

HUNGRY TO WIN:

A FIRST LOOK AT FOOD AND HOUSING INSECURITY

AMONG STUDENT-ATHLETES

WEB APPENDICES

Appendix A. College Participants

Division I

Colorado State University Fort Collins (CO)
Drexel University (PA)
La Salle University (PA)
Lehigh University (PA)
St. John's University (NY)
Stony Brook University (NY)
Temple University (PA)
The University of Montana (MT)
University of Kansas (KS)
University of Massachusetts Lowell (MA)
University of Memphis (TN)
University of Northern Colorado (CO)
West Virginia University (WV)

Division II

Colorado School of Mines (CO)
Emporia State University (KS)
Fort Lewis College (CO)
Grand Valley State University (MI)
Metropolitan State University of Denver (CO)
Minnesota State University Moorhead (MN)
Southwest Minnesota State University (MN)
University of Alaska Fairbanks (AK)
University of Central Missouri (MO)
University of Missouri St. Louis (MO)
Western Washington University (WA)

Division III

Bridgewater State University (MA)
Cedar Crest College (PA)
Fitchburg State University (MA)
Framingham State University (MA)
George Fox University (OR)
Maryville College (TN)
Muhlenberg College (PA)
Northern Vermont University Johnson (VT)
Rhode Island College (RI)
SUNY Cobleskill (NY)

SUNY College Old Westbury (NY)
SUNY Cortland (NY)
SUNY Fredonia (NY)
SUNY Maritime College (NY)
SUNY New Paltz (NY)
SUNY Oneonta (NY)
SUNY Oswego (NY)
SUNY Polytechnic institute (NY)
SUNY Potsdam (NY)
St. Norbert College (WI)
The College at Brockport (NY)
University of Massachusetts Boston (MA)
Westfield State University (MA)
York College of Pennsylvania (PA)

Two-year

Alfred State College (NY)
Anoka-Ramsey Community College (MN)
Atlantic Cape Community College (NJ)
Bay de Noc Community College (MI)
Bellevue College (WA)
Bergen Community College (NJ)
Blue Mountain Community College (OR)
Bristol Community College (MA)
Brookdale Community College (NJ)
Bucks County Community College (PA)
Bunker Hill Community College (MA)
Camden County College (NJ)
Cayuga Community College (NY)
Cedar Valley College (TX)
Central Lakes College Brainerd (MN)
Centralia College (WA)
Cerritos College (CA)
Chaffey College (CA)
Clackamas Community College (OR)
Clark College (WA)
Columbia Basin College (WA)
Community College of Allegheny County (PA)
Community College of Baltimore County (MD)
Community College of Philadelphia (PA)
Community College of Rhode Island (RI)
Compton College (CA)
County College of Morris (NJ)

Daytona State College (FL)
Delaware County Community College (PA)
Dine College (AZ)
Dutchess Community College (NY)
Eastfield College (TX)
Edmonds Community College (WA)
Essex County College (NJ)
Everett Community College (WA)
Fashion Institute of Technology (NY)
Finger Lakes Community College (NY)
Florida State College at Jacksonville (FL)
Fond du Lac Tribal and Community College (MN)
Galveston College (TX)
Glendale Community College (CA)
Grayson College (TX)
Green River College (WA)
Grossmont College (CA)
Hibbing Community College (MN)
Highline College (WA)
Holyoke Community College (MA)
Hudson Valley Community College (NY)
Itasca Community College (MN)
Jamestown Community College (NY)
Jefferson State Community College (AL)
Linn-Benton Community College (OR)
Lower Columbia College (WA)
Massasoit Community College (MA)

Cuyamaca College (CA)
Miami Dade College (FL)
Middlesex County College (NJ)
Minnesota State Community and Technical College (MN)
Mohawk Valley Community College (NY)
Monroe Community College (NY)
Montgomery College (MD)
Mountain View College (TX)
Mt. Hood Community College (OR)
Napa Valley College (CA)
Nassau Community College (NY)
North Central Texas College (TX)
North Lake College (TX)
Northern Essex Community College (MA)
Northern Virginia Community College (VA)
Northland Community and Technical College (MN)
Ocean County College (NJ)
Olympic College (WA)
Onondaga Community College (NY)
Passaic County Community College (NJ)
Patrick Henry Community College (VA)
Pierce College-Fort Steilacoom (WA)
Portland Community College (OR)
Rainy River Community College (MN)
Raritan Valley Community College (NJ)
Reedley College (CA)
Richland College (TX)
Ridgewater College (MN)
Riverland Community College (MN)
Riverside City College (CA)
Rochester Community and Technical College (MN)
Rogue Community College (OR)
Rowan College at Burlington County (NJ)
Rowan College of South Jersey (NJ)
SUNY Adirondack (NY)
SUNY Corning Community College (NY)
SUNY Delhi (NY)
SUNY Erie Community College (NY)
SUNY Morrisville (NY)
SUNY Orange (NY)
Salish Kootenai College (MT)
San Diego City College (CA)
Mesabi Range College (MN)
San Diego Miramar College (CA)
San Jose City College (CA)
Santa Rosa Junior College (CA)
Santiago Canyon College (CA)
Shoreline Community College (WA)
Skagit Valley College (WA)
South Puget Sound Community College (WA)
Southwestern Oregon Community College (OR)
Spokane Falls Community College (WA)
St. Cloud Technical and Community College (MN)
Sussex County Community College (NJ)
Tacoma Community College (WA)
Tallahassee Community College (FL)
Treasure Valley Community College (OR)
Trinity Valley Community College (TX)
Umpqua Community College (OR)
Union County College (NJ)
United Tribes Technical College (ND)
Wake Technical Community College (NC)
Walla Walla Community College (WA)
Wallace State Community College Hanceville (AL)
Wenatchee Valley College (WA)
Westchester Community College (NY)
Western Technical College (WI)
Whatcom Community College (WA)
Yakima Valley College (WA)

San Diego Mesa College (CA)

Appendix B. Survey Methodology

SURVEY ELIGIBILITY AND PARTICIPATING COLLEGES

Together with administrators, the Hope Center for College, Community, and Justice fielded this survey to all participating institutions. Each institution agreed to administer an online survey in the fall and offer ten \$100 prizes to their students in order to boost response rates. Institution staff sent a series of invitations and follow-up reminders to all enrolled students encouraging them to participate.

The Hope Center provided the email invitation language as well as hosted the survey as shown below. Upon opening the survey, students were presented with a consent form in compliance with Institutional Review Board standards. To actually take the survey, the student must have clicked continue as a record of consent and completed a minimum of the first page of the survey. 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 survey. We chose you simply because you attend [COLLEGE 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 2019, 13 Division I, 11 Division II, 24 Division III and 124 two-year postsecondary institutions fielded the survey early in fall term, as students enduring basic needs insecurity are at greater risk for dropping out of school later in the year. We use data from the United States Department of Education: Equity in Athletics Disclosure Act Survey to categorize colleges by division.

Colleges included in this report had at least one student who responded “yes” to the question “Are you a student-athlete on a team sponsored by your institution’s athletics department”? Survey data were then merged with data from the U.S. Department of Education’s Equity in Athletics Data Analysis in order to obtain numbers on the total number of unduplicated student athletes for each college. Colleges not included in the aforementioned dataset are not in this report.

Table B-1. Characteristics of Participating Institutions (weighted)

N (colleges)		172
N(survey respondents)		126,157
		%
Sector		
Public		94
Private, not for profit		6
Private, for profit		0
Region		
West		37
Midwest		12
South		14
Northeast		37
Urbanization		
City		49
Suburb		36
Town		11
Rural		4
Size		
Under 5,000		13
5,000–9,999		30
10,000–19,999		24
20,000 or more		33

Source: Integrated Postsecondary Education Data System (2019). Retrieved from <https://nces.ed.gov/ipeds/>

Notes: Cumulative percentages may not add up to 100 due to rounding error.¹ Survey statistics are weighted by the number of survey responses from each college

STUDENT SURVEY PARTICIPANTS

Who Answered the Survey?

Most students who were sent the #RealCollege survey did not answer it. Participating institutions sent survey invitations to an estimated 5,851 Division I student-athletes and 452 students participated, yielding an estimated response rate of 8%.² Both Division II and III student-athletes had an estimated response rate of 11%. Overall, survey invitations were sent to an estimated 35,771 student-athletes, and 3,506 students participated, yielding an overall estimated response rate of 10%.

We surveyed all students rather than drawing a subsample due to legal and financial restrictions. 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, and thus they had to have electronic access to respond. The incentives provided were negligible and did not include help with their challenges. Finally, the survey was framed as being about college life, not about hunger or homelessness.

A student is considered an athlete if they responded “yes” to being student-athlete on a team sponsored by their institution’s athletics department. Similarly, a student is defined as a non-athlete if they responded “no” to being a student-athlete on a team sponsored by their institution’s athletics department. Students who did not respond to this survey question (n=28,790) were not included in the analyses for this report.

Table B-2. Characteristics of Survey Respondents By Division

	Division I		Division II		Division III		Two-Year	
	N	%	N	%	N	%	N	%
All respondents	19,112	100	11,551	100	14,704	100	80,790	100
Student-athletes	452	2	417	4	997	7	1,640	2
Non-student-athletes	14,644	77	9,035	78	10,318	70	59,864	74
STUDENT-ATHLETES								
Gender Identity								
Female	309	68	271	65	614	62	931	57
Male	139	31	146	35	377	38	688	42
Non-binary	.	.	.	.	.	.	27	2
Prefer to self-describe	.	.	.	.	.	.	23	1
Prefer not to answer	.	.	.	.	.	.	24	1
Missing	.	.	.	.	.	.	16	1
Racial or Ethnic Background								
American Indian or Alaska Native	.	.	24	6	20	2	112	7
Black	46	10	29	7	88	9	275	17
Hispanic or Latinx	31	7	33	8	88	9	427	26
Indigenous	.	.	10	2	.	.	65	4

Middle Eastern or North African or Arab or Arab American	11	2	10	2	12	1	38	2
Other Asian or Asian-American	20	4	12	3	25	3	85	5
Pacific Islander or Native Hawaiian	.	.	.	.	.	.	71	4
Southeast Asian	12	3	.	.	15	2	57	3
White	384	85	372	89	859	86	1,026	63
Other	.	.	11	3	11	1	49	3
Prefers not to answer	.	.	.	.	.	.	19	1
Missing	.	.	.	.	.	.	15	1
Race/Ethnicity and Gender Identity								
Black male	21	5	11	3	45	5	143	9
White male	107	24	127	30	316	32	369	23
Asian male	10	2	.	.	14	1	47	3
Hispanic or Latinx male	.	.	14	3	38	4	207	13
Black female	24	5	20	5	44	4	130	8
White female	275	61	247	59	536	54	651	40
Asian female	15	3	11	3	21	2	77	5
Hispanic or Latinx female	23	5	21	5	50	5	217	13
Employment Status								
Employed	98	22	106	25	287	29	409	25
Not employed, looking	32	7	19	5	48	5	97	6
Not employed, not looking	76	17	54	13	107	11	182	11
Missing	246	54	238	57	555	56	952	58
Years in College								
Less than 1	148	33	123	29	333	33	807	49
1 to 2	139	31	123	29	301	30	629	38
Three or more	164	36	171	41	363	36	203	12
Missing	.	.	.	.	.	.	.	.
Student Receives the Pell Grant								
Yes	89	20	77	18	227	23	582	35
No	299	66	286	69	620	62	838	51
Missing	64	14	54	13	150	15	220	13
Student Lives on Campus								
Yes	316	70	242	58	804	81	471	29
No	133	29	171	41	187	19	1,142	70
Missing	.	.	.	.	.	.	27	2
Student Has Meal Plan								
Yes	273	60	195	47	768	77	317	19
No	179	40	222	53	229	23	1,320	80
Missing	.	.	.	.	.	.	.	.
NON-STUDENT-ATHLETES								

Gender Identity								
Female	9,934	68	6,487	72	7,405	72	42,055	70
Male	4,464	30	2,363	26	2,693	26	16,554	28
Non-binary	237	2	194	2	197	2	968	2
Prefer to self-describe	77	1	58	1	68	1	408	1
Prefer not to answer	77	1	59	1	73	1	549	1
Missing	39	<1	23	<1	31	<1	354	1
Racial or Ethnic Background								
American Indian or Alaska Native	366	2	517	6	237	2	2,604	4
Black	1,431	10	502	6	1,020	10	7,917	13
Hispanic or Latinx	1,455	10	791	9	1,336	13	17,542	29
Indigenous	153	1	247	3	108	1	1,311	2
Middle Eastern or North African or Arab or Arab American	354	2	119	1	189	2	1,528	3
Other Asian or Asian-American	1,336	9	343	4	443	4	3,808	6
Pacific Islander or Native Hawaiian	119	1	72	1	74	1	1,088	2
Southeast Asian	898	6	259	3	267	3	2,664	4
White	10,643	73	7,616	84	8,155	79	34,409	57
Other	310	2	145	2	195	2	1,964	3
Prefers not to answer	178	1	84	1	105	1	1,151	2
Missing	59	<1	31	<1	27	<1	304	1
Race/Ethnicity and Gender Identity								
Black male	334	2	108	1	245	2	1,880	3
White male	3,236	22	1,980	22	2,145	21	9,536	16
Asian male	724	5	176	2	208	2	1,922	3
Hispanic or Latinx male	399	3	190	2	323	3	4,738	8
Black female	1,087	7	383	4	753	7	5,916	10
White female	7,241	49	5,492	61	5,856	57	24,091	40
Asian female	1,271	9	333	4	405	4	3,596	6
Hispanic or Latinx female	1,036	7	586	6	980	9	12,560	21
Employment Status								
Employed	4,552	31	3,172	35	3,372	33	15,555	26
Not employed, looking	771	5	355	4	511	5	4,036	7
Not employed, not looking	1,326	9	618	7	797	8	6,067	10
Missing	7,995	55	4,890	54	5,638	55	34,206	57
Years in College								
Less than 1	3,834	26	1,786	20	2,478	24	20,380	34
1 to 2	4,089	28	2,258	25	3,058	30	22,632	38
Three or more	6,707	46	4,986	55	4,776	46	16,779	28
Missing	14	<1	5	<1	6	<1	73	<1

Student Receives the Pell Grant								
Yes	4,542	31	2,973	33	3,968	38	27,284	46
No	8,581	59	5,117	57	5,318	52	26,789	45
Missing	1,521	10	945	10	1,032	10	5,791	10
Student Lives on Campus								
Yes	6,888	47	3,782	42	6,281	61	3,966	7
No	7,636	52	5,164	57	3,972	38	54,863	92
Missing	120	1	89	1	65	1	1,035	2
Student Has Meal Plan								
Yes	5,080	35	2,586	29	5,705	55	3,888	6
No	9,556	65	6,445	71	4,606	45	55,858	93
Missing	.	.	.	.	.	.	118	<1

Source: 2019 #RealCollege Survey

Notes: Classifications of gender identity, racial and ethnic background, and disability or medical condition are not mutually exclusive. Students could self-identify with multiple classifications. Percentages of mutually exclusive groups may not add up to 100 percent due to rounding error. Survey questions about work status and number of hours worked were administered to a subset of randomly selected respondents. Results from any category with fewer than 10 participants are not shown in the table.

Table B-3. Characteristics of Survey Respondents of All Survey Respondents

	Overall	
	N	%
All respondents	126,157	100
Student-athletes	3,506	3
Non-student-athletes	93,861	74
ATHLETES		
Gender Identity		
Female	2,125	61
Male	1,350	39
Non-binary	44	1
Prefer to self-describe	36	1
Prefer not to answer	36	1
Missing	24	1
Racial or Ethnic Background		
American Indian or Alaska Native	164	5
Black	438	12
Hispanic or Latinx	579	17
Indigenous	85	2
Middle Eastern or North African or Arab or Arab American	71	2
Other Asian or Asian-American	142	4
Pacific Islander or Native Hawaiian	90	3
Southeast Asian	92	3

White	2,641	75
Other	77	2
Prefers not to answer	29	1
Missing	21	1
Racial/Ethnicity and Gender Identity		
Black male	220	6
White male	919	26
Asian or Asian-American male	79	2
Hispanic or Latinx male	266	8
Black female	218	6
White female	1,709	49
Other Asian or Asian-American female	124	4
Hispanic or Latinx female	311	9
Employment Status		
Employed	900	26
Not employed, looking	196	6
Not employed, not looking	419	12
Missing	1,991	57
Years in College		
Less than 1	1,411	40
1 to 2	1,192	34
Three or more	901	26
Missing	.	.
Student Receives the Pell Grant		
Yes	975	28
No	2,043	58
Missing	488	14
Student Lives on Campus		
Yes	1,833	52
No	1,633	47
Missing	40	1
Student Has Meal Plan		
Yes	1,553	44
No	1,950	56
Missing	.	.
NON-ATHLETES		
Gender Identity		
Female	65,881	70
Male	26,074	28
Non-binary	1,596	2
Prefer to self-describe	611	1
Prefer not to answer	758	1
Missing	447	<1
Racial or Ethnic Background		

American Indian or Alaska Native	3,724	4
Black	10,870	12
Hispanic or Latinx	21,124	23
Indigenous	1,819	2
Middle Eastern or North African or Arab or Arab American	2,190	2
Other Asian or Asian-American	5,930	6
Pacific Islander or Native Hawaiian	1,353	1
Southeast Asian	4,088	4
White	60,823	65
Other	2,614	3
Prefers not to answer	1,518	2
Missing	421	<1
Racial/Ethnicity and Gender Identity		
Black Male	2,567	3
White Male	16,897	18
Asian male	3,030	3
Hispanic or Latinx Male	5,650	6
Black Female	8,139	9
White Female	42,680	45
Asian female	5,605	6
Hispanic or Latinx Female	15,162	16
Employment Status		
Employed	26,651	28
Not employed, looking	5,673	6
Not employed, not looking	8,808	9
Missing	52,729	56
Years in College		
Less than 1	28,478	30
1 to 2	32,037	34
Three or more	33,248	35
Missing	98	<1
Student Receives the Pell Grant		
Yes	38,767	41
No	45,805	49
Missing	9,289	10
Student Lives on Campus		
Yes	20,917	22
No	71,635	76
Missing	1,309	1
Student Has Meal Plan		
Yes	17,259	18
No	76,465	81
Missing	137	<1

Source: 2019 #RealCollege Survey

Notes: Classifications of gender identity, racial and ethnic background, and disability or medical condition are not mutually exclusive. Students could self-identify with multiple classifications. Percentages of mutually exclusive groups may not add up to 100 percent due to rounding error. Survey questions about work status and number of hours worked were administered to a subset of randomly selected respondents. Results from any category with fewer than 10 participants are not shown in the table.

Appendix C. Three Survey Measures of Basic Needs Insecurity

FOOD SECURITY

To assess food *security* in 2019, we used questions from the 18-item Household Food Security Survey Module (shown below) from the U.S. Department of Agriculture (USDA). 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

Adult Stage 1

1. “In the last 30 days, I worried whether my food would run out before I got money to buy more.” (Often true, Sometimes true, Never true)
2. “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)
3. “In the last 30 days, I couldn’t afford to eat balanced meals.” (Often true, Sometimes true, Never true)

If the respondent answers “often true” or “sometimes true” to any of the three questions in Adult Stage 1, then proceed to Adult Stage 2.

Adult Stage 2

4. “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)
5. [If yes to question 4, ask] “In the last 30 days, how many days did this happen?” (Once, Twice, Three times, Four times, Five times, More than five times)
6. “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)
7. “In the last 30 days, were you ever hungry but didn’t eat because there wasn’t enough money for food?” (Yes/No)
8. “In the last 30 days, did you lose weight because there wasn’t enough money for food?” (Yes/No)

If the respondent answers “yes” to any of the questions in Adult Stage 2, then proceed to Adult Stage 3.

Adult Stage 3

9. “In the last 30 days, did you ever not eat for a whole day because there wasn’t enough money for food?” (Yes/No)
10. [If yes to question 9, ask] “In the last 30 days, how many days did this happen?” (Once, Twice, Three times, Four times, Five times, More than five times)

If the respondent has indicated that children under 18 are present in the household, then proceed to Child Stage 1.

Child Stage 1

11. "In the last 30 days, I relied on only a few kinds of low-cost food to feed my children because I was running out of money to buy food." (Often true, Sometimes true, Never true)
12. "In the last 30 days, I couldn't feed my children a balanced meal, because I couldn't afford that." (Often true, Sometimes true, Never true)
13. "In the last 30 days, my child was not eating enough because I just couldn't afford enough food." (Often true, Sometimes true, Never true)

If the respondent answers "often true" or "sometimes true" to any of the three questions in Child Stage 1, then proceed to Child Stage 2.

Child Stage 2

14. "In the last 30 days, did you ever cut the size of your children's meals because there wasn't enough money for food?" (Yes/No)
15. "In the last 30 days, did your children ever skip meals because there wasn't enough money for food?" (Yes/No)
16. *[If yes to question 15, ask]* "In the last 30 days, how often did this happen?" (1, 2, 3, 4, 5, 6, 7, 8 or more times)
17. "In the last 30 days, were your children ever hungry but you just couldn't afford more food?" (Yes/No)
18. "In the last 30 days, did any of your children ever not eat for a whole day because there wasn't enough money for food?" (Yes/No)

To calculate a raw score for food security, we counted the number of questions to which a student answered affirmatively.

- a. "Often true" and "sometimes true" were counted as affirmative answers.
- b. Answers of "Three times" or more were counted as a "yes." We translated the raw score into food security levels as follows:

Food security level	Raw Score	
	18-item (children present)	18-item (no children present)
High	0	0
Marginal	1–2	1–2
Low	3–7	3–5
Very Low	8–18	6–10

HOUSING INSECURITY

To assess housing insecurity, we used a series of survey questions adapted from the national Survey of Income and Program Participation (SIPP) Adult Well-Being Module to measure students’ access to and ability to pay for safe and reliable housing.³ In 2019, we asked students the following questions:

Housing Insecurity Module

1. “In the past 12 months, was there a rent or mortgage increase that made it difficult to pay?” (Yes/No)
2. “In the past 12 months, have you been unable to pay or underpaid your rent or mortgage?” (Yes/No)
3. “In the past 12 months, have you received a summons to appear in housing court?” (Yes/No)
4. “In the past 12 months, have you not paid the full amount of a gas, oil, or electricity bill?” (Yes/No)
5. “In the past 12 months, did you have an account default or go into collections?” (Yes/No)
6. “In the past 12 months, have you moved in with other people, even for a little while, because of financial problems?” (Yes/No)
7. “In the past 12 months, have you lived with others beyond the expected capacity of the house or apartment?” (Yes/No)
8. “In the past 12 months, did you leave your household because you felt unsafe?” (Yes/No)
9. “In the past 12 months, how many times have you moved?” (None, Once, Twice, 3 times, 4 times, 5 times, 6 times, 7 times, 8 times, 9 times, 10 or more times)

Students were considered housing insecure if they answered “yes” to any of the first eight questions or said they moved at least *three* times (question #9).

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.⁴

In 2019, students were considered homeless if they answered affirmatively to question #1 OR any part of question #2 (parts e through m) in the Homelessness Module (below).

Homelessness Module

1. "In the past 12 months, have you ever been homeless?"
2. "In the past 12 months, have you slept in any of the following places? Please check all that apply."
 - a. Campus or university housing
 - b. Sorority/fraternity house
 - c. In a rented or owned house, mobile home, or apartment (alone or with roommates or friends)
 - d. In a rented or owned house, mobile home, or apartment with my family (parent, guardian, or relative)
 - e. At a shelter
 - f. In a camper or RV
 - g. Temporarily staying with a relative, friend, or couch surfing until I find other housing
 - h. Temporarily at a hotel or motel without a permanent home to return to (not on vacation or business travel)
 - i. In transitional housing or independent living program
 - j. At a group home such as halfway house or residential program for mental health or substance abuse
 - k. At a treatment center (such as detox, hospital, etc.)
 - l. 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)
 - m. 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. Tables on Data Used in Figures

Table D-1. Distribution of Student-Athletes and Participating Institutions (Table 1)

	Division I	Division II	Division III	Two-Year (No Division)	Overall
Number of participating institutions	13	11	24	124	172
Distribution of Survey Respondents					
N (Athletes)	452	417	997	1,640	3,506
N (Non-athletes)	18,660	11,134	13,707	79,150	122,651
N (All survey respondents)	19,112	11,551	14,704	80,790	126,157
Response Rates of Athletes					
Total number at institution	5,851	3,665	8,904	17,351	35,771
Number of survey respondents	452	417	997	1,640	3,506
Estimated response rate (%)	8	11	11	9	10
Response Rates of Non-Athletes					
Total number at institution	251,400	110,783	119,308	961,104	1,442,595
Number of survey respondents	14,644	9,035	10,318	59,864	93,861
Estimated response rate (%)	6	8	9	6	7

Source: 2019 #RealCollege Survey; : *U.S. Department of Education: Equity in Athletics Disclosure Act (2018)*

Notes: The two-year college national figure includes colleges with varsity athletics programs. Response rates for student-athletes are defined as the total number of survey participants who are self-reported student athletes divided by total number of student-athletes by Division. Response rates for non-student-athletes are defined as the total number of survey participants who are not student athletes divided by the total number of enrolled students minus the number of total enrolled student-athletes for each division. Enrollment data are sourced from *Integrated Postsecondary Education Data System (2019)* and *U.S. Department of Education: Equity in Athletics Disclosure Act (2018)*.

Table D-2. Basic Needs Insecurity Among Student-Athlete Respondents (Figure 1 & 3)

	Division I		Division II		Division III		Two-year		Overall	
	N	%	N	%	N	%	N	%	N	%
Food insecure	108	24	109	26	206	21	634	39	1,057	30
Housing insecure	126	28	125	30	197	20	587	36	1,035	30
Homelessness	65	14	79	19	125	13	326	20	595	17
Level of Food Insecurity										
High	289	64	243	58	655	66	796	49	1,983	57
Marginal	55	12	65	16	135	14	206	13	461	13
Low	45	10	41	10	96	10	248	15	430	12
Very low	63	14	68	16	110	11	386	24	627	18

Source: 2019 #RealCollege survey

Notes: According to the USDA, students at either low or very low food security are considered “food insecure.” For more details on how each measure of basic needs insecurity was constructed, see Appendix C. Cumulative percentages may not add up to 100 percent due to rounding error.

Table D-3. Basic Needs Insecurity By Student-Athlete Status and College Type (Figures 2 and 4)

	Two-Year				Four-Year			
	Non-Athlete		Athlete		Non-Athlete		Athlete	
	N	%	N	%	N	%	N	%
Food insecurity	59,802	43	1,636	39	33,985	32	1,865	23
Housing insecurity	59,830	51	1,638	36	33,987	35	1,865	24
Homelessness	59,833	17	1,639	20	33,985	16	1,865	14

Source: 2019 #RealCollege survey

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

Table D-4. Employment Status by Athlete Status and Division (Table 2)

	Athletes								Non-Athletes	
	Division I		Division II		Division III		Two-year		N	%
	N	%	N	%	N	%	N	%		
Not employed, not looking	76	37	54	30	107	24	182	26	8,808	21
Not employed, looking	32	16	19	11	48	11	97	14	5,673	14
Working 20 hours or less	80	39	86	48	242	55	288	42	13,697	33
Working 21 to 30 hours	8	4	13	7	23	5	60	9	5,905	14
Working more than 30 hours	10	5	7	4	22	5	61	9	7,049	17

Source: 2019 #RealCollege Survey

Notes: Cumulative percentages may not add up to 100 percent due to rounding. Survey questions about work status and number of hours worked were administered to a subset of randomly selected respondents. For more details on how each measure of insecurity was constructed, see Appendix C.

Table D-5. Food and Housing Insecurity by Employment Status Among Athletes (Table 3)

	Working	Unemployed	Not in Labor Force
Division I			
Homeless (N)	13	8	10
Homeless (%)	13	25	13
Food Insecure (N)	30	11	6
Food Insecure (%)	31	34	8
Division II and III			
Homeless (N)	2,148	1,909	1,969
Homeless (%)	15	9	9
Food Insecure (N)	3,760	3,521	3,580
Food Insecure (%)	30	24	12
Two-Year Colleges			
Homeless (N)	91	21	24
Homeless (%)	22	22	13
Food Insecure (N)	160	42	41
Food Insecure (%)	39	43	23

Source: 2019 #RealCollege Survey

Notes: Due to small sample sizes, students in Division II and Division III were combined into one group. Survey questions about work status and number of hours worked were administered to a subset of randomly selected respondents. For more details on how each measure of insecurity was constructed, see Appendix C.

Table D-6. Food Insecurity Among Student-Athletes by Meal Plan (Table 4)

	Food Insecurity Rate Among Students with a Meal Plan		Food Insecurity Rate Among Students Without a Meal Plan	
	N	%	N	%
Division I	273	21	179	28
Division II	195	17	222	34
Division III	767	17	229	34
Two-year	315	35	1,318	40
Overall	1,550	21	1,948	37

Source: 2019 #RealCollege survey

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

Table D-7. Self-Reported Grades by Basic Need Insecurity Status Among Student-Athletes (Figure 5)

	N	A (%)	B (%)	C, D or F (%)
Food Insecure - No	2,339	53	39	8
Food Insecure - Yes	1,006	34	50	16
Housing Insecure - No	2,371	52	40	9
Housing Insecure - Yes	977	37	48	15
Homeless - No	2,789	49	42	9
Homeless - Yes	559	40	45	15

Source: 2019 #RealCollege Survey

Notes: Cumulative percentages may not add up to 100 percent due to rounding. Due to small sample sizes, students who reported C, D or F as best describing their grades were combined into one group. For more details on how each measure of insecurity was constructed, see Appendix C.

Appendix E. Other Survey Questions Used in the Hope Center’s #RealCollege Survey

1. What is your gender? (Mark Yes or No for each item)
 - a. Female
 - b. Male
 - c. Non-binary/third gender
 - d. Prefer to self-describe
 - e. Prefer not to answer

2. How do you usually describe your race and/or ethnicity? (Select “Yes” to all that apply if you identify with multiple groups)
 - a. White or Caucasian
 - b. African American or Black
 - c. Hispanic or Latinx/Latina/Latino or Chicanx/Chicana/Chicano
 - d. American Indian or Alaska Native
 - e. Middle Eastern or North African or Arab or Arab American
 - f. Southeast Asian
 - g. Pacific Islander or Native Hawaiian
 - h. Other Asian or Asian-American
 - i. Other (please specify)
 - j. Prefer not to answer
3. Are you a student-athlete on a team sponsored by your institution’s athletics department?
 - a. Yes
 - b. No
 - c. Prefer not to answer

To assess which students were living on campus, we asked:

4. In the past 12 months have you slept in any of the following places?
 - a. Campus or university housing
5. Do you have a meal plan at your college?
 - a. Yes
 - b. No

¹ Although assessments of basic needs insecurity made early in the fall semester are likely to capture more students, these assessments may also understate students’ basic needs. In fact, [Bruening et al. \(2018\)](#) surveyed the same population at the beginning and at the end of a semester and found that rates of food insecurity were higher at the end of the semester (35%) than at the beginning (28%).

² For most participating institutions, the estimated number of survey invitations is based on the total number of students at institutions, age 18 or above, in the fall of 2017, as reported by the National Center for Education Statistic’s Integrated Postsecondary Education Data System.

³ See https://www.census.gov/programs-surveys/sipp/about/sipp-content-information.html#par_textimage_5

⁴ Crutchfield, R. M. & Maguire, J. (2017). *Researching basic needs in higher education: Qualitative and quantitative instruments to explore a holistic understanding of food and housing insecurity*. Long Beach, California: Basic Needs Initiative, Office of the Chancellor, California State University.