#RealCollege During the Pandemic: New Evidence on Basic Needs Insecurity and Student Well-Being

WEB APPENDICES



Appendix A. Participating Colleges in 2020

Two-Year Colleges

Amarillo College (TX) *Bellevue College (WA) Blue Mountain Community College (OR) *Broward College (FL) City College of Chicago–Malcolm X College (IL) Clatsop Community College (OR) Columbia Gorge Community College (OR) Community College of Baltimore County (MD) County College of Morris (NJ) Dallas County Community College District (TX) Essex County College (NJ) Forsyth Technical Community College (NC) Grand Rapids Community College (MI) Greenville Technical College (SC) Hennepin Technical College (MN) Hudson County Community College (NJ) Ivy Tech Community College (IN) *Lake-Sumter State College (FL) Lane Community College (OR) *Lorain County Community College (OH) Middlesex Community College (MA) Milwaukee Area Technical College (WI) Minnesota West Community and Technical College (MN) Monroe Community College (NY) Montgomery College (MD) Mountain Empire Community College (VA) Mt. Hood Community College (OR) North Central Texas College (TX)

Northeast Wisconsin Technical College (WI) Phillips Community College of the University of Arkansas (AR) Raritan Valley Community College (NJ) Roane State Community College (TN) Rochester Community and Technical College (MN) Seward County Community College (KS) Southern Maine Community College (ME) Sussex County Community College (NJ) University of Arkansas-Pulaski Technical College (AR) Wake Technical Community College (NC) *Walla Walla Community College (WA)

Four-Year Colleges and Universities

Blackburn College (IL) Clarke University (IA) Dalton State College (GA) Eastern Michigan University (MI) George Fox University (OR) LIM College (NY) La Salle University (PA) Missouri Valley College (MO) National Louis University (IL) Northeastern Illinois University (IL) Paul Quinn College (TX) SUNY Upstate Medical University (NY) Texas Tech University (TX) The City College of New York (NY) University of Pikeville (KY)

* Institution primarily offers credentials other than a bachelor's degree and is characterized as a two-year institution.

Appendix B. Survey Methodology

SURVEY ELIGIBILITY AND PARTICIPATING COLLEGES

With the input of administrators, the Hope Center fielded this survey to all participating institutions. Each one agreed to administer an online survey in spring 2020 (between April and May) and institution



staff sent a series of invitations and follow-up reminders to all enrolled students encouraging them to participate. In order to boost response rates, all survey respondents were given the chance to enter a raffle in which 100 students would be randomly selected to receive a \$100 gift card.

The Hope Center for College, Community, and Justice provided the email invitation language and hosted the survey as shown below. Participants were asked to use only the provided invitation language to ensure consistency across institutions.

Subject: Real talk: We need your help From: email address [someone students "know" at COLLEGE NAME]

[COLLEGE LETTERHEAD FOR EMAIL]

Dear [student first name],

Let's get real. You're the expert when it comes to what's happening in college. So we need your help to make [COLLEGE NAME] the best it can be for you and your friends.

Share your real talk in the "#RealCollege during COVID-19" Survey, which we are administering in collaboration with the Hope Center for College, Community, and Justice at Temple University. We chose you simply because you attend [COLLEGE OR UNIVERSITY NAME]. In appreciation, you can win \$100 for completing the survey.

Click here to share your story. [SURVEY LINKED HERE]

Be honest—everything you say is confidential. If you have questions, send us a note at hopesrvy@temple.edu.

Thank you.



COLLEGE SURVEY PARTICIPANTS

In the spring of 2020, 54 postsecondary institutions fielded the survey during the pandemic, as students' lives were substantially disrupted due to the outbreak of the novel coronavirus.

Table B-1. Characteristics of Participating Institutions (weighted by surveyrespondents), by College Type

	Two-Year Colleges	Four-Year Colleges	Overall
Number of colleges	39	15	54
Number of survey respondents	30,721	7,881	38,602
	%	%	%
Sector			
Public	100	60	92
Private, not for profit	0	36	7
Private, for profit	0	4	1
Region			
West	6	9	7
Midwest	31	49	34
South	47	17	41
Northeast	16	25	18
Urbanization			
Urban	75	61	72
Suburban	14	19	15
Town	5	20	8
Rural	5	0	4
Size			
Not applicable	9	0	7
Under 5,000	9	30	13
5,000–9,999	27	29	27
10,000–19,999	19	33	22
20,000 or more	36	8	31

Source: Integrated Postsecondary Education Data System (2019).

Notes: Cumulative percentages may not add up to 100 due to rounding error. Information on institution size for Dallas College (formerly Dallas County Community College District) was not available in IPEDS. According to the <u>Dallas College</u> website, the college served more than 101,000 students in the fall of 2019.



STUDENT SURVEY PARTICIPANTS

Who Answered the Survey?

Most students who were sent the #RealCollege During the Pandemic survey did not answer it. Participating institutions sent survey invitations to an estimated 576,000 students and 38,602 students participated, yielding an estimated response rate of 6.7%.¹

Due to legal and financial restrictions, we surveyed all students rather than drawing a subsample. The results may be biased—overstating or understating the problem—depending on who answered and who did not. As readers ponder this issue, consider that the survey was emailed to students during the early and uncertain weeks of the pandemic crisis, and thus some may not have had reliable access to their college email to respond. Also, the incentives provided were negligible and did not include help for their challenges. Finally, the survey was framed as being about college life, not about hunger or homelessness.

Table B-2. Characteristics of Survey Respondents, by College Type

	Two-Year Colleges %	Four-Year Colleges %	Overall %
Gender Identity			
Female	64	64	64
Male	22	23	22
Non-binary/Third gender	1	1	1
Prefers to self-describe	1	1	1
Prefers not to answer	2	2	2
Missing	13	12	13
Transgender Identity			
Transgender	1	1	1
Non-transgender	85	86	85
Prefers not to answer	1	1	1
Missing	13	12	12
Racial or Ethnic Background			
White or Caucasian	47	52	48
African American or Black	19	13	18
Hispanic or Latinx	21	20	21
American Indian or Alaskan Native	2	2	2
Indigenous	1	1	1
Middle Eastern or North African or Arab or Arab American	2	2	2
Southeast Asian	4	4	4
Pacific Islander or Native Hawaiian	1	1	1

THE	no	pe	CENTER

5	6	5
3	3	3
3	2	3
13	12	12
22	11	19
66	77	68
12	12	12
97	97	97
3	3	3
<1	<1	<1
74	73	74
26	27	26
<1	<1	<1
	3 13 22 66 12 97 3 <1 74 26	3 3 3 2 13 12 22 11 66 77 12 12 97 97 3 3 <1

Source: 2020 #RealCollege During the Pandemic Survey

Notes: Classifications of gender identity and racial and ethnic background are not mutually exclusive. Students could selfidentify with multiple classifications. Percentages of mutually exclusive groups may not add up to 100 due to rounding error.

State	Two-Year Colleges	Four-Year Colleges	Overall
Arkansas	442	0	442
Florida	3,513	0	3,513
Georgia	0	470	470
Illinois	518	1,663	2,181
Indiana	4,096	0	4,096
lowa	0	184	184
Kansas	104	0	104
Kentucky	0	175	175
Maine	687	0	687
Maryland	4,358	0	4,358
Massachusetts	855	0	855
Michigan	1,554	1,527	3,081
Minnesota	1,454	0	1,454
Missouri	0	475	475

Table B-3. Number of Survey Respondents, by College Type and State



New Jersey	2,736	0	2,736
New York	665	1,626	2,291
North Carolina	1,239	0	1,239
Ohio	406	0	406
Oregon	1,623	693	2,316
Pennsylvania	0	352	352
South Carolina	869	0	869
Tennessee	405	0	405
Texas	3,477	716	4,193
Virginia	238	0	238
Washington	209	0	209
Wisconsin	1,273	0	1,273
Total	30,721	7,881	38,602

Source: 2020 #RealCollege During the Pandemic Survey



Appendix C. Three Survey Measures of Basic Needs Insecurity

FOOD SECURITY

To assess food *security* in the 2020 #RealCollege During the Pandemic Survey, we used the 6-item Household Food Security Survey Module (shown below) from the U.S. Department of Agriculture (USDA).² It is important to note that while we mainly discuss *insecurity*, the standard is to measure the level of *security*, referring to those with low or very low security as "food insecure."

Food Security Module

- 1. "In the last 30 days, the food that I bought just didn't last, and I didn't have money to get more." (Often true, Sometimes true, Never true)
- 2. "In the last 30 days, I couldn't afford to eat balanced meals." (Often true, Sometimes true, Never true)
- 3. "In the last 30 days, did you ever cut the size of your meals or skip meals because there wasn't enough money for food?" (Yes/No)
- 4. [*If yes to question 3, ask*] "In the last 30 days, how many days did this happen?" (Once, Twice, Three times, Four times, Five times, More than five times)
- 5. "In the last 30 days, did you ever eat less than you felt you should because there wasn't enough money for food?" (Yes/No)
- 6. "In the last 30 days, were you ever hungry but didn't eat because there wasn't enough money for food?" (Yes/No)

To calculate a raw score, tally the number of questions to which a student answers affirmatively.

- a. "Often true" and "sometimes true" should be counted as affirmative answers.
- b. Answers of three days or more should be counted as a "yes" in the 30-day version.
- c. Translate the raw score into food security levels as follows:

Food security level	Raw Score
	Six-item
High	0
Marginal	1
Low	2–4
Very Low	5–6



HOUSING INSECURITY

To assess housing insecurity in the 2020 #RealCollege During the Pandemic Survey, we asked students the following questions about their <u>current</u> living situation:

Housing Insecurity Module

- 1. "The place where I am living is only temporary, even if I wanted to stay."
- 2. "I feel confident about my ability to pay for this place so I can stay here next month."
- 3. "I am safe where I am living."
- 4. "I can study and engage in classes where I am living."

Students were considered housing insecure if they answered "strongly agree" or "agree" to question one or "strongly disagree" or "disagree" to questions two, three, or four.

HOMELESSNESS

To measure homelessness, we asked a series of survey questions that align with the definition of homelessness dictated by the McKinney-Vento Homeless Assistance Act. Please refer to pp. 31–32 in Crutchfield and Maguire (2017) for further discussion of this measure.³

In spring 2020, students were considered homeless if they answered affirmatively to any of the questions in the following Homelessness Module.

Homelessness Module

"Have you slept in any of the following places <u>due to COVID-19</u>? (Please mark Yes or No for each item.)"

- 1. Temporarily staying with a relative, friend, or couch surfing until I find other housing
- 2. Temporarily at a hotel or motel without a permanent home to return to (not on vacation or business travel)
- 3. At a shelter
- 4. In transitional housing or independent living program
- 5. At a group home such as halfway house or residential program for mental health or substance abuse
- 6. At a treatment center (such as detox, hospital, etc.)
- 7. In a camper or RV
- 8. Outdoor location (such as street, sidewalk, or alley; bus or train stop; campground or woods, park, beach, or riverbed; under bridge or overpass; or other)
- 9. In a closed area/space with a roof not meant for human habitation (such as abandoned building; car, truck, or van; encampment or tent; unconverted garage, attic, or basement; etc.)



Appendix D. Measure of Anxiety

Students' anxiety levels were assessed using a validated seven-item instrument, called the Generalized Anxiety Disorder Scale (GAD-7).⁴ The assessment asked students about the number of times in the last week they were bothered by any of the following items:

Generalized Anxiety Disorder Scale (GAD-7) Module

- Feeling nervous, anxious, or on edge
- Not being able to stop or control worrying
- Worrying too much about different things
- Trouble relaxing
- Being so restless that it's hard to sit still
- Becoming easily annoyed or irritable
- Feeling afraid as if something awful might happen

The frequency students felt bothered by any of these items determined their anxiety levels. Those who indicated that they felt bothered at least some of the days were considered moderately to severely anxious.

A mulicity lowed	Raw Score
Anxiety level	Seven-item
None to minimal	0–4
Mild	5–9
Moderate	10–14
Severe	15+

Appendix E. Tables on Data Used in Figures

Table E-1. Number of College Participants & Survey Respondents Over Time (Figure 2)

	#RealCollege During the Pandemic Survey						
	2015 2016 2017 2018 2019						
Two-year colleges	10	71	31	90	171	39	
Four-year colleges	0	0	35	33	56	15	
Two-year students	4,312	33,934	23,000	57,623	107,295	30,721	
Four-year students	0	0	20,000	28,214	48,618	7,881	

Source: 2019 #RealCollege survey report and 2020 #RealCollege During the Pandemic Survey

Notes: For 2019, the sample sizes of students exclude those who did not identify a college they attended (n=11,091).

Table E-2. Food Insecurity Items, by College Type (Figures 3 & 4)

	Two-Year Colleges		Four-Year Colleges		Over	all
	Ν	%	Ν	%	Ν	%
Any food insecure item	12,748	44	2,815	38	15,563	42
I couldn't afford to eat balanced meals.	12,233	43	2,736	37	14,969	41
The food that I bought just didn't last and I didn't have the money to buy more.	11,567	40	2,412	33	13,979	39
I cut the size of meals or skipped meals because there wasn't enough money for food.	10,250	35	2,272	31	12,522	34
I cut the size of meals or skipped because there wasn't enough money for food. (3 or more times)	6,660	23	1,484	20	8,144	23
I ate less than I felt I should because there wasn't enough money for food.	10,468	36	2,366	32	12,834	35
I was hungry but didn't eat because there wasn't enough money for food.	7,110	25	1,612	22	8,722	24

Source: 2020 #RealCollege During the Pandemic Survey

Notes: For more details on the food security module used in this report, see Appendix C.



Table E-3. Housing Insecurity Items, by College Type (Figures 3 & 5)

	Two-Year Colleges		Four-Year Colleges		Ove	erall
	Ν	%	Ν	%	Ν	%
Any housing insecure item	10,018	36	2,932	41	12,950	37
The place where I am living is only temporary, even if I wanted to stay.	3,527	13	1,217	17	4,744	14
I do not feel confident about my ability to pay for this place so I can stay here next month.	5,045	18	1,333	19	6,378	18
I cannot study and engage in classes where I am living.	4,171	15	1,311	18	5,482	16
I am not safe where I am living.	1,551	6	406	6	1,957	6

Source: 2020 #RealCollege During the Pandemic Survey

Notes: For more details on the housing insecurity module used in this report, see Appendix C.



Table E-4. Homelessness Items, by College Type (Figures 3 & 6)

	Two-Year Colleges		Four- Colle	-Year eges	Ονε	Overall	
	Ν	%	N	%	Ν	%	
Any homelessness item	3,042	11	1,029	15	4,071	12	
Locations stayed overnight:		1	1				
Temporarily staying with relative, friend or couch surfing until I find other housing	2,389	9	905	13	3,294	10	
Temporarily at a hotel or motel without a permanent home to return to (not vacation or business travel)	345	1	88	1	433	1	
At a shelter	221	1	39	1	260	1	
In transitional housing or independent living program	349	1	78	1	427	1	
At a group home (such as halfway house or residential program for mental health or substance abuse)	149	1	38	1	187	1	
At a treatment center (such as detox, hospital, etc.)	135	<1	39	1	174	1	
At outdoor location (such as street, sidewalk or alley; bus or train stop; campground or woods, park, beach, or riverbed; under bridge or overpass)	202	1	46	1	248	1	
In a camper or RV	247	1	80	1	327	1	
In closed area/space with roof not meant for human habitation (such as abandoned building; car, truck, or van; encampment or tent; unconverted garage, attic, or basement; etc.)	320	1	73	1	393	1	

Source: 2020 #RealCollege During the Pandemic Survey

Notes: For more details on the homelessness module used in this report, see Appendix C.



Table E-5. Basic Needs Insecurity Among Students at Four-Year Colleges, by Pre-Pandemic Residency (Figure 7)

	On-Ca	mpus	Off-Campus		
	N	%	N	%	
Food insecure	6,276	31	7,142	34	
Housing insecure	5,630	27	8,999	43	
Homelessness	3,514	17	3,085	15	

Source: 2019 #RealCollege Survey

Notes: For more details on how each measure of basic needs insecurity was constructed, see Appendix C.

Table E-6. Basic Need Insecurity, By Racial or Ethnic Background (Figure 8)

	Any Basic Insecu	
	N	%
White or Caucasian	9,663	52
Other Asian or Asian American	1,219	63
Hispanic or Latinx	5,190	65
American Indian or Alaska Native	557	67
Southeast Asian	958	67
Other	886	68
Middle Eastern or North African or Arab or Arab American	616	69
Pacific Islander or Native Hawaiian	201	71
African American or Black	4,846	71
Indigenous	327	74
Prefers not to answer	740	68
Missing	1,405	48

Source: 2020 #RealCollege During The Pandemic Survey

Notes: The "N" column indicates the number of survey respondents who experienced food insecurity, housing insecurity, or homelessness. Classifications of racial/ethnic background are not mutually exclusive. Students could self-identify with multiple classifications. For more details on how each measure of basic needs insecurity was constructed, see Appendix C.



Table E-7. Basic Needs Insecurity, by Parenting Status (Figure 9)

	Any Basic Needs Insecurity		
	Ν	%	
Non-parenting student	15,616	59	
Parenting student	4,494	60	

Source: 2019 #RealCollege Survey

Notes: The "N" column indicates the number of survey respondents who experienced food insecurity, housing insecurity, or homelessness. For more details on how each measure of basic needs insecurity was constructed, see Appendix C.

Table E-8. Impacts on Job Security Among Students Employed Pre-Pandemic, by College Type (Figure 10)

	Two-Year Colleges			-Year eges	Overall		
Post-Pandemic Employment Status	Ν	%	Ν	%	Ν	%	
Nothing has changed	7,999	36	2,070	37	10,069	36	
My hours/pay were reduced	7,014	32	1,559	28	8,573	31	
I lost this job	7,388	33	2,385	42	9,773	35	

Source: 2020 #RealCollege During The Pandemic Survey

Notes: The "N" column indicates the number of survey respondents who responded in the affirmative to the given item. Students were asked whether they held a work-study, on-campus, or off-campus job. An employment status change—lost job or had pay or hours reduced—in at least one of these jobs post-pandemic is considered a change in overall employment status. There was no difference in employment status between two- and four-year college students; 74 % of two-year college students held at least one job and 73% of four-year college students did.

Table E-9. Basic Needs Insecurity Among Students Employed Pre-Pandemic,by Impacts On Job Security and College Type (Figure 11)

	Two-Year Colleges		Four-Year Colleges		Overall	
Post-Pandemic Employment Status	Ν	%	Ν	%	Ν	%
Nothing has changed	3,778	49	964	48	4,742	49
My hours/pay were reduced	4,274	63	921	61	5,195	63
I lost this job	4,968	69	1,620	70	6,588	69

Source: 2020 #RealCollege During The Pandemic Survey

Notes: The "N" column indicates the number of survey respondents who experienced food insecurity, housing insecurity, or homelessness. For more details on how each measure of basic needs insecurity was constructed, see Appendix C. Students were asked whether they held a work-study, on-campus, or off-campus job. An employment status change—lost job or had pay or hours reduced—in at least one of these jobs post-pandemic is considered a change in overall employment status. There was no difference in employment status between two- and four-year college students; 74 % of two-year college students held at least one job and 73% of four-year college students did.

Table E-10. Level of Anxiety Among Survey Respondents, By College Type (Figure 12)

	Two-Year Colleges		Four-Year Colleges		Overall	
	Ν	%	Ν	%	Ν	%
None to minimal anxiety	6,570	24	1,513	22	8,083	24
Mild anxiety	7,216	27	1,853	26	9,069	27
Moderate anxiety	5,477	20	1,470	21	6,947	20
Severe anxiety	7,849	29	2,159	31	10,008	29

Source: 2020 #RealCollege During The Pandemic Survey

Notes: The "N" column indicates the number of survey respondents who responded in the affirmative to the given item. Cumulative percentages may not add up to 100 due to rounding. For more detail on how anxiety level was constructed, see Appendix D.

Table E-11. Academic Challenges, by College Type (Figure 13)

	Two-Year Colleges			-Year eges	Overall	
	Ν	%	Ν	%	Ν	%
I do not have a functional laptop.	3,319	11	520	7	3,839	10
I do not have sufficient internet access.	3,846	13	1,084	14	4,930	13
I do not have time for school.	4,406	14	1,227	16	5,633	15
I cannot concentrate on school.	15,251	50	4,892	63	20,143	53
I have to take care of my family members while going to school.	12,474	41	2,783	36	15,257	40

Source: 2020 #RealCollege During the Pandemic Survey

Notes: The "N" column indicates the number of survey respondents who responded in the affirmative to the given item. Examples of academic challenges due to the coronavirus pandemic are not mutually exclusive.



Table E-12. Type and Status of Financial Assistance Sought Among StudentsExperiencing Basic Needs Insecurity, by College Type (Figure 14)

	Two-Year Colleges		Four-Year Colleges		Overall	
	Ν	%	Ν	%	Ν	%
Unemployment						
No, this option is unavailable to me or I am ineligible	9,670	59	2,699	64	12,369	60
No, I didn't know about it	1,678	10	373	9	2,051	10
No, I don't know how to apply	1,513	9	406	10	1,919	9
Yes, applied	3,516	21	752	18	4,268	21
SNAP						
No, this option is unavailable to me or I am ineligible	9,280	58	2,763	67	12,043	60
No, I didn't know about it	2,195	14	501	12	2,696	13
No, I don't know how to apply	1,971	12	523	13	2,494	12
Yes, applied	2,605	16	365	9	2,970	15
Emergency Aid						
No, this option is unavailable to me or I am ineligible	4,968	31	1,652	39	6,620	32
No, I didn't know about it	5,427	34	1,232	29	6,659	33
No, I don't know how to apply	3,147	19	816	19	3 <i>,</i> 963	19
Yes, applied	2,654	16	491	12	3,145	15

Source: 2020 #RealCollege During the Pandemic Survey

Notes: The "N" column indicates the number of survey respondents who responded in the affirmative to the given item. Cumulative percentages may not add up to 100 due to rounding.

¹ Response rates were based on the number of survey respondents at each participating institution given the total number students to which survey invitations were sent. The latter number was self-reported by the participating institutions.

² United States Department of Agriculture, Economic Research Service. (2012). <u>U.S. household food security survey module:</u> <u>Six-item short form</u>.

³ Crutchfield, R. M. & Maguire, J. (2017). <u>Researching basic needs in higher education: Qualitative and quantitative</u> <u>instruments to explore a holistic understanding of food and housing insecurity</u>. Long Beach, California: Basic Needs Initiative, Office of the Chancellor, California State University.

⁴ Spitzer, R.L, Kroenke, K., Williams, J.B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder. *Archives of Internal Medicine*, *166*(10), 1092–1097.