%
MI	Wayne (Detroit)	110,430	22.8%
TX	Hidalgo	100,770	39.5%
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 more 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.

ASSESSING NEED BY INCOME BAND

Because of commonly used program eligibility measures, *Map the Meal Gap: Child Food Insecurity 2012* estimates the proportion of food insecure children who fall into income brackets reflecting federal nutrition program thresholds. The relevant income brackets are below 185% of the poverty line and above 185% of the poverty line. Children in the former bracket are eligible for WIC, NSLP, and SBP. Children in households with incomes above 185% of the poverty line are, in general, not eligible for these programs.

Ninety percent (N=2,821) 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%), on average, nearly three in four (73%) food insecure children live 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 federal child nutrition programs. Understanding the income composition of the food insecure population can help flag where outreach may be needed to maximize participation in these programs.

Despite the fact that a large number of food insecure households are also low-income, it is important to note that food insecurity exists in households with incomes that can be substantially above the poverty line. There may be a number of reasons why these households struggle. As discussed earlier, unemployment is a strong risk factor for food insecurity; however, other

challenges such as living in a high cost area, under-employment of parents, and large family medical bills may also contribute to these households' struggles to meet their food needs.

In most counties in the U.S., at least some food insecure children have incomes above 185% of the federal poverty level, and in more than 10 percent of counties, the majority of food insecure children live in households with incomes above 185% of the poverty line. Examples of this income composition among food insecure children are found in diverse locations around the country. For example, in Lumpkin, Georgia, approximately 28% of all children are food insecure and 57% of these children come from households with incomes above 185% of the poverty line. Although Loudoun, Virginia, has a lower child food insecurity rate (11%) than the national average, there are an estimated 10,000 food insecure children, 80% of whom are estimated to have incomes greater than 185% of poverty. Another example is Santa Clara, California, which has the largest absolute number of food insecure children—a little more than half of the 86,400 food insecure children are living in households with incomes above 185% of the poverty level. Even very needy counties, such as Swain, North Carolina, which has a child food insecurity rate of 33%, and actually saw its unemployment rate climb between 2009 and 2010 (to 13%), is still estimated to have almost half of its food insecure children (47%) in households with these higher incomes and who are likely ineligible for the government food safety net.

FOOD PRICE VARIATION AND CHILD FOOD INSECURITY

The food price analysis in *Map the Meal Gap 2012*, 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 and, as a consequence, the average household in these areas face more challenges in purchasing enough food. This disparity in food prices not matched by disparities in income is 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 43 counties that fall into the top 10% categories for both child food insecurity and food cost. The average cost per meal in these counties is \$2.94, 17% above the national average of \$2.52. The maximum per-meal cost for this group is \$3.60 in Colusa, California, and the lowest is \$2.81 in Duval, Texas; Lee, Kentucky; Noble, Ohio; Quitman, Georgia; and Reynolds, Missouri. The higher-than-average meal cost in these counties is particularly notable because the average of these counties' household median incomes among families with children (\$39,236) is well below the average of all U.S. counties (\$54,278). These counties also struggle with high child poverty rates (the average of these 43 counties' rates is 40% versus an average of 21% for all U.S. counties)

and high unemployment rates (the average of these 43 counties' rates is 14% versus an average of 9% for all U.S. counties). Additionally, on average, more than one in every five individuals in each of these counties is food insecure and 33% 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 (84% of this group versus 43% of all counties in the U.S.) and they are more often found in Mississippi and Tennessee (13 of the 43 counties). 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 and Oregon. No counties are represented in the high cost/high CFI group from the Northeast region. Overall, the counties in this group are relatively small in population; the largest county in this group is Madera, California. Madera County had a 2010 child population of 42,452 and an estimated food insecure child population of over 13,000 (32%). This predominantly Latino community in central California pays 18% more than average per meal, at \$2.98.

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 both public and private 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 has the potential to lead to negative health and other outcomes for individuals across the age spectrum, food insecurity can be particularly devastating among children due to their increased vulnerability and the potential for long-term consequences. 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. Several studies have demonstrated that food insecurity impacts cognitive development among young children and is linked to poor school performance in older children. (For a review see Gundersen et al., 2011.)

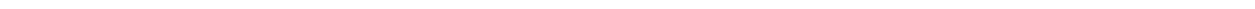
The consequences and costs of child hunger make addressing this issue an economic and societal imperative. Resources targeted at combating child food insecurity are an important investment not just for the individual child, but for society as a whole. The *Map the Meal Gap: Child Food Insecurity 2012* 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. In 2010, 47 percent of SNAP participants (nearly 19 million) were children (Eslami et al. 2011). The National School Lunch, School Breakfast, Summer Food Service (SFSP), and Child and Adult Care Food Programs (CACFP) also reduces 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%) (Harper, et al. 2009). 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 even fewer (2.3 million) received assistance through the Summer Food Service Program (USDA FNS 2011). Greater SFSP flexibility, improved coordination between nutrition programs and innovative strategies to increase program access for eligible children would go a long way to reducing food insecurity among children. 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 nonmetropolitan 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.

Even with these efforts, there are still millions of food insecure households in the United States that have incomes that render them ineligible for any federal food assistance programs. *Map the Meal Gap: Child Food Insecurity 2012* 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.



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Craig Gundersen, Lead Researcher, University of Illinois at Champaign-Urbana
 Elaine Waxman, Co-Investigator, Feeding America
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 Elizabeth Ignowski, Research Assistant to Craig Gundersen
 Jessica Pasciak, Research Assistant to Craig Gundersen
 Mitch Kriss, The Nielsen Company
 Brian Odeen, The Nielsen Company
 Roxane Vanni-Fett, The Nielsen Company

TECHNICAL ADVISORY GROUP OF FEEDING AMERICA

John Cook, Boston University School of Medicine
 Craig Gundersen, Lead Researcher, University of Illinois at Champaign-Urbana
 Alison Jacknowitz, American University School of Public Affairs
 Robert Santos, The Urban Institute

FEEDING AMERICA NATIONAL OFFICE STAFF

Tony Bagdy	Barbara Laane
Michelle Berger Marshall	Kathryn Lyons
Nancy Curby	Dan Michel
Maura Daly	Sophie Milam
Lisa Davis	Eric Olsen
Ross Fraser	Elizabeth Raines
Jacqueline Goodman	Paula Thornton Greear
Lucio Guerrero	

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35 East Wacker Drive, Suite 2000
Chicago, Illinois 60601
1.800.771.2303
www.feedingamerica.org

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