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Authors

Castellanos, Karla Palos

Davis, Charles

Dizon-Ross, Elise

et al.

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Karla Palos Castellanos, Charles Davis, Elise Dizon-Ross, Anna Doherty, Samantha Fu,
Johanna Lacoe, Jesse Rothstein, and Monica Saucedo

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California Community College and University of California student participation in CalFresh food benefits

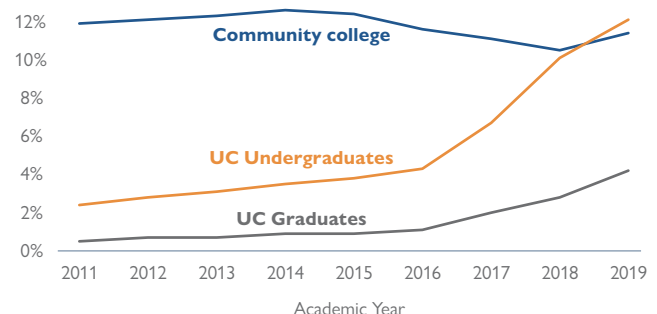
KARLA PALOS CASTELLANOS, CHARLES DAVIS, ELISE DIZON-ROSS, ANNA DOHERTY, SAMANTHA FU, JOHANNA LACOE, JESSE ROTHSTEIN, MONICA SAUCEDO

Food insecurity is widespread among college students in the United States. CalFresh food benefits, known federally as the Supplemental Nutrition Assistance Program, or SNAP, can help students in California pay for food, but may not reach all eligible students. CalFresh enrollment rates among students have been difficult to estimate due to incomplete data on California students' eligibility for and enrollment in the CalFresh program.¹ To overcome these issues, the California Policy Lab (CPL) partnered with the California Community College system (CCC), the University of California Office of the President (UCOP), the California Department of Social Services (CDSS), and the California Student Aid Commission (CSAC) to build a linked database of student-level administrative data on college enrollment, financial aid, and CalFresh participation.

This Data Point provides estimates of the rates at which CCC and University of California (UC) students participate in CalFresh. For context, 5.6 million Californians across 2 million households participated in CalFresh in 2019 — around 14% of the state's total population.² **We find that in Academic Year (AY) 2019–20, 11.4% of California community college students, 12.1% of UC undergraduate students, and 4.2% of UC graduate students were enrolled in CalFresh.** These rates represent approximately 250,000 community college students, 29,000 UC undergraduate students, and 2,600 UC graduate students. The participation rates among UC students have increased dramatically since 2016–17, which approximately coincides with increased funding targeting [UC Basic Needs initiatives](#), while the rates among community college students have remained relatively steady over the past decade. We also report CalFresh participation rates among student demographic groups, campuses, community college regions, and financial aid status.

This Data Point provides student enrollment rates in CalFresh, but it does not estimate how many students are eligible for the program. Eligibility is based on multiple factors including income, household composition, school enrollment status, and financial aid status.³ In future reports, we will use this new linked dataset to show how many likely eligible college students are participating in CalFresh.

FIGURE 1. CalFresh enrollment rates among college students, 2010–11 to 2019–20



The Student Supports linked database

The California Policy Lab has produced a cross-institution dataset consisting of records from all students at the California Community Colleges and University of California, linked to information from FAFSA applications and safety-net program participation. CPL matches encrypted data records from each agency without receiving Personally Identifiable Information (PII), allowing for accurate data linkage while guaranteeing the protection of private information (see [Appendix A — Data and linkage for more detail](#)).

This data resource, known as the Student Supports database, is the first of its kind in California, and will enable CPL and our research partners to:

- a) observe California college students as they begin, progress through, and complete their education;
- b) directly estimate student receipt and take-up of safety net benefits;
- c) evaluate strategies to increase take-up; and d) examine the relationship between receiving safety net benefits and student success.

Rate of CalFresh participation among college students

[Tables 1, 2, and 3](#) report estimates for CalFresh participation during the 2019–20 academic year among community college students,⁴ UC undergraduate students, and UC graduate students, respectively.⁵ In addition to differences across higher education segments, rates of CalFresh enrollment differed across community college regions, UC campuses, and by student subgroups. Specifically:

- **California community college regions** — CalFresh enrollment was highest in the Central Valley (18.3% of all enrolled students), followed by the Inland Empire (13.7%) and Northern California (13.4%). These three regions are (in this order) the highest poverty regions in California.
- **UC Campuses** — UC San Francisco (UCSF) — which enrolls only graduate students — had the highest rate of student CalFresh enrollment of the UC campuses, at 33.8% in AY 2019–20. This may be due to extensive outreach and application assistance [efforts at that campus](#), differences in the socioeconomic mix of campus populations, and/or differences in the review process of California Department of Social Services county offices. UC Merced and UC Santa Barbara had the highest rates of CalFresh enrollment among undergraduates, at 22.4% and 21.4%, respectively.
- **Student aid** — At both the UCs and CCCs, CalFresh enrollment in AY2019–20 was higher among students who received financial aid compared to those who didn't, and especially among students who received Pell Grants — which are based purely on financial need — or Cal Grants⁶ — which can be based on a combination of financial need and academic performance.
- **Race and ethnicity groups** — CalFresh enrollment was higher among UC and CCC students identifying as Black/African American compared to the overall student population, higher among CCC students identifying as American Indian/Alaska Native, and higher among UC students identifying as Mexican/Mexican American/Chicano.
- **Age groups** — CalFresh enrollment varies considerably across cohorts among the CCC student population, which is notably diverse in terms of age. Participation rates are highest among 30 to 39 year-olds, and lowest among students in their early 20s.

TABLE 1. CalFresh Enrollment Among California Community College Students, 2019–2020 Academic Year

	TOTAL STUDENT COUNT	CF ENROLLEES	CF ENROLLMENT RATE
All Students*	2,201,726	251,299	11.4%
Region			
Northern California	191,626	25,711	13.4%
Bay Area	443,398	31,542	7.1%
Central Valley	220,196	40,388	18.3%
South Central	153,163	15,233	9.9%
Greater Los Angeles	796,757	89,566	11.2%
Inland Empire	182,153	24,938	13.7%
San Diego	213,986	23,920	11.2%
Financial aid status			
Filed FAFSA	935,284	160,738	17.2%
Did not file FAFSA	1,266,442	90,561	7.2%
Cal Grant recipient	141,934	36,512	25.7%
Pell Grant recipient	434,818	108,756	25.0%
Promise Grant recipient	897,089	164,485	18.3%
Any financial aid recipient	924,153	167,728	18.1%
No financial aid recipient	1,277,573	83,571	6.5%
Enrollment type			
First-time students	195,710	32,219	16.5%
First-time transfer	167,004	14,596	8.7%
Continuing	1,245,422	133,625	10.7%
Returning	262,102	29,482	11.2%
Special admit	201,180	28,618	14.2%
Unknown	130,308	12,759	9.8%
Enrolled terms			
Summer only	215,513	17,041	7.9%
Fall, winter, and/or spring	1,986,213	234,258	11.8%

Table 1 continues on next page

TABLE 1. CalFresh Enrollment Among California Community College Students, 2019–2020 Academic Year (continued)

	TOTAL STUDENT COUNT	CF ENROLLEES	CF ENROLLMENT RATE
Race/Ethnicity			
American Indian/Alaska Native	8,019	1,585	19.8%
Asian	298,958	19,489	6.5%
Black/African American	122,109	32,634	26.7%
Hispanic/Latino	1,022,924	124,177	12.1%
Native Hawaiian/Pacific Islander	8,820	1,029	11.7%
White	520,768	50,649	9.7%
Two or more races	81,990	10,791	13.2%
Unknown	138,138	10,945	7.9%
Gender			
Female	1,194,922	162,171	13.6%
Male	971,692	85,899	8.8%
Non-binary	1,088	205	18.8%
Unknown	34,024	3,024	8.9%
Other student subgroups			
Educational goal			
ESL/adult education	76,864	5,950	7.7%
Short-term career	235,207	26,543	11.3%
Degree/transfer seeking	1,240,391	158,083	12.7%
Undecided/other	439,825	44,336	10.1%
First-generation	512,422	76,662	15.0%
Age groups			
19 or less	613,856	75,598	12.3%
20–21 y/o	338,075	24,805	7.3%
22–24 y/o	297,418	26,334	8.9%
25–29 y/o	293,924	38,384	13.1%
30–34 y/o	176,067	27,210	15.5%
35–39 y/o	121,552	18,556	15.3%
40–49 y/o	155,570	19,081	12.3%
50 and older	198,895	21,242	10.7%

* Because we rely on valid social security numbers (SSNs) to accurately link records across data sources, we are not able to estimate CalFresh participation among the approximately 15% of community college students without valid SSNs. Student records may lack a valid SSN for a number of reasons, including incomplete data and data entry errors. Among the 85% of community college students with valid SSNs, the total CalFresh participation rate is 11.5%.

Note: Cell sizes less than 100 are censored.

TABLE 2. CalFresh Enrollment Among UC Undergraduate Students, 2019–2020 Academic Year

	TOTAL STUDENT COUNT	CF ENROLLEES	CF ENROLLMENT RATE
All Students	235,897	28,571	12.1%
Campus			
Berkeley	32,709	3,538	10.8%
Davis	32,643	4,863	14.9%
Irvine	31,528	2,777	8.8%
Los Angeles	33,122	2,882	8.7%
Merced	7,889	1,768	22.4%
Riverside	23,125	1,867	8.1%
San Diego	32,026	3,280	10.2%
San Francisco	n/a	n/a	n/a
Santa Barbara	24,491	5,230	21.4%
Santa Cruz	18,364	2,366	12.9%
Financial aid status			
Filed FAFSA	157,720	28,061	17.8%
Did not file FAFSA	78,177	510	0.7%
Cal Grant recipient	75,858	20,929	27.6%
Pell Grant recipient	86,869	23,479	27.0%
Any financial aid recipient	148,216	27,848	18.8%
UC tenure			
1 year	69,075	5,817	8.4%
2 years	64,509	8,155	12.6%
3 years	49,754	7,239	14.5%
4+ years	52,559	7,360	14.0%
Enrollment type			
Transfer students	54,238	6,879	12.7%
Community college transfer students	49,199	6,513	13.2%

Table 2 continues on next page

TABLE 2. CalFresh Enrollment Among UC Undergraduate Students, 2019–2020 Academic Year (continued)

	TOTAL STUDENT COUNT	CF ENROLLEES	CF ENROLLMENT RATE
Race/Ethnicity			
American Indian/Alaska Native	1,156	157	13.6%
Asian American/Asian/ Pacific Islander	105,733	8,576	8.1%
Chinese	48,836	2,529	5.2%
East Indian/Pakistani	14,431	579	4.0%
Filipino	10,747	1,163	10.8%
Japanese	3,470	178	5.1%
Korean	9,141	851	9.3%
Vietnamese	13,276	2,445	18.4%
Other Asian/Pacific Islander	5,832	831	14.2%
Black/African American	10,316	2,412	23.4%
Hispanic/Latino/Chicano	58,093	12,942	22.3%
White/Caucasian	52,518	4,020	7.7%
Unknown	8,081	464	5.7%
Gender			
Female	126,629	18,465	14.6%
Male	107,936	10,008	9.3%
Unknown	9,483	540	5.7%
Other student subgroups			
Has disability	10,818	2,229	20.6%
Foster youth	1,992	641	32.2%
First-generation	68,217	17,896	26.2%
Not first-generation	113,043	9,892	8.8%
Zero expected family contribution (EFC)	51,234	14,652	28.6%
UC employment	52,739	11,207	21.2%

Note: Cell sizes less than 100 are censored.

TABLE 3. CalFresh Enrollment Among UC Graduate Students, 2019–2020 Academic Year

	TOTAL STUDENT COUNT	CF ENROLLEES	CF ENROLLMENT RATE
All Students	62,104	2,627	4.2%
Campus			
Berkeley	12,656	354	2.8%
Davis	7,905	164	2.1%
Irvine	6,950	<100	-
Los Angeles	13,423	625	4.7%
Merced	713	<100	-
Riverside	3,652	<100	-
San Diego	8,425	<100	-
San Francisco	3,177	1,073	33.8%
Santa Barbara	3,106	141	4.5%
Santa Cruz	2,097	<100	-
Financial aid status			
Filed FAFSA	20,974	2,360	11.3%
Did not file FAFSA	41,130	267	0.6%
Cal Grant recipient	108	<100	-
Pell Grant recipient	<100	<100	-
Any financial aid recipient	31,397	2,235	7.1%
Race/Ethnicity			
American Indian/Alaska Native	475	<100	-
Asian American/Asian/ Pacific Islander	17,617	970	5.5%
Chinese	7,994	300	3.8%
East Indian/Pakistani	3,139	101	3.2%
Filipino	1,035	<100	-
Japanese	880	<100	-
Korean	1,576	109	6.9%
Vietnamese	1,425	229	16.1%
Other Asian/Pacific Islander	1,568	<100	-
Black/African American	2,662	288	10.8%
Hispanic/Latino/Chicano	7,053	493	7.0%
White/Caucasian	20,923	665	3.2%
Unknown	13,374	188	1.4%

Table 3 continues on next page

TABLE 3. CalFresh Enrollment Among UC Graduate Students, 2019–2020 Academic Year (continued)

	TOTAL STUDENT COUNT	CF ENROLLEES	CF ENROLLMENT RATE
Gender			
Female	29,605	1,670	5.6%
Male	32,009	946	3.0%
Unknown	443	-	-
Other student subgroups			
Has disability	1,497	117	7.8%
Foster youth	<100	<100	-
First-generation	7,988	936	11.7%
Not first-generation	19,845	1,571	7.9%
Zero expected family contribution (EFC)	17,891	1,752	9.8%
UC employment	32,246	817	2.5%

Note: Cell sizes less than 100 are censored. First-generation students refers to those who did not have a parent who attended college (see Appendix for more detail).

Acknowledgments

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Editor's note: In September 2025, we updated our data linkage methodology, which resulted in a slight uptick in our estimates of CalFresh participation rates for all categories of college students. This publication includes the updated numbers. The interactive graph on our website, "[CalFresh participation among California college students](#)," also reflects these updated numbers. The original version of this data point is available upon request: jennifer@capolicylab.org.

Appendix A — Data and linkage

Data preparation

We include the full universe of enrolled CCC and UC students in the merge process that links student records to data from CDSS and CSAC. For data from the community colleges, student records are de-duplicated based on encrypted versions of personally identifiable information (PII), specifically social security numbers, name, and birthday (see below for more information on our privacy-preserving encryption process). For the approximately 15% of community college student records with a missing social security number, we de-duplicate within districts using encrypted name and birthday, along with district-assigned student identifiers. For the UCs, student records are de-duplicated based on the full set of encrypted PII elements, along with UC-assigned system-wide student ID numbers.

Description of data

CPL linked and analyzed the following de-identified, individual-level datasets for this analysis:

- **CCCCO** records for students enrolled in a California community college from academic year (AY) 2010–11 through spring 2020 (AY 2019–20), including information on student demographics, enrollment details, certificate or degree attainment, financial aid awards, and other characteristics pertaining to CalFresh eligibility (such as CalWORKS, foster youth or parent status, or disability). Our sample includes all students regardless of whether they were enrolled in credit or noncredit courses, so long as they were enrolled in a term within the academic year being analyzed.
- **UCOP** records for all UC students enrolled from AY 2010–11 through AY 2019–20, including student demographics, enrollment, degree attainment, financial aid awards, and other characteristics pertaining to CalFresh eligibility (such as foster youth status and disability). Student attributes in each year correspond to data from the latest term in which they were enrolled. For example, if a student was enrolled in UC Berkeley in the fall and UC Davis in the spring, we only include them in the UC Davis counts for that year.
- **CDSS** records of monthly enrollment in CalFresh between 2010 to 2021. These data include demographic information, dates of CalFresh enrollment, benefit amount, and quarterly earnings data. To analyze student CalFresh enrollment rates, CalFresh monthly enrollment data was aggregated to the academic term level. Students are considered to be CalFresh participants if they received CalFresh benefits during a term in which they were also enrolled in college.
- **CSAC** records on Free Application for Federal Student Aid (FAFSA) forms submitted from 2010–11 to 2019–20. This includes demographic characteristics, income, household composition, employment, FAFSA submission status and date, GPA verification, expected family contribution, whether the student was offered a Cal Grant, and information about where and when the grant was used.

Privacy-preserving record linkage

CPL has implemented a process to link individual-level data from multiple agencies without receiving PII. Rather than sharing raw PII, such as full names and social security numbers (SSNs), each agency applies a one-way encryption to PII before transferring any data to CPL. This encryption turns strings and substrings of PII into indecipherable strings of letters and numbers. As an additional measure to make the encryption process irreversible, all agencies append a unique string of characters to the original PII values prior to the encryption process. This appended string of characters is agreed on between the agencies, but never shared with CPL, so that the encryption process cannot be reversed when CPL is using data for record linkage. Further information on this process can be found [here](#).

Once the encrypted data is transferred, we use four rounds of ‘rules’ to identify exact and ‘fuzzy’ matches in order to link people across datasets. Fuzzy matches consider PII substrings (for example, the first few letters of the last name), each of which were hashed separately. All rounds require a perfect match on SSN, and they vary in the types of discrepancies allowed in the other PII fields.

Variable definitions

- **Received CalFresh:** Students are identified as participating in CalFresh if they received CalFresh benefits during a term (quarter or semester, depending on the school) in which they were also enrolled in college. The 2019–20 academic year spans the months June 2019 through May 2020 for semester schools, and July 2019 through June 2020 for quarter schools.
- **Filed a FAFSA:** Students who matched to a submitted FAFSA record in the California Student Aid Commission dataset were identified as having filed a FAFSA. All other students in the population were identified as not having filed a FAFSA.
- **Any financial aid recipient:** Among community college students, this group represents all students who received any type of [community college financial aid](#), including aid awarded by the federal or state government, and aid awarded by the California community colleges. Among UC students, this group represents all students who received aid through any of the following: the Blue and Gold Opportunity plan, Cal Grants, Pell Grants, Federal SEOG grants, UC grants, other gift aid or financial assistance from UC, veterans' specific assistance, work study, Chaffee grant, or either a federal or other type of loan.
- **First-generation student:** For community college students, first-generation students are defined as those who reported having no parent or guardian who attended college or earned an Associate degree, in accordance with California Community Colleges' [technical definition](#). This data began being collected by CCCCO in 2017. For UC students, we define first-generation students as those who reported on the FAFSA that neither parent attended college. Approximately 60% of UC students submitted a FAFSA (67% of undergraduates and 33% of graduates). UC students who did not submit FAFSAs are not included in either the “first-generation” or the “not first-generation” subgroups. Given the different data sources used to define this subgroup, we recommend that readers avoid making comparisons regarding student counts or CalFresh participation rates across the higher education segments.
- **Enrollment types:**
For community college students, **first-time students** are those who are enrolled for credit in higher education for the first time after high school. **First-time transfer students** are those enrolled in the reporting college and who transferred from another institution of higher education.

Continuing students are those who are enrolled in the current session and were enrolled in the previous regular session. **Returning students** are those enrolled in the reporting college after an absence of one or more terms. **Special admit students** are those currently enrolled in K–12. **Unknown** are those students whose enrollment status is not known. These categories are all mutually exclusive.

Summer only students are defined as those who are enrolled only in the summer term for a given academic year. **Fall, winter, and/or spring** students are those who are enrolled in at least one non-summer term in a given academic year.

- **Race/ethnicity:** For both community college and UC students, we rely on the racial and ethnic subgroups that are reported in each segment's administrative data, which are based on student self-report.
- **Zero expected family contribution (EFC):** For UC students, this subgroup is defined based on students' reported EFC on their FAFSA. This variable is included in administrative data from the UCs, who source it from CSAC.
- **Has disability:** For both community college and UC students, this subgroup is based on an indicator for having a disability in college administrative data, and may not be inclusive of all students who identify as having a disability. Students with a disability are not subject to the CalFresh “[student \(in\)eligibility rule](#)” and therefore do not need to meet a student exemption to be eligible for CalFresh, so long as they meet the citizenship and income requirements.

Eligibility for CalFresh among college students

CalFresh [eligibility rules](#) for students are complex and generally require them to meet additional criteria relative to non-students. Students must first meet the citizenship requirements and household income limits that apply to CalFresh applicants generally; once these requirements are met, students must qualify for one of a [number of exemptions](#) to be eligible to participate in the program. Examples of exemptions include receiving a Cal Grant A or B, working twenty or more hours a week, having a child under the age of twelve, participating in a campus program to increase employability, receiving CalWORKS, or planning to not enroll in school the following term.

The California Policy Lab builds better lives through data-driven policy. We are an independent, nonpartisan research institute at the University of California with sites at the Berkeley and Los Angeles campuses.

This research publication reflects the views of the authors and not necessarily the views of our funders, our staff, our advisory board, the California Community College system, the University of California Office of the President, the California Department of Social Services (CDSS), the California Student Aid Commission (CSAC), or the Regents of the University of California.

Endnotes

- 1 SB 77 CalFresh Student Data Report <https://www.cdss.ca.gov/Portals/9/Leg/202006-SB-77-CalFresh-Student-Data-Report.pdf>
- 2 Unrath, M. (2021). **Pushed out by paperwork: Why eligible Californians leave CalFresh.** Policy Brief, California Policy Lab, University of California, Berkeley.
- 3 See Appendix for more information on CalFresh eligibility rules for students.
- 4 The population of community college students represented in Table 1 is all students enrolled for at least one term in the 2019–20 academic year. This population differs slightly from those included in the California Community College Chancellor's Office Data Mart system, which excludes certain students based on headcount status. See https://datamart.cccco.edu/Students/Student_Term_Annual_Count.aspx for more information.
- 5 See Appendix for more detail on definitions of student subgroups included in tables.
- 6 Receiving certain types of Cal Grants exempts students from the “student (in)eligibility rule” that restricts their eligibility for CalFresh. See Appendix for more detail on CalFresh student eligibility rules.