

ASSOCIATION OF COMMUNITY COLLEGE TRUSTEES

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EXECUTIVE SUMMARY

Food and housing insecurity among the nation's community college students threatens their health and wellbeing, along with their academic achievements. Addressing these basic needs is critical to ensuring that more students not only start college, but also have the opportunity to complete degrees.

This report presents findings from the largest survey ever conducted of basic needs insecurity among college students. In 2015, the Wisconsin HOPE Lab published the research report Hungry to Learn, a study based on a survey of approximately 4,000 students at ten community colleges in seven states. This study includes more than 33,000 students at 70 community colleges in 24 states. While this is not a nationally representative sample of students or colleges, it is far greater in size and diversity than prior samples, and provides information to shed new light on critical issues warranting further research.

In particular, we draw on this new survey to provide information to help practitioners and policymakers learn more about whether food and housing insecurity are more or less prevalent at certain types of community colleges or among different parts of the country. We also share a detailed profile of homeless community college students, including their financial circumstances and work behaviors, as well as forms of support that they received.

We found substantially higher rates of food insecurity among community college students than previously reported, while rates of housing insecurity and homelessness were consistent with prior estimates. Our 2015 report indicated that about half of community college students were food insecure, but this study found that two in three students are food insecure. Both surveys revealed that about half of community college students were housing insecure, and 13 to 14 percent were homeless.

Contrary to popular expectations, there appears to be very little geographic variation in hunger and homelessness among community college students. Basic needs insecurity does not seem to be restricted to community colleges in urban areas or to those with high proportions of Pell Grant recipients, and is prevalent in all regions of the country.

However, some community college students are at greater risk of food and housing insecurity than others. For example, this is the first study to consider the basic needs security of former foster youth. We found that 29 percent of former foster youth surveyed were homeless, a far higher rate than that of non-former foster youth attending community college (13 percent). Students with children were also disproportionately likely to experience food and housing insecurity.

While pursuing degrees despite enduring basic needs insecurity, community college students are nonetheless striving to ameliorate conditions of material hardship. Between 31 and 32 percent of students experiencing food or housing insecurity were both working and receiving financial aid. But in many cases, these efforts were not matched by other forms of support. For example, we estimate that 63 percent of parenting students were food insecure and almost 14 percent were homeless, but only about five percent received any child care assistance.

As expected, homeless community college students were experiencing especially difficult challenges. They were more likely than housing-secure students to work long hours at low-wage, low-quality jobs, and to get less sleep. It is especially concerning that despite being in such vulnerable circumstances and facing high odds of non-completion, almost one-third of these students were using loans to finance college.

The data presented in this report largely confirm evidence from prior studies, underscoring the need for improvements in policy and practice to support the basic needs security of all undergraduates. Investments in food and housing assistance programs to help community college students complete degrees will yield dividends, helping individuals improve their employment prospects and reducing their need for future support. Such strategies must become priorities of leaders in higher education.

COMING UP SHORT: BASIC NEEDS INSECURITY ON THE COLLEGE CAMPUS

Over the last five years, it has become increasingly clear that the living expenses associated with productive enrollment in higher education constitute substantial barriers for many college students. While growth in public sector tuition has slowed in many states, the cost of living has not. Even though work has long been a strategy for covering food and housing, and some financial aid is available, students struggle in today's low-wage labor market to earn enough to make ends meet.²

At the same time, the doors to higher education are open wider than ever. Students growing up in poverty and even those who are experiencing homelessness have aspirations for further education and are more likely than before to go beyond high school in pursuing it.3 This is sensible given that 65 percent of the 55 million jobs produced in the coming decade will require some higher education or training.⁴ Yet few resources are available to support students who come from backgrounds marked by experiences of material hardship. Funding for public benefits programs is at a historic low and declining, and funding for college-based programs is tightly restricted.⁵

The security of students' basic needs for safe, affordable housing and food has thus become a topic of discussion among some policymakers, practitioners, students, and families.⁶ Food insecurity is the limited or uncertain availability of nutritionally adequate and safe foods, or the ability to acquire such foods in a socially acceptable manner. The most extreme form is often accompanied with physiological sensations of hunger. Homelessness means that a person is without a place to live, often residing in a shelter, an automobile, an abandoned building or outside, while housing insecurity includes a broader set of challenges such as the inability to pay rent or utilities or the need to move frequently. Several studies issued in 2015 and 2016 demonstrated that sizable numbers of students at community colleges and public universities, and even some private institutions, are experiencing these challenges.8 Estimated rates of food insecurity range from 20 to 40 percent, with higher rates reported in California and among community college students, and rates of housing insecurity reaching as high as 50 percent. Two studies have converged on a key observation: an estimated average of 13 percent of community college students may be homeless.9

The apparent prevalence of basic needs insecurity in higher education leads to many questions. We explore the following questions in this report: Is this challenge primarily concentrated in areas of the country where poverty and unemployment are high, or at colleges where more students receive financial aid? Are some groups of students, particularly immigrants and former foster care youth, at greater risk of facing material hardship during college? What strategies do students use when their needs are not met, and what social programs do they turn to? And finally, how do homeless students experience college? What distinguishes them from other students, and what might be avenues for better supporting them?

In order to address these critical questions, this report describes the largest study to date examining food and housing insecurity among community college students. Seventy community colleges in 24 states joined forces with the Wisconsin HOPE Lab and the Association of Community College Trustees to distribute a survey to all of their enrolled students. More than 33,000 students responded over eight times as many students as had participated in prior multi-state studies. 10 While representing only a small fraction of all of the nation's community college students, these students are numerous and diverse, and they were generous in sharing their experiences. It is worth noting that no federal funding has been made available to conduct a nationally representative survey, and no national coalition to facilitate one exists.

The focus on community colleges in this report is deliberate and timely. Community colleges are the most accessible, affordable points of entry to higher education in the United States and they exist in nearly every corner of the nation. They serve nearly one in two undergraduates and enroll by far the most economically and racially diverse students. 11 While their tuition rates and administrative fees are significantly lower on average than those of other sectors, prices relative to the family incomes of their students have grown guite substantially, presenting barriers to degree completion. After all grant aid is accounted for, a dependent student from a family in the lowest annual income quartile, earning \$21,000 per year, would have to pay \$8,300, or 40 percent of her family's total income, for a year of community college. 12 Thus, while there is growing evidence that food and housing insecurity is pervasive across college types and sectors, it is imperative for policymakers and practitioners to first focus their efforts on addressing basic needs in security at community colleges.

WHAT WE KNOW ABOUT STUDENTS AND **BASIC NEEDS INSECURITY**

The first level of Maslow's pyramid of human needs encompasses securing physiological requirements for breathing, food, water, shelter, clothing, and sleep. For decades, discussions about why some undergraduates leave college without degrees have neglected to consider whether any of these basic functional needs are being met.¹³ For example, we are aware of only two studies conducted before 2011 anywhere in the United States that examined either food or housing security-one in Hawaii and one in New York City. 14 However, since then there has been a wave of interest in the subject, in part because of growing attention to a crisis of college affordability and the rising price of living in America. Ruben Canedo, co-chair of the Food Access and Security Committee for the University of California (UC) systemwide Global Food Initiative, says, "Because the cost of living is increasing and the cost of a university education is increasing, students are facing basic needs security challenges at higher levels and in ways we haven't expected."15

Several studies of basic needs security have taken place in California, where practitioners from the University of California System and the California State University System have led the charge to assess food insecurity (in particular) and housing insecurity (in some cases) among their students. The University of California at Berkeley even established a Basic Needs Security Workgroup in 2016 to conduct assessments of need and develop approaches to support students. The most recent estimates suggest that 42 percent of UC students are food insecure, with 19 percent qualifying as hungry, while staff reported that an estimated 21 percent of CSU students were food insecure.16

There has not yet been a system-wide examination of food insecurity at California's community colleges. However, many of those institutions have participated in prior studies of food and housing insecurity in higher education. For example, all the colleges in the San Diego Community College District participated in the 2015 Wisconsin HOPE Lab report Hungry to Learn (discussed below). Moreover, a recent study of just over 3,600 students at seven California community colleges found about onethird of students were housing insecure or homeless, and 12 percent were food insecure.¹⁷ Beyond California, some of the most rigorous studies of basic needs security in higher education have occurred in one system or institution at a time. Public health researchers at the City University of New York found that 39 percent of students in that system were food insecure and 24 percent reported both food insecurity and housing insecurity.¹⁸

Unfortunately, there is no nationally representative study of basic needs security, but thus far there have been two multi-state efforts. In 2015, the Wisconsin HOPE Lab revealed that an online survey of nearly 4,000 students attending ten community colleges in seven states estimated that 52 percent of students were food insecure, with 20 percent qualifying as hungry, and 52 percent were housing insecure, including 13 percent who were homeless. Similar conclusions were reached in a report produced the following year by the College and University Food Bank Alliance, National Campaign Against Student Hunger and Homelessness, Student Government Resource Center, and Student Public Interest Research Groups where researchers recruited students using in-person tabling, resulting in a sample of 3,765 students attending eight community colleges and 26 public four-year colleges and universities in 12 states. They found that 50 percent of community college students who completed the survey were food insecure and 25 percent had very low levels of food security, often accompanied by sensations of hunger. Once again, 13 percent of community college students were homeless.¹⁹

These surveys help provide information on the prevalence, and some of the correlates, of food and housing insecurity in higher education. They reveal, for example, that while food insecure students are more likely than food secure students to have experienced food insecurity as children, many experience food insecurity for the first time during college.²⁰ However, research continues to fall short when it comes to explaining how students experience these challenges, when and where they obtain help, and how needs insecurity affects their schooling. More information is needed in order to develop effective interventions and facilitate achievement and attainment in college. In ongoing dissertation research, Katharine M. Broton of the University of Wisconsin-Madison is finding that housing insecurity during students' first year of college is associated with a nearly ten percent reduction in the probability of degree attainment or enrollment four years after initial college entry, net of background factors. She also finds that, after accounting for many student background characteristics, housing insecurity is associated with lower GPAs and part-time (rather than full-time) enrollment intensity in the short-term.²¹

These relationships are unsurprising, given that students whose basic needs are insecure are also more likely to experience high levels of stress.²² Food insecure students appear to be struggling to make ends meet despite working or reaching out for assistance.²³ Most report receiving some form of financial aid, about half are working while going to school, and some receive public assistance, often from the federal Supplemental Nutrition Assistance Program (SNAP).²⁴ Food insecure students are more likely than other students to turn to on- or off-campus free food events and food pantries for support.²⁵

METHODOLOGY

Following on *Hungry to Learn*, the Wisconsin HOPE Lab's initial exploratory study of ten community colleges in seven states, we sought funding to conduct an improved study at a larger and more diverse group of community colleges. We obtained modest financial support to conduct a study facilitated by the colleges-lacking money and time for a gold-standard, center-led study with student-level incentives to garner participation (which would also require substantial human-subjects approvals that create delays), we worked directly with colleges to field the survey. This effort improved on prior studies on this topic, many of which have relied on staff and faculty estimates of students' challenges²⁶ or otherwise highly restricted samples of students (e.g., at a single institution or consisting only of students who walked by a survey table). To that end, in summer 2016 we created an online survey instrument and asked colleges to administer it at their schools at the start of fall 2016 while offering students a chance to win one of ten \$100 prizes.²⁷ Since colleges sought information on their student bodies as a whole, and it was not possible to obtain the data required to devise either a nationally representative or an institutionally representative sampling strategy, colleges simply sent the survey to all of their enrolled students and offered two reminders as well. Given these limitations, we make no claims about the generalizability of the results obtained, but note that they do converge in many ways with prior research (see also a brief analysis of survey response rates and estimated prevalence of material hardship in the appendix). We urge private philanthropy and government leaders to provide resources to conduct a more rigorous study in the near future.²⁸

Seventy institutions across 24 states participated in the survey (see Appendix B for a full list of the colleges). Collectively, institutions sent the instrument to more than 750,000 students, and the final survey response rate was 4.5 percent (N = 33,934). This is the largest survey of its kind to date, including twice as many institutions and eight times as many respondents as any other survey focused on food and housing insecurity among college students. The response rate is lower than in the prior Wisconsin HOPE Lab study (9 percent) but higher than the CUFBA study (0.5 percent), and the total sample size is much larger than in either prior national study.²⁹ Relative to similar surveys that were fielded mid-year, the early fall fielding period of this survey is more likely to capture financially struggling students before they drop or stop out. Twenty-six colleges fielded the survey within the first month of their fall terms and 48 fielded within the first six weeks.

Characteristics of participating community colleges are presented in Table 1.30 Forty-seven percent of the colleges are located in the West, 27 percent in the Midwest, 18 percent in the South, and eight percent in the Northeast. They are mainly located in cities or surrounding suburbs (89 percent), with just 11 percent in towns or rural areas. Participating community colleges are in areas where the cost of living is on average 23 percent higher than the national average. However, their county-wide rates of food insecurity (14 percent) and state rates of homelessness (0.19 percent) are similar to national averages (15 percent and 0.12 percent respectively), as are county-level poverty (15.3 percent vs. 13.5 percent nationally) and unemployment rates (5.2 percent vs. 5.3 percent nationally).

The average cost of attendance (\$17,883) and institution-wide percentage of students receiving the Pell Grant (37 percent) among participating community colleges are similar to national averages (\$17,000 and 36 percent respectively). However, participating community colleges were more racially diverse than community colleges nationally, with 57 percent non-white students versus 36 percent nationally. The modal institution in the sample enrolls between 10,000 and 19,999 students.

Table 1. Characteristics of 70 Participating Community Colleges vs. National Averages

	Sample Average	Sample Minimum	Sample Maximum	National Average
Census region				
West	47%			24%
Midwest	27%	N/A	N/A	21%
South	18%			38%
Northeast	8%			17%
Urbanization				
City	58%			
Suburb	31%	N/A	N/A	N/A
Town	4%			
Rural	7%			
County cost of living index	123	92	158	100
County rate of food insecurity	14%	6%	22%	15%
State rate of homelessness	0.2%	0.1%	0.4%	0.1%
County poverty rate	15%	6%	26%	14%
County unemployment rate	5%	2%	10%	5%
Cost of attendance (\$)	\$17,883	\$11,934	\$26,563	\$17,000
Students receiving Pell Grant	37%	16%	73%	36%
Non-White students	57%	8%	98%	36%
Institution size				
Under 5,000	8%			
5,000 - 9,999	23%	N/A	N/A	N/A
10,000 - 19,999	42%			
Over 20,000	28%			

Sources and Notes:

Survey statistics are weighted by the number of survey responses from each college.

Sources for national statistics:

Census region derived from U.S. Census Bureau. (2016). Census regions and divisions of the United States. Retrieved from https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf

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Cost of attendance from College Board. (2016). Trends in college pricing 2016. Retrieved from https://trends.collegeboard.org/

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Table 2 contains a description of students in the sample, along with some comparisons to the characteristics of community college students across the nation. Women are overrepresented in this study, as 72 percent of the sample is female, compared to 57 percent nationally. This is consistent with research indicating that females tend to respond to surveys at higher rates than males.³¹ Forty-four percent of survey respondents identify as non-Hispanic white, 25 percent as Hispanic, and 11 percent identify as African American. Thirty-five percent of sample students indicated that they are the first in their family to attend college (compared to 36 percent nationally). Over 95 percent of respondents are U.S. citizens or permanent residents (93 percent nationally).

Only 30 percent of the sample are dependents for financial aid purposes, compared to 40 percent nationally. About five percent of students were placed in foster care at least once and 28 percent are parents. Just over half (53 percent) are single, divorced, or widowed.

Sixty-eight percent of students in this sample are in their first two years of college. Over two-fifths (42 percent) receive the federal Pell Grant (36 percent nationally), and 59 percent attend full-time (38 percent nationally). Nearly three in five students (58 percent) were employed in the week prior to the survey.

Table 2. Characteristics of Survey Respondents vs. National Averages

	Sample	National Average
Female	72%	57%
Race White, non-Hispanic or Latino African American Hispanic Native American SE Asian Other Asian More than one race	44% 11% 25% 1% 2% 5% 12%	49% 14% 22% 1% 6% 6% 3%
Age 18-20 21-25 26-30 Over 30	30% 26% 15% 29%	See note
Highest level of parental education High school or less Some college Associate's degree Bachelor's degree Graduate degree	35% 29% 9% 17% 10%	36% See note
Immigration status Student a citizen or permanent resident Either parent a citizen or permanent resident	95% 91%	93% N/A
Family characteristics Parent or guardian claims student as dependent Ever placed in foster care Have children	30% 5% 28%	40% N/A See note
Relationship status Single Divorced or widowed In a relationship Married or domestic partnership	49% 4% 29% 18%	N/A
Year in college Less than 1 1 to 2 More than 2	29% 39% 32%	N/A
Financial aid and employment Receives the Pell Grant Enrolled full-time Employed in last week Number of hours worked last week	42% 59% 58% 27	36 38 See note N/A

Sources and Notes:

American Association of Community Colleges. (2016). 2016 fact sheet. Retrieved from http://www.aacc.nche.edu/AboutCC/ Documents/AACCFactSheetsR2.pdf

Dependency status from Baum, S., and Ma, J. (2016). Trends in community colleges: Enrollment, prices, student debt, and completion. College Board Research Brief. Retrieved from https://trends.collegeboard.org/sites/default/files/trends-in-communitycolleges-research-brief.pdf

Notes: Nationally, 37 percent of students are 21 and under, 49 percent are 22-39, and 14 percent are 40 or older.

According to AACC, 36 percent of students are the first in their generation to attend college.

Nationally, 17 percent of community college students are single parents.

Nationally, 62 percent of full-time community college students and 73 percent of part-time students were employed in 2011-2012.

A CLOSER LOOK: COMMUNITY COLLEGE STUDENTS AND BASIC NEEDS INSECURITY

While neither the set of community colleges nor the survey sample itself is nationally representative, this study examines the prevalence of housing and food insecurity among the largest sample of community college students to date-more than 33,000 students at 70 community colleges in 24 states. The largest previous study (just over 4,000 students at ten community colleges in seven states surveyed in 2014-2015) suggested that about half of community college students had marginal, low, or very low levels of food security in the 30-day period prior to the survey, with one in five students exhibiting the very lowest level.³² But in this much larger and newer sample, we find that 67 percent of the students are food insecure, as shown in Table 3. Indeed, 33 percent of students surveyed indicated experiencing the very lowest levels of food security. This suggests that thousands of community college students participating in this study may have been experiencing hunger.

Moreover, rates of housing insecurity and homelessness in this sample were identical to rates in our prior study. In both samples, half of all community college students experienced housing insecurity during the last year, and 13 to 14 percent were homeless (13 percent in the prior study, and 14 percent in this study). That means that more than 10,000 undergraduates completing this survey had housing experiences in the prior year that research shows are likely to substantially reduce their odds of degree completion.³³ This includes inadequate funds to cover rent or utilities, frequent moving, doubling up, and moving in with other people to save money. The latter strategy can be especially difficult for students with children. Moreover, three percent of the homeless students in the study were formally evicted and six percent were thrown out of their home or informally evicted.³⁴ Four percent had slept in an abandoned building or car, while just over two percent had spent time in a shelter.

Geographic and Institutional Variation in Basic Needs Insecurity

Given the small number of colleges and universities in prior studies of basic needs security among students, it has been difficult to know whether these challenges are primarily concentrated in areas of the country where hunger and homelessness are more common among the general population. Particularly since community colleges represent their local districts and counties, such a relationship is plausible. Since the present study includes 70 institutions in 24 states spread across the country, we are able to begin to address this question. The results shown in Table 4 suggest that basic needs insecurity among college students is widespread and not a problem isolated to urban or high-poverty community colleges.

According to Feeding America, counties with higher levels of poverty and unemployment have correspondingly higher levels of food insecurity than those found in the general population, with unemployment playing a more important role.³⁵ Rural counties are more likely than metropolitan counties to have higher levels of food insecurity, with the highest rates in the South Atlantic and East South Central states. In addition, places with higher food costs also tend to have higher levels of food insecurity.

Table 3. Prevalence of Housing Insecurity, Homelessness, and Food Security Among **Survey Respondents**

Housing Insecurity (past 12 months)	
Any of the below items: - Didn't pay full amount of rent or mortgage - Didn't pay full amount of utilities - Moved 2 or more times per year - Doubled up - Moved in with other people due to financial problems	51% 21% 28% 14% 17% 18%
Homelessness (past 12 months)	
Any of the below items: - Thrown out of home - Evicted from home - Stayed in a shelter - Stayed in an abandoned building, auto, or other place not meant as housing - Did not know where you were going to sleep, even for one night - Didn't have a home	14% 6% 3% 2% 4% 8% 2%
Food Security (Last 30 days)	
High security (score = 0) Marginal security (score = 1) Low security (score = 2-4) Very low security (score = 5-6)	33% 12% 23% 33%
Responses to specific Items in USDA 6-item food security scale:	
The food that I bought just didn't last and I didn't have enough money to get more. I couldn't afford to eat balanced meals. Did you ever cut the size of your meals or skip meals because there wasn't enough money for food?	52% 60% 46%
3 or more days: Did you ever cut the size of your meals or skip meals because there wasn't enough money for food?	32%
Did you ever eat less than you felt you should because there wasn't enough money for food?	43%
Were you ever hungry but didn't eat because there wasn't enough money for food?	36%

However, trends in food insecurity among community college students appear to differ somewhat from those in the general population. For students, food insecurity does not appear to track as clearly with the county poverty rate and it appears most common in the West (59 percent) and Northeast (58 percent) compared to the Midwest (53 percent) or South (50 percent). Rural community colleges reported lower rates of food insecurity (53 percent) than those located in cities (56 percent), and counties with high and low rates of poverty, relative to other counties in the sample, exhibited similar levels of food insecurity.

Community colleges in the counties with the highest costs of living and the highest rates of food insecurity in the sample exhibited higher rates of undergraduate food insecurity than those in less expensive counties. Moreover, counties with higher unemployment rates had higher rates of undergraduate food insecurity. Even so, 53 percent of community college students in this sample who were living in the least expensive counties in the country and 49 percent of students living in areas with low unemployment rates, were food-insecure.

Table 4. Geographic Distribution of Housing Insecurity, Homelessness, and Food Security **Among Survey Respondents**

				Food Security		
	Housing Insecure	Homeless	Low Security	Very Low Security		
Census region						
West	53%	15%	23%	36%		
Midwest	48%	12%	23%	30%		
South	46%	12%	22%	28%		
Northeast	50%	16%	24%	34%		
Urbanization						
City	50%	15%	23%	33%		
Suburb	50%	14%	22%	32%		
Town	46%	9%	23%	30%		
Rural	50%	11%	23%	30%		
County cost of living index						
Lowest quartile	48%	11%	23%	30%		
Second quartile	48%	12%	22%	31%		
Third quartile	53%	16%	23%	36%		
Highest quartile	49%	18%	25%	31%		
County rate of food insecurity						
Lowest quartile	45%	11%	22%	27%		
Second quartile	54%	17%	24%	37%		
Third quartile	51%	13%	22%	32%		
Highest quartile	51%	14%	22%	34%		
State rate of homelessness						
Lowest quartile	46%	12%	23%	28%		
Second quartile	49%	12%	22%	31%		
Third quartile	54%	18%	24%	38%		
Highest quartile	51%	12%	22%	32%		
County poverty rate						
Lowest quartile	49%	13%	22%	31%		
Second quartile	48%	12%	22%	30%		
Third quartile	54%	17%	24%	38%		
Highest quartile	50%	14%	23%	34%		
County unemployment rate						
Lowest quartile	45%	10%	22%	27%		
Second quartile	50%	14%	23%	32%		
Third quartile	54%	17%	24%	37%		
Highest quartile	55%	14%	19%	40%		
Sources and Notes:						

Sources and Notes:

Census region derived from U.S. Census Bureau. (2016). Census regions and divisions of the United States. Retrieved from https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf

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County unemployment rates from Bureau of Labor Statistics. (2016). Labor force data by county, 2015 annual averages. Retrieved from https://www.bls.gov/lau/laucnty15.txt

Trends in housing insecurity and homelessness among undergraduates generally mirror trends in food insecurity. Rates of homelessness range from just under 12 percent of students in the Midwest and South to between 15 and 16 percent in the West and Northeast. In the general population, rates of homelessness have been declining in the Midwest and South, and increasing in the West and Northeast.³⁶ Rural and urban students are equally likely to be housing insecure, though higher rates of homelessness are evident in cities (15 percent) and suburbs (14 percent), compared to towns (9 percent) and rural areas (11 percent). A county's cost of living may be a stronger predictor of homelessness than of food insecurity, with nearly 18 percent of students living in the most expensive counties in the sample reporting that condition compared to 11 percent of those living in the least expensive sample counties.

Apart from regional or county-level differences, are community colleges with different organizational characteristics or populations more or less likely to have students struggling with food or housing insecurity? The results presented in Table 5 indicate that institutional size and cost of attendance, along with the percent of students receiving the Pell Grant and the percent of students who are non-white, appear unrelated to the prevalence of food or housing insecurity among colleges. Cost of attendance varied widely in our sample- from a low of \$11,934 to a high of \$26,563 (see Table 1). The community colleges with the lowest costs of attendance (often more accessible to people with fewer means) have somewhat higher rates of food and housing insecurity (55 percent and 50 percent) than the most expensive ones (50 percent and 46 percent).³⁷

Community colleges with greater proportions of students of color and those receiving the Pell Grant are more likely to have higher rates of food and housing insecurity, and in particular homelessness. But these challenges are also present at predominantly white institutions. For example, 11 percent of students at community colleges in the sample's bottom quartile of racial diversity were homeless and 31 percent had the very lowest levels of food security, compared to 17 percent homelessness and 38 percent very low levels of food security at the most racially diverse community colleges. Sample institutions with the highest proportions of Pell recipients had rates of very low levels of food security that are about five percent higher than those with the lowest proportions of Pell recipients, and slightly higher rates of housing insecurity and homelessness. But the variation among community colleges based on this factor appears less common than one might expect.

30 percent of former foster youth surveyed were homeless while attending community college.

Demographic Disparities in Basic Needs Insecurity

Eligibility for the federal Pell Grant is the most commonly used measure of socioeconomic status among a college's student body, and many practitioners rely on it as a proxy to identify low-income students. However, Pell eligibility requires compliance with a series of requirements, including the completion of the FAFSA, that serve to exclude some low-income individuals from the program. Moreover, it also utilizes a means-test that offers a conservative estimate of a student's ability to afford college-many students for whom the price of college is a sizable fraction of their annual income nonetheless are not Pell-eligible. For these reasons, Pell may not be the best proxy for the incidence of food and housing insecurity on campus, just as income is an insufficient proxy in the broader population (for example, 26 percent of food-insecure individuals are above 185 percent of the poverty line).38

Table 5. Institutional Variation in Housing Insecurity, Homelessness, and Food Security **Among Survey Respondents**

			Food Se	ecurity
	Housing Insecure	Homeless	Low Security	Very Low Security
Enrollment				
Under 5,000	48%	10%	23%	30%
5,000 - 9,999	52%	12%	24%	32%
10,000 - 19,999	51%	16%	22%	35%
Over 20,000	48%	13%	23%	31%
Cost of attendance				
Lowest quartile	50%	13%	22%	33%
Second quartile	50%	12%	23%	31%
Third quartile	54%	18%	24%	38%
Highest quartile	46%	12%	22%	28%
Students receiving Pell Grant				
Lowest quartile	49%	13%	23%	31%
Second quartile	49%	14%	22%	33%
Third quartile	50%	13%	23%	32%
Highest quartile	53%	15%	23%	36%
Non-White students				
Lowest quartile	49%	11%	23%	31%
Second quartile	50%	14%	21%	33%
Third quartile	47%	13%	23%	29%
Highest quartile	55%	18%	25%	38%

Sources and Notes:

Institutional characteristics from Integrated Postsecondary Education Data System, 2016

The results shown in Table 6 corroborate prior evidence that rates of food and housing insecurity are higher among Pell-eligible students, independent students, and undergraduates with children. Nonetheless, almost 28 percent of students who are ineligible for the Pell Grant reported very low levels of food security, and 12 percent were homeless (compared to rates of 40 percent and 16 percent, respectively, among Pell-eligible students). Thirty-seven percent of students who were independent for financial aid purposes and 40 percent of students with children had very low levels of food security, compared to almost 26 percent of dependent students and 31 percent of students without children. However, disparities in rates of homelessness vary little according to whether or not a student had a child or was a dependent for aid purposes.

One-third of community college students experiencing food and/or housing insecurity were both working and receiving financial aid.

This study is the first to examine variation in the prevalence of undergraduate food and housing insecurity according to immigration status and prior experience in the foster care system. We find that students who themselves are U.S. citizens or permanent residents, and those whose parents are U.S. citizens or permanent residents, have higher rates of very low levels of food security than immigrants. However, in this sample there is little variation in housing insecurity level or homelessness by this status.

In contrast, students who have previously been in the foster care system are substantially more likely than other students to struggle to secure their basic needs in college. Almost three in four of former foster care youth responding to the survey were housing insecure, and 55 percent have the very lowest levels of food security (compared to 49 percent and 33 percent respectively among non-former foster youth). Almost 30 percent of former foster youth surveyed are homeless, compared to 13 percent of non-former foster youth.

Table 6. Disparities in Housing Insecurity, Homelessness, and Food Security Among **Survey Respondents**

			Food Se	ecurity
	Housing Insecure	Homeless	Low Security	Very Low Security
Pell Grant receipt				
No	44%	12%	21%	28%
Yes	60%	16%	25%	40%
Immigration status				
Student a citizen or permanent resident	50%	14%	22%	34%
Student NOT a citizen or permanent resident	49%	14%	25%	26%
Either parent a citizen or permanent resident	50%	14%	22%	34%
Neither parent a citizen or permanent resident	49%	14%	26%	27%
Parent claims student as a dependent				
No	57%	14%	23%	37%
Yes	35%	12%	22%	26%
Student has children				
No	45%	14%	22%	31%
Yes	63%	14%	23%	40%
Ever placed in foster care				
No	49%	13%	23%	33%
Yes	72%	29%	20%	55%

Accessing Assistance: Sources of Support for Basic Needs Insecure Students

How do students experiencing food or housing insecurity make ends meet? We examine the strategies of food insecure and housing insecure students separately in Table 7.

Higher education policy offers financial aid as the first-and often the only-line of defense to help students with food and housing expenses. But only half of students in this study who lacked sufficient food or housing received a federal Pell Grant, and almost 40 percent did not receive any grant aid at all.³⁹ In contrast, more than half were working—with just under one-third receiving grant aid and working, and nonetheless experiencing material hardship.

There are several types of social programs for which undergraduates may be eligible when they need assistance with food or housing. The Supplementary Nutrition Assistance Program (SNAP) is the most prominent support for food, but undergraduates without children usually must work at least 20 hours per week to receive it. Housing assistance programs are often unavailable, since unlike SNAP, eligibility does not guarantee participation given the shortage in availability of subsidized housing. While in the past, cash assistance (e.g., Temporary Aid to Needy Families) or child care support may have assisted these students, funding reductions and tightened program requirements mean that they are often no longer an option.

It is therefore unsurprising that in this sample, less than 30 percent of food-insecure community college students receive food stamps and only 4 percent received cash assistance. Similarly, among students experiencing housing insecurity or even homelessness, less than 13 percent received any form of assistance with housing costs, and only about six percent got assistance with utilities. Even though 28 percent of students in this study have children, and of those 63 percent were food insecure and almost 13 percent were homeless, barely five percent received any child care assistance. Instead, the most common forms of support these students received were tax refunds (likely from the Earned Income Tax Credit) and Medicaid or public health insurance (e.g., via the Affordable Care Act). Moreover, about one-quarter of basic needs insecure students received free food, likely from food pantries on- and off-college campuses. Today, the College and University Food Bank Alliance reports that more than 400 campuses operate food pantries.⁴⁰

63 percent of parenting community college students surveyed were food insecure and almost 14 percent were homeless, but only about five percent received any child care assistance.

Table 7. Use of Assistance Among Housing Insecure, Homeless, and Food Insecure **Survey Respondents**

	Housing Insecure or Homeless	Food Insecure
Financial aid receipt and employment Pell Grant Other federal or state grants Institutional grants Any grant Employed in last week Any grant and employed in last week	50% 23% 8% 62% 57% 32%	49% 23% 8% 61% 56% 31%
Food-related public assistance SNAP (food stamps) WIC (nutritional assistance for pregnant women and children) Receive free food or meals Any of the above	32% 7% 24% 41%	29% 6% 23% 39%
Housing-related public assistance Housing assistance Utility assistance Any of the above	13% 6% 16%	13% 5% 16%
Other public assistance TANF SSI SSDI Medicaid or public health insurance Child care assistance Unemployment compensation/insurance Transportation assistance Tax refunds Veterans benefits Any of the above	5% 4% 4% 28% 5% 4% 4% 26% 4% 55%	4% 4% 4% 26% 5% 3% 4% 24% 4% 53%
Any type of public assistance	67%	64%

Sources and Notes:

Housing assistance includes direct housing assistance, living in a housing project, and receiving a housing voucher.

The above statistics are adjusted to account for missing values during the first two weeks of the survey. The original survey question about the assistance received did not include an option for "None." Students who did not answer the question may have chosen not to answer or may have not received benefits. The survey question was changed to include an option for "None." Responses from before and after the question changed were compared to calculate an adjustment for students who were not given the "None" option. Adjusted and unadjusted results are qualitatively similar.

WHO ARE HOMELESS UNDERGRADUATES?

Of the challenges revealed in this study, homelessness is often the most difficult issue for community colleges to confront. Very few institutions have residence halls or employ designated caseworkers with the skills required to support this population. It can be difficult for practitioners to know much about the experiences and needs of this very vulnerable group of undergraduates. To assist, we offer a profile of the homeless community college students who participated in this survey.

As Table 2 indicates, women are overrepresented in higher education (and in this sample), and they are also overrepresented among homeless undergraduates, as shown in Table 8. Nearly 70 percent of the homeless students who shared their information with us are female, and they tended to be older than their counterparts with secure housing. For example, 45 percent of homeless students were over the age of 25, compared to 34 percent of housing secure students. Correspondingly, about three-quarters were also independent for financial aid purposes, and the vast majority (almost 70 percent) did not have a parent with a college degree of any kind. But it is also notable that 27 percent of the homeless students were under 21 years of age, and more than 70 percent had no children. Ten percent are former foster youth.

Community college students of color were overrepresented among homeless undergraduates in the study. Whereas only eight percent of the housing-secure students in this survey are African American, they comprised 17 percent of the homeless community college students in the study. More than one in five homeless students profiled in the study is Hispanic, and almost 16 percent identify as multi-racial. Yet the largest single racial category among homeless community college students in the study is non-Hispanic white.

Mary Ashley Estrella Mountain Community College Avondale, AZ

A married woman with three young children, Mary Ashley grew up the oldest child in a large Native American family on an isolated reservation. She was the first to attend college and did so hoping that getting an education would help lift her family into the middle-class. Her tribe provided her with a modest scholarship, which she initially used to enroll in a medical assistant program at a for-profit college. She completed that certificate but still could not find a job, and in the meantime her husband was injured in a car accident and rendered unable to work. So she returned to school, this time to Estrella Mountain Community College.

The financial aid and scholarship that Mary Ashley received in community college quickly proved insufficient support for a family of five. They turned to the local church for free food and struggled to make ends meet. Under economic duress, Mary Ashley and her husband split up, and she was left on her own. Without a parent with whom to share childcare, and no affordable options nearby, it became difficult for Mary Ashley to attend classes. She switched to online courses, but found she could not afford the bills for internet and computer access at home. Even as she continued trying to work towards a degree, late payments for both rent and utility rendered her and her children housing insecure, as they were threatened with eviction.

Almost all of the homeless community college students surveyed also experienced food insecurity, with 67 percent indicating the very lowest levels of food security. Even so, less than half received any type of food-related public assistance, and just 18 percent got any support from housing-related public assistance. They were more likely than housing-secure students to receive the federal Pell Grant (50 percent vs. 35 percent) but not much more likely to receive state or institutional support.

Instead, almost one-third of homeless community college students in the study used student loans (compared to 19 percent of housing secure students) and 16 percent used credit cards (compared to 12 percent of housing secure students) to finance their educations. This appears to be at least in part because they had difficulty securing work-while 50 percent of homeless students were working (compared to 58 percent of housing-secure students), 54 percent reported looking for work in the last 30 days (compared to 30 percent of housingsecure students). When they did work, they worked longer hours-65 percent of homeless students who were employed worked more than 20 hours per week, compared to 59 percent of housing-secure students. However, these students also endured jobs with less reliable work schedules that interfered with school more and related less to their respective majors or careers, and they were half as likely as other students to earn at least \$15 per hour. Housing-secure students were more likely than homeless students to report being able to do schoolwork at their jobs, to learn new skills, and to enjoy their jobs.

In contrast, homeless students spent more time commuting, less time sleeping, and more time caring for other adults—a task that requires a lot of time. Overall, homeless students were more likely to experience living situations that were less conducive to school success and were less safe. Indeed, safety appeared to be a sharp divider that distinguished homeless students from all others-38 percent of homeless students said that they left home because they felt unsafe, compared to 15 percent of other housing insecure but not homeless students, and just three percent of housing secure students.

Almost one-third of homeless community college students are receiving student loans.

Carla

Mesa Community College Mesa, AZ

Carla came to the United States from Mexico when she was two years old. She attended public schools in Los Angeles and often figured that college would not be in her future because neither she nor her family members had documentation. After finishing high school, she moved to Arizona along with her mother and aunt, in search of better work opportunities. They rented a small apartment and borrowed a car to help them work at irregular, menial, low-paying jobs.

Online coursework at a local community college appealed to Carla, as she sought opportunities to do more with her life but could not obtain regular transportation or sufficient time to regularly attend classes in person. Paying out-of-state tuition meant she could only afford one class at a time-until in her second year of college, when she secured DACA status. Now she could pay in-state tuition and pursue her degree faster by taking two courses at a time. More than that was impossible, however, as the family was barely able to pay the rent, and was often at risk of missing payments. Moreover, Carla couldn't afford the books required for the classes, making it hard to learn the material as quickly.

Danny

Milwaukee Area Technical College Milwaukee, WI

Raised by a single mother, Danny found it difficult to leave home and his younger brother in order to attend college. So he enrolled in the local public university, and remained in the family house. But during his first year, his mother lost her job and bills became difficult to pay. His financial aid was insufficient, so he worked at a retail store, laid pavement, sold plasma, cut lawns, and did some contracting work on the side-all while taking a full course load. That still didn't work, and soon his brother and mother moved out of state to live with relatives. Danny stayed in school, determined to make it through. He moved in with his aunt and uncle, who charged him \$600 per month for rent to sleep in the basement. He was never given keys to the home, and was often locked out, instead sleeping in his car. He also ran short of food, relying on the local pantry. These conditions left him exhausted, sometimes asleep in class.

Student profiles are from in-depth interviews conducted by Wisconsin HOPE Lab researcher Anthony Hernandez. Pseudonyms are provided to protect student confidentiality.

Table 8. Characteristics of Housing Secure, Housing Insecure, and Homeless **Survey Respondents**

	Housing Secure	Housing Insecure	Homeless
Female	69%	75%	69%
Race White, non-Hispanic or Latino African American Hispanic Native American SE Asian Other Asian More than one race	47%	42%	37%
	8%	14%	17%
	25%	24%	22%
	1%	1%	1%
	3%	2%	2%
	6%	4%	5%
	11%	13%	16%
Age 18-20 21-25 26-30 Over 30	40%	20%	27%
	25%	27%	27%
	11%	18%	16%
	23%	35%	30%
Highest level of parental education High school or less Some college Associate degree Bachelor's degree Graduate degree	33%	38%	38%
	27%	30%	31%
	10%	9%	8%
	19%	15%	14%
	12%	9%	9%
Immigration status Student a citizen or permanent resident Either parent a citizen or permanent resident	95%	96%	95%
	91%	91%	91%
Family characteristics Parent claims as a dependent Have children Ever placed in foster care	39%	21%	26%
	21%	35%	28%
	3%	7%	10%
Food security level High Marginal Low Very Low	51%	14%	7%
	14%	9%	5%
	20%	26%	21%
	15%	52%	68%
Living situation Computer at home Wireless internet at home Quiet place to study in home Feel safe at home (very or extremely) Left home because felt unsafe	94%	85%	76%
	95%	85%	76%
	87%	72%	64%
	78%	60%	43%
	3%	15%	38%
Approaches to paying for college Work study job Non-work study job Pell grant Other state or federal grants Grant from student's college Student loans Family or friends Savings Credit cards	6%	6%	7%
	46%	48%	44%
	35%	50%	50%
	20%	23%	23%
	7%	8%	8%
	19%	33%	32%
	27%	24%	25%
	24%	20%	20%
	12%	18%	16%

Table 8. Characteristics of Housing Secure, Housing Insecure, and Homeless **Survey Respondents (continued)**

Employment			
Looked for work in the last 30 days	30%	41%	54%
Had a job last week	58%	57%	50%
Hours worked per week			
- Less than 20	41%	34%	35%
- 20 - 40	50%	55%	54%
- More than 40	9%	11%	10%
Wages			
- \$10 or less per hour	40%	34%	42%
- \$10 - \$15 per hour	40%	46%	47%
- More than \$15 per hour	20%	19%	11%
Job Quality			
- Work schedule changes (often or always)	25%	29%	35%
- Job relates to career (little or none)	58%	59%	67%
- Job relates to major (little or none)	62%	62%	71%
- Job serves the community (little or none)	30%	31%	36%
- Able to do schoolwork at job (little or not at all)	58%	64%	64%
- Learning new skills at job (little or not at all)	23%	31%	35%
- Enjoy job (little or not at all)	21%	26%	31%
- Job interferes with courses (little or not at all)	66%	52%	48%
Utilization of public assistance			
Any food-related public assistance	20%	43%	48%
Any housing-related public assistance	9%	17%	18%
Any other public assistance	41%	58%	55%
Time Use			
Commuting time to/from college			
Lowest quartile	14%	12%	10%
Second quartile	33%	31%	30%
Third quartile	20%	19%	17%
Highest quartile	20%	26%	32%
Time spent attending college	0.404	0.404	000/
Lowest quartile	26%	24%	23%
Second quartile	20%	20%	20%
Third quartile	29%	27%	27%
Highest quartile	21%	24%	25%
Time spent caring for an adult	000/	700/	
Zero	82%	72%	69%
Greater than zero	18%	28%	31%
Time spent sleeping	220/	2/0/	2004
Lowest quartile	23%	26%	29%
Second quartile	25%	32%	33%
Third quartile	26%	24%	21%
Highest quartile	26%	18%	16%

Homeless community college students were more likely to work long hours at lower quality jobs.

IMPROVING POLICY AND PRACTICE

This study contributes to a growing body of evidence suggesting that basic needs insecurity is now a serious challenge in American higher education, and particularly in the nation's community colleges. With a sample of students and colleges many times larger than those in prior studies, we nonetheless reach very similar conclusions. Neither financial aid nor employment is a sufficient buffer to prevent students from going hungry or even homeless—at least half of the food and housing insecure students in this study and in prior studies received Pell Grants and/or were employed.⁴¹ Likely due to a lack of information and work requirements for non-parenting students, both studies also found that only about one-quarter of food-insecure students receive help from SNAP. There is an array of social programs that could support students pursuing degrees but is not reaching them because of insufficient information and requirements.42

Everyone working in higher education, whether it is via shaping policies and practices, teaching, supporting students, or allocating funding, needs to be cognizant that a failure to secure students' basic needs during college puts them at risk of dropout. Here are some recommendations to help address basic needs security among community college students.

Community Colleges:

- 1. Identify an institutional leader or committee of leaders who are specifically charged with assessing and addressing students' basic needs security. Consider the model now in place at the University of California–Berkeley, where a workgroup is tasked with "coordinating and overseeing advocacy efforts around basic needs security, including identifying specific issues, solutions, and goals, developing recommendations for advocacy campaign efforts undertaken by officers and staff, coordinating delegate campaign efforts, coordinating the preparation of communications and documents detailing findings and proposals, and serving as a point of contact for advocacy campaign coalition partners."43
- 2. Hire a case manager and/or train existing staff to serve as a single point of contact for basic needs insecure students, and in particular homeless students. Consider positioning this person within a comprehensive campus center that offers training and education about poverty, income inequality, and socioeconomic class, and also provides direct services to students in need. For example, the Human Services Resource Center at Oregon State University offers a food pantry, a shower, laundry, assistance completing SNAP applications, and emergency short-term housing.
- 3. Identify and implement creative approaches to addressing food insecurity, including the creation of campus food pantries, campus community gardens, food recovery programs, and coordinated benefits access programs. Whenever possible, engage community food pantries and local food banks to do this work effectively.⁴⁴ For example, Humboldt State University has an excellent benefits access program in "Oh SNAP!," and Single Stop provides support for benefits access at community colleges across the country. Look to the College and University Food Bank Alliance, Swipe Hunger, and other organizations for technical assistance.

- 4. Consider the needs of lower and moderate income students when developing any on-campus housing-seek to build mixed-income housing, and build partnerships with the local housing authority to identify supports for students in subsidized housing programs. See the U.S. Department of Housing and Urban Development's Guidebook for Colleges and Universities for specific suggestions.
- 5. Develop a robust and accessible emergency aid program that delivers support to students quickly. There are guides produced by NASPA and the Wisconsin HOPE Lab to support these efforts, which are often popular fundraising efforts undertaken by colleges.

Federal and State Policymakers:

- 1. Promote degree completion by expanding the SNAP eligibility requirements for college students to allow all work-study eligible students (not only those receiving the very limited pool of work-study funds) to meet the work requirement, and reducing or eliminating the 20 hour per week requirement affecting many other students (or, count college attendance toward the work requirement).
- 2. Simplify the FAFSA application process for establishing independence, particularly for homeless students.
- 3. Create incentives for community colleges to offer benefits access opportunities on their campuses (including employing a dedicated staff member if there is sufficient demand) and work to align social and educational policies to ensure that access for students is as seamless as possible. The Center for Law and Social Policy offers excellent recommendations in this regard. 45
- 4. Encourage state and federal investment in targeted aid programs that reach students with the most financial need, and/or Promise programs that help students who otherwise would not access financial aid for fear of the price being out of reach.
- 5. Re-institute year-round Pell so students have access to summer support to make progress in their studies and to contribute to living expenses.
- 6. Change American Opportunity Tax Credit (AOTC) requirements so that students who receive Pell can access AOTC as well.

Researchers

We urge the research community to move into the field of intervention, testing approaches to alleviating hunger and homelessness, helping students pay rent and buy food, so that they may focus on school. Rigorous evaluations of creative approaches, especially cross-sector partnerships with food banks and housing authorities, are sorely needed to ensure that such innovations are effective and can be scaled. Private philanthropy must play a critical role in supporting these evaluations in the coming years, given limitations on federal research funding.

Later this spring, the Wisconsin HOPE Lab will be publishing a new research guide for institutions seeking to assess basic needs security among their students and/or evaluating programs to address those needs. Visit wihopelab.com for more.

APPENDIX A

Like many online surveys, studies of community college students, and past surveys of basic needs security, the findings in this study are limited by low response rates and potentially non-random sampling. Students experiencing food and housing insecurity may have been more likely to respond to the survey, upwardly biasing the measured prevalence of key indicators of food and housing insecurity. If this is the case, all else equal, we might expect that higher response rates would be associated with lower levels of measured material need.

To explore this issue, Appendix Table 1 shows estimated rates of food and housing insecurity by institutional response rates. These rates ranged from one percent to 20 percent across sample colleges. Recent research has shown that, in samples of over 1,000 college students, response rates of five percent produce very few instances of large (> 0.3 standard deviation) errors in estimated item means.46 It is important to note that even the highest institutional response rates are not sufficient to guard against bias if student response was related to their material disadvantage. The pattern of results in Table A1, however, does provide information as to whether the key indicators may be biased across the range of observed response rates.

Table A1 provides little evidence of a strong relationship between institutional response rates and reported levels of food and housing insecurity. Students at colleges with the highest response rates reported slightly lower rates of low and very low food security (50 percent), housing insecurity (46 percent), and homelessness (10 percent) as students at colleges with the lowest response rates, (55 percent, 50 percent, and 14 percent, respectively). As discussed earlier, measured rates of material need are broadly consistent with previous survey efforts. Most importantly, regardless of response rate all surveyed colleges contain substantial numbers of students who require assistance to meet basic food and housing needs. While these rates may overstate (or understate) the prevalence of material need on campus, they underscore the importance of interventions and policies to help economically disadvantaged students as they work toward graduation.

Table A1. Relationship between Institutional Response Rate and Estimated Prevalence of Food and Housing Insecurity

		Food S	ecurity				
Response Rate	High	Marginal	Low	Very Low	Housing Insecure	Homeless	Percent of Sample
10-20%	39%	12%	23%	27%	47%	10%	23%
5-10%	29%	12%	24%	36%	53%	16%	33%
0-5%	34%	11%	22%	33%	50%	14%	45%

APPENDIX B

Participating Institutions

Bergen Community College (NJ)

Bladen Community College (NC)

Brookhaven College (TX)

Bunker Hill Community College (MA)

Cedar Valley College (TX)

Central Lakes College (MN)

Chandler-Gilbert Community College (AZ)

Chippewa Valley Technical College (WI)

College of Southern Idaho (ID)

Community College of Philadephia (PA)

Contra Costa College (CA)

Cuyahoga Community College (OH)

Cuyamaca College (CA)

Dakota County Technical College (MN)

Dallas County Community College District (TX)

Dallas Colleges Online (TX)

Daytona State College (FL)

Des Moines Area Community College (IA)

Diablo Valley College (CA)

East Los Angeles College (CA)

Eastfield College (TX)

El Centro College (TX)

Estrella Mountain Community College (AZ)

Flathead Valley Community College (MT)

GateWay Community College (AZ)

Glendale Community College (AZ)

Grand Rapids Community College (MI)

Grossmont College (CA)

Harper College (IL)

Highline College (WA)

Inver Hills Community College (MN)

Jackson College (MI)

Kishwaukee College (IL)

Los Angeles Community College District (CA)

Los Angeles City College (CA)

Los Angeles Harbor College (CA)

Los Angeles Mission College (CA)

Los Angeles Pierce College (CA)

Los Angeles Southwest College (CA)

Los Angeles Trade-Tech College (CA)

Los Angeles Valley College (CA)

Los Medanos College (CA)

Maricopa Community Colleges (AZ)

Mesa Community College (AZ)

Midlands Technical College (SC)

Milwaukee Area Technical College (WI)

Mineral Area College (MO)

Mohave Community College (AZ)

Monroe Community College (NY)

Mott Community College (MI)

Mount Hood Community College (OR)

Mountain View College (TX)

North Lake College (TX)

Northern Virginia Community College (VA)

Olympic College (WA)

Ozarks Technical Community College (MO)

Paradise Valley Community College (AZ)

Phoenix College (AZ)

Richland College (TX)

Rio Salado College (AZ)

San Antonio College (TX)

Santa Fe Community College (NM)

Scottsdale Community College (AZ)

South Mountain Community College (AZ)

Spartanburg Community College (SC)

State Fair Community College (MO)

St. Louis Community College District (MO)

Tacoma Community College (WA)

United Tribes Technical College (ND)

The University of Wisconsin Colleges (WI)

West Los Angeles College (CA)

Wilson Community College (NC)

Wisconsin Indianhead Technical College (WI)

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- Students struggling with material need may be more likely to withdraw from classes. Early-term survey administration was intended to 27 capture as many of those students as possible before they left school.
- Addressing methodological limitations will require substantial investments. Gold-standard surveys require large monetary incentives, stratified random sampling, and mail and phone surveys. All are resource-intensive strategies typically undertaken with federal funding, such as the National Postsecondary Student Aid Study (NPSAS). While food and housing insecurity measures are likely to be included in subsequent versions of the NPSAS, these data will not be available until 2021 at the earliest.
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