



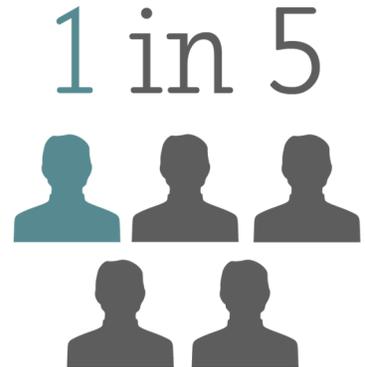
Phase I: Uncovering the Need for Food Assistance in Franklin County

A HEALTHY & THRIVING COMMUNITY: CREATING AN
INTEGRATED RESPONSE TO HUNGER IN FRANKLIN COUNTY
MEASUREMENT RESOURCES COMPANY

EXECUTIVE SUMMARY

In 2016, Mid-Ohio Foodbank began a systematic process to develop an Integrated Response to Hunger. The goal of this process was to develop a blueprint for a client centric response to hunger that is based on client feedback and experience, aligns with community needs, and will advance Mid-Ohio Foodbank’s mission to *end hunger one nourishing meal at a time while co-creating communities where everyone thrives*.

To understand the actual need for food assistance in Franklin County, Mid-Ohio Foodbank partnered with Measurement Resources Company in the development of the Franklin County Missing Meals Index. This index was developed to estimate how many meals low-income Franklin County residents miss because they are unable to purchase meals for themselves, even after utilizing government nutrition programs or charitable sources. This methodology is impactful because missing meals align to pantry distribution metrics of meals required to feed those in need.

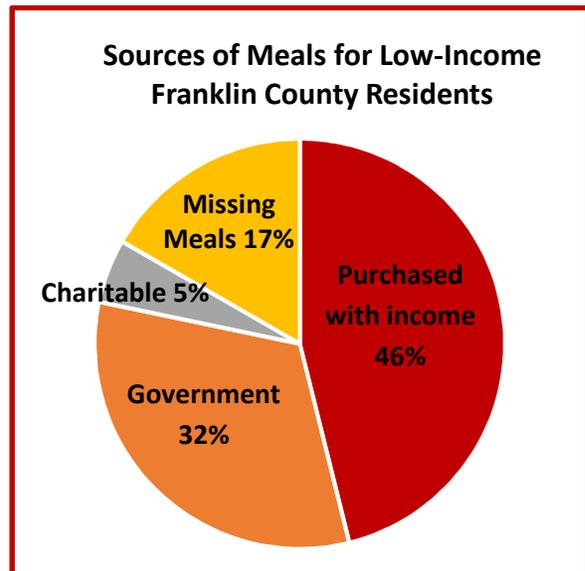


Nearly 1 in 5 Franklin County residents (18%), or approximately 214,500 individuals, experience food insecurity.

Key learnings related to the actual need for food assistance in Franklin County include the following.

- The number of missing meals in Franklin County – 75.5 million per year – demonstrates a substantial meal gap for Franklin County’s residents living below 200% of poverty.
- Residents are estimated to purchase 46% of their meals with their earnings. Many receive additional meals from government or charitable support, yet still have a meal gap.
- On average, residents miss approximately 3.5 meals weekly, or 17% of their total meals.
- Residents living below 130% of poverty receive nearly half their meals through government food programs. Residents living between 130-185% of poverty are estimated to miss 3.9 meals per week, or 19% of their total meals.

These findings suggest many opportunities exist to bring food assistance to food insecure Franklin County residents and close the meal gap. Using the Franklin County Missing Meals Index, Mid-Ohio Foodbank and its partners can measure Franklin County’s meal gap over time and assess the impact of its response to hunger on those Franklin County residents most in need of food assistance.



BACKGROUND

In 2016, the Mid-Ohio Foodbank began an endeavor to develop an Integrated Response to Hunger. The goal of this initiative was to advance Mid-Ohio Foodbank's mission to *end hunger one nourishing meal at a time while co-creating communities where everyone thrives* by developing a client-centric integrated response aligned with community needs.

To develop this plan, Mid-Ohio Foodbank set out to answer three questions:

1. What is the **actual need for food assistance** in Franklin County?
2. What are the Mid-Ohio Foodbank's **clients' experiences with hunger relief**?
3. What about the Mid-Ohio Foodbank's **work needs to shift**?

Mid-Ohio Foodbank engaged two outside experts to help them best understand the real need for food assistance in Franklin County and people's experiences with hunger relief, and to develop an effective integrated response to hunger based on these experiences. Ronald Fry, Ph.D., Professor in the Weatherhead School of Management, Case Western Reserve University, facilitated a process of Appreciative Inquiry. Dr. Fry is the co-creator of the Appreciative Inquiry theory and method, which has the potential to increase an organization's capacity by managing to positive change. Measurement Resources Company (MRC), an evaluation and research firm, was tasked with defining the actual need for food assistance in Franklin County and to assist with data collection, data analysis, and documentation of the activities and outcomes.

INTRODUCTION

There are a multitude of hunger indexes, reports, and calculations that estimate hunger in the United States. Many rely on algorithms to approximate the percentage of food insecure people based on economic and demographic indicators. However, the emergency feeding network of food banks and other resources does not target its response to hunger by exclusively improving economic indicators; they feed hungry people. Subjectivity in how one defines themselves as food insecure reduces the utility of these estimations.

A different measure of hunger is needed for communities to track their local needs for food assistance. Following the framework of the Sonoma County Hunger Index¹, the Franklin County Missing Meals Index was calculated for all low-income Franklin County residents. This report outlines the traditional approach to measuring food insecurity through algorithm-based estimations and its limitations, eligibility and utilization of food assistance programs in Franklin County, and the resulting missing meals that often translates into skipping a meal or going to bed hungry.

¹ Sonoma County Hunger Index. <http://sonomahungerindex.com/>

TRADITIONAL APPROACH TO MEASURING FOOD INSECURITY

Food insecurity refers to lack of access, at times, to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods². Food insecure households are not necessarily food insecure all the time. Food insecurity may reflect a household's need to make trade-offs between important basic needs, such as housing or medical bills, and purchasing nutritionally adequate foods. On average, households experiencing food insecurity are estimated to experience these conditions during seven months of the year³.

Franklin County residents experience food insecurity at a greater rate than the U.S. average of 15.4 percent⁴, according to statistics published by Feeding America. Nearly 1 in 5 residents (17.9%), or approximately 214,500 individuals, experience food insecurity⁵. Franklin County children are at an even greater risk of being food insecure, as it is estimated that 62,010, or 21.8% of children, are food insecure⁶.

Estimates of food insecurity are calculated by determining the relationships between food insecurity and its known determinants, such as poverty, unemployment, median income, select racial and ethnic characteristics, and other variables at the state level. The resulting coefficient estimates are then applied to the same variables defined at the county level to create estimates of food insecurity for individuals and children at the county level. Overall, it has been shown that these economic and demographic indicators are robust determinants of food insecurity. However, greater focus on Franklin County may determine the strength of these predictors or other unique predictors of food insecurity in central Ohio.

Franklin County Predictors of Food Insecurity

Food insecurity in Franklin County reaches beyond those experiencing extreme poverty. Slightly more than half (54%) of those experiencing food insecurity are living below the threshold of 130% of poverty⁷. It is estimated that 1 out of 3 (34%) people experiencing food insecurity are living at or above the 185% of poverty level, disqualifying them from most federal nutrition programs.

Based on research conducted by the Kirwan Institute⁸, some Franklin County neighborhoods have higher rates of food assistance utilization, an indicator of food insecurity, than others. Residents in the following neighborhoods are more likely to utilize food assistance: Weinland Park and Linden, East Side, West Side Contiguous, West Side, Contiguous South Side, Far South Side, and Contiguous Far South Side (see Figure 2). Comparing characteristics of the populations of these high areas of utilization with the

² See Appendix A for questions used to determine food insecurity.

³ Map the Meal Gap 2016: Technical Brief. <http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/2014/2014-map-the-meal-gap-tech-brief.pdf>

⁴ Map the Meal Gap. <http://map.feedingamerica.org/county/2014/overall/ohio/county/franklin>. *Household Food Security in the United States in 2014, ERR-194* Economic Research Service/USDA estimates the U.S. average food insecurity is 14.0 percent.

⁵ Map the Meal Gap. <http://map.feedingamerica.org/county/2014/overall/ohio/county/franklin>.

⁶ Map the Meal Gap. <http://map.feedingamerica.org/county/2014/child/ohio/county/franklin>.

⁷ Map the Meal Gap. <http://map.feedingamerica.org/county/2014/overall/ohio/county/franklin>.

⁸ Mid-Ohio Foodbank Client Centricity Study. 2014 Kirwan Institute.

entire county provides valuable information regarding what factors may play a key role in predicting the need for food assistance in Franklin County.

Based on a sample of pantry users in Franklin and Delaware Counties who participated in focus groups and a survey of food assistance professionals, the following issues are often predictors that Franklin County residents may find themselves below the 200% poverty line and in need of food assistance.

- Unemployment
- Underemployment
- Mental health/addiction issues
- Seniors on a fixed income
- Illness and injury
- Foreign born/non-English speaking
- Female head of household
- Not finishing high school

Figure 1. Comparison Between Food Insecure Neighborhoods in Franklin County and the Entire County

Characteristics	Franklin County	
	Food Insecure Neighborhoods	All Franklin County
% Population Under 18	27.48%	23.85%
% Population Over 65	8.29%	10.18%
% Black or African American	47.44%	20.90%
% Hispanic/Latino	9.60%	4.80%
% White	37.79%	66.90%
% Living below 200% Poverty	62.69%	35.50%
% Population of home owners with a mortgage who are housing cost burdened or severely housing cost burdened	47.23%	29.80%
% Population of renters who are housing cost burdened or severely housing cost burdened	52.03%	45.89%

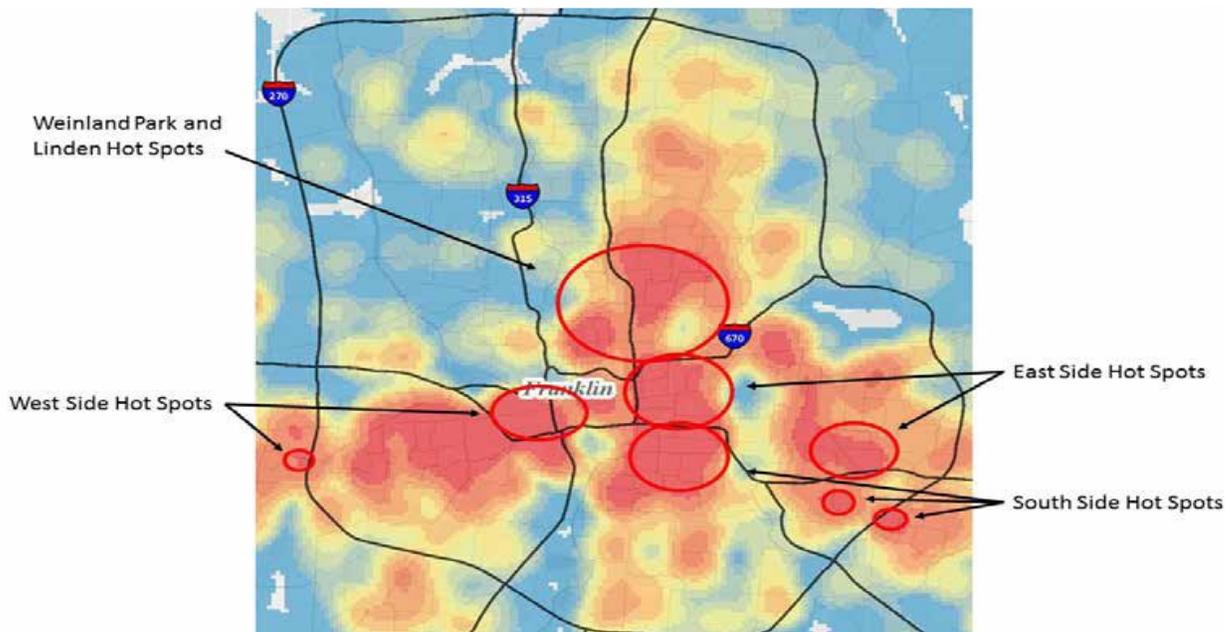
Challenges with the Traditional Approach to Measuring Food Insecurity

The traditional approach to measuring food insecurity presents several challenges when designing an integrated response to hunger at the county level. Food insecurity is measured with a self-report, retrospective survey assessing one’s perceptions of having inadequate food or money to purchase food in the previous 12 months. A household may depend heavily on government programs and/or charitable food assistance sources to feed all family members, yet disagree with questions on the food insecurity survey because meals were never or rarely missed due to high utilization of food assistance programs. To the contrary, a different household that utilizes government programs to adequately feed all family members could identify as food insecure, recognizing that the present stability would be gone if there was any reduction in government benefits. In either scenario, food insecurity is a perception of the individual, not an objective measurement of one’s lack of access to enough food for an active, healthy life for all household members.

Algorithm-based estimates of food insecurity also have limited utility when designing a county-level response to hunger. Poverty rates, unemployment rates, home ownership rates and median income have all been shown to be robust predictors of food insecurity. However, systematic economic improvements to a county or region are likely to take years, meaning food insecurity estimates are not

Figure 2. Highest Areas of Food Assistance Utilization in Franklin County

Source: Mid-Ohio Foodbank Client Centricity Study, 2014 Kirwan Institute.



likely to improve as a direct and rapid response to targeted county-level economic stimulus efforts. An effective initiative may lose support before it can generate data to demonstrate its impact. Also, because the accepted methodology for calculating food insecurity rates is to analyze the relationships between select indicators and food insecurity at the state level and apply the resulting coefficients to the counties, targeted economic improvements in a single county or region of the state may be mitigated by the overall state trends. This may again reduce the ability to measure the true impact of an integrated response to hunger at the county level.

Because of the challenges of subjectively measuring food insecurity perceptions with a predictive algorithm, more needs to be known about Franklin County residents' eligibility for and utilization of government and charitable food assistance programs. The next section examines various food programs' utilization by low-income Franklin County residents and opportunities to increase utilization rates among eligible Franklin County residents.

FOOD PROGRAM UTILIZATION AND GAPS

Many programs and systems exist to prevent individuals at risk of food insecurity from experiencing hunger. Government programs such as food stamps (SNAP), Women, Infants, and Children (WIC), Commodity Supplemental Food Program (CSFP), the free and reduced lunch programs in schools, and The Emergency Food Assistance Program (TEFAP) are designed to provide the basic needs for individuals who may not be self-sufficient. These programs are based on financial need and not all people experiencing food insecurity can qualify for these services. Table 1 summarizes the number of Franklin County residents at each poverty threshold who qualify for government and charitable assistance.

Below 130% of Poverty. SNAP eligibility is restricted to those whose income falls below the threshold of 130% poverty and financial assistance benefits are determined by several resource and income tests. CSFP is a federal nutrition assistance program for low-income elderly individuals and is also restricted to only those whose income is below 130% poverty. The National School Lunch Program provides free lunches to school-aged children of families who fall below 130% of poverty as well. WIC is available to pregnant women, postpartum and breastfeeding women, infants, and children up to their fifth birthday who meet certain eligibility requirements, including income up to 185% of poverty. TEFAP provides emergency food and nutritional assistance to low-income Ohioans whose income is below 200% poverty. Food pantries and other charitable food assistance is available at this income level.

Table 1. Estimated Number of Food Insecure People in Franklin County by Poverty Threshold

	Below 130% poverty	Between 130-185% poverty	Between 185-200% poverty
Franklin County Residents⁹	270,465	115,741	29,025
% of Total Franklin County Residents	23.10%	9.87%	2.48%
Example poverty guideline for 4 persons in family/household¹⁰	Less than \$31,005	Between \$31,005 and \$44,122	Between \$44,122 and \$47,700
Government Programs	SNAP		
	CSFP		
	WIC	WIC	
	Free School Lunch	Reduced Price School Lunch	
	TEFAP	TEFAP	TEFAP
Other Sources	Food Pantries and Charitable Assistance	Food Pantries and Charitable Assistance	Food Pantries and Charitable Assistance

Between 130-185% of Poverty. In this category, residents are no longer eligible for food assistance through SNAP benefits or CSFP. Free school lunches for school-aged children are replaced by reduced price school lunches. Eligibility for WIC benefits is identical to those residents whose income is under 130% of poverty. Eligibility for TEFAP, food pantries, and other charitable food assistance remains for those whose income is between 130-185% of poverty.

Above 185% of Poverty. At this ratio of income to poverty, eligibility for government food assistance programs is restricted to TEFAP. Those whose household income is categorized as above 185% of poverty and who experience food insecurity do not qualify for any other government programs listed and instead must rely on charitable or community food assistance resources.

⁹ American Community Survey 2014, 5-year Estimates, population for whom poverty status was determined.

¹⁰ 2014 Poverty Guidelines. U.S. Department of Health and Human Services. <https://aspe.hhs.gov/2014-poverty-guidelines#thresholds>

The emergency feeding network, which Mid-Ohio Foodbank is a part of, supplements the available government assistance programs by providing food assistance to residents who do not qualify for these government programs, but are living at or below 200% of poverty. Access to food pantries for non-TEFAP food distributions is typically, though not strictly, capped at the 200% of poverty threshold. However, Mid-Ohio Foodbank's network of agency partners adopt a policy for the client to self-declare that their income to poverty ratio is at or below 200%, meaning those who are food insecure and whose income is above 200% of poverty are not likely to be turned away by a Mid-Ohio Foodbank pantry or agency partner.

Franklin County Residents' Eligibility and Utilization Rates of Government Programs

It is beneficial to translate Franklin County's estimated percentage of food insecure individuals into actual population numbers. Table 2 displays the number of food insecure Franklin County residents who likely fall within each category of government assistance as determined by percentage of poverty. This is calculated by multiplying the estimated number of food insecure individuals (214,500¹¹) by the percentage of people who likely fall within each income eligibility categories for federal nutrition assistance (e.g., 54% of the 214,500 Franklin County residents who are food insecure likely have incomes below 130% poverty). The result is the estimated number of people within each poverty category who are food insecure. Next, the estimated number of food insecure residents is divided by the total number of Franklin County residents within the poverty category. As shown in Table 2, nearly half of residents (42.83%) whose income is below the 130% of poverty threshold are estimated to be food insecure. Approximately 1 in 5 residents (24.09%) between 130 and 185% of poverty are estimated to be food insecure, and less than 1 in 10 (9.30%) of all Franklin County residents above 185% of poverty are food insecure. Dividing the number of food insecure residents by the total number of Franklin County residents in each poverty category results in a percentage of the food insecure people in each income to poverty ratio category in Franklin County.

The results of Table 2 highlight meaningful trends related to poverty and food insecurity in Franklin County. Living below 130% of the federal poverty line makes one nearly five times more likely to be food insecure as those living above 185% of poverty. Residents living below 130% of poverty are twice as likely to be food insecure as those whose income is between 130 and 185% of poverty, even though those living below 130% of poverty have access to more comprehensive government programs, including food stamps, free school lunches, and CSFP for seniors. All children and some women living in Franklin County below 185% of the federal poverty line qualify for government food assistance programs. However, this population's high percentage of food insecurity confirms that government programs and/or food pantries are currently insufficient to create food security for all residents at these levels of poverty.

Another insight derived from the calculations in Table 2 relates to the percentage of *food secure* people living below 130% of poverty. According to these estimations, more than half of Franklin County residents living below 130% of poverty are food secure, meaning they would describe themselves as

¹¹ Map the Meal Gap. <http://map.feedingamerica.org/county/2014/overall/ohio/county/franklin>.

having enough food for an active, healthy life for all household members. This is counterintuitive to research conducted by the Kirwan Institute¹², Feeding America¹³, and numerous other studies that have shown poverty is a driving factor of food insecurity. As stated before, it could be that a low-income Franklin County resident feels food secure because the household has enough food without accessing any government programs or food pantries. Or, one may rate themselves food secure because consistently accessing government programs and food pantries has created food security for the household. The food insecurity estimations in Table 2 do not take into account the sources of a household's food. In addition, food security is known to change over time. For example, a family might indicate that they are food secure when surveyed but experience a shift to food insecurity throughout the year. Therefore, it is important to consider utilization of government programs and food pantries when attempting to understand the need for food assistance in Franklin County.

Table 2. Percentage of Food Insecure Franklin County Residents Within Each Income to Poverty Ratio Category

	Below 130% poverty	Between 130-185% poverty	Above 185% poverty	Total
Likely Income Eligibility Categories for Those who are Food Insecure ¹⁴	54%	13%	34%	
Estimated Number of Food Insecure Residents	115,830	27,885	72,930	214,500
Franklin County Residents ¹⁵	270,465	115,741	784,435	1,170,641
% of Food Insecure People in each Income to Poverty Ratio Category	42.83%	24.09%	9.30%	17.91% ¹⁶

Utilization Rates of Government Programs

The following tables summarize the eligibility and utilization of various government food assistance programs by Franklin County residents. As shown in Table 3, three out of every four (73.87%) Franklin County residents qualifying for SNAP are receiving these benefits. Table 4 summarizes the available utilization data of the National School Lunch Program (NSLP). Less than half (43.73%) of those who are eligible for Ohio WIC are utilizing this program (Table 5). Tables 6 and 7 report the CSFP and TEFAP distribution by Mid-Ohio Foodbank as a number of pounds per eligible resident, respectively.

¹² Mid-Ohio Foodbank Client Centricity Study. 2014 Kirwan Institute.

¹³ Gunderson, C., Dewey, A., Crumbaugh, A. S., Kato, M., & Engelhard, E. Map the Meal Gap 2016: Technical Brief. <http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/2014/2014-map-the-meal-gap-tech-brief.pdf>.

¹⁴ Map the Meal Gap. <http://map.feedingamerica.org/county/2014/overall/ohio/county/franklin>.

¹⁵ American Community Survey 2014, 5-year Estimates, population for whom poverty status was determined.

¹⁶ Map the Meal Gap estimates the number of food insecure individuals from the total estimated population of Franklin County residents, 1,197,592 in the American Community Survey 2014, 5-Year Estimates. However, income to poverty ratios used to estimate the number of residents below a certain threshold of poverty are tabulated in the ACS 2014 5-year Estimates with the total population for whom poverty status is determined, or 1,170,641. Map the Meal Gap 2014's food insecurity rate of 17.91% is reported in Table 2, though calculations in the Total column would actually estimate a food insecurity rate of 18.32%.

Table 3. SNAP Eligibility and Utilization

	Below 130% poverty	Between 130-185% poverty	Above 185% poverty	Total
Franklin County Residents	270,465	115,741	784,435	1,170,641
Number of participating residents	196,328 ¹⁷			196,328
% Utilization	72.59%			72.59%

The utilization rate for those qualifying for free and reduced lunches is difficult to estimate due to inconsistencies in the census poverty data and the most recent utilization data from the Ohio Department of Education. The Community Eligibility Provision allows all Columbus City Schools and select non-Columbus City Schools with high poverty rates to provide free breakfast and lunch to all students. Therefore, students enrolled in CEP schools who are not income eligible to participate in NSLP are utilizing the program and are included in the total participation statistics. Hence, the number of free lunches served far exceeds the number of school-aged children living below 130% of poverty, even after estimating the percentage of CEP students in each income to poverty ratio. The overall number of free and reduced lunches served estimates 56.7% of all school-aged children in Franklin County are utilizing this government program. However, utilization rates by students within specific percent of poverty eligibility categories are impossible to calculate with the data collected.

Table 4. National School Lunch Program Eligibility and Participation

	Below 130% poverty	Between 130-185% poverty	Above 185% poverty	Total
Franklin County Residents Ages 5 to 17 ¹⁸	58,714	22,324	115,081	196,119
Columbus City Schools <i>Community Eligibility Provision</i>	30,536 ¹⁹	2,306	15,459	48,301
Non-Columbus City Schools <i>Community Eligibility Provision</i>	4,930 ²⁰	254	1,701	6,885
Non-Columbus City Schools <i>Free or Reduced School Lunch</i>	49,235	6,820		56,055
Number of Participating Students	84,701	9,380	17,160	111,241

¹⁷ Ohio Department of Job & Family Services, June 2016 data.

¹⁸ American Community Survey 2014, 5-year Estimates, population for whom poverty status was determined. Percent of poverty data is available for children ages 6 to 17. The number of children 5 years of age is estimated.

¹⁹ Estimates based on Community Eligibility Provision (CEP) eligibility rate of 63.22% for all Columbus City Schools. Estimates between 130-185% poverty and above 185% poverty are based on NSLP utilization rates for free and reduced lunches, Ohio Department of Education, October 2012 data. Total enrollment in Columbus City Schools reflects FY16 enrollment (ODE October 2015 data).

²⁰ Estimates based on CEP eligibility rate of 71.60% for all non-Columbus City Schools. Estimates between 130-185% poverty and above 185% poverty are based on NSLP utilization rates for free and reduced lunches, ODE, October 2012 data. Total enrollment in non-Columbus City Schools reflects FY-2016 enrollment (ODE October 2015 data).

Table 5. Women, Infants, and Children (WIC) Eligibility and Utilization

	Below 130% poverty	Between 130- 185% poverty	Above 185% poverty	Total
Potentially Income Eligible ²¹				
Women	15,379			
Infants & Children (1-5)	53,080			68,459
Number of participating residents ²²				
Women	8,149			
Infants & Children (1-5)	27,187			35,336
% Utilization				
Women	52.99%			
Infants & Children (1-5)	51.22%			51.62%

Table 6. Commodity Supplemental Food Program Eligibility and Utilization

	Below 130% poverty	Between 130- 185% poverty	Above 185% poverty	Total
Franklin County Residents				
Age 60 or Older	12,403	10,902	2,786	26,091
Number of pounds distributed by Mid-Ohio Foodbank ²³	588,533			588,533
Average pounds per eligible resident	47.45 lbs			47.45 lbs

Table 7. TEFAP Eligibility and Utilization

	Below 130% poverty	Between 130- 185% poverty	Between 185- 200% poverty	Total
Franklin County Residents	270,465	115,741	29,025	415,231
Number of pounds distributed by Mid-Ohio Foodbank ²⁴				3,131,150
Average pounds per eligible resident				7.54 lbs

Overall, there are an estimated 325,745 cases of Franklin County residents accessing government food assistance programs through either SNAP, WIC, or free and reduced school lunch, and an additional 55.0 pounds of food distributed per eligible resident from CSFP and TEFAP. Many of these cases are likely

²¹ Calculated with Ohio Department of Health WIC Potential Eligibility Estimator, Measurement Resources Company, 2014.

²² Ohio Department of Health – Bureau of Nutrition Services. WIC Initial Participation Report, through August 2016. Retrieved from Ohio Department of Health in September 2016. Reported numbers of enrolled Women, Infants, and Children are August 2016 enrollment statistics. The average total participants during FY16 equals 35,159, or 51.36% of the estimated eligible participants in Franklin County.

²³ Mid-Ohio Foodbank distributions to Franklin County residents, CY-2015.

²⁴ Mid-Ohio Foodbank distributions to Franklin County residents, CY-2015.

duplicated, such as female-headed households who receive SNAP benefits, WIC benefits for children under the age of five, and free or reduced school lunches for school-aged children in the home. The data cannot be combined to determine the household duplication rate in the records. In addition, it is known that NSLP utilization data below 130% of poverty is an overestimate. In sum, the total number of Franklin County residents eligible to participate in these government programs is 386,206, which makes the overall utilization of government food assistance programs no higher than 84.34%. Table 8 summarizes this data²⁵.

Table 8. Eligibility and Utilization of All Government Programs by Franklin County Residents

	Below 130% poverty	Between 130-185% poverty	Above 185% poverty	Total
Eligible for Government Programs (<185% poverty)	270,465	115,741		386,206
Duplicated Utilization of Government Programs				325,745
SNAP	196,328			
National School Lunch Program	84,701	9,380		
WIC	35,336			
% Maximum Overall Utilization of Government Programs				84.34%

Overall, up to 84% of Franklin County residents who qualify for government food programs are accessing at least one of these government food assistance programs. However, these food benefits are not sufficient to provide food for Franklin County residents, as demonstrated by the 17.9% of Franklin County residents experiencing food insecurity.

Franklin County Residents' Food Pantry Utilization and Charitable Food Response

Unlike most government programs, food pantries and charitable food assistance are available to any individual living under 200% of poverty. In Franklin County, these residents represent more than 35% of the population. According to data collected through Mid-Ohio Foodbank's PantryTrak data system, 195,044 Franklin County residents (approximately 17% of all Franklin County residents) receive food assistance from one of Mid-Ohio Foodbank or a partner's pantries annually²⁶. Table 9 demonstrates that nearly half (47%) of those individuals who are income eligible to receive food assistance services through Mid-Ohio Foodbank are receiving them. However, the PantryTrak data system was not fully implemented to capture all of the Mid-Ohio Foodbank's services in 2015, so data in Table 9 are an underestimation of the number of Franklin County residents served by a network pantry annually. Estimates from Mid-Ohio Foodbank's comprehensive client data tracking suggest approximately 71% of services in 2015 were recorded in PantryTrak. Extrapolating from this percentage, it is estimated that

²⁵ Because CSFP and TEFAP data are recorded as the number of pounds distributed and not the number of participating individuals, CSFP and TEFAP programs are excluded from this estimation.

²⁶ Mid-Ohio Foodbank distributions to Franklin County residents, CY-2015.

the Mid-Ohio Foodbank and its partnering agencies served 274,000 Franklin County residents in 2015, or approximately 66% of the eligible population.

Table 9. Eligibility and Utilization of Mid-Ohio Foodbank

	Below 130% poverty	Between 130-185% poverty	Between 185-200% poverty	Actual	Estimate
Mid-Ohio Foodbank Eligible Population	270,465	115,741	29,025	415,231	415,231
Number of Franklin County PantryTrak clients				195,044 ²⁷	274,000
% Utilization by those Eligible				46.97%	65.99%

Summary of Utilization and Eligibility Data

Franklin County residents are utilizing many of their available resources to access food, yet it's estimated that 214,500 Franklin County residents are food insecure. However, as stated before, estimates of food insecurity do not take into account a household's sources of food. Food insecure individuals may be utilizing all of their available government programs and food pantry and charitable resources and still feel food insecure. Or, food insecure individuals may not be utilizing any or all of their resources, which presents opportunities for service providers to provide food assistance. Unfortunately, there is no reliable way to combine the unique data sources to calculate the percentage of food insecure individuals who are receiving food assistance. It is approximated that as many as 84% of eligible residents are utilizing government programs and approximately 66% of eligible residents are using food pantries.

The next section outlines a different method to calculate hunger: missing meals.

MEASURING HUNGER WITH MEAL GAPS AND BUDGET SHORTFALLS

In addition to the annual food insecurity calculations, estimates of food budget shortfalls experienced by food insecure individuals and the cost-of-food index at the county level are published annually. Combined, these calculations can help to inform the financial impact of the estimated missing meals experienced by food insecure Franklin County residents.

For example, Map the Meal Gap reports the estimated food budget shortfall experienced by food insecure households. This amount is calculated at the individual level and averaged, resulting in an estimated weekly food budget shortage per person. Nationally, the average weekly food budget shortfall is \$16.28²⁸. This number is used to calculate the total additional money required to meet food needs of a targeted population. In Franklin County, \$106,961,000 is required annually to meet the food needs of all food insecure residents. Per person, this equates to an average annual food budget shortfall of \$498.65. Table 10 summarizes the estimated food budget shortfall calculations for Franklin County.

²⁷ This is known to be an underestimation of the number of Franklin County residents served by a Mid-Ohio Foodbank network pantry in 2015.

²⁸ Map the Meal Gap. <http://map.feedingamerica.org/county/2014/overall/ohio/county/franklin>.

Table 10. Average Food Budget Shortfall Per Food Insecure Person in Franklin County

	Total
Additional money required to meet food needs in Franklin County ²⁹	\$106,961,000
Food Insecure People in Franklin County ³⁰	214,500
Average Annual Food Budget Shortfall Per Person	\$498.65

The average food budget shortfall of \$498.65 per person is significant. Food insecurity calculations take into account all of the ways people access food, including food purchased with one’s own money, government assistance programs, pantry visits and any other family or community food access points. This budget shortfall for food insecure Franklin County residents represents a meaningful need for food assistance that remains after all other resources are taken into account.

Another way to examine these data is to consider the number of meals that a food insecure individual is missing because there is insufficient access to food at every meal. Map the Meal Gap’s cost-of-food index calculations resulted in an average meal cost in Franklin County of \$2.82 per meal³¹. As shown in Table 11, the average cost of a meal in Franklin County divides into the weekly food budget shortfall per person. The resulting meal gap is an average of 3.40 meals per week for food insecure residents. Based on 21 meals per week (three meals per day × seven days per week), a meal gap of 3.40 meals per week equates to Franklin County residents missing an estimated 16.2% of meals weekly due to food insecurity.

Table 11. Average Meal Gap Per Week for Every Food Insecure Person in Franklin County

	Total
Average Annual Food Budget Shortfall Per Person	\$498.65
Weekly Food Budget Shortfall Per Person	\$9.59
Average Meal Cost in Franklin County	\$2.82
Average Weekly Meal Gap for Food Insecure Residents	3.40 meals

Limitations to Current Meal Gap Estimations

The primary limitation to this estimate of 3.40 meals missed weekly is that average food budget shortfall estimates are exclusively reported by individuals who identify as food insecure. As previously stated, food insecurity is clearly *defined* as the lack of access, at times, to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods. However, food insecurity is *measured* as a subjective perception of having inadequate food or money to purchase food. In the Current Population Survey (CPS) Food Security Supplement questionnaire, the entire sample was asked, “About how much MORE would you need to spend each week to buy just enough food to meet the needs of your household?” However, the analysis of food budget shortfall was

²⁹ Map the Meal Gap. <http://map.feedingamerica.org/county/2014/overall/ohio/county/franklin>.

³⁰ Map the Meal Gap. <http://map.feedingamerica.org/county/2014/overall/ohio/county/franklin>.

³¹ Map the Meal Gap. <http://map.feedingamerica.org/county/2014/overall/ohio/county/franklin>.

restricted to those who identified themselves as food insecure over the previous 12 months. This likely biases the food budget shortfall estimation, but it is impossible to calculate the magnitude or direction of error because the inclusion criteria (i.e., viewing oneself as food insecure) is not consistently measured; households with identical utilization of food assistance programs can respond as either food *insecure* or food *secure*, but only the *food insecure* family's data would be included. In addition, the estimate of 3.40 meals missed weekly by food insecure Franklin County residents, like all algorithm-based food insecurity estimations, is not likely to decrease unless other economic determinants in the equation are significantly impacted over time. Changes over time to this estimated meal gap provide increased accessibility for tracking at the county level, but the cause of the change is not defined. Local interventions to decrease the meal gap cannot be directly linked to movement in the estimated meal gap because it is calculated with the same perception-based food insecurity data.

A NEW APPROACH: FRANKLIN COUNTY MISSING MEALS INDEX

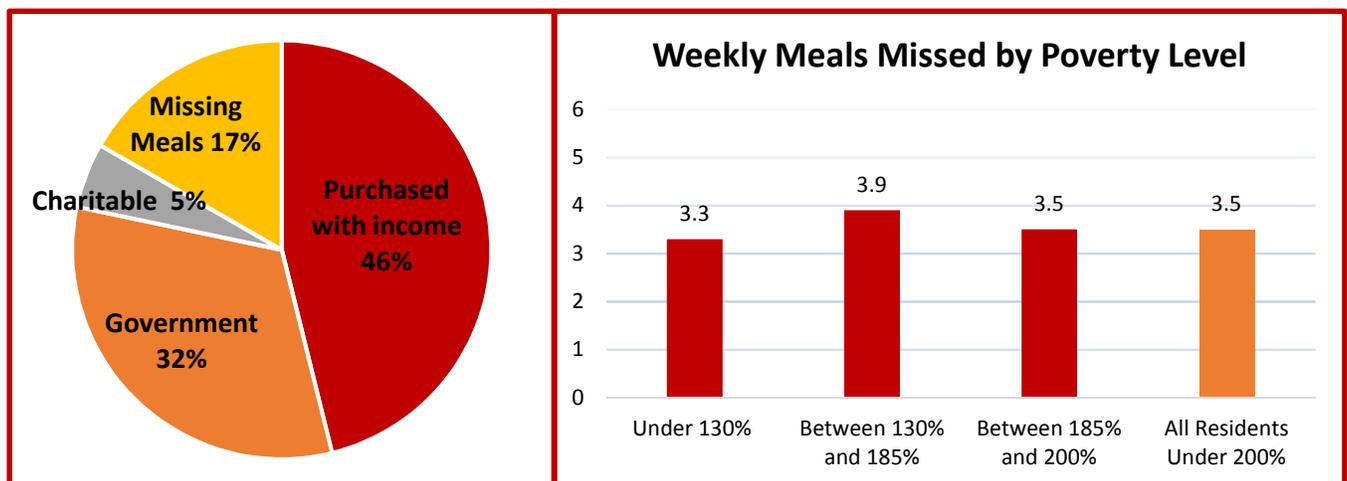
A new approach to uncovering the true need for food assistance in Franklin County is to estimate the meal gap locally, rather than relying on annual estimates published by national researchers. Franklin County's meal gap can be estimated by:

1. Totaling the number of meals that local, low-income families need
2. Subtracting the number of meals purchased with earnings, and
3. Subtracting the number of meals received through food assistance programs.

The result is the number of missing meals for all low-income individuals in Franklin County, which often translates into skipping a meal or going to bed hungry. This can be tracked and evaluated as the total number of missing meals, a percentage of the needed meals, and/or the number of missing meals per person on an annual or weekly basis. Table 12 summarizes the results of the Franklin County Missing Meals Index.

Table 12. Franklin County Missing Meals Index: Estimating the True Need for Food Assistance

Franklin County Missing Meals Index				
	Under 130% Poverty	Between 130-185% Poverty	Between 185-200% Poverty	TOTAL
Total Meals Needed per Year <i># of people * 3 meals per day</i>	296,159,175	126,736,395	31,782,375	454,677,945
Meals Purchased by Low-Income Individuals <i>\$ spent on food ÷ cost per meal</i>	95,618,347	90,440,795	22,557,846	208,616,988
	32.3%	71.4%	71.0%	45.9%
Meals Provided by Government Resources <i># of meals provided by SNAP, WIC, NSLP, etc.</i>	137,816,766	8,381,972	1,791,428	147,990,166
	46.5%	6.6%	5.6%	32.5%
SNAP <i>% of total meals needed</i>	108,308,955 36.6%			108,308,955
WIC <i>% of total meals needed</i>	5,275,457 1.8%	2,257,544 1.8%		7,533,001
NSLP <i>% of total meals needed</i>	21,870,338 7.4%	5,626,965 4.4%	1,551,171 4.9%	29,048,474
TEFAP <i>% of total meals needed</i>	1,871,572 0.6%	497,463 0.4%	240,257 0.8%	2,609,292
CSFP <i>% of total meals needed</i>	490,444 0.2%			490,444
Meals Provided by Food Pantries and other Charitable Sources <i># of meals provided by Pantries, etc.</i>	16,216,847	4,310,428	2,081,788	22,609,062
	5.5%	3.4%	6.6%	5.0%
Number of Missing Meals	46,507,215	23,603,201	5,351,313	75,461,729
<i>% of total meals needed</i>				16.6%
Missing meals per person, weekly	3.3	3.9	3.5	3.5



The Franklin County Missing Meals Index is calculated with the following inputs.

Total Meals Needed per Year. The total number of people whose income falls below 200% of poverty is multiplied by three meals per day, annually. The result is nearly 455 million meals needed to feed Franklin County residents living below 200% of poverty.

Meals Purchased by Low-Income Individuals. Bureau of Labor Statistics Consumer Expenditure Survey³² data are used to calculate the amount of money spent on food by families in the given poverty categories. The number of meals is calculated by dividing the total amount of money spent on food by the average cost of a meal in Franklin County, or \$2.82 per meal. This estimate includes payments for food with SNAP and WIC vouchers, which are estimated separately and then subtracted from this category. The result is the estimated number of meals low-income Franklin County residents purchase with their own money in a given year, which equates to roughly 209 million meals.

Meals Provided by Government Resources. Utilization rates and average expenditure data for SNAP, WIC, National School Lunch Program, and CSFP and TEFAP distributions by the Mid-Ohio Foodbank are analyzed to translate each data source into an estimation of the number of meals provided. Annually, Franklin County residents receive approximately 148 million meals from government sources.

Meals Provided by Food Pantries and Other Charitable Resources. Food distribution data for the Mid-Ohio Foodbank, partner agencies, and other charitable resources are analyzed to translate each data source into an estimation of the number of meals provided. Annually, Franklin County residents receive approximately 23 million meals from food pantries and charitable sources.

Number of Missing Meals. The number of missing meals is calculated by subtracting the meals purchased and meals provided by government and other charitable sources from the total meals needed by low-income individuals per year. In Franklin County, the number of missing meals is estimated to be approximately 75.5 million meals. This equates to 3.5 missing meals per person every week, or approximately 16.6% of low-income Franklin County residents' meals. Because food insecurity is known to affect families for seven months of the year, on average, this weekly estimate year-round is more likely to be seasonally amplified. A common example is the increased hardship experienced during the summer months when school-aged children do not have access to free and reduced school lunches. Franklin County residents are likely missing far more than 16.6% of their meals during these leaner months.

Inferences and Learnings from the Franklin County Missing Meals Index

The Franklin County Missing Meals Index provides many insights about low-income Franklin County residents' need for food assistance not previously summarized in a single tool. Feeding America estimates that approximately one in every five Franklin County residents is food insecure, but the magnitude of need is not defined. The Franklin County Missing Meals Index estimates that an

³² Bureau of Labor Statistics Consumer Expenditure Survey. Table 1202, 3rd quarter 2014 through 2nd quarter 2015.

additional 16.6% of meals are needed to close the meal gap for all residents under 200% of poverty, not just those who perceive themselves to be food insecure.

Also, identifying the source of meals – meals purchased, government assistance, and charitable assistance – as a percentage of the total informs how a local response to hunger can best close the gap in its community. For example, Mid-Ohio Foodbank currently provides approximately 5.0% of meals to Franklin County residents below 200% of poverty. For Mid-Ohio Foodbank to close the 16.6% missing meal gap alone requires quadrupling their distribution. Alternatively, it is estimated that low-income residents purchase only 45.9% of their meals. Advocacy for increased wages may result in households purchasing more food; a 36% increase in meals purchased with earnings would close the meal gap. However, advocacy for increased wages without similar advocacy for revised thresholds to access government food programs may disqualify some residents from SNAP or other food assistance, ultimately decreasing their access to food. Estimating the source of meals for low-income residents informs strategic local interventions.

Value as an Impact Tool. The Franklin County Missing Meals Index is most powerful as an impact tool. The index is based on publicly available and timely data specific to Franklin County residents and calculations are easily updated annually to track the meal gap over time. The index provides specific insight into the source of change in the meal gap, whether it be changes in the purchase of food with earnings or in the utilization of government or charitable food benefits. This index reliably measures the magnitude of the meal gap without needing to account for perceptions of food insecurity. More importantly, it provides a highly reliable outcome measure of a targeted response to hunger at the local level. Year over year, updating the index will inform strategic interventions and serve to measure interventions' impact over time.

Similarities to Other Meal Gap Estimates. The Franklin County Missing Meals Index and Feeding America's meal gap estimates are quite similar, even though they are derived through completely different methodologies. Feeding America's estimate of 3.4 missing meals per week is nearly identical to the Franklin County Missing Meals Index estimate of 3.5 meals per person. This provides evidence that both methodologies are measuring similar constructs. Changes in the metrics over time will inform whether both are reliable and valid measures of the meal gap in Franklin County.

Differences from Other Meal Gap Estimates. Food insecurity estimates find that the majority (54%) of food insecure individuals in Franklin County are below 130% of poverty. However, the Franklin County Missing Meals Index estimates similar meal gaps for all three ratio of income to poverty bands, with a marginally smaller meal gap for those living below 130% of poverty due to their access to SNAP and other government and charitable assistance. The largest meal gap for any ratio of income to poverty band in the Franklin County Missing Meals Index is for those between 130 and 185% of poverty: they are estimated to miss 3.9 meals, or 18.6% of their weekly meals. This is counterintuitive and suggests that the level of deprivation of those lower in the income spectrum is *less* than those higher in the income spectrum. But upon careful review, loss of SNAP access appears to marginally increase residents' need for food assistance above 130% of poverty. The increase in need implicates a modest

benefits cliff effect for residents who no longer qualify for SNAP but have little more income to purchase food.

Estimations of food insecurity are known to be valid and reliable measures of one's perceived lack of access, at times, to enough food for an active, healthy life. The methodology is limited, however, in measuring the magnitude of the need in those who perceive themselves to lack access to sufficient food. If a local community were to implement a response to hunger based on food insecurity estimates, most of the attention would be given to those lower in the income spectrum under 130% of poverty. But if a community were to address the need for food assistance, independent of whether a family perceives themselves to be food insecure, the Franklin County Missing Meals Index suggests that all those living below 200% of poverty are in need. It is probable that nearly all low-income Franklin County residents experience meaningful challenges, at times, to accessing food. Rather than focus on one group to the exclusion of others, the research summarized in this report and discovered through the Franklin County Missing Meals Index suggests that no category or group of low-income residents should be excluded from a targeted response to hunger.

Benefits of the Franklin County Missing Meals Index

Measuring the true need for food assistance in Franklin County with the number of missing meals has several advantages compared to algorithm-based estimations. First, all of the data needed to calculate the number of missing meals is publicly available and published semi-annually or annually, making the tool easy to update. Food assistance trends and overall pantry distribution performance can be tracked locally without waiting on newly released national studies. Second, measuring the outcome as the number of missing meals, not the percentage of people in need, aligns to how food is distributed from pantries: meals required to feed those in need. Algorithm-based estimations of food insecure people take into account racial, economic, and other demographic indicators to predict who may need food. The most robust correlates to food insecurity are poverty and unemployment. Until those economic factors systematically improve, there may be little movement in algorithm-based estimations of food insecurity, even if the total number of missing meals is shifting dramatically with greater utilization of government food assistance programs and/or pantries. The advantages of this calculator and its metrics may prove beneficial to the Mid-Ohio Foodbank and their partners when measuring their progress feeding the line while simultaneously working to end the line.

SUMMARY

Franklin County residents who are food insecure are utilizing many of their available resources to access food. Of those who are eligible for government food assistance programs, utilization rates range from 51 to 74% in specific government programs. The Mid-Ohio Foodbank has served approximately 66% of those eligible to access food pantries in Franklin County. Yet, 17.9% of Franklin County residents remain food insecure. Of these individuals, multiple calculations of the average weekly meal gap result in similar estimates, from 3.5 (from Franklin County Missing Meals Index calculator) to 3.4 missed meals (Map the Meal Gap 2014 data), suggesting many opportunities remain to bring food assistance to food insecure Franklin County residents and close the meal gap.

Closing the Franklin County meal gap could take several forms. For a charitable organization like Mid-Ohio Foodbank to close the 16.6% gap on its own, their food distribution would need to more than quadruple from providing 5.0% to 21.6% of low-income residents' meals. If SNAP utilization increased from 72.59% to 100% of those eligible, the meal gap would only close by 41 million meals, well short of the 75.5 million meal gap estimated in Franklin County and without helping those whose household incomes are above 130% of poverty, the SNAP eligibility threshold. For low-income residents to close the meal gap on their own by paying for more of their own food, an additional \$212.8 million is needed in earnings. A single response to hunger in Franklin County, therefore, is likely not sufficient. But a tool now exists to measure the impact of targeted and sustained interventions from multiple stakeholders and the ability of these efforts to close the meal gap. Using the Franklin County Missing Meals Index, Mid-Ohio Foodbank and its partners can measure Franklin County's meal gap over time and assess the impact of its response to hunger on those Franklin County residents most in need of food assistance.

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APPENDIX A. FOOD INSECURITY MEASURE

1. “We worried whether our food would run out before we got money to buy more.” Was that often, sometimes, or never true for you in the last 12 months?
2. “The food that we bought just didn’t last and we didn’t have money to get more.” Was that often, sometimes, or never true for you in the last 12 months?
3. “We couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for you in the last 12 months?
4. In the last 12 months, did you or other adults in the household ever cut the size of your meals or skip meals because there wasn’t enough money for food? (Yes/No)
5. (If yes to question 4) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?
6. In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money for food? (Yes/No)
7. In the last 12 months, were you ever hungry, but didn’t eat, because there wasn’t enough money for food? (Yes/No)
8. In the last 12 months, did you lose weight because there wasn’t enough money for food? (Yes/No)
9. In the last 12 months did you or other adults in your household ever not eat for a whole day because there wasn’t enough money for food? (Yes/No)
10. (If yes to question 9) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?

(Questions 11-18 were asked only if the household included children age 0-17)

11. “We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food.” Was that often, sometimes, or never true for you in the last 12 months?
12. “We couldn’t feed our children a balanced meal, because we couldn’t afford that.” Was that often, sometimes, or never true for you in the last 12 months?
13. “The children were not eating enough because we just couldn’t afford enough food.” Was that often, sometimes, or never true for you in the last 12 months?
14. In the last 12 months, did you ever cut the size of any of the children’s meals because there wasn’t enough money for food? (Yes/No)
15. In the last 12 months, were the children ever hungry but you just couldn’t afford more food? (Yes/No)
16. In the last 12 months, did any of the children ever skip a meal because there wasn’t enough money for food? (Yes/No)
17. (If yes to question 16) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?
18. In the last 12 months did any of the children ever not eat for a whole day because there wasn’t enough money for food? (Yes/No)