

FOOD INSECURITY IN SANTA CRUZ COUNTY

2020 Update to Santa Cruz County's Food Insecurity Index: The First Year of the COVID-19 Pandemic

David Amaral Heather Bullock Eva Bertram MARCH 2022 Volume 3



Overview

Since 2019, the Blum Center on Poverty, Social Enterprise, and Participatory Governance at the University of California, Santa Cruz and Second Harvest Food Bank of Santa Cruz County have worked together to estimate food insecurity in Santa Cruz County. We base our estimates on a *food insecurity index* that is designed to accurately estimate and track the prevalence of food insecurity in the county and to assess efforts by the food bank, community partners, and government nutrition programs to meet local food assistance needs. Our goals in tracking annual rates of food insecurity in Santa Cruz County are to (1) inform the public about local need and (2) provide a metric for evaluating countywide progress toward reducing food insecurity.

Food insecurity occurs when a household lacks reliable access to sufficient nutritious food to maintain a healthy diet and lifestyle. Food insecurity encompasses a range of challenges, from missed meals, running out of groceries and not having money to purchase more food, to the anxiety that is experienced when access to food is uncertain. Experiences of food insecurity may be temporary or chronic. A large body of research documents that food insecurity, in its many forms, is associated with adverse physical and mental health outcomes for both children and adults, including asthma, depression, diabetes, hypertension, and behavioral issues (Drenner et al., 2019; Gundersen & Ziliak, 2015; Seligman et al., 2010; Stuff et al., 2004; Thomas et al., 2019; Whitaker et al., 2006). Alleviating food insecurity reduces these negative effects, contributing to improved health, educational attainment, and economic mobility in the short-term and decades later (Bailey et al., 2020; Bitler & Figinski, 2019).

In 2020, 10.5% of U.S. households experienced food insecurity, with families with children (14.8%), and African American (21.7%), and Latinx or Hispanic¹(17.2%) households experiencing even higher rates of food insecurity (Coleman-Jensen et al., 2021). Despite its prevalence, food insecurity receives limited media attention. A notable exception occurred during the early months of the COVID-19 pandemic, when the dramatic spike in food insecurity resulted in increased national media coverage and heightened public concern²

We confronted multiple challenges to updating our estimates for the fiscal year extending from July 2019 through June 2020. In addition to limited data availability, the index is a measure of annual rates and was not developed to trace sudden fluctuations in need such as those brought on by the pandemic. Despite these challenges, we are confident in the updated estimates of food insecurity provided in this report and the methodological revisions reported here (see Notes on Methodology). We hope that our findings will inform efforts to reduce food insecurity in Santa Cruz County, and galvanize the resources and public commitment needed to do so.

 $[\]frac{1}{2}$ "Hispanic" is the category used by the USDA and can include members of any racial group.

² For example, see New York Times photo-journalism by Brenda Ann Kenneally (2020).

County Food Insecurity in Fiscal Year 2019-2020

In the 2019-20 fiscal year, we estimate that approximately 41,000 households (consisting of approximately 92,000 individuals) were at risk of food insecurity in Santa Cruz County. This "at risk" population - defined as all households earning under \$75,000 annually - represents 1 in every 3 county residents. Based on data from the U.S. Bureau of Economic Analysis, we estimate that this population purchased approximately 61% of the food needed to ensure that each household member received three healthy meals a day each day of the year.

Food assistance programs in the county provided the equivalent of more than 30 million meals over the course of the year to help fill the gap between meals purchased and meals needed. Assistance through CalFresh, California's Supplemental Nutrition Assistance Program (SNAP), was the largest single source of food assistance meals, providing 42% of all assistance meals over the course of the year. Second Harvest Food Bank and its nonprofit and community partners were responsible for distributing about 32% of annual food assistance meals. School meals (provided through the School Nutrition Program and the Summer Meals Program, along with the Child and Adult Care Food Program) distributed about 22% of all assistance meals in the county over the year, while the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provided about 4% of county assistance meals.



Food Assistance Meals by Source, Fiscal Year 2019-20

Despite these significant contributions to reducing food insecurity, we estimate that there remained over 9 million "missed meals" in Santa Cruz County over the course of the year. If these missed meals were distributed equally across the entire at-risk population, each individual would have missed about 2 meals each week of the year. However, it is unlikely that need was evenly distributed. Some households included in our at risk population may have experienced little or no food insecurity, while others likely missed more than 2 meals a week per person. Moreover, given that food insecurity is often experienced episodically, we expect that for many county households, access to nutritious food fluctuated over the course of the year, likely spiking during times of high unemployment such as April 2020.



Total Meals Required in Fiscal Year 2019-20: 102,575,570

Over the course of the 2019-20 fiscal year, we estimate that 23% of the need for assistance went unmet. Although this is the lowest level of unmet need of any year included in the analysis, these results call attention to the enduring need for expanded food assistance in Santa Cruz County.

Trends in Need and Assistance, 2014-2020

Comparing results from the food insecurity index across multiple years allows us to identify trends and fluctuations in levels of local need and assistance distributed. One recurring trend, and one that we observed in previous analyses, is that the level of meals required by the population at risk steadily declined over the six years examined. Since the total meals required reflects the number

Note: Each block represents approximately one million meals.

of meals needed to ensure access to three meals a day for each individual at risk, this decline directly reflects the decreasing number of county households earning under \$75,000 annually. Although our analysis does not directly probe the causes for this decline, it is likely that rapidly rising housing costs in Santa Cruz County are driving out lower-income households, among other contributing factors.³



In fiscal year 2019-20, significant increases in food assistance - both from state-administered programs and food bank and community efforts - led to the lowest levels of unmet need and missed meals of all years analyzed. Cumulatively, *5 million more food assistance meals* were distributed in fiscal year 2019-20 than in 2018-19, a 23% total increase in assistance over the previous year. Meals purchased through CalFresh, the largest single source of food assistance meals provided by Second Harvest Food Bank and its community partners increased by more than 21% to provide 1.8 million more meals than this group had the previous year. School meals programs distributed more than 2 million additional meals than the year before, an increase of 53%.

³ According to the American Community Survey conducted by the U.S. Census Bureau, the median housing cost in Santa Cruz County increased 20% over the five years between 2015 and 2019.



Without this significant increase in assistance, food insecurity would have been even greater in Santa Cruz County over the course of the year. Had countywide food assistance remained at fiscal year 2018-19 levels, it would have meant 5.8 million more missed meals in the county, which would equate to an additional meal missed each week by the more than 92,000 individuals among the population at risk. Instead, food assistance providers dramatically increased the level of assistance distributed in the county and in doing so, reduced unmet need to the lowest levels yet observed.

Summary and Implications

Our most recent food insecurity findings have important implications for how we understand and respond to food insecurity in Santa Cruz County. First, food insecurity remains prevalent in the county, and much need for food assistance goes unmet. It is important to keep in mind that the timespan of this analysis includes only the earliest months of the pandemic. As the pandemic and its attendant social and economic disruptions persist, local food insecurity and need for assistance have remained higher than the pre-pandemic levels. Many households that had never experienced food insecurity found themselves - often due to wage or job loss, and high, inflexible housing costs - in need of assistance.

Findings from our analysis of fiscal year 2019-20 demonstrate that meeting the need for food assistance in Santa Cruz County is not an insurmountable challenge. The collective efforts of government and community-based food assistance programs distributed the equivalent of 5

million *more* meals than had been provided the previous year. And, as the following chart illustrates, both CalFresh and the Second Harvest Food Bank quickly responded to the sudden demand for assistance brought on by the COVID-19 pandemic. Significant outreach conducted by the food bank and community partners to increase CalFresh enrollment among eligible county residents likely contributed to the program's expanded reach. We believe that with continued commitment and collaboration coupled with sufficient financial investment, food assistance programs can reduce experiences of food insecurity.



estimate for pounds of food per meal.

Looking ahead, both new challenges and opportunities are on the horizon. The child tax credit - which has reduced rates of child poverty and food insecurity - expired at the end of 2021.⁴ The loss of this financial assistance will lead to increased need for assistance among families with children at risk of food insecurity. Inflation and rising food prices pose additional challenges, limiting the reach of financial assistance programs such as CalFresh while also creating new pressures for food banks, which often serve as the safety net of last resort for protecting against hunger and food insufficiency (Schwartz & Marcos, 2021).

Increased federal and state government assistance is poised to assist food insecure households. In 2021, the USDA's *thrifty meal plan* - through which SNAP and CalFresh benefits are determined - was increased to reflect higher food costs and this, in turn, resulted in increased assistance for

⁴ Analysis by the Social Policy Institute at Washington University indicates that two thirds of parents intended to use assistance from the tax credit to purchase food and other living necessities (Hamilton et al., 2021).

participating households (U.S. Department of Agriculture, 2021). This year, the California legislature also initiated "the largest free student lunch program in the country" (Associated Press, 2021) by making free meals available to all students without eligibility requirements, a move that will both alleviate food insecurity and help reduce stigma associated with assistance programs.

Santa Cruz County is fortunate to have a well-integrated and collaborative network of food assistance providers, and this dense organizational ecosystem is surely one reason so much of the need for assistance was met during the fiscal year in which the pandemic struck. The food bank and its agency partners strive to develop trusting relationships with diverse communities throughout the county to make food assistance accessible. Many providers expressed hope that the significant increase in need and assistance program participation during the early months of the pandemic (along with the shift in public awareness and conversation) will decrease the stigma associated with food assistance. Across the country, as participation in SNAP and community-based assistance programs remain at heightened levels, it may be difficult to disentangle increased need from increased willingness to participate in such programs (Reiley, 2021).

In the years ahead, we look forward to continuing to calculate the food insecurity index for Santa Cruz County. We hope our findings inform local policymakers, service providers, key stakeholders, and the community about the prevalence of food insecurity in Santa Cruz County, and about the need for greater access to healthy food for all residents of Santa Cruz County.

Notes on Methodology

The food insecurity index tool used in this analysis was refined by the Blum Center on Poverty, Social Enterprise, and Participatory Governance in collaboration with Second Harvest Food Bank of Santa Cruz County.⁵ For complete details on the methodology, please see Amaral and Bullock (2021).

Calculating the index begins by estimating the population at risk of food insecurity in a particular county. Our population at risk includes all Santa Cruz County households earning under \$75,000 annually. Using data collected by the U.S. Bureau of Labor Statistics on spending patterns by income group, we estimate the number of meals these households are likely able to purchase for themselves. We do so using the specific cost of a meal for Santa Cruz County (see below). Finally, we determine how much of the gap between the meals these households need and the meals they can afford is closed by food assistance provided by governmental programs (CalFresh, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the School Nutrition Program, School Meals Program, and the Child and Adult Care Food Program (CACFP), and from the county food bank and select nonprofit assistance organizations. As a result, we are able to estimate the percentage of need that goes unmet through assistance efforts, and approximate the number of meals missed in the county.

⁵ We are indebted to Michael Enos for his initial development of the food insecurity index, and his ongoing guidance and support.

To further refine our measurements, the following three modifications to our methodology were adopted this year:

Meal Cost

Small modifications to the "average cost of a meal" incorporated into the analysis yield substantial shifts in the estimates the *food insecurity index* ultimately produces. Food costs vary considerably by geographic region, so care is required in determining the meal cost for a particular county. For this report, we use the following three different meal cost estimates: (1) the cost of a meal according to the USDA's low-cost meal plan for a family of four, multiplied by the regional price parity for Santa Cruz-Watsonville metropolitan statistical area provided by the Bureau of Economic Analysis, (2) the average meal cost for California according to Feeding America's *Map the Meal Gap* project (Gundersen, C. et al., 2021), and (3) average meal cost for Santa Cruz County according to Feeding America's *Map the Meal Gap* project. The *index* analysis uses the average of these three meal costs, an approach we view as achieving balanced, accurate, and still conservative estimates. Using this process for the 2019-20 year, the average meal cost is \$3.44.

The figure below displays the full range of potential missing meal estimates between the 2014-15 and 2019-20 fiscal years according to the various meal costs. The bold line shows the trend according to the average meal costs used in our calculations of the index. The dark band shows estimates stretching between Feeding America's estimated average meal cost for California (bottom of the band) and the organization's estimate for average meal costs in Santa Cruz County (top of band). The bottom of the light band indicates meal costs based on the USDA low cost meal plan multiplied by the regional price parity, a price (\$2.95 in the most recent year) we view as considerably below actual cost.



Missing Meals in Santa Cruz County, 2015-2020

Increased Need

The index calculates levels of need for assistance based on annual estimates (from the U.S. Census's American Community Survey) of the number of households in income brackets below \$75,000. However, in fiscal year 2019-20, we expect that the need for assistance fluctuated considerably in response to the COVID-19 pandemic. To account for the likely increases in need toward the end of the fiscal year, we draw on data from the U.S. Census's Community Pulse Survey, conducted weekly beginning the end of April, 2020. The survey, designed to track "the social and economic effects of coronavirus on American households" (US Census Bureau, 2021b), included a number of questions regarding recent household experiences of food insufficiency. We use data from the first nine weekly surveys (April 23 - June 25) to track changes in reported levels of food insufficiency by respondents in California. We then use these trends to modify the number of weekly assistance meals needed in the county. Again, we view this approach as generating a more accurate yet still-conservative estimate of need for food assistance during the pandemic.

Population Estimates

The COVID-19 pandemic disrupted nearly all aspects of social and economic life, including efforts to gather survey data about the country's population. In July of 2021, the U.S. Census Bureau announced it would not be releasing American Community Survey (ACS) data for 2020 (U.S. Census Bureau, 2021a). This is the data we have historically relied upon to establish estimates for the population at risk of food insecurity and, in turn, total need for assistance. Lacking ACS data, we estimated the number of households in the county earning less than \$75,000 using trends calculated from the five previous years of ACS records for each individual income group. The figure below illustrates both the trend lines used and our inferred population estimates (the blue dots) used in the analysis. Given the data limitations, we see this approach as the best available option for calculating the index for the 2019-20 year and for generating timely data to inform community efforts to reduce food insecurity in these difficult times.



Santa Cruz County Households by Income Group: Trends and 2020 Estimates

References

Amaral, D., & Bullock, H. (2021). *Tracking the meal gap in Santa Cruz County: Findings from the 2018-2019 food insecurity index and provider perspectives on food assistance during the COVID-19 pandemic.* Blum Center on Poverty, Social Enterprise, and Participatory Governance. https://online.fliphtml5.com/mtnrt/odtb/

Associated Press. (2021, July 20). California will launch the nation's largest free student lunch program. *NPR*. https://www.npr.org/2021/07/20/1018267303/california-free-lunch-public-schools

Bailey, M. J., Hoynes, H. W., Rossin-Slater, M., & Walker, R. (2020). *Is the social safety net a long-term investment? Large-scale evidence from the food stamps program* (Working Paper No. 26942). National Bureau of Economic Research. https://doi.org/10.3386/w26942

Bitler, M. P., & Figinski, T. F. (2019). *Long-run effects of food assistance: Evidence from the Food Stamp Program* (Paper # 20195). Economic Self-Sufficiency Policy Research Institute. https://www.esspri.uci.edu/files/docs/working_papers/ESSPRI%20Working%20Paper%2020195%20 Bitler%20Figinski.pdf?mc_cid=c5949f79b9&mc_eid=3262a712e7

Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2021). *Household food security in the United States in 2020* (Economic Research Report No. ERR-298). U.S. Department of Agriculture. http://www.ers.usda.gov/publications/pub-details/?pubid=102075

Drennen, C. R., Coleman, S. M., Ettinger de Cuba, S., Frank, D. A., Chilton, M., Cook, J. T., ... & Black, M. M. (2019). Food insecurity, health, and development in children under age four years. *Pediatrics*, 144(4). https://publications.aap.org/pediatrics/article/144/4/e20190824/38458/Food-Insecurity-Health-and-Development-in-Children

Gundersen, C., Strayer, M., Dewey, A., Hake, M., & Engelhard, E. (2021). *Map the meal gap 2021: An analysis of county and congressional district food insecurity and county food cost in the United States in 2019.* Feeding America. https://www.feedingamerica.org/sites/default/files/2021-05/Map%20 the%20Meal%20Gap%202021%20Technical%20Brief.pdf

Gundersen, C., & Ziliak, J. P. (2015). Food insecurity and health outcomes. *Health Affairs, 34,* 1830-1839.

Hamilton, L., Roll, S., Despard, M., Maag, E., & Chun, Y. (2021). *Employment, financial and well-being effects of the 2021 expanded child tax credit: Wave 1 executive summary.* Social Policy Institute. https://socialpolicyinstitute.wustl.edu/employment-financial-wellbeing-effects-2021-ctc-report/

Kenneally, B. A. (2020, September 2). America at hunger's edge. *New York Times*. https://www.nytimes.com/interactive/2020/09/02/magazine/food-insecurity-hunger-us.html

Reiley, L. (2021, August 23). Census data suggests America's hunger problem may be waning, but food assistance continues to top pre-pandemic levels. *Washington Post.* https://www.washingtonpost.com/business/2021/08/23/hunger-pandemic-food-stamps/

Schwartz, N. D., & Marcos, C. M. (2021, October 27). Higher food prices hit the poor and those who help them. *New York Times*. https://www.nytimes.com/2021/10/27/business/economy/food-prices-us.html

Seligman, H. K., Bindman, A. B., Vittinghoff, E., Kanaya, A. M., & Kushel, M. B. (2007). Food insecurity is associated with diabetes mellitus: Results from the National Health Examination and Nutrition Examination Survey (NHANES) 1999–2002. *Journal of General Internal Medicine, 22,* 1018-1023.

Seligman, H. K., Laraia, B. A., & Kushel, M. B. (2010). Food insecurity is associated with chronic disease among low-income NHANES participants. *Journal of Nutrition, 140,* 304-310.

Stuff, J. E., Casey, P. H., Szeto, K. L., Gossett, J. M., Robbins, J. M., Simpson, P. M., ... & Bogle, M. L. (2004). Household food insecurity is associated with adult health status. *Journal of Nutrition, 134,* 2330-2335.

Thomas, M., Miller, D. P., & Morrissey, T. W. (2019). Food insecurity and child health. *Pediatrics,* 144(4). https://publications.aap.org/pediatrics/article/144/4/e20190397/38475/Food-Insecurity-and-Child-Health

US Census Bureau. (2021a). *Census Bureau announces changes for 2020 American Community Survey 1-year estimates.* https://www.census.gov/newsroom/press-releases/2021/changes-2020-acs-1-year.html

US Census Bureau. (2021b). *Measuring household experiences during the coronavirus pandemic.* https://www.census.gov/householdpulsedata

U.S. Department of Agriculture. (2021). *Thrifty food plan, 2021* (FNS-916). https://www.fns.usda.gov/resource/thrifty-food-plan-2021-0

Whitaker, R. C., Phillips, S. M., & Orzol, S. M. (2006). Food insecurity and the risks of depression and anxiety in mothers and behavior problems in their preschool-aged children. *Pediatrics, 118*, e859-e868.

Acknowledgements

This report would not be possible without the data sharing and support of a committed network of nutrition assistance providers across Santa Cruz County. We thank the Grey Bears, Community Bridges, Second Harvest Food Bank, Valley Churches United Missions, and many other nutrition assistance programs in Santa Cruz County for their generosity and support. We are deeply grateful to Michael Enos for sharing his expertise and experience calculating food insecurity indices. We also thank Lisa Nishioka, for her assistance preparing this report.

This report was produced during the COVID-19 pandemic and some of the years analyzed occurred during the pandemic. Our findings document the importance of strong, inclusive food security systems before, during, and following the pandemic.