UNIVERSITY
OF
CALIFORNIA

**Global Food
Initiative**

Global Food Initiative:
Food and Housing
Security at the
University of California

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Executive Summary

Meeting the basic needs of food and housing security is a multidimensional challenge for communities across the country and one that higher education also faces. Today expenses other than tuition can account for more than 60 percent of the total cost of attending a college or university. Over the past four decades, the cost of living for college students has increased by over 80 percent.[1]

The University of California is dedicated to ensuring the success of its more than 260,000 students and as such, has embarked on a comprehensive effort to assess and help solve the basic needs challenges its students experience. To that end, this report builds on the 2015 Student Food Access and Security Survey (SFASS) and the findings from the 2016 Student Food Access and Security Study where 48 percent of the university's undergraduates and 25 percent of its graduate students experience some level of food insecurity. The report, "Global Food Initiative: Food and Housing Security at the University of California," provides information on the university's latest data collection efforts and strategies for addressing basic needs security.

UC Global Food Initiative targets food security

The Global Food Initiative (GFI) was launched in 2014 to address one of the critical issues of our time: how to sustainably and nutritiously feed a world population expected to reach 8 billion people by 2025. The initiative aligns the university's research, outreach and operations in a sustained effort to develop, demonstrate and export solutions for food security, health and sustainability throughout California, the United States and the world. From the beginning, this ambitious goal has also included a focus on addressing food security among UC students. Some of these efforts already undertaken have included:

- In 2014, establishing campus food security working groups — including students, staff, faculty and community partners — tasked with coordinating campus food security efforts.

- In 2015, conducting the 2015 Student Food Access and Security Survey — the nation's largest higher education study at the time.

- Also in 2015, convening statewide leadership across two- and four-year colleges and universities by establishing the California Higher Education Food Summit (CHEFS), focused on discussing strategies for improving food security and student success across California.

- Since 2015, UC President Janet Napolitano has allocated more than $4 million to the campuses ($377,000 per campus) to address the challenges of food security and advance a multiyear plan to develop and/or build on support services and new programming to ensure student access to healthy food and basic needs resources.

- In 2017, the campus working groups created the Student Food Access & Security Toolkit that includes best practices and activities developed by UC campuses, sharing key efforts underway to nourish and support students.

- Facilitating intersegmental leadership meetings with California Community Colleges (CCC) and California State University (CSU) representatives, to share evidence-based practices to better support students and their basic needs.

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[1] The Real Price of College. *Wisconsin Hope Lab.* Retrieved from https://tcf.org/content/report/the-real-price-of-college/ on July 27, 2017.

At the campus level, these efforts have resulted in the creation of a wide and comprehensive range of resources, including, but not limited to: developing and/or expanding food pantries, donating meals through "Swipe Out Hunger" programs, creating campus basic needs websites, awareness campaigns, and efforts to enhance financial aid literacy, and CalFresh enrollment drives. Further details on the campuses efforts and accomplishments are located in the "University of California's Efforts" section of the report.

UC Housing Initiative

The university also has tackled basic needs challenges by working systemwide to ensure sufficient and affordable student housing. In January 2016, President Janet Napolitano announced the UC Student Housing Initiative to add some 14,000 new affordable beds by 2020 and UC is on track to achieve this goal.

As part of the initiative, the Office of the President has conducted internal development team visits to all 10 campuses to understand specific housing needs, goals and barriers such as debt and community issues. Since May 2016, campuses have been providing detailed presentations on their housing plans to the Board of Regents, including critical information about the unique campus environment and local factors impacting housing availability and affordability for students. These presentations generally included the number of students housed, rental rates as compared to market rate housing, off-campus housing vacancy rates, housing goals, upcoming projects, delivery models being considered, and 10-year financial plans and modeling.

Since the announcement of the President's Student Housing Initiative in January 2016, approximately 3,600 below-market beds have come online and the university is on track for meeting the 14,000 affordable beds goal by fall 2020.

Finally, at their July 2017 meeting, the UC Board of Regents approved providing a one-time $27 million allocation to support campus efforts to address housing needs for students, faculty and staff. The funding is intended to provide assistance for existing or new housing programs, studies in support of advancing new housing projects, and/or capital improvements. Given the unique housing challenges facing each individual campus, they will have the flexibility to utilize the funding based on specific needs.

Student basic needs: A statewide and national issue

Universities and other institutions across the state and country are working to better understand students' basic needs. Research indicates that the challenges students face are problems not only in California, but across the nation. Some of the salient findings among recent studies include:

- A 2015 study by California State University that suggests 9 percent of CSU's 460,000 students are homeless, while 21 percent lack consistent food sources.

- A fall 2016 study by the Los Angeles Community College District (LACCD) that found 63 percent of students surveyed experience food insecurity, with 38 percent experiencing very low food security. Nineteen percent indicated experiencing homelessness within a year of the time the questionnaire was administered.

- A 2017 survey that included 33,000 students across 70 community colleges in 24 states found that 66 percent of students had experienced food insecurity, 50 percent had experienced housing insecurity and 14

percent experienced homelessness at some point. Researchers also determined that there was minimal geographic variation in hunger and homelessness among community college students.[2]

- Other surveys have suggested that more than one in five students had experienced hunger during the past month, and that close to one in 10 responded they had been homeless at some point in the past year.[3]

The State of California has worked to ensure that programs available to assist Californians' basic food needs are also accessible for UC and other college students. The California Legislature has adopted a number of proposals over the past several sessions focused on food assistance for students enrolled in higher education institutions. As a result, California has become the most inclusive and accessible state for Supplemental Nutrition Assistance Program (SNAP) eligibility for college and university students. Known as CalFresh in California, the program provides eligible students with up to $192 per month that does not negatively affect their financial aid packages. UC is making every effort to ensure eligible students sign-up for CalFresh and that all students know how to access emergency food supplies on campus.

Further demonstrating their commitment to food access, leaders in the California Legislature included in the 2017-18 state budget $2.5 million in one-time funding for each of the three public higher education segments. The funding is to incentivize campuses to become "hunger-free campuses." UC campuses will utilize these important resources to further investment in infrastructure and programs that help support student food security.

2016 UC survey results

As a follow-up to the 2015 Student Food Access and Security Survey (SFASS),[4] the university added food and housing questions to the 2016 UC Undergraduate Experience Survey (UCUES) and the Graduate Student Well-Being Survey (GSWBS) to further examine the issue of basic needs. This report presents the quantitative findings from these two surveys, with the key findings below.

Food insecurity

- Forty-four percent of undergraduate students and 26 percent of graduate students reported having experienced food insecurity, which is in line with the 2015 SFASS findings of 48 percent and 25 percent, respectively.

- The USDA defines very low food security as reduced food intake or disrupted eating patterns at times due to limited resources. Low food security is defined as reduced quality, variety or desirability of diet, with little or no indication of reduced food intake. These two categories comprise food insecurity.

- The limited validated questions on the 2016 survey do not provide adequate information to distinguish between low and very low food security.

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2 Hungry and Homeless in College: Results from a National Study of Basic Needs in Higher Education. *Wisconsin Hope Lab.* Retrieved from http://www.wihopelab.com/publications/Hungry-and-Homeless-in-College-Report.pdf
3 Shine light on hungry, homeless community college students, https://www.acct.org/news/new-study-new-york-times-op-ed-shine-light-hungry-homeless-community-college-students
4 Global Food Initiative: Student Food Access and Security Survey, http://www.ucop.edu/global-food-initiative/best-practices/food-access-security/student-food-access-and-security-study.pdf

Housing insecurity

As part of its comprehensive approach to student well-being, UC has proactively begun to examine the housing challenges students face. Current data in this area are limited at both the state and national level. Nevertheless, UC took a first internal step of preliminarily assessing housing challenges by including one question on homelessness in its 2016 UCUES and GSWBS surveys, which indicates:

- Five percent of both UC undergraduate and graduate student populations said they had experienced homelessness at some point during their enrollment.

  - The question used has not been validated to ensure it is an accurate measurement of homelessness and the issue of defining "homelessness" and how to correctly measure housing insecurity is still being addressed nationally.

  - The definition of homelessness in the UC question provided responses ranging from "couch surfing" at a friend's place to living on the streets.

  - Moving forward, UC intends to improve upon this preliminary finding with additional research, including using housing-related questions that have been validated to accurately measure housing security.

Moving forward: Implementing a basic needs master plan

Based on the findings of this report, campuses will now be able to prioritize resources and efforts for their most vulnerable student populations. Furthermore, the survey findings will inform the creation of a UC basic needs master plan. Key elements of the master plan will include:

- Establishing a basic needs center (either physically and/or virtually) on each campus, where existing staff and services will be centrally coordinated for greater impact and efficiency. For example, in 2017 UC Irvine opened a spacious 2,630 square foot FRESH Basic Needs Hub where students can:

  - pick up emergency food and toiletries;

  - visit and talk with other students;

  - prepare food in a kitchenette complete with blenders, a convection oven, a microwave and a coffee machine;

  - participate in the Smart 'Eaters Life Skills Series which gives students the education and skills they need to eat healthy on a budget and to learn how to cook affordable, nutrient-dense foods for themselves; and

  - get involved by volunteering in the Hub and/or participating in the FRESH Intern program.

- Identifying and confirming adequate staffing to coordinate and facilitate campus basic needs efforts.

- Updating pre-undergraduate and pre-graduate student informational materials, outreach presentations and programming to include basic needs information.

- Proactively targeting outreach to student populations with higher food and housing insecurity rates (as identified by the survey results presented in this report) and prioritizing resources and efforts for the most vulnerable student populations.

- Hosting on-campus and web-based CalFresh application assistance sessions for eligible student populations. UC has estimated that less than 10 percent of eligible students on each undergraduate campus have enrolled.

- Coordinating and providing trainings and workshops that address: financial literacy, from personal budgeting to college aid packages; healthy and culturally relevant meal provisioning and preparation; housing and rental planning; and self-advocacy.

- Establishing a holistic crisis resolution approach that will go beyond food pantries and look at the root of chronically food insecure and/or homeless students.

- At the systemwide and campus levels, utilizing researched-based evaluations, such as surveys, focus groups and interviews to determine if existing efforts are working and how they can reach more vulnerable student populations.

- Strengthening the existing California higher education basic needs partnership to improve research and evaluation collaborations, local/state/federal policy engagement, and coordination of local to state programming and services.

Tackling the challenges of food and housing insecurity is a long-term, resource-driven endeavor. The "Global Food Initiative: Food and Housing Security at the University of California" report is a major milestone in communicating UC's expansive approach toward student and systems solutions — incorporating extensive research, outreach and collaboration among campuses and partners — to help students meet basic needs. In just three years, the UC system has built campus and system infrastructure that will facilitate the improvement of ongoing learning, services and systems transformation. UC will continue close collaboration with the State of California, California State University and California Community Colleges to more comprehensively combat the basic-needs challenges that affect students and families statewide.

Introduction

Meeting people's basic needs is a growing challenge in the United States, including on college campuses. Research has shown a significant impact to students and their academic experiences stemming from a lack of basic needs security. A new study conducted at the K-12 level[5] applied existing knowledge about the link between growing up in households without enough to eat and poor academic performance years later.

Nationally, investment in public higher education has not kept pace with increases in the cost of living. Additionally, more than half of the students who reported experiencing hunger during their college years also held paying jobs or received financial aid, and many were enrolled in a meal plan.[6] Although financial aid helps with costs, non-tuition expenses can account for more than 60 percent of the total cost of attending a college or university.[7]

The issue of unmet basic needs affects students across the country at both two- and four- year colleges and universities and is not isolated to those from lower-income families:

- In a 2015 survey of students at 10 community colleges in seven states, 52 percent of respondents reported some degree of food insecurity within 30 days of the survey.[8]

- A 2015 survey of low- and middle-income undergraduates, mostly at Wisconsin four-year colleges, found that 61 percent reported some food insecurity during the prior academic year (Goldrick-Rab, 2015).

- In a national survey of college students, more than 20 percent said they had experienced hunger in the past month (Dubick, 2016), and nearly 10 percent said they had been homeless at some point within a year of the survey (Field, 2017).

- Food insecurity among college students has been associated with poor health, poor academic performance and mental health symptoms such as depression and anxiety (Freudenberg, et al., 2011; 2011; Patton-Lopez, et al., 2014; Goldrick-Rab, Broton and Eisenberg, 2015; Knol, et al., 2017).

In California, the University of California and other public higher education segments are collaborating through research and awareness efforts to better understand and support students' food and basic needs security. Local governments and organizations are addressing the issue through legislation and promotion of partner programs such as CalFresh.

Like the national studies, those centered on California indicate basic needs are a challenge across our two- and four-year institutions of public higher education:

- In fall 2015 a study by the Los Angeles Community College District (LACCD) found that about 63 percent of students surveyed experience food insecurity, with 38 percent of those students indicating very low food security.

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[5] Published article, Kids who suffer hunger in first years lag behind peers in school, Ruth Chaterjee, https://www.npr.org/sections/thesalt/2017/03/23/520997010/kids-who-suffer-hunger-in-first-years-lag-behind-their-peers-in-school%20on%20September%2012

[6] Hunger on Campus. *College and University Food Bank Alliance.* Retrieved from http://studentsagainsthunger.org/wp-content/uploads/2016/10/Hunger_On_Campus.pdf

[7] The real price of college. *Wisconsin Hope Lab.* Retrieved from https://tcf.org/content/report/the-real-price-of-college/

[8] Hungry to Learn: Addressing Food & Housing Insecurity Among Undergraduates. *Wisconsin Hope Lab,* http://wihopelab.com/publications/Wisconsin_hope_lab_hungry_to_learn.pdf

- A preliminary study released in winter 2016 by California State University found 8.7 percent experience homelessness and 21 percent lack consistent food sources (Crutchfield, et al., 2016).

- Based on a 2015 USDA report, California ranks 48 out 51 administrative districts (50 states and Washington, D.C.) in SNAP (CalFresh) participation lagging among those eligible to take part in the program.

The University of California's mission of research, teaching and public service continues to drive UC's engagement to tackle basic needs challenges. Through the development and sharing of best practices across California public higher education segments, ongoing institutional research and programmatic interventions, UC is working to address the various facets of basic needs security. A recent outcome of the intersegmental partnership includes working with the state legislature that passed legislation supporting "hunger-free" campuses across all three higher education segments. With statewide and systemwide coordination, the university remains committed to exploring the root causes of basic needs security among students, while actively identifying and implementing solutions to enhance their well-being.

University of California Efforts

UC Global Food Initiative

In 2014, University of California President Janet Napolitano and UC's 10 chancellors launched the UC Global Food Initiative (GFI). The GFI involves all 10 UC campuses, UC Agriculture and Natural Resources and Lawrence Berkeley National Laboratory, aligning the university's research and outreach in the fields of agriculture, medicine, nutrition, climate science, public policy and social science, biological science, humanities, arts and law. There are multiple projects under the GFI with efforts focusing on one of the critical issues of our time: how to sustainably and nutritiously feed a growing world population.

In 2015, with the formation of the GFI Food Access and Security subcommittee and under the coordination of the subcommittee co-chairs, the issue of food insecurity was more deeply examined across the campuses. Based on the findings from the subcommittee's efforts and recognizing there was a growing concern around student food security, President Napolitano allocated $75,000 per campus to address the immediate challenges of ensuring student access to nutritious food, while GFI co-chairs began examining the best approach for addressing the issue. In response to the findings from the GFI-funded Student Food Access and Security Survey (SFASS) in 2015 and a multiyear strategic plan created by the systemwide GFI co-chairs, the president committed an additional $3.3 million over a two-year period to provide emergency assistance, financial and food literacy, life skills training and to establish food security working groups on each campus. The effort is built upon campuses participating across the system in processes that leverage campus expertise coupled with a systems approach to problem-solving. The Food Access and Security Basic Needs (FAS-BN) subcommittee, sponsored by GFI and overseen by UC's Office of Student Affairs, has established a working group on each campus that includes equitable representation from campus stakeholders. Led by GFI co-chairs, the FAS-BN workgroups have been working closely together to address basic needs challenges and develop implementation plans that address the unique needs of each respective campus. Based on the SFASS 2015 findings and campus input, the subcommittee workgroup recognized that efforts to not only address immediate emergency relief were needed, but consideration of long-term sustainable solutions to address student basic needs would be critical.

UC Food and Housing Security Framework

UC students are fortunate to benefit from strong institutional and state financial aid programs that help address both fee and non-fee costs. These programs make UC far more socioeconomically diverse than any other similarly competitive universities. However, despite the university's generous financial aid programs, many UC students face food and housing insecurity.

In order to help students meet their basic needs during their time at UC and beyond, the FAS-BN subcommittee created the UC Basic Needs Model to address holistic preventative education and training. The goal is to consistently reduce and eventually eliminate the number of students in need of emergency resources and/or experiencing a crisis. UC's Basic Needs Model approaches this goal by beginning with comprehensive educational efforts aimed at all students. This action-oriented model includes the establishment of a basic needs committee on each campus to support systemwide coordination of work and sharing of knowledge.

Figure 1: Food Access & Security Framework

UC's systemwide approach focuses on efforts that include:

- Updating pre-college programming curriculum and materials to teach effective basic needs strategies to high school and community college participants.

- Enhancing financial aid communications and skills training to include housing and food costs awareness and available student support services.

- Expanding existing crisis response teams to provide student support and guidance.

- Creating central basic needs online campus resources.

- Increasing collaboration with state and county offices to grow CalFresh registration of UC students where less than 10 percent of our potentially eligible students on our undergraduate campuses have enrolled.

- Expanding existing Swipe Out Hunger programs with campus dining services.

Figure 2: Student Experience Logic Model

- Developing food voucher benefits and financial aid guidelines to support increased resources for students.

- Expanding healthy and culturally diverse food distribution and pantry sites.

- Establishing wellness and homeless student resolution protocols.

- Continually reviewing and evaluating institutional student assessment tools.

At the same time, the FAS-BN subcommittee has recognized that this work is a united effort across campus departments and institutional lines. Therefore, the committee has organized the framework of the model around the following five components:

1. **On-campus student services and programming**, such as food pantries, demonstration cooking kitchens and financial literacy materials;

2. **Off-campus partnerships and engagement**, such as CalFresh outreach and application assistance, CalFresh enrollment, food banks and local farmers markets;

3. **Campus coordination,** such as centralized and accessible resources, or college student finances and nutrition workshops;
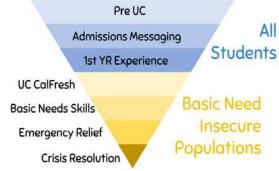
4. **Systemwide coordination,** such as hosting a quarterly systemwide convening of workgroups and statewide conferences which include our intersegmental partners; and

5. **Research and data collection** through UCUES, GSWBS, and campus surveys and focus groups.

UC campuses are in the second year of executing their 2016-2018 implementation plans. So far, campuses have implemented best practices, shared lessons learned and continue to advance efforts to meet each local community's particular needs. From establishing and enhancing food pantry/distribution efforts and bolstering campus gardens/farms for student engaged production to streamlining communication channels to ensure target populations have access to resources, a systemwide integration of support is being implemented. Available resources of activities taking place across UC can be accessed through the *Student Food Access and Security Toolkit.* [9]

Cumulative campus impacts to date since the inception of the FAS-BN systemwide project include:

- Established food access and distribution channels that include choice-based pantries, pop-up markets, and mobile access sites to centralized Basic Needs Hubs offering a range of support services (i.e., UC Irvine and UC San Diego).

- Efforts to raise student awareness and reduce stigma through the development of print and social media basic needs messaging and creation of campus basic needs webpages for centralization of on- and off-site resources.

- Increased supplemental acute support resources that include campus meal voucher/Swipes programs, retail grocery gift cards and emergency financial assistance to address student basic needs.

- Increased staff and student peer-based CalFresh promotion and enrollment assistance.

- Added new basic needs evaluation and campus assessment measures to ensure a responsive model of improving support services.

Campus specific impacts and advances that have been undertaken include:

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[9] Food Security and Access Toolkit, http://www.ucop.edu/global-food-initiative/_files/food-security-toolkit.pdf

UC Berkeley

- Developed and hosted training on college student basic needs to institutional outreach and through recruitment entities such as the Centers for Educational Partnership on campuses that support preparation for and success in higher education.

- Increased the UC Berkeley CalFresh Clinic services by approximately 200 percent in a single academic year with support from the Alameda County Food Bank (from 70 to 208 participants).

- In November 2017 UC Berkeley hosted the first-of-its-kind CalFresh Mega Clinic where 184 applications were submitted within five hours. UC Berkeley Food Pantry has increased its services from 424 to 2,113 unique students since opening in 2014.

- Hired a UC Berkeley Farm & Gardens Coordinator who is producing a five-year strategic plan to coordinate research, courses, programming, harvesting and distribution.

- Launched a campus basic needs website, centralizing basic needs information, materials and resources (basicneeds.berkeley.edu); the site averages 4,919 visitors per month.

- Instituted a Food Recovery Coalition to minimize campus wasted food levels and direct nutritious foods to our students in need.

UC Davis

- Launched the Aggie Food Connections website (foodconnection.ucdavis.edu/find-food) that aggregates existing UC Davis services into an online central repository, is user-friendly and provides access to available resources.

- Formalized Yolo County Partnerships and implemented the GetCalFresh mobile tool to increase UC Davis student CalFresh enrollment.

- Implemented Electronic Benefits Transfer (EBT) capability at UC Davis stores and in the renovated Memorial Union markets (opened May 2017).

- Created an edible gardens and seasonal fruiting trees map for the campus (ediblecampus.ucdavis.edu).

- Achieved through outreach and marketing campaigns a 200 percent increase in the number of individual students using UC Davis Food Pantry.

- Established the "Back to Basics" Resource Center, which is scheduled to open in spring 2018 and is funded by $200,000 from the chancellor.

UC Irvine

- Passed the Food Pantry Initiative Referendum in 2016, providing $3.00 (adjusts to CPI) per undergraduate student for the next 10 years to support campus basic needs services.

- Opened the UC Irvine FRESH Basic Needs Hub in fall 2017. The Hub provides a 2,630 square foot space where advising, food preparation, community meetings, teaching, CalFresh and Food Pantry services are centralized.

- Increased pantry clients served by 300 percent in one academic year through outreach efforts with 9,954 visits; partnered with Second Harvest Food Bank, receiving 5,000 lbs. of free food weekly.

- Launched the Emergency Meal Swipe Program to provide meal swipes to students in need.

- Launched Basic Needs Emergency Grants in partnership with campus social workers and the Office of Financial Aid.

- Launched Smart Eaters Life Skills Series: Nutrition, Financial Wellness, Cooking Skills.

- Facilitated the first summer program workshop on basic needs for high school students.

UCLA

- Expanded the Community Program Office's food closet to include increased fresh fruits and vegetables as well as refrigerated goods.

- Formed the Teaching Kitchen Collaborative bringing together students from the schools of Medicine, Public Health, Dental and Nursing to teach healthy eating cooking classes and food demonstrations.

- Completed UCLA's Community Garden site where students are growing food for pantry needs and hosting a wide range of basic needs/sustainable agriculture focused workshops.

- Launched the UCLA CalFresh Initiative, which hosts ongoing large- scale enrollment and promotion days on campus.

- Created the Holiday Food Boxes program to provide food and care packages to students who remain at school during campus holiday closures.

- Students donated $400,000 through the UCLA dining Swipes program.

- Launched a grocery shuttle service to provide weekly student transportation support to a diverse range of grocery retail stores that accept CalFresh benefits.

UC Merced

- Established an on-campus research and analysis partnership with the UC Merced Blum Center to oversee student basic needs research and provide action grants.

- Introduced CropMobster, a new phone app and web platform, that provides students with daily updates on food donation availability from farms and local food businesses as well as onsite catering and dining.[10]

- Launched a new peer-to-peer outreach program to increase student enrollment through facilitated training by CalFresh representatives.

- Hired a full-time Basic Needs Coordinator to expand support services and begin to develop mid-to long-term plans for advancing basic needs.

- Served local residents, community college students and UC Merced affiliates through a community distribution pantry.

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[10] Published article, Campus launches countywide food and ag exchange
http://www.ucmerced.edu/news/2017/campus-launches-countywide-food-and-ag-exchange

UC Riverside

- In 2015-2016, UC Riverside Dining became the first campus to establish an onsite retail food business that accepts EBT and CalFresh benefits.

- Established staff and student peer CalFresh enrollment support services by appointment and during quarterly outreach events.

- Expanded operations of the R'Pantry in addition to toiletries and infant support supplies, providing more products including fresh, refrigerated and dry goods.

- Utilized student grown R'garden produce to support R'pantry services.

- Launched a dining Swipes program.

- Created UC Riverside Basic Needs workshops facilitated by UC Riverside Highland Chefs that host food provisioning and food preparation demonstrations and donate food to onsite distribution efforts.

- Created a "Food Resources for Students" web page.

UC Santa Barbara

- Created a campus Economic Crisis Response Team that integrates Counseling and Psychological Services, Financial Aid, and Student Affairs with the goal of responding with a greater holistic understanding of student needs.

- Distributed over 5,000 meal vouchers in 2016-2017 to students in need of acute food assistance. The program is expanding and advancing to track usage and increase impact.

- Established a Basic Needs committee that coordinates over 60 workshops quarterly, targeting both residential and non-residential student populations, reaching over 1,000 participants per quarter.

- Expanded pantry services to ensure a broader selection of fresh and refrigerated goods and opened a second satellite site to support student families in campus-affiliated housing.

- Created a systemwide UC Gardens and Farms Group consisting of UC students, staff and faculty. The group holds monthly conference calls and they are creating a best practices series of fact sheets.

- Collected food from the first harvest of the campus Vertical Garden Project and donated to the AS food bank.

UC Santa Cruz

- Served more than 1,000 students per quarter through two primary pantry sites, open daily.

- Began monthly food distribution at Family Student Housing, as well as at a west campus satellite pantry that opened in fall 2017.

- Produced over 20,000 lbs. of fruits and vegetables from the UC Santa Cruz Farm for use in campus food access efforts.

- Hosted a weekly, student-run "pop-up" market that accepts EBT and CalFresh.

- Established campus food access programs and systems that empower students through academic, co-curricular and paid internship experiences.

- Facilitated more than 25 quarterly basic needs events, workshops and programmatic activities. Led by undergraduates and graduate student researchers.

- Created "Swipes for Slugs" program and distributed over 5,000 meal vouchers in FY 16-17.

- Worked with campus dining to develop software to facilitate meal voucher transfer directly to student ID cards to reduce stigma and simplify use of the voucher program.

UC San Diego

- Hired a campus Basic Needs Coordinator.

- Launched a successful campus website that aggregates information on food and other basic needs resources: basicneeds.ucsd.edu

- Transformed the Triton Food Pantry to the Basic Needs Center.

- Increased connections with CalFresh, Housing Dining & Hospitality, Financial Aid, San Diego Hunger Coalition, San Diego Food System Alliance, Food Recovery Network, Campus Community Centers, Academic Enrichment Programs and Campus Gardens.

- Developed a short-term emergency housing protocol in collaboration with Housing & Dining Services.

- Expanded service at the Triton Food Pantry, with 10,413 overall visits — a 64 percent increase in undergraduate and graduate student attendance from the 2015-2016 academic year.

- Collaborated with the Center for Community Health to develop a basic needs awareness campaign and an evaluation plan.

UC San Francisco

- Created the Food Security Emergency Relief Program, providing UCSF students with urgent, short-term emergency food assistance via $70 food gift card packets.

- Distributed 1,700 gift card packets and saw a 38 percent increase in student use of the Food Security Emergency Relief Program between 2015 and 2017.

- Created a "Food 4 UCSF Students" app which is an opt-in text message notification system for untouched leftover food from UCSF catered events. Since its launch in June 2017, 1,458 students have signed up, 44 percent of enrolled students.

- Promoted awareness of how to sign up for CalFresh through fliers and the GetCalFresh.org app. Financial Aid advisors assisted students interested in applying for CalFresh.

- Distributed 200 farmers market vouchers to students during Winter Quarter finals. Approximately 90 percent of the vouchers were redeemed within three weeks.

- Initiated planning and fundraising efforts for a training kitchen near UCSF which would include programming for students, staff and faculty; patients and their families; and at-risk populations in San Francisco.

As the Food Access and Security food and housing insecurity model grows, the GFI co-chairs and UCOP will

continue to seek external partners for a broader forum for shared learning. In 2016-2017, the University of California, California State University and California Community Colleges collaborated to strengthen policies statewide with the aim of improving the lives of all California college students. Starting with clarifying CalFresh student eligibility and increasing program enrollment, this partnership has already yielded positive results with more success to come. In addition to California-based collaborations, the GFI FAS-BN subcommittee has gained national recognition for its work, positioning UC as a leader across higher education in addressing food and basic needs challenges. Moving forward, the university expects to continue to provide leadership in how it addresses the basic needs challenges.

UC Housing Initiative

California policymakers have long recognized the statewide housing crisis challenges facing many communities. During the 2017 legislative session, a package of several bills was enacted to begin addressing the overall challenges across the state of housing affordability and availability.

As this statewide housing affordability and availability problem persists across the state and impacts UC students, the university is furthering its efforts to increase student access to affordable housing. In January 2016, President Napolitano announced a housing initiative aimed at supporting current students and future enrollment growth across the UC system. Through the initiative, UC expects to expand the pool of student housing over the next four years, and to accelerate the timetable for completing student housing developments that are already in the planning phase. Current estimates project that UC will add 14,000 new affordable student housing beds to the campuses' stock by fall 2020, and one of the initiative's central missions will be accelerating this timeline. This includes the creation of new beds for undergraduates in residence halls and the addition of more graduate student housing and other apartments that are generally open to all students.

The overarching goals of the effort are twofold: first, to ensure that each of UC's campuses has sufficient housing for its growing student populace; and second, to keep housing as affordable as possible for all UC students. The housing initiative addresses those circumstances by harnessing the expertise and resources of the UC system to accelerate the creation of affordable student housing at every UC campus. Along with facilitating projects that are already in planning and development, the initiative aims to spur new housing construction, and potentially, the acquisition of existing housing stock.

From February through May 2016, a team of internal developers visited all 10 campuses to get a sense of each campus's specific housing needs. They assessed existing barriers to development, such as debt capacity, site and/or community issues. The goals of the internal developer team were to:

- Accelerate development of student housing projects that were already in production or proposed;

- Assess campus-specific issues affecting additional development and work with campuses to overcome them;

- Identify and develop new funding options, such as third-party financing, that could help ensure the affordability of new projects; and

- Ensure that internal policies and processes align with housing initiative goals.

During the campus visits, UC senior leaders also engaged undergraduate and graduate student leaders to obtain their input on housing issues.

From May 2016 to July 2017, most campuses presented detailed housing plans to the Board of Regents to provide critical information about their unique campus environment and local factors impacting housing availability and affordability for students. These presentations generally included the number of students housed, rental rates as compared to market rate housing, off-campus housing vacancy rates, housing goals, upcoming projects, delivery models being considered, and 10-year financial plans and modeling.

Since the announcement of the president's Student Housing Initiative in January 2016, approximately 3,600 below-market beds have come online, and the university is on track to meet the 14,000 affordable beds goal by fall 2020. Under the President's Initiative, typical arrangements in providing housing are that the University builds and leases new housing to students or that the University ground leases University land to a non-profit. The non-profit contracts with a developer who builds housing and the non-profit then leases the beds to University students at agreed upon below market rates, The entire project reverts to the University after the termination of the ground lease, typically after approximately 35 years.

In addition, at its July 2017 meeting, the UC Board of Regents approved providing a one-time $27 million allocation to support campus efforts to address housing needs for students, faculty and staff. As a result, $3 million will be directed to each of the following campuses: Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, San Francisco, Santa Barbara and Santa Cruz (a separate funding allocation was previously allocated to Merced). The funding is intended to provide assistance for existing or new housing programs, for studies in support of advancing new housing projects and/or for capital improvements. Given the unique housing challenges facing each individual campus, flexibility is key in addressing specific needs.

A State and National Issue: Student Food and Housing Security Research

Colleges across the nation have seen dramatic changes over the last few decades in their student populations. More low-income students are enrolling than in the past, as are students who have defied the odds to become among the first in their families to attend college. These lower-income students are far more likely than their peers to experience basic needs challenges, yet the problem also extends to the middle-income population. Increasingly middle-income students are feeling the impacts of rising food, housing and other costs associated with college attendance.

Many studies across the country are finding that these cost pressures are affecting students' ability to sufficiently meet their nutrition needs. Additionally, the stigma of shame that shrouds food insecurity makes it very difficult to identify the population of hungry students experiencing food insecurity. With this growing challenge across a broader spectrum of students nationwide, a number of research efforts have been launched to assess the impact of food and housing security on college students:

- A survey from Oregon State University found 59 percent of the 354 students surveyed were food insecure at some point in the prior 12 months, using the USDA Six-Item Short Form Household Food Insecurity Model.[11]

- According to the Michigan State University Student Food Bank, the number of university food pantries has shot up, from four in 2008 to 121 today.[12]

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[11] http://ir.library.oregonstate.edu/xmlui/handle/1957/45177
[12] Published article, More college students battle hunger as education and living costs rise, https://www.washingtonpost.com/local/more-college-students-battle-hunger-as-education-and-living-costs-rise/2014/04/09/60208db6-bb63-11e3-9a05-c739f29ccb08_story.html

- A national 2015 study by the Wisconsin Hope Lab of more than 4,000 undergraduates at community colleges across the nation found that half experience food and/or housing insecurity, including 20 percent who are hungry and 13 percent who are homeless.

- Another national study found that[13]:
  - college campuses have seen a 180 percent increase in food pantries since 2007

  - 53 percent of students who experienced food insecurity reported missing a class

  - 25 percent reported dropping a class, as a result of food issues.

The issue is especially acute in California which has some of the highest living costs in the country. This problem is particularly so in many of the urban areas where University of California campuses are located. Undergraduate and graduate students, like the general population, have seen the cost of living increase dramatically, creating a myriad of budget challenges. Within a five-year time period (2012-2017), housing costs have increased by close to 75 percent in the San Francisco Bay Area, Greater Los Angeles and the metro San Diego area (home to five of 10 UC campuses, Nagourney and Dougherty, 2017).

The other California public higher education segments, California State University (CSU) and California Community Colleges (CCC) systems, are also working to better understand students' basic needs through research and awareness building. Some of their preliminary work includes:

- A fall 2016 study by the Los Angeles Community College District (LACCD) that found about 63 percent of students surveyed experienced food insecurity, with 38 percent of those students indicating experiencing very low food security. Further, almost 19 percent indicated experiencing homelessness within the past year.[14]

- A 2015 study by California State University suggests that 9 percent of Cal State's 460,000 students are homeless, while 21 percent lack consistent food sources.[15]

Addressing the underlying cause of food and housing insecurity nationally and statewide will require increased collaboration, hard work and determination among agencies, policymakers and stakeholders alike. Like other colleges, the University of California is limited in its ability to control increases in the cost of living. However, as a public research university, UC is in a unique position to study the issue and analyze the effectiveness of possible solutions. The university's research, teaching and public service mission will continue to drive UC's commitment to address basic needs for its students.

The state of California has played an important leadership role to ensure that programs available to assist Californians' basic food needs are also accessible for UC and other college students. The California

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[13] Hunger on Campus. *College and University Food Bank Alliance.* Retrieved from http://studentsagainsthunger.org/wp-content/uploads/2016/10/Hunger_On_Campus.pdf
[14] Survey on Food and Housing Insecurity, https://www.laccd.edu/Documents/NewsDocuments/LACCD-HOPE-LAB-Survey-Results.pdf
[15] Serving Displaced and Food Insecure Students in the CSU report, https://presspage-production-content.s3.amazonaws.com/uploads/1487/cohomelessstudy.pdf?10000

Legislature has adopted a number of proposals over the past several sessions focused on food assistance for students enrolled in higher education institutions. As a result, California has become the most inclusive and accessible state for Supplemental Nutrition Assistance Program (SNAP) eligibility for college and university students. Known as CalFresh in California, the program provides eligible students with up to $192 per month and does not negatively affect their financial aid packages.

Building on this foundation, UC, CSU, and CCC have partnered with the California Department of Social Services to increase student access to CalFresh benefits by better aligning local county implementation of the program with statewide eligibility requirements. This will help ensure students eligible for CalFresh throughout the state are able to receive benefits in a timely manner regardless of county residence.

Further demonstrating their commitment to food access, leaders in the California Legislature included in the 2017-18 state budget $2.5 million in one-time funding for each of the three segments of public higher education. The funding is to incentivize campuses to become "hunger-free campuses." UC campuses will utilize these important resources to continue investing in infrastructure and programs that help support student food security.

President Janet Napolitano has formed two key initiatives — the Global Food Initiative and the Student Housing Initiative — to better understand the basic needs challenges facing students and to address those challenges where possible. UC has partnered with CSU and the CCC systems to better align how the public higher education sector is addressing these issues, including the development and sharing of best practices. This intersegmental partnership has focused on areas such as CalFresh and providing students with financial literacy and training. At the same time, through further research and awareness building, the university remains committed to addressing basic needs security while examining the root issues and how best to address this growing national crisis.

UC Research: Scope and Key Findings

The university began examining the issue of food insecurity in 2015 starting with the Student Food Access and Security Survey (SFASS) funded by President Napolitano as part of the UC Global Food Initiative effort. Based on the findings and to better understand the prevalence of food insecurity among University of California students, the university continues to examine the issue of food insecurity further and is beginning to assess students' housing insecurity. Questions were added to both the UC Undergraduate Experience Survey (UCUES) and the Graduate Student Well-Being Survey (GSWBS), which were administered in 2016. This report presents the quantitative findings from these two surveys to further improve awareness about student food and housing needs and to assist in UC's efforts to evaluate the current status, share best practices and plan future strategies to reduce basic needs insecurity.

Food insecurity was defined as an affirmative response to either or both of the two food insecurity questions common to both surveys:

1. *"I was worried whether my food would run out before I got more"*

2. *"The food that I bought just didn't last, and I didn't have money to get more.*"

In other words, respondents that indicated either statement was "sometimes true" or "often true" were considered as experiencing food insecurity. These two items have convergent validity as they have been validated against the 18-item USDA food insecurity module and used to identify families with high likelihood/being at risk of experiencing food insecurity (Hagar, et al., 2010). The current study also found that these two items had good internal and external reliability (Appendix 2). The validated two-item food security assessment, however, does not provide adequate information to distinguish between low and very low food security categories.

Survey results suggest that, overall, 44 percent of undergraduate students and 26 percent of graduate students reported having experienced food insecurity. These results are similar to the 2015 SFASS survey, which found about 48 percent of undergraduates and 25 percent of graduate students reported that they experienced food insecurity. However, moving from a six-item question in 2015 to a two-item question in the 2016 surveys does not provide adequate information to determine if students experienced "low" or "very low" food insecurity.

Further, the proportion of those experiencing food insecurity was higher among certain student populations:

- Among both undergraduates and graduate students, underrepresented minority (URM, i.e., African American, Hispanic/Latino (a) and American Indian) and LGBTQ (lesbian, gay, bisexual, transgender, queer) students were more likely to report experiencing food insecurity when compared to non-URM students (i.e., White and Asian).

- For undergraduates, former foster care youth, transfer students, and fifth- and sixth-year (or beyond) students were more likely to report experiencing food insecurity than other students.

- For undergraduates, students with no meal plan, typically those living off campus, were more likely to report experiencing food insecurity than students with a meal plan; students who spent more time working were more likely to report experiencing food insecurity.

- For graduate students, those in the humanities were more likely to experience food insecurity than other students.

UC has begun to examine the housing insecurity challenges among students. The definition of housing insecurity among students is still being conceptualized. Consequently, unlike with food security, there are no existing survey questions that are fully validated at the state or national level to assess college student homelessness or housing insecurity. Nationwide, research and data on student housing insecurity is limited, so UC is working to develop validated survey questions that can provide a clearer picture of the issue. The university took the first step in preliminarily assessing the housing challenges that students face by asking a specific question on homelessness in two 2016 student surveys. The question was intended to provide insight into whether or not a student may have been homeless at any point in time during their tenure at UC.

Moving forward, the university plans to expand on this initial assessment by establishing a validated set of survey questions that can provide more definitive data related to student housing security. This will be accomplished through targeted student focus groups and research and collaboration with other institutions of higher education.

The preliminary question asked on both the University of California Undergraduate Experience Survey (UCUES) and Graduate Student Well-Being Survey (GSWBS) related to student housing was:

> *Since attending UC, have you ever been homeless for any of the following lengths of time (check all that apply)? (Homeless means not having stable or reliable housing, e.g., living on the street, in vehicles, motels, campgrounds, single-occupancy facilities, or couch surfing in other people's homes for temporary sleeping arrangements).*

The question asked students whether they had ever been homeless since enrolling in UC. If yes, whether it was during the fall-spring academic year, summer session when taking classes, summer break when not taking classes, and/or winter break.

Homelessness was defined as not having stable or reliable housing (e.g., living on the street, in vehicles, motels, campgrounds, single-occupancy facilities, or couch surfing in other people's homes for temporary sleeping arrangements, transient housing and overcrowding, and when cost of housing relative to income is overly high) during any time point during the school year.

It is worth noting that homelessness differs from the more general term, *housing insecurity*, which includes "a broader set of challenges such as the inability to pay rent or utility or the need to move frequently" (Goldrick-Rab and colleagues, 2017). The single question on homelessness that was included in the survey is not a valid measure of housing insecurity or homelessness. However, UC will continue to research, refine and validate questions around student homelessness and housing insecurity.

Survey results indicated that:

- Five percent of UC students expressed that they experienced homelessness, as assessed by the question above, at some point in time during their enrollment.

With limited national models aimed at addressing food and housing insecurity and homelessness on college campuses, UC continues to learn from campus experiences, research and collaboration while working to advance the national higher education dialogue for best practices that other colleges and universities can leverage to meet the needs of students. Regular meetings and collaboration involving leaders from across the

UC system form the platform for continuous group learning and engagement that helps drive the university's focus on these critical efforts.

To better understand the student basic needs experience (i.e., food and housing insecurity), campuses are diving deeper into the data findings through further projects and studies to address the unique needs of their respective communities. In 2016-2017, several UC campuses performed their own professional and graduate student-led studies through focus groups, interviews and surveys on student basic needs.

- **UC Berkeley and UCSF** partnered to conduct a survey study on the psychological impacts of food insecurity among UC Berkeley students. A total of 23 students were interviewed using a 13-question guide, exploring food insecurity through personal stories tied to their emotional well-being. While students reported experiencing the physical impact of exhaustion and weight loss, they also reported depression and anger towards themselves, which affected their ability to focus on their studies and their overall academic performance. The UC Berkeley campus will be directing efforts to include lessons learned from the study in future workshops for students, faculty and staff along with special training for volunteers and interns who support the food insecurity programs and services.

- **At UC Davis** a survey study was undertaken to understand the prevalence of housing insecurity through a parallel series of questions addressing living conditions. The parallel series looked at housing conditions during the fall 2016 quarter and the month of December when students are required to vacate the dorms. A total of 618 students participated in an 11-question, self-reporting tool. A total of 29 or 4.69 percent of students surveyed reported some level of housing insecurity. Study results have informed reinforcing collaborations with other campus entities, such as the Associated Students, University of California, Davis, to better understand housing security amongst students.

- **UC Irvine** conducted focus groups among UC Irvine undergraduate students who access certain services offered through the Student Outreach and Retention Center (SOAR). The purpose of the study was to gain a deeper understanding of food insecurity on their campus. A total of 38 students participated in the focus group discussions. The study found that the population that accesses SOAR has varying levels of gift-aid that helped with expenses. Those that received less gift-aid found their financial aid and/or income left them more challenged to meet their living expenses. Participants reported that the resources offered through SOAR were very helpful and the staff and center itself created a welcoming, comfortable environment. The results of the study have highlighted the need for stronger communication and awareness building especially among freshman and transfer students. The study also pointed to "loan-aversion" and increased financial literacy as areas to focus on in the future.

- **UCLA** conducted 11 focus groups in the spring of 2017[16]. A total of 82 students participated and the study recruited across four subpopulations: 1) undergraduates living on campus with a meal plan; 2) undergraduates living off campus; 3) graduate/professional students; and 4) students using free food resources. Unifying themes around food security and food literacy included the challenge of the campus food environment in meeting student needs, a desire for practical financial and food literacy "life skills" training and uncertainty about the university's commitment to address student basic needs. The results of this study broadly suggest there is opportunity for the university to address student food insecurity through providing food (and financial) literacy training, among other strategies and skills around food preparation and budgeting.

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[16] Published article can be found in the California Agricultural Journal GFI Special Edition, July-September 2017, http://calag.ucanr.edu/archive/?article=ca.2017a0023

Survey Background

Student Food Access and Security Survey (SFASS)

UC conducted a comprehensive study on food security based on 2015 survey data to better understand if students' nutritious basic needs were being met. More than 66,000 undergraduate and graduate students across all 10 UC campuses in spring 2015 were invited to participate in an online survey. Students could participate in one of two ways: through the National College Health Assessment II (NCHA) survey administered by the American College Health Association, or through the Got Food? Survey[17], an independent campus survey (with matching items) administered by the UC Office of the President's Institutional Research and Academic Planning Office. Together these surveys are referred to as the Student Food Access and Security Survey (report made available in 2016).

Both surveys utilized the six-item U.S. Department of Agriculture (USDA) food security module to assess student food insecurity. Of those who were invited to participate, 8,932 undergraduate and graduate students responded to the survey, with a response rate of 14 percent (mean response for the two studies).

UC Undergraduate Experience Survey (UCUES)

The UC Undergraduate Experience Survey (UCUES)[18] is a universitywide undergraduate census survey, administered every two years. Registered students are invited to participate in an online survey to evaluate their undergraduate experience. For the first time and as an outcome of SFASS findings, UCUES 2016 included three food insecurity questions (two of which have been validated to assess food insecurity) and one housing insecurity question on homelessness. It was administered in spring 2016 to more than 190,000 undergraduate students across the nine undergraduate campuses. Of those who were invited to participate, 63,115 students responded to the survey, resulting in a response rate of 33 percent. The nine undergraduate campuses have different response rates varying from 25 percent to 43 percent.

The Graduate Student Well-Being Survey (GSWBS)

The Graduate Student Well-Being Survey (GSWBS)[19] was developed by UC to examine graduate life satisfaction, mental health, mentorship and advising, finances, and food and housing security. It was administered during the winter quarter/spring semester of 2016 to a stratified random sample of over 13,400 graduate students across all 10 UC campuses. Questions about food and housing insecurity included in this survey were the same three questions given in UCUES 2016. Of those who were invited to participate, 6,764 graduate students responded to the survey, a response rate of 50 percent.

It is important to note the differences in the three surveys. The three student surveys were administered at

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[17] Survey instrument of Got Food? Survey can be found at:
http://ucop.edu/institutional-research-academic-planning/_files/survey-instruments/Instrument_Others_Global_Food_Initiative_2015.pdf
[18] Survey instrument of UC Undergraduate Experience Survey can be found at:
http://ucop.edu/institutional-research-academic-planning/_files/survey instruments/UCUES-2016-Instrument.pdf
[19] Survey instrument of UC Graduate Student Well-Being Survey can be found at:
http://ucop.edu/institutional-research-academic-planning/_files/survey instruments/grad_wellbeing_survey_2016_Final_.pdf

different points in time, and to potentially different students with different response rates. In addition, some of the questions used to assess food and homelessness differed across the three surveys. Specifically, SFASS included the USDA Six-Item Short Form Food Security Survey Module for the measurement of food insecurity. Both UCUES and GSWBS included three of these items, two of which were the same as the items in the USDA module, one of which was slightly different in its wording and response options. These two surveys used responses to two validated questions that are also included as part of the USDA six-item module. Detailed comparisons of the food and housing insecurity questions and their response categories across the surveys can be found in Appendix 1.

Methodology

As campuses and different student subpopulations had different response rates to the surveys, weights were used to approximate equal representation of the different subpopulation. For undergraduate students, results were weighted by campus size, gender, ethnicity, and student level. For graduate students, results were weighted by campus size, student gender, ethnicity, level and major discipline. Weights were constructed to minimize the impact of non-response bias among aspects of the student population. Appendix 2 provides detailed information about weighting methodology.

Based on weighted results, survey responses were examined overall and by different student characteristics. At the undergraduate level, responses were presented by age, applicant status, ethnicity, first-generation status, foster care status, gender, family income, LGBTQ status, and years enrolled at UC. At the graduate level, responses were displayed by major discipline, ethnicity, gender, academic level, LGBTQ status, and years enrolled at UC.

Logistic regression analyses were conducted to better understand the relationship between student characteristics and food insecurity. Relational analyses were also conducted to examine the impact of basic needs on student performance.

Food and Housing Insecurity of Undergraduate Students

Major findings are organized in four sections. The first two sections present the results of undergraduate students who have experienced food insecurity and homelessness overall and by student characteristics. The third section examines students who experienced both. The last section shows academic performance of students experiencing basic needs insecurity.

Students Experiencing Food Insecurity

Table 1 lists the distribution of student responses to the two food insecurity questions. Most students selected "Never True" to both questions (56 percent), or "Sometimes true" to one question and "Sometimes true" or "Never true" to the other question (30 percent).

Table 1. Distribution of survey responses to food insecurity questions

Student Responses	Distribution	Cumulative Distribution
"Sometimes True" & "Sometimes True/Never True"	30%	30%
"Often True" & "Sometimes True/Never True"	6%	36%
"Often True" to both	8%	44%
"Never True" to both	56%	100%

In this study, students with an affirmative response to either or both of the questions were considered as experiencing food insecurity. In other words, students in all groups except the "'Never True' to both" group were considered as food insecure students (Table 1). Based on weighted results, such students represented 44 percent (n=84,752) of the undergraduate student body in spring 2016.

This section also examines food insecurity of these students by race/ethnicity, LGBTQ identification, age, foster care status, first-generation status, family income, year at UC, hours spent working and meal plan. Differences in food insecurity by these variables were statistically significant based on a logistic regression analysis (Appendix 7.1 and Appendix 8), so disaggregated data for each category were reported. Statistics from logistic regression also show that students vary largest across family income categories in terms of food insecurity, so findings by other variables crossed with family income are examined and reported for further understanding of food insecurity of subpopulations. Differences by gender were not statistically significant.

In summary,

- **Food insecurity was more prevalent among URM students (African American, Hispanic/Latino(a) and American Indian) compared to Asian or White students.** About three-fifths of African American students (62 percent) and Hispanic/Latino(a) students (57 percent), and half of American Indian (49 percent) students reported that they had experienced food insecurity, compared to about two-fifths of Asian (41 percent), international (41 percent) and White (35 percent) students (Figure 1).

- **Older students were more likely to report experiencing food insecurity when compared to younger students.** Students aged 20-21 (43 percent), 22-23 (47 percent), 24-25 (57 percent) and 26 and older (55 percent) were more likely to experience food insecurity when compared to students aged 19 and younger (36 percent).

- **Students in their fifth and sixth year (or beyond) were more likely to report experiencing food insecurity when compared to students in their first four years at UC.** Students within their fifth (58 percent) and sixth (59 percent) year were more likely to report experiencing food insecurity when compared to students within their first four years (range from 40 percent to 46 percent).

- **LGBTQ students were more likely to experience food insecurity when compared to non-LGBTQ students.** Over half of LGBTQ students have experienced food insecurity, compared to 43 percent of non-LGBTQ students. Food insecurity was highest among independent LGBTQ students (67 percent).
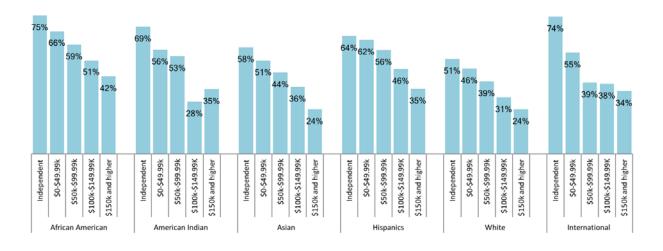

Figure 1. Percent of undergraduate students experiencing food insecurity by demographics

- **Independent [20] students were more likely to experience food insecurity.** About 60 percent of independent students experienced food insecurity compared to 43 percent of non-independent students (Figure 1). It is also important to note that the prevalence of food insecurity for independent students by ethnicity varies significantly with 75 percent of African American independent students experiencing food insecurity compared to 51 percent of White independent students (Figure 2).

- **Food insecurity was more prevalent among low socioeconomic status (SES) students, such as first-generation students or a student from a low-income family.** Overall, 56 percent of first-generation students reported that they had experienced food insecurity compared to 35 percent of those who were not first-generation (Figure 1). In addition, as Figure 2 shows, 55 percent of students from families with incomes below $50,000 have experienced food insecurity. The percentage declined while family income increased. The results also show that African American students across the income spectrum tend to be at higher risk for experiencing food insecurity when compared to students of other racial/ethnic groups. African American students that come from families with incomes of $150,000 or higher (42 percent) experienced food insecurity at similar rates to White students from families making $49,999 or less (46 percent), and Asian students from families with incomes between $50,000 and $99,999 (44 percent).

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[20] Independent student as defined for the purposes of financial aid, http://admission.universityofcalifornia.edu/paying-for-uc/glossary/index.html#dependent
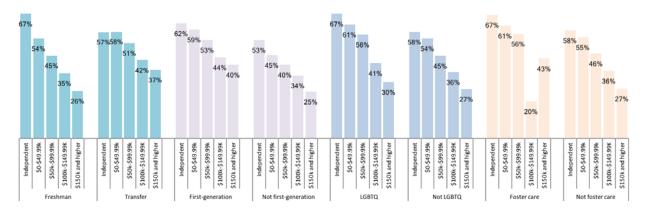
Figure 2. Percent of undergraduate students experiencing food insecurity by student characteristic and family income

- **Food insecurity was more prevalent among former foster care youth (FFY) compared to non-FFY.** Over 60 percent of undergraduate FFY students reported that they had experienced food insecurity, 17 percentage points higher than their non-FFY peers. However, it is important to note that half of foster care youth were independent students who were more likely to experience food insecurity (Appendix 4).

- **Food insecurity was more prevalent among transfer students compared to freshman students.** More transfer students (52 percent) than freshmen (42 percent) reported experiencing food insecurity (Appendix 4).

- **Both economic instability and financial management were associated with food insecurity.** Food insecurity was found to be associated with less economic stability, such as asking the financial aid department to review one's package again, increasing credit card debt and increasing work hours (Figure 3 and Appendix 8).
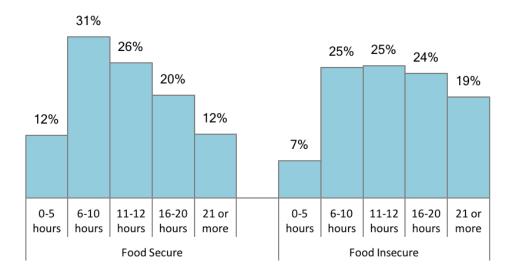
Figure 3: Relationship between food insecurity and hours spent working

Having a meal plan was found to be associated with a decrease in the likelihood that an individual would experience food insecurity (Figure 4). Living off campus was found to be associated with a decrease in the likelihood that an individual would experience food insecurity, although, it should be noted that on most campuses, the overwhelming share of students living on-campus have a meal plan (Appendix 8). Food insecurity was also found to be related to student economic behaviors. Specifically, students who reported experiencing food insecurity spent less time watching movies or enjoying other forms of entertainment. Conversely, hours spent during a week partying was related to an increase in food insecurity (Appendix 8).
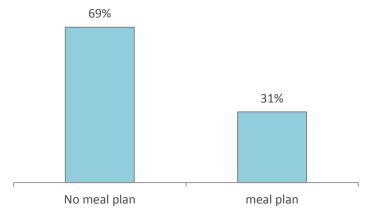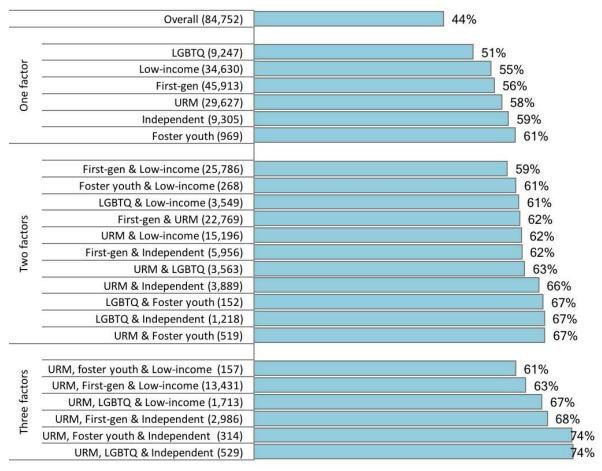

Figure 4: Relationship between food insecurity and campus meal plan

A regression analysis was used to identify risk factors for food insecurity (Appendix 7.1). Six factors were identified as risk factors and were: LGBTQ, low income, first-generation, URM, independent and foster care youth. We conducted additional analysis to examine the prevalence of food insecurity among students based on having one, two or three of these factors.

Figure 5 indicates that:

- Among the subgroups with a single factor, food insecurity was highest among foster care students.

- For subgroups with two factors, URM and foster youth, LGBTQ and independent along with LGBTQ and foster youth had a higher prevalence of food insecurity, when compared to other groups.

- Among the subgroups with three factors, food insecurity was highest for the combinations of URM, LGBTQ and independent, and URM, foster youth and independent.

Note: The number within the parenthesis indicates the estimate of the number (weighted count) in the student population subgroup who had experienced food insecurity.

Figure 5. Percent of undergraduate students experiencing food insecurity by associated factors

Students Experiencing Homelessness

As noted earlier, the university is in the early stages of research on housing insecurity. The question on homelessness (the extreme of housing insecurity) which was added to the 2017 UCUES and GSWBS was a first step to begin gathering data on this issue.

Roughly five percent of UC undergraduates reported that they experienced homelessness within the past twelve months (Appendix 9). The homelessness prevalence also varied slightly by campus.

Figure 6 presents major findings of students experiencing homelessness by demographics. Differences between various demographic groups (e.g., race/ethnicity) were mostly not statistically significant, due to the overall small prevalence of students experiencing homelessness.
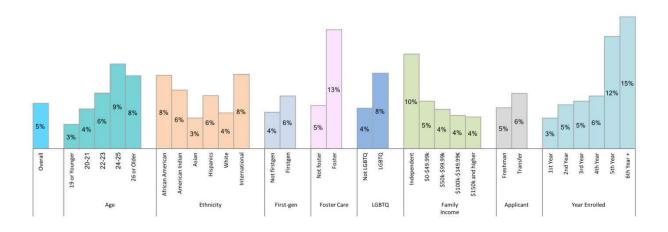

Figure 6. Percent of undergraduate students experiencing homelessness by basic demographics

In summary,

- **Homelessness was higher among URM and international students**. International students (eight percent) had a high prevalence of homelessness, largely due to housing policy during holidays and university breaks. About six percent of URM students reported having experienced homelessness, compared to about three to four percent of Asian and White students. The difference across the ethnic groups was statistically significant.

- **Homelessness was higher among LGBTQ students when compared to non-LGBTQ.** Eight percent of LGBTQ students reported having experienced homelessness, compared to four percent of non-LGBTQ students.

- **Homelessness was slightly higher among transfer students when compared to freshmen.** Six percent of transfer students reported experiencing homelessness, compared to five percent of freshmen students.

- **Homelessness was higher among low socioeconomic status (SES) students, such as first-generation students or students from low-income families.** Six percent of first-generation students reported that they had experienced homelessness compared to four percent of those who were not first-generation. Five percent of students from families with incomes below $50,000 have experienced homelessness. Homelessness was highest among independent students with 10 percent reported having experienced homelessness.

- **Homelessness was higher among former foster care youth (FFY) when compared to non-FFY students**. Thirteen percent of undergraduate FFY students reported that they had experienced homelessness, eight percentage points higher than their non-FFY peers.

Students Experiencing Both Food Insecurity and Homelessness

Overall, four percent of undergraduate students indicated that they experienced both food insecurity and homelessness. Differences between various demographic groups were not statistically significant, due to the overall small percentage of students experiencing both food insecurity and homelessness. Universitywide results for undergraduate students are provided in Appendix 11. Results indicate that:

- **URM and LGBTQ students were more likely to experience both food insecurity and homelessness when compared to other students**. About six percent of undergraduate URM students reported having experienced both food insecurity and homelessness, two percentage points higher than the overall rate. Seven percent of undergraduate LGBTQ students reported experiencing both, compared to three percent of non-LGBTQ students.

- **Students who experienced homelessness were more likely to experience food insecurity.** Among students who reported having experienced homelessness, 77 percent also reported having experienced food insecurity, compared to 42 percent who reported not having experienced homelessness (Figure 7). About nine percent of undergraduate students who reported experiencing food insecurity also reported having been homeless, four percentage points higher than the undergraduate prevalence overall.
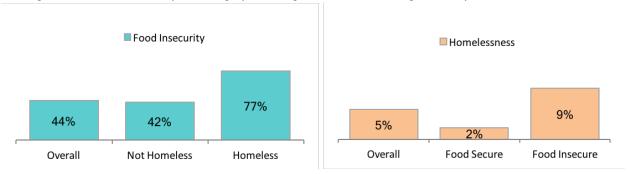

Figure 7. Comparisons of undergraduates experiencing food insecurity and homelessness

Academic Performance of Student's Experiencing Basic Needs Insecurity

Previous research conducted at the K-12 level has demonstrated that food insecurity has an effect on cognitive and emotional functioning (Chatterjee, 2017). The current study sought to apply existing knowledge about the negative effects of food insecurity on student performance to the UC undergraduate population. To test this, average cumulative UC GPA was calculated for students who reported having experienced food insecurity and/or homelessness and those who did not. Figure 8 presents the average GPAs for four respondent groups: (1) respondents who experienced both food and housing security; (2) respondents who were only food insecure but not housing insecure; (3) respondents who were housing insecure but not food insecure; and (4) respondents who were both food and housing insecure. Results show that:

- **Average UC GPA was highest for undergraduate students who did not experience food insecurity and homelessness, and lowest for students who experienced both food insecurity and homelessness**. Differences in average GPA were statistically significant between the two groups across all levels of students from freshman to senior.

- **In comparing students who experienced food insecurity alone to students who experienced homelessness alone, average UC GPA was consistently lower for students who experienced food insecurity.** Differences were statistically significant in sophomore, junior and senior years. In other words, UC GPAs significantly decreased among students experiencing food insecurity, regardless of years in college, compared to students experiencing homelessness.
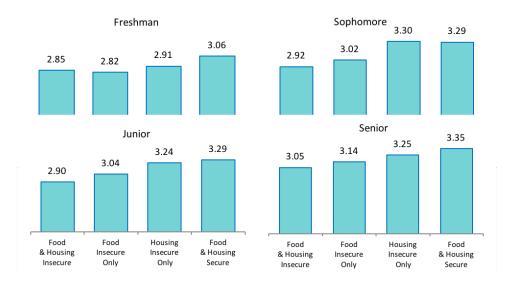

Figure 8. Average undergraduate GPA and basic needs insecurity

Findings suggest that food insecurity negatively impacts student academic achievement, which may be further compounded when students simultaneously experience homelessness.

Food and Housing Insecurity of Graduate Students

Major findings are organized in the same sections for graduate students as well. The first two sections present the results of graduate students who have experienced food insecurity and homelessness overall and by student characteristics. The third section examines students who experienced both. The last section shows academic performance of students experiencing basic needs insecurity.

Graduate Students Experiencing Food Insecurity

Based on weighted results, 26 percent of graduate students have experienced food insecurity. The food insecurity prevalence varied by campus.

Table 2 listed the distribution of survey responses to the food insecurity questions by graduate students. Twenty-one percent of students selected "Sometimes true" to one question and "Sometimes true" or "Never true" to the other question. Two percent of graduate students selected "Often true" to one question and "Sometimes true" or "Never true" to the other. Three percent of graduate students selected "Often true" to both questions which indicates a high level of food insecurity; and the rest (74 percent) selected "Never True" to both questions.

Table 2. Distribution of survey responses to food insecurity questions

Student Responses	Distribution	Cumulative Distribution
"Sometimes True" & "Sometimes True/Never True"	21%	21%
"Often True" & "Sometimes True/Never True"	2%	23%
"Often True" to both	3%	26%
"Never True" to both	74%	100%

Figure 9 presents findings of graduate students experiencing food insecurity by student demographics. Detailed unweighted and weighted results are provided in Appendix 6.
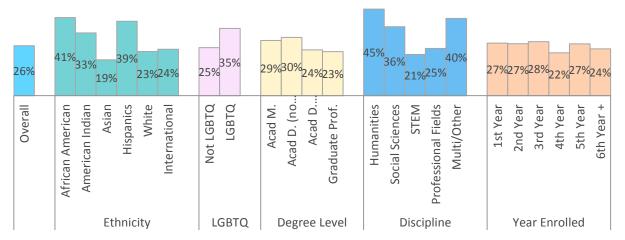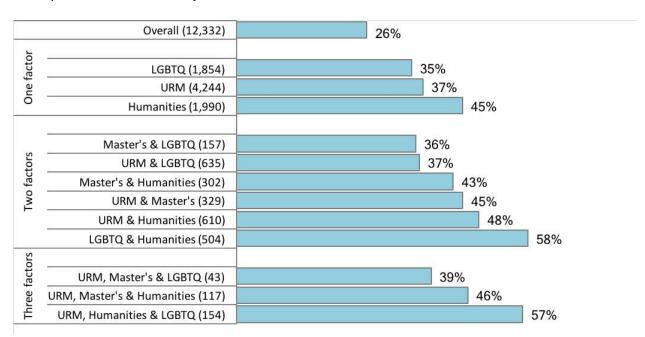

Figure 9. Percent of graduates experiencing food insecurity by student characteristic

In summary,

- **Food insecurity was less prevalent among graduate students compared to undergraduate students.** Overall, 26 percent of graduate students reported having experienced food insecurity, compared to 44 percent of undergraduate students. The difference between graduate and undergraduate students was statistically significant.

- **By ethnicity, food insecurity was more prevalent among URM students (African American, Hispanic/Latino(a) and American Indian) compared to Asian or White students.** About two-fifths of Hispanic/Latino(a) students (39 percent) and African American students (38 percent) reported having experiencing food insecurity compared to about one-fifth for international (24 percent), White (23 percent) and Asian (19 percent) students. The difference across ethnic groups was statistically significant.

- **LGBTQ students were more likely to experience food insecurity when compared to non-LGBTQ students.** About 35 percent of the LGBTQ students experienced food insecurity, compared to 25 percent of non-LGBTQ graduate students.

- **By degree level, food insecurity was high among academic master's and academic doctoral students with no candidacy.** Academic master's students (28 percent) as well as academic doctoral students who had not advanced to candidacy (30 percent) were more likely to experience food insecurity than were professional students (23 percent) and academic doctoral students who had advanced to candidacy (24 percent).

- **By discipline, food insecurity was higher among students in humanities when compared to other student disciplines.** Students in humanities (45 percent) were more likely to experience food insecurity when compared to students in social sciences (35 percent), professional fields (24 percent) and STEM (21 percent). The difference across disciplines was statistically significant.

A regression analysis was conducted to determine risk factors for food insecurity among the graduate student population. Based on regression results (Appendix 7.2), three risk factors were identified (Humanities, URM and LGBTQ). We conducted similar analysis as with UCUES to estimate the prevalence of experiencing food insecurity based on having one, two or three of these factors. Figure 10 indicates that:

- **Among the subgroups with a single factor, food insecurity was high among students in humanities, URM or LGBTQ students.** Among those three factors, students in the humanities were more likely to experience food insecurity than were other students.

- **Among the subgroups with two factors, food insecurity was highest among students in the humanities and LGBTQ students.** Overall, combinations with humanities were more likely to be associated with food insecurity.

- **Among the subgroups with three factors, food insecurity was highest among students in humanities, URM and LGBTQ students.** Over half of the URM and LGBTQ students in humanities had experienced food insecurity.

	Percent
Overall (12,332)	26%
One factor	
LGBTQ (1,854)	35%
URM (4,244)	37%
Humanities (1,990)	45%
Two factors	
Master's & LGBTQ (157)	36%
URM & LGBTQ (635)	37%
Master's & Humanities (302)	43%
URM & Master's (329)	45%
URM & Humanities (610)	48%
LGBTQ & Humanities (504)	58%
Three factors	
URM, Master's & LGBTQ (43)	39%
URM, Master's & Humanities (117)	46%
URM, Humanities & LGBTQ (154)	57%

Note: the number within the parenthesis indicates the estimate of the number (weighted count) in the student population subgroup who had experienced food insecurity.

Figure 10. Percent of graduate students experiencing food insecurity by associated factors

Graduate Students Experiencing Homelessness

Roughly 5 percent of UC graduate students reported that they experienced homelessness within the past 12 months (Appendix 10). The homelessness prevalence also varied slightly by campus. Figure 11 presents major findings of students having experienced homelessness by demographics. Differences between various demographic groups (e.g., race/ethnicity) were mostly not statistically significant, due to the overall small prevalence of students experiencing homelessness.
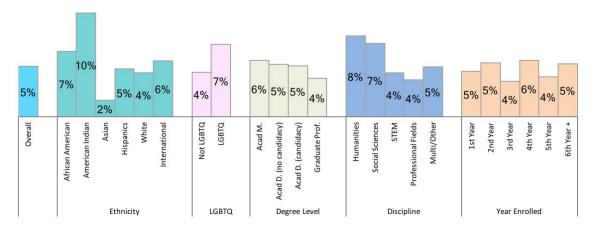

Figure 11. Percent of graduate students having experienced homelessness by basic demographics

In summary,

- **Homelessness prevalence was similar among graduate and undergraduate students**. Overall, five percent of both graduate and undergraduate students reported having experienced homelessness.

- **Homelessness was higher among URM and international students**. International students (eight percent) had a high prevalence of homelessness, largely due to housing policy during holidays and university breaks. About six to ten percent of URM students reported having experienced homelessness, compared to about two to four percent of Asian and White students. The difference across the ethnic groups was statistically significant.

- **Homelessness was higher among LGBTQ students when compared to non-LGBTQ.** Seven percent of graduate LGBTQ students reported having experienced homelessness compared to four percent of non-LGBTQ students.

- **By degree level, homelessness was highest among academic master's students and lowest among graduate professional degree students.** Six percent of academic master's students reported having experienced homelessness, two percentage points higher than professional degree students.

- **By discipline, homelessness was highest among students in humanities, followed by students in social sciences**. As high as eight percent of students in humanities reported experiencing homelessness, four percentage points higher than students in professional fields and students in STEM majors. Seven percent of students in social sciences reported experienced homelessness. The difference across disciplines was statistically significant.

Graduate Students Experiencing Both Food Insecurity and Homelessness

Overall, three percent of graduate students indicated that they have experienced both food insecurity and homelessness. Differences between various demographic groups were not statistically significant, due to the overall small percentage of students experiencing both food insecurity and homelessness. Universitywide results of graduate students experiencing both food insecurity and homelessness are provided in Appendix 11.

In summary,

- **URM and LGBTQ students were more likely to experience both food insecurity and homelessness when compared to other students.** About five percent of graduate URM students reported having experienced food insecurity and homelessness, two percentage points higher than the overall rates. Six percent of graduate LGBTQ students reported experiencing both, compared to three percent of non-LGBTQ students.

- **Food insecurity and homelessness were higher among students in humanities.** Six percent of students in humanities reported having experienced both food insecurity and homelessness compared to three percent of all students.

- **Students who experienced homelessness were more likely to experience food insecurity than students who did not.** Among students who reported having experienced homelessness, 60 percent also reported having experienced food insecurity, compared to 24 percent who reported not having experienced homelessness (Figure 12), a difference of 36 percentage points. About 11 percent of graduate students who reported experiencing food insecurity also reported experiencing homelessness, eight percentage points higher than the graduate students who are food secure.
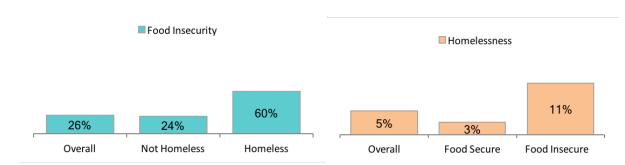

Figure 12. Comparisons of graduate students experiencing food insecurity and homelessness

Academic Performance of Students Experiencing Basic Needs Insecurity

At the graduate level, we used student responses to a survey question in the Graduate Well-Being Survey as a measure of graduate student academic performance. The questions asked students about their agreement with the statement "I'm on track to complete my degree program on time." Figure 13 compares the percentage of students who responded in the "agree" categories (i.e., strongly agree, agree and slightly agree) of the statement. Results showed that:

- **Students who reported experiencing both food insecurity and homelessness were less likely to be on track in graduate studies when compared to their food and housing secure counterparts.** Specifically, the prevalence of students experiencing housing and food insecurity was 12 percent higher than students who are food and housing secure.

- **Students only experiencing homelessness were less likely to be on track when compared to students only experiencing food insecurity.** Specifically, the on-track gap between housing insecure students and food insecure students was five percentage points.

I'm on track to complete my degree program on time.

70%	77%	72%	82%
Food & Housing Insecure	Food Insecure Only	Housing Insecure Only	Food & Housing Secure

Figure 13. Graduate student performance and basic needs insecurity

Findings suggest that not meeting basic needs affected student academic performance at both undergraduate and graduate levels. Among undergraduates, students who reported that their basic needs were not met had lower cumulative GPAs on average when compared to students who had their basic needs met. At the graduate level, findings suggested that basic needs not being met may impact students' ability to complete their degrees on time. Moreover, experiencing food insecurity may have a deleterious impact on student well-being (both mental and physical) among both undergraduate and graduate levels.

Survey Strengths and Limitations

When studying food insecurity in large populations, surveys are the most effective way of assessing the prevalence of the problem. The UC Undergraduate Experience Survey (UCUES) is a census survey and as such, every member of UC's undergraduate population is asked to complete the survey. The large sample size and good response rate (33 percent) of the UCUES survey allows researchers to produce more accurate estimates of food insecurity within the undergraduate student population. The Graduate Student Well-Being Survey (GSWBS), a large-scale sample survey, with a 50 percent response rate, also produced a robust enough sample to create accurate estimates about the prevalence of food insecurity within UC's graduate student population. To adjust for nonresponse bias, meaning differences between the population of interest and those who responded to the survey, weights were constructed for both UCUES and GSWBS. In addition to sample size and sample representativeness, the two food insecurity items used in both surveys had strong internal and external reliability. While the food insecurity items were administered at different time points, among the various surveys, the results were consistent (see Appendix 2). Lastly, within each survey, the two food insecurity items had high internal consistency.

However, the current study also has several limitations. As only the two item food insecurity scale was used, this study was not able to make a distinction between different levels of food and housing insecurity (e.g., very low food insecurity). Furthermore, as both UCUES and GSWBS were large-scale surveys that covered many aspects of student life, it is possible that the length of the survey and the placement of the food insecurity items could have had an effect on the results. Specifically, research has shown that when surveys are long (UCUES for example has more than 100 items), people tend to respond faster and more uniformly to items at the end of the survey when compared to items at the beginning of the survey. Thirdly, the results, even the weighted results, may not perfectly reflect the real situation of students' basic needs due to differences in response rates among different groups. Lastly, the homelessness question included in both surveys has not been fully validated, so the result should be interpreted with caution.

Moving Forward: Implementing a Basic Needs Master Plan

The University of California is committed to tackling this critical issue and produced this report to provide analysis on the basic needs challenges facing our students. All of UC's 10 campuses have provided robust outreach, education and services to their students over the past three years as part of the GFI Food Access Security and Basic Needs project. Students on some campuses have also directly demonstrated their commitment to alleviating student food insecurity for their fellow students by initiating and adopting student-approved fees used to support food pantries and other efforts.

Based on the survey findings shared in this report, campuses will now be able to:

- Prioritize resources and efforts for the most vulnerable student populations — URM, LGBTQ, 5th and 6th year students, etc.

- Utilize researched-based evaluations to determine if existing efforts are working and how these efforts can be better targeted to reach student populations that are more vulnerable to food insecurity.

- Improve how we ask about housing insecurity, not just homelessness.

- Strengthen and deepen the existing partnership with the California Department of Social Services to increase student access and enrollment in CalFresh. This partnership has already resulted in meaningful engagement that is benefiting college students across California by troubleshooting barriers to student participation in the program.

- Host on-campus CalFresh sign-up sessions for identified populations of students who are more likely to need and qualify for food assistance.

- Increase education around food literacy and financial literacy which were two areas that have been consistently mentioned in the campuses' qualitative research as requiring attention.

Basic Needs Master Plan

The FAS-BN co-chairs and campus working groups are working on a master plan to build off the momentum that began in 2014 with the launch of the GFI. The focus of this plan is to assess sustainable, action-oriented efforts that can continue building on the foundation and advances made in addressing student basic needs established across the university. Evaluation tools and long-term sustainable programs and activities will be built into this master plan.

Collectively the campuses have been working under the guidance of the FAS-BN co-chairs to create the master plan that will include the following key areas of focus:

- Vision/Goal
  - All students have the information, resources and services needed to have a basic needs secure UC experience.

- Infrastructure and staffing:

- o For those campuses that have not already done so, they will identify and establish a Basic Needs Center/Hub, where existing staff and services will be coordinated for greater impact and efficiency. These "centers" may reflect both physical and virtual elements as well as coordinate decentralized services to meet needs across the campus landscape.
  - o Campuses will identify and confirm adequate staffing to coordinate and facilitate campus basic needs efforts.
  - o Campuses will integrate both undergraduate and graduate students through academic internships as well as compensated positions to ensure a participatory approach to student engagement in improving student basic needs.

- Funding
  - o Campuses will identify funding — federal, state and institutional — and utilize fundraising opportunities to sustain the resources needed for basic needs programming, services, facilities and staffing.

- Institutionalizing a basic needs model
  - o At the systemwide and campus level, update pre-undergraduate and pre-graduate student informational materials, outreach presentations and programming to include basic needs. Outreach efforts will go beyond teaching prospective students about application logistics and how to be competitive and teach students how to better prepare and transition into their respective programs and manage their basic needs.
  - o At the systemwide and campus level, integrate basic needs information and materials for new undergraduate and graduate student orientations.
  - o Campuses will provide early basic needs screening of incoming students. Results will generate a personalized basic needs resource section in their student portal.
  - o Proactive targeted outreach to populations with higher insecurity rates (as identified by the UCUES and GSWBS survey results). Prioritizing resources and efforts for the most vulnerable student populations.
  - o Host both on-campus and web-based CalFresh application assistance sessions for eligible student populations. There are an estimated 5,000 to 10,000 potentially eligible students per campus.
  - o Coordinate and provide trainings and workshops that address financial literacy from personal budgeting to understanding college aid packages, healthy and culturally relevant meal provisioning and preparation, housing and rental planning, and self-advocacy. Campus qualitative research has identified these areas as requiring training.
  - o Enhance emergency resources, such as food pantries and donated meal swipes (via Swipe Out Hunger programs or similar) to better serve targeted populations that are not eligible for Financial Aid or CalFresh.
  - o Establish a holistic crisis resolution protocol that will go beyond providing transactional resources to chronically food insecure and/or homeless students. Protocol will include additional health, wellness, academic and professional development support.

- Research and evaluation
  - o At the systemwide level and campus level, utilize researched-based mixed-method evaluations to determine if existing efforts are working and how these efforts can be better targeted to reach more vulnerable student populations.
  - o At the systemwide level, ensure institutional student experience survey tools implemented through Institutional Research & Academic Planning (IRAP) include sufficient and validated question sets to measure student basic needs.
  - o Ensure UC data infrastructure integrates both campus and systemwide levels in order to capture student basic needs data.

- UC partnerships
  - Strengthen and deepen the existing partnership with the California Department of Social Services to increase student access and enrollment in CalFresh. This partnership has already resulted in meaningful engagement that is benefiting college students across California by clarifying eligibility requirements, troubleshooting barriers to student participation and improving communication at state/local levels.
  - Strengthen and deepen the existing California higher education basic needs partnership to improve research and evaluation collaborations, local, state and federal policy engagement, and coordination of local to state programming and services.
  - Strengthen and deepen intersegmental partnerships for shared knowledge and best practices information such as defining student basic needs and validating questions that capture this concept to better identify students at risk for food and housing insecurity, and therefore address/close the gap in student basic needs.

Worth noting is another systemwide program that came online under the GFI in 2017 as part of the initiative's ongoing work: the Healthy Campus Network (HCN). Emanating from the chancellor's office on each campus the HCN was launched in January 2017. The HCN objective is "to make UC the healthiest place to work, learn and live" by creating a healthy campus culture and environment through campus and systemwide collaboration on policies, programs, services and initiatives addressing all dimensions of well-being for students, faculty and staff. The efforts of the FAS-BN workgroups are part of the campus health and well-being assets. We hope to continue to promote collaborative systemwide programs that will foster positive synergies among students, staff, faculty and administrators devoted to health and wellness-related activities and a successful UC community.

Dealing with the challenges of basic needs is a systemic issue that requires a collaborative, dedicated response and is a long-term, resource-driven enterprise. While the University of California does not control federal and state funding for public higher education and the cost of living where our universities are situated, we recognize the need to develop solutions that ensure a holistic approach to the basic needs of our student populations. Significant research and learning, infrastructure development and services to students in need have made progress in addressing the basic needs issue on our campuses. However, there is still work ahead that will also rely on our partnerships with our state, federal and intersegmental public higher education partners. The University of California is fully committed and embraces the responsibility of ensuring that all students regardless of student characteristics or socioeconomic standing are supported equitably and have access to available resources to ensure a healthy and safe college experience for future success.

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Appendices

Appendix 1. Comparisons of Food and Homeless Items across Surveys

	UCUES	GSWBS	SFASS
Food Insecurity Item 1	How frequently have you engaged in the following behaviors in the past year? — Skipped or cut the size of meals because there wasn't enough money for food.	During the past year, how frequently have you skipped or cut the size of meals because there wasn't enough money for food?	In the last 12 months, did you ever cut the size of your meals or skip meals because there wasn't enough money for food?
Response categories	❍ Never ❍ Rarely ❍ Occasionally ❍ Somewhat often ❍ Often ❍ Very often	❍ Never ❍ Rarely ❍ Somewhat often ❍ Often ❍ Very often	❍ Yes, almost every month ❍ Yes, some months, but not every month ❍ Yes, only 1 or 2 months ❍ No
Food Insecurity Item 2	For the following statements, please say whether the statement was often true, sometimes true, or never true for you in the last 12 months. — I was worried whether my food would run out before I got money to buy more.	For the following statements, please say whether the statement was often true, sometimes true, or never true for you in the past year. — I was worried whether my food would run out before I got money to buy more.	For the following statements, please say whether the statement was often true, sometimes true, or never true for you in the past year. — I was worried whether my food would run out before I got money to buy more.
Response categories	❍ Never true ❍ Sometimes true ❍ Often true	❍ Never true ❍ Sometimes true ❍ Often true	❍ Never true ❍ Sometimes true ❍ Often true
Food Insecurity Item 3	For the following statements, please say whether the statement was often true, sometimes true, or never true for you in the last 12 months. — The food that I bought just didn't last, and I didn't have money to get more.	For the following statements, please say whether the statement was often true, sometimes true, or never true for you in the past year. — The food that I bought just didn't last, and I didn't have money to get more.	For the following statements, please say whether the statement was often true, sometimes true, or never true for you in the last 12 months. — The food that I bought just didn't last, and I didn't have money to get more.
Response categories	❍ Never true ❍ Sometimes true ❍ Often true	❍ Never true ❍ Sometimes true ❍ Often true	❍ Never true ❍ Sometimes true ❍ Often true

Food Insecurity Item 4	N/A	N/A	For the following statements, please say whether the statement was often true, sometimes true, or never true for you in the last 12 months. — I couldn't afford to eat balanced meals.
Response categories	N/A	N/A	❍ Never true ❍ Sometimes true ❍ Often true
Food Insecurity Item 5	N/A	N/A	In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food?
Response categories	N/A	N/A	❍ No ❍ Yes
Food Insecurity Item 6	N/A	N/A	In the last 12 months, were you ever hungry but didn't eat because there wasn't enough money for food?
Response categories	N/A	N/A	❍ No ❍ Yes
Homelessness Question	Since attending UC ${e://Field/CAMPUS}, have you ever been homeless for any of the following lengths of time (check all that apply)? (Homeless means not having stable or reliable housing, e.g., living on the street, in vehicles, motels, camping grounds, single-occupancy facilities, or couch surfing in other people's homes for temporary sleeping arrangements).	N/A	
Response categories	❑ No ❑ Yes, during Fall-Spring academic year ❑ Yes, during Summer when taking classes ❑ Yes, during Summer when not taking classes ❑ Yes, during Winter break	N/A	

Appendix 2. Methodology

2.1 Reliability of Food Insecurity Questions

I was worried whether my food would run out before I got money to buy more.

This item (above) was the same across the three surveys. For undergraduate respondents (Table 1), SFASS data showed that 37 percent reported that it was "sometimes true" or "often true" that they were worried whether their food would run out before they got money to buy more, compared to 42 percent reported by UCUES respondents.

For graduate respondents (Table 2), SFASS data showed that 19 percent reported that it was "sometimes true" or "often true" that they were worried whether their food would run out before they got money to buy more, compared to 25 percent reported by GSWBS respondents.

A chi-square test of association was performed and concluded that the responses to this item were not significantly different between SFASS and UCUES, or SFASS and GSWBS. The Cramér's Vs (Cramér, 1946) were all below 0.15, which implied that the difference between the response distributions was not statistically significant. In other words, the "food ran out" question had good external reliability. Students responded to the question very similarly in the three surveys.

Table 1. Undergraduate Student Responses (Food ran out)				
	Undergraduate			
	SFASS		UCUES	
Never true	4,007	63%	112,498	58%
Sometimes true	1,602	25%	56,885	30%
Often true	791	12%	23,775	12%
Total	6,400	100%	193,158	100%

Table 2. Graduate Student Responses (Food ran out)				
	Graduate			
	SFASS		GSWBS	
Never true	1,889	81%	35,378	75%
Sometimes true	348	15%	9,686	20%
Often true	96	4%	2,152	5%
Total	2,931	100%	47,126	100%

Note: Table 1 and 2 provide weighted student population responded in each category.

The food that I bought just didn't last, and I didn't have money to get more.

This item was also the same across all three surveys. Table 3 showed that 42 percent of undergraduate respondents to SFASS reported that it was "sometimes true" or "often true" that the food they bought did not last and they did not have money to get more, compared to 33 percent of UCUES respondents.

For graduate respondents (Table 4), SFASS data showed that 20 percent reported that it was "sometimes true" or "often true" that the food they bought did not last and they did not have money to get more, compared to 16 percent reported by the respondents of GSWBS.

The results based on a chi-square test indicated that there was no significant difference between responses from SFASS and UCUES, or between SFASS and GSWBS. The Cramér's Vs (Cramér, 1946) were all below 0.15, which implied that the difference between the response distributions was not statistically significant. In

other words, the "food didn't last" question had good external reliability. Students responded to the question very similarly in the three surveys.

Table 3. Undergraduate Student Responses (Food didn't last)	Undergraduate			
	SFASS		UCUES	
Never true	3,737	58%	129,678	67%
Sometimes true	2,078	32%	45,880	24%
Often true	606	10%	17,350	9%
Total	6,421	100%	192,908	100%

Table 4. Undergraduate Student Responses (Food didn't last)	Graduate			
	SFASS		GSWBS	
Never true	1,870	80%	39,388	84%
Sometimes true	388	17%	6,143	13%
Often true	82	3%	1,573	3%
Total	2,940	100%	47,104	100%

Note: Data presented in Table 3 and 4 is weighted counts for.

A Cronbach's alpha analysis (Cronbach, 1951; McDonald, 1999)was conducted to examine the internal reliability of the two items. The alpha values were all above 0.8 indicating high internal reliability of the items in the surveys. Between SFASS and UCUES for the undergraduate students, UCUES had higher internal reliability (α=0.88) than SFASS (α=0.83). For the graduate students, GSWBS had higher internal reliability (α=0.86) than SFASS (α=0.80). Among the three surveys, UCUES had the highest internal reliability.

2.2 Weighting Methodology

When conducting a survey, having a representative sample of the target population is important when seeking to generalize the results. However, in many cases, different subpopulations are likely to be overrepresented or underrepresented in the respondent population. For example, assume campus A has a response rate of 40 percent, while campus B has a response rate of only 25 percent. As a result, students at campus A are more represented than are students at campus B. This introduces bias into systemwide estimates.

When working with census surveys, or surveys which are sent to the entire populations (e.g., the U.S. Census, UCUES), post-stratification weights are constructed to adjust for response bias due to unequal representativeness of the respondents after data collection. Below is an example of how to compute a post-stratification weight based on the campus size and gender.

Subpopulation	Population	Respondent	Post-stratification weight
Campus A female	100	45	100/45=2.22
Campus A male	100	55	100/55=1.82
Campus B female	200	45	200/45=4.44
Campus B male	200	55	200/45=3.64

Appendix 3. Undergraduate Students Experiencing Food Insecurity, Systemwide

	Unweighted			Weighted		
	# Resp	# Insecure	% Insecure	# Resp	# Insecure	% Insecure
By Age						
19 or Younger	13,844	5,041	36%	45,357	16,379	36%
20-21	22,804	10,075	44%	77,352	33,618	43%
22-23	13,682	6,537	48%	47,481	22,320	47%
24-25	1,762	1,009	57%	6,395	3,660	57%
26 or Older	3,770	2,088	55%	13,508	7,421	55%
Overall	55,862	24,750	44%	190,093	83,397	44%
By Applicant Status						
Freshman	44,536	18,835	42%	149,851	62,506	42%
Transfer	11,115	5,817	52%	39,597	20,590	52%
Others*	211	98	46%	645	301	47%
Overall	55,862	24,750	44%	190,093	83,397	44%
By Ethnicity						
African American	1,973	1,223	62%	7,041	4,340	62%
American Indian	397	195	49%	1,137	555	49%
Asian	20,310	8,353	41%	67,430	27,638	41%
Hispanics	13,038	7,508	58%	42,733	24,371	57%
White	14,031	5,039	36%	45,634	16,090	35%
International	4,482	1,852	41%	21,052	8,642	41%
Other/Unknown	1,631	580	36%	5,067	1,761	35%
Overall	55,862	24,750	44%	190,093	83,397	44%
By First-generation						
Not First-generation	29,935	10,402	35%	103,874	35,877	35%
First-generation	24,447	13,679	56%	81,093	45,219	56%
Unknown	1,480	669	45%	5,127	2,301	45%
Overall	55,862	24,750	44%	190,093	83,397	44%
By Foster Care Status						
Not Foster Care	55,389	24,462	44%	188,516	82,441	44%
Foster Care	473	288	61%	1,577	956	61%
Overall	55,862	24,750	44%	190,093	83,397	44%
By Gender						
Female	34,156	15,314	45%	101,646	45,136	44%
Male	21,524	9,355	43%	88,077	38,105	43%
Unknown	182	81	45%	370	156	42%
Overall	55,862	24,750	44%	190,093	83,397	44%
By Income						
Independent	4,527	2,667	59%	15,619	9,168	59%
0-49,999	18,889	10,373	55%	62,486	34,102	55%
50,000-99,999	11,763	5,460	46%	39,960	18,304	46%
100,000-149,999	7,317	2,671	37%	25,235	9,176	36%
150,000 and higher	13,264	3,538	27%	46,520	12,538	27%
Unknown	102	41	40%	273	109	40%
Overall	55,862	24,750	44%	190,093	83,397	44%

	Unweighted			Weighted		
	# Resp	# Insecure	% Insecure	# Resp	# Insecure	% Insecure
By LGBTQ Status						
Not LGBTQ	50,586	22,040	44%	172,182	74,292	43%
LGBTQ	5,276	2,710	51%	17,911	9,105	51%
Overall	55,862	24,750	44%	190,093	83,397	44%
By Year Enrolled						
1st Year	18,894	7,626	40%	63,767	25,729	40%
2nd Year	15,642	7,164	46%	53,442	24,131	45%
3rd Year	10,962	5,080	46%	37,707	17,215	46%
4th Year	8,607	3,857	45%	29,060	12,767	44%
5th Year	1,157	678	59%	4,063	2,353	58%
6th Year +	600	345	58%	2,053	1,202	59%
Overall	55,862	24,750	44%	190,093	83,397	44%

Notes: *"Others" refers to "non-degree" students. 1) Weighted and unweighted counts include students who responded to food insecurity questions. 2) LGBTQ status is collected from the survey.

Appendix 4. Percent of Undergraduate Students by Student Characteristics and Family Income

Characteristics	Family Income	Count	Percentage
Freshman	Independent	2,514	1%
	$0-$49.99k	60,165	35%
	$50k-$99.99k	38,699	22%
	$100k-$149.99K	24,476	14%
	$150k and higher	47,434	27%
Transfer	Independent	14,671	33%
	$0-$49.99k	11,592	26%
	$50k-$99.99k	7,441	17%
	$100k-$149.99K	4,627	10%
	$150k and higher	6,666	15%
First-generation	Independent	10,579	11%
	$0-$49.99k	49,845	53%
	$50k-$99.99k	20,981	22%
	$100k-$149.99K	6,653	7%
	$150k and higher	5,420	6%
Not first-generation	Independent	5,695	5%
	$0-$49.99k	20,398	17%
	$50k-$99.99k	24,229	20%
	$100k-$149.99K	21,788	18%
	$150k and higher	47,621	40%
LGBTQ	Independent	1,807	10%
	$0-$49.99k	5,805	32%
	$50k-$99.99k	3,981	22%
	$100k-$149.99K	2,403	13%
	$150k and higher	4,255	23%
Not LGBTQ	Independent	15,628	8%
	$0-$49.99k	66,112	33%
	$50k-$99.99k	42,235	21%
	$100k-$149.99K	26,765	13%
	$150k and higher	49,884	25%
Foster care	Independent	932	51%
	$0-$49.99k	506	28%
	$50k-$99.99k	177	10%
	$100k-$149.99K	75	4%
	$150k and higher	134	7%
Not foster care	Independent	16,503	8%
	$0-$49.99k	71,411	33%
	$50k-$99.99k	46,039	21%
	$100k-$149.99K	29,093	13%
	$150k and higher	54,006	25%

Appendix 5. Percent of Undergraduate Students by Race/Ethnicity and Family Income

Ethnicity	Family Income	Count	Percentage
African American	Independent	1,233	15%
	$0-$49.99k	3,323	40%
	$50k-$99.99k	1,842	22%
	$100k-$149.99K	836	10%
	$150k and higher	992	12%
American Indian	Independent	252	19%
	$0-$49.99k	303	23%
	$50k-$99.99k	252	19%
	$100k-$149.99K	205	16%
	$150k and higher	288	22%
Asian	Independent	3,835	5%
	$0-$49.99k	27,231	36%
	$50k-$99.99k	15,730	21%
	$100k-$149.99K	11,136	15%
	$150k and higher	18,586	24%
Hispanics	Independent	4,992	10%
	$0-$49.99k	24,479	50%
	$50k-$99.99k	11,757	24%
	$100k-$149.99K	3,790	8%
	$150k and higher	4,233	9%
White	Independent	5,968	12%
	$0-$49.99k	9,868	19%
	$50k-$99.99k	9,425	18%
	$100k-$149.99K	8,014	15%
	$150k and higher	18,518	36%
International	Independent	465	2%
	$0-$49.99k	5,451	21%
	$50k-$99.99k	6,166	24%
	$100k-$149.99K	4,286	16%
	$150k and higher	9,639	37%

Appendix 6. Graduate Respondents Experiencing Food Insecurity, Systemwide

	Unweighted			Weighted		
	# Resp	#Insecure	%Insecure	# Resp	#Insecure	%Insecure
By Discipline						
Humanities	780	332	43%	4,366	1,967	45%
Social Sciences	812	290	36%	4,771	1,712	36%
STEM	2,014	451	22%	20,151	4,321	21%
Professional Fields	1,547	391	25%	16,876	4,149	25%
Multi/Other	155	59	38%	399	160	40%
Overall	5,308	1,523	29%	46,564	12,309	26%
By Ethnicity						
African American	269	118	44%	4,116	1,673	41%
American Indian	81	31	38%	2,409	787	33%
Asian	979	253	26%	6,627	1,240	19%
Hispanics	707	288	41%	5,007	1,940	39%
White	1,682	411	24%	15,003	3,456	23%
International	1,245	334	27%	10,637	2,570	24%
Other/Unknown	345	88	26%	2,764	644	23%
Overall	5,308	1,523	29%	46,564	12,309	26%
By Gender						
Female	2,879	853	30%	22,086	6,412	29%
Male	2,389	655	27%	24,434	5,879	24%
Unknown	40	15	38%	44	19	42%
Overall	5,308	1,523	29%	46,564	12,309	26%
By Level						
Academic master's	625	206	33%	5,697	1,637	29%
Academic doctoral (no candidacy)	1,978	628	32%	16,485	4,999	30%
Academic doctoral (candidacy)	1,326	361	27%	8,620	2,055	24%
Graduate professional	1,321	310	23%	15,698	3,601	23%
Other/Unknown	58	18	31%	64	18	28%
Overall	5,308	1,523	29%	46,564	12,309	26%
By LGBTQ Status						
Not LGBTQ	4,623	1,254	27%	40,837	10,277	25%
LGBTQ	623	243	39%	5,254	1,841	35%
Unknown	62	26	42%	473	191	40%
Overall	5,308	1,523	29%	46,564	12,309	26%
By Year Enrolled						
1st Year	1,542	447	29%	15,737	4,306	27%
2nd Year	1,105	315	29%	10,285	2,781	27%
3rd Year	652	183	28%	5,464	1,536	28%
4th Year	582	149	26%	4,691	1,047	22%
5th Year	577	166	29%	4,095	1,104	27%
6th Year +	818	253	31%	6,260	1,525	24%
Unknown	32	10	31%	32	10	31%
Overall	5,308	1,523	29%	46,564	12,309	26%

Notes: *"Others" refers to "non-degree" students. 1) Weighted and unweighted counts include students who responded to food insecurity questions. 2) LGBTQ status is collected from the survey.

Appendix 7.1. Logistic Regression of Food Insecurity for Undergraduate Students

Student Factors	Standardized Coefficients	Odds	95% CI		Reference Group
African American	0.26***	2.30	2.18	2.43	White
American Indian	0.04	1.47	1.30	1.67	
Asian	-0.12***	1.15	1.12	1.19	
Hispanic	0.13***	1.64	1.59	1.69	
International	-0.01	1.32	1.27	1.37	
Other	-.15***	0.98	0.92	1.05	
2nd Year	-0.11***	1.06	1.02	1.09	1st Year
3rd Year	-0.04**	1.15	1.10	1.20	
4th Year	-0.09***	1.06	1.00	1.12	
5th Year	0.12***	1.54	1.42	1.68	
6th Year +	0.15***	1.64	1.43	1.87	
Age 19-	-0.12***	0.95	0.86	1.04	26 or older
Age 20-21	0.04***	1.25	1.16	1.36	
Age 22-23	0.06***	1.31	1.22	1.42	
Age 24-25	0.07***	1.45	1.34	1.58	
Transfer	0.08***	1.21	1.15	1.27	Freshman
First-generation	0.21***	1.51	1.48	1.54	Not first-generation
LGBTQ	0.09**	1.34	1.30	1.39	Not LGBTQ
Female	0.01	1.00	0.98	1.02	Male
Foster Care	0.01*	1.14	1.02	1.27	Not Foster Care
Independent	0.26***	2.79	2.60	2.99	150,000 or higher
0-49,999	0.20***	2.29	2.22	2.36	
50,000-99,999	0.03***	1.83	1.78	1.89	
100,000-149,999	-0.13***	1.42	1.38	1.47	

Note: *$p<.05$ **$p<.01$ ***$p<.001$ Analysis is weighted

Appendix 7.2. Logistic Regression of Food Insecurity for Graduate Students

Student Factors	Standardized Coefficients	Odds	95% CI		Reference=1
African American	0.55***	2.41	2.24	2.60	White
American Indian	0.16***	1.65	1.50	1.82	
Asian	-0.47***	0.89	0.83	0.96	
Hispanic	0.43***	2.10	1.96	2.26	
International	-0.20***	1.17	1.10	1.25	
Other	-0.20***	1.11	1.00	1.23	
2nd Year	0.06*	0.92	0.87	0.98	1st Year
3rd Year	0.08*	0.94	0.88	1.01	
4th Year	-0.20***	0.72	0.66	0.79	
5th Year	0.07*	0.94	0.85	1.04	
6th+ Year	-0.15***	0.77	0.71	0.83	
LGBTQ	0.18***	1.40	1.31	1.49	Not LGBTQ
Female	0.11***	1.14	1.09	1.19	Male
Multi/Other	0.32***	1.80	1.43	2.27	Professional Fields
Humanities	0.42***	1.85	1.68	2.03	
STEM	-0.89***	0.66	0.61	0.72	
Social Sciences	0.01	1.22	1.11	1.35	
Academic master's	0.25***	1.86	1.68	2.06	Graduate Professional
Academic doctoral (no candidacy)	0.21***	1.70	1.56	1.85	
Academic doctoral (candidacy)	-0.02	1.43	1.29	1.60	

Note: *$p<.05$ **$p<.01$ ***$p<.001$ Analysis is weighted.

Appendix 8. Relationship between Measures of Economic Instability and Food Insecurity[21]

Student Factors	Standardized Coefficients	Odds	95% CI	
Increased Credit Card Debt	0.42***	2.51	2.28	2.77
Financial Aid Review	0.32***	2.01	1.83	2.21
Live Off Campus	-0.08*	0.84	0.73	0.97
Meal Plan	-0.08*	0.84	0.71	0.98
Hours Spent Working	0.13***	1.11	1.07	1.15
Time Spent on Entertainment	-0.08**	0.95	0.93	0.98
Time Spent Partying	0.30***	1.33	1.27	1.39

Note: *p<.05   **p<.01   ***p<.001 Analysis is weighted

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[21] While not shown in the model, the analysis controlled for year enrolled, first-generation status, respondent age, gender, respondent race and campus.

Appendix 9. Undergraduate Students Experiencing Homelessness, Systemwide

	Unweighted			Weighted		
	# Resp	# Insecure	% Insecure	# Resp	# Insecure	% Insecure
By Age						
19 or Younger	13,672	332	2%	45,379	1,221	3%
20-21	22,514	955	4%	77,344	3,400	4%
22-23	13,508	823	6%	47,463	2,920	6%
24-25	1,739	158	9%	6,395	599	9%
26 or Older	3,724	303	8%	13,511	1,091	8%
Overall	55,157	2,571	5%	190,093	9,230	5%
By Applicant Status						
Freshman	43,988	1,893	4%	149,890	6,765	5%
Transfer	10,964	660	6%	39,559	2,415	6%
Others*	205	18	9%	644	50	8%
Overall	55,157	2,571	5%	190,093	9,230	5%
By Ethnicity						
African American	1,961	155	8%	7,041	570	8%
American Indian	393	22	6%	1,137	74	6%
Asian	20,045	650	3%	67,429	2,285	3%
Hispanics	12,907	745	6%	42,733	2,511	6%
White	13,864	561	4%	45,634	1,812	4%
International	4,379	363	8%	21,052	1,735	8%
Other/Unknown	1,608	75	5%	5,067	243	5%
Overall	55,157	2,571	5%	190,093	9,230	5%
By First-generation						
Not First-generation	29,530	1,129	4%	103,807	4,187	4%
First-generation	24,174	1,356	6%	81,174	4,745	6%
Unknown	1,453	86	6%	5,112	298	6%
Overall	55,157	2,571	5%	190,093	9,230	5%
By Foster Care Status						
Not Foster Care	54,691	2,511	5%	188,524	9,024	5%
Foster Care	466	60	13%	1,569	206	13%
Overall	55,157	2,571	5%	190,093	9,230	5%
By Gender						
Female	33,767	1,366	4%	101,646	4,220	4%
Male	21,213	1,192	6%	88,077	4,984	6%
Unknown	177	13	7%	370	26	7%
Overall	55,157	2,571	5%	190,093	9,230	5%
By Income						
Independent	4,476	461	10%	15,624	1,633	10%
0-49,999	18,644	952	5%	62,422	3,277	5%
50,000-99,999	11,635	484	4%	40,052	1,741	4%
100,000-149,999	7,239	241	3%	25,306	929	4%
150,000 and higher	13,065	426	3%	46,423	1,631	4%
Unknown	98	7	7%	266	19	7%
Overall	55,157	2,571	5%	190,093	9,230	5%

		Unweighted			Weighted	
	# Resp	# Insecure	% Insecure	# Resp	# Insecure	% Insecure
By LGBTQ Status						
Not LGBTQ	49,892	2,149	4%	171,983	7,719	4%
LGBTQ	5,265	422	8%	18,110	1,511	8%
Overall	55,157	2,571	5%	190,093	9,230	5%
By Year Enrolled						
1st Year	18,659	576	3%	63,810	2,170	3%
2nd Year	15,414	709	5%	53,312	2,584	5%
3rd Year	10,835	561	5%	37,753	1,977	5%
4th Year	8,522	500	6%	29,130	1,699	6%
5th Year	1,144	141	12%	4,068	506	12%
6th Year +	583	84	14%	2,020	294	15%
Overall	55,157	2,571	5%	190,093	9,230	5%

Notes: *"Others" refers to "non-degree" students. 1) Weighted and unweighted counts include students who responded to housing insecurity questions. 2) LGBTQ status is collected from the survey.

Appendix 10. Graduate Students Experiencing Homelessness, Systemwide

	Unweighted			Weighted		
	# Resp	# Insecure	% Insecure	# Resp	# Insecure	% Insecure
By Discipline						
Humanities	765	57	7%	4,337	348	8%
Social Sciences	796	50	6%	4,714	343	7%
STEM	1,971	84	4%	20,053	875	4%
Professional Fields	1,507	47	3%	16,813	618	4%
Multi/Other	150	9	6%	392	20	5%
Overall	5,189	247	5%	46,309	2,203	5%
By Ethnicity						
African American	261	19	7%	3,911	255	7%
American Indian	81	6	7%	2,409	248	10%
Asian	954	31	3%	6,625	108	2%
Hispanics	698	34	5%	5,007	238	5%
White	1,662	68	4%	14,999	656	4%
International	1,197	69	6%	10,609	588	6%
Other/Unknown	336	20	6%	2,751	110	4%
Overall	5,189	247	5%	46,309	2,203	5%
By Gender						
Female	2,818	122	4%	22,024	1,101	5%
Male	2,332	122	5%	24,242	1,100	5%
Unknown	39	3	8%	43	3	7%
Overall	5,189	247	5%	46,309	2,203	5%
By Level						
Academic master's	597	34	6%	5,665	317	6%
Academic doctoral (no candidacy)	1,949	96	5%	16,352	851	5%
Academic doctoral (candidacy)	1,312	76	6%	8,624	435	5%
Graduate professional	1,278	38	3%	15,610	597	4%
Other/Unknown	53	3	6%	59	3	5%
Overall	5,189	247	5%	46,309	2,203	5%
By LGBTQ Status						
Not LGBTQ	4,562	200	4%	40,997	1,819	4%
LGBTQ	618	45	7%	5,283	380	7%
Unknown	9	2	22%	29	4	12%
Overall	5,189	247	5%	46,309	2,203	5%
By Year Enrolled						
1st Year	1,474	57	4%	15,440	699	5%
2nd Year	1,089	53	5%	10,314	553	5%
3rd Year	639	24	4%	5,440	191	4%
4th Year	574	32	6%	4,655	261	6%
5th Year	569	24	4%	4,136	164	4%
6th Year +	812	54	7%	6,292	332	5%
Unknown	32	3	9%	32	3	9%
Overall	5,189	247	5%	46,309	2,203	5%

*Notes: *"Others" refers to "non-degree" students. 1) Weighted and unweighted counts include students who responded to housing insecurity questions. 2) LGBTQ status is collected from the survey.*

Appendix 11. Undergraduates Experiencing Both Food Insecurity and Homelessness

	Unweighted			**Weighted**		
	# Resp	**# Insecure**	**% Insecure**	**# Resp**	**# Insecure**	**% Insecure**
By Age						
19 or Younger	13,641	239	2%	45,390	869	2%
20-21	22,452	737	3%	77,343	2,596	3%
22-23	13,463	635	5%	47,432	2,238	5%
24-25	1,737	134	8%	6,409	512	8%
26 or Older	3,716	252	7%	13,519	900	7%
Overall	55,009	1,997	4%	190,093	7,114	4%
By Applicant Status						
Freshman	43,870	1,434	3%	149,888	5,066	3%
Transfer	10,935	547	5%	39,565	2,005	5%
Others*	204	16	8%	640	44	7%
Overall	55,009	1,997	4%	190,093	7,114	4%
By Ethnicity						
African American	1,950	132	7%	7,041	489	7%
American Indian	393	20	5%	1,137	67	6%
Asian	19,999	514	3%	67,429	1,814	3%
Hispanics	12,881	637	5%	42,733	2,154	5%
White	13,835	420	3%	45,634	1,343	3%
International	4,354	223	5%	21,052	1,091	5%
Other/Unknown	1,597	51	3%	5,067	156	3%
Overall	55,009	1,997	4%	190,093	7,114	4%
By First-generation						
Not First-generation	29,452	794	3%	103,825	2,915	3%
First-generation	24,108	1,129	5%	81,155	3,948	5%
Unknown	1,449	74	5%	5,114	251	5%
Overall	55,009	1,997	4%	190,093	7,114	4%
By Foster Care Status						
Not Foster Care	54,543	1,945	4%	188,520	6,932	4%
Foster Care	466	52	11%	1,573	183	12%
Overall	55,009	1,997	4%	190,093	7,114	4%
By Gender						
Female	33,667	1,069	3%	101,646	3,267	3%
Male	21,166	918	4%	88,077	3,829	4%
Unknown	176	10	6%	370	19	5%
Overall	55,009	1,997	4%	190,093	7,114	4%
By Income						
Independent	4,468	386	9%	15,637	1,366	9%
0-49,999	18,588	802	4%	62,401	2,756	4%
50,000-99,999	11,601	370	3%	40,033	1,314	3%
100,000-149,999	7,224	159	2%	25,328	592	2%
150,000 and higher	13,030	274	2%	46,427	1,071	2%
Unknown	98	6	6%	266	15	6%
Overall	55,009	1,997	4%	190,093	7,114	4%

	Unweighted			Weighted		
	# Resp	# Insecure	% Insecure	# Resp	# Insecure	% Insecure
By LGBTQ Status						
Not LGBTQ	49,754	1,654	3%	171,972	5,891	3%
LGBTQ	5,255	343	7%	18,121	1,224	7%
Overall	55,009	1,997	4%	190,093	7,114	4%
By Year Enrolled						
1st Year	18,611	420	2%	63,815	1,592	2%
2nd Year	15,377	558	4%	53,331	2,000	4%
3rd Year	10,804	455	4%	37,747	1,596	4%
4th Year	8,493	382	4%	29,108	1,279	4%
5th Year	1,142	112	10%	4,072	405	10%
6th Year +	582	70	12%	2,020	242	12%
Overall	55,009	1,997	4%	190,093	7,114	4%

Notes: *"Others" refers to "non-degree" students. 1) Weighted and unweighted counts include students who responded to both food and housing insecurity questions. 2) LGBTQ status is collected from the survey.

Appendix 12. Graduates Experiencing Both Food Insecurity and Homelessness Systemwide

	Unweighted			Weighted		
	# Resp	#Insecure	% Insecure	# Resp	#Insecure	% Insecure
By Discipline						
Humanities	765	45	6%	4,337	272	6%
Social Sciences	796	35	4%	4,704	231	5%
STEM	1,971	44	2%	20,053	411	2%
Professional Fields	1,507	23	2%	16,812	381	2%
Multi/Other	150	7	5%	392	13	3%
Overall	5,189	154	3%	46,299	1,309	3%
By Ethnicity						
African American	261	14	5%	3,901	218	6%
American Indian	81	6	7%	2,409	248	10%
Asian	954	19	2%	6,625	50	1%
Hispanics	698	26	4%	5,007	145	3%
White	1,662	39	2%	14,999	324	2%
International	1,197	35	3%	10,609	247	2%
Other/Unknown	336	15	4%	2,751	78	3%
Overall	5,189	154	3%	46,299	1,309	3%
By Gender						
Female	2,818	86	3%	22,024	780	4%
Male	2,332	65	3%	24,232	526	2%
Unknown	39	3	8%	43	3	7%
Overall	5,189	154	3%	46,299	1,309	3%
By Level						
Academic master's	597	25	4%	5,665	197	3%
Academic doctoral (no candidacy)	1,949	61	3%	16,352	525	3%
Academic doctoral (candidacy)	1,312	49	4%	8,614	250	3%
Graduate professional	1,278	16	1%	15,609	334	2%
Other/Unknown	53	3	6%	59	3	5%
Overall	5,189	154	3%	46,299	1,309	3%
By LGBTQ Status						
Not LGBTQ	4,562	119	3%	40,983	1,006	2%
LGBTQ	618	35	6%	5,289	303	6%
Unknown	9	0	0%	26	0	0%
Overall	5,189	154	3%	46,299	1,309	3%
By Year Enrolled						
1st Year	1,474	37	3%	15,439	447	3%
2nd Year	1,089	32	3%	10,311	308	3%
3rd Year	639	12	2%	5,442	94	2%
4th Year	574	22	4%	4,664	179	4%
5th Year	569	18	3%	4,136	111	3%
6th Year +	812	30	4%	6,275	167	3%
Unknown	32	3	9%	32	3	9%
Overall	5,189	154	3%	46,299	1,309	3%

*Notes: *"Others" refers to "non-degree" students. 1) Weighted and unweighted counts include students who responded to both food and housing insecurity questions. 2) LGBTQ status is collected from the survey.*