The Impact of the Coronavirus on Local Food Insecurity

FEEDING AMERICA®

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.

Introduction

In 2020, the novel coronavirus (COVID-19) pandemic threatens the lives and livelihoods of people throughout the world. For the first time in recent memory, decisions are being made that weigh economic cost against the lives of people in the United States, and no matter the outcome, the most vulnerable members of society are in position to fare the worst. The individuals who are at highest risk for serious illness associated with COVID-19 – including seniors, people with chronic illness, and people of color – are, in many cases, the same individuals who will be most adversely affected by the economic ramifications that have resulted from widespread closures.

In this brief, we explore the impact of COVID-19 on local food insecurity. Households that experience food insecurity lack access to enough food for an active, healthy life for all household members. Before the COVID-19 crisis began, more than 37 million people, including more than 11 million children, lived in a food-insecure household.[1] Pre-pandemic data reflect the lowest food insecurity rates seen since before the Great Recession,[2] but the current crisis is likely to reverse the improvements that have occurred over the past decade. As of this writing, unemployment has soared, and demand has spiked at food banks and pantries across the country.[3]

As we reveal in the following pages, millions of people are newly at risk of experiencing food insecurity, alongside those who were experiencing food insecurity before the COVID-19 crisis began.

Report Contents

METHODS

For ten years, Feeding America has produced local-level estimates of food insecurity through the *Map the Meal Gap* (MMG) study. The same model that is leveraged to estimate local food insecurity can also predict food insecurity using projected changes to annual unemployment and poverty rates. In fact, the MMG model was first developed to estimate the impact of the 2010 Deepwater Horizon oil spill on food insecurity. To predict changes in food insecurity as a result of COVID-19, we update the variables in the model based on the best available evidence around projected unemployment and poverty.[4]

Two earlier briefs examined potential increases in national food insecurity rates for the overall population and for children.[5] These included three scenarios, displayed in **Table 1**, that increase in severity: Scenarios A and B mirror changes that occurred in years one and two of the Great Recession and Scenario C reflects more severe circumstances. Under Scenario C, in which the annual poverty rate increases to 16.6% (4.8 percentage points higher than 2018) and the annual unemployment rate increases to 11.5% (7.6 percentage points higher than 2018), the number of people experiencing food insecurity in 2020 would increase by over 17 million, including nearly 7 million children. This implies that approximately 54 million people (1 in 6) would experience food insecurity in 2020, including 18 million children (1 in 4).

Table 1. Projections of food insecurity and underlying factors, by scenario, 2020

	Scenario A	Scenario B	Scenario C
Projected Annual Unemployment Rate (percentage point increase from 2018)	5.0% (+1.1)	8.4% (+4.5)	11.5% (+7.6)
Projected Annual Poverty Rate (percentage point increase from 2018)	13.3 % (+1.5)	14.4% (+2.6)	16.6% (+4.8)
Projected Annual Food Insecurity Rate (percentage point increase from 2018)	12.5% (+1.0)	14.5% (+3.0)	**16.7% (+5.2)**
Projected No. of Food-insecure People (increase in millions from 2018)	40.5 M (+3.3)	47.1 M (+9.9)	**54.3 M (+17.1)**

In this brief, we build upon this approach to explore how food insecurity in 2020 may change locally: for counties, congressional districts, and states.

While we have produced projected food insecurity estimates for each of the three scenarios at the local level, this brief focuses only on estimates generated for Scenario C. At this time, the assumption used for the annual projected unemployment rate under Scenario C is most consistent with published projections from other credible sources.[6] Additionally, the state, county and congressional district projections account for likely changes in the unemployment rate by industry and occupation as well as local variation in the number of workers by industry.[7]

FINDINGS OVERVIEW

Across geographies, the following trends generally hold:

- Places that had relatively higher rates of food insecurity before COVID-19 will continue to have relatively **higher rates of food insecurity**.
- Places that had relatively higher numbers of food-insecure people before COVID-19 (higher population areas) will continue to have relatively **higher numbers of food-insecure people**.
- Places that had relatively lower rates of food insecurity before COVID-19 will see the **largest relative increases** in food insecurity (though they will generally still have relatively lower rates).[8]

In the following sections we highlight notable findings by geography for the overall population and for children. A summary of the highest projected rates and changes are summarized below in **Table 2**.

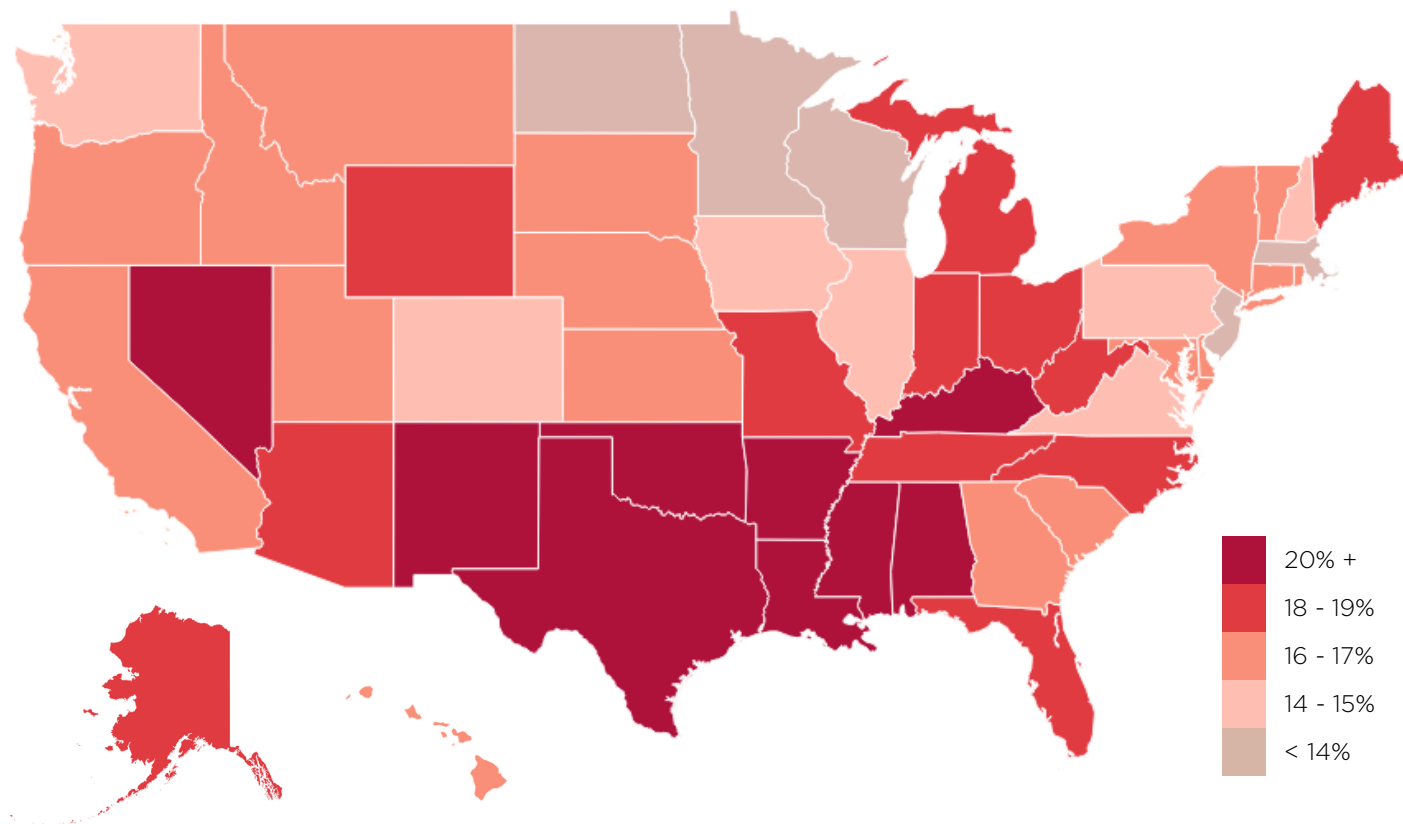**Table 2. Areas with the highest 2020 food insecurity projections due to COVID-19**

Highest Projected:	State		County		Congressional District	
	Overall	Children	Overall	Children	Overall	Children
Food insecurity rate	Mississippi (24.1%)	Louisiana (34.5%)	Jefferson County, MS (34.2%)	East Carroll Parish, LA (52.5%)	Michigan's 13th District (28.2%)	Louisiana's 2nd District (41.7%)
Increase to the number of food insecure people	California (2.1 million)	California (852,730)	Los Angeles County, CA (535,260)	Los Angeles County, CA (211,500)	Nevada's 3rd District (62,030)	Arizona's 7th District (26,200)
Total number of food insecure people	California (6.4 million)	Texas (2.3 million)	Los Angeles County, CA (1.7 million)	Los Angeles County, CA (553,750)	Louisiana's 2nd District (208,640)	Texas's 28th District (84,510)
Percent increase in the food insecurity rate	North Dakota (77%)	North Dakota (96%)	Burke County, ND (157%)	Falls Church city, VA (363%)	Virginia's 10th District (100%)	Virginia's 10th District (158%)

STATES

Overall population

At the state level, the projected rate of food insecurity among the overall population for 2020 is the lowest for North Dakota (12.0%) and highest for Mississippi (24.1%). North Dakota also had the lowest food insecurity rate in 2018 (6.8%), but it would see the largest increase in the food insecurity rate (77%) compared to all other states. Mississippi had the highest rate of food insecurity for 2018 (18.7%) as well, and its projected rate for 2020 would represent a 29% increase. In line with its status as the most populous state, California, would see the largest increase in the number of people experiencing food insecurity - 2.1 million as well as the largest total number of people experiencing food insecurity - 6.4 million. **Figure 1** shows projected food insecurity rates for the overall population by state.

Figure 1. Projected rates of food insecurity among the overall population in 2020 by state

20% +
18 - 19%
16 - 17%
14 - 15%
< 14%

STATES

Overall population, continued

The states with the highest projected food insecurity rates for 2020 are shown in **Table 3**. The list closely parallels rankings based on 2018 rates, with the exception of Nevada which moves from 20th to 8th on the basis of the state having the largest projected increase in unemployment because of the pandemic.

Table 3. States with the highest rates of projected food insecurity (FI) in 2020 versus 2018

2020 Projections				2018	
Ranking	State	FI Rate	Number of FI People	Ranking	FI Rate
1	Mississippi	24.1%	720,410	1	18.7%
2	Arkansas	22.5%	679,210	2	17.3%
3	Alabama	22.2%	1,084,390	3	17.0%
4	Louisiana	21.7%	1,011,130	4	16.1%
5	New Mexico	20.7%	434,570	5	15.1%
6	Oklahoma	20.6%	810,510	5	15.1%
7	Texas	20.2%	5,806,140	7	15.0%
8	Nevada	20.0%	608,270	20	12.8%
8	Kentucky	20.0%	893,950	8	14.8%

Note: Tennessee, West Virginia, and North Caroline are ranked 10th, with a projected food insecurity rate of 19.3%.

Table 4 lists the five states that would have the largest percent change in food insecurity rate between 2018 and 2020.

Table 4. States with the highest projected percent change in food insecurity (FI) rate between 2018 and 2020

2020 Projections			2018
Ranking	State	Percent Change in FI Rate, 2018 to 2020	FI Rate	FI Rate
1	North Dakota	77%	12.0%	6.8%
2	Minnesota	60%	13.1%	8.2%
3	Nevada	57%	20.0%	12.8%
4	Wisconsin	57%	13.9%	8.9%
5	Hawaii	57%	17.5%	11.2%

STATES

Children

Among children, the projected child food insecurity rates for 2020 range from 18.4% (Massachusetts) to 34.5% (Louisiana). While California would see the highest increase in the number of children living in food-insecure households (852,000), Texas would be home to the most food-insecure children – 2.3 million – though only slightly more than the total for California (2.2 million). **Figure 2** shows projected child food insecurity rates by state.

Figure 2. Projected rates of child food insecurity in 2020 by state

30% +
27 - 29%
24 - 26%
21 - 23%
< 21%
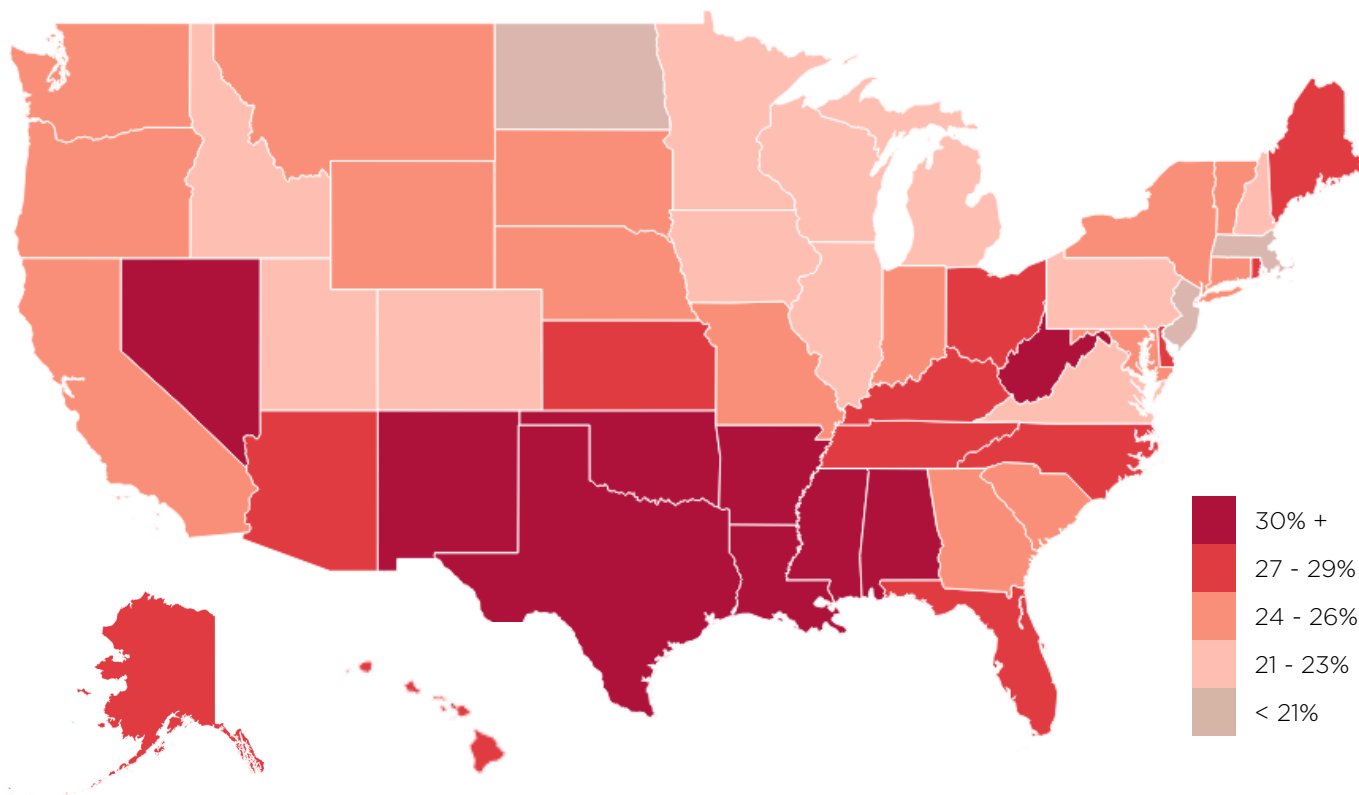
STATES

Children, continued

Table 5 displays states with the highest projected child food insecurity rates for 2020. Like with the overall population, the 2020 rankings compare closely to 2018. In this case, the exception is Hawaii, which moves from 19th to 10th and is second only to Nevada in its projected increase in unemployment because of the pandemic.

Table 5. States with the highest rates of projected child food insecurity (CFI) in 2020 versus 2018

2020 Projections				2018	
Ranking	State	CFI Rate	Number of FI children	Ranking	CFI Rate
1	Louisiana	34.5%	378,730	1	24.6%
2	New Mexico	33.9%	162,960	2	23.8%
3	Nevada	32.9%	226,520	9	19.5%
4	Mississippi	32.6%	229,890	5	23.0%
5	Alabama	32.4%	352,450	3	23.1%
6	Arkansas	32.3%	227,540	3	23.1%
7	Oklahoma	31.5%	301,660	6	21.8%
8	Texas	30.9%	2,290,070	7	21.6%
9	West Virginia	30.0%	108,870	8	20.3%
10	Hawaii	29.9%	90,680	19	18.4%

Table 6 lists the five states that would have the largest percent change in child food insecurity rate between 2018 and 2020.

Table 6. States with the highest projected percent change in child food insecurity (CFI) rate, 2018 to 2020

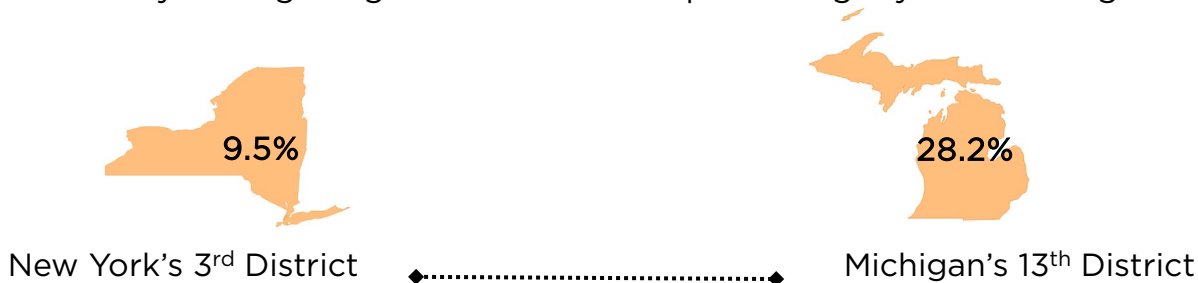| 2020 Projections				2018
Ranking	State	Percent Change in FI Rate, 2018 to 2020	FI Rate	FI Rate
1	North Dakota	96%	18.7%	9.6%
2	Massachusetts	81%	18.4%	10.1%
3	Colorado	78%	21.8%	12.2%
4	Idaho	75%	22.1%	12.6%
5	New Jersey	75%	19.7%	11.3%
5	Utah	75%	21.3%	12.1%

COUNTIES AND CONGRESSIONAL DISTRICTS

Overall population

Among all counties, the projected rate of food insecurity among the overall population for 2020 ranges from a low of 8.6% to a high of 34.2%.

8.6%

Loudoun County, Virginia

34.2%

Jefferson County, Mississippi
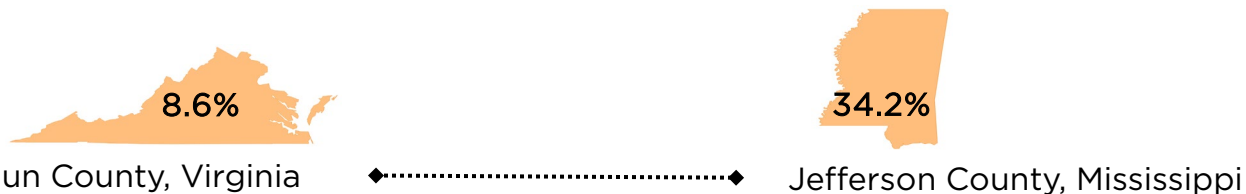
Food insecurity among congressional districts spans a slightly smaller range.

9.5%

New York's 3rd District

28.2%

Michigan's 13th District

Spotlight: Navajo County, Arizona

Among larger counties (total population greater than 100,000), Navajo County, Arizona, is projected to have the highest food insecurity rate at 26.2%, an increase of 6.0 percentage points over the rate in 2018.

Navajo County is home to parts of the Hopi Indian reservation, the Navajo Nation, and Fort Apache Indian Reservation, and 43% of the population is Native American. Tribal communities have higher rates of unemployment and food insecurity due to lack of access to jobs and food sources, in turn resulting from a history of persistent geographic displacement and now renounced federal policies. The disparities facing Native Americans also increase vulnerabilities to the Coronavirus, including higher rates of high-risk health conditions including respiratory disease; more limited access to clean water, which can make frequent hand washing challenging and results in poorer health overall; and barriers to practicing social distancing due to communal or crowded living situations.[9]

COUNTIES AND CONGRESSIONAL DISTRICTS

Overall population, continued

The counties that are projected to have the highest food insecurity rates and the highest number of food-insecure people in 2020 are listed in **Table 7**.

Table 7. Counties with the highest projected overall food insecurity (FI) in 2020

Highest FI Rates (Projected)			Highest Number of FI People (Projected)		
Ranking	County	FI Rate	Ranking	County (Major City)	Number of FI People
1	Jefferson County, MS	34.2%	1	Los Angeles County, CA (Los Angeles)	1,681,550
2	Issaquena County, MS	33.9%	2	Harris County, TX (Houston)	923,090
3	East Carroll Parish, LA	33.2%	3	Cook County, IL (Chicago)	785,890
4	Kusilvak Census Area, AK	33.1%	4	Maricopa County, AZ (Phoenix)	738,870
5	Holmes County, MS	32.7%	5	Dallas County, TX (Dallas)	525,730

The counties that are projected to have the largest percent change in food insecurity rate between 2018 and 2020 are listed in **Table 8**.

Table 8. Counties with the highest projected percent change in food insecurity (FI) rate, 2018 to 2020

2020 Projections				2018
Ranking	County	Percent Change in CFI Rate, 2018 to 2020	FI rate	FI Rate
1	Burke County, North Dakota	157%	9.2%	3.6%
2	Renville County, North Dakota	131%	9.9%	4.3%
3	Dickey County, North Dakota	127%	9.3%	4.1%
4	Loudoun County, Virginia	125%	8.6%	3.8%
5	Eagle County, Colorado	124%	13.8%	6.2%

COUNTIES AND CONGRESSIONAL DISTRICTS

Children

At the county level, the projected rate of child food insecurity for 2020 would be lowest in in Falls Church city, Virginia and highest in East Carroll Parish, Louisiana, where more than half of children are projected to be food insecure.

11.3%

Falls Church City, Virginia ◆┄┄┄┄┄┄┄┄┄◆

52.5%

East Carroll Parish, Louisiana
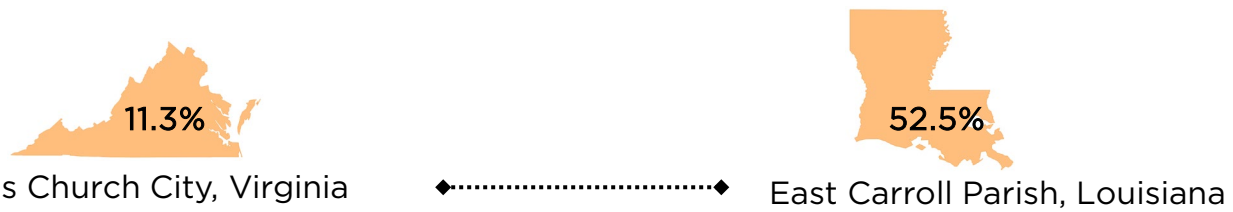
Like with food insecurity for the overall population, child food insecurity among congressional districts spans a slightly more narrow range.

13.4%

Massachusetts' 5th District ◆┄┄┄┄┄┄┄┄┄◆

41.7%

Louisiana's 2nd District

Spotlight: Hidalgo County, Texas

Among larger counties (child population greater than 100,000), Hidalgo County, TX, is projected to have the highest child food insecurity rate at 37.2%, an increase of nearly 10 percentage points over the rate in 2018.

Hidalgo County shares a border with Mexico and sits approximately 60 miles inland from the Gulf of Mexico. Ninety-two percent of the population of Hidalgo is Latino, a group that has been particularly affected by the economic fallout of the pandemic. The unemployment rate for April was 18.9% among Latinos, higher than all other racial/ethnic groups. Compared to other groups, a higher proportion of Latino workers are employed in the leisure and hospitality industry, and a lower proportion are employed in roles that can be performed at home.[10] Systemic inequities that face communities of color even when the economy is strong are particularly visible during times of crisis.

COUNTIES AND CONGRESSIONAL DISTRICTS

Children, continued

The counties that are projected to have the highest child food insecurity rates and the highest number of food-insecure children in 2020 are listed in **Table 9**.

Table 9. Counties with the highest projected child food insecurity (CFI) in 2020

Highest CFI Rates (Projected)			Highest Number of FI Children (Projected)		
Ranking	County	CFI Rate	Ranking	County (Major City)	Number of FI Children
1	East Carroll Parish, LA	52.5%	1	Los Angeles County, CA (Los Angeles)	553,750
2	Kusilvak Census Area, AK	52.3%	2	Harris County, TX (Houston)	377,620
3	Issaquena County, MS	49.9%	3	Maricopa County, AZ (Phoenix)	276,970
4	Sabine County, TX	49.1%	4	Cook County, IL (Chicago)	239,130
5	Zavala County, TX	48.9%	5	Dallas County, TX (Dallas)	208,210

The counties that are projected have the largest percent change in child food insecurity rate between 2018 and 2020 are listed in **Table 10**.

Table 10. Counties with the highest projected percentage change in child food insecurity (CFI) rate, 2018 to 2020

2020 Projections				2018
Ranking	County	Percent Change in CFI Rate, 2018 to 2020	FI rate	FI Rate
1	Falls Church city, Virginia	363%	11.3%	2.4%
2	Arlington County, Virginia	216%	12.9%	4.1%
3	Loudoun County, Virginia	210%	12.3%	3.9%
4	Eagle County, Colorado	201%	21.3%	7.1%
5	Fairfax city, Virginia	189%	13.8%	4.8%

COUNTIES AND CONGRESSIONAL DISTRICTS

Spotlight: Orleans Parish, Louisiana

Among larger counties (total population greater than 100,000), Orleans Parish, Louisiana, has one of the highest projected food insecurity rates - 23.9% for the overall population, which would mean that an additional 23,110 people would experience food insecurity when compared to 2018. The projected child food insecurity rate for Orleans Parish is 36.6%, meaning that one in three or an additional 8,430 children would experience food insecurity in 2020.

In Orleans Parish, which is home to the city of New Orleans, more than 60% of the population is African American.

Increasing evidence reveals that African Americans are experiencing worse health outcomes from COVID-19, likely due to a combination of factors that stem from longstanding economic and health inequities. People of color are more likely to have inconsistent access to healthcare and to face discrimination in the healthcare system and are also more likely to have pre-existing chronic health conditions that increase the severity of COVID-19's health impact.[11] African Americans in particular are more likely to be represented in occupations such as nursing, specifically as home health aides and licensed practical and vocational nurses (i.e. LPN and LVNs) as well as other jobs without the option of working from home - adding to the risk of contracting COVID-19.

Structural disparities have also led to substantially higher levels of food insecurity for African Americans: in 2018, 21.2% of black households were food insecure versus 11.1% overall.[12] Systematic barriers to those jobs less likely to be affected by the pandemic, lower than average wages, and greater employment instability all contribute to African American workers being more vulnerable to an economic downturn.[13] Both pre-pandemic and in 2020, counties with the highest rates of food insecurity are overrepresented by counties with a majority African American population.[14]

IMPLICATIONS

The COVID-19 pandemic has caused a public health and economic crisis, the effects of which are widespread. The repercussions will include added hardship for already vulnerable populations as well as a significant increase in the number of people experiencing food insecurity.

Federal nutrition programs, especially the Supplemental Nutrition Assistance Program (SNAP), continue to be an important first line of defense against food insecurity for millions of people and have become particularly critical during this period of acute need. Promising steps have been taken to increase benefit levels, but continued and increased investment in these programs is needed to help individuals experiencing food insecurity weather the crisis.

In addition to federal support, many people are turning to charitable food assistance to make ends meet. Prior to the COVID-19 pandemic, the Feeding America network of food banks served over 40 million people each year. Since the crisis began, food banks have faced a "perfect storm" that includes surges in demand, declines in food donations, fewer available volunteers, and other disruptions to the charitable food assistance system's operating model.

The COVID-19 crisis has dealt a swift blow to the economic health of individuals and communities across the country, and the effects have the potential to be long-term. It took ten years for food insecurity rates to return to pre-Great Recession levels. For now, with no immediate end to the crisis in sight, demand for charitable food assistance is expected to remain at elevated levels for the foreseeable future.

Additional Information:
- How Feeding America is Responding to COVID-19
- Feeding America's Hub for Advocacy Resources during COVID-19
- Feeding America Research about Food Insecurity During COVID-19

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NOTES AND REFERENCES

[1] Coleman-Jensen, A., Rabbitt, M., Gregory, C., & Singh, A. (2019). *Household Food Security in the United States in 2018*, United States Department of Agriculture, Economic Research Service, Report Number 270.

[2] Coleman-Jensen, A., Rabbitt, M., Gregory, C., & Singh, A. (2019). *Household Food Security in the United States in 2018*, United States Department of Agriculture, Economic Research Service, Report Number 270.

[3] According to the Department of Labor's Weekly Unemployment Insurance Claims reports, 36.5 million people filed new claims between the weeks ending March 21st and May 9th. The vast majority of Feeding America member food banks have report increased client demand since the pandemic began.

[4] Although MMG accounts for several economic and demographic variables, our food insecurity projections are based on projected changes to unemployment and poverty in 2020. This is because these two variables have a statistically significant effect on food insecurity estimates and are likely to be most directly affected by COVID-19. Other variables in the model are held constant using 2018 data.

[5] The Impact of the Coronavirus on Food Insecurity and The Impact of the Coronavirus on Child Food Insecurity can be found at Feedingamerica.org.

[6] The annual national unemployment rate used here for Scenario C (11.5%) is within range of estimates (when annualized) from a monthly Wall Street Journal survey of more than 60 economists as of May (11.6%), the Congressional Budget Office (11.4%), and Goldman Sachs Global Investment Research (10.3%).

[7] The projected adjusted change in unemployment was calculated using estimates of industry job loss due to COVID-19 based on an analysis of projected changes in the unemployment rate by sector and occupation using estimates from Goldman Sachs Global Investment Research as well as actual percentages of workers by industry from the American Community Survey (ACS). The adjusted unemployment changes are not provided in this brief but are available from Feeding America upon request.

[8] For example, North Dakota had the lowest state rate of food insecurity in 2018 (6.8%). North Dakota's projected food insecurity rate because of COVID-19 is 12.0%. That represents a 77% increase, and the highest increase of any state, but North Dakota's new food insecurity rate would still be the lowest among all states.

[9] Center for American Indian Health (2020). *Programs: COVID-19 response.* http://caih.jhu.edu/programs/category/covid-19-response

[10] Spievack, N., González, J., & Brown, S. (2020, May 8). *Latinx unemployment is highest of all racial and ethnic groups for the first time on record.* Urban Wire (Blog of the Urban Institute). https://www.urban.org/urban-wire/latinx-unemployment-highest-all-racial-and-ethnic-groups-first-time-record

[11] Johns Hopkins Medicine (2020). *Coronavirus in African Americans and other people of color.* https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/covid19-racial-disparities

[12] Coleman-Jensen, A., Rabbitt, M., Gregory, C., & Singh, A. (2019). *Household Food Security in the United States in 2018*, United States Department of Agriculture, Economic Research Service, Report Number 270.

[13] Weller, C. E. (2019). *African Americans face systematic obstacles to getting good jobs. Center* for American Progress. https://www.americanprogress.org/issues/economy/reports/2019/12/05/478150/african-americans-face-systematic-obstacles-getting-good-jobs/

[14] Gundersen, C., Dewey, A., Engelhard, E., Strayer, M., & Lapinski, L. (2020). *Map the Meal Gap 2020: A Report on County and Congressional District Food Insecurity and County Food Cost in the United States in 2018.* Produced by Feeding America.