

## Rising food insecurity and the impacts of the COVID-19 pandemic on emergency food assistance in Michigan

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### Abstract

This study of eight types of emergency food assistance organizations in Michigan, USA, is the first statewide study of the COVID-19 pandemic's

impacts on the operations of these organizations. It focuses on the following question: How did the pandemic affect the operations of emergency food assistance organizations? The paper examines how the race/ethnicity of the organization's director was related to program activities, the pandemic's impacts, and responses to the pandemic. It offers new insights into emergency food assistance organizations operated by Black and multicultural directors. The article examines how the sex of the emergency food assistance directors is related to programming, the pandemic's impacts, and responses to it. Most studies of emergency food assistance focus on urban areas. In addition to studying organizations in the state's metropolitan areas, we also study organizations in small towns and rural

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areas. The paper also analyzes two additional questions: How did the government support the state's emergency food assistance organizations during the pandemic? And how do organization leaders perceive government responses to the pandemic?

The sample consists of 181 emergency food assistance organizations. Whites directed most organizations; 82.9% had a primary director who was White, 11% had Black directors, and 6.1% had directors from other racial/ethnic groups. The organizations studied are long-lived; they have been operating for a mean of 20.8 years. The organizations serve meals to an average of 79 people per day. They also provide food items to roughly 185 people daily.

The pandemic had profound effects on the operations of emergency food assistance organizations. About 28% of the organizations indicated that they cut back on their programming, and just over a fifth of the organizations limited their operating hours. Moreover, 23% of the organizations reported that the number of restaurants donating food declined, while 18% percent reported a decline in supermarket food donations. However, 58.9% of the organizations increased the amount of food they distributed, and 61.3% reported an increase in the number of people seeking food from the organization. During the pandemic, White-run organizations obtained government funding from 19 sources, multicultural-led organizations got government support from 10 sources, and Black-run organizations received support from three sources. Forty percent of directors in all-Black-run organizations, 23.5% of those in multiracial-led organizations, and 22.6% of the directors in all-White-led organizations criticized government responses to the pandemic.

### **Keywords**

White, Black, People of Color, Urban, Rural, Charity, Food Bank, Food Pantry, Soup Kitchen, Shelter, COVID-19, Pandemic, Staff, Professional Development, Career, Disaster Planning, Emergency Planning, Food Policy

### **Introduction**

Food insecurity is a vexing problem in America, and the Coronavirus (COVID-19) pandemic

exposed how deeply entrenched it is. The pandemic also laid bare the frailties of the current food system and our inability to deal effectively with rapidly increased demands for food assistance. Despite the emotional anxiety, stigma, blame, shame, indignity, and structural barriers sometimes associated with asking for and receiving free food (Booth et al., 2018; Bruckner, Castro-Campos et al., 2021; Bruckner, Westbrook et al., 2021; de Souza, 2019; Goodman, 2016), more people than usual sought help from emergency food assistance organizations in 2020. Therefore, it is incumbent on us to thoroughly understand how food assistance organizations are affected by national emergencies.

This paper is unique in four ways and provides us with new insights into emergency food assistance organizations. It is an early attempt to examine the pandemic's impacts on emergency food assistance. The article is important because it is the first to conduct a statewide study of such organizations as it assesses Michigan's responses to the pandemic. It is appropriate to study emergency food assistance in Michigan, as data from the U.S. Department of Agriculture (USDA) show that the Midwest has the highest rate of food pantry usage in the country. The data indicate that 5.6% of households in the region rely on food pantries to obtain food (Coleman-Jensen et al., 2018). Moreover, Michigan has high poverty rates, higher than average food insecurity, and a robust emergency food assistance system.

The paper examines the following question: How did the pandemic affect the operations of emergency food assistance organizations? The article is also unique because few studies have examined the racial/ethnic characteristics of the leaders of emergency food assistance organizations or how racial equity influences the work of food assistance organizations. However, leadership is vital in understanding an organization's philosophy about and approach to food assistance work, programming, and outcomes. Hence, this paper examines the demographic characteristics of the emergency food assistance organizations' directors because it is an overlooked part of the research in this genre. More specifically, the paper examines how the race/ethnicity of each organization's director was

related to program activities, the pandemic's impacts, and responses to the pandemic. It offers new insights into emergency food assistance organizations operated by Black and multicultural directors. The article also examines how the sex of the emergency food assistance directors is related to programming, the pandemic's impacts, and responses to it.

Even though 14.4% of rural residents in the U.S. were food-insecure in 2020 (Feeding America, 2021a), most studies of emergency food assistance focus on urban areas. Researchers such as Burke, Durr, and Reamer (2018) point to the importance of examining food insecurity in rural areas, small towns, and urban locales. Sharkey (2009) explores the differences between rural and urban food environments. McEntee and Naumova (2012) also examine rural emergency food assistance organizations. Consequently, besides studying organizations in the state's metropolitan areas, we also examine organizations in small towns and rural areas. The additional information about small-town and rural emergency food assistance will deepen our understanding of the state's food assistance system.

The paper also analyzes two additional questions: How did federal, state, and local governments support the state's emergency food assistance organizations during the pandemic? And how do organization leaders perceive government responses to the pandemic?

### **The Pandemic, Job Loss, Poverty, and Food Insecurity**

Several factors converged to give rise to enormous requests for food assistance in 2020. Foremost among them was the COVID-19 pandemic that spread from coast to coast. The pandemic precipitated a health crisis, excessive job loss, reduced income, school closures, increased poverty, and

increased food insecurity.

The overall U.S. food-insecurity rate had fallen steadily for more than two decades, but the pandemic halted that decline (Feeding America, 2021a). As a result, emergency food assistance programs were called on to play vital roles in supporting and maintaining individual and community food security.

The pandemic showed that despite the prevalence of government food assistance programs, nongovernmental organizations still play pivotal roles in providing food for those in need. In the U.S., the USDA operates 15 food and nutrition assistance programs costing US\$92.4 billion annually.<sup>1</sup> Each year about one in four people participate in at least one government food program (Tiehen, 2020). Nevertheless, despite government programs, one charitable food assistance network, Feeding America, distributed six billion meals across the country in 2020 through its 200 food banks and 60,000 food pantries and meals programs (Feeding America, n.d.-a; n.d.-d; 2021a). According to Feeding America (2021b), 60 million people turned to food banks and other food assistance programs to obtain food in 2020.

The pandemic resulted in millions of people losing their jobs. As a result, unemployment jumped from 3.5% in February 2020 to 14.7% in April. When unemployment peaked in April, 18.1 million people were out of work, and Blacks and Latinx had the highest unemployment rates (U.S. Bureau of Labor Statistics, 2020).<sup>2</sup> Rising job loss and unemployment were accompanied by declining household income. According to the Census, in 2020, the median household income was 2.9% lower than in 2019 (U.S. Census Bureau, 2021). The Midwest was especially hard-hit; the real median household income dropped by 3.2% in the

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<sup>1</sup> The USDA's Food and Nutrition Service (FNS) administers nutrition programs such as the Supplemental Nutrition Assistance Program (SNAP), SNAP-ed Connection, SNAP to Skills, Women, Infant and Children (WIC), Farmers Market Nutrition Program, Seniors Farmers Market Nutrition Program, Summer Food Service Program, School Breakfast Program, National School Lunch Program, Special Milk Program, Team Nutrition, Fresh Fruit and Vegetable Program, Community Food Systems, and the Child and Adult Care Food Program. The FNS also administers the following food distribution programs: Food Distribution Program on Indian Reservations, Commodity Supplemental Food Program, The Emergency Food Assistance Program, and USDA in Schools (USDA Food and Nutrition Service [USDA FNS], n.d.).

<sup>2</sup> The unemployment rates varied for different racial and ethnic groups. While 5.9% of Whites were unemployed in October 2020, 6.7% of Asians, 8.4% of Latinx, and 10.3% of Blacks were unemployed in that month (U.S. Bureau of Labor Statistics, 2020).

region (Shrider et al., 2021).<sup>3</sup>

There is a connection between unemployment, household income, and poverty that is related to reliance on food assistance programs. High unemployment rates and declining household incomes often signal increased poverty. In 2019, the U.S. Census Bureau reported that the poverty rate was 10.5% (Semega et al., 2021). That rate rose by a percentage point to reach 11.4% in 2020 (Shrider et al., 2021). The spike in the 2020 poverty rate came after five consecutive years of annual declines (Shrider et al., 2021).<sup>4</sup>

Poverty is a significant contributor to food insecurity. Like unemployment, the poverty rate varied by racial/ethnic group; Whites and Asians had lower poverty rates than Latinx and Blacks (Shrider et al., 2021).<sup>5</sup> In 2018, about 38.1 million people (11.8% of the U.S. population) had incomes below the poverty line (Tiehen, 2020). Before the pandemic, approximately 11.1% (or 14.3 million households) experienced food insecurity at some point during 2018 (Tiehen, 2020). Things changed dramatically in 2020. Feeding America (2021a) estimated that 45 million people (13.9%) experienced food insecurity in 2020. However, the USDA has lower estimates. It claims that 38.3 million people dwelled in food-insecure households in 2020. That means that 10.5% of the population experienced food insecurity during the year (Coleman-Jensen et al., 2021).

Michigan was ravaged by the pandemic, which impacted poverty and food insecurity. In 2020, the Urban Institute projected that Michigan's poverty rate was 10.5% (Giannarelli et al., 2020). However, the University of Michigan's Poverty Solutions initiative released more dire statistics estimating that 14.1% of the state's population lived below the poverty level in 2020 (Slagter & Guest, 2020).

The USDA conducted interviews with 2,364 Michigan households and found that 11.8% were food insecure at some point during 2020 (Cole-

man-Jensen et al., 2021). However, other sources reported higher food insecurity rates for that year. For instance, the United Health Foundation (2020) indicated that the state's household food insecurity rate was 12.9%.<sup>6</sup>

### **The Pandemic: New Food Seekers and Greater Overall Demand**

The pandemic wreaked havoc on conventional food systems while increasing the demand for emergency food assistance. The amplified need forced some cities to create pop-up and drive-through food distribution sites (Elattar, 2020). Moreover, some of those seeking food were first-time emergency food seekers (Ollove & Hamdi, 2021). For instance, two surveys of emergency food seekers in Connecticut found that 68% and 71% of the people picking up food at a drive-through food bank in East Hartford said they had never visited a food pantry or received free food before COVID-19. Other research supports the assertion that many people who typically did not use emergency food programs did so in 2020. A Feeding America survey found that 49% of respondents said they had not sought or received free food before COVID-19 (Morello, 2020). The pandemic also forced people to use emergency food assistance programs regularly. The East Hartford study found that roughly two-thirds of the respondents said they came to the drive-through food bank at least once per week (Cavaliere et al., 2021).

As the pandemic worsened, it became increasingly difficult to obtain food because emergency food assistance is not a regular part of government emergency or disaster relief efforts. Hence, in places like Baltimore City, emergency responders had to scramble to secure and distribute food to those in need. Other factors such as public health restrictions and new policy guidelines curtailed food access for many. For instance, social distanc-

<sup>3</sup> The median household income was US\$67,521 in 2020. Compared to the Midwest, median household incomes declined by 2.3% in the South and West (Shrider et al., 2021).

<sup>4</sup> In all, 37.2 million people lived in poverty in 2020—3.3 million more than in 2019 (Shrider et al., 2021).

<sup>5</sup> In 2020, 8.1% of Asians, 8.2% of non-Latinx Whites, 17% of Latinx, and 19.5% of Blacks lived in poverty (Shrider et al., 2021).

<sup>6</sup> According to Feeding America (n.d.-b; n.d.-c), as of 2017 one in seven (or 1,359,650) Michiganders is food insecure and battles hunger.

ing and food-handling procedures affected places like soup kitchens where food is consumed communally and in close quarters (Avrutina et al., 2020).

Emergency food assistance programs rely heavily on volunteers (Cavaliere et al., 2021; Eisinger, 2002; Gany et al., 2013; Poppendieck, 1994; Weinfield et al., 2014), a fact that placed a strain on the programs during the COVID-19 pandemic. Volunteers were scarce at the same time that the number of people needing food assistance ballooned. Some emergency food assistance organizations closed because they lacked the infrastructure to deal with pandemic demands. For instance, Foodshare in Connecticut reported that 20% of its partner programs closed because their volunteers were affected by COVID-19 (Cavaliere et al., 2021). Hence, in 2020, it was common to see lines stretching for blocks around food pantries, food banks, and soup kitchens in low-income areas.

In response to the pandemic, government entities stepped in with programs to help get food to those in need. For instance, the USDA approved a US\$4.5 billion package to connect producers with consumers through the Farmers to Families Food Box Program (FFFBP) during the pandemic. The USDA created the program to help producers sell foods previously earmarked for restaurants (Galloway, 2020; Taylor et al., 2022; USDA Agricultural Marketing Service [USDA AMS], 2021). The USDA contracted with distributors and wholesalers to provide prepacked boxes of fresh produce, dairy, and meat to food banks, faith-based organizations, and local nonprofits to distribute to families needing food (Sielski, 2020). According to the USDA AMS (2021), between May 15 and December 31, 2020, distributors delivered 132.9 million boxes of food to families nationwide. In Michigan, one of the distributors—Eastern Market—packaged and delivered 2,000 food boxes to food banks and other nonprofits weekly (Galloway, 2020; Taylor et al., 2022).<sup>7</sup>

### **The Role of Nonprofits in Food Assistance**

Food assistance programs have been a part of the American food landscape for more than two centuries (Nichols-Casebolt & Morris, 2002; Taylor, 2009). Initially established by churches and charities as temporary and stop-gap efforts to provide rudimentary food aid in dire situations, food assistance programs are no longer fleeting. They have morphed into long-lived programs that are essential components of the food acquisition strategies that millions use regularly (Berner & O'Brien, 2004; Nichols-Casebolt & Morris, 2002; Poppendieck, 1994; Rochester et al., 2011; Thompson et al., 2019).

Most people think that private food assistance is emergency assistance; however, this mischaracterizes food assistance organizations' roles and functions. The term "emergency" implies short-term, acute reliance on food aid. However, scholars find that emergency food assistance organizations are enduring rather than short-lived institutions. For instance, Thompson et al. (2019) studied seven food pantries in North Carolina and found that they had operated for about 28 years. Daponte and Bade (2006) argue that food assistance organizations meet acute and long-term chronic food needs.

Scholars and critics have scrutinized the functions that food assistance organizations serve. Ahmadi and Ahn (2004) argue that although food banks are a crucial part of the food safety net, they do not address the root causes of hunger. Other scholars say that food organizations' focus on charity distracts from eradicating the root causes of hunger. Critics contend that poverty, not food scarcity, leads people to seek food from food pantries. Researchers surmise that chronic dependence on emergency food perpetuates the need for food banks and emergency kitchens and fuels their growth (de Souza, 2019; Fisher, 2018; Riches, 2018). De Souza (2019) further argues that emergency food assistance organizations like food pantries tend to see hunger and asking for food as a problem with the individual rather than structural and systemic problems with root causes that lie

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<sup>7</sup> When the program ended on May 31, 2021, 173,699,775 boxes of food had been distributed to families seeking food (USDA AMS, 2021).

outside of the individual’s control. Individualizing the problem shifts blame from the structures or systems onto the individual.

Bartfeld’s (2003) research supports the above claims. In her study of single mothers in Wisconsin, Bartfeld reports that food pantries were not a temporary safety net or for emergencies only. Instead, the participants in her study routinely used food pantries as sources of food aid. Bruckner, Westbrook et al. (2021) found that food assistance seekers used Boulder, Colorado’s, food assistance programs frequently to ensure that they met their monthly food needs. Mabli and Worthington (2017) found that participants in their study regularly used emergency food assistance programs while also participating in the Supplemental Nutrition Assistance Program (SNAP). Lambie-Mumford and Dowler (2015), Warshawsky (2010), and Tarasuk and Eakin (2003) also found that people needing food assistance used food pantries and food banks regularly. These researchers suggest that the prolonged and regular use of emergency food programs should lead us to focus on why what is described as a temporary or stop-gap measure has evolved into a routine and permanent food acquisition strategy for many.

Carney (2012) is also critical of emergency food assistance organizations. The researcher argues that emergency food assistance organizations tend to focus on distributing food rather than addressing the structural barriers (high unemployment and low wages) that prevent people from obtaining healthy and affordable food.

***A Central Role for Food Pantries and Soup Kitchens and the Bundling of Nongovernmental Food Assistance with Government Food Aid***

Food pantries and soup kitchens historically have played a central role in alleviating food insecurity in the U.S. These institutions are still salient in the food assistance landscape. In 2017, the USDA reported that 4.7% of American households received emergency food from food pantries and

0.6% obtained food at soup kitchens; see Table 1.

As the table shows, the incidence of obtaining food from pantries and emergency kitchens increases when households are food-insecure. The table also shows a strong relationship between poverty and food insecurity. It indicates that almost two-thirds of households with income that are 185% below the poverty rely on food pantries and emergency kitchens to secure food (Coleman-Jensen et al., 2018).

A more in-depth analysis of the use of food pantries reveals racial disparities too. Black households were more likely to report using food pantries than other racial and ethnic groups. While 3.5% of White (not Latinx) households obtained food from pantries, 6.5% of Latinx households and 9.4% of Black households got food from pantries (Coleman-Jensen et al., 2018).

Some food activists argue that food pantries and soup kitchens are prevalent and permanent fixtures because government-run food programs do not provide enough funds to enable program participants to purchase the food needed. Data from the USDA support this claim, which reports that more than half of food pantry and emergency kitchen users receive SNAP, Women, Infant and

**Table 1. Food Insecurity and the Use of Food Pantries and Emergency Kitchens**

| Household Characteristics  | Percent Using Pantries | Percent Using Emergency Kitchens |
|--|------------------------|----------------------------------|
| <b>All U.S. households</b>                                       | 4.7                    | 0.6                              |
| <b>Food-secure households</b>                                    | 1.8                    | 0.2                              |
| <b>Food-insecure households</b>                                  | 26.0                   | 3.3                              |
| Households with low food security                                | 20.9                   | 1.9                              |
| Households with very low food security                           | 34.2                   | 5.5                              |
| <b>Households with income less than 185% of the poverty line</b> |                        |                                  |
| Food-secure households   | 34.5                   | 34.6                             |
| Food-insecure households   | <b>65.5</b>            | <b>64.5</b>                      |
| Households with low food security                                | 31.2                   | 24.1                             |
| Households with very low food security                           | 34.3                   | 41.3                             |

Source: Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2018). *Statistical supplement to household food security in the United States in 2017* Administrative Publication No. 079). U.S. Department of Agriculture Economic Research Service. <https://www.ers.usda.gov/webdocs/publications/90029/ap-079.pdf>

Children (WIC), and other government nutrition program benefits (Coleman-Jensen et al., 2018).

Other studies show a long-time connection between the receipt of government food aid and the use of emergency food assistance programs. The links are enduring, in part, because some emergency food assistance organizations help their clients find out about government food programs and help them apply for and obtain food assistance benefits. For instance, Eisinger (2002) examined the extent to which 92 emergency food assistance programs in metropolitan Detroit shared the task of providing food to the needy by helping their clients gain access to government nutrition programs. The researcher found that 17% of the organizations helped people participate in SNAP and WIC, and 47% encouraged people to apply to government food programs. The practice occurs nationwide. Weinfield et al. (2014) found that 22.7% of food assistance programs in the U.S. offered help to clients to gain access to government nutrition assistance programs; an additional 35.6% of the food assistance organizations provided information to clients about government nutrition assistance programs.

Emergency food assistance organizations have found it challenging to secure adequate institutional resources. Prepandemic studies find that the organizations in this sector are under-resourced. For example, a survey of 60 New York City emergency food organizations found that most were in precarious financial situations, and some were closed or on the brink of closure (Gany et al., 2013). Chapman (2020) similarly found that the pantries studied in Missouri were under-resourced. A national study of food pantries found that 28% did not have enough food to meet their clients' needs (Weinfield et al., 2014). The pandemic strained the resources of emergency food organizations further and limited their ability to respond effectively.

### ***Schools as an Emergent Site of Emergency Food Assistance***

Children are particularly vulnerable to food insecurity, and COVID-19 increased that

vulnerability. The pandemic made it necessary to link schools to emergency food distribution. School-based food assistance programs became more explicitly linked to emergency food programs and organizations because many children obtain their meals through school breakfast and lunch programs.<sup>8</sup> Jablonski et al. (2021) studied emergency food assistance for children in five cities after schools closed during the pandemic. The researchers found an increased need for food assistance and a shortage of volunteers in Albany, New York; Austin, Texas; Cleveland, Ohio; Denver, Colorado; and Flint, Michigan. When schools closed in spring 2020, rules governing school meal programs were relaxed, but schools had to scramble to provide meals to children. Because federal guidance was either limited or absent, individual schools and school districts had to figure out how to establish the new feeding programs independently.

The federal government did allow schools to serve “grab and go” food packages to all children regardless of whether they were participants in the school breakfast or lunch programs. This service continued through the summer and fall of 2020 (Guthrie, 2020). In the case of Flint, the Flint Community Schools established sites that provided youths with three breakfasts and three lunches on Tuesdays and four breakfasts and four lunches on Thursdays. Cleveland took another approach; it provided students with backpacks filled with food (Jablonski et al., 2021).

### **The Demographic Characteristics of Leaders in Emergency Food Assistance Organizations**

Only a handful of studies have examined the demographic characteristics of leaders in emergency food assistance organizations. Those studies find demographic profiles that are predominantly White and female. One of the earliest studies of this nature found that most of the food pantry directors studied in Alabama and Mississippi were White (Duffy et al., 2006). More recent studies find

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<sup>8</sup> In 2020, more than 29 million children participated in the National School Lunch Program, and 15 million obtained food through the School Breakfast Program (Jablonski et al., 2021).

similar demographic profiles in other locations.<sup>9</sup> Chapman (2020) studied food pantry directors affiliated with Feeding Missouri; he found that they were predominantly White.<sup>10</sup> Additionally, a 2021 study released by the Houston Food Bank—the largest food bank in the Feeding America system—found that although people of color composed the majority of the 388 employees, most directors and executives were White (Rios, 2021). So, although there were many fewer Whites on the staff than Blacks or Latinx, more Whites were on the leadership team than all other racial groups combined (Rios, 2021).<sup>11</sup>

## Methodology

### *Survey Methodology: Identifying and Selecting Emergency Food Assistance Programs*

We studied emergency food assistance organizations in Michigan during the summer and fall of 2020. For data sources, we used Data Axle Reference Solutions<sup>12</sup> (formerly ReferenceUSA), the Food Bank Council of Michigan, Food Bank of Eastern Michigan, the website <https://foodpantries.org>, and Feeding America to identify emergency food organizations in Michigan. We communicated with 530 emergency food assistance providers for whom we had contact information to ask them to complete a survey about the emergency food organizations they operate. The survey, designed on the QualtricsXM platform, could be self-administered or completed on the telephone. Emergency food assistance staff were usually too busy during daytime hours to take a telephone survey, so they were sent a hyperlink to complete it at their convenience. We offered study participants US\$35 in compensation for their time; it took about 45 minutes to complete the instrument. We collected data from July 10, 2020, to

February 5, 2021. We received 272 responses, of which 181 were usable. We analyzed data from the Qualtrics survey in IBM SPSS (Version 27.0).

### *Defining Urbanized Areas, Urban Clusters, and Rural Designations*

We used U.S. Census Bureau (2020a) guidelines to classify urban and rural areas. According to the census, an urbanized area is a continuously built-up setting with a population of 50,000 or more. The bureau defines an urban cluster as a small urban area or locale outside a metropolitan area or central city incorporated with at least 2,500 residents but fewer than 50,000 inhabitants. Rural areas are formally incorporated jurisdictions or census-designated places with fewer than 2,500 inhabitants; these are not part of urbanized areas (Michigan Department of Transportation [MDOT], 2013; Ratcliffe et al., 2016; U.S. Census Bureau, 2020a).

### *Spatial Mapping*

First, we used the state of Michigan's GIS Open Data (State of Michigan, GIS Open Data, 2020) system to identify Michigan's urban boundaries. The Adjusted Census Urban Boundary (ACUB) layer is a single polygon representing the boundary of each locality. Next, the SPSS data file was converted to a comma-separated-value (CSV) file with emergency food assistance organizations' addresses. We used ArcPro (Version 2.7.1; ESRI, n.d.) and the ArcGIS World Geocoding Service (ArcGIS Developer, 2021) to geocode the emergency food assistance organizations' addresses, turning each address into a point on the map. The data points were then projected onto a map using the NAD 1983 Michigan GeoRef projected coordinate system (ESRI, 2016). Because some organizations are close, we included inset maps to depict the organizations' locations in Grand Rapids, Flint,

<sup>9</sup> A 2019 study of 129 staff in 69 food pantries in Oklahoma found that the staff of emergency food assistance organizations were predominantly White and female. The researchers found that 82.4% of the staff were White, 5.6% were Black, 8% were Native American, and 5.7% were Latinx. The staff was mostly female: 74.4% were female, and 25.6% were male (Wetherill et al., 2019).

<sup>10</sup> Of the 334 directors, 83.5% were White, 9% were Black, and 3.3% were from other racial groups. Most of the directors were female; 74% were female, and 24% were male (Chapman, 2020).

<sup>11</sup> In 2020, two of the 123 Latinx employees, nine of 176 Black employees, one of nine Asians, and 15 of 68 Whites were a part of the leadership (Rios, 2021).

<sup>12</sup> Data Axle provides profiles and contact information for millions of businesses and organizations in the U.S. and Canada. See <https://www.data-axle.com/>



Detroit, and the Ann Arbor–Ypsilanti metropolitan areas.

## Results

### *Location of Emergency Food Assistance Organizations*

As Figure 1 shows, 175 of the organizations studied are in the Lower Peninsula, and the remaining 6 are in the state's Upper Peninsula. Most organizations (54.6%) were in urbanized areas (Table 2). A third of the organizations are in urban clusters, and the remaining 12.7% (24) are in rural areas.

### *Characteristics of the Directors of the Emergency Food Assistance Organizations*

All 181 organizations studied had a primary director; 103 also had a secondary director. In many

cases, organizations had a director and a co-director or associate. Table 2 shows that we identified 284 such personnel. White females dominate the top leadership positions in Michigan's emergency food assistance organizations. Overall, 81.3% of all the directors are White, and 80.3% are female. A higher percentage of Whites are primary directors than secondary directors; almost 83% of the primary directors and 78.6% of the secondary directors are White. In contrast, 11% of the primary directors are Black, as are 17.5% of the secondary directors.

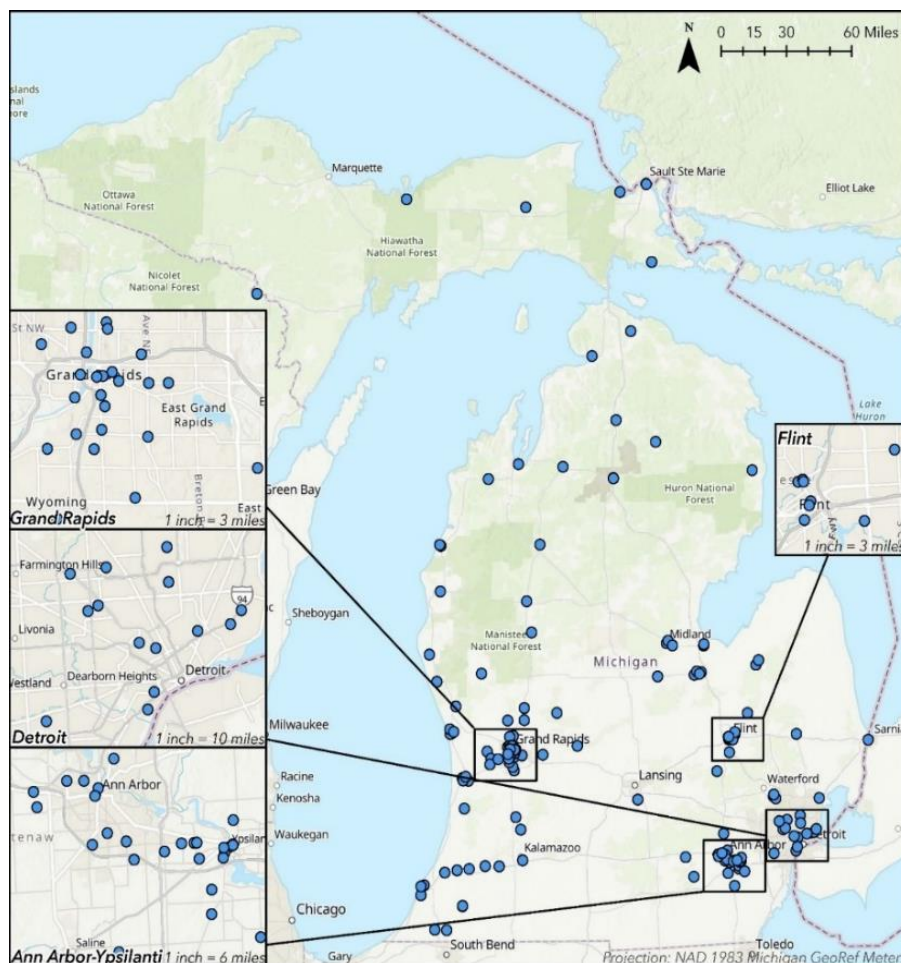
### *Types of Emergency Food Assistance Organizations Studied*

The emergency food assistance directors identified what kinds of programs they administered. They identified 245 programs (see Table 3). An organization may administer multiple programs; for example, a food bank may also operate a soup kitchen, or a food distributor may operate a food pantry. One hundred and fourteen (or 46.5%) of the programs were located in urbanized areas, 92 (37.6%) were in urban clusters, and 39 (15.9%) were in rural areas.

Roughly 77% (189) of the programs have only Whites as directors, and 20 programs (8.2%) have only Blacks as directors. The remaining 36 programs have Latinx, Asians, or Native Americans directors. These programs may also have a combination of Whites, Blacks, and other people of color sharing the directorships.

Food pantries were the most common of the eight types of

**Figure 1. Location of Emergency Food Assistance Organizations Studied**



**Table 2. Characteristics of the Directors of Emergency Food Assistance Organizations**

| Characteristics          | Total Directors |         | Primary Directors |         | Secondary Directors |         |
|--------------------------|-----------------|---------|-------------------|---------|---------------------|---------|
|                          | Number (n=284)  | Percent | Number (n=181)    | Percent | Number (n=103)      | Percent |
| <b>Locale</b>            |                 |         |                   |         |                     |         |
| Urbanized Area           | 155             | 54.6    | 95                | 52.5    | 60                  | 58.3    |
| Urban Cluster            | 93              | 32.7    | 62                | 34.3    | 31                  | 30.1    |
| Rural                    | 36              | 12.7    | 24                | 13.3    | 12                  | 11.7    |
| <b>Race or Ethnicity</b> |                 |         |                   |         |                     |         |
| White                    | 231             | 81.3    | 150               | 82.9    | 81                  | 78.6    |
| Black                    | 38              | 13.4    | 20                | 11.0    | 18                  | 17.5    |
| Other Races/Ethnicities  | 15              | 5.3     | 11                | 6.1     | 4                   | 3.9     |
| <b>Sex</b>               |                 |         |                   |         |                     |         |
| Male                     | 56              | 19.7    | 36                | 19.9    | 20                  | 19.4    |
| Female                   | 228             | 80.3    | 145               | 80.1    | 83                  | 80.6    |

organizations studied. The 121 food pantries composed 49.4% of the sample. In addition, we studied 52 food distributors, 22 soup kitchens, and 15 food banks. Most food pantries, soup kitchens, and food banks are in urbanized areas. So, 61 of the food pantries were in urbanized regions, while another 42 were in urban clusters; only 18 were in rural areas.

Only two soup kitchens and five food banks

studied were in rural areas. We found all-White director teams in the eight types of emergency food assistance organizations. However, only four types of organizations were directed solely by Blacks: food pantries, food distributors, food banks, and residential facilities serving meals. Six of the eight organizational types had multiracial directors. All the institutional types studied had all-female directors; seven of the eight categories of food

**Table 3. Characteristics of Emergency Food Assistance Organizations**

| Types of Emergency Food Assistance Organizations or Programs | Number of Organizations or Programs (Multiple Responses Allowed) |                                    | Percent of Emergency Organization or Programs in Various Locales |               |       | Percent of Emergency Organization or Program Directors From Each Racial/Ethnic Group |             |              | Percent of Male and Female Emergency Organization or Program Directors |            |                          |
|--|--|------------------------------------|--|---------------|-------|--|-------------|--------------|--|------------|--------------------------|
|  | Number   | Percent of Organizations Reporting | Urbanized Area   | Urban Cluster | Rural | Only Whites  | Only Blacks | Multi-racial | All Male   | All Female | Mixture of Male & Female |
| Number of Organizations or Programs                          | 245  | 100.0                              | 114  | 92            | 39    | 189  | 20          | 36           | 24   | 185        | 36                       |
| Percent  |  |                                    | 46.5   | 37.6          | 15.9  | 77.1   | 8.2         | 14.7         | 9.8  | 75.5       | 14.7                     |
| <b>Type of Organizations or Programs</b>                     |  |                                    |  |               |       |  |             |              |  |            |                          |
| Food Pantries  | 121  | 49.4                               | 53.5   | 45.7          | 46.2  | 45.5   | 70.0        | 58.3         | 50.0   | 47.0       | 61.1                     |
| Food Distributor   | 52   | 21.2                               | 20.5   | 21.7          | 21.1  | 21.7   | 15.0        | 22.2         | 12.5   | 22.7       | 19.4                     |
| Soup Kitchens  | 22   | 9.0                                | 7.9  | 12.0          | 5.1   | 9.5  | 0.0         | 11.1         | 16.7   | 9.2        | 2.8                      |
| Food Banks   | 15   | 6.1                                | 6.1  | 3.3           | 12.8  | 6.9  | 5.0         | 2.8          | 8.3  | 5.9        | 5.6                      |
| Residential—Meals Served                                     | 13   | 5.3                                | 5.3  | 7.6           | 0.0   | 5.8  | 10.0        | 0.0          | 4.2  | 5.9        | 2.8                      |
| Food Aggregator  | 8  | 3.3                                | 1.8  | 4.3           | 5.1   | 3.7  | 0.0         | 2.8          | 4.2  | 3.2        | 2.8                      |
| Food Gleaning  | 7  | 2.9                                | 1.8  | 2.2           | 7.7   | 3.7  | 0.0         | 0.0          | 4.2  | 2.7        | 2.8                      |
| Food Producing/Growing                                       | 7  | 2.9                                | 2.6  | 3.3           | 2.6   | 3.2  | 0.0         | 2.8          | 0.0  | 3.2        | 2.8                      |

assistance organizations had all-male director teams.

### *Longevity and Structure of Emergency Food Assistance Organizations and Programs*

Although organization staff uses the term “emergency” to describe their institutions, the organizations and programs studied have been a part of the Michigan food landscape for decades. Table 4 shows that 158 organizations and programs operated for a mean of 20.8 years. The mean for rural organizations was 15.7 years; it was 21.2 years in urbanized areas, 22.1 years in urban clusters. White directors managed organizations that were operating for about 22.2 years, but Black directors managed organizations operating for about 17.1 years, and multiracial directors led organizations that were operating for 16.7 years. On average, all-male directors managed organizations that have been operational for 25.7 years. The organizations that all-female teams managed have operated for a mean of 20.1 years; those managed by multiracial directors have operated for about 16.7 years.

On average, organizations and programs had 4.7 paid employees. The mean staff size of organizations in rural areas is 2.2; it is 5.5 in organizations in urbanized areas. The organizations with only White directors have 5.8 staff, but organizations with only Black directors have 3.8 staff, and those

with multiracial directors have 3.2 staff. Organizations directed by all-male teams have 7.5 staff, those led by all-female teams have 4.6 employees, and those with a mixture of male and female directors have 3.3 employees.

The pattern is somewhat different for the number of volunteers that organizations have. One hundred and sixty organizations divulged how many volunteers they had. The mean was 61.8 volunteers, while organizations in urbanized areas had a mean of 70.4 volunteers, in urban clusters a mean of 57.2, and in rural areas 40.8.

Organizations that had only Black directors had an average of 32.2 volunteers. The organizations led by only White directors had a mean of 62.5, and those led by multiracial directors had a mean of 75.4 volunteers. While organizations directed by all females or a mixture of males and females had similar numbers of volunteers (58.4 and 57.3, respectively), organizations led by all-male teams had a mean of 90.1 volunteers.

Sixty-four organizations indicated that they served meals to a mean of 79.2 people daily. Organizations in urbanized areas served meals to 102.9 people daily. However, organizations in urban clusters and rural areas served meals to fewer than 50 people per day. Organizations operated by only Blacks served meals to 12 people per day. In comparison, organizations operated by other racial

**Table 4. Means Comparisons of Emergency Food Assistance Organizations and Programs**

| Operations and Services                     | Number of Organizations or Programs Reporting |        | Mean of Emergency Organization or Programs in Various Locales |               |        | Mean of Emergency Organization or Program Directors From Each Racial/Ethnic Group |             |             | Mean of Male and Female Emergency Organization or Program Directors |            |                            |
|---|---|--------|---|---------------|--------|---|-------------|-------------|---|------------|----------------------------|
|   | Number  | Mean   | Urbanized Area  | Urban Cluster | Rural  | Only Whites   | Only Blacks | Multiracial | All Male  | All Female | Mixture of Male and Female |
| No. of Years Operating                      | 158   | 20.79  | 21.15   | 22.08         | 15.68  | 22.22   | 17.07       | 16.74       | 25.71   | 20.89      | 16.83                      |
| No. of Paid Staff                           | 145   | 4.66   | 5.52  | 4.12          | 2.24   | 5.08  | 3.83        | 3.24        | 7.50  | 4.56       | 3.25                       |
| No. of Volunteers                           | 160   | 61.80  | 70.38   | 57.21         | 40.76  | 62.46   | 32.20       | 75.37       | 90.06   | 58.41      | 57.32                      |
| No. of People Meals are Provided for Daily  | 64  | 79.19  | 102.85  | 44.76         | 37.0   | 85.7  | 12.00       | 81.67       | 171.17  | 78.02      | 17.50                      |
| No. of People Food Items are Given to Daily | 85  | 185.31 | 109.19  | 340.11        | 130.55 | 243.28  | 30.75       | 41.56       | 47.0  | 235.02     | 25.69                      |

groups served meals to more than 80 people daily. It should be noted that emergency food assistance organizations that had all-Black directors had smaller staff and fewer volunteers than other organizations. These factors might limit the quantity of meals they are able to serve.

When we considered the sex of the director, the all-male-run organizations served meals to a mean of 171.2 people daily. Organizations with all-female directors served 78 people daily, and organizations directed by a mixture of males and females served meals to 17.5 people per day. Like all-Black-directed organizations, the ones administered by a mixture of males and females also had a small number of employees and volunteers.

With 85 organizations reporting, the mean number of people given food items to take home was 185.3. While the urban cluster organizations provided food items to about 340 people daily, rural organizations gave away food items to about 130.6 people daily. Those in urbanized areas gave

away food items to 109.2 people per day. Organizations managed by all-White teams gave food to 243.3 people daily, multiracial-led organizations gave food to 41.6 people per day, and Black-run organizations gave food to 30.8 people daily. All-female-run organizations gave food to 235 people per day; all-male-run organizations gave food to 47 people daily. Those directed by a mixture of males and females gave away food to 25.7 people daily.

### *Additional Services that Emergency Food Assistance Organizations and Programs Provide*

Emergency food assistance organizations do not focus solely on serving or giving away food. They usually provide a suite of social, financial, and educational services that may or may not be related to food insecurity. Consequently, we asked organizations to indicate if they provided any assistance with 15 types of services. Table 5 shows that the most popular ancillary service provided information or training on general nutrition. Seventy-eight

**Table 5. Other Services Provided by Emergency Food Assistance Organizations and Programs**

| Assistance that Organizations and Programs Provide | Number of Organizations or Programs Reporting |         | Percent of Emergency Organization or Programs in Various Locales |               |       | Percent of Emergency Organization or Program Directors From Each Racial/Ethnic Group |             |              | Percent of Male and Female Emergency Organization or Program Directors |            |                            |
|--|---|---------|--|---------------|-------|--|-------------|--------------|--|------------|----------------------------|
|  | Number  | Percent | Urban-ized Area  | Urban Cluster | Rural | Only Whites  | Only Blacks | Multi-racial | All Male   | All Female | Mixture of Male and Female |
| General nutrition                                  | 78  | 53.1    | 58.2   | 41.3          | 59.1  | 47.7   | 64.3        | 72.7         | 66.7   | 53.2       | 45.8                       |
| Long-term food security                            | 71  | 49.3    | 50.0   | 40.4          | 66.7  | 42.7   | 64.3        | 75.0         | 53.8   | 50.5       | 41.7                       |
| Utilities  | 54  | 36.0    | 35.8   | 39.6          | 28.6  | 35.4   | 35.7        | 39.1         | 46.7   | 35.1       | 33.3                       |
| Housing  | 53  | 34.2    | 33.7   | 38.0          | 27.3  | 33.9   | 26.7        | 40.0         | 33.3   | 35.1       | 30.8                       |
| Health care  | 51  | 34.2    | 40.2   | 28.3          | 23.8  | 30.1   | 35.7        | 54.5         | 46.7   | 34.5       | 25.0                       |
| Alleviating poverty                                | 47  | 32.4    | 38.5   | 28.3          | 19.0  | 30.6   | 35.7        | 40.0         | 53.8   | 32.4       | 20.8                       |
| Government food programs                           | 35  | 23.8    | 27.2   | 15.6          | 28.6  | 17.6   | 33.3        | 45.8         | 15.4   | 22.0       | 36.0                       |
| Voter registration                                 | 35  | 23.8    | 31.3   | 15.2          | 14.3  | 17.1   | 50.0        | 40.9         | 15.4   | 22.9       | 32.0                       |
| Educational issues                                 | 35  | 24.5    | 35.1   | 13.3          | 9.5   | 19.3   | 38.5        | 42.9         | 8.3  | 28.0       | 16.7                       |
| Mental health                                      | 28  | 19.2    | 27.8   | 10.9          | 4.8   | 15.5   | 30.8        | 30.4         | 21.4   | 22.2       | 4.2                        |
| Jobs   | 27  | 18.4    | 21.5   | 14.9          | 14.3  | 16.2   | 14.3        | 31.8         | 38.5   | 15.5       | 20.8                       |
| Addiction and substance abuse                      | 22  | 15.4    | 20.5   | 9.1           | 9.5   | 10.1   | 38.5        | 28.6         | 15.4   | 14.3       | 20.0                       |
| Domestic violence                                  | 20  | 13.9    | 18.2   | 13.0          | 0.0   | 11.9   | 15.4        | 22.7         | 28.6   | 14.2       | 4.2                        |
| Immigration issues                                 | 15  | 10.4    | 14.3   | 6.7           | 4.5   | 9.1  | 15.4        | 14.3         | 8.3  | 12.0       | 4.2                        |
| Policing and incarceration                         | 10  | 6.9     | 9.1  | 4.3           | 4.8   | 4.5  | 14.3        | 15.0         | 0.0  | 7.5        | 8.0                        |

(53.1%) of the organizations had nutrition education programs. The second most popular program focused on alleviating chronic or long-term food insecurity (such as teaching program participants how to grow foods, providing opportunities to become entrepreneurs through incubator kitchen programs, or selling products grown in community gardens and farms).

Fifty-four organizations, or 36% of the sample, provided help with utilities. About 36% of the organizations in urbanized areas, 39.6% in urban clusters, and 28.6% in rural areas provided help with utilities. Almost 47% of the all-male-led organizations, 35.1% of the all-female-directed organizations, and a third of the male-female-directed organizations provided utility assistance.

Roughly 34% of the organizations assisted with housing and health care. Though food insecurity and seeking food assistance are strongly associated with poverty, only 32.4% of emergency food assistance organizations provided programming to alleviate poverty (such as providing training to enhance skills childcare assistance, and financial

literacy). About 39% of the organizations in urbanized areas, 28.3% of those in urban clusters, and 19% of the rural organizations had programs to help alleviate poverty. More than half of the all-male-led organizations had poverty-alleviation programs; less than a third of other organizations have similar programming.

Emergency food assistance organizations also helped clients gain access to government-run food programs; 35 (23.8%) of the organizations did this. Thirty-five organizations also provided help with voter registration and educational issues. Fewer than 20 organizations worked on immigration issues or policing and incarceration.

### *Where the Food Served or Distributed in the Organizations Studied Comes From*

The food served, sold, or given away in Michigan's emergency food assistance organizations comes from various sources (see Table 6). Local nonprofits are the most significant food source, making up 78.8% of where food is obtained. For instance, nonprofits such as Food Gatherers operate soup

**Table 6. Where the Food that is Served or Distributed by Emergency Food Assistance Organizations and Programs Comes From**

| Where Food Donations Comes From        | Number of Organizations or Programs Reporting |         | Percent of Emergency Organization or Programs in Various Locales |               |       | Percent of Emergency Organization or Program Directors From Each Racial/Ethnic Group |             |             | Percent of Male and Female Emergency Organization or Program Directors |            |                            |
|--|---|---------|--|---------------|-------|--|-------------|-------------|--|------------|----------------------------|
|  | Number  | Percent | Urbanized Area   | Urban Cluster | Rural | Only Whites  | Only Blacks | Multiracial | All Male   | All Female | Mixture of Male and Female |
| Local nonprofits                       | 123   | 78.8    | 79.3   | 79.2          | 76.2  | 80.2   | 93.8        | 62.5        | 70.6   | 79.1       | 83.3                       |
| Individuals                            | 116   | 76.8    | 61.9   | 80.8          | 78.2  | 79.1   | 76.9        | 65.2        | 82.4   | 76.6       | 73.9                       |
| Government agencies provide it         | 113   | 72.0    | 72.3   | 73.6          | 66.7  | 73.5   | 80.0        | 60.0        | 76.5   | 69.8       | 79.2                       |
| We purchase it                         | 111   | 71.6    | 73.2   | 69.8          | 70.0  | 71.6   | 73.3        | 70.8        | 70.6   | 71.1       | 75.0                       |
| Groceries and supermarkets             | 99  | 80.5    | 80.9   | 85.0          | 66.7  | 79.3   | 90.9        | 80.0        | 78.6   | 79.1       | 88.9                       |
| Farmers                                | 99  | 65.1    | 65.4   | 69.8          | 52.4  | 64.3   | 76.9        | 62.5        | 82.4   | 60.7       | 73.9                       |
| Restaurants                            | 86  | 56.2    | 49.4   | 62.3          | 66.7  | 56.0   | 64.3        | 52.2        | 64.7   | 55.8       | 52.2                       |
| Farmers markets                        | 72  | 48.0    | 43.4   | 52.8          | 52.4  | 47.4   | 75.0        | 37.5        | 58.8   | 42.9       | 66.7                       |
| Community gardens or farms in the area | 62  | 41.1    | 47.4   | 34.6          | 33.3  | 38.6   | 60.0        | 40.9        | 41.2   | 39.6       | 47.8                       |
| Our community garden or farm           | 55  | 36.2    | 34.2   | 36.5          | 42.9  | 34.2   | 53.3        | 34.8        | 35.3   | 34.8       | 43.5                       |
| Local hospitals                        | 28  | 18.5    | 15.2   | 21.6          | 23.8  | 20.4   | 0.0         | 21.7        | 17.6   | 17.0       | 27.3                       |
| Local colleges                         | 23  | 15.3    | 16.7   | 19.2          | 0.0   | 15.9   | 0.0         | 22.7        | 11.8   | 16.4       | 13.0                       |

kitchens and pantries, but they also collect and aggregate food, which they redistribute to smaller food banks, pantries, soup kitchens, and the like. Feeding America also plays a similar role in the emergency food sector. Other nonprofits in Michigan organize regular food drives and deliver what they collect to emergency food assistance organizations. More than a hundred organizations purchase food; several organizations mentioned buying the food they distribute from Feeding America. One hundred and sixteen organizations indicated that their food comes from individual donations, while 113 got their food from government agencies.

Grocery stores and supermarkets are also essential sources of food. Ninety-nine organizations secured produce and other foods from these entities. Some of this food is purchased, while some are donated. Almost 81% of emergency food assistance organizations in urban areas and 85% in urban clusters obtained food from grocery stores and supermarkets. Two-thirds of the organizations in rural areas also receive food from these sources. Ninety-one percent of all-Black-run organizations, 80% of multiracial-led organizations, 79.3% of all-White-run organizations get food donations from grocery stores and supermarkets. Restaurants also contribute food to emergency food assistance organizations; 86 organizations reported receiving food from restaurants.

During the pandemic, farmers became important food suppliers to emergency food assistance organizations. The FFFBP purchased food from Michigan farmers and delivered it to the organizations studied for distribution to families seeking food assistance. Consequently, 99 organizations in the sample reported obtaining food from farmers. Moreover, 72 organizations indicated that they got food from farmers markets. Donated food also came from residents who grew food. Sixty percent of Black directors got food from local community gardens and urban farms, while 53.3% got food from the community gardens or urban farms their organizations cultivate.

### *Impacts of the Pandemic on Operations*

The pandemic had a profound effect on the operations of emergency food assistance organizations. We asked respondents to report whether their organizations decreased or increased their activities, or if things remained the same as the year before the pandemic. For ease of reading, Table 7 reports only the percentage of organizations that reported a decrease or increase in their operations; the unreported rate reflects activities that remained the same. Similar percentages of organizations indicated that the number of programs they operated decreased (28.4%) or increased (27%). A third of the organizations in urbanized areas reported reduced programming, but only one in five from urban clusters made a similar report.

Organizations maintained the same operating hours; almost 58% said their working hours remained the same as in 2019. Nonetheless, 41.2% of the all-male-directed organizations said they reduced their operating hours. The reduced number of volunteers affected the organizations studied. More than half of the organizations (51.8%) indicated that the number of volunteers declined in 2020. In addition, almost a third of the organizations operated with fewer staff members.

Demand for food assistance skyrocketed in 2020. Most organizations (58.9%) reported that the amount of food they distributed increased. Relatedly, 61.3% reported that more people sought food from them than usual. At the same time, 69.1% of the organizations reported that the amount of food they obtained from restaurants remained roughly the same as in 2019, and 73% said that the amount of food received from grocery stores and supermarkets remained about the same as the year before. On the flip side, 50.7% of the organizations reported that other food donations increased. Most organizations (51.9%) also noted that their funding rose in 2020. However, 18.8% of the organizations said the number of people who purchased items from them declined.<sup>13</sup>

### *Government Assistance Received*

Almost half of the organizations (46.4%)

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<sup>13</sup> Some emergency food organizations sell some of what they stock (like nonfood items) at reduced prices. Kitchens can create meals from donated food and sell the meals at very low prices in low-income communities (Buzby, 2021).

responding to the question about the kinds of government assistance they received during the pandemic said they received no government funding. As Table 8 shows, 16 organizations received general grants, and another 12 obtained federal Paycheck Protection Program (PPP) loans. Nine organizations reported that they accessed

funding through the Coronavirus Aid, Relief, and Economic Security (CARES) Act, while seven participated in the FFFBP. Five organizations said they got grants from United Way, while four got small grants from Food Gatherers. Some federal COVID funds went to organizations like United Way and Food Gatherers, which in turn made

**Table 7. Impacts of the Pandemic on Emergency Food Assistance Organizations**

| Pandemic Impacts                                | Organizations or Programs Reporting |         | Percent of Emergency Organization or Programs in Various Locales |               |       | Percent of Emergency Organization or Program Directors From Each Racial/Ethnic Group |             |              | Percent of Male and Female Emergency Organization or Program Directors |            |                            |
|---|-------------------------------------|---------|--|---------------|-------|--|-------------|--------------|--|------------|----------------------------|
|   | Number                              | Percent | Urbanized Area   | Urban Cluster | Rural | Only Whites  | Only Blacks | Multi-racial | All Male   | All Female | Mixture of Male and Female |
| Number of programs operated (n=141)             |                                     |         |  |               |       |  |             |              |  |            |                            |
| Decreased                                       | 40                                  | 28.4    | 33.8   | 20.8          | 26.3  | 26.2   | 26.7        | 42.1         | 18.8   | 28.2       | 36.4                       |
| Increased                                       | 38                                  | 27.0    | 25.7   | 27.1          | 31.6  | 25.2   | 26.7        | 36.8         | 18.8   | 30.1       | 18.2                       |
| Operating hours (n=144)                         |                                     |         |  |               |       |  |             |              |  |            |                            |
| Decreased                                       | 31                                  | 21.5    | 18.4   | 24.5          | 26.3  | 19.3   | 26.7        | 30.0         | 41.2   | 18.1       | 22.7                       |
| Increased                                       | 30                                  | 20.8    | 25.0   | 16.3          | 15.8  | 19.3   | 26.7        | 25.0         | 11.8   | 24.8       | 9.1                        |
| Amount of food distributed (n=141)              |                                     |         |  |               |       |  |             |              |  |            |                            |
| Decreased                                       | 27                                  | 19.1    | 16.4   | 24.5          | 15.8  | 19.6   | 26.7        | 10.5         | 12.5   | 20.4       | 18.2                       |
| Increased                                       | 83                                  | 58.9    | 63.0   | 53.1          | 57.9  | 57.9   | 60.0        | 63.2         | 56.3   | 60.2       | 54.5                       |
| The number of restaurants donating food (n=110) |                                     |         |  |               |       |  |             |              |  |            |                            |
| Decreased                                       | 25                                  | 22.7    | 28.6   | 17.5          | 14.3  | 21.2   | 45.5        | 14.3         | 38.5   | 19.2       | 26.3                       |
| Increased                                       | 9                                   | 8.2     | 5.4  | 12.5          | 7.1   | 7.1  | 9.1         | 14.3         | 0.0  | 10.3       | 5.3                        |
| Groceries & supermarkets donating food (n=122)  |                                     |         |  |               |       |  |             |              |  |            |                            |
| Decreased                                       | 22                                  | 18.0    | 26.2   | 7.3           | 12.5  | 11.8   | 46.7        | 28.6         | 7.1  | 19.5       | 19.0                       |
| Increased                                       | 11                                  | 9.0     | 6.3  | 14.6          | 6.3   | 9.7  | 6.7         | 7.1          | 7.1  | 9.2        | 9.5                        |
| Number of employees (n=139)                     |                                     |         |  |               |       |  |             |              |  |            |                            |
| Decreased                                       | 44                                  | 31.7    | 35.1   | 26.1          | 31.6  | 27.6   | 60.0        | 31.6         | 25.0   | 31.4       | 38.1                       |
| Increased                                       | 20                                  | 14.4    | 13.5   | 17.4          | 10.5  | 14.3   | 0.0         | 26.3         | 18.8   | 14.7       | 9.5                        |
| Number of volunteers (n=141)                    |                                     |         |  |               |       |  |             |              |  |            |                            |
| Decreased                                       | 73                                  | 51.8    | 54.8   | 46.9          | 52.6  | 52.3   | 60.0        | 42.1         | 68.8   | 48.5       | 54.5                       |
| Increased                                       | 30                                  | 21.3    | 17.8   | 24.5          | 26.3  | 19.6   | 6.7         | 42.1         | 12.5   | 23.3       | 18.2                       |
| Number of clients purchasing food (n=80)        |                                     |         |  |               |       |  |             |              |  |            |                            |
| Decreased                                       | 15                                  | 18.8    | 24.4   | 14.3          | 9.1   | 14.8   | 50.0        | 18.2         | 0.0  | 22.6       | 7.7                        |
| Increased                                       | 6                                   | 7.5     | 7.3  | 7.1           | 9.1   | 6.6  | 12.5        | 9.1          | 0.0  | 6.5        | 15.4                       |
| Number of people seeking food (n=142)           |                                     |         |  |               |       |  |             |              |  |            |                            |
| Decreased                                       | 28                                  | 19.7    | 21.6   | 18.4          | 15.8  | 19.6   | 20.0        | 20.0         | 18.8   | 17.3       | 31.8                       |
| Increased                                       | 87                                  | 61.3    | 60.8   | 59.2          | 68.4  | 60.7   | 66.7        | 60.0         | 68.8   | 60.6       | 59.1                       |
| Amount of funding (n=133)                       |                                     |         |  |               |       |  |             |              |  |            |                            |
| Decreased                                       | 19                                  | 14.3    | 15.7   | 11.1          | 16.7  | 13.6   | 35.7        | 0.0          | 21.4   | 13.3       | 14.3                       |
| Increased                                       | 69                                  | 51.9    | 51.4   | 53.3          | 50.0  | 49.5   | 42.9        | 75.0         | 57.1   | 46.9       | 71.4                       |
| Amount of revenues generated (n=95)             |                                     |         |  |               |       |  |             |              |  |            |                            |
| Decreased                                       | 11                                  | 11.6    | 12.2   | 9.4           | 14.3  | 9.5  | 44.4        | 0.0          | 12.5   | 10.8       | 15.4                       |
| Increased                                       | 17                                  | 17.9    | 28.6   | 12.5          | 18.4  | 16.2   | 11.1        | 33.3         | 12.5   | 17.6       | 23.1                       |
| Amount of food donated to us (n=138)            |                                     |         |  |               |       |  |             |              |  |            |                            |
| Decreased                                       | 29                                  | 21.0    | 27.8   | 14.6          | 11.1  | 19.8   | 50.0        | 5.6          | 26.7   | 18.4       | 30.0                       |
| Increased                                       | 70                                  | 50.7    | 45.8   | 58.3          | 50.0  | 51.9   | 28.6        | 61.1         | 40.0   | 54.4       | 40.0                       |

grants to small organizations.

Table 8 also shows that organizations with all-White directors listed 19 types of grants, funds, or assistance they received or had access to in 2020, but organizations that had all-Black leadership teams listed only three types of grants or funds they obtained in 2020. Organizations with multiracial leadership teams listed 10 grants or funds that they accessed.

### *Perceptions of Government Assistance During the Pandemic*

Respondents wrote open-ended answers to describe how they felt about government responses to the pandemic. Respondents were more likely to make favorable than unfavorable comments about

governmental pandemic responses. Overall, 45% of the comments supported government responses, roughly a fourth (24.8%) were critical, and 21.7% of the study participants were ambivalent or indifferent. Forty percent of the organizations with all-Black directors were critical of the government assistance, and 26.7% were supportive. Roughly 35% of the organizations with multiracial directors supported government actions, while 23.5% were critical of government support. Approximately half of the organizations with all-White directors supported the government responses, while 22.6% criticized them (see Table 9).

### *Critiques of Government Responses*

Respondents expressed concern over some aspects

**Table 8. Government Assistance that Emergency Food Assistance Organizations Received During the Pandemic**

| Types of Assistance Received                                       | Organizations Reporting |         | Race/Ethnicity of Organization Directors |            |             |
|--|-------------------------|---------|--|------------|-------------|
|  | Number (n=125)          | Percent | All Whites                               | All Blacks | Multiracial |
| No funding received  | 58                      | 46.4    | 44                                       | 5          | 9           |
| General grants   | 16                      | 12.8    | 9  | 3          | 4           |
| Paycheck Protection Program (PPP) loan                             | 12                      | 9.6     | 10                                       |            | 2           |
| Coronavirus Aid, Relief, and Economic Security (CARES) funding     | 9                       | 7.2     | 8  |            | 1           |
| Farmers to Families Food Box Program (FFFBP)                       | 7                       | 5.6     | 5  |            | 2           |
| US Department of Agriculture frozen products and other commodities | 7                       | 5.6     | 4  |            | 3           |
| United Way grant or assistance                                     | 5                       | 4.0     | 4  |            | 1           |
| Food Gatherers grant   | 4                       | 3.2     | 2  | 1          | 1           |
| Received face masks to distribute                                  | 3                       | 2.4     | 2  |            | 1           |
| Food donations from food bank                                      | 2                       | 1.6     | 2  |            |             |
| Federal Emergency Management Administration (FEMA) grant           | 2                       | 1.6     | 2  |            |             |
| Emergency Food and Shelter Program (EFSP) grant                    | 2                       | 1.6     | 2  |            |             |
| Feeding America assistance   | 2                       | 1.6     | 2  |            |             |
| Michigan State Housing Development Authority (MSHDA) grant         | 1                       | 0.8     |  |            | 1           |
| Obtained loan  | 1                       | 0.8     | 1  |            |             |
| Organized fundraiser   | 1                       | 0.8     |  |            | 1           |
| Dairy products from local farmers                                  | 1                       | 0.8     | 1  |            |             |
| Stimulus checks  | 1                       | 0.8     | 1  |            |             |
| Increased food stamps  | 1                       | 0.8     | 1  |            |             |
| Additional food through Gleaners                                   | 1                       | 0.8     |  | 1          |             |
| Community Development Block Grant (CBDG)                           | 1                       | 0.8     | 1  |            |             |
| Michigan Restart loan  | 1                       | 0.8     | 1  |            |             |
| Federal funds to purchase food                                     | 1                       | 0.8     | 1  |            |             |



of government responses to the pandemic. These included either a slow response to the demand for increased food or the lack of response to this need, lack of program support, lack of understanding of how the pandemic affected food assistance programs, and how the food aid rolled out. Respondents made statements like this one that a Black female director from southeast Michigan wrote, “Their response has been very slow or not at all.” Another Black female director from southeast Michigan articulated similar thoughts when she wrote, “I feel like the government could have provided more support to food assistance programs during the COVID-19 pandemic.”

One White female director from southeast Michigan who thought the shortage of food at the outset of the pandemic was indicative of the government’s lack of concern for citizens said, “How do you refuse people food? Everything we stand for—our value statement is ‘hunger relief with dignity.’ So much of what is modeled in the government at every point lack[s] dignity.”

Respondents identified ebbs and flows that corresponded to food surpluses or shortages at emergency food assistance organizations during the pandemic. Study participants felt that local, state, and federal government employees were either unaware of or unwilling to adjust to and manage the fluctuations effectively. As a White female director from southwest Michigan explains,

I feel they were very plentiful, and lots of resources were available during the pandemic. In the beginning, our pantry saw a significant decrease in the number of people we served

because there were so many resources available, people were receiving extra food stamps, as well as children were receiving SNAP benefits. There were more food trucks going on, free lunches for kids, etc. . . . Now that there isn’t all of the extra relief money etc., people are struggling more, so we are seeing an increase again in the number of people we serve each month.

Other directors also reported that they got too much food at times. For instance, a White female director from a multiracial-led organization from southwest Michigan wrote,

Too little food assistance and too much food assistance are both a problem. Finding a solution to food assistance that fits everyone’s needs is nearly impossible when we have an already very broken food system. Too little food assistance is bad for obvious reasons. Too much, and we begin to enable individuals to rely on all the options instead of empowering them to problem solve and find other solutions. History has shown that the emergency response within the food system is unhealthy and only creates long-term problems. I believe increasing food stamps was a good response. I think the idea of allowing individuals to use their food stamps in other ways, for example, at participating restaurants, is a good idea.

She went on to criticize programs that gave food to a broad array of venues to distribute by saying,

**Table 9. Race/Ethnicity of Emergency Food Assistance Directors and Perceptions of Government Responses to the COVID-19 Pandemic**

| Perceptions of Government Responses to the Pandemic  | Total Directors Reporting (n=129) |         | All White Directors (n=97) |         | All Black Directors (n=15) |         | Multiracial Directors (n=17) |         |
|--|-----------------------------------|---------|----------------------------|---------|----------------------------|---------|------------------------------|---------|
|  | Number                            | Percent | Number                     | Percent | Number                     | Percent | Number                       | Percent |
| Critical of government responses                     | 32                                | 24.8    | 22                         | 22.6    | 6                          | 40.0    | 4                            | 23.5    |
| Ambivalent or indifferent about government responses | 28                                | 21.7    | 20                         | 20.6    | 4                          | 26.7    | 4                            | 23.5    |
| Supportive of government responses                   | 58                                | 45.0    | 48                         | 49.5    | 4                          | 26.7    | 6                            | 35.3    |
| Don't know about government responses                | 11                                | 8.5     | 7                          | 7.2     | 1                          | 6.7     | 3                            | 17.6    |

I don't believe all the funding to pop up food spots or through one organization is the best solution. There were so many food sites near us I couldn't count them all. People could get food all over the place. If you aren't working within emergency food, I can see how someone may think that is a good thing, but there are many reasons in which it only hurts those who they think they are helping. The government's response is necessary, but it's not going to work perfectly, and it may just continue to add to an already broken food system.

A White male director from central Michigan also revealed that his organization and community were inundated with food. He said, "We have received plenty of food in our community—too much, really. [I] have had a hard time finding homes for it all before it goes bad." He suggested that "They really should ask the communities before just sending the food."

He thought the excess food also resulted from the fact that "everyone has a lot more food stamps to buy food too, so they didn't need as much [of the food that we gave away]."

Respondents in southwest Michigan also made similar reports. For instance, one White female director from the region said, "In the beginning, they were giving out TONS of food everywhere. I thought it was a bit much, as the food pantries can take in the food, and we can pass it out. Our numbers went down because of it."

Though the FFFBP was generally popular with emergency food assistance organizations, some directors identified the program's challenges. It was not only the flow of food into the emergency food system that was challenging at times. The amount of food in the boxes and the inability to tailor the quantity of food to the family's size presented a challenge. As a result, one female director from southwest Michigan said that some recipients wasted food because there was too much for small family units to consume. She said,

Whenever you box up food and hand it out to people, there is bound to be waste. For example, the dairy box contained two gallons of milk, cream cheese, cottage cheese, two [kinds

of] Swiss cheese, etc. For a household of one, that was simply too much dairy. Not everyone likes cottage cheese, etc. We heard about people throwing food away.

But others felt differently. For instance, another female director from southwest Michigan said,

The USDA Produce and Dairy boxes were a huge blessing this summer. I was grateful that we were able to participate in that program from May-Sept[ember] 2020. I wish there were a way to continue those boxes all the time. Even though increases were made to the SNAP, we still saw an increase in the number of families that needed additional food.

Some critics of government responses identified the lack of staffing and the handling of the FFFBP boxes as problematic. A White male director from the northwestern part of the Lower Peninsula commented on these two issues in the following statement.

In my opinion, I feel that the government has not handled this well at all. If increased programming has even been implemented, it's not organized or carried out sufficiently. Haphazard. One example is the USDA Farmers to Families Food Box Program. We worked as the main distributor of those boxes as we received them from a grant recipient. ... USDA was short-staffed and provided few answers to questions. Timing to apply, get organized, and get started was very short. While I do not know of all the initiatives the government has implemented for food assistance, I am not satisfied with the efforts that I am aware of.

A White female director from southwest Michigan also questioned the wisdom of providing families with extra money to purchase food. She said, "While trying to help—the government has created a problem by families getting used to maximum benefit and now trying to return to their 'normal' food assistance benefit. Not all money went to

people who needed it.”

Not all communities may have received extra resources. One White female director from the Upper Peninsula said, “We did not see any government response, just [only] from the community via Salvation Army, Meijer’s, Simply Give Program funding and Feeding America.”

#### *Ambivalence or Indifference to Government Responses*

Some respondents were either nonjudgmental or indifferent about the government responses, while others simultaneously expressed positive and negative thoughts. For instance, a White female director from southeast Michigan wrote, “The initial response was good but slightly delayed. The government was getting the funding together, and we had to feed people immediately. After the CARES Act expired, the need was just as high, but the funding was lower.”

Similarly, a Black male director from southeast Michigan acknowledged the government assistance but pointed out that, at times, it missed the mark. Hence, he wrote,

There are many levels to the government, so I will try to address each of them. The Federal government has opened up “some” monies to be used for food pantries and soup kitchens, but in hard-hit areas and “hot spot” areas where the funding was needed the most, we have not received the kind of help you would think is warranted for a world-wide global pandemic.

This same respondent praised the state’s and city’s efforts to assist and critiqued the practice of providing resources to larger food assistance organizations while bypassing smaller ones. He noted,

Michigan has tried its best to offer resources and provide funding for larger organizations such as Forgotten Harvest and Gleaners, but for smaller entities that are on the front-lines serving the people, it has been hard to come by although, by far, the state has been extremely helpful in providing food for our children, the elderly, and the homeless. Finally, the city, spe-

cifically Detroit, has been good at getting information to the public, community partners, and food pantries. They have also been great in pointing us smaller food pantries in the right direction of where available food is for our clients. They have been instrumental in partnering with the Michigan Department of Education to provide meals for children in Detroit Public Schools. However, they themselves have not been strong in providing local non-profits, food pantries, and others in the food industry the necessary funding to provide service. Although this sounds bleak, the pandemic has taken a toll on everyone, and as this is the first (and prayerfully the only) time we are to go through this, I believe that the government’s approach was as best as it could be among the circumstances. But honestly, I truly believe it could have been better.

#### *Support for Government Responses*

Many study respondents were pleased with government responses and expressed gratitude for their organizations’ and clients’ aid. For instance, a White female director from central Michigan said, “We loved receiving and distributing the dairy boxes and veggie boxes to families in our community. This was the best thing, in my opinion, the government could do for families. We love fresh fruits, veggies, and dairy.” A White female director from the northwestern part of the Lower Peninsula had similar thoughts. She said, “We loved the partnership with farms. Our guests were able to take [home] entire boxes of fresh fruits and vegetables because of that program.”

A multiracial male director from the northeastern portion of the Lower Peninsula Michigan also praised the food program, saying, “It has been a good opportunity to work with the USDA to provide food. We fed over 750 families for 26 straight weeks with no stopping.” A White female director from southeast Michigan was also happy with the FFFBP. She noted that,

The Farmers to Families Food boxes have made a huge impact for our clients. Since our pantry runs mostly on foods purchased from grocery stores, the empty store shelves of the

pandemic caused great challenges in stocking the pantry. There were limits on the number of cans a customer could buy at the box stores for many months. Four cans of green beans don't feed too many families. Thus, the government filled in those gaps with the food boxes providing a variety of food groups within—meat, dairy, and produce. Our clients continue to thank us for providing these boxes to them. And we pass those thanks on to the quick action of the federal government.

A White female director from the eastern shores of the state loved the FFFBP. She said, "The amount of government-subsidized food boxes that were distributed in our county was amazing. We have at least one pop-up-pantry food distribution weekly in our city." Respondents also applauded the decision to increase payments to SNAP recipients. A White male director from central Michigan said, "I believe that the increase in food stamps has been helpful. I think people who have been furloughed from jobs are having more difficulty in accessing food." A White female director from southwest Michigan felt the same. She said, "I think increasing the amount of money individuals received on their Michigan Bridge Cards [SNAP] was critical in keeping families from going hungry."

Others like a White female director from southeast Michigan were "happy to see SNAP amounts raised to the maximum." But "for folks who were already receiving the maximum amount, we would have liked to see that number raised." Some directors thought the government's increase of SNAP dollars reduced reliance on emergency food assistance organizations. A White female director from the northwestern part of the Lower Peninsula explained, "The extension of the SNAP benefit to the maximum [per] family has caused guests not to use us as much as they have in the past." Finally, a White female director from southeast Michigan remarked, "They have done what they can. I don't expect them to carry [the] full burden. It's a partnership between government and private sector to take care of vulnerable in the community."

## Discussion

Our study supports the arguments of researchers who contend that well-established and long-lasting organizations populate the U.S. emergency food assistance landscape (Berner & O'Brien, 2004; Nichols-Casebolt & Morris, 2002; Poppendieck, 1994; Thompson et al., 2019). It is undoubtedly the case in Michigan. We found that, on average, Michigan's emergency food assistance organizations were in operation for about 21 years. Food insecurity is so deeply entrenched in Michigan's fabric that an extensive infrastructure exists to assist those in need of food. Emergency food assistance practitioners mobilized the state's vast network of emergency food assistance organizations to help Michigan cope with the soaring demand for food during the pandemic.

Michigan's emergency food assistance organizations serve both short-term and chronic needs. Though many describe emergency food assistance as temporary, short-term, stop-gap, and aid for unusual times of hardship, Michigan's food assistance organizations operate like permanent fixtures. They have staff and buildings, do long-term programming, build extensive relations with government agencies and funders, have suppliers, provide comprehensive services, and have substantial clientele bases. Similar configurations of emergency food assistance organizations exist in other states. Our finding supports arguments made by Ahmadi and Ahn (2004), Bartfeld (2003), Daponte and Bade (2006), and Thompson, Sugg, and Bard (2019) that emergency food assistance is a sector geared toward alleviating both acute and persistent food needs.

Our study, however, does not suggest that the emergency food assistance organizations studied are purely corporatist in their philosophy and approach (for instance, see the critiques of de Souza, 2019, and Poppendieck, 1994). Although two of the organizations in our study are branches of Feeding America, most of the organizations we studied had small staff and budgets. Seventy-four (40.9%) had 2019 budgets that were less than US\$50,000, while only three had 2019 budgets of US\$1 million or more. The staff of the organizations we studied felt they responded to needs that government social safety nets do not fill.

Critics of food banks, food pantries, soup kitchens, and other emergency food assistance organizations contend that these organizations are not focused on alleviating poverty—the root cause of food insecurity. They suggest that organizations devise programs that inadvertently or purposefully perpetuate the demand for their existence and fuel their growth and longevity (Ahmadi & Ahn, 2004; Bartfeld, 2003; de Souza, 2019; Poppendieck, 1994). Although one cannot argue that the emergency food assistance organizations studied are singularly focused on poverty alleviation, it would be unfair to suggest the organizations were unconcerned with such issues. Only eight of the organizations in our sample focused solely on serving or giving away food; the others provided an array of ancillary services as part of their food assistance work. Our study found that 18.5% of the organizations focused on jobs, and 24.5% had programming that dealt with educational issues.

Some of the organizations studied had community gardens and urban farms, either on-site or off-site. Hence, 36.2% of the organizations said they got food that they distributed from their gardens and farms, and 41.1% obtained and distributed food from off-site gardens and urban farms. In this context, the community gardens and urban farms served multiple functions. They provided healthy foods to clients of the emergency food assistance organizations, helped address some of the root causes of food insecurity, and helped reduce the stigma associated with asking for and getting free food (especially if clients helped to grow the food). Growing food demonstrates a level of concern for food insecurity beyond simply distributing food.

Chapman (2020) found that 11.4% of Missouri's food pantries had an on-site community garden, and 7.8% had an off-site garden. In addition, 19.5% of the pantries held nutrition education classes; 11.4% held mental health screenings, 11.4% provided drug and alcohol treatment, 16.5% provided job training, 19.8% provided employment opportunities, 11.1% offered educational programs, and 12% registered voters. Our findings thus are consistent with Chapman (2020), who found that the food pantries were not ignoring poverty alleviation or long-term food insecurity.

That being said, our study did indicate that, to some extent, food pantries and food banks rely on poor people to stay viable. Directors in our study report that, at times during the year, they saw decreased numbers of clients coming to seek food, purchase food from them, or use their services during the pandemic. Program managers felt that the government stimulus checks and increased SNAP benefits provided to their clients were spent in grocery stores rather than at the food pantries. Directors also believed that the food boxes meant less need for people to come to the pantries and food banks. The pandemic provided an opportunity to see a clear link between government financial support for nutrition programs and food insecurity.

Studies show that SNAP recipients rely heavily on emergency food assistance programs to meet their food needs because they do not receive enough money to purchase all the food their households need (Lambie-Mumford & Dowler, 2015; Mabli & Worthington, 2017; Tarasuk & Eakin, 2003; Warshawsky, 2010). The increased amount of SNAP funding, together with the provision of food boxes (Galloway, 2020; Sielski, 2020; USDA AMS, 2021), resulted in fewer nutrition-aid recipients using food banks and pantries.

Notwithstanding, the pandemic increased the overall demand for emergency food assistance. Sixty-one percent of the organizations studied saw an increased number of people requesting food, and 58.9% increased the amount of food they distributed during the pandemic. The overall demand for emergency food assistance rose because the government raised the support to nutrition program recipients for only part of the year. Secondly, studies from Connecticut (Ollove & Hamdi, 2021) and Feeding America (Morello, 2020) report that many clients used emergency food assistance programs for the first time during the pandemic. Hence, the new users sought food from the emergency food assistance organizations—and increased overall demand—even when some regular and long-time users received enough government benefits to stop using the organizations temporarily.

Regardless of the mix of long-time and new food seekers, emergency food assistance organiza-

tions were stretched thin because they had fewer staff and volunteers. Due to these staffing shortages, more than a fourth of the organizations cut back on the amount of programming they offered during the pandemic.

The FFFBP, popular with farmers and federal and state governments (Galloway, 2020; Sielski, 2020; Taylor et al., 2022; USDA AMS, 2021), was also popular with most emergency food assistance organizations. However, FFFBP administrators need to pay more attention to the amount and type of food boxed. Program administrators, intent on giving away food, did little to adjust the quantity of food in the box or the food waste that occurred when families could not consume all they received.

Our findings partly support the claims of scholars who critique emergency food assistance organizations for sometimes serving, giving away, and selling highly processed, high-calorie, energy-dense, high-salt, and otherwise unhealthy foods. As we saw in our survey, this is partly due to the reliance on donated food (Pompa-Metsaars, 2014; Rochester et al., 2011; Sisson & Lown, 2011).

The emergency food assistance organizations we studied relied heavily on donations from non-profits and individuals. For instance, about 77% of the organizations get food from individual donations. The emergency food assistance organizations also relied on donations from restaurants, grocery stores, and supermarkets. However, restaurants were heavily affected by the pandemic, and many closed, went out of business, or curtailed their operations. It is reflected in the data showing that 22.7% of the emergency organizations got less food from restaurants than usual during the pandemic; only 8.2% of the organizations studied reported receiving more restaurant food than usual. The pattern was similar for food donations from grocery stores and supermarkets.

Emergency food assistance organizations have more control over the quality of food they purchase; 72% of the organizations indicate they buy some foods they distribute. Source notwithstanding, it is difficult for emergency food assistance

organizations to control food quality when they rely so heavily on donated food. It is also hard to shift and serve or give away healthier foods. Regardless of the balance between donated and purchased food, many of the emergency food assistance providers in our sample welcomed the infusion of fresh, healthy, and affordable fruits, vegetables, and dairy made available via the FFFBP.

While organizations participating in our study gave away boxes of healthy foods through the FFFBP, they also reported giving away boxes filled with milk and cheese even when they knew some families did not or could not consume those items. The emergency food assistance organizations did not seem to have effective responses to curbing the inadvertent food waste they were helping to generate.

Directors pointed to other challenges with the FFFBP that have important lessons for the USDA and the program nationwide. The USDA should coordinate more effectively with state and local governments, farmers, and emergency food assistance organizations to improve food flow and distribution. The one-size-fits-all food boxes contained too much food for small family units to consume, so recipients wasted some of the food. Such boxed food could come in two or three sizes to accommodate different types of family units more effectively in the future.<sup>14</sup>

Directors said the FFFBP distributors delivered too much food to western and central Michigan. Concurrently, directors in Detroit were unable to meet the demand for food in the city. Ergo, we need a distribution system that recognizes when too much food is in one area and too little is available in another. Distributors should also shift excess food to areas still in need. The locations of surplus food and deficits are interesting. Nationwide, Blacks and Latinx proportionally experience the highest levels of poverty (Shrider et al., 2021) and food insecurity (Feeding America, n.d.-e). A higher percentage of Blacks use food pantries and soup kitchens than other groups (Coleman-Jensen et al., 2018). Yet, predominantly Black parts of the state experienced food shortages while distributors

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<sup>14</sup> Contractors (distributors, wholesalers, and other vendors) collect the farm products and box and distribute it to emergency food organizations. Those in charge of boxing could pack the food in different sized boxes (USDA AMS, 2021b).

delivered excess food to predominantly White regions. This pattern is worth interrogating nationally to see if the food was maldistributed in other states and whether localities with large numbers of poor people of color received inadequate supplies of government food assistance while White communities received excess food.

Our finding that directors of the state's emergency food assistance organizations are predominantly White is consistent with the leadership characteristics of such organizations in other parts of the U.S. (Chapman, 2020; Duffy et al., 2006; Rios, 2021; Taylor, 2018; USDA National Agricultural Statistics Service [USDA NASS], n.d.; 2019; White & King 2019). Females also dominate the leadership of the emergency food assistance organizations studied. However, all-male-led emergency food organizations tended to have more staff and volunteers and have operated longer than all-female-led or male-and-female-led organizations in this sector. Although other studies have found similar sex distribution in these organizations in other states (Chapman, 2020), none has identified how the gender of the director is related to staffing, volunteering, and longevity.

Organization size and locality have implications for funding and food acquisition. The study found that Black directors tend to operate small food assistance organizations in urbanized areas. Established food assistance organizations usually receive grants and redistribute the funds to smaller organizations. This funding model means that organizations with only Black directors end up with small grants, which they obtain indirectly. The current funding model also does not allow small organizations or ones directed solely by Blacks to establish and nurture direct relationships with funders or the USDA.

Having direct relationships with funders and the government builds the trust and experience needed to secure larger grants and contracts. Black directors suggest that sometimes even the food they obtain to distribute is filtered through aggregators. So, despite being in existence for long periods, organizations directed solely by Blacks are, at times, in marginal positions. However, there is great demand for the services such organizations provide. We suggest that the USDA and other fun-

ders reassess their funding strategies to see if and how the race/ethnicity and sex of the leader, size of the emergency food organization, and organization location are related to funding outcomes.

Black-led food assistance organizations occupy an essential niche that we should not ignore. The language of food assistance in Black-run food organizations has been linked to narrative frames espousing the right to healthy food, food justice, food sovereignty, and dignity. Blacks and other people of color also link food access to structural racism and oppression. Consequently, activists prioritize having control over the production and distribution of food as a critical element of their discourse and action. This approach is evident in the nineteenth- and twentieth-century work of Black food advocates (Alkon & Agyeman, 2011; Bruckner, Westbrook et al., 2021; Passidomo, 2014; Povitz, 2019; Taylor & Ard, 2015; White, 2018). Food assistance providers who were part of the Black Power movement, such as the Black Panther Party, saw their food assistance programs not as charities nor spaces to stigmatize clients but as spaces to exercise sovereignty and justice in the food movement (Alkon & Agyeman, 2011).

Thus, emergency food assistance programs led by Blacks and other people of color try to avoid what de Souza (2019) describes as the neoliberal stigma. She contends that when people seek food from emergency food assistance providers, they are sometimes blamed and shamed. At the same time, the root causes of hunger are overlooked, and hunger is reframed as the individual's fault. Our paper did not focus specifically on blaming or stigmatizing emergency food assistance clients. It found that most White directors were ecstatic with the government food aid that flowed into their organizations. However, embedded in the above quotes from two directors from southwest Michigan are comments suggesting that the additional government food aid was perceived as enabling recipients rather than "empowering them to problem solve." Another suggested that the government had created a problematic situation where "families" were "getting used to maximum benefits." In contrast, Black emergency food assistance directors focused on underfunding, inadequate food aid, unmet food needs, and lack of infrastructure.

### Future Research Directions

The study found that the need for food assistance was uneven in the state. The flow of food aid was also inconsistent. Emergency food assistance organizations in metropolitan Detroit—where the pandemic began infecting people first and had the highest infection rates—seemed to receive insufficient food to meet the demand.

Detroit has the largest Black population in the state. Before the pandemic, it was an urban area characterized by high unemployment, poverty, and food insecurity (U.S. Census Bureau 2020b). Nevertheless, enough food was not channeled to Detroit while communities in the southwest portion of the state—about three hours away—were, at times, inundated with food. It warrants further investigation to determine what factors influenced where, how, and how much food was sent to different parts of the state. We also need to understand why food delivery was not recalibrated when food surpluses and shortages were discovered in various parts of the state. Similar analyses should be conducted around the country to determine if this was a common occurrence with the delivery of pandemic food aid.

Continuing with this line of research, we want to do a more in-depth examination of all-Black-led organizations and organizations led by multiracial teams. The questions of interest are: What is their philosophical approach to emergency food assistance? How are these different from the philosophies of White emergency food assistance directors? Where are the emergency food assistance organizations administered by Blacks and other people of color found? What is the state of their financial infrastructure? How are they positioned in the grant-making arena? And who are their clients? What kinds of programming do they do? What are their outcomes? Researchers also need to probe if programs are alleviating poverty and long-term food insecurity and how is this being done. In addition, we need more localized research to understand the local food infrastructure both before the pandemic and with its effects.

There are additional areas where more research is needed; how the race/ethnicity of the leadership of organizations affects the philosophy of the emergency food assistance organizations, what they

do, and their outcomes. We need to understand more about how the sex of the director and other leaders affects philosophy, programming, and results in these organizations. We must also find out more about the differences between urban and rural emergency food assistance organizations.

There should also be more studies of females on the staff and in the leadership of emergency food assistance organizations and the implications of current distributions. Future research should also assess male-operated emergency food assistance organizations to see how they differ from other food assistance institutions.

### Conclusion

The COVID-19 pandemic has profoundly impacted the emergency food assistance landscape and potentially transformed it for the foreseeable future. Despite having fewer staff and volunteers, the emergency food assistance organizations studied continued to operate. They provided various services as they served more people and distributed more food than usual.

The increased demand for food assistance resulted in federal program innovations such as the FFFBP. However, the rollout of such programming unveiled significant challenges that need immediate attention. While the government program pleased farmers, who were happy to find new markets for their produce, the distribution was uneven. Majority-Black communities in the southeast part of the state experienced food shortages while predominantly White communities in other parts of Michigan reported food surpluses. Black directors of emergency food assistance organizations identified structural problems with the delivery of food aid, inaccessible funding, and marginality. These problems must be resolved in Michigan and around the country so that organizations like these can be more effective in the communities they serve.

In evaluating which pandemic-related food assistance programs should persist after COVID-19 subsidies, the federal government should consider adjusting and retaining the FFFBP. Hence, it would be worthwhile for the government to assess the FFFBP to improve program design and execution. The government should also assess the




impact of increasing the funds low-income families received in programs such as SNAP while families were getting food boxes. Efforts should be made to understand how to deploy programs like these quickly and effectively in emergencies.

Was the combination of increased SNAP dollars and the FFFBP enough to meet the food needs of families? Data presented above suggest that providing families with these two benefits simultaneously reduced the reliance on emergency food assistance. A much more comprehensive assessment of this topic is needed to learn more about the impacts of bundling these two benefits.

There is a robust infrastructure of emergency food assistance organizations in Michigan and around the country. However, the demand for

food assistance and related programming is growing. Consequently, we should pay more attention to alleviating poverty—the root cause of food insecurity. To do so, cities, states, and the federal government must create more jobs with higher wages. Paying workers living wages require a higher minimum wage. There is also a need for more affordable housing and training to help people develop needed workplace skills and more significant support for substance abuse, mental health, and general health care concerns. In short, food assistance organizations should explore strategies to provide emergency assistance to those in need while working toward permanent solutions to reduce hunger and poverty.



## References

- Ahmadi, B., & Ahn, C. (2004). Beyond the food bank. *Backgrounder*, 10(4), 1–4.  
<https://foodfirst.org/publication/beyond-the-food-bank/>
- Alkon, A. H., & Agyeman, J. (2011). *Cultivating food justice: Race, class, and sustainability*. MIT Press.
- ArcGIS Developer. (2021). ArcGIS World Geocoding Service. <https://developers.arcgis.com/rest/geocode/api-reference/overview-world-geocoding-service.htm>
- Avrutina, S., Murphy, H., & Patne, E. (2021). Community-led food resilience: Integrating grassroots food access into municipal emergency planning. *Journal of Agriculture, Food Systems, and Community Development*, 10(1), 215–217.  
<https://doi.org/10.5304/jafscd.2020.101.011>
- Bartfeld, J. (2003). Single mothers, emergency food assistance, and food stamps in the welfare reform era. *The Journal of Consumer Affairs*, 37(2), 283–304. <https://doi.org/10.1111/j.1745-6606.2003.tb00454.x>
- Berner, M., & O'Brien, K. (2004). The shifting pattern of food security support: Food stamp and the food bank usage in North Carolina. *Nonprofit and Voluntary Sector Quarterly*, 33(4), 655–672. <https://doi.org/10.1177/0899764004269145>
- Booth, S., Begley, A., Mackintosh, B., Kerr, D. A., Jancey, J., Caraher, M., Whelan, J., & Pollard, C. M. (2018). Gratitude, resignation and the desire for dignity: Lived experience of food charity recipients and their recommendations for improvement, Perth, Western Australia. *Public Health Nutrition*, 21(15), 2831–2841.  
<https://doi.org/10.1017/S1368980018001428>
- Bruckner, H., Castro-Campos, I., Dansky, H., Loberg, L., Marquez, J., Schaeffbauer, C., Teig, E., & Westbrook, M. (2021). *Food access in Boulder, Colorado*. Boulder Food Rescue. <https://www.boulderfoodrescue.org/wp-content/uploads/2021/01/Food-Access-Report-2021.pdf>
- Bruckner, H. K., Westbrook, M., Loberg, L., Teig, E., & Schaeffbauer, C. (2021). “Free” food with a side of shame? Combating stigma in emergency food assistance programs in the quest for food justice. *Geoforum*, 123, 99–106.  
<https://doi.org/10.1016/j.geoforum.2021.04.021>
- Burke, T. K., Durr, C., & Reamer, D. (2018). The importance of local foods to users of food pantries in accessible rural Alaska. *Journal of Agriculture, Food Systems, and Community Development*, 8(1), 53–69.  
<https://doi.org/10.5304/jafscd.2018.081.003>
- Buzby, J. (2021). *Good Samaritan Act provides liability protection for food donations* [Blog post]. U.S. Department of Agriculture [USDA]. <https://www.usda.gov/media/blog/2020/08/13/good-samaritan-act-provides-liability-protection-food-donations>

- Carney, M. (2012). "Food security" and "food sovereignty": What frameworks are best suited for social equity in food systems? *Journal of Agriculture, Food Systems, and Community Development*, 2(2), 71–88.  
<http://dx.doi.org/10.5304/jafscd.2012.022.004>
- Cavaliere, B. N., Drew, C., & Martin, K. S. (2021). Food bank drive-through distribution during COVID-19: A reflective essay. *Journal of Agriculture, Food Systems, and Community Development*, 10(2), 135–145.  
<https://doi.org/10.5304/jafscd.2021.102.044>
- Chapman, D. (2020). *"We only do food": Social assumptions of poverty and the implementation of emergency food services* [Doctoral dissertation, University of Missouri-Columbia]. <https://www.proquest.com/docview/2491970187?pq-origsite=gscholar&fromopenview=true>
- Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2018). *Statistical supplement to household food security in the United States in 2017* (Administrative Publication No. 079). U.S. Department of Agriculture Economic Research Service. <https://www.ers.usda.gov/webdocs/publications/90029/ap-079.pdf>
- Coleman-Jensen, A., Rabbitt, M. P., Hales, L., & Gregory, C. A. (2021). *Food security in the U.S.: Key statistics & graphics*. U.S. Department of Agriculture Economic Research Service. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics.aspx>
- Daponte, B. O., & Bade, S. (2006). How the private food assistance network evolved: Interactions between public and private responses to hunger. *Nonprofit and Voluntary Sector Quarterly*, 35(4), 668–690.  
<https://doi.org/10.1177/0899764006289771>
- de Souza, R. T. (2019). *Feeding the Other: Whiteness, privilege, and neoliberal stigma in food pantries*. MIT Press.  
<https://doi.org/10.7551/mitpress/11701.001.0001>
- Duffy, P. A., Irimia-Vladu, M., Cashwell, S., Bartkowski, J. P., Molnar, J. J., & Casanova, V. (2006). Food pantries and the populations they serve: Strange bedfellows or strategic partners? *Sociological Inquiry*, 76(4), 502–527.  
<https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1475-682X.2006.00168.x>
- Eisinger, P. (2002). Organizational capacity and organizational effectiveness among street-level food assistance programs. *Nonprofit and Voluntary Sector Quarterly*, 31(1), 115–130. <https://doi.org/10.1177/0899764002311005>
- Elattar, H. (2020, April 18). Weekly drive through food pantry services options offered in Orange County. *Voice of OC*.  
<https://voiceofoc.org/2020/04/weekly-drive-through-food-pantry-services-options-offered-in-orange-county/>
- ESRI. (n.d.). *ArcGIS Pro overview*. Retrieved April 5, 2021, from <https://www.esri.com/en-us/arcgis/products/arcgis-pro/overview>
- ESRI. (2016, May 5). *How to: Reproject Michigan GEOREF to State Plane Michigan NAD83*.  
<https://support.esri.com/en/technical-article/000002213>
- Feeding America. (n.d.-a). *Find your local food bank*. Retrieved May 6, 2020, from <https://www.feedingamerica.org/find-your-local-foodbank>
- Feeding America. (n.d.-b). *What hunger looks like in Michigan*. Retrieved May 20, 2020, from <https://www.feedingamerica.org/hunger-in-america/michigan>
- Feeding America. (n.d.-c). *Food insecurity in Michigan before COVID-19*.  
<https://map.feedingamerica.org/county/2017/overall/michigan>
- Feeding America. (n.d.-d). *Food today. Food security tomorrow*. Retrieved January 15, 2021, from <https://www.feedingamerica.org/about-our-work>
- Feeding America. (n.d.-e). *Black communities face many unique challenges that result in being more likely to face hunger during the pandemic*. <https://www.feedingamerica.org/hunger-in-america/african-american>
- Feeding America. (2021a, March). *The impact of the coronavirus on food insecurity in 2020 & 2021*.  
[https://www.feedingamerica.org/sites/default/files/2021-03/National%20Projections%20Brief\\_3.9.2021\\_0.pdf](https://www.feedingamerica.org/sites/default/files/2021-03/National%20Projections%20Brief_3.9.2021_0.pdf)
- Feeding America (2021b, September 1). *Feeding America estimates at least 60 million people turned to charitable food assistance in 2020*. <https://www.feedingamerica.org/about-us/press-room/60-million-turned-to-charitable-food-2020#:~:text=Feeding%20America%20announced%20today%20new,by%20the%20COVID%2D19%20pandemic>

- Fisher, A. (2018). *Big hunger: The unholy alliance between corporate America and anti-hunger groups*. MIT Press.  
<https://doi.org/10.7551/mitpress/10987.001.0001>
- Galloway, M. (2020, July 31). USDA food box program helping food banks, suppliers, Michiganders. *Michigan Farm News*. <https://www.michiganfarmnews.com/usda-food-box-program-helping-food-banks-suppliers-michiganders>
- Gany, F., Bari, S., Crist, M., Moran, A., Rastogi, N., & Leng, J. (2013). Food insecurity: Limitations of emergency food resources for our patients. *Journal of Urban Health*, 90, 552–558. <https://doi.org/10.1007/s11524-012-9750-2>
- Giannarelli, L., Wheaton, L., & Acs, G. (2020, July). *2020 poverty projections: Initial US policy response to the COVID-19 pandemic's economic effects is projected to blunt the rise in annual poverty*. Urban Institute.  
<https://www.urban.org/sites/default/files/publication/102521/2020-poverty-projections.pdf>
- Goodman, M. K. (2016). Food geographies I: Relational foodscapes and the busy-ness of being more-than-food. *Progress in Human Geography*, 40(2), 257–266. <https://doi.org/10.1177/0309132515570192>
- Guthrie, J. (2020, October 5). Free school lunch, breakfast participation rose between 2009 and 2019. *Amber Waves*.  
<https://www.ers.usda.gov/amber-waves/2020/october/free-school-lunch-breakfast-participation-rose-between-2009-and-2019/>
- Jablonski, B. B. R., Casnovsky, J., Clark, J. K., Cleary, R., Feingold, B., Freedman, D., Gray, S., Romeiko, X., Schmitt Olabisi, L., Torres, M., van den Berg, A. E., Walsh, C., & Wentworth, C. (2021). Emergency food provision for children and families during the COVID-19 pandemic: Examples from five U.S. cities. *Applied Economic Perspectives and Policies*, 43(1), 169–184. <https://doi.org/10.1002/aep.13096>
- Lambie-Mumford, H., & Dowler, E. (2015). Hunger, food charity and social policy—Challenges faced by the emerging evidence base. *Social Policy and Society*, 14(3), 497–506. <https://doi.org/10.1017/S1474746415000172>
- Mabli, J., & Worthington, J. (2017). Supplemental Nutrition Assistance Program participation and emergency food pantry use. *Journal of Nutrition Education and Behavior*, 49(8), 647–656. <https://doi.org/10.1016/j.jneb.2016.12.001>
- McEntee, J. C., & Naumova, E. N. (2012). Building capacity between the private emergency food system and the local food movement: Working toward food justice and sovereignty in the global North. *Journal of Agriculture, Food Systems, and Community Development*, 3(1), 235–253. <http://dx.doi.org/10.5304/jafscd.2012.031.012>
- Michigan Department of Transportation [MDOT]. (2013, December). *MDOT Small Urban Program eligible areas / Area information*. [https://www.michigan.gov/documents/MDOT\\_smallurban\\_Attach5-SU\\_Area\\_List\\_154607\\_7.pdf](https://www.michigan.gov/documents/MDOT_smallurban_Attach5-SU_Area_List_154607_7.pdf)
- Morello, P. (2020, May 4). *COVID-19 means a 'new normal'* [Blog post]. Feeding America Hunger Blog.  
<https://www.feedingamerica.org/hunger-blog/covid-19-means-new-normal>
- Nichols-Casebolt, A., & Morris, P. M. (2002). Making ends meet: Private food assistance and the working poor. *Journal of Social Service Research*, 28(4), 1–22. [https://doi.org/10.1300/J079v28n04\\_01](https://doi.org/10.1300/J079v28n04_01)
- Ollove, A., & Hamdi, S. (2021). Activating the local food system in emergency food response. *Journal of Agriculture, Food Systems, and Community Development*, 10(2), 255–257. <https://doi.org/10.5304/jafscd.2021.102.006>
- Passidomo, C. (2014). Whose right to (farm) the city? Race and food justice activism in post-Katrina New Orleans. *Agriculture and Human Values*, 31, 385–396. <https://doi.org/10.1007/s10460-014-9490-x>
- Pompa-Metsaars, E. D. (2014). The nutrient intake of homeless women of Grand Rapids, Michigan [Master's thesis, Grand Valley State University]. <http://scholarworks.gvsu.edu/theses/749>
- Poppendieck, J. (1994). Dilemmas of emergency food: A guide for the perplexed. *Agriculture Human Values*, 11, 69–76.  
<https://doi.org/10.1007/BF01530418>
- Povitz, L. D. (2019). *Stirrings: How activist New Yorkers ignited a movement for food justice*. University of North Carolina Press.
- Ratcliffe, M., Burd, C., Holder, K., & Fields, A. (2016, December). *Defining rural at the U.S. Census Bureau* (American Community Survey and Geography Brief, ACSGEO-1). U.S. Census Bureau.  
[https://www2.census.gov/geo/pdfs/reference/ua/Defining\\_Rural.pdf](https://www2.census.gov/geo/pdfs/reference/ua/Defining_Rural.pdf)
- Riches, G. (2018). *Food bank nations: Poverty, corporate charity and the right to food*. Routledge.
- Rios, L. (2021, February). *Start where you are: Tools for assessing racial equity and powering change*. Houston Food Bank.  
<https://www.hungercenter.org/wp-content/uploads/2021/03/Start-where-you-are-Leslie-Rios-HFB.pdf>

- Rochester, J. S., Nanney, M. S., & Story, M. (2011). Assessing foodshelves' ability to distribute healthy foods to foodshelf clients. *Journal of Hunger & Environmental Nutrition*, 6(1), 10–26. <https://doi.org/10.1080/19320248.2011.549363>
- Semega, J., Kollar, M., Shrider, E. A., & Creamer, J. F. (2020, revised 2021). *Income and poverty in the United States: 2019* (Current Population Reports, P60–270 [RV]). <https://www.census.gov/content/dam/Census/library/publications/2020/demo/p60-270.pdf>
- Sharkey, J. R. (2009). Measuring potential access to food stores and food-service places in rural areas in the U.S. *American Journal of Preventative Medicine*, 36(4, Suppl.), S151–S155. <https://doi.org/10.1016/j.amepre.2009.01.004>
- Shrider, E. A., Kollar, M., Chen, F., & Semega, J. (2021, September 15.). *Income and poverty in the United States: 2020* (60–273). U.S. Census Bureau. <https://www.census.gov/library/publications/2021/demo/p60-273.html>
- Sielski, J. (2020). Several Michigan companies awarded contracts for USDA Farm to Families Food Box Program [Press release]. <https://www.michigan.gov/coronavirus/0,9753,7-406-98158-528880--,00.html>
- Sisson, L. G., & Lown, D. A. (2011). Do soup kitchen meals contribute to suboptimal nutrient intake & obesity in the homeless population? *Journal of Hunger & Environmental Nutrition*, 6(3), 312–323. <https://doi.org/10.1080/19320248.2011.597832>
- Slagter, L., & Guest, G. (2020, May 4). *Michigan poverty map shows economic security by county*. Michigan News, University of Michigan. <https://news.umich.edu/michigan-poverty-map-shows-economic-security-by-county/>
- State of Michigan, GIS Open Data. (2020). Adjusted census urban boundaries (v17a). [https://gis-michigan.opendata.arcgis.com/datasets/d07b75149ae64a2da75ba9a01a4e11e6\\_5?geometry=179.973%2C61.739%2C-173.347%2C80.167&page=8](https://gis-michigan.opendata.arcgis.com/datasets/d07b75149ae64a2da75ba9a01a4e11e6_5?geometry=179.973%2C61.739%2C-173.347%2C80.167&page=8)
- Tarasuk, V. & Eakin, J. M. (2003). Charitable food assistance as symbolic gesture: An ethnographic study of food banks in Ontario. *Social Science & Medicine*, 56(7), 1505–1515. [https://doi.org/10.1016/S0277-9536\(02\)00152-1](https://doi.org/10.1016/S0277-9536(02)00152-1)
- Taylor, D. E. (2009). *The environment and the people in American cities, 1600s-1900s: Disorder, inequality, and social change*. Duke University Press.
- Taylor, D. E. (2018). Black farmers in the USA and Michigan: Longevity, empowerment, and food sovereignty. *Journal of African American Studies*, 22, 49–76. <https://doi.org/10.1007/s12111-018-9394-8>
- Taylor, D. E., & Ard, K. J. (2015). Food availability and the food desert frame in Detroit: An overview of the city's food system. *Environmental Practice*, 17(2), 102–133. <https://doi.org/10.1017/S1466046614000544>
- Taylor, D. E., Farias, L. M., Kahan, L. M., Talamo, J., Surdoval, A., McCoy, E. D., & Daupan, S. M. (2022). Understanding the challenges faced by Michigan's family farmers: Race/ethnicity and the impacts of a pandemic. *Agriculture and Human Values*. Advance online publication. <https://doi.org/10.1007/s10460-022-10305-6>
- Thompson, K. L., Sugg, M., & Barth, M. M. (2019). The North Carolina food pantry organizational capability and mapping study: Research brief and pilot study. *Journal of Agriculture, Food Systems, and Community Development*, 9(1), 75–87. <https://doi.org/10.5304/jafscd.2019.091.031>
- Tiehen, L. (2020). *The food assistance landscape: Fiscal year 2019 report* (Economic Information Bulletin No. 218). U.S. Department of Agriculture Economic Research Service. <https://www.ers.usda.gov/webdocs/publications/99026/eib-218.pdf?v=715.6>
- United Health Foundation. (2020). America's health rankings: Food insecurity in Michigan. [https://www.americashealthrankings.org/explore/annual/measure/Overall\\_a/state/MI?edition-year=2020](https://www.americashealthrankings.org/explore/annual/measure/Overall_a/state/MI?edition-year=2020)
- U.S. Bureau of Labor Statistics. (2020). *The employment situation—November 2020* (USDLE-20-2184). U.S. Department of Labor. [https://www.bls.gov/news.release/archives/empst\\_12042020.htm](https://www.bls.gov/news.release/archives/empst_12042020.htm)
- U.S. Census Bureau. (2021, September 14). *Income, poverty and health insurance coverage in the United States: 2020*. <https://www.census.gov/newsroom/press-releases/2021/income-poverty-health-insurance-coverage.html#:~:text=Income-Median%20household%20income%20was%20%2467%2C521%20in%202020%2C%20a%20decrease%20of,the%202019%20median%20of%20%2469%2C560>
- U.S. Census Bureau. (2020a, February 24). *Urban and rural*. <https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html>

- U.S. Census Bureau. (2020b). *QuickFacts*.  
<https://www.census.gov/quickfacts/fact/table/lansingcitykansas,muskegoncitymichigan,grandrapidscitymichigan,flintcitymichigan,detroitcitymichigan,MI/AGE295219>
- U.S. Department of Agriculture Agricultural Marketing Service [USDA AMS]. (2021). *USDA Farmers to Families Food Box*. <https://www.ams.usda.gov/selling-food-to-usda/farmers-to-families-food-box>
- USDA Food and Nutrition Service [USDA FNS]. (n.d.). *FNS nutrition programs*. Retrieved February 10, 2022, from <https://www.fns.usda.gov/programs>
- USDA National Agricultural Statistics Service [USDA NASS]. (n.d.). *2017 Census of Agriculture state profile: Michigan*. [https://www.nass.usda.gov/Publications/AgCensus/2017/Online\\_Resources/County\\_Profiles/Michigan/cp99026.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Michigan/cp99026.pdf)
- USDA NASS. (2019, October). *2017 Census of Agriculture highlights: Female producers*. [https://www.nass.usda.gov/Publications/Highlights/2019/2017Census\\_Female\\_Producers.pdf](https://www.nass.usda.gov/Publications/Highlights/2019/2017Census_Female_Producers.pdf)
- Warshawsky, D. N. (2010). New power relations served here: The growth of food banking in Chicago. *Geoforum*, 41(5), 763–775. <https://doi.org/10.1016/j.geoforum.2010.04.008>
- Weinfield, N. S., Mills, G., Borger, C., Gearing, M., Macaluso, T., Montaquila, J., & Zedlewski, S. (2014). *Hunger in America 2014: National report*. Feeding America. <https://www.feedingamerica.org/research/hunger-in-america>
- Wetherill, M. S., Williams, M. B., White, K. C., Li, J., Vidrine, J. I., & Vidrine, D. J. (2019). Food pantries as partners in population health: Assessing organizational and personnel readiness for delivering nutrition-focused charitable food assistance. *Journal of Hunger & Environmental Nutrition*, 14(1–2), 50–69. <https://doi.org/10.1080/19320248.2018.1512931>
- White, M. M. (2018). *Freedom farmers: Agricultural resistance and the Black Freedom Movement*. The University of North Carolina Press.
- White, T., & King, S. (2019, April 11). *2017 Census of Agriculture data now available* [Press release No. 0051.19]. U.S. Department of Agriculture. <https://www.usda.gov/media/press-releases/2019/04/11/2017-census-agriculture-data-now-available>