Background & Frequently Asked Questions about:
The Impact of the Coronavirus on Food Insecurity in 2020: Update October 2020

Analysis of how food insecurity may increase in 2020 due to COVID-19 for the overall population and children by state, county, and congressional district.

Developed by the Feeding America Research Team, in partnership with Dr. Craig Gundersen.

Last updated: 11/2/2020 | Please contact the Feeding America Research Team for the latest version of this document or additional information.

Background

Since the onset of the crisis related to the coronavirus (COVID-19) pandemic, Feeding America has worked with our Technical Advisory Group and others to analyze and share information about impacts of the economic crisis on food insecurity via briefs, visuals, and talking points. We released our first round of projections at the national level and for states, counties, and congressional districts between March and May 2020. This document accompanies revised projections for the same geographies released as of October 2020.

For ten years, Feeding America has produced local-level estimates of food insecurity through the *Map the Meal Gap* (MMG) study. The same model used to estimate local food insecurity can also predict food insecurity using projected changes to variables in the model. To predict changes in food insecurity as a result of COVID-19, we have used projected changes to unemployment and poverty, two variables that have a statistically significant and substantial effect on food insecurity estimates and are likely to be most directly affected by COVID-19.

National Estimates

Below, Table 1 displays the assumptions used for unemployment and poverty at the national level and the food insecurity levels that would result for both the overall population and for children. If the annual unemployment rate averages to 10.5% and the annual poverty rate is 14.4% (20.1% for children), 1 in 6 people (more than 50 million people total), including 1 in 4 children (17 million children total) will experience food insecurity in 2020.

Table 1. National projections of food insecurity and underlying factors for 2020

	Overall Population	Children Only
Projected Annual Unemployment Rate (percentage point increase from 2018)	10.5% (+6.6)	10.5% (+6.6)
Projected Annual Poverty Rate (percentage point increase from 2018)	14.4% (+2.6)	20.1% (+3.9)
Projected Annual Food Insecurity Rate (percentage point increase from 2018)	**15.6%** (+4.1)	23.1% (+4.9)
Projected No. of Food-insecure People (increase in millions from 2018)	50.4 M (+13.2)	17.0 M (+5.8)

Local Estimates

To estimate the impact of COVID-19 on food insecurity at the local level, we began with the assumptions described above. Because unemployment has varied across the country, the projected change in the unemployment rate at the local level is adjusted using actual unemployment rates since the pandemic began. The adjustment for poverty at the national level is used across all geographies.

Citation

Gundersen, C., M. Hake, A. Dewey, E. Engelhard (2020). The Impact of the Coronavirus on Food Insecurity in 2020, Update October 2020 v1 [Data file and FAQ]. Available from Feeding America: research@feedingamerica.org.

Frequently Asked Questions

Below we provide responses to commonly asked questions. If you have other questions that are not addressed below, please contact research@feedingamerica.org.

Methodological Questions:

How are these food insecurity projections calculated?

Using the model developed for *Map the Meal Gap*, which provides insight into the relationships between poverty, unemployment, and food insecurity, we apply projected changes to *annual* unemployment and poverty rates to arrive at new estimates for food insecurity. Specifically, for every percentage point increase in the annual unemployment rate, the estimated food insecurity rate for the full population increases by 0.502 percentage points, and for every percentage point increase in the annual poverty rate, food insecurity for the full population increases by 0.296 percentage points.

Note that the *Map the Meal Gap* model does include other indicators, such as median income, homeownership, and disability. While these variables do change over time, in the near term we assume the most significant changes due to COVID-19 will be in unemployment and poverty as jobs are lost, incomes decline, and new expenses increase. Consequently, we have limited our projection calculations to consideration of those two indicators.

For more background on the *Map the Meal Gap* methodology, see the Technical Appendix.

What is the rationale for the assumption used related to unemployment?

Our revised projections assume that the annual unemployment rate for 2020 will be 10.5% overall, an increase of 6.6 percentage points relative to the 2018 baseline being used. The *Map the Meal Gap* model relies on an **annual** estimate of unemployment, which is the average of monthly rates throughout the year.

This assumption represents a slight downward shift relative to our initial 2020 projections (which assumed an annual unemployment rate of 11.5%). The assumption accounts for actual monthly unemployment year-to-date, along with annual and quarterly unemployment projections from various reputable experts, including the Congressional Budget Office, Organization of Economic Cooperation and Development, International Monetary Fund and Federal Reserve.

What is the rationale for the assumption used related to poverty?

Compared to unemployment, there has been far less work done to try to predict poverty rates for 2020. This is largely due to the fact that poverty is inherently more difficult to predict since a household's income relative to the poverty line cannot be determined until the year is over (whereas the annual unemployment rate is an average of monthly unemployment rates). Work that has been done has primarily focused on alternative measures of poverty (e.g. scholars at The Urban Institute use a measure that accounts for SNAP benefits, scholars from the University of Chicago and Notre Dame use monthly data from the Basic Monthly Current Population Survey and scholars from Columbia University use monthly data from the Supplemental Poverty Measure). The *Map the Meal Gap* model utilizes the official annual poverty measure, adjusted to reflect non-students only, so these sources can't be directly applied to our projections.

Our revised projections assume that the national poverty rate for 2020 will be 14.4% overall, an increase of 2.6 percentage points relative to the 2018 baseline being used (for children, we are assuming a child poverty rate of 20.1%, an increase of 3.9 percentage points over 2018). This assumption is consistent with the change in poverty observed during the time of the Great Recession (from 2007 to 2009) and represents a slightly lower increase relative to our initial projections.

While some experts, including the scholars referenced above, have suggested that poverty may go down or not change significantly, we have opted to use an assumption that falls roughly midway between our original projections and a zero percentage point change.

How did you calculate values related to projected local unemployment?

To localize the projected change in the national annual unemployment rate, we utilized actual county-level unemployment rates as published by the Bureau of Labor Statistics and created indices of the population weighted average unemployment rate for the months of April through July, relative to the national average unemployment rate during the same time. Congressional district indices were created by mapping counties to congressional districts, and those indices were aggregated up to produce state-level indices. For all geographies, the indices were multiplied by the projected national increase in unemployment (6.6 percentage points) to arrive at an adjusted local unemployment rate.

What is the timeframe for these food insecurity projections?

The projections outlined in this work are estimates of the annual food insecurity rate for calendar year 2020.

How do these projections relate to the latest national food insecurity data released by the USDA?

On September 9, 2020, the USDA released its annual report on household food insecurity in the United States. In 2019, more than 35 million people, including nearly 11 million children, lived in a food-insecure household. These results reflect the lowest that food insecurity rates have been in more than 20 years.

Feeding America's projections indicate our best estimates of what food insecurity rates will be in 2020 as a result of COVID-19 and its economic and other effects. While 2019 data is available at the national level, we have continued to use 2018 as the baseline for computing our projections since it is the most recent year for which we have the information needed to calculate food insecurity at the county and congressional district levels.

I have more questions. Who do I contact?

Contact research@feedingamerica.org with any additional questions you have.