

# The Impact of the Coronavirus on Food Insecurity in 2020



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

## Introduction

In 2020, the novel coronavirus (COVID-19) pandemic threatens the lives and livelihoods of people throughout the world. 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 are being most adversely affected by the economic recession that began in the spring of 2020.

In this brief, we provide updated analysis of the potential impact of COVID-19 on food insecurity in 2020.<sup>1</sup> 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 35 million people, including nearly 11 million children, lived in a food-insecure household.<sup>2</sup> Pre-pandemic data reflect the lowest food insecurity rates had been in more than 20 years,<sup>3</sup> but the current crisis has reversed improvements made over the past decade since the Great Recession.

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



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# 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 variables in the model. In fact, the MMG model was first developed to estimate the impact of the 2010 Deepwater Horizon oil spill on food insecurity in Louisiana. 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 effect on food insecurity estimates and are likely to be most directly affected by COVID-19.<sup>4</sup>

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 (approximately 17 million children total) will experience food insecurity in 2020.<sup>5</sup>

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

	Overall Population	Child Population
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)
<b>Projected Annual Food Insecurity Rate</b> (percentage point increase from 2018)	<b>15.6%</b> (+4.1)	<b>23.1%</b> (+4.9)
<b>Projected No. of Food-insecure People</b> (increase in millions from 2018)	<b>50.4 M</b> (+13.2)	<b>17.0 M</b> (+5.8)

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 unemployment at the local level was adjusted using actual unemployment rates since the pandemic began, while the adjustment for poverty used at the national level was used across all geographies.<sup>6</sup>



# 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 **larger relative increases** in food insecurity (though they will generally still have relatively lower rates).

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 (22.6%)	Nevada/Louisiana (32.3%)	Jefferson County, MS (36.8%)	Kusilvak Census Area, Alaska (56.9%)	Michigan's 13 <sup>th</sup> District (29.3%)	New York's 15 <sup>th</sup> District (43.9%)
Increase to the number of people in food insecure households	California (1.9 million)	California (864,100)	Los Angeles County, CA (614,760)	Los Angeles County, CA (271,290)	Nevada's 3 <sup>rd</sup> District (61,720)	Nevada's 4 <sup>th</sup> District (26,890)
Total number of people in food insecure households	California (6.2 million)	California (2.2 million)	Los Angeles County, CA (1.8 million)	Los Angeles County, CA (613,540)	New York's 15 <sup>th</sup> District (215,690)	New York's 15 <sup>th</sup> District (88,270)
Percent increase in the food insecurity rate	Massachusetts (59%)	Massachusetts (102%)	Kendall County, IL (93%)	Norfolk County, MA (163%)	New York's 3 <sup>rd</sup> District (96%)	Michigan's 11 <sup>th</sup> District (183%)

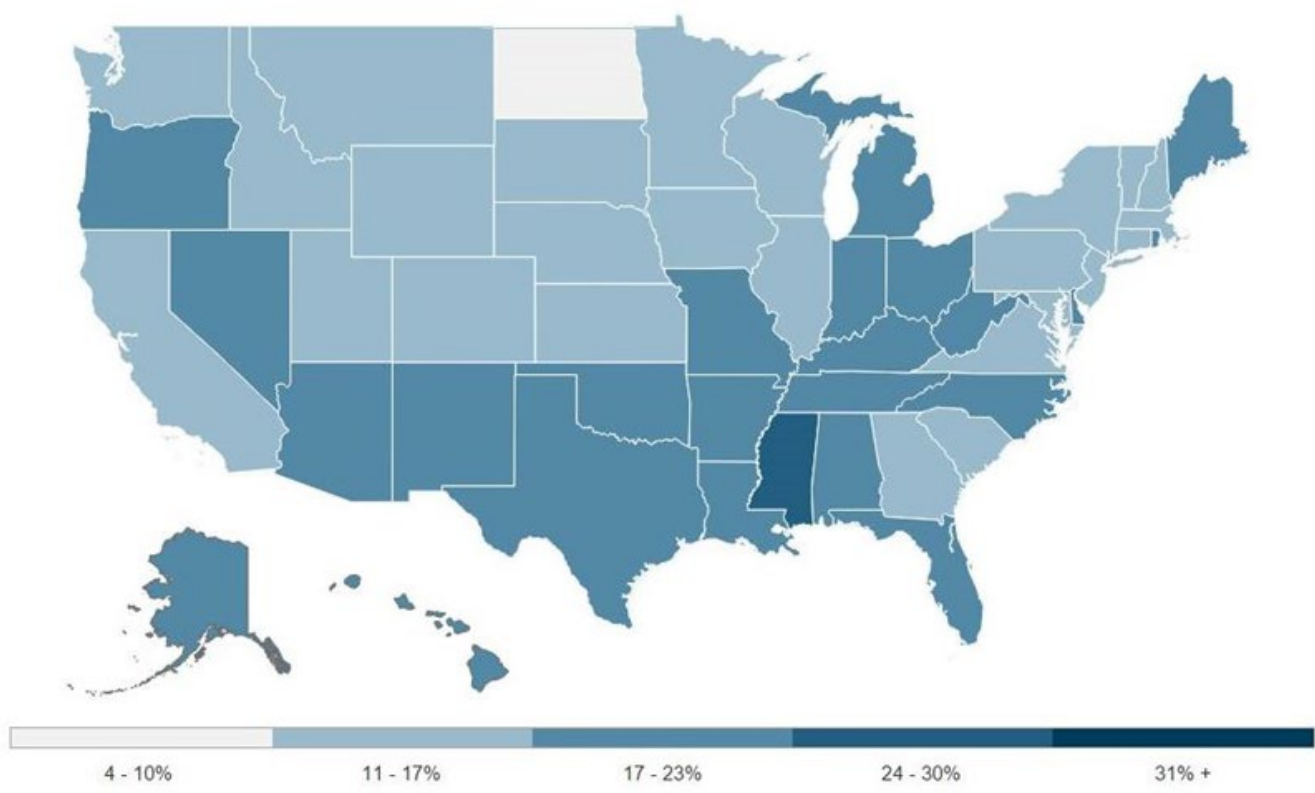
# STATES



## Overall population

At the state level, the projected rate of food insecurity for 2020 is the lowest for North Dakota (9.7%) and highest for Mississippi (22.6%). North Dakota also had the lowest food insecurity rate in 2018 (6.8%), while Mississippi had the highest rate (18.7%). Massachusetts would see the largest relative increase in the food insecurity rate (59%) compared to all other states. In line with its status as the most populous state, California would see the largest absolute increase in the number of people living in food-insecure households (+1.9 million) as well as the largest total number of people living in food-insecure households (6.2 million). **Figure 1** shows projected food insecurity rates for the overall population by state for 2020.

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





## 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 states like Nevada and Michigan which appear higher on this list on the basis of having relatively larger projected increases in unemployment in 2020.

**Table 3. States with the 10 highest rates of projected food insecurity (FI) in 2020 versus 2018**

2020 Projections				2018	
Ranking	State	FI Rate	Number of People in FI Households	Ranking	FI Rate
1	Mississippi	22.6%	675,300	1	18.7%
2	Arkansas	20.5%	617,010	2	17.3%
3	Alabama	20.3%	993,240	3	17.0%
4	Louisiana	20.1%	938,280	4	16.1%
5	Nevada	19.2%	583,340	20	12.8%
6	Michigan	19.1%	1,906,860	13	13.6%
7	New Mexico	18.7%	392,420	5	15.1%
8	Oklahoma	18.6%	731,970	5	15.1%
9	Texas	18.6%	5,346,640	7	15.0%
10	Kentucky	18.1%	809,820	8	14.8%
10	Ohio	18.1%	2,116,540	11	13.9%

**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**

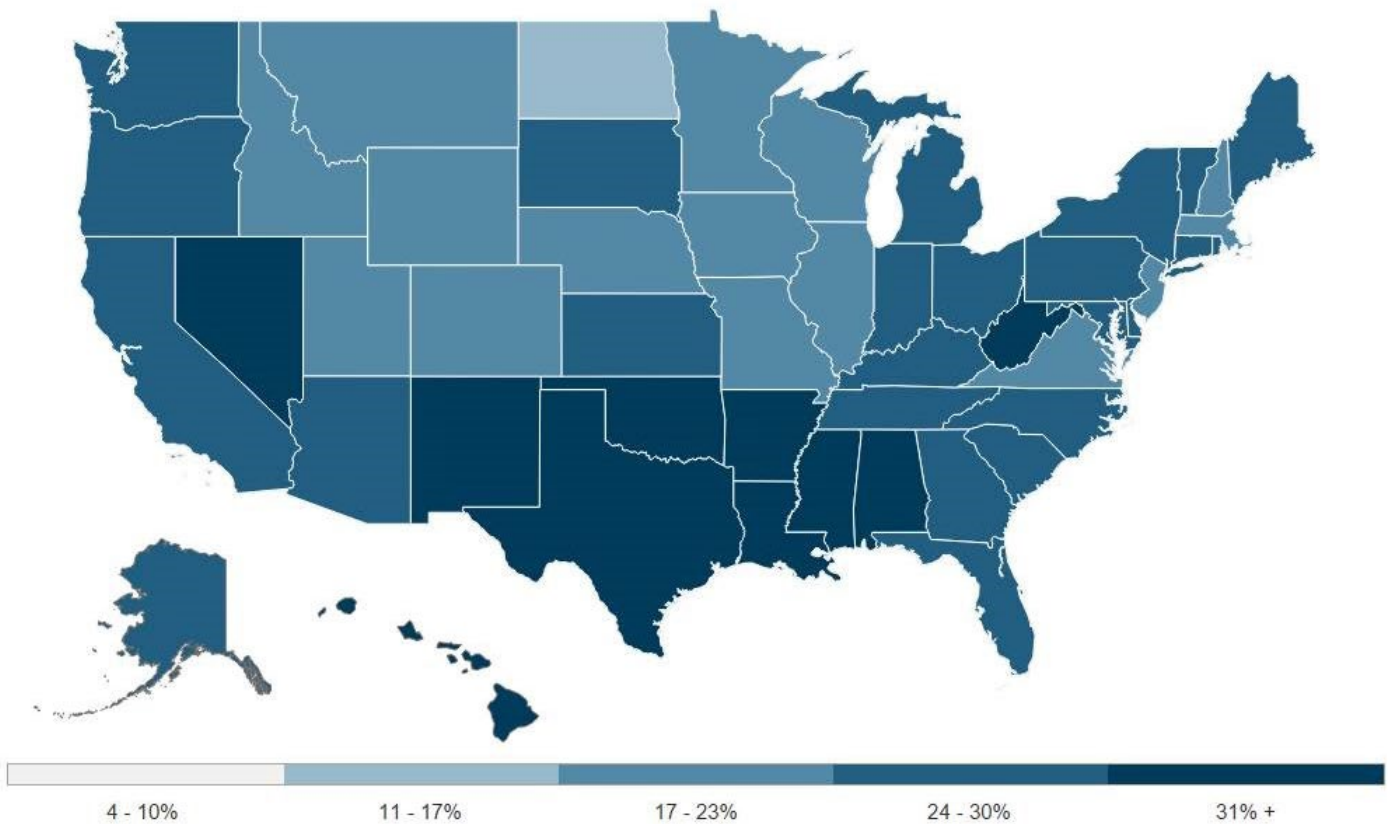
2020 Projections				2018
Ranking	State	Percent Change in FI Rate, 2018 to 2020	FI Rate	FI Rate
1	Massachusetts	59%	14.2%	8.9%
2	New Jersey	56%	13.6%	8.7%
3	Nevada	50%	19.2%	12.8%
4	Hawaii	50%	16.8%	11.2%
5	Illinois	46%	14.7%	10.1%



## Children

Among children, the projected food insecurity rates for 2020 range from 15.0% (North Dakota) to 32.3% (Louisiana and Nevada). California would see both the largest absolute increase in the number of children living in food-insecure households (+864,100) as well as the largest total number of children living in food-insecure households (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**





# 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 19<sup>th</sup> to 6<sup>th</sup> 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	32.3%	354,580	1	24.6%
1	Nevada	32.3%	222,350	9	19.5%
3	New Mexico	30.8%	147,940	2	23.8%
4	Mississippi	30.5%	215,290	5	23.0%
5	Alabama	29.6%	321,980	3	23.1%
6	Hawaii	29.4%	89,050	19	18.4%
7	Arkansas	29.1%	204,840	3	23.1%
8	Texas	28.7%	2,124,960	7	21.6%
9	Oklahoma	28.5%	272,530	6	21.8%
10	West Virginia	28.3%	102,680	8	20.3%

**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 CFI Rate, 2018 to 2020	FI Rate	FI Rate
1	Massachusetts	102%	20.5%	10.1%
2	New Jersey	85%	20.9%	11.3%
3	Michigan	73%	25.5%	14.7%
4	Illinois	72%	21.9%	12.7%
5	Nevada	65%	32.3%	19.5%

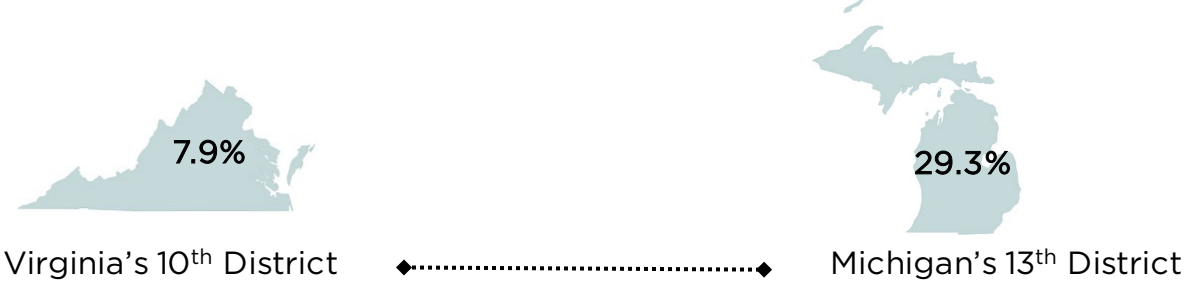
# COUNTIES AND CONGRESSIONAL DISTRICTS

## Overall population

Among all counties, the projected rate of food insecurity among the overall population for 2020 ranges from a low of 6.3% to a high of 36.8%.



Food insecurity among congressional districts spans a slightly smaller range.



## Spotlight: Food Insecurity in Latino Communities

Before the pandemic, Latino individuals were almost twice as likely to live in food insecure households as non-Hispanic white individuals (15.8% compared to 8.1%).<sup>7, 8</sup>



Systemic inequities that face communities of color even when the economy is strong are particularly visible during times of crisis. 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.<sup>9</sup> As a result, the unemployment rate among Latinos spiked to 18.9% in April 2020, higher than any other racial/ethnic group.<sup>10</sup> While some of that job loss has since been recovered, many communities are continuing to face challenges as continued spread of COVID-19 keeps segments of the economy from operating at full capacity.



# COUNTIES AND CONGRESSIONAL DISTRICTS

## Overall population, continued

The counties that are projected to have the highest food insecurity rates and the highest number of people living in food-insecure households 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 People in FI Households (Projected)		
Ranking	County	FI Rate	Ranking	County (Major City)	Number of FI People
1	Jefferson County, MS	36.8%	1	Los Angeles County, CA (Los Angeles)	1,761,050
2	Kusilvak Census Area, AK	34.8%	2	Harris County, TX (Houston)	869,010
3	Holmes County, MS	34.5%	3	Cook County, IL (Chicago)	798,130
4	Claiborne County, MS	32.9%	4	Maricopa County, AZ (Phoenix)	664,840
5	East Carroll Parish, LA	32.5%	5	Kings County, NY (Brooklyn)	520,120

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

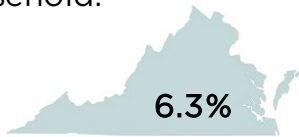
**Table 8. Counties with the highest projected percent change in food insecurity (FI) rate, 2018 to 2020**

2020 Projections				2018
Ranking	County	Percent Change in FI Rate, 2018 to 2020	FI rate	FI Rate
1	Kendall County, IL	93%	9.2%	4.8%
2	Williams County, ND	92%	9.3%	4.9%
3	Mono County, CA	87%	15.9%	8.5%
4	Gilpin County, CO	87%	12.7%	6.8%
5	Nassau County, NY	83%	9.8%	5.3%

# 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 Kusilvak Census Area, Alaska, where more than half of children are projected to be living in a food insecure household.

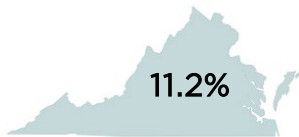


Falls Church City, Virginia

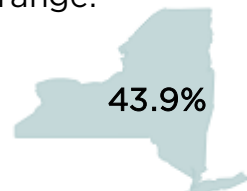


Kusilvak Census Area, Alaska

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



Virginia's 10<sup>th</sup> District



New York's 15<sup>th</sup> District

## Spotlight: Food Insecurity in Native American Communities

Nationwide, only 28 counties have a population that is majority American Indian or Alaska Native (referred to here as *Native American*), but 18 of those counties are projected to be *high food insecurity counties* in 2020 - i.e. counties with the top 10% of food insecurity rates. Kusilvak Census Area, Alaska, is projected to have the highest child food insecurity rate (56.9%) and the second highest overall food insecurity rate (34.8%) in 2020. Ninety-one percent of the population of the region identifies as Native American.



This occurrence is driven by above-average unemployment and poverty among Native Americans, resulting from a history of persistent geographic displacement and damaging 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.<sup>11</sup>



# 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 Children in FI Households (Projected)		
Ranking	County	CFI Rate	Ranking	County (Major City)	Number of FI Children
1	Kusilvak Census Area, AK	56.9%	1	Los Angeles County, CA (Los Angeles)	613,540
2	Jefferson County, MS	52.6%	2	Harris County, TX (Houston)	360,630
3	East Carroll Parish, LA	52.2%	3	Cook County, IL (Chicago)	256,800
4	Zavala County, TX	50.7%	4	Maricopa County, AZ (Phoenix)	250,590
5	Greene County, AL	48.9%	5	Dallas County, TX (Dallas)	193,590

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	Norfolk County, MA	163%	16.1%	6.1%
2	Falls Church city, Virginia	160%	6.3%	2.4%
3	Middlesex County, MA	143%	14.9%	6.1%
4	Loudoun County, Virginia	142%	9.6%	3.9%
5	Eagle County, Colorado	141%	17.0%	7.1%

# COUNTIES AND CONGRESSIONAL DISTRICTS

## Spotlight: Food Insecurity in Black Communities

Food insecurity has always been disproportionately high in communities with large Black populations. Before the pandemic, Black individuals were 2.4 times as likely to live in food-insecure households as White individuals (19.2% compared to 8.1%).<sup>12</sup> While only three percent of all counties have a population that is majority Black (>50%), according to Feeding America’s revised food insecurity projections, 18 of the 25 counties projected to have the highest 2020 food insecurity rates are majority Black.

The story underlying this and many other disparities facing Black Americans is one of systemic racism. Owing to a long history of discriminatory policies and practices, Black people are more likely to live in poverty, more likely to face unemployment, and have less wealth and fewer assets than their White counterparts - all of which are driving forces that can lead to food insecurity. In the context of the current economic crisis, Black people are more likely to hold jobs that have been affected by the pandemic and thus are more vulnerable to the economic downturn.<sup>13</sup>

Additionally, 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.<sup>14</sup> 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.







The COVID-19 pandemic has caused a public health and economic crisis, the effects of which are widespread. The repercussions include added hardship for populations already facing challenges making ends meet, as well as a significant increase in the number of people experiencing food insecurity in 2020.

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 and access to benefits, but continued and increased investment in these programs is needed to help people 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 due to supply chain challenges, 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

<sup>1</sup> Feeding America first released projections of food insecurity rates in 2020 between March and May of 2020.

<sup>2</sup> Coleman-Jensen, Alisha, Matthew P. Rabbitt, Christian A. Gregory, and Anita Singh. 2020. *Household Food Security in the United States in 2019*, ERR-275, U.S. Department of Agriculture, Economic Research Service.

<sup>3</sup> Ibid.

<sup>4</sup> 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.

<sup>5</sup> The unemployment 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](#).

The poverty assumption utilized 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 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.

<sup>6</sup> The projected change in unemployment at the local level was adjusted using averaged actual unemployment rates between April 2020 and July 2020.

<sup>7</sup> Coleman-Jensen, Alisha, Matthew P. Rabbitt, Christian A. Gregory, and Anita Singh. Statistical Supplement to Household Food Security in the United States in 2019, AP-084, U.S. Department of Agriculture, Economic Research Service, September 2020.

<sup>8</sup> *Latino* and *Hispanic* have been used interchangeably.

<sup>9</sup> 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>

<sup>10</sup> Bureau of Labor Statistics (May 8, 2020). *The Employment Situation - April 2020*. [https://www.bls.gov/news.release/archives/empsit\\_05082020.pdf](https://www.bls.gov/news.release/archives/empsit_05082020.pdf)

<sup>11</sup> Center for American Indian Health (2020). *Programs: COVID-19 response*. <http://caih.jhu.edu/programs/category/covid-19-response>

<sup>12</sup> Coleman-Jensen, Alisha, Matthew P. Rabbitt, Christian A. Gregory, and Anita Singh. Statistical Supplement to Household Food Security in the United States in 2019, AP-084, U.S. Department of Agriculture, Economic Research Service, September 2020.

<sup>13</sup> Weller, C. E. (2019). *African Americans face systematic obstacles to getting good jobs*. Center for American Progress.

<sup>14</sup> 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>