



THE STATE OF **SENIOR HUNGER** IN 2021

RELEASED
APRIL 2023

Dr. James P. Ziliak
University of Kentucky

Dr. Craig Gundersen
Baylor University

FEEDING[®]
AMERICA

The State of Senior Hunger in America in 2021: An Annual Report

Prepared for Feeding America

April 26, 2023

Dr. James P. Ziliak
University of Kentucky

Dr. Craig Gundersen
Baylor University

ACKNOWLEDGEMENTS

This report was made possible in partnership with Feeding America by a generous grant from the Enterprise Rent-A-Car Foundation. The conclusions and opinions expressed herein are our own and do not necessarily represent the views of any sponsoring agency.

CONTENTS

EXECUTIVE SUMMARY	3
I. FOOD INSECURITY IN 2021	4
Table 1. The Extent of Senior Food Insecurity in 2021	4
Table 2. The Distribution of Senior Food Insecurity in 2021	6
Table 3. State-Level Estimates of Senior Food Insecurity in 2021	8
Map 1: Top 10 States with the Highest Rates of Senior Food Insecurity in 2021	10
Map 2. Top 10 States for Rates of Very Low Food Security among Seniors.....	10
Table 4. Estimates of Senior Food Insecurity in Metropolitan Areas > 1,000,000 Persons in 2021.....	11
II. FOOD INSECURITY OVER TIME	12
Table 5. Percentage Point Changes in the Composition of Senior Hunger from 2020 to 2021	13
III. CONCLUSION	18
Appendix Table 1: Questions on the Food Security Supplement	19
Appendix Table 2: Selected Characteristics of Seniors Age 60 and older in 2021	20
Appendix Table 3a. The Extent of Senior Marginal Food Insecurity in 2021	21
Appendix Table 3b. The Distribution of Senior Marginal Food Insecurity in 2021	23
Appendix Table 3c. State-Level Estimates of Senior Marginal Food Insecurity in 2021	25
Appendix Table 3d. Estimates of Senior Marginal Food Insecurity in Metropolitan Areas > 1,000,000 Persons in 2021	26
Appendix Table 3e. Percentage Point Changes in the Composition of Senior Marginal Food Insecurity from 2020 to 2021	28
Appendix Table 4. The Extent of Senior Food Insecurity in 2021 by Combined Race/Ethnicity Categories	29
REFERENCES	30
ABOUT THE AUTHORS	31

EXECUTIVE SUMMARY

In this report, we provide a broad overview of the extent and distribution of food insecurity among seniors (those 60 years of age and older) in the United States in 2021, along with trends over the past two decades using national, state-level, and metropolitan-level data from the December Supplement to the Current Population Survey (CPS).

We concentrate on two measures of food insecurity: food insecurity and very low food security (VLFS). These are based on the full set of 18 questions in the Food Security Supplement (FSS), the module used by the United States Department of Agriculture (USDA) to establish the official food insecurity rates of households in the United States. We define food insecurity by three or more affirmative responses and very low food security as eight or more affirmative responses in households with children and six or more in households without children. All VLFS persons are also included in the food insecure category.

In 2021, we find that:

- Out of 78 million persons age 60 and over, 7.1% are food insecure and 2.7% are VLFS. This translates into 5.5 million and 2.1 million seniors, respectively.
- From 2020 to 2021, there was not a statistically significant change in the rate or numbers for food insecurity or VLFS.
- Compared to 2001, the fraction of food insecure and VLFS seniors increased by 35% and 90%. The number of seniors in each group rose 140%, and 239%, which also reflects the growing population of seniors.
- Continuing with historic trends documented in prior reports, we find that food insecurity is greatest among Black and Hispanic seniors, seniors with lower incomes, seniors who are younger (ages 60-69), seniors in households with someone with a disability, and seniors who are renters.
- State-level food insecurity rates range from a high of 13.4% (Louisiana) to a low of 2.8% (North Dakota).
- Metro-level food insecurity rates range from a high of 13.8% (New Orleans) to a low of 2.0% (Rochester, NY).

Unlike the population overall, senior rates of food insecurity and VLFS still have not returned to their pre-Great Recession levels, and thus millions of seniors still remain vulnerable to food hardships and the associated negative health consequences. This risk is particularly acute among those seniors experiencing VLFS, the ranks of which have especially swelled since 2001. While food insecurity did not increase dramatically in the first year of the Covid-19 health pandemic, this was likely due to the dramatic influx of resources to households in the form of stimulus payments and expansion of federal food assistance. In this report there are some hints that in the second year of Covid-19 those defenses started to crack. This was especially notable among seniors who are over age 80, who experienced the largest increase in food insecurity in 2021 since the Great Recession. In 2022 and into 2023, there were some factors going against food security among older seniors, including very large declines in equity markets, a surge in inflation, and withdrawals of some forms of federal assistance. This suggests that ongoing monitoring of food insecurity is needed to better inform policy on the well being of seniors.

I. FOOD INSECURITY IN 2021

We document the state of hunger among senior Americans ages 60 and older in 2021 using data from the most recently available Current Population Survey (CPS). This is part of a series of reports on food insecurity among seniors, which began with Ziliak et al. (2008) and has been produced annually since 2012.

In December of each year, households in the Current Population Survey (CPS) respond to a series of 18 questions (10 questions if there are no children present in the household) that make up the Food Security Supplement (FSS), the module used by the USDA to establish the official food insecurity rates of households in the United States. The CPS is a nationally representative survey conducted by the Census Bureau for the Bureau of Labor Statistics, providing employment, income and poverty statistics. Households are selected to be representative of civilian households at the state and national levels, using suitably appropriate sampling weights. The CPS does not include information on individuals living in group quarters, including nursing homes or assisted living facilities. Each question on the FSS is designed to capture some aspect of food insecurity and, for some questions, the frequency with which it manifests itself. Respondents are asked questions about their food security status in the last 30 days, as well as over the past 12 months. Following the standard approach used by the USDA, we focus on the questions referring to the past year. The questions from the FSS are found in Appendix Table 1. Because our focus is on food insecurity among those 60 and over, in 2021, this results in 19,808 sample observations. Appendix Table 2 presents selected summary statistics for the CPS sample, adjusted using the FSS survey weight to make the sample nationally representative among those over the age of 60.

Based on the full set of 18 questions in the FSS, we concentrate on two measures: food insecurity (three or more affirmative responses) and very low food security (VLFS; eight or more affirmative responses in households with children; six or more in households without). All VLFS seniors are also included in the food insecure category and, thus, VLFS seniors constitute a subset of food insecure seniors. Another measure, marginal food insecurity (one or more affirmative responses), is included in Appendix Tables 3a-e.)

In Table 1, we present estimates of food insecurity among seniors in 2021. We find that 7.1% were food insecure (5.5 million seniors) and 2.7% were VLFS (2.1 million seniors). The table also presents estimates of food insecurity across selected socioeconomic categories. Here we see great heterogeneity across the senior population. For example, for those with incomes below the poverty line, 26.4% were food insecure and 10.5% were VLFS. In contrast, for seniors with incomes greater than twice the poverty line, these numbers fall dramatically to 2.7%, and 1.0%. Turning to race, Black seniors have a food insecurity rate that is over three times higher than that of white seniors. Similarly, the food insecurity rate of Hispanic seniors (of any racial category) is just over twice the rate of non-Hispanic seniors. (In Appendix Table 4 we provide a breakdown where the race and Hispanic categories are combined.)

Table 1. The Extent of Senior Food Insecurity in 2021

	Food Insecure	Very Low Food Secure
--	---------------	-------------------------

Overall	7.1%	2.7%
By Income		
Below the Poverty Line	26.4	10.5
Between 100% and 200% of the Poverty Line	14.4	4.5
Above 200% of the Poverty Line	2.7	1.0
Income Not Reported	5.8	2.5
By Race		
Asian American, Pacific Islander, Native American, and people who identify as multi-racial	10.0	3.8
Black	17.2	6.6
White	5.6	2.1
By Hispanic Status		
Hispanic	13.8	4.5
Non-Hispanic	6.4	2.5
By Marital Status		
Divorced or Separated	13.3	5.8
Married	4.1	1.1
Never Married	13.3	5.6
Widowed	9.0	3.8
By Metropolitan Location		
Metro	7.0	2.7
Non-Metro	7.6	2.6
By Age		
60-69	8.2	3.5
70-79	6.0	2.0
80 and older	6.0	1.8
By Employment Status		
Disabled ¹	23.5	9.9
Employed	4.5	1.6
Retired	5.8	2.1
Unemployed	23.1	9.1
By Gender		
Female	7.5	2.7
Male	6.6	2.6
By Grandchild Present		
Grandchildren Present	15.0	6.3
No Grandchild Present	6.8	2.5
By Homeownership Status		
Homeowner	5.0	1.6
Renter	17.1	7.6
By Veteran Status		
Not a Veteran	7.3	2.7
Veteran	5.6	2.7
By Disability Status ²		
With a disability	13.4	5.5
Without a disability	5.0	1.7

Source: Authors' calculations from 2021 December Current Population Survey. The numbers in the table show the rates of food insecurity under two measures for various groups.

¹Disabled employment status means the person is out of the labor force because of a disability or other reason.

²Disability status refers to those with limitations on select activities of daily living.

Food insecurity among divorced or separated seniors and for never married seniors is more than three times greater than married seniors. As age increases, food insecurity rates generally fall. For example, seniors between the ages of 60 and 69 have VLFS rates that are almost twice as high as those aged 80 and older. Prior reports revealed a stronger age gradient, but as we note below there was a marked increase in food insecurity among the those over the age of 80 in 2021—a worrying development that will require monitoring. In terms of employment categories, food insecurity rates are five times higher among those who report being disabled as the reason for being out of the labor force in comparison to the employed. For VLFS the difference is over six times higher. For seniors with a grandchild present, food insecurity rates for both measures are substantially higher than when no grandchildren are present. Seniors who are renters have rates of both food insecurity and VLFS that are three to four times higher in comparison to homeowners. Non-Veteran seniors have slightly higher food insecurity rates than seniors who are Veterans. We also include a measure of disability in addition to the one tied to labor force participation noted above. This measure defines an individual as having a disability if they report any of the following limitations on activities of daily living (ADLs): hearing, visual, cognitive, ambulatory, self-care, or independent living. Seniors with limitations in ADLs have food insecurity rates over two times higher and VLFS rates over three times higher as those without limitations in ADLs.¹

Table 1 allows us to see the proportions of persons within various categories who are food insecure, and, with this information, we can make statements about who is most in danger of being food insecure. For example, seniors with lower incomes are more likely to be food insecure than seniors with higher incomes. Also, of interest is the distribution of senior hunger. In other words, out of seniors who are food insecure, what proportion fall into a particular category? We present these results in Table 2.

As seen in Table 2, the majority of seniors in either food insecurity category have incomes above the poverty line. For example, out of those reporting income, 3 of 4 food-insecure seniors have incomes above the poverty line. A similar story holds for race—while Black seniors are at greater risk of food insecurity under either measure than white seniors, almost 2/3 of food-insecure seniors are white. Despite the lower food insecurity rates among older seniors, 13.9% of food-insecure seniors are over the age of 80; the figure is 10.8% for VLFS. And while the rates of food insecurity are below average for retired persons, they make up a large portion of both categories—50.6%, and 48.1%.

	Food Insecure	Very Low Food Secure
By Income		
Below the Poverty Line	30.5%	32.0%

¹ We note that those seniors who are out of the labor force due to disability likely overlap with the group reporting limitations in ADLs. The fact that their rates of food insecurity are higher than the rate overall for those with ADLs suggests that disability associated with labor force exit is likely more severe.

Between 100% and 200% of the Poverty Line	25.6	21.3
Above 200% of the Poverty Line	18.5	17.2
Income Not Reported	25.4	29.5
By Race		
Asian American, Pacific Islander, Native American, and people who identify as multi-racial	9.9	10.1
Black	25.5	26.1
White	64.6	63.8
By Hispanic Status		
Hispanic	19.0	16.6
Non-Hispanic	81.0	83.4
By Marital Status		
Divorced or Separated	28.6	32.9
Married	33.7	25.2
Never Married	15.1	16.9
Widowed	22.5	25.0
By Metropolitan Location		
Metro	82.8	84.2
Non-Metro	17.2	15.8
By Age		
60-69	58.1	64.9
70-79	28.0	24.3
80 and older	13.9	10.8
By Employment Status		
Disabled ¹	28.5	31.8
Employed	18.1	17.3
Retired	50.6	48.1
Unemployed	2.8	2.9
By Gender		
Female	57.4	55.1
Male	42.6	44.9
By Grandchild Present		
Grandchildren Present	8.0	8.8
No Grandchild Present	92.0	91.2
By Homeownership Status		
Homeowner	57.4	50.1
Renter	42.6	49.9
By Veteran Status		
Not a Veteran	89.6	87.0
Veteran	10.4	13.0
By Disability Status²		
With a disability	47.6	52.3
Without a disability	52.4	47.7

Source: Authors' calculations from 2021 December Current Population Survey. The numbers in the table show the distribution of food insecurity under two measures for various groups.

¹Disabled employment status means the person is out of the labor force because of a disability or other reason.

²Disability status refers to those with limitations on select activities of daily living.

As seen in Tables 3 and 4, along with the accompanying figures, there is substantial geographic variation of food insecurity among seniors across states and large metropolitan areas. The range for food insecurity spans from 2.8% in North Dakota to 13.4% in Louisiana and, for VLFS, from 0.5% in New Hampshire to 4.8% in Louisiana.

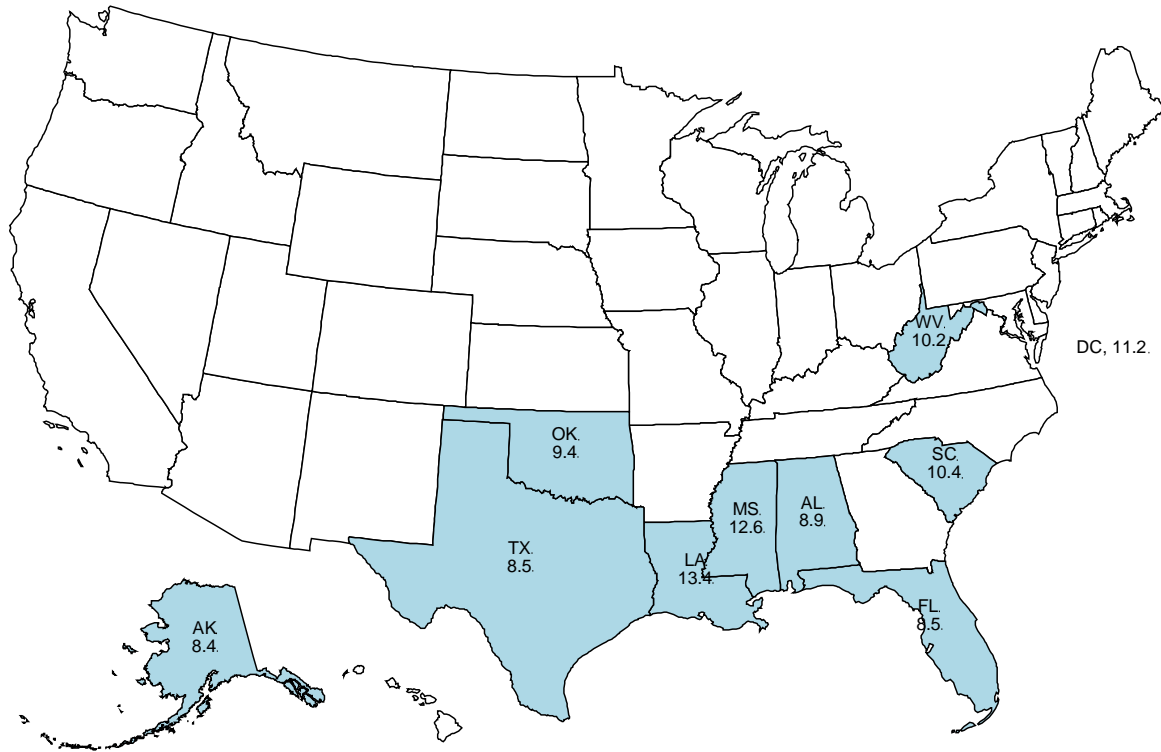
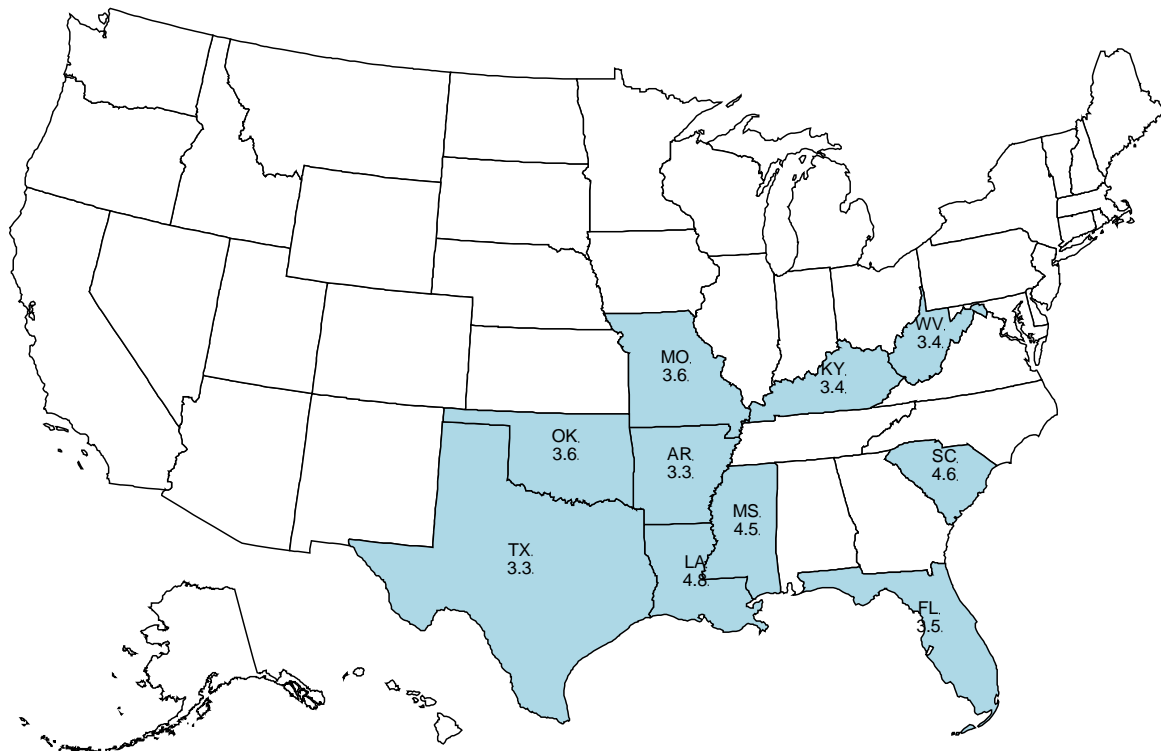
Table 3. State-Level Estimates of Senior Food Insecurity in 2021

	Food Insecure	Very Low Food Secure		Food Insecure	Very Low Food Secure
AL	8.9%	3.0%	MT	4.3%	1.9%
AK	8.4	2.3	NE	4.7	2.6
AZ	7.4	2.8	NV	4.6	1.4
AR	7.6	3.3	NH	2.9	0.5
CA	7.4	2.4	NJ	6.4	1.9
CO	7.4	2.5	NM	5.9	1.8
CT	5.5	3.2	NY	6.6	2.2
DE	6.0	2.2	NC	7.2	2.4
DC	11.2	3.2	ND	2.8	1.1
FL	8.5	3.5	OH	4.9	1.6
GA	8.0	3.2	OK	9.4	3.6
HI	3.7	1.2	OR	6.9	2.8
ID	5.4	1.5	PA	4.7	1.7
IL	7.6	3.2	RI	5.2	1.3
IN	6.4	3.2	SC	10.4	4.6
IA	4.3	0.9	SD	3.4	0.6
KS	4.6	1.5	TN	6.9	2.7
KY	6.9	3.4	TX	8.5	3.3
LA	13.4	4.8	UT	5.4	1.1
ME	4.3	1.7	VT	4.3	1.1
MD	7.2	2.9	VA	5.2	2.1
MA	6.4	3.1	WA	3.7	1.4
MI	6.0	2.7	WV	10.2	3.4
MN	3.8	1.3	WI	6.0	2.8
MS	12.6	4.5	WY	7.3	3.0
MO	7.9	3.6			

Source: Authors' calculations. The numbers are two-year averages found by summing the weighted number of food-insecure seniors in each category by state across the 2020-2021 December Current Population Surveys and dividing by the corresponding weighted total number of seniors in each state across the two years.

In the maps below we highlight the ten states with the highest rates of senior hunger in 2021. For food insecurity, all states are located in the South (with the exception of Alaska). The same holds for VLFS (with the exception of Missouri). There is some movement in the top ten classifications from one year to the next both because of changes in economic circumstances within states and variation from survey sample sizes, but overall, many of the states consistently

appear. For example, seven of the ten states with the highest rates of food insecurity were on the list last year and five with the highest rates of VLFS were on the list last year.

Map 1: Top 10 States with the Highest Rates of Senior Food Insecurity in 2021**Map 2. Top 10 States for Rates of Very Low Food Security among Seniors**

In Table 4 are estimates of food insecurity and VLFS rates by large metropolitan areas (i.e., more than 1 million in total population). These are based on data from 2017 to 2021. For food insecurity, the highest rate, in the New Orleans metro area, is over six times higher than the lowest rate, in Rochester, NY (13.8% versus 2.0%). For VLFS, the highest rate is, like last year, in the New Orleans metro area (5.4%) and the lowest are in San Diego and Rochester, NY (0.7%).

Table 4. Estimates of Senior Food Insecurity in Metropolitan Areas > 1,000,000 Persons in 2021

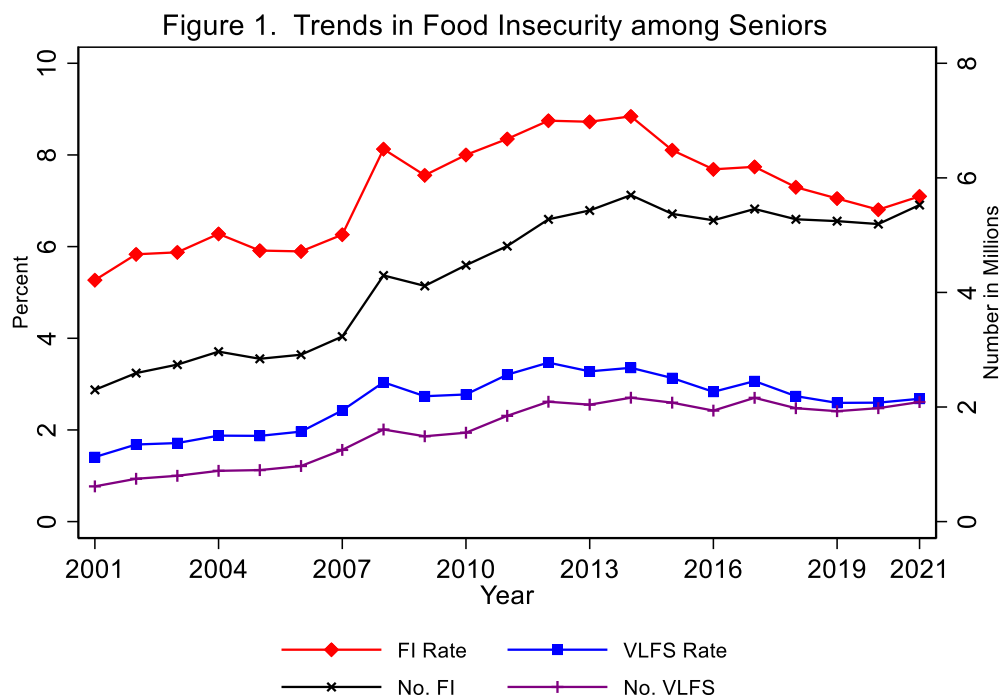
	Food Insecure	Very Low Food Secure
Atlanta-Sandy Springs-Roswell, GA	6.7%	2.3%
Austin-Round Rock, TX	6.4	2.2
Baltimore-Columbia-Towson, MD	8.6	3.8
Birmingham-Hoover, AL	8.2	3.0
Boston-Cambridge-Newton, MA-NH	6.4	2.7
Buffalo-Cheektowaga-Niagara Falls, NY	7.7	2.9
Charlotte-Concord-Gastonia, NC-SC	4.9	1.8
Chicago-Naperville-Elgin, IL-IN-WI	8.0	3.3
Cincinnati, OH-KY-IN	5.4	1.5
Cleveland-Elyria-Mentor, OH	6.5	2.6
Columbus, OH	7.1	2.5
Dallas-Fort Worth-Arlington, TX	6.7	2.2
Denver-Aurora-Lakewood, CO	8.8	3.5
Detroit-Warren-Dearborn, MI	6.7	2.6
Hartford-West Hartford-East Hartford, CT	7.0	2.1
Houston-Baytown-Sugar Land, TX	11.1	3.7
Indianapolis, IN	7.7	4.4
Jacksonville, FL	7.6	3.4
Kansas City, MO-KS	8.4	3.4
Las Vegas-Henderson-Paradise, NV	6.9	3.3
Los Angeles-Long Beach-Anaheim, CA	8.6	2.7
Louisville, KY-IN	7.2	3.1
Memphis, TN-MS-AR	10.8	3.1
Miami-Fort Lauderdale-West Palm Beach, FL	9.8	3.5
Milwaukee-Waukesha-West Allis, WI	8.3	3.9
Minneapolis-St Paul-Bloomington, MN-WI	3.0	1.4
Nashville-Davidson-Murfreesboro, TN	3.3	2.3
New Orleans-Metairie, LA	13.8	5.4
New York-Newark-Jersey City, NY-NJ-PA	7.0	2.5
Oklahoma City, OK	6.5	3.0
Orlando, FL	5.8	1.3
Philadelphia-Camden-Wilmington, PA-NJ-DE	6.0	2.0
Phoenix-Mesa-Scottsdale, AZ	6.5	2.8
Pittsburgh, PA	3.6	1.9

Portland-Vancouver-Hillsboro, OR-WA	4.5	2.1
Providence-Warwick, RI-MA	5.5	1.5
Raleigh, NC	10.7	3.5
Richmond, VA	4.6	1.7
Riverside-San Bernardino-Ontario, CA	7.8	2.9
Rochester, NY	2.0	0.7
Sacramento-Arden-Arcade-Roseville, CA	4.2	2.9
St. Louis, MO-IL	6.6	3.0
Salt Lake City, UT	6.0	2.4
San Antonio, TX	7.7	3.0
San Diego-Carlsbad-San Marcos, CA	4.3	0.7
San Francisco-Oakland-Fremont, CA	6.5	1.6
San Jose-Sunnyvale-Santa Clara, CA	6.8	1.5
Seattle-Tacoma-Bellevue, WA	5.0	1.3
Tampa-St. Petersburg-Clearwater, FL	7.6	3.5
Virginia Beach-Norfolk-Newport News, VA-NC	3.4	1.4
Washington-Arlington-Alexandria, DC-VA-MD-WV	5.2	2.4

Source: Authors' calculations. The numbers are five-year averages found by summing the weighted number of food-insecure seniors in each category by metro areas across the 2017-2021 December Current Population Surveys and dividing by the corresponding weighted total number of seniors in each metro area across the five years.

II. FOOD INSECURITY OVER TIME

To place the 2021 estimates into perspective, we now examine trends in food insecurity since 2001. In Figure 1, we display results in terms of the percentage of seniors (left-hand axis) and number of seniors in millions (right-hand axis). While food insecurity and VLFS increased slightly from 2020 to 2021, these changes were not statistically different from the 2020 level. However, these food insecurity rates remain stubbornly high insofar as it is still higher in 2021 than before the Great Recession that started in December 2007 (7.1% versus 6.3%). This is in contrast to the full population whose food insecurity rate in 2021 fell below that at the start of the Great Recession (10.4% versus 12.2%) as reported in Coleman-Jensen et al. (2022). This food insecurity rate for the full population is the lowest since measurement of food insecurity began. Likewise, the senior VLFS rate also slightly exceeds its 2007 level (2.7% versus 2.4%). Both rates are far higher than in 2001—the fraction of seniors experiencing food insecurity and VLFS has increased by 35%, and 90%—and the number of seniors in each group rose 140%, and 239%, reflecting both the growing number of seniors and their rising food insecurity rates.



In Table 5, we take a deeper look into underlying changes in the composition of food-insecure seniors from 2020 to 2021. The table presents percentage point changes in both categories of food insecurity by the same set of socioeconomic characteristics in Table 1. Insofar as there were not statistically significant changes in food insecurity or VLFS, it is not surprising that there are not many statistically significant changes by categories either. However, there were some sizable increases in food insecurity in some groups, including among seniors who are Asian American, Pacific Islander, Native American, and people who identify as multi-racial; persons over the age of 80; homeowners; and seniors without ADL disabilities. The increase in Asian American, Pacific Islander, Native American and people who identify as multi-racial was also observed for the general population perhaps due, in part, to this increase in the senior population. For VLFS, two saw statistically significant increases – those over the age of 80 and the retired.

Table 5. Percentage Point Changes in the Composition of Senior Hunger from 2020 to 2021

	Food Insecure	Very Low Food Secure
Overall	0.29	0.08
By Income		
Below the Poverty Line	-0.18	-1.23
Between 100% and 200% of the Poverty Line	-1.29	-0.87
Above 200% of the Poverty Line	-0.16	0.02
Income Not Reported	0.05	0.14
By Race		

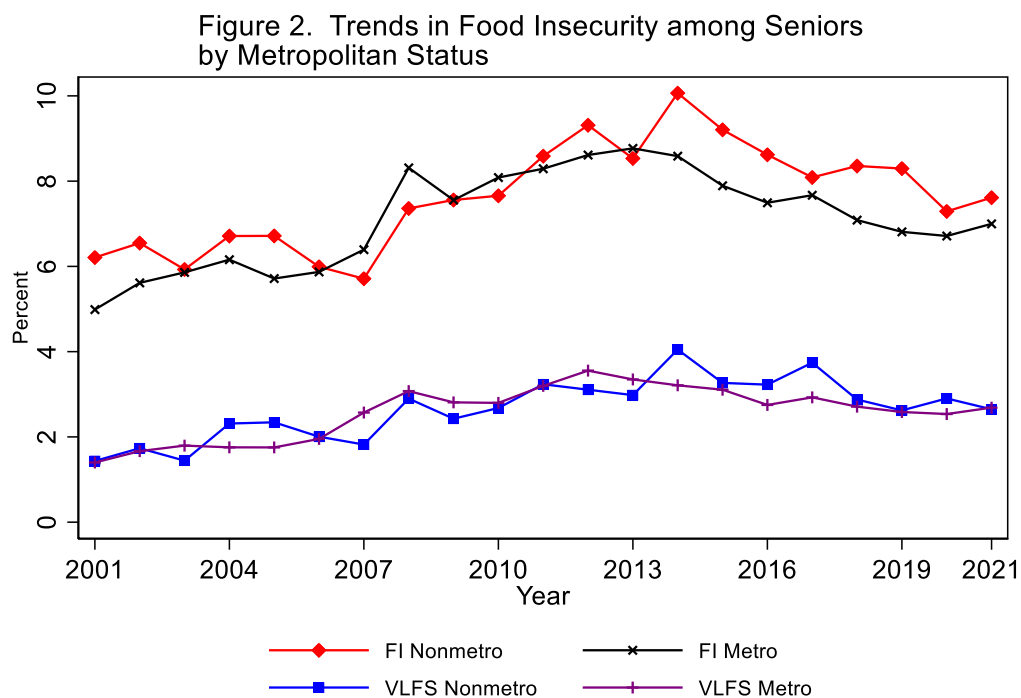
Asian American, Pacific Islander, Native American, and people who identify as multi-racial	2.76**	1.03
Black	-1.89	-1.02
White	0.38	0.15
By Hispanic Status		
Hispanic	0.58	0.15
Non-Hispanic	0.24	0.07
By Marital Status		
Divorced or Separated	0.56	0.03
Married	0.09	0.06
Never Married	0.50	-0.40
Widowed	0.50	0.37
By Metropolitan Location		
Metro	0.29	0.15
Non-Metro	0.32	-0.25
By Age		
60-69	0.12	0.02
70-79	-0.02	-0.08
80 and older	1.56**	0.68*
By Employment Status		
Disabled ¹	1.94	-1.16
Employed	-0.16	-0.09
Retired	0.54	0.48**
Unemployed	2.96	0.76
By Gender		
Female	0.26	0.08
Male	0.33	0.10
By Grandchild Present		
Grandchildren Present	-2.85	-1.77
No Grandchild Present	0.49	0.19
By Homeownership Status		
Homeowner	0.52*	0.19
Renter	-1.18	-0.59
By Veteran Status		
Not a Veteran	0.21	0.07
Veteran	0.72	0.15
By Disability Status ²		
With a disability	-0.34	-0.11
Without a disability	1.72**	0.42

Source: Authors' calculations. The numbers in the table reflect percentage point changes from 2020-2021. The asterisks denote statistical significance at the following levels: *** p<0.01; ** p<0.05; * p<0.1,

¹Disabled employment status means the person is out of the labor force because of a disability or other reason.

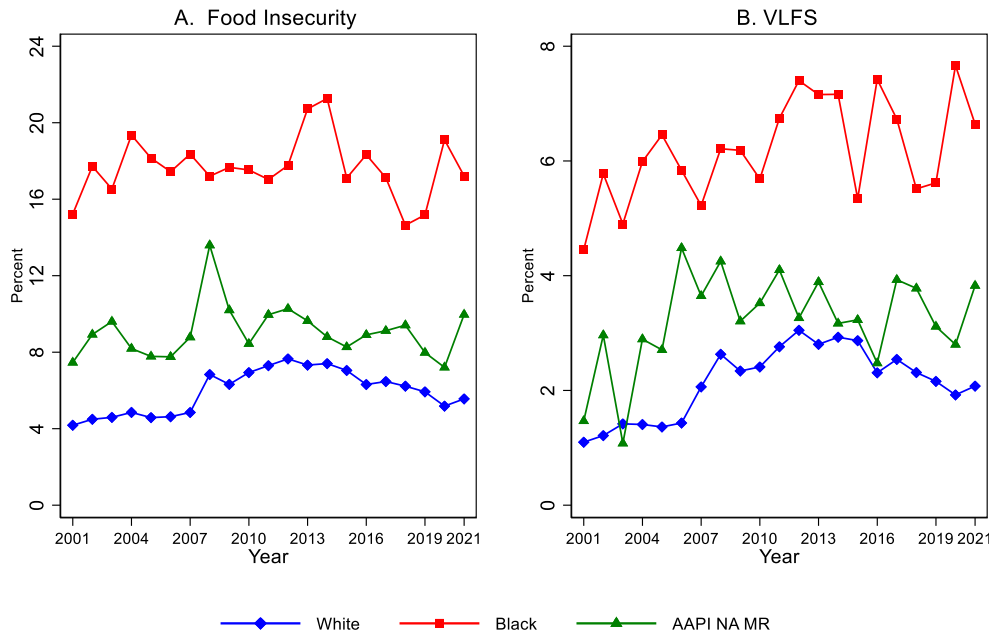
²Disability status refers to those with limitations on select activities of daily living.

In the next set of figures, we examine trends in food insecurity since 2001 across a variety of subpopulations found in Tables 1 and 5. We begin in Figure 2 with trends in food insecurity for seniors living in metropolitan areas versus nonmetropolitan areas. The figure shows that, for most years, but not all, food insecurity rates were higher in nonmetro areas. After an increase in this gap in both 2018 and 2019, the gap fell in 2020 and 2021. For VLFS, though, whether the rates are higher or lower in nonmetro areas shows no clear pattern.



Panel A of Figure 3 depicts trends in food insecurity across different races and panel B is for VLFS. As discussed above, food insecurity and VLFS for Black seniors are much higher than for white seniors. These figures reveal that these differences were present in all years with a sharp increase in this difference in 2020. The gap diminished in 2021, albeit it is still larger than in 2019. Comparing white seniors and the Asian American, Pacific Islander, Native American, and people who identify as multi-racial, rates are higher among the latter category in all years except one for VLFS.

Figure 3. Trends in Senior Food Insecurity by Race



Note: 'AAPI NA MR' denotes Asian American, Pacific Islander, Native American, and people who identify as multi-racial

In Figure 4, we present trends broken down by Hispanic status. For food insecurity, the rates are higher among Hispanic seniors than non-Hispanic seniors in all years. The trends in VLFS are similar, with the exception of 2005. In 2007, interestingly, the VLFS rate of Hispanic seniors was higher than the food insecurity rate of non-Hispanic seniors (7.1% versus 5.6%), highlighting the impact of the Great Recession on Hispanic seniors.

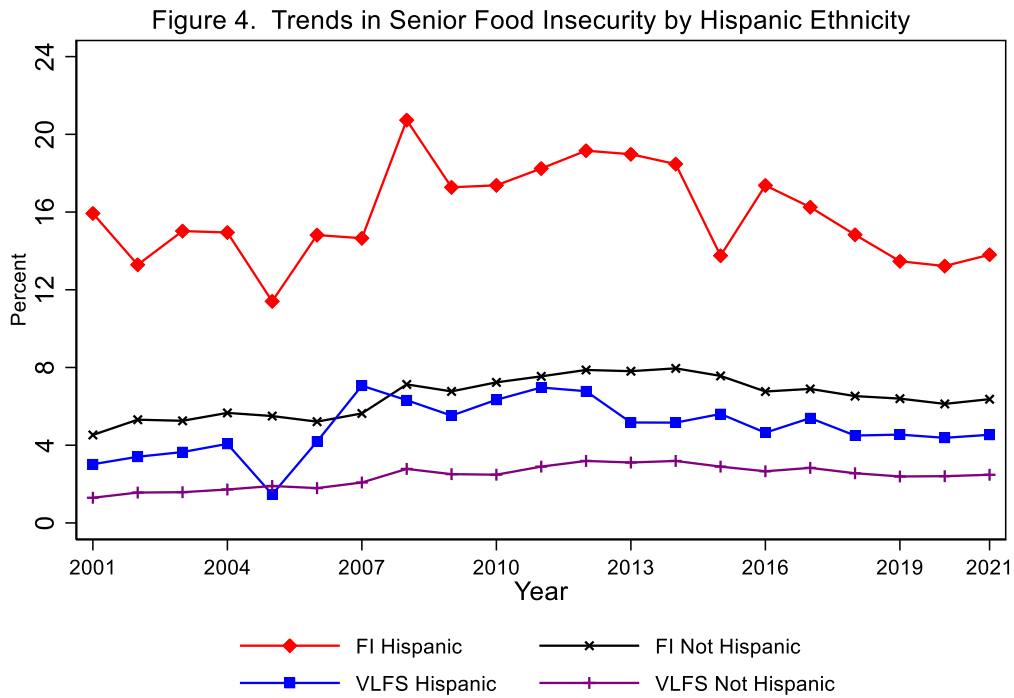
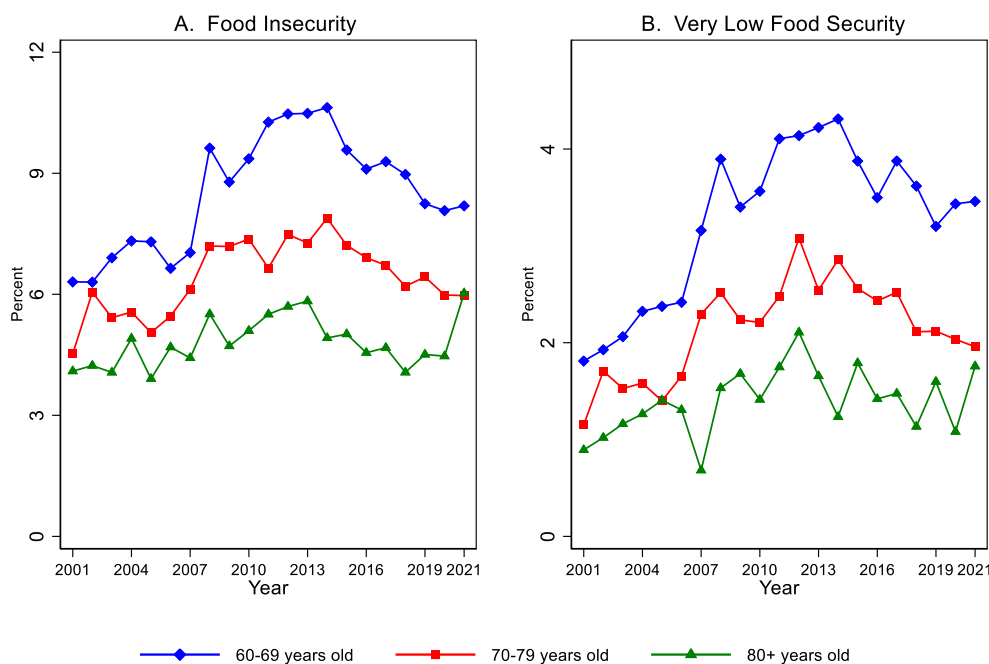


Figure 5 presents a parallel set of results for seniors broken down into three age groups – 60-69 years-old, 70-79 years old, and age 80 and older. Since reaching the highest rates ever in 2014 (2012 for VLFS for 70-79 years old), rates have declined in most years and are now substantially below 2014. In all years until 2021, these rates have been higher than for the 80+ group. This changed in 2021, though, and for the food insecurity rates among 80+ are now higher than the 70-79 group and they are almost the same for VLFS. This is primarily due to the sharp increase among the 80+ group in 2021.

Figure 5. Trends in Senior Americans Food Insecurity by Age



III. CONCLUSION

Food insecurity among seniors in America is a continuing challenge facing the nation insofar as rates of senior food insecurity remain elevated compared to the Great Recession of 2007-2009, unlike for the general population. Given the compelling evidence in Gundersen and Ziliak (2021) that food insecurity is associated with a host of poor nutrition and health outcomes among seniors, this report implies that food insecurity among seniors will continue to lead to additional public health challenges and costs for our country (Berkowitz et al., 2017; Berkowitz et al., 2019).

It was perhaps surprising that there was not a significant increase in food insecurity in the first year of the Covid-19 health pandemic. This good fortune was likely due to the dramatic influx of resources to households in the form of stimulus payments and expansion of federal food assistance. These additional resources started to be withdrawn in 2021, and the evidence in this report hints that food insecurity among seniors started to increase. While this rise was not statistically significant compared to 2020 for the whole population of seniors, it was among some groups who traditionally are relatively protected from food insecurity; namely seniors who are retired, over age 80, and homeowners. The economic headwinds in 2022 were substantially worse, with an average decline in equity markets of about 20%, a tripling of inflation, and even further retrenchment of federal assistance for relief from Covid-19; notably the elimination of emergency assistance as part of Supplemental Nutrition Assistance Program benefits in nearly half the states. This suggests that ongoing monitoring of food insecurity will be crucial to inform policy on the well being of vulnerable seniors.

Appendix Table 1: Questions on the Food Security Supplement

Food Insecurity Question	Asked of Households with Children	Asked of Households without Children
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?	x	x
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?	x	x
3. “We couldn’t afford to eat balanced meals.” Was that often, sometimes , or never true for you in the last 12 months?	x	x
4. “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?	x	
5. 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)	x	x
6. “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?	x	
7. 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)	x	x
8. (If yes to Question 5) How often did this happen— almost every month, some months but not every month , or in only 1 or 2 months?	x	x
9. “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?	x	
10. In the last 12 months, were you ever hungry, but didn’t eat, because you couldn’t afford enough food? (Yes/No)	x	x
11. In the last 12 months, did you lose weight because you didn’t have enough money for food? (Yes/No)	x	x
12. 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)	x	
13. 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)	x	x
14. In the last 12 months, were the children ever hungry but you just couldn’t afford more food? (Yes/No)	x	
15. (If yes to Question 13) How often did this happen— almost every month, some months but not every month , or in only 1 or 2 months?	x	x
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)	x	
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?	x	
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)	x	

Notes: Responses in bold indicate an “affirmative” response.

Appendix Table 2: Selected Characteristics of Seniors Age 60 and older in 2021

Income Categories	
Below the Poverty Line	0.08
Between 100% and 200% of the Poverty Line	0.13
Above 200% of the Poverty Line	0.48
Missing Income	0.31
Racial Categories	
Asian American, Pacific Islander, Native American, and people who identify as multi-racial	0.07
Black	0.11
White	0.82
Hispanic Status	
Hispanic	0.1
Non-Hispanic	0.9
Marital Status	
Divorced or Separated	0.15
Married	0.59
Never Married	0.08
Widowed	0.18
Metropolitan Location	
Metro	0.84
Non-Metro	0.16
Age	
60 to 69	0.5
70 to 79	0.33
80 and older	0.16
Employment Status	
Disabled ¹	0.09
Employed	0.28
Retired	0.62
Unemployed	0.01
By Gender	
Female	0.54
Male	0.46
Grandchild Present	
Grandchild Present	0.04
No Grandchild Present	0.96
By Homeownership Status	
Homeowner	0.82
Renter	0.18
By Veteran Status	
Not a Veteran	0.87
Veteran	0.13
By Disability Status	
With a disability ²	0.25
Without a disability	0.75

Source: Authors' calculations from 2021 December Current Population Survey.

¹Disabled employment status means the person is out of the labor force because of a disability or other reason.

²Disability status refers to those with limitations on select activities of daily living.

Appendix Table 3a. The Extent of Senior Marginal Food Insecurity in 2021	
Overall	12.9%
By Income	
Below the Poverty Line	43.5
Between 100% and 200% of the Poverty Line	28.3
Above 200% of the Poverty Line	5.6
Income Not Reported	9.8
By Race	
Asian American, Pacific Islander, Native American, and people who identify as multi-racial	18.0
Black	28.9
White	10.4
By Hispanic Status	
Hispanic	24.3
Non-Hispanic	11.6
By Marital Status	
Divorced or Separated	22.6
Married	8.1
Never Married	22.5
Widowed	15.9
By Metropolitan Location	
Metro	12.8
Non-Metro	13.2
By Age	
60-69	14.6
70-79	11.6
80+	10.1
By Employment Status	
Disabled ¹	35.8
Employed	8.8
Retired	11.2
Unemployed	36.2
By Gender	
Female	13.6
Male	12
By Grandchild Present	
Grandchildren Present	25.7
No Grandchild Present	12.4
By Homeownership Status	
Homeowner	9.2
Renter	29.8
By Veteran Status	
Not a Veteran	13.3
Veteran	9.9
By Disability Status ²	
With a disability	22.5
Without a disability	9.6

Source: Authors' calculations from 2021 December Current Population Survey. The numbers in the table show the rates of food insecurity under two measures for various groups.

¹Disabled employment status means the person is out of the labor force because of a disability or other reason.

²Disability status refers to those with limitations on select activities of daily living.

Appendix Table 3b. The Distribution of Senior Marginal Food Insecurity in 2021

By Income	
Below the Poverty Line	27.8%
Between 100% and 200% of the Poverty Line	27.8
Above 200% of the Poverty Line	20.8
Income Not Reported	23.6
By Race	
Asian American, Pacific Islander, Native American, and people who identify as multi-racial	9.8
Black	23.7
White	66.5
By Hispanic Status	
Hispanic	18.5
Non-Hispanic	81.5
By Marital Status	
Divorced or Separated	26.8
Married	37.2
Never Married	14.1
Widowed	21.9
By Metropolitan Location	
Metro	83.6
Non-Metro	16.4
By Age	
60-69	57.0
70-79	30.1
80+	12.9
By Employment Status	
Disabled ¹	23.9
Employed	19.5
Retired	54.3
Unemployed	2.4
By Gender	
Female	57.4
Male	42.6
By Grandchild Present	
Grandchildren Present	7.5
No Grandchild Present	92.5
By Homeownership Status	
Homeowner	59.1
Renter	40.9
By Veteran Status	
Not a Veteran	89.9
Veteran	10.1
By Disability Status²	
With a disability	44.3
Without a disability	55.7

Source: Authors' calculations from 2021 December Current Population Survey. The numbers in the table

show the distribution of food insecurity under two measures for various groups.

¹Disabled employment status means the person is out of the labor force because of a disability or other reason.

²Disability status refers to those with limitations on select activities of daily living.

Appendix Table 3c. State-Level Estimates of Senior Marginal Food Insecurity in 2021

AL	15.1%	MT	8.5%
AK	14.5	NE	9.4
AZ	12.1	NV	8.9
AR	14.0	NH	6.4
CA	12.5	NJ	11.7
CO	9.0	NM	12.5
CT	11.7	NY	11.8
DE	10.7	NC	12.0
DC	18.2	ND	5.6
FL	15.4	OH	10.6
GA	13.4	OK	20.9
HI	7.0	OR	12.1
ID	11.2	PA	11.1
IL	13.4	RI	10.2
IN	9.7	SC	16.1
IA	7.2	SD	9.6
KS	9.6	TN	11.3
KY	15.2	TX	14.9
LA	20.9	UT	8.9
ME	9.9	VT	8.0
MD	12.2	VA	10.2
MA	12.0	WA	8.2
MI	9.8	WV	19.3
MN	7.4	WI	10.1
MS	21.6	WY	11.2
MO	13.0		

Source: Authors' calculations. The numbers are two-year averages found by summing the number of marginally food-insecure seniors in each category by state across the 2020-2021 December Current Population Surveys and dividing by the corresponding total number of seniors in each state across the two years.

Appendix Table 3d. Estimates of Senior Marginal Food Insecurity in Metropolitan Areas > 1,000,000 Persons in 2021

Atlanta-Sandy Springs-Roswell, GA	11.6%
Austin-Round Rock, TX	12.7
Baltimore-Columbia-Towson, MD	13.5
Birmingham-Hoover, AL	14.1
Boston-Cambridge-Newton, MA-NH	9.6
Buffalo-Cheektowaga-Niagara Falls, NY	11.2
Charlotte-Concord-Gastonia, NC-SC	10.0
Chicago-Naperville-Elgin, IL-IN-WI	14.6
Cincinnati, OH-KY-IN	10.3
Cleveland-Elyria-Mentor, OH	14.5
Columbus, OH	11.6
Dallas-Fort Worth-Arlington, TX	12.5
Denver-Aurora-Lakewood, CO	12.5
Detroit-Warren-Dearborn, MI	10.6
Hartford-West Hartford-East Hartford, CT	11.8
Houston-Baytown-Sugar Land, TX	18.3
Indianapolis, IN	10.6
Jacksonville, FL	11.5
Kansas City, MO-KS	13.0
Las Vegas-Henderson-Paradise, NV	14.1
Los Angeles-Long Beach-Anaheim, CA	14.1
Louisville, KY-IN	14.2
Memphis, TN-MS-AR	15.4
Miami-Fort Lauderdale-West Palm Beach, FL	18.9
Milwaukee-Waukesha-West Allis, WI	14.0
Minneapolis-St Paul-Bloomington, MN-WI	6.3
Nashville-Davidson-Murfreesboro, TN	7.4
New Orleans-Metairie, LA	22.2
New York-Newark-Jersey City, NY-NJ-PA	12.8
Oklahoma City, OK	15.2
Orlando, FL	12.1
Philadelphia-Camden-Wilmington, PA-NJ-DE	11.6
Phoenix-Mesa-Scottsdale, AZ	9.8
Pittsburgh, PA	10.0
Portland-Vancouver-Hillsboro, OR-WA	7.8
Providence-Warwick, RI-MA	13.3
Raleigh, NC	13.5
Richmond, VA	8.1
Riverside-San Bernardino-Ontario, CA	14.5
Rochester, NY	8.2
Sacramento-Arden-Arcade-Roseville, CA	9.9
St. Louis, MO-IL	11.8

Salt Lake City, UT	11.0
San Antonio, TX	16.7
San Diego-Carlsbad-San Marcos, CA	8.1
San Francisco-Oakland-Fremont, CA	10.5
San Jose-Sunnyvale-Santa Clara, CA	11.0
Seattle-Tacoma-Bellevue, WA	8.7
Tampa-St. Petersburg-Clearwater, FL	14.4
Virginia Beach-Norfolk-Newport News, VA-NC	6.9
Washington-Arlington-Alexandria, DC-VA-MD-WV	9.0

Source: Authors' calculations. The numbers are five-year averages found by summing the number of food-insecure seniors in each category by metro areas across the 2017-2021 December Current Population Surveys and dividing by the corresponding total number of seniors in each metro area across the five years.

Appendix Table 3e. Percentage Point Changes in the Composition of Senior Marginal Food Insecurity from 2020 to 2021

Overall	0.93**
By Income	
Below the Poverty Line	0.03
Between 100% and 200% of the Poverty Line	0.73
Above 200% of the Poverty Line	-0.24
Income Not Reported	0.33
By Race	
Asian American, Pacific Islander, Native American, and people who identify as multi-racial	4.83***
Black	-0.51
White	0.81**
By Hispanic Status	
Hispanic	2.81
Non-Hispanic	0.70*
By Marital Status	
Divorced or Separated	2.25*
Married	0.72*
Never Married	0.89
Widowed	0.27
By Metropolitan Location	
Metro	1.24***
Non-Metro	-0.69
By Age	
60-69	0.62
70-79	1.02
80+	1.89***
By Employment Status	
Disabled ¹	2.82
Employed	-0.04
Retired	1.43***
Unemployed	7.52
By Gender	
Female	0.92*
Male	0.94*
By Grandchild Present	
Grandchildren Present	-0.30
No Grandchild Present	1.07***
By Homeownership Status	
Homeowner	0.87**
Renter	0.58
By Veteran Status	
Not a Veteran	0.92**
Veteran	0.82
By Disability Status ²	
With a disability	-0.01
Without a disability	3.02***

Source: Authors' calculations. The numbers in the table reflect percentage point changes from 2020-2021. The asterisks denote statistical significance at the following levels: *** p<0.01; ** p<0.05; * p<0.1

¹Disabled employment status means the person is out of the labor force because of a disability or other reason.

²Disability status refers to those with limitations on select activities of daily living.

Appendix Table 4. The Extent of Senior Food Insecurity in 2021 by Combined Race/Ethnicity Categories

	Food Insecure	Very Low Food Secure
Asian American, Pacific Islander, Native American, and people who identify as multi-racial, non-Hispanic	9.7	3.9
Black, non-Hispanic	17.3	6.8
Hispanic	13.8	4.5
White, non-Hispanic	4.6	1.8

Source: Authors' calculations from 2021 December Current Population Survey. The numbers in the table show the rates of food insecurity under two measures for various groups.

REFERENCES

- Berkowitz, S. A., Basu, S., Gundersen, C., & Seligman, H. K. (2019). State-Level and County-Level Estimates of Health Care Costs Associated with Food Insecurity. *Preventing Chronic Disease, 16*(E90).
- Berkowitz, S. A., Basu, S., Meigs, J. B., & Seligman, H. K. (2018). Food insecurity and health care expenditures in the United States, 2011–2013. *Health Services Research, 53*(3), 1600.
- Coleman-Jensen, A., Rabbitt, M., Gregory, C., & Singh, A. (2022). *Household Food Security in the United States in 2021*, United States Department of Agriculture, Economic Research Service, Report Number 309.
- Gundersen, C. & Ziliak, J. (2021). *The Health Consequences of Senior Hunger in the United States: Evidence from the 1999-2016 NHANES*. Report submitted to Feeding America.
- Ziliak, J., Gundersen, C., & Haist, M. (2008). *The Causes, Consequences, and Future of Senior Hunger in America*. Report submitted to Meals on Wheels Association of America Foundation.

ABOUT THE AUTHORS

James P. Ziliak, Ph.D., is the Carol Martin Gatton Endowed Chair in Microeconomics, University Research Professor, and Founding Director of the Center for Poverty Research and the Kentucky Federal Statistical Research Data Center all at the University of Kentucky. He received his BS and BA degrees in economics and sociology from Purdue University, and his Ph.D. in Economics from Indiana University. He previously served as assistant and associate professor of economics at the University of Oregon, and has held visiting positions at the Brookings Institution, Russell Sage Foundation, University College London, University of Michigan, and University of Wisconsin. His research expertise is in the areas of labor economics, poverty, food insecurity, and tax and transfer policy.

Craig Gundersen, Ph.D., is the Snee Family Endowed Chair at the Baylor Collaborative on Hunger and Poverty (BCHP) and a Professor in the Department of Economics at Baylor University. He is also on the Technical Advisory Group for Feeding America, the lead researcher on Feeding America's Map the Meal Gap project, the Managing Editor for *Applied Economic Perspectives and Policy*, a Round Table Fellow of the Farm Foundation, and a Faculty Affiliate of the Wilson Sheehan Lab for Economic Opportunities (LEO) at the University of Notre Dame. His research concentrates on the causes and consequences of food insecurity and on the evaluation of food assistance programs, with an emphasis on SNAP. Gundersen is a Fellow of the Agricultural and Applied Economic Association (AAEA).

Contact information:

Dr. James P. Ziliak
Center for Poverty Research
University of Kentucky
550 South Limestone St
Lexington, KY 40506-0034
Phone: (859) 257-6902
Email: jziliak@uky.edu

Dr. Craig Gundersen
Baylor University Baylor Collaborative on Hunger and Poverty
One Bear Place #97320
Waco, TX 76798
Email: Craig_Gundersen@baylor.edu