# STUDENT BASIC NEEDS INSECURITY

AT THE UNIVERSITY OF COLORADO BOULDER



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<sup>1</sup>The Hope Center for College, Community, and Justice. (2021). #RealCollege 2021: Basic Needs Insecurity During the Ongoing Pandemic. Philadelphia, PA.

<sup>2</sup>Cuite, C.L., Brescia, S.A., Sackey, J., El-Buri, H., Dietz, K., Leikhram, C., Zaragoza, D., Warren, D., Weintraub, D., Willson, K., Bowler Darrow, G. (2023). Basic needs insecurities among Rutgers students: A university wide survey. https://doi.org/10.7282/00000362

<sup>3</sup>Rabbitt, M.P., Hales, L.J., Burke, M.P., & Coleman-Jensen, A. (2023). Household Food Security in the United States in 2022 (Report No. ERR-325), U.S. Department of Agriculture, Economic Research Service.

<sup>4</sup>Four Categories of the Homeless Definition (N.D.). HUD Exchange. Retrieved February 2024, from <u>https://www.hudexchange.info/</u> <u>homelessness-assistance/coc-esg-virtual-binders/coc-esg-</u> <u>homeless-eligibility/four-categories/</u>

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### INTRODUCTION

The 2024 Basic Needs Survey builds on previous efforts undertaken by the Division of Student Affairs (DSA) at the University of Colorado Boulder to build data-informed solutions and ensure all students have their basic needs met. Prior to the 2022-23 academic year, no formal office providing basic needs support existed at the University of Colorado Boulder. The university's Office of Student Support & Case Management (SSCM) offers a student emergency fund to provide financial assistance to students experiencing crisis/emergency circumstances as well as supports them in the development of self-care and self-advocacy skills. However, findings from a 2018 DSA survey on student food insecurity at CU Boulder revealed that student needs surpassed the services that SSCM and DSA offered.

As a result, the CU Boulder Volunteer Resource Center (VRC) began supporting students via a small food pantry in 2020, with the student demands for this resource quickly outgrowing the scope of the VRC as well as the capacity of VRC staff. Additionally, VRC staff began engaging with students who needed more than food support; many indicating a need for housing support in the form of financial and physical living space assistance.

Findings from the 2018 food insecurity survey, coupled with data from the 2021 HOPE Center Basic Needs Survey<sup>1</sup> (a national benchmarking basic needs security survey hosted by Temple University), revealed a growing imperative to address student basic needs on college campuses. To act on this data, the VRC director advocated for a new office in the Division of Student Affairs—the Basic Needs Center. The Basic Needs Center (BNC) opened in the fall 2022 semester and has seen an increase each year in students accessing services. The staff of the BNC support students seeking basic need assistance through emergency housing financial assistance, emergency housing placement, SNAP benefit enrollment, a food pantry and other workshops to support daily living. With an ever-evolving student population, and the noticeable increase in service requests, the BNC needed to better understand the reality of basic needs insecurity across campus. In spring 2024, the BNC in partnership with the Student Affairs Office of Planning, Assessment and Data Analytics (PANDA) launched the first campus-wide survey pertaining to basic needs insecurity.

The Basic Needs Survey was administered via Qualtrics and emailed to all undergraduate and graduate students enrolled at the University of Colorado Boulder (CU Boulder) in February 2024 (n=37,162). The purpose of the survey was to better understand the scope and scale of basic needs insecurities faced by students at CU Boulder, as well as the impact of any insecurities on academic performance and students' sense of belonging and sense of mattering. Survey questions were adapted from Rutgers University's Basic Needs Survey<sup>2</sup>, as well as the USDA's Household Food Security survey<sup>3</sup>. The CU Boulder Basic Needs Survey received 8,008 responses, yielding a 22% response rate. It is important to note that response rates vary by question, and will be indicated accordingly throughout this report. In the future, this survey will be administered every two years, to a sample of undergraduate and graduate students.

### DEFINITIONS

Definitions of the four types of insecurity assessed in this survey were provided by the Basic Needs Center at CU Boulder. Housing insecurity and homelessness definitions were adapted from the U.S. Department of Housing and Urban Development<sup>4</sup>, and the food insecurity definition was adapted from the U.S. Department of Agriculture<sup>3</sup>. These definitions were provided to students in the respective section of the survey.

**Housing insecurity** is defined as experiencing a broad set of difficulties that prohibit an individual from having a residence that is safe, stable, adequate, and affordable.

#### Homelessness is defined as:

- An individual or family who lacks a fixed, regular and adequate nighttime residence, such as those living in emergency shelters, transitional housing or places not meant for habitation, or
- An individual or family who will imminently lose their primary nighttime residence (within 14 days), provided that no subsequent housing has been identified and the individual/family lacks support networks or resources needed to obtain housing, or
- Unaccompanied youth under 25 years of age, or families with children and youth who qualify under other Federal statutes, such as the Runaway and Homeless Youth Act, have not had a lease or ownership interest in a housing unit in the last 60 or more days, have had two or more moves in the last 60 days, and who are likely to continue to be unstably housed because of disability or multiple barriers to employment, or
- An individual or family who is fleeing or attempting to flee domestic violence, has no other residence and lacks the resources or support networks to obtain other permanent housing

**Food insecurity** is defined as experiencing a lack of access or resources to affordable nutritious and culturally relevant food in a quantity that supports the active and healthy lifestyle students need to be successful.

**Other basic needs insecurity** can include lack of access to resources such as hygiene, transportation, healthcare, mental wellness, financial sustainability, sleep, emergency needs for students with dependents, safety and accessibility.

## METHODOLOGY

In collaboration with the Basic Needs Center, the Student Affairs Office of Planning, Assessment and Data Analytics (PANDA) created a Basic Needs Survey to administer to all undergraduate and graduate students at CU Boulder. PANDA and the Basic Needs Center referenced the basic needs study at Rutgers University<sup>2</sup> and adapted their survey for the CU Boulder population. The survey was administered through Qualtrics and disseminated via email to 37,162 undergraduate and graduate students. The survey was open for two weeks in early February 2024.

PANDA used Microsoft Excel and Tableau to analyze and visualize descriptive statistics for each survey question, including response frequencies. The Tableau dashboard allows users to filter responses by various demographic groups to compare responses within and across groups. PANDA used MS Excel and SPSS to analyze inferential statistics. Results of these analyses are discussed below.

### RESULTS

#### **Survey Respondents Profile**

8,008 CU Boulder students responded to the basic needs survey, yielding an overall response rate of 22%. A representativeness analysis was conducted (see Appendix A), and the respondent sample was determined to be approximately representative of the CU student population. Because the survey was sent to all students, the survey dissemination process introduced selection bias. As such, survey findings have limited generalizability to the CU student population.

#### **Insecurity Summary**

Detailed findings of the prevalence of the various types of basic needs insecurities are provided in Appendix B. Below is a summary of key findings.

44% of respondents (n = 3,524) experienced at least one form of basic needs insecurity in the past 12 months. Figure 1 shows the proportion of overall respondents (n = 8,008) who indicated experiencing each type of basic needs insecurity.



#### Figure 1. Prevalence of Basic Needs Insecurity among Survey Participants (%)

#### **Housing Insecurity and Homelessness**

One in five survey participants (n = 1,588) indicated they experienced some form of housing insecurity in the past 12 months, including difficulty or inability to pay for housing expenses (see Figure 2), moving in with roommates because of financial concerns, moving often or moving for safety reasons, and legal concerns related to housing.





Many students found themselves having to move often or move in with others. At the time of the survey, 504 students reported having moved in with other people, even for a little while, because of financial concerns in the last 12 months. 262 students lived with others beyond the maximum number of people permitted to live in the space. 211 students said they had moved three or more times, and 197 students had left their household because they felt unsafe. Housing insecurity challenges led to financial and legal issues for some students, with 136 students responding they had an account default or go into collections and 51 students having received a summons to appear in court in the past 12 months.

7% of respondents (526 students) experienced homelessness in the last 12 months. The most common form of homelessness experienced by students is temporarily staying with a relative or friend, or couch surfing while looking for housing (393 students in the past 12 months). 138 students were temporarily staying with someone at the time of the survey. In addition, 81 students temporarily stayed at a hotel or motel without a permanent home to return to in the past 12 months, and 34 students were at the time of the survey. The prevalence of additional forms of homelessness is displayed in Figure 3.

#### Figure 3. Prevalence of Homelessness among Survey Participants





\*\*Percentages based on total responded "yes" to having experienced homelessness or responded they experienced an indicator of homelessness listed on this page

#### **Food Insecurity**

One in four survey participants (n=1,985) experienced food insecurity in the last 12 months at the time of taking the Basic Needs Survey. Of those, 994 struggled to obtain a sufficient amount of food for themselves on a monthly basis, 624 on a weekly basis, and 144 on a daily basis.



The majority of students who experienced food insecurity cited financial (n=1,655) and scheduling challenges (n=1,257) as reasons.



Figure 4. Reasons for Food Insecurity



444 students said they lacked available resources. Other reasons listed by students include challenges finding food that fit their dietary requirements such as gluten-free or Halal options, mental health challenges, challenges accessing food due to disability and barriers accessing SNAP benefits.

#### **Impacts of Food Insecurity**

Nearly 1,000 students shared examples of how food insecurity has impacted their health and well-being. Of those, half discussed physical health impacts, such as fatigue, headaches, vitamin deficiencies, feeling hungry, digestion issues and more frequent illnesses. Some students reported experiencing unwanted weight loss due to lack of access to food, whereas other students experienced unwanted weight gain due to reliance on cheap and accessible foods that are less nutritious. For those who had existing health issues, food insecurity exacerbated their symptoms.

432 students shared that food insecurity negatively impacted their mental health and/or mood, with many describing stress and anxiety arising from their challenges accessing food. Some students discussed food insecurity exacerbating their depression. Students described the way these mental health impacts affected other aspects of their life as well, such as lack of motivation interfering with their academic success. Some students perceived food insecurity negatively impacting their relationships due to irritability arising from hunger or a lack of ability to participate in social outings around food they could not afford. Many students discussed hunger as a cause of sleep disturbance. In addition, some students discussed that their food insecurity triggered eating disorders.

#### **Other Basic Needs Insecurity**

One in four survey participants (n=1,984) experienced other forms of basic needs insecurity in the last 12 months. Figure 5 displays forms of other basic needs insecurities experienced by students. The most commonly cited forms of other basic needs insecurities include lack of access to mental healthcare (n=906), lack of access to healthcare (n=770) and lack of transportation (n=544).

#### Figure 5. Prevalence of Other Basic Needs Insecurities among Survey Participants



\*\*Percentages based on total responded "yes" to having experienced other basic needs insecurity or responded they experienced an indicator of other basic needs insecurity listed on this page

Students with dependents cited particular gaps in meeting the basic needs of their families, with 34% of students with dependents saying they lacked access to childcare in the past 12 months and 14% saying they lacked access to eldercare in the past 12 months.

#### **Demographic Differences in Basic Needs Insecurities**

Data from the Basic Needs Survey revealed disparities in experiences of basic needs insecurities for certain identities. Associations between certain student demographic identities and whether they experienced basic needs insecurity in the last year were found to be statistically significant. In particular, race/ethnicity, first-generation status, Colorado residency, graduate level status, gender and whether a student has dependents were all found to be associated with basic needs insecurity among students at a statistically significant level. (See chi square test results in Appendices C-H to learn more.)

#### **Demographic Groups with Elevated Rates of Basic Needs Insecurity**

The following list displays student demographic groups that reported elevated rates of basic needs insecurity (more than 44% in each group experienced some type of basic needs insecurity in the past year).

- Race/ethnicity
  - Hispanic/Latino/a/x students
  - Black/African American students
  - American Indian/Native American students
  - International students
- Gender
  - Nonbinary students
  - Female students

- First-generation students
- CO resident students
- Graduate students
- Students with dependents

#### **Belonging and Mattering**

The Student Affairs Office of Planning, Assessment and Data Analytics (PANDA) uses seven validated questions to assess students' senses of belonging and mattering. Four questions assess a student's sense of belonging, defined by PANDA as a sense of connection and community with others at the institution—peers, staff, faculty, etc.; three questions assess a student's sense of mattering, defined by PANDA as a sense of feeling valued, appreciated, supported and cared for.

Students were asked to rate their level of agreement with each of the belonging and mattering statements. Tables 1 and 2 display the percentage of students who responded agree or strongly agree with each statement. Means indicate average scores for each statement on a six-point agreement scale (strongly disagree=1 to strongly agree=6).

As depicted in Tables 1 and 2, students who did not indicate experiencing basic needs insecurities in the past 12 months at the time of the survey had statistically significantly higher sense of belonging and mattering as compared to students who indicated experiencing at least one form of basic needs insecurity in the past 12 months (see Appendix I).

#### Table 1. Sense of Belonging by Basic Needs Insecurity Experience

Sense of Belonging		t least one type ity in the past 1		No basic needs insecurity in the past 12 months			
	% Strongly Agree/ Agree	n	Mean	% Strongly Agree/ Agree	n	Mean	
I belong at CU Boulder	52%	1,767	4.44*	71%	3,093	4.87*	
People at CU Boulder accept me	54%	1,839	4.49*	73%	3,196	4.91*	
I fit in well at CU Boulder	42%	1,423	4.13*	61%	2,676	4.65*	
I feel a connection with the CU Boulder community	34%	1,145	3.89*	50%	2,146	4.37*	

\*Difference in mean scores between students who experienced insecurity and students who did not are statistically significant (p<.001)

 Table 2. Sense of Mattering by Basic Needs Insecurity Experience

Sense of Mattering		t least one type ity in the past 1		No basic needs insecurity in the past 12 months			
	% Strongly Agree/ Agree	n	Mean	% Strongly Agree/ Agree	n	Mean	
People on campus are generally supportive of my individual needs	43%	1,448	4.22*	62%	2,697	4.68*	
There are people on campus who are genuinely interested in me as a person	54%	1,837	4.47*	71%	3,046	4.85*	
There are people on campus that care about me and my future	58%	1,968	4.58*	74%	3,187	4.95*	

\*Difference in mean scores between students who experienced insecurity and students who did not are statistically significant (p<.001)

#### Impact on Academic Performance and Likelihood to Return

More than one in three survey participants cited that their academic performance was impacted by at least one form of basic needs insecurity. Data from the Basic Needs Survey suggests students who are contending with basic needs insecurities may be less likely to persist at CU Boulder (see Appendix J). Of the 604 respondents who indicated they were very unlikely or unlikely to return to CU Boulder, 15% cited basic needs insecurity as a contributing reason. Students were asked how likely they were to return to CU Boulder in fall 2024 on a four-point agreement scale (very unlikely =1; very likely = 4). 71% of students who experienced basic needs insecurity were very likely or likely to return to CU in fall, compared to 76% of students who did not experience basic needs insecurity. Students who did not experience basic need insecurity had a statistically significantly higher liklihood of returning (mean score = 3.67) compared to students who experienced at least one form of basic need insecurity (mean score = 3.53, p<.001) (this survey question also included the response option "graduating," which is not included in mean calculations).

#### Figure 6. Impact of Basic Needs Insecurities on Academic Performance



Which, if any of the following have impaced your academic performace at CU Boulder?

#### **Resource Awareness and Usage**

Although the majority of students are aware of resources available to them, including the Basic Needs Center, over 40% of students responded they were not aware of campus resources that may support their ability to improve housing and food security concerns, such as Off-Campus Housing & Neighborhood Relations (OCHNR), Student Support & Case Management, and the Basic Needs Center (see Figure 7).



#### Figure 7. Awareness and use of Resources





696 students who were aware of but unable to use resources shared the reasons they were unable to access resources. The most commonly cited reason was lack of time. 11% of these students shared that juggling school, work and other responsibilities made it difficult for them to find time to book or attend an appointment. In addition, many students shared that the hours of availability to access certain campus resources conflicted with their schedules. This was especially challenging to navigate for students who do not live on campus.

In addition, qualitative analysis of open responses revealed some students had concerns about the impact of insurance on their ability to access resources. For example, some students were interested in accessing services through Counseling and Psychiatric Services (CAPS) to receive mental health support on campus but did not ultimately utilize CAPS services due to limitations of their medical insurance. Students at CU Boulder who pay the medical fee, as part of tuition and fees, receive access to CAPS services at no additional charge; however, insurance limitations could mean that referral to services outside CAPS and the university such as filling prescriptions, or other medical procedures not covered by CAPS, may be restricted. Uncertainty around insurance requirements was a barrier for some. Other students found that services, such as CAPS and housing options through OCHNR, were too costly to access.

Qualitative analysis of open response questions also revealed that some students were unsure how to access available campus resources and some found that services were difficult to access. Students reported they lacked the necessary information to be able to seek support, and that some websites were confusing to navigate or uninformative. Some students had difficulty finding the location of resources on campus. Anxiety, shame or discomfort about having to rely on resources compounded difficulty in accessing services, as well as distrust in service providers. Students also indicated difficulty accessing resources because of appointment availability, as well as lack of response from staff when reaching out for support, thus perceiving services to be understaffed.

An additional theme that arose in qualitative analysis of open responses showed that in certain cases, available services did not offer what students needed. Due to limitations in service provision, some students were denied support, and some opted to access private services.

### LIMITATIONS

Conclusions drawn from survey findings must be made with consideration of a few limitations. The first is the self-reporting nature of the survey. The survey provided students definitions of housing insecurity, homelessness, food insecurity and other basic needs insecurities as defined in the "definitions" section above, and asked students to indicate whether they have experienced each form of insecurity by responding "yes," "maybe" or "no." In the housing insecurity, food insecurity and other basic needs insecurity sections of the survey, students who responded "yes" or "maybe" were prompted to respond to follow-up questions to understand the scope of need with each respective security type. Students who responded "no" to these questions were not presented with follow-up questions of each security type. However, on the homelessness section of the survey, students were prompted to respond to follow-up and to respond to follow-up questions about homelessness experiences, regardless of their initial response of "yes," "maybe" or "no." 367 students responded "no" to having experienced homelessness but responded affirmatively to follow-up homelessness question experiences in the survey.

To account for these irregularities in the data, the analysts defined students as having experienced each type of insecurity in one of two ways: 1) if they had responded "yes" to having experienced the insecurity generally or 2) if they responded affirmatively to having experienced any insecurity in the follow-up questions within each section. Since students responding "no" to experiencing housing insecurity, food insecurity or other basic needs insecurity did not proceed to the survey follow-up questions for those insecurity types, the actual number of students who experienced basic needs insecurity, particularly related to housing, food or other basic needs, may be greater than the findings of this survey suggest. Frequency tables displaying how many students responded "yes," "maybe" or "no" to each insecurity type may be found in Appendix B.

Additionally, participation in the survey was voluntary and therefore may have introduced self-selection bias. Although the survey sample was found to be generally representative of the CU Boulder student population, particularly related to undergraduate entry type, undergraduate first-generation status and Colorado residency, there was an overrepresentation of survey participants in the following student populations: graduate students, nonbinary students, international students and veteran students. (See Appendix A for a full representativeness analysis.) These student groups also reported higher levels of basic needs insecurities, suggesting the survey may show overrepresentation of students who experience basic needs insecurities. Without a random or targeted sample, the findings have limited generalizability to the overall student population.

All demographic data included in this report was drawn from institutional records, which uses federal categories drawn from admissions applications to CU Boulder. Because demographic categories are not drawn from student self-identification, this introduces limitations. For example, the gender categories shown on student applications only display binary (male/female) options. Students may request an update to their student records to show a nonbinary (x) option, but due to barriers such as lack of awareness about this option and safety concerns, institutional records may underrepresent the number of nonbinary students. In addition, students may self-identify as racial/ethnic identities that are not included in federal categories, such as Middle Eastern/North African, introducing a limitation to the validity of institutional racial/ethnic categories.

### CONCLUSIONS

Inferential statistical analysis revealed statistically significant differences in the experiences of students who reported experiencing basic needs insecurity on the 2024 Basic Needs Survey compared to students who did not. Students who reported experiencing at least one type of basic needs insecurity were more likely to report significantly lower senses of belonging and mattering compared to students who did not experience any type of insecurity. The likelihood to return to CU Boulder in fall 2024 was also statistically significantly lower for students reporting insecurity compared to students who do not report insecurity.

As a result of the survey findings, staff in the CU Boulder Basic Needs Center are considering the following actions, pending adequate financial and human resources, with an anticipated timeline of completion of 2-4 years.

#### **Expand Housing Support Programs**

- Temporary housing solutions: Continue emergency housing options for students facing immediate homelessness, safety, or uninhabitable living conditions.
- Affordable housing partnerships: Collaborate with local housing authorities to provide affordable housing options for students.

#### Enhance Food Assistance Programs

- Food pantries and meal programs: Increase the availability and accessibility of campus food pantries and subsidized meal programs.
- Food recovery: Research food recovery programs to determine if implementation could happen at CU Boulder.
- SNAP enrollment: Increase enrollment for eligible students in SNAP or WIC.
- Identify alternative support for populations that aren't eligible for local or government entitlement programs, such as undocumented or international students.

#### Comprehensive Basic Needs Assistance

- One-stop resource center: Continue to develop and expand a centralized resource center where students can access information and support for all basic needs, including mental health services, healthcare and transportation. This includes partnerships with onand off-campus organizations and increase space for the Basic Needs Center.
  - Develop cross training with Health and Wellness Services to ensure cross referrals take place within departments and during meetings with students.
- Emergency financial aid: Centralize emergency financial assistance for basic needs insecurities in the Basic Needs Center to address sudden and unexpected needs, such as transportation or hygiene products.

#### Increase Awareness and Utilization of Campus Resources

- Outreach and education: Conduct awareness campaigns to educate students about available resources and how to access them.
- Student support networks: Foster peer support networks to help students navigate and utilize available resources effectively.

#### Continuous Monitoring and Improvement

- Regular surveys and feedback mechanisms: Implement surveys every two years to monitor the evolving needs of students and adjust programs accordingly.
- Data-driven decision making: Use survey data to continuously evaluate and improve the effectiveness of basic needs programs.

#### **Representativeness Analysis**

A chi square analysis was conducted to measure the representativeness of the survey participants to the campus population. The chi square analysis compares the demographic groups of the CU Boulder student population to the demographic groups of the sample of CU Boulder students who participated in the 2024 Basic Needs Survey. The Cramer's V statistic indicates the strength of the association between the distribution of students in each demographic category in the overall CU Boulder student population and the distribution of students in each demographic category in the survey sample. A weak association indicates there are no strong patterns of deviations in the distribution of the demographic category of the survey sample, and thus is fairly representative of students in the CU Boulder population.

#### Table A1. Chi Square Analysis of Representativeness

	Total N	Perecent	Response N	Response Rate	Change	Expected Sample Value	Difference (Expected Observed)	Difference <sup>^</sup> 2/ Expected	Chi- Square Value	<i>p</i> -value	Cramer's V (.10=small effect, .30=medium effect and .50=large effect)
TOTAL	37,153		8,008	22%							
Level (Degree Seeking)									517.07	0.00	0.11
UG - All Degree seeking/Licensure	30,707	83%	5,812	19%	-3%	6619	807	98.30			
Grad - Doctoral	2,949	8%	1,035	35%	14%	636	-399	250.93			
Grad - Masters	2,910	8%	919	32%	10%	627	-292	135.73			
Grad - Law	491	1%	164	33%	12%	106	-58	31.97			
Grad - Certificate	96	0%	19	20%	-2%	21	2	0.14			
Gender									275.49	0.00	0.08
Female	16,867	45%	4,304	26%	4%	3636	-668	122.87			
Male	20,211	54%	3,626	18%	-4%	4356	730	122.45			
Nonbinary	74	0%	38	51%	30%	16	-22	30.18			
Race/Ethnicity									237.53	0.00	0.07
White	24,208	65%	4,803	20%	-2%	5218	415	32.98			
Hispanic/Latino	4,685	13%	1,021	22%	0%	1010	-11	0.12			
Asian	3,521	9%	821	23%	2%	759	-62	5.08			
International	2,514	7%	854	34%	12%	542	-312	179.79			
Black/African American	1,015	3%	222	22%	0%	219	-3	0.05			
American Indian/Alaska Native	541	1%	104	19%	-2%	117	13	1.36			
Unknown	420	1%	131	31%	10%	91	-40	18.09			
Native Hawaiian/Pacific Islander	249	1%	52	21%	-1%	54	2	0.05			
First Generation (UG Only)									46.07	0.00	0.04
First gen	4,613	15%	1,058	23%	1%	873	-185	39.15			
Non-first gen	26,094	85%	4,754	18%	-3%	4939	185	6.92			
Entry Type (UG Only)									0.04	0.85	0.00
First-time	25,702	84%	4,870	19%	-3%	4865	-5	0.01			
Transfer	5,005	16%	942	19%	-3%	947	5	0.03			
Receiving Veteran Benefits									238.76	0.00	0.07
Yes	817	2%	379	46%	25%	176	-203	233.50			
No	36,336	98%	7,629	21%	-1%	7832	203	5.25			
Residency									71.83	0.00	0.04
Resident	21,188	57%	4,919	23%	2%	4567	-352	27.15			
Non-resident	15,965	43%	3,049	19%	-2%	3441	392	44.68			

#### **Response Rates by Demographics**

#### Figure A1. Degree Type



#### Figure A2. School/College



#### Figure A3. Gender



Figure A4. Race/Ethnicity



#### Figure A5. First-Generation Status



Figure A6. Undergraduate Entry Type







Figure A8. Colorado Residency



### APPENDIX B

#### Prevalence of Basic Needs Insecurity Among CU Students

 Table B1. Basic Needs Insecurities (n=8,008)

	#	%
Any basic needs insecurity in the past 12 months	3,524	44%
Housing insecurity in the past 12 months	1,588	20%
Homelessness in the past 12 months	526	7%
Food insecurity in the past 12 months	1,985	25%
Other basic needs insecurity in the past 12 months	1,984	25%

#### Table B2. Basic Needs Insecurities: Student Self-Report\* (n=8,008)

	Yes		Maybe		No	
	#	%	#	%	#	%
Housing insecurity in the past 12 months	1,395	17%	307	4%	6,305	79%
Homelessness in the past 12 months	115	1%	78	1%	7,747	98%
Food insecurity in the past 12 months	1,630	20%	392	5%	5,870	73%
Other basic needs insecurity in the past 12 months	1,695	22%	480	6%	5,668	72%

\*This table displays student responses to whether they experienced each type of basic needs insecurity as defined in the "definitions" section above. Due to discrepancies, as explained in the "limitations" section, this report defines a student as having experienced each type of basic needs insecurity based on their "yes" response to each insecurity type or affirmative responses to follow-up questions in each section. Please refer to the "definitions" and "limitations" sections to learn more about how this survey defines basic needs insecurities.

#### Table B3. Housing Insecurity (n=1,588)

	#	% of Students w/ Housing Insecurity (n=1,588)	% of Total Respondents (n=8,008)
Within the last 12 months			
A rent or mortgage payment increase that made it difficult to pay	748	47%	9%
Not paying or underpaying your rent or mortgage due to insufficient funds	423	27%	5%
Not paying the full amount of a utility bill including water, trash, electricity, Wi-Fi, etc. due to insufficient funds		27%	5%
Currently			
A rent or mortgage payment increase that made it difficult to pay	466	29%	6%
Not paying or underpaying your rent or mortgage due to insufficient funds	175	11%	2%
Not paying the full amount of a utility bill including water, trash, electricity, Wi-Fi, etc. due to insufficient funds	204	13%	3%
Within the last 12 months		·	
Moved in with other people, even for a little while, because of financial concerns	504	32%	6%
Lived with others beyond the maximum number of people permitted to live in the space	262	16%	3%
Moved three or more times	211	13%	3%
Left the household because you felt unsafe	197	12%	2%
Prefer not to answer	191	12%	2%
Had an account default or go into collections	136	9%	2%
Received a summons to appear in court	51	3%	1%

#### Table B4. Homelessness (n=526)

	#	% of Students w/ Homelessness (n=526)	% of Total Respondents (n=8,008)
Within the last 12 months			
Temporarily staying with a relative, friend, or couch surfing until I found other housing	393	75%	5%
Temporarily at a hotel or motel without a permanent home to return to (not on vacation or business travel)	81	15%	1%
In a closed area/space with a roof not meant for human habitation (such as abandoned building; car, truck, van, RV, or camper; encampment or tent; uncovered garage, shed, attic, or basement, etc.)	53	10%	1%
In transitional housing or independent living program	31	6%	0.4%
Outdoor location (such as street, sidewalk, or ally; bus or train stop; campground or woods; park, beach, or riverbed; under bridge or overpass; or other)	28	5%	0.3%
At a treatment center (such as detox, hospital, etc.)	10	2%	0.1%
At a shelter	6	1%	0.1%
At a group home such as a halfway house or residential program for mental health or substance abuse	3	1%	0.04%
Currently			
Temporarily staying with a relative, friend, or couch surfing until I found other housing	138	26%	2%
Temporarily at a hotel or motel without a permanent home to return to (not on vacation or business travel)	34	6%	0.4%
In a closed area/space with a roof not meant for human habitation (such as abandoned build- ing; car, truck, van, RV, or camper; encampment or tent; uncovered garage, shed, attic, or basement, etc.)	28	5%	0.3%
In transitional housing or independent living program	17	3%	0.2%
Outdoor location (such as street, sidewalk, or ally; bus or train stop; campground or woods; park, beach, or riverbed; under bridge or overpass; or other)	11	2%	0.1%
At a treatment center (such as detox, hospital, etc.)	0	0%	0%
At a shelter	4	1%	0.05%
At a group home such as a halfway house or residential program for mental health or substance abuse	1	0%	0.01%

#### Table B5. Food Insecurity (n=1,985)

	#	% of Students w/ Food Insecurity (n=1,985)	% of Total Respondents (n=8,008)
How frequently do you struggle to obtain a sufficient amount of food for yourself?			
On a daily basis	144	7%	2%
On a weekly basis	624	31%	8%
On a monthly basis	994	50%	12%
What are the reasons that you've been experiencing food insecurity?			
Financial	1,655	83%	21%
Schedule (ex: out of class/work too late, other responsibilities impact availability)	1,257	63%	16%
Lack of available resources (ex: food banks in your area, transportation, knowledge of resources)	444	22%	6%
Other	127	6%	2%

#### Table B6. Other Basic Needs Insecurities (n=1,984)

	#	% of Students w/ Other Basic Needs Insecurity (n=1,984)	% of Total Respondents (n=8,008)
Within the last 12 months			
Lack of access to mental healthcare (ex: counseling, therapy)	906	46%	11%
Lack of access to healthcare (ex: primary care, medical specialist, medications, physical therapy)	770	39%	10%
Lack of transportation to and from campus	544	27%	7%
Lack of access to technology (ex: computer, laptop, printer)	324	16%	4%
Lack of access to textbooks (ex: purchasing, renting)	312	16%	4%
Lack of access to Wi-Fi	233	12%	3%
Lack of access to hygiene products (ex: toiletries, toilet paper, menstrual products)	223	11%	3%
Lack of childcare	45	2%	1%
Lack of eldercare	32	2%	0.4%
Currently			
Lack of access to mental healthcare (ex: counseling, therapy)	692	35%	9%
Lack of access to healthcare (ex: primary care, medical specialist, medications, physical therapy)	512	26%	6%
Lack of transportation to and from campus	321	16%	4%
Lack of access to technology (ex: computer, laptop, printer)	180	9%	2%
Lack of access to textbooks (ex: purchasing, renting)	108	10%	3%
Lack of access to Wi-Fi	91	5%	1%
Lack of access to hygiene products (ex: toiletries, toilet paper, menstrual products)	183	9%	2%
Lack of childcare	37	2%	0.5%
Lack of eldercare	24	1%	0.3%



#### Chi Square Test Results of Basic Needs Insecurity by Race/Ethnicity and Basic Needs Insecurity

\*Asian American and Pacific Islander students were grouped together for analysis because of the low n of Pacific Islander students

A chi square test was conducted using SPSS to evaluate any statistically significant differences in basic needs insecurity among 20 racial/ ethnic identity groups:

#### Identifying as one race/ethnicity\*:

- Hispanic/Latino/a/x
- American Indian/Native American
- Black/African American
- Asian/Asian American and Pacific Islander
- White

#### Identifying as two races/ethnicities:

- White and Asian/Asian American/Pacific Islander
- Hispanic/Latino/a/x and American Indian/Native American
- Hispanic/Latino/a/x and White
- Hispanic/Latino/a/x and Black/African American
- American Indian/Native American and White
- Black/African American and White
- Hispanic/Latino/a/x and Asian/Asian American/Pacific Islander
- 2 race/ethnicities other (inclusive of categories below with n's less than 10)
- American Indian/Native American and Black/African American
- American Indian/Native American and Asian/Asian American/Pacific Islander
- Black/African American and Asian/Asian American/Pacific Islander

#### Identifying as three races/ethnicities:

- American Indian/Native American, Hispanic/Latino/a/x, and White
- Black/African American, Hispanic/Latino/a/x, and White
- AAPI, Hispanic/Latino/a/x, and White
- AAPI, Black/African American, and White
- 3 race/ethnicities other (inclusive of categories below with n's less than 10)
- American Indian/Native American, Black/African American, and White
- American Indian/Native American, Black/African American, and Hispanic/Latino/a/x
- AAPI, Black/African American, and Hispanic/Latino/a/x
- AAPI, American Indian/Native American, and Black/African American
- AAPI, American Indian/Native American, and White
- AAPI, American Indian/Native American, and Hispanic/Latino/a/x



#### Identifying as four races/ethnicities (grouped as one combined category to protect confidentiality of students)

- Hispanic/Latino/a/x, American Indian/Native American, Black/African American, and white
- Hispanic/Latino/a/x, Black/African American, AAPI, and white
- Hispanic/Latino/a/x, American Indian/Native American, AAPI, and white
- Hispanic/Latino/a/x, American Indian/Native American, Black/African American, and AAPI
- American Indian/Native American, Black/African American, AAPIT, and white

#### International

The chi square test compared the responses of these groups based on two conditions:

- Condition 1: Students who experienced either housing insecurity, homelessness, food insecurity, and/or other basic needs insecurity in the last 12 months
- Condition 2: Students who did not indicate they experienced one of those forms of basic needs insecurity in the last 12 months

As a point of comparison for rates of insecurity for the below groups, 44% of all survey respondents reported having some form of basic needs insecurity in the last 12 months.

Table C. Frequencies of Students Experiencing Basic Needs Insecurity by Race/Ethnicity

	# Experienced one form of basic needs insecurity within the last 12 months	% Experienced one form of basic needs insecurity within the last 12 months	# Did not experience one form of basic needs insecurity in the last 12 months	% Did not experience one form of basic needs insecurity in the last 12 months
Hispanic/Latino/a/x and AAPI	10	83%	2	17%
Hispanic/Latino/a/x and Black/African American	12	80%	3	20%
Hispanic/Latino/a/x and American Indian/Native American	20	67%	10	33%
Hispanic/Latino/a/x only	70	62%	43	38%
Black/African American only	83	61.5%	52	38.5%
Hispanic/Latino/a/x, American Indian/Native American, and white	45	61%	29	39%
Black/African American, AAPI, and white	6	60%	4	40%
Hispanic/Latino/a/x, AAPI, and white	14	56%	11	44%
International student	473	55%	381	45%
Hispanic/Latino/a/x and white	366	52%	340	48%
American Indian/Native American	12	52%	11	48%
American Indian/Native American and white	29	47.5%	32	52.5%
AAPI only	232	42%	324	58%
Hispanic/Latino/a/x, Black/African American, and white	8	42%	11	58%
AAPI and white	130	41%	187	59%
White only	1905	40%	12898	60%
Black/African American and white	24	35%	45	65%
Four race/ethnicities - other	9	47%	10	53%
Three race/ethnicities - other	11	52%	10	48%
Two race/ethnicities - other	8	53%	7	47%

There is a statistically significant association between race/ethnicity and whether students experienced a form of basic needs insecurity in the last 12 months (p<.001). The strength of the relationship is weak (Cramer's V=0.15). However, this may be due to the number of racial/ ethnic identity groups being compared. Findings indicate that students who carry Hispanic/Latino/a/x, Black/African American and American Indian/Native American identities reported elevated rates of basic needs insecurities, as well as international students.

#### Chi Square Test of Basic Needs Insecurity by First-Generation College Student Status

A chi square test was conducted using SPSS to evaluate any statistically significant difference in basic needs insecurity by first-generation college student status. The chi square test compared the responses of these two groups, first-generation college students and continuing/ non-first-generation college students, based on two conditions:

- Condition 1: Students who experienced either housing insecurity, homelessness, food insecurity, and/or other basic needs insecurity in the last 12 months
- Condition 2: Students who did not indicate they experienced one of those forms of basic needs insecurity in the last 12 months

As a point of comparison for rates of insecurity for the below groups, 44% of all survey respondents reported having some form of basic needs insecurity in the last 12 months.

Table D. Frequencies of Basic Needs Insecurity by First-Generation College Student Status

	# Experienced one form of basic needs insecurity within the last 12 months	% Experienced one form of basic needs insecurity within the last 12 months	# Did not experience one form of basic needs insecurity in the last 12 months	% Did not experience one form of basic needs insecurity in the last 12 months
First Generation	644	58%	463	42%
Not first generation	2,870	42%	3,998	58%

There is a statistically significant association between first-generation college students and continuing/non-first-generation college students and whether students experienced a form of basic needs insecurity in the last 12 months (p<.001). The strength of the relationship is weak (Cramer's V=0.11). Findings indicate first-generation college students experience higher rates of basic needs insecurities.



#### Chi Square Test of Basic Needs Insecurity by Colorado Residency

A chi square test was conducted using SPSS to evaluate any statistically significant differences in basic needs insecurity between students who are Colorado residents and students who are not Colorado residents. The chi square test compared the responses of these two groups, Colorado residents and Colorado non-residents, based on two conditions:

- Condition 1: Students who experienced either housing insecurity, homelessness, food insecurity, and/or other basic needs insecurity in the last 12 months
- Condition 2: Students who did not indicate they experienced one of those forms of basic needs insecurity in the last 12 months

As a point of comparison for rates of insecurity for the below groups, 44% of all survey respondents reported having some form of basic needs insecurity in the last 12 months.

#### Table E. Frequencies of Basic Needs Insecurity by Colorado Residency

	# Experienced one form of basic needs insecurity within the last 12 months	% Experienced one form of basic needs insecurity within the last 12 months	# Did not experience one form of basic needs insecurity in the last 12 months	% Did not experience one form of basic needs insecurity in the last 12 months
Resident	2,224	45%	2,695	55%
Non-resident	1,287	42%	1,762	58%

There is a statistically significant association between Colorado state residency status and whether students experienced a form of basic needs insecurity in the last 12 months (p=.009). The strength of the relationship is moderate (Cramer's V=.029). Findings indicate students who are Colorado residents experience higher rates of basic needs insecurity compared to students who are not Colorado residents.



#### Chi Square Test of Basic Needs Insecurity by Graduate/Undergraduate Level and Basic Needs Insecurity

A chi square test was conducted using SPSS to evaluate any statistically significant differences in basic needs insecurity between undergraduate students and graduate students.

The chi square test compared the responses of these two groups, undergraduate and graduate students, based on two conditions:

- Condition 1: Students who experienced either housing insecurity, homelessness, food insecurity, and/or other basic needs insecurity in the last 12 months
- Condition 2: Students who did not indicate they experienced one of those forms of basic needs insecurity in the last 12 months

As a point of comparison for rates of insecurity for the below groups, 44% of all survey respondents reported having some form of basic needs insecurity in the last 12 months.

#### Table F. Frequencies of Basic Needs Insecurity by Colorado Residency

	# Experienced one form of basic needs insecurity within the last 12 months	of basic needs	# Did not experience one form of basic needs insecurity in the last 12 months	% Did not experience one form of basic needs insecurity in the last 12 months
Graduate	1,026	48%	1,111	52%
Undergraduate	2,478	43%	3,334	57%

There is a statistically significant association between graduate and undergraduate academic levels and whether students experienced a form of basic needs insecurity in the last 12 months (p<.001). The strength of the relationship is weak (Cramer's V=.048). Findings indicate graduate students experience higher rates of basic needs insecurity compared to undergraduate students.



#### Chi Square Test of Basic Needs Insecurity by Gender

A chi square test was conducted using SPSS to evaluate any statistically significant differences in basic needs insecurity among students by gender.

The chi square test compared the responses of three groups, male, female and nonbinary, based on two conditions:

- Condition 1: Students who experienced either housing insecurity, homelessness, food insecurity, and/or other basic needs insecurity in the last 12 months
- Condition 2: Students who did not indicate they experienced one of those forms of basic needs insecurity in the last 12 months

As a point of comparison for rates of insecurity for the below groups, 44% of all survey respondents reported having some form of basic needs insecurity in the last 12 months.

#### Table G. Frequencies of Basic Needs Insecurity by Gender

	# Experienced one form of basic needs insecurity within the last 12 months	% Experienced one form of basic needs insecurity within the last 12 months	# Did not experience one form of basic needs insecurity in the last 12 months	% Did not experience one form of basic needs insecurity in the last 12 months
Nonbinary	26	68%	12	32%
Female	1,935	45%	2,369	55%
Male	1,549	43%	2,077	57%

There is a statistically significant association between gender and whether students experienced a form of basic needs insecurity in the last 12 months (p=.001). The strength of the relationship is weak (Cramer's V=.041). Findings indicate nonbinary students experience basic needs at the highest rates, followed by female then male.



#### Chi Square Test of Basic Needs Insecurity by Students with Dependents

A chi square test was conducted using SPSS to evaluate any statistically significant differences in basic needs insecurity between students who have dependents and students who do not have dependents.

The chi square test compared the responses of these two groups based on two conditions:

- Condition 1: Students who experienced either housing insecurity, homelessness, food insecurity, and/or other basic needs insecurity in the last 12 months
- · Condition 2: Students who did not indicate they experienced one of those forms of basic needs insecurity in the last 12 months

As a point of comparison for rates of insecurity for the below groups, 44% of all survey respondents reported having some form of basic needs insecurity in the last 12 months.

#### Table H. Frequencies of Basic Needs Insecurity by Students with Dependents Status

	# Experienced one form of basic needs insecurity within the last 12 months	% Experienced one form of basic needs insecurity within the last 12 months	# Did not experience one form of basic needs insecurity in the last 12 months	% Did not experience one form of basic needs insecurity in the last 12 months
Yes, has dependents	157	56%	122	44%
Does not have dependents	3,141	43%	4,176	57%

There is a statistically significant association between whether students have dependents and whether students experienced a form of basic needs insecurity in the last 12 months (p<.001). The strength of the relationship is weak (Cramer's V=.051). Findings indicate students with dependents experience higher rates of basic needs insecurity.



### APPENDIX I

#### Independent Samples T-Test of Basic Needs Insecurity and Sense of Mattering and Belonging

An independent samples T-test was conducted using SPSS to compare the means for each mattering and belonging statement for the following groups:

- Group 1: Students who indicated experiencing at least one type of basic needs insecurity in the last 12 months on the basic needs survey (n=3,376)
- Group 2: Students who did not indicate experiencing basic needs insecurity on the basic needs survey (n=4,337)

Differences between means between the two groups were found to be statistically significant for every mattering and belonging statement. Students who experienced at least one type of insecurity reported significantly lower levels of belonging and mattering.

Table I. Independent Samples T-test Analysis Results for Basic Needs Insecurity and Senses of Mattering and Belonging

Statement 1= strongly disagree 2 = disagree 3 = somewhat disagree 4 = somewhat agree 5 = agree 6 = strongly agree	Students with no Basic Needs Insecurity	Students with Basic Needs Insecurity	Statistically Significant?
I belong at CU Boulder	Mean = 4.87	Mean = 4.44	Ү
	SD = 1.00	SD = 1.18	p<.001
People at CU Boulder accept me	Mean = 4.91	Mean = 4.49	Ү
	SD = 0.91	SD = 1.07	p<.001
I fit in well at CU Boulder	Mean = 4.65	Mean = 4.13	ү
	SD = 1.08	SD = 1.26	p<.001
I feel a connection with the CU	Mean = 4.37	Mean = 3.89	ү
Boulder community	SD = 1.21	SD = 1.34	p<.001
People on campus are generally supportive of my individual needs	Mean = 4.68	Mean = 4.22	Ү
	SD = 0.96	SD = 1.14	p<.001
There are people on campus who are interested in me as a person	Mean = 4.85	Mean = 4.47	ү
	SD = 1.02	SD = 1.21	p<.001
There are people on campus who care about me and my future	Mean = 4.95	Mean = 4.58	Ү
	SD = 0.96	SD = 1.14	p<.001

#### Independent Samples T-Test of Basic Needs Insecurity and Likelihood to Return to CU

An independent samples T-test was conducted using SPSS comparing the mean likelihood students returning to CU in the fall 2024 semester between two groups:

- Group 1: Students who indicated experiencing at least one type of basic needs insecurity in the last 12 months on the basic needs survey (n=2,717)
- Group 2: Students who did not indicate experiencing basic needs insecurity on the basic needs survey (n=3,642)

Differences in means between the two groups were found to be statistically significant. Students who experienced at least one type of insecurity reported significantly lower levels of likelihood of returning to CU Boulder.

Table J. Independent Samples T-test Analysis Results for Basic Needs Insecurity and Likelihood of Returning to CU Boulder in Fall 2024

Survey Question 1= very unlikely 2 = unlikely 3 = likely 4 = very likely	Students with no Basic Needs Insecurity	Students with Basic Needs Insecurity	Statistically Significant?
What is your likelihood of returning to CU Boulder in Fall 2024?	Mean = 3.67 SD = 0.80	Mean = 3.53 SD = 0.86	Ү p<.001

