

Report to Congressional Requesters

December 2018

FOOD INSECURITY

Better Information
Could Help Eligible
College Students
Access Federal Food
Assistance Benefits

GAO Highlights

Highlights of GAO-19-95, a report to congressional requesters

Why GAO Did This Study

Increasing evidence indicates that some college students are experiencing food insecurity, which can negatively impact their academic success. However, college students are only eligible for SNAP in certain cases. Given the substantial federal investment in higher education and the risk posed if students do not complete their degrees, GAO was asked to review food insecurity among college students.

This report examines (1) what is known about the extent of food insecurity among college students and their use of SNAP; (2) how selected colleges are addressing student food insecurity; and (3) the extent to which federal programs assist students experiencing food insecurity. GAO reviewed relevant federal laws and agency documents and studies on student food insecurity; analyzed 2016 federal student data (the most recent available), and visited four states, selected based on actions taken to address student food insecurity, geographic diversity, and other factors. GAO interviewed researchers; officials from Education, FNS national and regional offices; and officials at 14 colleges, including students at 8 of these colleges. GAO also emailed all state SNAP agencies about their efforts related to students.

What GAO Recommends

GAO recommends that FNS (1) improve student eligibility information on its website and (2) share information on state SNAP agencies' approaches to help eligible students. FNS partially concurred, and plans to review its information. GAO continues to believe additional action is warranted, as discussed in the report.

View GAO-19-95. For more information, contact Kathryn Larin at (202) 512-7215 or larink@gao.gov.

FOOD INSECURITY

Better Information Could Help Eligible College Students Access Federal Food Assistance Benefits

What GAO Found

There is limited information about the national prevalence of food insecurity among college students. GAO reviewed 31 studies that identified a wide range of food insecurity rates among the students studied, but the studies did not provide national estimates. College students at risk of food insecurity may be eligible for benefits from the Food and Nutrition Service's (FNS) Supplemental Nutrition Assistance Program (SNAP). However, GAO's analysis of Department of Education (Education) data shows that almost 2 million at-risk students who were potentially eligible for SNAP did not report receiving benefits in 2016. According to GAO's analysis, having a low income is the most common risk factor for food insecurity among college students. Among low-income students, most have one additional risk factor associated with food insecurity, such as being a first-generation student or a single parent.

The 14 selected colleges that GAO contacted were addressing student food insecurity in a number of ways. For example, all 14 were providing free food to students through on-campus food pantries, and most were offering emergency funds to help students pay for living expenses that might otherwise force them to choose between buying food or staying in school. Many of these colleges had centralized student services to better address their students' basic needs and provide other support, such as screening students for potential eligibility and helping them apply for federal benefit programs like SNAP.

Selected Colleges' Initiatives to Address Student Food Insecurity



Source: Information from colleges GAO contacted. | GAO-19-95

Federal student aid generally does not cover all college costs for low-income students, and college students may have limited access to federal food assistance programs such as SNAP because of program eligibility restrictions. Some state SNAP agencies reported that they are taking steps to help students access SNAP by conducting outreach to colleges and developing guidance. Nevertheless, at 9 of the 14 colleges GAO contacted, some college officials and students said that they were unfamiliar with or did not fully understand SNAP's student eligibility rules. Some college officials said that they would like information from FNS to better explain SNAP student rules, but FNS has not made such information easily accessible on its website. Further, college officials and state SNAP agencies noted that FNS does not share examples of actions taken by other states to help eligible students access SNAP. Clarification of SNAP student eligibility rules and enhanced information sharing about state efforts could help ensure that potentially eligible college students can access federal food assistance programs.

Contents

Letter		1		
	Background	4		
	Information about the Prevalence of Food Insecurity among			
	College Students Nationally is Limited and Many Potentially	11		
Eligible, At-Risk Students Do Not Receive SNAP Selected Colleges Are Using a Range of Approaches to Address				
	Student Food Insecurity	20		
	While SNAP Can Supplement Other Federal Aid for Some Low-			
	Income Students, FNS Does Not Share Key Information to Help	20		
	States Better Leverage SNAP to Assist Students Conclusions	28 39		
	Recommendations for Executive Action	40		
	Agency Comments and Our Evaluation	40		
Appendix I: Objectives, Scope, and	Methodology	42		
Appendix II: GAO Contact and Staff	Acknowledgments	57		
Tables				
142.00	Table 1: Prevalence of Risk Factors Associated with Food			
	Insecurity among Low-Income U.S. College			
	Undergraduate Students, by College Type in 2016	16		
	Table 2: Prevalence of Risk Factors Associated with Food			
	Insecurity among Low-Income U.S. College			
	Undergraduate Students in 2016	17		
	Table 3: Studies Included in GAO's Review That Estimate College	4.4		
	Student Food Insecurity Table 4: Risk Factors Identified by GAO Associated with Food	44		
	Insecurity Among College Students	48		
	Table 5. Selected Risk Factors and Corresponding Variables in	40		
	the 2016 National Postsecondary Student Aid Study Data			
	Set	50		
	Table 6: Supplemental Nutrition Assistance Program (SNAP)			
	Eligibility Exemptions for College Students and			
	Corresponding Variables in the 2016 National			
	Postsecondary Student Aid Study Data Set Table 7: List of 2- and 4-year Selected Colleges that GAO	52		
	Contacted, by State	55		
	Contacted, by Clate	55		

Figures

Figure 1: Percentages and Characteristics of Traditional and	
Nontraditional College Students in 2016	7
Figure 2: Supplemental Nutrition Assistance Program (SNAP)	
Participation among Low-Income College Students At-	
Risk of Food Insecurity in 2016	19
Figure 3: Initiatives by Selected Colleges to Address Student Food	
Insecurity	21
Figure 4: Pictures of Food Pantries from GAO Site Visits to	
Selected Colleges	24

Abbreviations

Education

E&T Employment and Training

FAFSA Free Application for Federal Student Aid

FNS Food and Nutrition Service

NPSAS National Postsecondary Student Aid Stud

U.S. Department of Education

NPSAS National Postsecondary Student Aid Study SNAP Supplemental Nutrition Assistance Program

USDA U.S. Department of Agriculture

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

December 21, 2018

The Honorable Debbie Stabenow
Ranking Member
Committee on Agriculture, Nutrition, and Forestry
United States Senate

The Honorable Patty Murray
Ranking Member
Committee on Health, Education, Labor & Pensions
United States Senate

The Honorable Edward J. Markey United States Senate

The Honorable Elizabeth Warren United States Senate

In fiscal year 2017, the federal government spent over \$122 billion in grants, loans, and work-study funds through federal student aid programs to help make college accessible to students. 1 This substantial federal investment in higher education is at risk if college students drop out because they cannot afford basic necessities like food. The federal government also spent \$98 billion in fiscal year 2017 on nutrition assistance programs, including \$68 billion on the Supplemental Nutrition Assistance Program (SNAP), the nation's largest nutrition assistance program, to combat food insecurity. College students enrolled at least half time, however, are generally not eligible for SNAP benefits unless they fall into certain categories designed to more narrowly target students in need of assistance. According to some studies, college students who experience food insecurity, which the U.S. Department of Agriculture (USDA) defines as the condition of limited or uncertain access to adequate food, may also experience decreased academic performance, symptoms of depression and anxiety, and other negative mental health

¹For this report, we define federal student aid programs as financial aid programs authorized under Title IV of the Higher Education Act of 1965, as amended, Pub. L. No. 89-329, Title IV, 79 Stat. 1219 (codified at 20 U.S.C. § 1001 et seq.). These include the William D. Ford Federal Direct Loan, the Federal Pell Grant, and the Federal Work-Study programs.

indicators.² In light of the potential obstacles to college students' academic success posed by lack of access to adequate food, you asked us to review the issue of food insecurity among college students.

This report examines: (1) what is known about the extent of food insecurity among college students and their use of SNAP; (2) how selected colleges are addressing student food insecurity; and (3) the extent to which federal programs assist college students experiencing food insecurity.

To determine what is known about the extent of food insecurity among college students, we conducted an in-depth review of studies. To be included, studies had to: (1) be based on research conducted in and published in the United States; (2) be published after 2007; and (3) contain original, direct estimates of food insecurity rates among college students. We identified 35 studies that met these criteria, but subsequently eliminated 4 of these from our in-depth review due to concerns about their methodological limitations. We reviewed and summarized the remaining 31 studies.

We also analyzed National Postsecondary Student Aid Study (NPSAS) data from the 2015-2016 academic year, the most recent year available, to estimate the prevalence of risk factors for food insecurity among college students. Nationally representative survey data that would support direct estimates of the prevalence of food insecurity among college students do not currently exist. However, the National Center for Education Statistics at the Department of Education (Education) regularly collects NPSAS data, which contain nationally representative, detailed

²See Suzanna M. Martinez, Edward A. Frongillo, Cindy Leung, and Lorrene Ritchie, "No Food for Thought: Food Insecurity is Related to Poor Mental Health and Lower Academic Performance among Students in California's Public University System," *Journal of Health Psychology* (June 25, 2018), accessed at

http://journals.sagepub.com/doi/abs/10.1177/1359105318783028; Maya E. Maroto, Anastasia Snelling, and Henry Linck, "Food Insecurity among Community College Students: Prevalence and Association with Grade Point Average," *Community College Journal of Research and Practice*, vol. 39, no. 6 (2015); Megan M. Patton-López, Daniel F. López-Cevallos, Doris I. Cancel-Tirado, and Leticia Vazquez, "Prevalence and Correlates of Food Insecurity among Students Attending a Midsize Rural University in Oregon," *Journal of Nutrition Education and Behavior*, vol. 46, no. 3 (2014); Meg Bruening, Stephanie Brennhofer, Irene van Woerden, Michael Todd, and Melissa Laska, "Factors Related to the High Rates of Food Insecurity among Diverse, Urban College Freshmen," *Journal of the Academy of Nutrition and Dietetics*, vol. 116, no. 9 (2016).

demographic and financial data about college students.³ We assessed the reliability of the NPSAS data by reviewing existing information about the data and the system that produced them and by interviewing agency officials knowledgeable about the data. As a result, we determined that the data were sufficiently reliable for the purposes of this report. We identified risk factors associated with food insecurity through a literature review and through interviews with academic researchers, college officials, state and federal officials, and relevant policy organizations. We also analyzed NPSAS data to estimate SNAP participation among potentially eligible students.

To understand how selected colleges address student food insecurity, we conducted site visits in California, Kentucky, Massachusetts, and Michigan. We selected a geographically diverse group of states where colleges or state SNAP agencies were actively addressing food insecurity among college students. In selecting these states, we reviewed literature and asked researchers we interviewed about colleges and states that were actively addressing food insecurity on campus. In each state, we met with administrators, faculty, and students at selected 2- and 4-year public colleges and with officials from the state agencies that administer the SNAP program and other relevant organizations. Overall, we contacted 14 colleges—seven 2-year and seven 4-year colleges—that were actively addressing food insecurity among their students. We also interviewed researchers and staff at policy organizations knowledgeable about SNAP and college student food insecurity.

To assess the extent to which federal programs assist college students experiencing food insecurity, we reviewed relevant federal laws, regulations, and agency guidance and program documents. We emailed the 51 state SNAP agency directors (all 50 states and the District of Columbia) to ask whether their state agency is taking any action to address college student food insecurity and received responses from 50

³NPSAS data are based on a nationally representative sample of college students. Data are collected from multiple sources, including school records and government databases, as well as student interviews.

⁴We visited 12 colleges as a part of our site visits and conducted telephone interviews with officials at 2 colleges in other states.

of them.⁵ We interviewed state SNAP agency directors in our site visit states of California, Kentucky, Massachusetts, and Michigan, as well as in Washington because of its innovative partnerships with colleges. We also interviewed USDA Food and Nutrition Service (FNS) officials at the national office as well as at four of the seven FNS regional offices.⁶ We compared FNS's communication and information sharing activities against federal internal control standards. Further details on our methodology are available in appendix I.

We conducted this performance audit from July 2017 to December 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

The federal government, states, colleges, students and their families all play important roles in financing higher education costs. Under Title IV of the Higher Education Act of 1965, as amended, the federal government offers students at all types of colleges financial assistance to help pay for their education, such as through the William D. Ford Federal Direct Loan (Federal Direct Loan), the Federal Pell Grant (Pell Grant), and the Federal Work-Study programs. Some of this aid is targeted toward students based on their financial need. For example, Education provided almost \$27 billion in Pell Grants to low-income students in fiscal year 2017. States also provide funding to public colleges through state appropriations for operating expenses and grant programs that provide financial aid directly to students based on financial need, merit, or a combination of both. Despite the substantial federal expenditure in higher

⁵Michigan's state SNAP agency did not respond to our email. However, we interviewed the Michigan state SNAP agency director during the course of our review and incorporated the state's actions to address student food insecurity into our report, as appropriate.

⁶We interviewed the four FNS regional offices that are responsible for oversight of our site visit states.

⁷For purposes of this report, "colleges" include 2- and 4-year degree-granting institutions as well as those that provide technical training in certificate programs of shorter duration. Unless otherwise noted, "college students" refers to undergraduates enrolled in one of these institutions.

education, rising college costs have outpaced federal and state grant aid and, over time, have led to an increasing share of the cost being borne by students and their families. For example, over the past 30 years, the average in-state net price for a full-time undergraduate student at a public 4-year college—after taking into account all grant aid and education tax benefits—has nearly doubled, from about \$8,000 in 1990-1991 to nearly \$15,000 in 2017-2018. At public 2-year colleges, the net price for full-time students increased over the same time period from about \$6,800 to \$8,000.8

To plan for the cost of college, students and their families must consider the full cost of attendance, which includes not only tuition and fees, but also room and board and other miscellaneous expenses. The federal government requires colleges to estimate and distribute information on the full cost of attendance to prospective and enrolled students. The amount of need-based federal aid a student is eligible for is based, in part, upon the school's estimated cost of attendance.

Changes in College Student Demographics

National data show that, over the past several decades, an increasing percentage of students from low-income households are enrolling in college. According to NPSAS data, the percentage of all undergraduates who had a household income at or below 130 percent of the federal poverty line increased from 28 percent in 1996 to 39 percent in 2016. ¹⁰ In addition, the percentage of college students receiving a Pell Grant has nearly doubled over roughly the same time period. For example, in 1999-2000, approximately 23 percent of college students received a Pell Grant,

⁸Net price is the cost of college per student after all financial aid and education tax benefits are taken into account. This figure includes tuition, fees, room, and board (the cost of food). To increase transparency about college costs and help students make informed decisions about which college they can afford, the federal government requires all colleges that are authorized to disburse federal financial aid to annually publish on their website a net price calculator. These figures are collected and published in Sandy Baum, Jennifer Ma, Matea Pender, and Meredith Welch, *Trends in Student Aid 2017* (New York: The College Board, October 2017).

⁹Room costs include an allowance for living expenses for students who do not live on campus. Miscellaneous expenses may include allowances for books, supplies, transportation, loan fees, and, if applicable, dependent care.

¹⁰These results are within a +/-1 percentage point margin of error. U.S. Department of Education, National Center for Education Statistics, 1995-1996 National Postsecondary Student Aid Study (NPSAS:96); and 2015-2016 National Postsecondary Student Aid Study (NPSAS:16).

and in 2016, this figure was about 40 percent. ¹¹ Some researchers have suggested that reductions in federal and state funding of higher education relative to the increasing cost of college have coupled with these student demographics to increase the share of college costs borne by students, which can reduce the amount students have to support their basic needs, such as food and housing. ¹²

A traditional college student is generally considered to be someone who is enrolled in college full time immediately after graduating from high school, is financially dependent on his or her parents, and either does not work during the school year or works part time. ¹³ However, these students represent a minority of students enrolled in college today. According to NPSAS data, about half of all undergraduate students enrolled in college in 2016 were considered financially independent from their parents. About 22 percent had dependent children themselves, and 14 percent were single parents. The average college student in 2016 was 26 years old and first enrolled at age 21. Sixty-four percent of college students in 2016 worked at least part time while enrolled, and a quarter worked full time. See figure 1 for the percentages of traditional and nontraditional students in 2016 and for Education's list of traditional and nontraditional student characteristics.

¹¹U.S. Department of Education, National Center for Education Statistics, *Trends in Pell Grant Receipt and the Characteristics of Pell Grant Recipients: Selected Years*, 1999-2000 to 2011-2012, NCES 2015-601 (Washington, D.C.: September 2015); and 2015-2016 National Postsecondary Student Aid Study (NPSAS:16).

¹²See, for example, Amy Ellen Duke-Benfield, *Bolstering Non-Traditional Student Success: A Comprehensive Student Aid System Using Financial Aid, Public Benefits, and Refundable Tax Credits* (Washington, D.C.: Center for Law and Social Policy, December 2015); Sara Goldrick-Rab, Katharine Broton, and Daniel Eisenberg, *Hungry to Learn: Addressing Food and Housing Insecurity among Undergraduates* (Madison: Wisconsin HOPE Lab, December 2015); Sara Goldrick-Rab, Jed Richardson, and Anthony Hernandez, *Hungry and Homeless in College: Results from a National Study of Basic Needs Insecurity in Higher Education* (Madison: Wisconsin HOPE Lab, March 2017).

¹³U.S. Department of Education, National Center for Education Statistics, *Findings from the Condition of Education, 2002: Nontraditional Undergraduates,* NCES 2002–012 (Washington, D.C.: 2002).

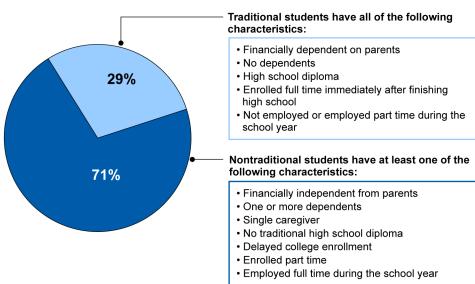


Figure 1: Percentages and Characteristics of Traditional and Nontraditional College Students in 2016

Source: GAO analysis of 2016 National Postsecondary Student Aid Study data from the U.S. Department of Education. | GAO-19-95

Note: Categories of traditional and nontraditional students are based on the Department of Education's definition. All results are within a +/-2 percentage point margin of error.

Federal Food Assistance Programs Available to College Students

FNS oversees the states' administration of SNAP, the main federal benefit program to address food insecurity for low-income households. In fiscal year 2017, the program provided benefits to about 42 million individuals in more than 20 million households. The purpose of the SNAP program is to safeguard the health and well-being of the nation's population by providing a monthly cash benefit to raise the purchasing power and nutrition level of low-income households. FNS is responsible for establishing program regulations and ensuring that state officials administer SNAP in compliance with program rules. Officials in seven FNS regional offices assist officials from the FNS national office in this oversight work. FNS shares information and policy guidance with state SNAP agencies in part through its regional offices, the FNS website, and annual conferences. The states, or in some cases counties within a state, administer SNAP by determining whether households meet the program's eligibility requirements, calculating monthly benefits for qualified households, issuing benefits to participants on an electronic benefits transfer card, and investigating and prosecuting recipient fraud. States

are also allowed to establish some state-specific modifications in how they administer SNAP policy.¹⁴

Beyond SNAP, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is another federal food assistance program available to eligible college students who are pregnant or postpartum. ¹⁵ FNS also oversees the WIC program, which is administered by state and local agencies through approximately 10,000 clinic sites.

College Student Eligibility for SNAP

SNAP eligibility is largely based on a household's income and certain other characteristics. ¹⁶ However, in 1980 federal law restricted college students who are enrolled at least half time from receiving SNAP benefits. ¹⁷ This law generally prevents traditional college students—who may appear to have a low income while attending college but receive

¹⁴SNAP's statutes, regulations, and waivers provide state SNAP agencies with various policy options. State SNAP agencies use this flexibility to adapt their programs to meet the needs of eligible, low-income households in their states. See U.S. Department of Agriculture, Food and Nutrition Service, *Supplemental Nutrition Assistance Program, State Options Report, 14th Edition* (Washington, D.C.: May 31, 2018).

¹⁵WIC is designed to improve the health and nutritional well-being of pregnant and postpartum women, infants, and young children by providing nutritious supplemental foods, nutrition education, and referrals to health and social service programs. Pregnant and postpartum women and children up to age 5 are eligible if they are found to be at nutritional risk and have incomes below a certain threshold. WIC participants typically receive food benefits in the form of vouchers or coupons that they redeem at authorized retail vendors to obtain, at no cost, certain approved foods, including infant formula.

¹⁶In general, SNAP defines a household as persons living together who purchase food and prepare meals together for home consumption. Some people who live together are included in the same household even if they purchase and prepare meals separately, such as spouses and children under 22 living with their parents. Some federal program benefits are included as income when determining a household's SNAP eligibility, while a household may deduct certain expenses from the income used to calculate their eligibility for SNAP, such as those for dependent care if the care enables a household member to work or enroll in training or education.

¹⁷Food Stamp Act Amendments of 1980, Pub. L. No. 96-249, Title I, § 139, 94 Stat. 357, 370. The statutory language restricts access to SNAP benefits for individuals enrolled half time or more in an institution of higher education. 7 U.S.C. § 2015(e). An individual is considered to be enrolled in an institution of higher education if the individual is enrolled in a business, technical, trade, or vocational school that normally requires a high school diploma or equivalency certificate for enrollment in the curriculum or if the individual is enrolled in a regular curriculum at a college or university that offers degree programs regardless of whether a high school diploma is required. For the purposes of discussing student access to SNAP benefits in this report, we will refer to these individuals as college students.

financial support from their parents—from receiving SNAP benefits. Federal law establishes several exemptions to this restriction so that college students who are enrolled at least half time and have a legitimate need can access SNAP. 18 For example, assuming that they meet all other SNAP eligibility criteria, a full-time college student may be exempt from the college student restriction if they are:

- younger than age 18 or age 50 or older;
- a parent caring for a child under age 6;
- a parent caring for a child aged 6 to 11 who is unable to obtain childcare to attend school and work;
- a single parent caring for a child under 12 years old and enrolled full time:
- working a minimum of 20 hours per week at paid employment;
- participating in a state- or federally-financed work-study program;
- receiving Temporary Assistance for Needy Families (TANF) benefits;¹⁹
- not physically or mentally fit (e.g., have a disability);²⁰ or
- enrolled in certain programs for the purpose of employment and training.²¹

FNS officials told us that states have flexibility regarding which programs may qualify a student for the exemption pertaining to enrollment in certain programs for the purpose of employment and training. These programs must be operated by a state or local government, target low-income households, and increase participants' employability. State SNAP agencies have discretion to determine which programs in their state

¹⁸Throughout this report we refer to these as student eligibility exemptions. Students who meet one of these student eligibility exemptions do not automatically qualify for SNAP—they must still apply for SNAP and meet the household income and asset limits, among other eligibility criteria, to be determined eligible to receive SNAP benefits.

¹⁹TANF is a block grant to states to help meet the needs of low-income families. The program emphasizes work and time-limited cash assistance and gives states wide discretion on how to use TANF funds, including for various noncash services.

²⁰For ease of reference, in this report we use the term "disability" to refer to this student eligibility exemption.

²¹7 U.S.C. § 2015(e)(3).

qualify.²² These employment and training programs may be operated at community colleges, among other community partners.

FNS officials said that in 2014 the agency expanded its focus on SNAP Employment & Training (E&T) program services, which are intended to help individuals in SNAP households acquire skills, training, and work experience that will increase their ability to obtain regular employment that will ultimately lead to greater self-sufficiency and reduce their reliance on SNAP. State agencies have flexibility in designing SNAP E&T program services, and FNS encourages states to enter into partnerships with established providers, including community colleges, to deliver SNAP E&T program services. For example, a SNAP recipient could train to become a Certified Nursing Assistant at a community college as part of a state's SNAP E&T program. In addition to providing employment and training services, state SNAP E&T programs are required to provide participants with necessary supportive services, such as transportation, childcare, and textbooks.

²²7 C.F.R. § 273.5(b)(11)(iv). The law also states that programs must be at least equivalent to a state SNAP Employment and Training (E&T) program service.

²³We recently reported on the performance of the SNAP E&T Program. See GAO, Supplemental Nutrition Assistance Program: More Complete and Accurate Information Needed on Employment and Training Programs, GAO-19-56 (Washington, D.C.: Nov. 20, 2018).

²⁴A provision in the 2014 Farm Bill clarified that SNAP E&T program services must meet the criteria for a career or technical education program outlined in the Carl D. Perkins Career and Technical Education Act (Perkins Act). For the purposes of the Perkins Act, a career or technical education program is defined at 20 U.S.C. § 2302.

Information about the Prevalence of Food Insecurity among College Students Nationally is Limited and Many Potentially Eligible, At-Risk Students Do Not Receive SNAP

Studies Identify a Range of Food Insecurity Rates among Respondents, but Results Cannot Be Generalized to All Students

Our review of 31 studies provided some information regarding food insecurity among college students, but all of the studies have limitations and none provide estimates of food insecurity for this population in general.²⁵ Estimates of food insecurity among college students included in the studies we reviewed ranged from 9 percent to well over 50 percent, with 22 of these of 31 studies estimating food insecurity rates of over 30 percent. 26 These results reflect the studies' different samples and methods, and the estimates from the studies included in our review are not generalizable to the college student population as a whole. None of these studies are based on a sufficiently large or diverse random sample of college students to constitute a representative study. The studies addressed the difficulty of sampling the college student population in different ways, including by extrapolating from household data, surveying students in a particular degree program or on a particular campus, or targeting particular, non-random sub-groups of the college student population. Most of the studies were also conducted on only one campus,

²⁵We included studies that had been published in U.S. journals from January 2007 through August 2018, covered college students in the United States, and contained original, direct estimates of food insecurity among college students.

²⁶USDA has developed three questionnaires containing 6, 10, and 18 questions, respectively, to measure household food insecurity. All but three of the studies in our review adapted the questions from either the 6-, 10-, or 18-question USDA questionnaire to measure food insecurity among individual students. Depending on how many questions respondents answer affirmatively, they were designated as being either food secure, having low food security, or having very low food security. Those with either low or very low food security were termed "food insecure."

although some studies gathered data from more than one campus.²⁷ Despite the limitations, these studies as a whole help shed some light on the range of food insecurity that exists among some groups of college students.

Of the 31 studies we reviewed, 2 used nationally representative household data sets, the Current Population Survey and the Survey of Income and Program Participation.²⁸ The study that used the Current Population Survey data from 2011-2015 found that an estimated:

- 11 percent of households with a student in a 4-year college experienced food insecurity,
- 14 percent of households with a student in vocational/technical education experienced food insecurity, and
- 17 percent of households with a student in a community college experienced food insecurity.²⁹

These national household surveys assess the food security of households with a college student member, but they do not directly survey college students and only measure food security at the household, and not the individual, level. For example, these household data may not capture a

²⁷Of the 31 studies included in our review, 8 had survey respondents from multiple college campuses or across university systems.

²⁸The Current Population Survey, sponsored jointly by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics, is the primary source of labor force statistics for the population of the United States. Since 1995, the Current Population Survey has included a Food Security Supplement (FSS) that has collected information on the food security, food program participation, and food expenditures of U.S. households. FSS survey questions ask about the household as a whole and not about individuals within the household. The Survey of Income and Program Participation, sponsored by the U.S. Census Bureau, is the federal government's premier source of information for U.S. household income and program participation. The Survey of Income and Program Participation collects data for many topics, including: economic well-being, family dynamics, education, assets, health insurance, childcare, and food security.

²⁹The authors found that the incidence of food insecurity for each of these groups was significantly different (at the .05 level) from the incidence of food insecurity for all adults not in that group. See Kristin Blagg, Craig Gundersen, Diane Whitmore Schanzenbach, and James P. Ziliak, *Assessing Food Insecurity on Campus: A National Look at Food Insecurity among America's College Students* (Washington, D.C.: The Urban Institute, August 2017).

college student's food insecurity in situations where the student member of the household does not live at home for most of the year.³⁰

The remaining 29 studies we reviewed collectively surveyed college students on approximately 200 campuses across multiple states, including two large state university systems, and produced a wide range of estimates of food insecurity. In most cases, the results can be characterized as applying only to the respondents of the survey.³¹ The 29 studies based on campus surveys provide a range of food insecurity rates among respondents, from 9 percent to over 50 percent.

- For example, a study first published in 2017 found that 15 percent of student respondents at one 4-year college experienced food insecurity, with an additional 16 percent of student respondents at that college estimated to be at-risk for food insecurity.³²
- Two recent surveys of college systems in California found that 40 percent of respondents from University of California campuses and 42 percent of respondents from California State University campuses experienced food insecurity.³³

Estimates of food insecurity rates in the studies we reviewed tended to be higher at 2-year than at 4-year colleges. Four studies examined only 2-year college students and three of these studies estimated food insecurity

³⁰Additionally, while these surveys are nationally representative overall, the number of households with college students in these surveys is relatively small, which limits the precision of these estimates.

³¹The inability to generalize beyond survey respondents occurs in these cases because even when a survey is sent to all students or to a random sample of students, the students who choose to respond may be non-random. For example, students with a particular interest in food insecurity or who want to report their own food insecurity may opt to participate in these surveys at higher rates than other students. As a result, the respondents may not fully represent the population sampled. Additionally, the response rates in many of the surveys used in the studies we reviewed were very low—in some cases 10 percent or below.

³²See Devon C. Payne-Sturges, Allison Tjaden, Kimberly M. Caldeira, Kathryn B. Vincent, and Amelia M. Arria, "Student Hunger on Campus: Food Insecurity among College Students and Implications for Academic Institutions," *American Journal of Health Promotion*, vol. 32, no. 2 (2018).

³³See R.M. Crutchfield and J. Maguire, "California State University Office of the Chancellor Study of Student Basic Needs," retrieved from http://www.calstate.edu/basicneeds; and Suzanna M. Martinez, Karen Webb, Edward A. Frongillo, and Lorrene D. Ritchie, "Food Insecurity in California's Public University System: What Are the Risk Factors?," *Journal of Hunger and Environmental Nutrition*, vol. 13, no. 1 (2017).

rates among respondents at 2-year colleges to be 40 percent or higher. Three studies looked at both 2-year and 4-year colleges and estimated food insecurity to be higher among students at 2-year colleges. For example, a large, multi-college study conducted in 2017 found that during the 30 days preceding the survey, 42 percent of community college students who responded and 36 percent of students at 4-year colleges who responded indicated they were food insecure. Further, the two studies that used national household data sets found that households with community college and vocational education student members had higher food insecurity levels than households with students at 4-year colleges. Security levels than households with students at 4-year colleges.

Federal Data Show Most Low-Income Students Had Multiple Risk Factors Associated with Food Insecurity in 2016 We identified and analyzed the prevalence of risk factors associated with food insecurity among students through our review of peer-reviewed publications on food insecurity and through interviews with academic researchers, college officials, state and federal officials, and officials from relevant policy organizations.³⁶ In the studies we reviewed and in our interviews with researchers, having a low income was consistently identified as a key risk factor for food insecurity. The other risk factors we included in our analysis are: being a first-generation college student,

³⁴Sara Goldrick-Rab, Jed Richardson, Joel Schneider, Anthony Hernandez, and Clare Cady, *Still Hungry and Homeless in College* (Madison: Wisconsin HOPE Lab, April 2018).

³⁵See Blagg, Gundersen, Schanzenbach, and Ziliak, *Assessing Food Insecurity on Campus*. See also K. Broton, "The Evolution of Poverty in Higher Education: Material Hardship, Academic Success, and Policy Perspectives" (Ph.D. diss., University of Wisconsin-Madison, 2017).

³⁶We focused on risk factors associated with food insecurity because nationally representative data on food insecurity among college students do not exist. The risk factors we identified can be grouped into several broad categories: low-income indicators, housing issues, skills/resiliency factors, demographic characteristics, and "other stressors." For example, the academic studies we reviewed consistently identified having a low-income as a correlate of food insecurity. Our analysis focused on potential risk factors that had a corresponding variable in the 2016 NPSAS data set. We defined low income as a household income at or below 130 percent of the federal poverty line because this is the income threshold for SNAP benefits for households that do not include a member who is 60 years of age or older or disabled. For more information on how we identified risk factors associated with food insecurity, see appendix I.

receiving SNAP, being a single parent, being disabled, being homeless or at risk of homelessness, and being a former foster youth.³⁷

In our analysis, we focused on students with a household income at or below 130 percent of the federal poverty line, which represents 39 percent of all undergraduates.³⁸ While having a low income is itself the most common risk factor for food insecurity among college students, our analysis found that the majority of low-income students also experience additional risk factors for food insecurity. The three most common risk factors for food insecurity among low-income students were being a firstgeneration college student; receiving SNAP (receiving SNAP can be considered a risk factor in that it may reduce, but not entirely eliminate, food insecurity); and being a single parent. Of the approximately 7.3 million low-income students, 31 percent were first-generation college students, 31 percent reported receiving SNAP, and 25 percent were single parents.³⁹ The prevalence of risk factors among low-income students was lower at 4-year colleges compared to other colleges. For example, about 21 percent of low-income 4-year college students were single parents in 2016 compared to about 42 percent of low-income students in less than 2-year programs. Low-income individuals enrolled in less than 2-year programs had the highest prevalence for almost all risk factors (see table 1).40

³⁷Receiving SNAP is a risk factor for food insecurity because while receiving SNAP benefits addresses food insecurity to some extent, studies show SNAP recipients still have higher food insecurity rates than the general population. For example, one study found that receiving SNAP for 6 months only reduced food insecurity by about 13 percent. In other words, receiving SNAP benefits may reduce food insecurity without completely eliminating it. See, for example, James Mabli, Jim Ohls, Lisa Dragoset, Laura Castner, and Betsy Santos, *Measuring the Effect of Supplemental Nutrition Assistance Program (SNAP) Participation on Food Security*, a report prepared by Mathematica Policy Research at the request of the U.S. Department of Agriculture, Food and Nutrition Service (August 2013).

³⁸This analysis excludes foreign and international students.

³⁹Risk factors associated with food insecurity frequently co-occur. Our analysis found the majority of low-income students who received SNAP also have one or more additional risk factors. Including SNAP receipt as a risk factor in our analysis did not substantially affect the total number of at-risk students.

⁴⁰Our analysis does not estimate rates of food insecurity among students with these characteristics because the NPSAS does not include data on food insecurity. Instead, our analysis highlights low-income students who have at least one other risk factor associated with food insecurity. Education officials said they are planning to incorporate food insecurity questions into the next NPSAS data collection in 2020. See appendix I for information about how we selected and operationalized these risk factors.

Table 1: Prevalence of Risk Factors Associated with Food Insecurity among Low-Income U.S. College Undergraduate Students, by College Type in 2016

	Total		4-year schools		2-year schools		Less than 2-year schools	
Risk factor	Number of students	Percent of low- income students	Number of students	Percent of low-income students	Number of students	Percent of low- income students	Number of students	Percent of low- income students
First generation ^a	2,299,206	31%	1,015,263	28%	1,188,889	34%	95,053	35%
Receiving SNAP ^b	2,257,121	31%	1,024,774	29%	1,128,133	33%	104,214	38%
Single parent	1,815,655	25%	756,885	21%	943,168	27%	115,602	42%
Disabled ^c	1,591,962	22%	757,267	21%	773,159	22%	61,536	22%
Homeless or at risk of homeless	1,109,714	15%	504,397	14%	548,235	16%	57,082	21%
Former foster youth ^d	788,866	11%	391,819	11%	371,419	11%	25,628	9%
Total Low- income students ^e	7,339,571	100%	3,597,419	100%	3,466,862	100%	275,291	100%

Source: GAO analysis of 2016 National Postsecondary Student Aid Study Data | GAO-19-95

Notes: All results are within a +/-5.5 percentage point margin of error. Percentages do not sum to 100 percent because students may have more than one risk factor.

^aBeing a first generation college student is determined based on whether the student reported that his/her parents attended college.

^bReceipt of Supplemental Nutrition Assistance Program (SNAP) benefits is self-reported and not cross-checked with Food Nutrition Service (FNS) enrollment data.

^cStudents self-report their disability status; this is not based on a federal disability determination.

Twenty-nine percent of all U.S. undergraduates had a low income and experienced at least one additional risk factor for food insecurity, according to our analysis of 2016 NPSAS data—14 percent had a low income and one other risk factor and 15 percent had a low income and two or more additional risk factors associated with food insecurity (see table 2). Risk factors associated with food insecurity are more prevalent among low-income students than among the general student population, with 75 percent of low-income students experiencing one or more additional risk factors. Students at 2-year colleges and those in less than 2-year programs were also more likely to have multiple risk factors.

^dThe variable we used as a proxy for having been a former foster youth is indicated by being an orphan or ward of the court.

^eLow income is defined as having a household income level at or below 130 percent of the federal poverty level.

Table 2: Prevalence of Risk Factors Associated with Food Insecurity among Low-Income U.S. College Undergraduate Students in 2016

Number of risk factors	Number of low-income undergraduates	Percent of all undergraduates		Percent of low-income undergraduates	
Low-income and 0 additional risk factors	1,858,253	10%		25%	
Low-income and 1 additional risk factor	2,586,454	14%	29% of U.S. undergraduates are low-income and	35%	75% of low- income undergraduates
Low-income and 2 or more additional risk factors	2,894,864	15%	have 1 or more additional risk factors for food insecurity	39%	have 1 or more additional risk factors for food insecurity
Total low-income undergraduates	7,339,571	39%		100%	_

Source: GAO analysis of 2016 National Postsecondary Student Aid Study Data | GAO-19-95

Notes: All results are within a +/-1 percentage point margin of error. Sums have been rounded to the nearest whole percentage point. We included the following risk factors associated with food insecurity in addition to having a low income: being a first-generation college student, receiving Supplemental Nutrition Assistance Program (SNAP) benefits, being a single parent, being disabled, being homeless or at risk of homelessness, and being a former foster youth.

Fifty-Seven Percent of Potentially Eligible Low-Income Students with Food Insecurity Risk Factors in 2016 Did Not Participate in SNAP

In our analysis of SNAP participation among students, we focused on low-income students with at least one additional risk factor for food insecurity because these students would likely meet the income threshold for SNAP eligibility and have an additional risk factor that could put them in need of food assistance. ⁴¹ Our analysis of 2016 NPSAS data identified about 5.5 million low-income students with at least one additional risk factor for food insecurity and found that about 59 percent of these students (3.3 million) reported being enrolled at least half time and meeting a SNAP student eligibility exemption. About 1.8 million of these low-income students with an additional risk factor reported meeting a student exemption and also that they were not receiving SNAP benefits. ⁴² In other words, among potentially SNAP eligible low-income students with at least one additional factor for food insecurity, 57 percent did not report participating in SNAP in 2016 (see fig. 2). ⁴³

⁴¹We identified potentially eligible students based on characteristics we identified in the NPSAS data, specifically, whether they had an income at or below 130 percent of the federal poverty level and reported meeting one of the student exemptions we were able to capture in our analysis. Our analysis was not able to perfectly capture all the student eligibility exemptions. Some of the limitations of our analysis may have led to fewer students appearing to meet an eligibility exemption (specifically the exemption related to participation in other employment and training programs, for which there is no corresponding NPSAS variable), while others may have led to more students appearing to meet an eligibility exemption (specifically the exemptions related to disability and the availability of childcare, for which the NPSAS variable does not perfectly align with the SNAP student exemptions). A student who meets a SNAP exemption must still submit a SNAP application with household income and asset information; then the state SNAP agency reviews the application, interviews the applicant to gather additional relevant information, and determines eligibility for SNAP benefits. See appendix I for more information on how we identified students who potentially met a SNAP eligibility exemption using NPSAS data.

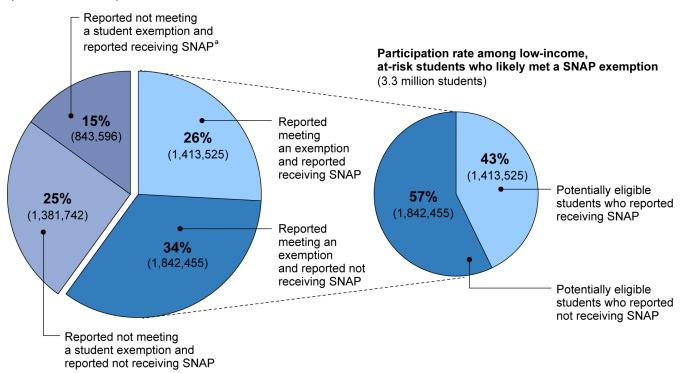
⁴²The student or their parents report receipt of SNAP benefits on the Free Application for Federal Student Aid. Students are asked about their receipt of SNAP benefits again during the interview portion of the NPSAS. Most students we identified as not receiving SNAP were financially independent and could likely apply for SNAP as their own household; dependent students who are potentially eligible can only receive SNAP as part of their parents' household.

⁴³The total SNAP participation rate among potentially eligible students with one additional risk factor was 43 percent. According to FNS, in fiscal year 2016, the national SNAP participation rate among all eligible persons was about 85 percent. See Karen Cunnyngham, *Trends in Supplemental Nutrition Assistance Program Participation Rates: Fiscal Year 2010 to Fiscal Year 2016,* a report prepared at the request of the U.S. Department of Agriculture, Food and Nutrition Service (Washington, D.C.: Mathematica Policy Research, July 2018).

Figure 2: Supplemental Nutrition Assistance Program (SNAP) Participation among Low-Income College Students At-Risk of Food Insecurity in 2016

Total low-income, at-risk student population

(5.5 million students)



Source: GAO analysis of 2016 National Postsecondary Student Aid Study (NPSAS) data. | GAO-19-95

Notes: All results are within a +/-2 percentage point margin of error. We identified students potentially eligible for SNAP based on characteristics we identified in the NPSAS data related to SNAP eligibility—specifically, whether they had an income at or below 130 percent of the federal poverty level and reported one of the characteristics we identified that correspond to the student exemptions we were able to capture in our analysis. Some of the limitations of our analysis may have led to fewer students appearing to meet an eligibility exemption (specifically the exemption related to participation in other employment and training programs, for which there is no corresponding NPSAS variable), while others may have led to more students appearing to meet an eligibility exemption (specifically the exemptions related to disability and the availability of childcare, for which the NPSAS variable does not perfectly align with the SNAP student exemption). We did not make any legal determination about actual SNAP eligibility for any individual. Risk factors associated with food insecurity include being disabled, homeless or housing insecure, a former foster youth, a single parent, the first-generation in a student's family to attend college, and receiving SNAP benefits. Participation in SNAP is self-reported through the Free Application for Federal Student Aid and these data are used in the NPSAS.

^aStudents who did not meet an eligibility exemption but reported receiving SNAP (1) may be receiving SNAP as members of their parents' household, (2) may have attended college less than half time and therefore were not subject to the student SNAP restrictions, or (3) may have met one of the student exemptions we were unable to capture in our analysis.

About one-quarter of the 5.5 million low-income students with at least one additional risk factor for food insecurity did not meet any of the student exemptions we could identify in the NPSAS data and reported that they did not receive SNAP benefits. 44 These students would likely be ineligible to participate in SNAP unless they begin meeting one of the student eligibility exemptions in the future, such as working 20 hours per week.

Selected Colleges Are Using a Range of Approaches to Address Student Food Insecurity

The 14 selected colleges we contacted are addressing student food insecurity in three main ways: by educating faculty, staff, and students; by providing students free food and emergency assistance; and by centralizing and coordinating their student services and helping students apply for federal and state benefits. Officials at 9 of these colleges said that they viewed student food insecurity as part of students' increasing inability to meet their basic needs as a result of the decreasing affordability of higher education or the high cost of living. This sentiment was echoed by selected students we spoke with during discussion groups (see text box).

Student Statements from GAO Site Visits at Selected Colleges

The reality is that I skip meals, often I don't eat lunch. I don't want to get lunch here on campus because it's too expensive. I get headaches, have trouble concentrating. I also have a disability that is worse if I don't eat.

My parents stopped supporting me once I left for college, so I'm on my own. So the amount of food I'm able to buy is less.

I did not have much money when I started school, and immediately had to choose whether to buy food or a \$200 book for class. I chose to buy the book.

Sometimes I get home at the end of the day and I realize I haven't eaten all day. And then I realize my school work is not up to my actual ability—I definitely think not eating affects my grades. You can tell when you don't feel good that you can't do your best work.

Source: GAO discussion groups with students at selected colleges taking steps to address food insecurity among students. | GAO-19-95

⁴⁴In addition, 15 percent of low-income college students with one additional risk factor for food insecurity did not appear to meet one of the student exemptions, based on our analysis, but reported they received SNAP in 2016. This may be because they received SNAP through their parents' household, were enrolled less than half time and therefore not subject to student SNAP restrictions, or met one of the student exemptions we were unable to capture in our analysis. For example, the NPSAS data set does not contain data for the student eligibility exemption "enrolled in certain programs aimed at employment," such as the Workforce Innovation and Opportunity Act or Temporary Assistance for Needy Families employment and training programs. As a result, we may overestimate the number of students who did not meet an eligibility exemption.

All of the colleges we contacted have implemented on-campus initiatives to combat students' food insecurity with the goal of improving their student outcomes, such as retention, completion, and loan repayment rates. As one community college official told us: "We have come to realize that we can't address retention and completion without addressing students' basic needs." See figure 3 for the range of initiatives the 14 colleges we contacted were taking to address food insecurity among college students on their campuses.

Educating faculty, staff, and students

Research/
data analysis

Food pantries and other food provision

Centralizing student services

Help applying for federal and state benefits
Counseling
Disability support services
Financial aid
Veterans services

Figure 3: Initiatives by Selected Colleges to Address Student Food Insecurity

Source: Information from 14 selected colleges GAO contacted. | GAO-19-95

Educating the campus community. Officials at several of the selected colleges told us that many administrators, faculty, staff, and students on their campus are unaware that students experience food insecurity, which hinders their college's efforts to address the issue (see text box). At all 14 colleges we contacted, officials said they are educating their campus community about available resources, both on campus and off, to address student food insecurity.

Student Statements from GAO Site Visits at Selected Colleges

Students may think: 'I'm educated, [SNAP] is not a program for me and therefore don't apply for [SNAP]. So many students, including graduate students, plan their evenings around events with free food—but the same people [who are] trying to figure out how to get free food every night also think they don't need [SNAP].'

One student said that a university housing staff member told him: 'You're a college student, you don't need SNAP.'

Source: GAO discussion groups with students at selected colleges taking steps to address food insecurity among students. | GAO-19-95

All of the 14 colleges we contacted also educate their students about the resources available to address food insecurity in a variety of ways, such as by providing information during student orientations, on flyers and pamphlets, or through social media and text messages. Eight of the 14 colleges we contacted hold trainings or distribute information to faculty and staff about the on-campus and community resources available to students. Nine of these colleges have created supplemental or for-credit courses on topics such as financial literacy or cooking and nutrition. For example, one college we visited runs a workshop for first-year students on writing a spending plan and a food budget. At several of the selected colleges, faculty members include blurbs about basic needs-related resources, such as campus food pantries, in their syllabi.

Providing food and emergency financial assistance. All of the 14 colleges we contacted address student food insecurity by providing students free food and most provide students emergency financial assistance. Nationwide, the College and University Food Bank Alliance has reported that at least 656 colleges have or were developing food pantries as of September 2018. 45 Each of the 14 colleges we contacted had a food pantry, with 7 having started their pantry in the past 5 years.

⁴⁵This is the number of college food pantries registered as members with the College and University Food Bank Alliance and does not include college food pantries that are not members.

According to college officials, individual faculty and staff members are often first to identify food insecurity as a campus concern and provide food to students. For example, officials at several of the colleges we contacted traced the origins of their college's food pantry to a drawer of food a faculty or staff member kept in their office for students, or to a professor who brought jars of peanut butter or bagels for any student who wanted one.

The college food pantries we visited varied in terms of their size and location, which can depend upon the space available on campus. 46 For example, some pantries we visited consisted of only a couple of shelves of non-perishable items, while others spanned multiple rooms containing refrigerators and freezers. Directors at four of the selected food pantries said that student need was great enough to support expanding the food pantry, but that they had been unable to expand because space on campus is at a premium (see text box).

Campus Food Pantry Coordinator Statement from GAO Site Visit at Selected College

Demand for the food pantry has increased tenfold in the last 2 years. We have far more demand than supply. We're trying to get additional delivery days for produce, because as soon as produce is stocked, it's gone the same day. The same is true for protein, especially frozen chicken.

Source: GAO interview. | GAO-19-95

Several pantries also had separate sections providing students personal health items and clothing and offered auxiliary services, such as information about cooking, food budgeting, or SNAP enrollment (see fig. 4 for pictures of some of the college food pantries at selected colleges).

⁴⁶The food pantries we visited received funding from a variety of sources, including from their college's budget, faculty, staff, and student donations, grants from community food banks, or endowments created by college donors.

Figure 4: Pictures of Food Pantries from GAO Site Visits to Selected Colleges











Sources: Photographs from colleges and GAO. | GAO-19-95

Officials at 11 of the selected colleges we contacted said that a major barrier they face is overcoming the stigma some students associate with accepting help for their basic needs, such as using the food pantry (see text box). Concern about this stigma led at least 3 of the colleges we contacted to place their food pantry in a less-public area of campus to address students' privacy concerns. In contrast, 3 other colleges we contacted centrally located their food pantry to advertise its existence and normalize its use. One college president we spoke with said that "until [the college] normalized [the food pantry] and pulled it to the center of campus, it was underutilized," and stated that moving the food pantry to the center of campus quadrupled its use.

Student Statements from GAO Site Visits at Selected Colleges

I don't tell my family that I'm struggling with food because everyone I know is struggling with money—I don't want to stress them out. It's not a comfortable conversation to have. I haven't lived with my parents in years, I wouldn't even know how to ask them for help.

In the academic community, there's a normalization that you provide food at events to get students to come because they're hungry—one professor said 'starving is part of grad school.' One student responded to that by saying 'lsn't it odd that we're using students' hunger to get them in the door? Why should this even be an issue?'

I didn't recognize the physical impact of eating breakfast until I took Physical Education here, where the coach said we couldn't come to class unless we ate breakfast. I realized that eating breakfast makes me much more clearheaded and focused in my morning classes.

Source: GAO discussion groups with students at selected colleges taking steps to address food insecurity among students. | GAO-19-95

Officials at 9 of the 14 colleges we contacted reported that their campus food pantry had seen an increased number of users over time as the

student body became aware of this resource. One student we spoke with said that his college's food pantry was his only source of food, while another estimated that the food pantry allowed him to save about \$100 per month on food.

Officials at 10 of the 14 selected colleges we contacted told us they partner with national organizations or campus dining services or both to try to respond to the needs of students who might be experiencing food insecurity. For instance, public colleges in California receive state funding to incentivize them to address student food insecurity in a variety of ways, including by establishing campus food pantries, providing information to students about SNAP benefits, and establishing meal point donation programs.⁴⁷ Two California colleges we contacted were working with a national organization to set up a meal point donation program. One college in another state we visited included in their contract with their private dining services vendor funding for several initiatives, such as a campus-wide survey of student food insecurity, on-campus farmer's markets, and a learning kitchen that teaches students hands-on cooking skills. Additionally, 2 of the colleges we contacted are working to have SNAP benefits accepted at campus markets.

Beyond providing students with free food, officials at 12 of the 14 colleges we contacted said that their college makes emergency cash assistance available to students through small loans, grants, or grocery store or gas station gift cards. These emergency funds are intended to help students pay bills for one-time financial emergencies, such as buying groceries or paying for a car repair or a utility bill. One community college we visited directly ties this assistance to its retention efforts, providing a one-time amount of up to \$500 for students judged to have sufficient need *and* who are likely to remain in school if the bill is paid.

Centralizing and coordinating student services and access to benefits. Officials at many of the colleges we contacted told us they have centralized their student support and financial aid services, among others, and several have introduced a case management approach to better collaborate across departments and more efficiently and holistically address their students' basic needs (see text box). Of the 14 colleges we contacted, 8 had centralized some or all of their student services. For example, one community college we visited has co-located many of its

⁴⁷Cal. Educ. Code § 66027.8(d).

student services—including its financial aid, academic counseling, payroll, food pantry, veterans' services, and women's resource center, among others—around a central hub of the student union. Students visiting this central hub may be assigned a caseworker to connect them with the oncampus, community, state, and federal benefits for which they are eligible. Officials at a few of the colleges we contacted said that centrally locating student services also helped faculty and staff by providing a single point of contact to refer students. One official said that she tells faculty and peer mentors: "If you see a student in any kind of distress at all—mental health, hunger, homelessness, anything—send them to us." She added that it is too much to ask faculty to figure out which office or official to send students to for specific concerns.

Student Statements from GAO Site Visits at Selected Colleges

[The college's centralized benefits hub, which offers food and assistance applying for federal and state benefit programs] has helped me so much. I visit [it] probably two times a week and they helped me get my SNAP benefits. When I am hungry, I can't concentrate on school or pay attention to my studies.

The entire basement level of the student center is being turned into a basic needs hub. In addition to the food pantry, the hub will also include the student SNAP office, the student environmental resource center [which is a partner in building sustainable and equitable food systems on campus], and other student benefits services. Services on this campus have been very decentralized, and this centralized hub will provide one location for students to go to get assistance with their basic needs—it's going to be a big help having everything in one place.

Source: GAO interview and discussion group with students at selected colleges taking steps to address food insecurity among students. | GAO-19-95

Officials at 8 of the 14 colleges we contacted told us their campus has established a coordinated benefits access program or is actively screening students for potential eligibility for, and helping them enroll in, federal and state benefit programs like SNAP, WIC, Medicaid, and the Earned Income Tax Credit. As For example, one community college we contacted had a staff member build a statistical model to analyze the college's existing data on first-time students, such as data on students' household income, demographics, and course enrollment, to identify students at risk of not returning to college and to provide these students, their professors, and their faculty advisors with information about oncampus resources. Officials at one college we visited told us the campus

⁴⁸Medicaid is a joint federal and state program that provides health coverage to millions of Americans, including some low-income individuals, families and children, pregnant women, the elderly, and people with disabilities. The Earned Income Tax Credit is a federal benefit for low- to moderate-income workers.

hosts weekly clinics with county SNAP eligibility analysts to screen students for SNAP eligibility and help them apply for benefits. At a community college system we visited, the administration told us they were working with the state SNAP agency to identify which students were receiving SNAP benefits and they plan to send targeted information on SNAP to those potentially eligible students not receiving benefits.

Officials at three of the colleges we contacted said that their college was purchasing software that creates a centralized portal where faculty and staff can share information about a student's situation with student support providers so they can better provide help. For example, at a college we visited that is using such software, officials said that a professor might note in the centralized portal that an at-risk student was either failing or not attending a class, and that student would be flagged in the portal to notify academic advisors, counselors, and other college staff who can direct the student to the on-campus resources they may need, such as the food pantry or help in completing a SNAP application.

While SNAP Can Supplement Other Federal Aid for Some Low-Income Students, FNS Does Not Share Key Information to Help States Better Leverage SNAP to Assist Students

Federal Programs Are Limited in the Extent to Which They Can Address the Needs of College Students Experiencing Food Insecurity

Federal Student Aid Generally Does Not Cover All College Costs for Low-Income Students Federal grant aid is available to help low-income college students and their families pay for college, but for many students, the maximum amount of grant aid available to them does not cover all of the costs associated with attending college. 49 Officials from many of the organizations we interviewed said that the federal Pell Grant Program for low-income college students was a major source of financial support for these students, but that it does not cover the full cost of college attendance for many students, and particularly for those at 4-year colleges or in areas with high costs of living. 50 Most low-income students also work while attending college. 51 Despite this, several college officials

⁴⁹Most states also have need- and merit-based student aid programs.

⁵⁰For 2018-2019, the maximum annual federal Pell Grant award is \$6,095.

⁵¹According to 2015-2016 NPSAS data, 60 percent of low-income students had a job while enrolled in college.

we interviewed told us that the gap between the amount of financial aid available and what it costs to attend college is continuing to grow. One financial aid director told us that students used to be able to pay for groceries or rent with some of their financial aid "refund" money (that is, financial aid funds refunded to a student after tuition, fees, and other school charges are paid, which can be used to pay for other education and living expenses); however, he said students rarely receive a refund any more. According to data from Education's National Center for Education Statistics, the average Pell Grant used to cover more of the cost of college than it does today. For example, about 40 years ago soon after the Pell Grant Program was established—the average award covered about 50 percent of the average cost of in-state tuition, fees, room, and board at public 2-year colleges, and 39 percent at public 4year colleges. Today, the average Pell Grant award amount covers just 37 percent of these costs at public 2-year colleges, and 19 percent at public 4-year colleges. 52 Federal Work-Study Program employment opportunities may be available to qualifying students, but several officials we interviewed noted that funding for this program is extremely limited, especially at community colleges where there are more students at risk of food insecurity.⁵³

When grant funds and student earnings are insufficient to cover the full cost of college, students can take out federal student loans to make up the difference. Officials at a national association of community colleges and at a few colleges we visited told us that low-income students often use federal loans to help them pay for basic living expenses—such as food or rent. While these loans can be helpful for some students who need additional funds to support themselves while in college, officials at a few community colleges also cautioned that loans may not be the best choice for all students, and may worsen the financial position of already vulnerable students. For example, at one 4-year college we visited, the financial aid director said that many of their students have reached their

⁵²These figures are based on data from the U.S. Department of Education, National Center for Education Statistics and Federal Pell Grant Program End of Year reports. See National Center for Education Statistics, *Digest of Education Statistics*, Table 330.10 and Pell Grant End of Year reports at https://www2.ed.gov/finaid/prof/resources/data/pell-data.html.

⁵³The Federal Work-Study Program allows students to earn up to their awarded amount by working at an on-campus job or certain off-campus jobs. Students who participate in the Federal Work-Study Program would meet one of the student SNAP exemptions. A few officials told us that because funds for each campus are limited and awarded to students on a first come, first served basis, many students are unable to participate.

maximum federal lifetime loan limit (see text box for an example).⁵⁴ He also noted that graduates have, on average, \$25,000 of student loan debt. He said his college has historically trained its students for public sector careers, e.g., teachers or counselors, and he worries that salaries in these professions will not allow graduates to repay this amount of student loans.⁵⁵

Student Statement from GAO Site Visit at Selected College

I was originally in the Registered Nursing (RN) program, but had to switch to the Licensed Practicing Nursing (LPN) program because that program requires fewer credits, and I have maxed out my federal student loans and have no further funds to pay for the additional classes needed for an RN.

Source: GAO interview. | GAO-19-95

College Students Have Limited Access to Federal Food Assistance Programs

Given the limitations of federal student aid funding, officials from several organizations we interviewed spoke about the importance of leveraging other federal benefits, such as food assistance programs, to help address the needs of college students experiencing food insecurity. According to research on the effect of SNAP benefits, these benefits can provide some help to students, although they may not completely eliminate their food insecurity. 56 However, college students have limited access to several key federal food assistance programs that could help address some of their needs. For example, several college officials we spoke with noted that many low-income students received federally subsidized free or reduced price lunch while in elementary and secondary school, but a comparable program does not exist for college students, even though many face the same level of need. In addition, many college students are prohibited from receiving federal SNAP benefits because of restrictions on student eligibility. Several college officials told us that when students are unable to meet one of the student exemptions for SNAP benefits, they will try to

⁵⁴In 2018, the aggregate lifetime Federal Direct Loan limit for dependent undergraduate students was \$31,000. For independent undergraduate students, it was \$57,500.

⁵⁵Graduates who enter public service careers full time with qualifying employers are eligible for forgiveness for part of their federal student loan debt after meeting certain other requirements. GAO found that many borrowers are confused about this program and we recommended that Education do more to ensure students understand which employers qualify for the program. See GAO, *Public Service Loan Forgiveness: Education Needs to Provide Better Information for the Loan Servicer and Borrowers*, GAO-18-547 (Washington, D.C.: Sept. 5, 2018).

⁵⁶See, for example, Mabli, Ohls, Dragoset, Castner, and Santos, *Measuring the Effect*.

connect them to community resources or to the on-campus food pantry, but a few characterized these as short-term solutions to their students' problems. We also heard from officials at several colleges that students who are pregnant or postpartum may qualify for the WIC program, which provides food assistance to mothers with infants and young children; however, this program serves only a small minority of college students who may be experiencing food insecurity.

Some State SNAP
Agencies Are Assisting
Potentially Eligible
Students to Access SNAP
Benefits

About one-third of state SNAP agencies reported they were taking actions to inform college students about SNAP and help them access SNAP benefits. ⁵⁷ These state SNAP agencies reported assisting college students in various ways, including by developing guidance or training for state and college officials on student eligibility rules, by conducting outreach at local colleges, or by providing students with options to qualify for a SNAP student exemption by participating in employment and training services.

Several States Are Clarifying Student Rules and Conducting Training and Outreach about SNAP Student Eligibility Eleven state SNAP agencies reported clarifying policy on college student eligibility to SNAP staff who determine eligibility for benefits or providing training to third-party partners to increase awareness of students' potential eligibility for SNAP. For example, in 2015 and 2017 California's state SNAP agency issued policy letters to its county offices clarifying college student eligibility rules and expanding the list of college programs that qualify a student for an exemption under the employment and training provision. Minnesota's state SNAP agency reported that it conducts technical assistance training on student eligibility issues for its caseworkers twice a year.

⁵⁷We emailed the SNAP directors of all 50 states and the District of Columbia to ask what, if any, actions their state agency was taking to address college student food insecurity. Fifty of the 51 state SNAP agencies responded to our email for a 98 percent response rate. About a quarter of states that responded to our email indicated that they had implemented a state option related to averaging student work hours on a monthly basis instead of requiring 20 hours per week to qualify for a student exemption. For the purposes of our analysis, we did not include this as a state action because it is an approach to implementing an existing student exemption. This email inquiry was conducted in March and April 2018 and may not include all state actions that have occurred since April 2018.

⁵⁸In California and in nine other states, counties separately administer the SNAP program on behalf of the state SNAP agency.

State SNAP agencies also reported partnering with colleges to increase awareness of potential student SNAP eligibility or to reduce the burden of the application process for students. For example, Missouri's state SNAP agency reported that it recently began a partnership with the state's community college association to increase students' awareness of their potential eligibility for SNAP. To reduce the burden students face in applying for SNAP benefits, Rhode Island's state SNAP agency reported that its outreach partner holds regular "office hours" at state community college campuses to answer questions about SNAP, screen students for potential eligibility, and assist with application completion. Officials from California's state SNAP agency stated that its county SNAP agencies periodically hold SNAP enrollment clinics on college campuses. At one time, a community college in California had a county SNAP staff member located on campus to assist their students with benefit applications.

Finally, two of the states we visited partially fund their state higher education grants for low-income college students with some of their federal TANF block grant dollars. ⁵⁹ Because these grant recipients receive TANF benefits, they are eligible for the corresponding SNAP student exemption. For example, the California state SNAP agency issued guidance in February 2017 to all of its county offices to explain that this SNAP student exemption applies to any student who receives the state's higher-education grant for low-income students. ⁶⁰ In Massachusetts, the state SNAP agency issued similar guidance in August 2017 to state SNAP staff who determine eligibility for benefits. ⁶¹

⁵⁹States may use federal TANF block grant funds on a wide range of benefits and services, including to support work, education, and training programs.

⁶⁰California Health and Human Services Agency, Department of Social Services, *CalFresh Student Eligibility*, All County Letter No. 17-05 (Sacramento: February 2017).

⁶¹Massachusetts Executive Office of Health and Human Services, Department of Transitional Assistance, *SNAP – Student Eligibility Updates*, Online Guide Transmittal 2017-52 (Boston: August 2017).

Some States Are Implementing Approaches that Provide Additional Employment and Training Options for Certain Students

Some state SNAP agencies are taking steps related to the exemption for students who are enrolled in certain employment and training programs, which can be offered at 2-year colleges and other community-based organizations. ⁶² Seven states reported taking steps to designate specific programs at their community colleges to qualify as employment and training programs to make it easier for students and SNAP staff who determine eligibility for benefits to identify students who could meet this exemption. In these states, according to the SNAP agency, they have determined that certain programs at community colleges qualify enrolled students for one of the student SNAP exemptions because they are programs for low-income households, aimed at employment, and run by a state or local government. ⁶³

According to FNS, state SNAP agencies have the authority to decide which programs would qualify enrolled students for this exemption, and several states have identified qualifying programs at community colleges in their state. ⁶⁴ Students in these designated community college programs who attend at least half time and do not meet one of the other student exemptions can be eligible for SNAP under this provision if they meet all other eligibility criteria. In 2010, Massachusetts' state SNAP agency began using a dedicated form that provides community college students in these state-designated employment and training programs support for their SNAP application. According to officials at the state SNAP agency, this form has helped to streamline the application process for both students and state SNAP agency staff who determine eligibility for benefits.

Other states are developing opportunities for students to meet the employment and training exemption through partnerships with the states' SNAP Employment & Training (E&T) programs. Twenty-four state SNAP

⁶²Many of the student SNAP exemptions are relatively easy for a state SNAP staff member who determines eligibility for benefits to verify, for example, being a single parent of a child under age 12 or participating in the Federal Work-Study Program. One student exemption—related to participation in employment and training programs—is less straightforward because states must review the components of each program and independently determine if it qualifies as such a program under FNS rules. FNS officials told us state SNAP agencies are not required to report information on how many states take these approaches or how many students qualify for SNAP through the employment and training student exemption.

⁶³See 7 U.S.C. § 2015(e)(3)(D); see also 7 C.F.R. § 273.5(b)(11)(iv).

⁶⁴These programs must meet the requirements detailed at 7 C.F.R. § 273.5(b)(11)(iv).

agencies reported that they have implemented a third-party partnership with at least one community college to deliver SNAP E&T program services on campus. ⁶⁵ Under these state SNAP E&T program partnerships, the state SNAP agency works with community colleges to enroll SNAP recipients in programs that are designed to increase the employability of the participant. One FNS official told us that state SNAP E&T programs were an ideal way to provide college students who qualify for SNAP benefits with additional services and support, such as counseling or transportation assistance, and that they can help students persist in their community college program and ultimately improve their self-sufficiency. ⁶⁶

According to FNS, state agencies can enroll individuals in these SNAP E&T programs in one of two ways. A SNAP recipient may enroll in the designated community college training program affiliated with the state's SNAP E&T program, which allows them to continue receiving SNAP benefits even if they attend the program more than half time. Or, the community college partner can refer individuals already enrolled at the college to the state SNAP agency to determine if they are eligible for state SNAP E&T program services—a process known as a "reverse referral." In the case of a reverse referral, individuals who are enrolled in certain training programs and who are experiencing food insecurity may be able to qualify for a student exemption to receive SNAP, as well as additional services through state SNAP E&T programs. 67 According to Washington's state SNAP agency, SNAP E&T programs operate at all 34 community colleges in the state, and have served approximately 20,000 students each fiscal year since 2015. A senior program official at Washington's state SNAP agency told us that the vast majority of incoming community college students in Washington are screened for potential eligibility and reverse referral into the state's SNAP E&T program services.

⁶⁵FNS-reported data as of fiscal year 2018. SNAP E&T programs can also partner with other community-based organizations to deliver services.

⁶⁶According to FNS, state SNAP E&T programs are a secondary payer for students who are enrolled in college programs. For example, if a student is determined to be eligible for a Pell Grant or other federal financial aid, these funds must be used first to pay for tuition. Once other funding sources have been exhausted, state SNAP E&T program funds may be used for any outstanding tuition and fees.

⁶⁷Students who are referred to state SNAP E&T programs and qualify for a student SNAP exemption must meet other financial and non-financial eligibility criteria to receive benefits.

College and State Officials Reported That FNS Does Not Share Key Information That Could Help Them Assist Students Experiencing Food Insecurity

At 9 of the 14 colleges we contacted, some officials and students we spoke with indicated that they either did not know about or found it difficult to understand the SNAP student rules. For example, in a student discussion group at one community college, some students said they were uncertain about how SNAP student rules applied to them when they lived with their parents but received no financial support or food from them. Officials at another college told us that many students are not even aware of or do not realize that the SNAP student rules apply to them. In a student discussion group we held at another college, some students told us that they had been unaware that they may be eligible for SNAP until they spoke to someone at their college. Further, we found college officials may also have difficulty understanding SNAP student rules—for example, officials at one college said that they believed that college students are not eligible for SNAP. College officials can be an important source of information for students regarding SNAP, but this can create barriers to access if college officials do not have the correct information. For example, at one college we visited, two students said they were misinformed by officials at their college or their state SNAP agency about their potential eligibility for SNAP.

Officials we met with at three colleges said that they would like information from FNS about college student eligibility rules so they can help educate and enroll students in SNAP, but FNS has not developed such targeted information to distribute to colleges and students. Officials at one college said they requested information from FNS to distribute to students, but the general SNAP eligibility brochure FNS provided did not reference college student eligibility requirements. A senior FNS official said developing printed materials expressly explaining the college student eligibility requirements is primarily a state agency responsibility, and that information about this topic was available on the FNS website. However, we found that the information specifically related to college student eligibility requirements on the FNS website was not easy to find. For example, the main webpage of FNS's SNAP eligibility website lists the special circumstances under which certain specific populations may be SNAP eligible, but it does not include college students nor does it link to

⁶⁸Officials at two FNS regional offices told us they were aware of a few colleges in their regions that had developed SNAP materials to distribute to students, but these materials were locally developed and disseminated only at certain colleges.

the webpage listing the student exemptions. ⁶⁹ Further, the webpage containing information on SNAP for college students restates the list of student exemptions from the regulations, using legal and technical language that is not always easy to understand. For example, the webpage states that students "may be able to get SNAP benefits if otherwise eligible, and they 'get public assistance benefits under a Title IV-A program of the Social Security Act." Many college officials and students may not realize this refers to TANF benefits. In addition, the website does not list being "not physically or mentally fit" (e.g., having a disability) as one of the ways to qualify for a student exemption, nor does it provide information relevant to how students may qualify for an exemption because they are assigned to or placed in certain employment and training programs.

A senior official from the FNS national office said that college student eligibility and the student exemptions were among the most complicated SNAP policies to explain and that they frequently receive questions from the general public about how the rules apply to certain students in certain situations. This official said that because the student SNAP rules are so difficult to navigate. FNS responds to these individual guestions and circumstances as they arise, rather than developing materials that could apply broadly to every situation, and that state SNAP agencies are primarily responsible for assisting students. Officials at all four FNS regional offices we spoke with said materials explaining the student rules tailored to colleges and college students would prove useful to states and colleges in their regions. While developing clear written materials about a complicated policy is challenging, Standards for Internal Control in the Federal Government states that agencies should communicate key information to their internal and external stakeholders. 70 Further, a core activity of the SNAP program is to work with its partners to ensure that those eligible for nutrition assistance can make informed decisions about applying for the program. 71 The lack of clear and easily accessible

⁶⁹According to federally developed web usability guidelines, important information should be available within two or three clicks of the homepage. We found the SNAP for Students webpage was not linked to the SNAP Eligibility webpage, and only found the SNAP for Students webpage by conducting a keyword search on the FNS website. See Department of Health and Human Services, *The Research-based Web Design and Usability Guidelines, Enlarged/Expanded Edition*, (Washington, D.C.: August 2006).

⁷⁰GAO, Standards for Internal Control in the Federal Government, GAO-14-704G (Washington, D.C.: Sept. 10, 2014).

⁷¹The SNAP program's other core activity is to improve program administration and ensure program integrity.

information on student SNAP eligibility requirements can make it difficult for potentially eligible students to make informed choices about applying for SNAP, and for colleges to develop their own materials to help potentially eligible students apply for SNAP. As a result, students could miss opportunities to obtain the additional support they may need to stay in college and graduate.

In addition, we found that some state SNAP agencies had limited information about approaches that they could take to help potentially eligible college students who may qualify for a student exemption. Specifically, officials at four of the five state SNAP agencies and at three of the four FNS regional offices that we spoke with said that it is not entirely clear to them under which circumstances college students may be eligible for a student exemption if they are enrolled in a qualifying employment and training program run by a community college. State SNAP agency officials in four of the five states, as well as officials in three of the four FNS regional offices, told us that they would like more information from FNS about how to implement the approach some state SNAP agencies are taking to help college students who may qualify for an employment and training exemption access SNAP. One state SNAP agency official said that she believes that the lack of guidance and leadership from FNS on this issue leaves many state SNAP agencies operating with uncertainty, and, as a result, many of them do not take any actions to identify those college students who may qualify for an employment and training exemption under SNAP rules.

Several of the FNS regional office officials we interviewed agreed that the FNS national office was uniquely positioned to collect and share information about potential approaches that states are using to implement the student exemption for employment and training programs so that other states could also consider using such approaches to assist low-income college students who may qualify. Officials at one FNS regional office said that an FAQ-type document on college student eligibility scenarios would be helpful. At the same time, a few FNS regional office officials said that the national office is cautious about developing information for all states when each state's SNAP program operates slightly differently. According to FNS national office officials, FNS issued the most recent document discussing general SNAP eligibility for students

⁷²As previously noted, state SNAP agencies have flexibility to adapt their programs to meet the needs of eligible, low-income households in their states.

in August 2010. This document explained that certain employment and training services provided by a state or local government may qualify a student for a SNAP student exemption. In November 2016, six federal agencies including USDA (on behalf of FNS) released an interagency letter, *Aligning Federal Supports and Program Delivery for College Access and Completion*, that includes information from FNS related to general student eligibility for SNAP.⁷³

However, neither of these documents included specific strategies or examples of approaches states have used or can use to help potentially eligible college students access SNAP benefits. Standards for Internal Control in the Federal Government states that agency management should internally communicate the necessary information to achieve the program's objectives. 74 In addition, part of the role of the FNS national office is to work with its partners, including its regional offices and the state SNAP agencies, to improve program administration and ensure access to benefits for eligible individuals. FNS officials told us FNS has several existing mechanisms for information sharing with the regional offices and the state SNAP agencies, including policy memos, webinars, and annual conferences. However, a senior FNS official told us that she was not aware of any plans to share additional information with state SNAP agencies or regional offices on this topic, noting that college students are a relatively small population compared to other SNAP recipients. As a result, state SNAP agencies may not be aware of approaches other states have used that they could take to assist college students experiencing food insecurity in accessing SNAP benefits, and FNS may not be fulfilling its role to ensure program access for college students who are eligible.

In addition to noting how complicated the college student SNAP eligibility rules are, most state higher education and SNAP policy organization officials we interviewed remarked that the student exemptions can make it challenging for many students who are food insecure to obtain SNAP benefits that could help them succeed in college. Specifically, a few researchers and state higher education officials said the eligibility restrictions were instituted when college students were generally from

⁷³See Aligning Federal Supports and Program Delivery for College Access and Completion (Washington, D.C.: Nov. 15, 2016). According to an Education official, this interagency letter was the product of the federal College Access and Completion Interagency Working Group.

⁷⁴GAO-14-704G.

higher-income households, whereas many students enrolled in college today are from low-income households. Several higher education officials and one researcher noted that when a student qualifies for a student exemption by working 20 hours a week, it can have a detrimental impact on college completion. For example, research has shown that full-time college students who work more than 15 hours a week or who reduce their college course load and attend part time in order to increase their work hours are less likely to complete their degree or educational program.⁷⁵

At the same time, FNS officials and officials at one state SNAP agency stressed the importance of having proper controls in place to prevent certain students from improperly receiving benefits. A senior FNS official noted that the college student restrictions were established to prohibit traditional college students who are supported by their parents from receiving SNAP benefits. This official said that the student eligibility rules should ensure that middle-class and wealthy students do not access SNAP while attending college. Further, officials at a few organizations and one state SNAP agency we interviewed expressed support for some of the student exemptions, such as the exemption for college students who work 20 hours per week.⁷⁶

Conclusions

The federal government invests billions of dollars annually in higher education through grants and loans to low-income students. Partially as a result of this investment, a college education is accessible to more low-income Americans than ever before. Despite this federal support, many low-income college students struggle to meet their basic needs, including

⁷⁵See, for example, Robert Bozick, "Making It Through the First Year of College: The Role of Students' Economic Resources, Employment, and Living Arrangements," *Sociology of Education*, vol. 8, no. 3 (2007); and Sarah Blanchard Kyte, *Who Does Work Work For? Understanding Equity in Working Learner College and Career Success*, (Iowa City, IA: ACT Center for Equity in Learning, July 2017). Officials at all state SNAP agencies, along with several college and state higher education policy officials, as well as a few students that we interviewed also noted that if college students were allowed to count unpaid internships or similar volunteer work in their field of study to qualify for the student exemption by working 20 hours per week, it could help support their academic and future career success.

⁷⁶Many federal means-tested benefits programs require some low-income recipients to work in order to receive benefits. For more information, see our prior work on federal means-tested benefits programs, GAO, *Federal Low-Income Programs: Eligibility and Benefits Differ for Selected Programs Due to Complex and Varied Rules*, GAO-17-558 (Washington, D.C.: June 29, 2017).

obtaining the food that they need, and may drop out of college as a result. SNAP can be an important source of support for low-income students, although it may not completely ameliorate food insecurity. However, because the SNAP eligibility requirements for college students can be difficult for students and colleges to understand, students may be unaware of or misinformed about their potential eligibility for SNAP. FNS has not made information that clearly explains student SNAP eligibility requirements easily accessible to students and college officials and, as a result, students experiencing food insecurity may remain unaware that they could be eligible for SNAP.

In addition, some states are exercising existing state flexibilities to help students experiencing food insecurity to access SNAP, but FNS does not actively share this information among state SNAP agencies. By collecting and sharing information on approaches taken by state SNAP agencies active in this area, FNS could potentially help state SNAP agencies identify ways to help eligible students who are experiencing food insecurity. Better supporting these students will also help the Department of Agriculture and the Department of Education meet their respective goals and make good use of the substantial federal investment in higher education while improving the health and nutrition of individuals experiencing food insecurity.

Recommendations for Executive Action

We are making the following two recommendations to FNS:

The Administrator of FNS should make information on their website regarding student SNAP eligibility requirements easier to understand and more accessible, as a resource for colleges and state SNAP agencies. (Recommendation 1)

The Administrator of FNS should coordinate with its regional offices to collect and review information about existing SNAP flexibilities and examples of approaches state SNAP agencies are taking to assist eligible college students to access SNAP benefits, and share such information with state SNAP agencies. (Recommendation 2)

Agency Comments and Our Evaluation

We provided a draft of this report to the Department of Agriculture and the Department of Education for review and comment. The Department of Education provided technical comments, which we incorporated into the report as appropriate. On November 28, 2018, and December 7, 2018, the Directors of the FNS SNAP Program Development Division and Office

of Employment and Training met with us to provide the agency's comments orally. At the December 7, 2018 meeting, FNS officials told us they partially concur with our recommendations and believe that FNS has sufficient guidance in place for states to provide further information to colleges. However, the agency agrees with the intent of GAO's recommendations and plans to review its existing guidance to determine if any improvements are warranted. We continue to believe that additional action is necessary to address our recommendations. While reviewing its existing information would be helpful, we believe that changes to FNS's existing information are also needed to improve the clarity and accessibility of information about SNAP student eligibility requirements on FNS's website, and that FNS needs to work with its regional offices to identify and share additional information about state approaches to assist eligible college students with access to SNAP benefits. In response to FNS officials' comments, we also clarified both recommendations to focus more on actions that fall under the responsibility of the FNS National Office. FNS also provided technical comments, which we incorporated into the report as appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to the Secretaries of Agriculture, Education, appropriate congressional committees, and other interested parties. In addition, the report will be available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-7215 or larink@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix II.

Kathryn Larin

Director, Education, Workforce,

Kathryn Warin

And Income Security

Appendix I: Objectives, Scope, and Methodology

This report examines (1) what is known about the extent of food insecurity among college students and their use of the Supplemental Nutrition Assistance Program (SNAP); (2) how selected colleges are addressing student food insecurity; and (3) the extent to which federal programs assist college students experiencing food insecurity. This appendix provides details of the data sources used to answer these questions, the analyses we conducted, and any limitations to our analysis.

Overview

We used multiple methodologies to conduct this review. We conducted a review of academic studies based on original research to determine what is known about food insecurity among college students. We assessed the quality of these studies by evaluating their research methods and determined that the studies we included in our review were sufficiently reliable for our use. To describe the prevalence of risk factors for food insecurity among college students, we used data on student characteristics from the nationally representative National Postsecondary Student Aid Study (NPSAS). We assessed the reliability of NPSAS data by reviewing existing information about the data and the system that produced them and by interviewing agency officials knowledgeable about the data. We determined that the data were sufficiently reliable for the purposes of describing the prevalence of risk factors for food insecurity among college students and students' participation in SNAP.

To understand how selected colleges address student food insecurity, we conducted four state site visits (California, Kentucky, Massachusetts, and Michigan) selected based on whether colleges and/or state government agencies were taking steps to address food insecurity among students, and geographic diversity, among other criteria. In each state, we visited public colleges and universities, where we met with college officials, students, and researchers. We also interviewed state higher education and SNAP officials, as well as experts from relevant policy organizations. To assess federal efforts, we identified federal programs that may assist college students in need of food, interviewed officials from Education and USDA, and reviewed relevant federal laws, regulations, and agency guidance and program documents, as well as federal internal controls standards applicable to these programs.

Review of Studies

To understand what is currently known about the extent of food insecurity among college students, we conducted an in-depth review of studies. Our

preliminary search in Scopus identified a recent systematic literature review on food insecurity on college campuses. 1 Upon reviewing the article's scope and methodology, we chose to update rather than duplicate their efforts. We expanded the original search terms to include "higher education" and "postsecondary" among others, and searched two additional research databases (ProQuest and Scopus) in addition to the original list of sources (MEDLINE, PSYCHINFO, and Web of Science). We identified peer-reviewed journal articles and other published research through this search. Through news reports on food insecurity and interviews with researchers, we also identified studies published up to August 31, 2018 that may not have been included in our initial review. We included studies in our review if they met the following criteria: (1) were based on research conducted and published in the United States; (2) were published since 2007; and (3) contained original, direct estimates of food insecurity rates among college students.

We identified a total of 35 studies that met these criteria and conducted an initial review to determine if the studies met generally accepted social science standards and were appropriate for our purpose to provide information on the prevalence of food insecurity among college students. We eliminated some studies if we determined that the methods were not appropriate or rigorous—specifically, we concluded that we could not report the results of four studies due to research design limitations. For instance, some studies did not fully disclose their methods, had small sample sizes, used data based on low survey response rates, or did not attempt to correct for or address potential biases in their methodology. For studies included in this report, we performed an initial in-depth review of the findings and methods, and a GAO methodologist performed a second review to confirm our reported analysis of the findings. As a result, we determined 31 studies to be of sufficient quality and we summarized the findings of these 31 studies in our report (see table 3).

¹Meg Bruening, Katy Argo, Devon Payne-Sturges, and Melissa N. Laska, "The Struggle is Real: A Systematic Review of Food Insecurity on Postsecondary Education Campuses," *Journal of the Academy of Nutrition and Dietetics*, vol. 117, no. 11 (2017).

	Title	Authors	Year of publication
1	Food Insecurity Prevalence among College Students at the University of Hawai'i at Mānoa	Chaparro , M. Pia, Sahar S. Zaghloul , Peter Holck, Joannie Dobbs	2009
2	Examining the Role of Financial Factors, Resources and Skills in Predicting Food Security Status among College Students	Gains, Alisha, Clifford A. Robb, Linda L Knol, Stephanie Sickler	2014
3	Prevalence and Correlates of Food Insecurity among Students Attending a Midsize Rural University in Oregon	Patton-Lopez , Megan M., Daniel F. Lopez-Cevallos, Doris I. Cancel-Tirado, Leticia Vazquez	2014
4	Hungry to Learn: Addressing Food and Housing Insecurity Among Undergraduates.	Goldrick-Rab, Sara, Katharine Broton, Daniel Eisenberg	2015
5	Food Insecurity Among Community College Students: Prevalence and Association With Grade Point Average	Maroto, Maya E., Anastasia Snelling, Henry Linck	2015
6	The Relationship Between Food Security, Housing Stability, and School Performance Among College Students in an Urban University	Silva, Meghan R., Whitney L. Kleinert, A. Victoria Sheppard, Kathryn A. Cantrell, Darren J. Freeman-Coppadge, Elena Tsoy, Tangela Roberts, and Melissa Pearrow	2015
7	Factors Related to the High Rates of Food Insecurity among Diverse, Urban College Freshmen	Bruening, Meg, Stephanie Brennhofer, Irene van Woerden, Michael Todd, Melissa Laska	2016
8	Prevalence of Food Insecurity Among College Students at Southeast Missouri State University	Hillmer, Amelia	2016
9	Predictors of College-Student Food Security and Fruit and Vegetable Intake Differ by Housing Type	Mirabitur, Erica, Karen E. Peterson, Colleen Rathz, Stacey Matlen , Nicole Kasper	2016
10	The Prevalence of Food Security and Insecurity Among Illinois University Students	Morris, Loran Mary, Sylvia Smith, Jeremy Davis, Dawn Bloyd Null	2016
11	A Household-Based Food Security Survey of Western New York College Students to Determine Its Prevalence	Bentley, Bradley J.	2017
12	Assessing Food Insecurity on Campus	Blagg, Kristin, Diane Whitmore Schanzenbach, Craig Gundersen, James P. Ziliak	2017
13	The Evolution of Poverty in Higher Education: Material Hardship, Academic Success, and Policy Perspectives	Broton, Katharine M.	2017
14	The Relationship Between Food Insecurity and Academic Performance Among San Jose State University Students	Dudley, Bethany	2017
15	Hungry and Homeless in College: Results from a National Study of Basic Needs Insecurity in Higher Education	Goldrick-Rab, Sara, Jed Richardson, Anthony Hernandez	2017
16	Fostering Success: Understanding the Experience of Foster Youth Undergraduates	Kinarsky, Alana. R.	2017
17	Food Insecurity Among College Students: Exploring the Predictors of Food Assistance Resource Use	King, Jennifer A.	2017

	Title	Authors	Year of publication
18	Food Insecurity, Self-rated Health, and Obesity among College Students	Knol, Linda L., Cliff A., Robb, Erin M.McKinley, Mary Wood	2017
19	Food Insecurity in California's Public University System: What are the risk factors?	Martinez, Suzanna M., Karen Webb, Edward A. Frongillo, Lorrene D. Ritchie	2017
20	A High Prevalence of Food Insecurity Among University Students in Appalachia Reflects a Need for Educational Interventions and Policy Advocacy.	McArthur, Laura Helena, Lanae Ball, Ariel C. Danek, Donald Holbert	2017
21	Prevalence and Predictors of Social Work Student Food Insecurity	Miles, Rhen, Bowen McBeath, Stephanie Brockett, Paul Sorenson	2017
22	Student Hunger on Campus: Food Insecurity Among College Students and Implications for Academic Institutions	Payne-Sturges, Devon C., Allison Tjaden, Kimberly M, Caldeira, ,Kathryn B. Vincent, Amelia M. Arria	2017
23	Hungry to Learn: the Prevalence and Effects of food Insecurity on Health Behaviors and Outcomes over Time among a Diverse Sample of University Freshmen	Bruening, Meg, Irene van Woerden, Michael Todd, and Melissa N. Laska.	2018
24	Study of Student Basic Needs	Crutchfield, Rashida, Jennifer Maguire	2018
25	Why are Hungry College Students Not Seeking Help? Predictors of and Barriers to using an on-Campus Food Pantry.	El Zein, Aseel, Anne E. Mathews, Lisa House, and Karla P. Shelnutt.	2018
26	Food Insecurity and Hunger: Quiet Public Health Problems on Campus	Forman, Michele R., Lauren D Mangini, Yong-Quan Dong, Ladia M Hernandez, Karen L Fingerman	2018
27	Still Hungry and Homeless in College	Goldrick-Rab, Sara, Jed Richardson, Joel Schneider, Anthony Hernandez Clare Cady	2018
28	Food Insecurity and Behavioral Characteristics for Academic Success in Young Adults Attending an Appalachian University	Hagedorn, Rebecca L., and Melissa D. Olfert	2018
29	Food Insecurity and Academic Disruption among College Students.	Phillips, Erica, Anne McDaniel, and Alicia Croft.	2018
30	Relationship between Diet and Mental Health in a Young Adult Appalachian College Population.	Wattick, Rachel A., Rebecca L. Hagedorn, and Melissa D. Olfert.	2018
31	Experiences With "Acute" Food Insecurity Among College Students	Wood, J.Luke, Frank Harris III	2018

Source: Studies GAO reviewed. | GAO-19-95

Note: We selected studies for inclusion based on the following criteria: (1) based on research conducted and published in the United States; (2) published after 2007; and (3) contains original, direct estimates of food insecurity rates among college students. While we determined that these 31 studies were appropriate for our purpose to provide some information regarding food insecurity among college students, all of the studies have methodological limitations and none provide estimates of food insecurity for the college student population in general.

While these 31 studies are of sufficient quality to provide information on what is known about food insecurity among college students, the generalizability of their findings require significant caveats. Most of the survey results in these studies are not generalizable to a population larger than their sample size, meaning that the findings apply only to the

respondents of the survey. None of the studies in our review conducted non-response bias analyses or attempted to address potential selection bias in the sample. Despite these limitations, the studies collectively offer assessments of food insecurity conducted on over 200 campuses in more than 30 states, at both 2- and 4-year schools, and all but three of the studies used adapted versions of the USDA food insecurity measure.

NPSAS Data Analysis

We analyzed data from the Department of Education's (Education) National Postsecondary Student Aid Study (NPSAS). Because no federal datasets contain food insecurity data specifically about college students, we chose to analyze NPSAS data for the prevalence of risk factors associated with food insecurity.² Additionally, we used some summary statistics from frequencies presented in the 2016 NPSAS data codebook.

NPSAS data contain nationally representative, detailed demographic and financial aid data for college students enrolled in less than 2-year, 2-year. 4-year, and graduate postsecondary programs. These data come from institutional records, government databases, and interviews with students. Because the NPSAS data are based on probability samples, estimates are calculated using the appropriate sample weights provided which reflect the sample design. Each of these samples follows a probability procedure based on random selection, and they represent only one of a large number of samples that could have been drawn. Since each sample could have provided different estimates, we express our confidence in the precision of our particular sample's results as a 95 percent confidence interval. This is the interval that would contain the actual population value for 95 percent of the samples we could have drawn. Unless otherwise noted, all percentage estimates from the NPSAS data analysis have 95 percent confidence intervals within plus or minus 5 percentage points of the percent estimate, and other numerical estimates have confidence intervals within plus or minus 5 percent of the estimate itself. We compared 95 percent confidence intervals to identify statistically significant differences between specific estimates and the comparison groups. The information provided in the NPSAS data, particularly those

²Federal data sets that collect data on food insecurity measure food insecurity at a household level, which is limited for estimating food insecurity among college students. Likewise, no federal education datasets currently contain food insecurity data for individual students. Department of Education officials told us they are planning to include a series of questions measuring student food insecurity in the next NPSAS data collection in 2020.

from the interview portion of the study, are self-reported and not all of the data are based on federal determinations or cross-verified with outside sources. For example, students self-report their disability status, their hours worked, and so on. Such self-reported data are subject to several sources of nonsampling error, including the inability to obtain information about all sample cases; difficulties of definition; differences in the interpretation of questions; respondents' inability or unwillingness to provide correct information; and errors made in collecting, recording, coding, and processing data. These nonsampling errors can influence the accuracy of information presented in the report, although the magnitude of their effect is not known.

Identification of Risk Factors for Food Insecurity

In order to identify risk factors associated with food insecurity among college students, we reviewed published articles and reports on the topic of food insecurity and interviewed researchers, college and state officials, and officials at relevant policy organizations. We present the list of risk factors for food insecurity we considered in table 4. Not all of the risk factors we identified have a corresponding NPSAS variable. For example, NPSAS does not ask respondents about unmet medical needs or childhood food insecurity. Additionally some of the risk factors overlapped and were thus not included in our analysis. For example, the NPSAS dataset contains multiple variables pertaining to student and student household income, such as household income, financial aid, and receipt of public benefits. Many indicators of low-income status likely overlap (e.g., being eligible for a Pell Grant and receiving other financial aid), and many students who have one indicator will likely have others.

Risk factor selected for GAO analysis	Description		
Disability	Several studies and an expert in one interview mentioned having a disability as a correlate for food insecurity; also it is one of the exemptions for Supplemental Nutrition Assistance Program (SNAP) eligibility. Disability is a stressor that may partially overlap with the low-income variable, but adds a unique dimension of risk for food insecurity.		
First-generation student	Mentioned in several studies as a correlate of food insecurity; may partially overlap with the low-income variable.		
Former foster youth	Former foster youth are more likely to be low income, housing insecure, and food insecure than other types of students.		
Homelessness/housing insecurity	Several studies mention homelessness/housing insecurity as a strong correlate of food insecurity. Particularly in high-cost areas, this may be an indicator of food insecurity risk even among students who are not technically low income.		
Low income	Multiple studies and experts in multiple interviews mention that having a low income is associated with an increased risk of food insecurity.		
Single parent status	Single parent status likely overlaps with low-income status to some degree; it is also indicative of a unique stressor that may increase food insecurity risk (it is also one of the student exemptions for SNAP eligibility).		
Receiving SNAP	Receipt of SNAP benefits is positively associated with food insecurity. While receiving SNAP mitigates food insecurity, SNAP recipients still have higher food insecurity rates than the general population.		
Risk factors considered but not included in analysis	Reason excluded		
(Lack) of access to credit card	No corresponding National Postsecondary Student Aid Study (NPSAS) variable.		
Age or year in school	Some studies identify different years in school or different age groups as having different risks for food insecurity, but which year is at higher risk varies from study to study.		
Exogenous shock (e.g., death of family member, income loss, natural disaster, etc.)	No corresponding NPSAS variable.		
Familial financial support/expected family contribution	Experts mentioned lack of family financial support as a strong correlate of food insecurity and a proxy for financial need. It is also indicative of the level of support a student's family can provide to assist a student experiencing food insecurity. However, this factor is likely highly correlated with low-income status.		
Food prep skills/other skills	No corresponding NPSAS variable		
Household receipt of Free and Reduced Price Lunch in High School	Research has found that household receipt of Free or Reduced Price Lunch is positively associated with food insecurity. However, this variable broadly overlaps with low-income status.		
Living arrangements, such as on- or off- campus housing and whether food provision is included in on-campus housing	This factor may be correlated with food insecurity and is potentially related to homelessness/housing insecurity; however, homelessness is a stronger correlate/indicator of food insecurity risk.		
Hours worked per week	Two studies found that the number of hours worked per week is positively correlated with food insecurity. However, working a greater number of hours while in college is likely correlated with having a low-income.		

Risk factors considered but not included in analysis	Reason excluded
Independent student status	Independent student status may be a proxy for having a low income or lacking family resources. Other variables may more directly indicate low-income status.
Loan use	May be a proxy for having a low income, but is also very broad as many non-low-income students also take out student loans.
Race/Ethnicity	Several studies have found that non-whites and certain ethnicities have higher risk of food insecurity. Race is generally considered a marker of other underlying risk factors more strongly associated with food insecurity, including being low-income. Because of this, we did not include race as a risk factor in our analysis.
Receipt of or eligibility for Pell Grants or financial aid broadly speaking	Several studies have found that unmet financial need and Pell Grant receipt are both indicators of overall need and are positively associated with food insecurity. The federal government determines Pell Grant eligibility based on income as reported on the Free Application for Federal Student Aid (FAFSA). However, this risk factor largely overlaps with having a low income.
Sex/Gender	The research results are unclear on the relationship between gender and food insecurity.
Type of institution attended (2-year vs. 4-year, for profit, etc.).	Several studies have found that community and vocational and technical college students have higher food insecurity rates than students at 4-year colleges. We report the results of our analysis by college type, but do not consider college type a risk factor itself.
Undocumented/international students	No corresponding NPSAS variable for undocumented students, and few variables available for documented international students.
Unmet medical needs	No corresponding NPSAS variable.

Source: GAO analysis. | GAO-19-95

Notes: GAO compiled this list of risk factors associated with food insecurity among college students based on whether the risk factor was mentioned in research or mentioned during interviews with researchers, college officials, state and federal officials, and relevant policy organizations.

Although this is not an exhaustive list of risk factors, individuals who experience one of the following seven characteristics may be at risk of food insecurity: being disabled, homeless or housing insecure, being a former foster youth, receiving SNAP benefits, being a single parent, and being the first-generation in a student's family to attend college.³ Table 5 shows how we compared these risk factors with corresponding variables from the 2016 NPSAS data.

³Participation in SNAP is correlated with both having a low-income and with food insecurity; studies show SNAP recipients are more food insecure than the general population even though they receive SNAP benefits. This is partially because food insecure people choose to participate in SNAP and partially because receiving SNAP does not completely ameliorate food insecurity. According to research by USDA, participating in SNAP for 6 months was associated with a decrease in food insecurity of 12.7 percentage points. See James Mabli, Jim Ohls, Lisa Dragoset, Laura Castner, and Betsy Santos, *Measuring the Effect of Supplemental Nutrition Assistance Program (SNAP) Participation on Food Security*, a report prepared by Mathematica Policy Research at the request of the U.S. Department of Agriculture, Food and Nutrition Service (Washington, D.C.: August 2013).

Risk factor	NPSAS variable name	Description	
Disability ^a	DISABIL2	Indicates student has some type of disability or condition.	
Homeless/housing insecure	HOMELESS2	Includes some students who were determined by a professional to be homeless (via the Free Application for Federal Student Aid or FAFSA), but predominantly measures studer determined "risk of homelessness." This is not a direct measure of homelessness.	
Former foster youth	ORPHAN2	Indicates student is an orphan, ward of court, emancipated minor, or in legal guardianship.	
Receiving SNAP ^b	FEDBENA	Indicates whether any member of the student's household received Food Stamp (SNAF Benefits during the 2013 or 2014 calendar year.	
Single parent status	SINGLPAR	Identifies independent students who were single parents/caretakers during the 2015-2016 academic year.	
Low-Income	PCTPOV	Indicates total 2014 income as a percentage of the federal poverty level thresholds for 2014. For our purposes, low income is defined as having a household income level at or below 130 percent of the federal poverty level.	
First generation student	PAREDUC	Indicates the highest level of education achieved by a parent, stepparent, or guardian of the student. Per previous Department of Education studies, we define first generation as college students whose parents' maximum educational attainment was a high school diploma or less. Note that students who did not know their parent's highest education were not counted as first generation students.	

Source: GAO analysis. | GAO-19-95.

Because our analysis does not include some of the risk factors for food insecurity listed in table 4, our findings may underestimate the number of college students who have a risk factor for food insecurity. For example, we heard in some of our interviews with researchers and in our discussions with students that being an undocumented or an international student was a risk factor for food insecurity. Such students are generally ineligible for federal financial aid and are restricted in the type of other federal aid they can receive. Undocumented students are also more likely than other students to be poor. However, NPSAS does not contain detailed data about undocumented or international students, so we could not include this risk factor for food insecurity in our analysis. The risk factors for food insecurity we included in our analysis may also be correlated with one another and can co-occur. For example, youth who were formerly in foster care are more likely than other youth to be low-

^aThe data are self-reported. The student may not be eligible for or receiving federal disability benefits.

^bThe data are reported by the student and their family on the FAFSA or during the student interview. National level, individual SNAP enrollment data are not available to verify this variable, as states provide aggregate statistics to FNS.

income.⁴ Indeed, the prevalence of additional risk factors for food insecurity is higher among low-income than wealthier students. We did not analyze the extent to which some risk factors are more strongly associated with food insecurity than others or attempt to rank or weight the relative importance of risk factors.

Student SNAP Eligibility

To calculate potential student SNAP eligibility, we first calculated the number of students who might qualify for SNAP based upon having a household income at or below 130 percent of the federal poverty line, which is the standard income requirement for households that do not include a member who is 60 years of age or older or disabled to qualify for SNAP benefits. Next, we analyzed NPSAS variables to identify those that corresponded with SNAP student eligibility rules. We deemed all students who met the income requirements, were enrolled in school at least half time, and met one of the student eligibility exemptions we were able to identify in the data as potentially eligible for SNAP.

However, our analysis has limitations and does not precisely identify all students who are SNAP eligible. The 2016 NPSAS data set contains several variables that match up closely with certain student eligibility exemptions. For example, the exemptions related to age, having young dependents, working 20 hours per week, and receiving certain federal benefits have corresponding NPSAS variables (see table 6). For two of the exemptions, we used variables from the NPSAS data set that do not perfectly correspond to the statute but were the closest available proxies in the data. For the eligibility exemption that covers parents caring for a child 6-11 years old who are unable to obtain childcare to attend school and work, we identified students who have a child 6-11 years old and indicate they have no paid childcare. However, some individuals may have unpaid childcare, such as family members, and be able to work and attend school despite not having paid childcare, meaning they would not meet this SNAP student eligibility exemption. For the disability exemption, we used the NPSAS variable based on an interview question that asks students if they have a mental or physical disability. However, because of different definitions, the NPSAS disability variable may include students

⁴Most foster and homeless youth have incomes within the lowest income quartile of all college-enrolled youth. See GAO, *Higher Education: Actions Needed to Improve Access to Federal Financial Assistance for Homeless and Foster Youth*, GAO-16-343 (Washington, D.C.: May 19, 2016).

with disabilities who would not qualify for the SNAP student exemption related to disability. Specifically, to qualify for this SNAP student exemption, the student must not be "physically or mentally fit,", while the NPSAS interview question asks students if they have some type of disability or condition, including a long-lasting condition such as serious difficulty hearing; blindness or serious difficulty seeing; difficulty concentrating, remembering or making decisions, a serious learning disability, depression, or Attention Deficit Hyperactivity Disorder; or serious difficulty walking or climbing stairs. As a result, we may overestimate the number of students who would qualify for the student exemption related to having a disability or caring for a child age 6-11. Lastly, NPSAS does not contain a variable to capture the student eligibility exemption related to enrollment in certain programs aimed at employment, such as the Workforce Innovation and Opportunity Act or Temporary Assistance for Needy Families employment and training programs. Therefore, we could not identify any students who met this eligibility exemption for SNAP and may have therefore underestimated the number of students who were potentially eligible for SNAP.

Table 6: Supplemental Nutrition Assistance Program (SNAP) Eligibility Exemptions for College Students and Corresponding Variables in the 2016 National Postsecondary Student Aid Study Data Set

College student SNAP exemption	NPSAS variable	Variable description and limitations
Under age 18 or age 50 or older	AGE	Provides the student's age as of 12/31/2015.
Parent caring for a child under age 6	DEPCHILD, DEPYNG	DEPCHILD identifies students who dependents who are children; DEPYNG provides the age of the student's youngest child during the 2015-16 academic year.
Parent caring for a child 6-11 years old who is unable to obtain child care to attend school and work	DEPCHILD, DEPYNG, DEPCARE	DEPCARE indicates whether the student had dependent children in paid childcare during the 2015-16 academic year. Students who have a child between 6 and 11 and indicate they do not have paid childcare were identified as meeting this condition. However, some individuals may have unpaid childcare that allows them to work and attend school, which these variables do not capture.
Single parent caring for a child under 12 years old and enrolled full-time	SINGLPAR, DEPYNG, ATTEND2	The student's single parent status, age of their youngest child, and whether they are enrolled full time.
Working a minimum of 20 hours per week	JOBHOUR	Based on the following student interview question asked of each job the student has held while enrolled, "How many hours per week have you usually worked [for this employer] while you have attended school?" Excludes work study hours.
Receiving any Federal Work-Study funds	TFEDWRK	Total amount of federal work study awarded for the 2015-2016 academic year.
Receiving Temporary Assistance for Needy Families (TANF) benefits	FEDBEND	Whether any member of the student's household received Temporary Aid for Needy Families (TANF) benefits during the 2013 or 2014 calendar year.

College student SNAP exemption	NPSAS variable	Variable description and limitations
Not physically or mentally fit (e.g., have a disability)	DISABIL2	Student has self-reported some type of disability or condition; not based on a federal disability determination.
Enrolled in certain programs aimed at employment, including TANF work programs, Workforce Innovation and Opportunity Act Title I programs, and others	N/A	No corresponding NPSAS Variables

Source: GAO analysis and 2016 National Postsecondary Student Aid Study Documentation. | GAO-19-95.

Additionally, SNAP eligibility for college students depends not only on income and meeting a student exemption, but also on other determinations such as the level of the individual's financial assets, including savings and any state policy waivers that may apply to the individual's eligibility. Given that our analysis relied on self-reported information, and did not capture all aspects of student SNAP eligibility, we did not make any legal determinations about whether individuals were eligible for SNAP, and therefore our analysis can be characterized as providing only a rough estimate of those students who may potentially be eligible for SNAP benefits.

State Site Visits

To understand how selected colleges address student food insecurity, we conducted four state site visits (California, Kentucky, Massachusetts, and Michigan). We selected these states based on the following criteria:

- Mentioned in interviews with researchers or government officials as being a state that is: actively addressing college food insecurity, or has at least one public college that is taking action to address food insecurity among college students (number of mentions).
- School or state program on hunger or food insecurity featured in research papers or policy briefs (number of mentions).
- FNS data on food insecurity rates in the state, to indicate whether food insecurity among college students might also be a problem (rank by state).
- FNS data on SNAP enrollment and participation in the state, to indicate the level of SNAP usage in the state (rank by state).
- FNS information regarding the number of SNAP waivers a state has received, as a proxy for SNAP policy activity in the state (rank by state).

We also sought geographic diversity in our site visit states. To achieve this, we created summary rank ordering of states based upon our criteria. then, from those states that ranked in the top 15, we selected one state from the Northeast, South, Midwest, and West census regions. Some of our criteria were purely qualitative in nature, such as information from interviews, research papers, and policy briefs regarding states and colleges with promising practices. Our site visit selection focused specifically on states and colleges with documented activity addressing college student food insecurity, and is therefore biased toward those that had taken action to address college student food insecurity. Our selection strategy did not capture situations where there was high food insecurity among students but the college or state was taking no action to address it, nor did we seek to identify or visit locations where food insecurity had not been identified as a problem. In addition to our site visits, we conducted interviews with officials from one college in Texas and one college in Ohio to learn about specific campus food insecurity initiatives in these states.

In each site visit state, we visited several colleges that were taking action to address food insecurity among their student populations, selected based on recommendations from researchers and college officials. We also considered geographic proximity when selecting colleges to visit. Overall, we spoke with officials representing 14 2- and 4-year public colleges (12 in-person and 2 telephone interviews).⁵ In each of our site visit states, we visited at least one large public university and one community college. See table 7 for a list of the 2- and 4-year colleges we interviewed in each state.

⁵In addition, we met with one private college during the course of our study. We met with this 4-year private work college to learn about their unique approach to meeting their students' basic needs. This college is not included in our summary of actions taken by colleges because it fell outside of our report's focus on public 2- and 4-year colleges.

State	2-year colleges interviewed	4-year colleges interviewed
California	Skyline College	California State University, Sacramento
		University of California, Berkeley
Kentucky	Maysville Community and Technical College	Eastern Kentucky University
		University of Kentucky
Massachusetts	Bunker Hill Community College	University of Massachusetts, Boston
Michigan	Mott Community College	Eastern Michigan University
	Washtenaw Community College	University of Michigan, Dearborn
Ohio	Cuyahoga Community College	
Texas	Amarillo College	
Total	7	7

Source: GAO. | GAO-19-95

At colleges, we asked members of the leadership team, financial aid officers, student affairs administrators, and other staff members questions about how they recognize, measure, and address college student food insecurity. We also conducted discussion groups with students at seven colleges we visited and asked about their experiences with food insecurity and federal assistance programs, such as SNAP. Students were invited by college officials to participate in these meetings. In each state we visited, we also met with officials from the state agencies that administer SNAP and any state governmental agencies, such as those overseeing higher education or involved in addressing food insecurity among college students. Lastly, in each site visit state, we identified and interviewed staff members at policy organizations, such as legal policy institutes or hunger advocacy groups, involved in efforts to address food insecurity among college students.

Assessing Federal Efforts to Address Food Insecurity

We assessed the extent to which federal programs assist college students experiencing food insecurity by reviewing relevant federal laws, regulations, and agency guidance and program documents related to specific SNAP requirements for college students and we interviewed FNS national office officials, including representatives of the Divisions of SNAP Program Development, Employment and Training, and Retailer Policy. We also interviewed FNS regional office officials in four of the seven FNS regions about their experiences working with the FNS national office and

Appendix I: Objectives, Scope, and Methodology

with state SNAP agencies in their regions to address college student food insecurity and access to SNAP.

We also sent an email to all 51 state SNAP agency directors (all 50 states plus the District of Columbia) to ask about any actions their state has taken to address college student food insecurity. We received responses from 50 of the 51 state SNAP agencies, for a 98 percent response rate. This email inquiry was conducted in March and April 2018 and may not include all state actions that have occurred since April 2018.

We conducted in-depth interviews with officials at five state SNAP agencies and asked about any specific policies or actions their agencies have taken to address college student food insecurity or to assist potentially eligible college students to access SNAP. We conducted these interviews in person with state SNAP agencies during our four state site visits, and interviewed the Washington state SNAP agency by phone.⁷

We conducted this performance audit from July 2017 to December 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

⁶The Michigan state SNAP agency did not respond to our email. However, we interviewed the Michigan state SNAP agency director during the course of our review and incorporated the state's actions into our report, as appropriate.

⁷We interviewed the Washington state SNAP agency director because of Washington's extensive SNAP Employment & Training Program partnerships with colleges.

Appendix II: GAO Contact and Staff Acknowledgments

GAO Contact

Kathryn Larin, (202) 512-7215 or larink@gao.gov

Staff Acknowledgments

In addition to the contact named above, Michelle L. St. Pierre (Assistant Director), Nora Boretti (Analyst-In-Charge), Jessica K. Rider, and Stephen C. Yoder made significant contributions to this report. Also contributing to this report were Holly A. Dye, Barbara J. El Osta, Sarah C. Gilliland, Alison E. Grantham, Gina M. Hoover, Saida B. Hussain, Sheila R. McCoy, John W. Mingus Jr., Mimi Nguyen, Monica P. Savoy, Benjamin A. Sinoff, Almeta Spencer, Rachel R. Stoiko, Elaine L. Vaurio, and David A. Watsula.

GAO's Mission	The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.	
Obtaining Copies of GAO Reports and Testimony	The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's website (https://www.gao.gov). Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to https://www.gao.gov and select "E-mail Updates."	
Order by Phone	The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, https://www.gao.gov/ordering.htm .	
	Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.	
	Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.	
Connect with GAO	Connect with GAO on Facebook, Flickr, Twitter, and YouTube. Subscribe to our RSS Feeds or E-mail Updates. Listen to our Podcasts. Visit GAO on the web at https://www.gao.gov.	
To Report Fraud,	Contact:	
Waste, and Abuse in	Website: https://www.gao.gov/fraudnet/fraudnet.htm	
Federal Programs	Automated answering system: (800) 424-5454 or (202) 512-7700	
Congressional Relations	Orice Williams Brown, Managing Director, WilliamsO@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548	
Public Affairs	Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548	
Strategic Planning and External Liaison	James-Christian Blockwood, Managing Director, spel@gao.gov, (202) 512-4707 U.S. Government Accountability Office, 441 G Street NW, Room 7814, Washington, DC 20548	

