

## Reading the Atlas, County Tables, and State Maps

This atlas presents information on indicators that measure both food insecurity and hunger need, and program success in meeting citizen needs. We have identified seven indicators related to “need” and sixteen measures of “performance.” Depending on the variable, our measures focus on the 2008 calendar year, or the state fiscal year 2009 (July 1, 2008 - June 30, 2009). In the county pages that make up the bulk of this report, readers will find county-level information on (A) general profile indicators, (B) economic indicators, (C) need indicators, and (D) performance indicators.

The next few pages of this atlas provide an overview of these four categories, as well as important information on how to read the county tables. This section also includes information on how to read the state maps included in this atlas.

### County General Profile Indicators

At the top of each county page are six general indicators, three each related to population and health. These give readers a general profile of the county context. We present health variables due to the close correlations between food security, diet, and health status.

### Economic Indicators

In the lower left corner are three poverty measures that we include because poverty is the best predictor of food security in the United States. Median household income,

unemployment rate, and percent of female headed households are additional measures of economic well-being.

### Need Indicators

The purpose of the “Need Indicators” is to provide measures of the extent of food insecurity and hunger in each Missouri County.

#### How to read the table of “Need Indicators”

The left side of each table provides information on seven indicators of food insecurity and hunger need. Four columns of information are presented for each variable. To demonstrate how to read this information, here is the first need indicator for SNAP/Food Stamps for Adair County (see Page 30):

	County	Trend	State	County Rank*
SNAP/Food Stamps				
% total population income eligible	30.5%	↑	18.2%	Very high

- The *first column*, “County,” reports the result for the county on this indicator; in this case, 30.5% of Adair County’s total population has an income level that qualifies for SNAP/food stamp eligibility.
- The *second column*, “Trend,” shows whether the county’s level has increased (↑) decreased (↓) or stayed the same (-). The trend period, usually three or five years, is defined for each variable in the next section. If an increase or decrease is shown, this

means a growth or decline of more than 5 percent over the trend period. In our example, the Adair County rate has increased more than 5 percent over the past three years.

- The *third column*, “State,” shows the average across all counties and St. Louis City for the indicator, in this case 18.2 percent.
- The *fourth column* is labeled “County Rank.” This last column indicates the county’s rank in comparison with all other Missouri counties and St. Louis City. Individual county results are normally divided into five quintiles to reveal if a county’s need is in the top 20%, second highest 20%, and so on. The labels under “county rank” indicate the following groups:

- Very High – in the highest quintile (from the 80<sup>th</sup> to the 100<sup>th</sup> percentile) of need in MO
- High – in the second highest quintile (60<sup>th</sup> to 79<sup>th</sup> percentile) of need
- Average – from 40<sup>th</sup> to 59<sup>th</sup> percentile of need
- Low – in the second lowest quintile (20<sup>th</sup> to 39<sup>th</sup> percentile of need)
- Very Low – in the lowest quintile (1<sup>st</sup> to 19<sup>th</sup> percentile) of need in MO

The example on Page 3 shows the level in Adair County, in comparison to other counties, is in the highest quintile of percent of total population eligible for SNAP/Food Stamps.

The reader will find the designation “NA” where data is not available or appropriate to report.

## Performance Indicators

The “Performance Indicators” provide county-level measures of the extent to which residents are participating in public and private programs intended to help residents cope with food insecurity. Knowing county needs, we now examine the success of programs established to address those needs.

### *How to read the table of “Performance Indicators”*

The right side of each table provides information on sixteen indicators of performance. Four columns of information are presented for most variables. To demonstrate how to read this information, here is the performance indicator for Adair County (see Page 30) related to the need variable just discussed:

	County	Trend	State	County Rank*
SNAP/Food Stamps Participation				
% income eligible Population	34.8%	↓	70.5%	Very low

- The *first column*, “County,” reports the measure of the performance indicator for that county. In this case, the table reveals participation of 34.8 percent of the total population eligible for the SNAP/Food Stamps.
- The *second column*, “Trend,” shows whether the county’s level has increased (↑) decreased (↓) or stayed the same (-). The trend period, usually three or five years, is defined for each variable in the next section. If an increase or decrease is shown, this means a growth or decline of more than 5 percent over

the trend period. In our example, the Adair County participation rate has decreased more than 5 percent over the past three years.

- The *third column*, “State,” shows the average across all counties and St. Louis City for the indicator. The average Missouri participation rate is 70.5 percent.
- The *fourth column* is labeled “County Rank.” This last column indicates the county’s rank in comparison with all other Missouri counties and St. Louis City. For most variables, individual county results are divided into five categories or quintiles to reveal if a county’s performance is in the top 20%, second highest 20%, and so on. The labels under “county rank” indicate the following groups:

Very High – in the highest quintile (from the 80<sup>th</sup> to the 100<sup>th</sup> percentile) of performance in MO

High – in the second highest quintile (60<sup>th</sup> to 79<sup>th</sup> percentile) of performance

Average – from 40<sup>th</sup> to 59<sup>th</sup> percentile

Low – in the second lowest quintile (20<sup>th</sup> to 39<sup>th</sup> percentile) of performance

Very Low – in the lowest quintile (1<sup>st</sup> to 19<sup>th</sup> percentile) of performance in MO

The example on Page 4 shows the level of income eligible participation in Adair County is in the “very low” quintile, or the bottom 20 percent of rates in the state.

The reader will find the designation “NA” where data is not available or appropriate to report.

## *State Maps*

For selected indicators of food insecurity and hunger need and performance we provide maps to graphically represent patterns among Missouri’s 114 counties and St. Louis City. The maps allow the reader to quickly note the rankings of all counties in the state.

Each map divides the state into five equal fifths, or quintiles, according to the complete results for the measure. A quintile thus includes one-fifth of the counties in the state.

*The quintiles on each need indicator map* are arranged from very low (the 23 counties with lowest need on that measure) to very high (the 23 counties with highest need). For example, “Food uncertainty” rates for total county population range from a state low of 8.4 percent (St. Charles County) to a high of 20.2 percent (Pemiscot County). To make the state map of Food Uncertainty for the total population, the 23 counties with the lowest levels of food uncertainty (8.4 – 11.0 percent) are in the first, or lowest need, quintile. The second quintile includes the 23 counties next lowest in levels of food uncertainty, with rates from 11.1 to 12.3 percent. This pattern continues to the fifth quintile or highest need group, which includes 23 counties with food uncertainty rates from 15.0 to 20.2 percent.

## *Final Notes*

This atlas emphasizes percentages rather than absolute numbers. In other words, most of our indicators reveal the percentage of a county's population that is, for example, food uncertain, or eligible for a particular program. With this approach, we are able to compare need and performance measures between counties with different population numbers. However, we should remind readers that emphasizing percentages and comparatively assessing need and performance percentages between counties could cloak important differences in the absolute numbers of people affected by any single variables. The large proportion of people in Missouri's highest populated counties, for example St. Louis City, St. Louis County and Jackson County, means that the number, rather than level, of people who are food insecure, eligible for a program or participating in a program are almost always highest in these regions. St. Louis City, for example, appears to be doing well in participation rates for

specific programs and has a higher participation rate than many other counties with lower numbers of eligible participants. However, a participation rate of 80% in a highly-populated county may mean that more people remain nonparticipants than in a county with a lower population and 70% participation rate. Similarly, a rate of eligibility for a program may be lower in a highly populated county than a less populated area, but there may well be more individuals eligible in the former county due to the high number of residents.

*The next four sections of the report present the indicators that readers will find on the county pages. These are the county profile, economic, need, and performance indicators. We present the name of each indicator, how it is measured, and the source of our data. We also provide state maps of selected indicators as well as information on some of the key programs in Missouri to address food insecurity and hunger.*