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Broadening the Safety Net: The Impact of Increased CalFresh Access for University of California Students

Gaby Lohner, Johanna Lcoe, Jesse Rothstein

December, 2025



Introduction

Forty-three percent of UC undergraduate students and 35% of graduate students reported being food insecure in the 2022-23 academic year (Regents' Special Committee on Student Basic Needs 2024). Food insecure UC students have worse mental health and lower GPAs than their food secure peers (Martinez et. al 2020). Food benefits provided by the Supplemental Nutrition Assistance Program (SNAP, known as CalFresh in California) can mitigate food insecurity. However, students are only eligible for benefits if they meet both the income requirements and an “exemption” to the student SNAP rule, such as being approved for work study or receiving Cal Grant aid.¹ It is not clear the extent to which this exemption requirement represents an important barrier to student CalFresh participation. We study this by measuring the impact of a new student exemption, known as Local Programs to Increase Employability (LPIEs), on student CalFresh participation.

LPIEs are programs, such as academic majors or scholarship programs, at California’s public universities and colleges that promote student employability by providing work experience, job training, basic skills and English learning, or vocational education.² The California Department of Social Services (CDSS) oversees this designation and started approving LPIEs in 2017. Since then, over 13,000 programs at California Community Colleges, California State Universities, and UCs have been LPIE-approved. The introduction and growth of the LPIE designation means that thousands more college students in California may now qualify for monthly food benefits.

Data

This research uses data from the California Policy Lab (CPL) Student Supports project, which merges administrative enrollment data from all ten UC campuses with monthly CalFresh participation and benefit amount data from CDSS. We identify UC campuses and majors that appear on CDSS’s list of approved LPIEs over time.³ This allows us to measure CalFresh participation at the student-by-term level for majors that are and are not LPIE-approved at that time.

Research Questions

How many UC students are enrolled in an LPIE program? How do these students compare to the UC system at large?

The number of LPIE-approved programs has grown steadily since the introduction of the policy in 2017. Before 2021, only a handful of programs had been approved, mostly at the graduate level. Since then, CDSS has streamlined the approval process and encouraged all campuses to submit full lists of LPIE-eligible majors by September 1, 2022. Figure 1 shows the number of students across the UC system who are enrolled in programs that are LPIE-approved. In Spring 2024, over 70,000 undergraduate students (38% of total undergraduate enrollment) and around 25,000 graduate students (65% of total graduate enrollment) were enrolled in LPIE programs.

¹ For more details on student SNAP eligibility and the full list of student exemptions, see [here](#).

² LPIEs must have some component of federal SNAP E&T Programs. For more information, see [here](#).

³ See Appendix A for additional information on this matching process.

Figure I

Number of Students in LPIE Programs

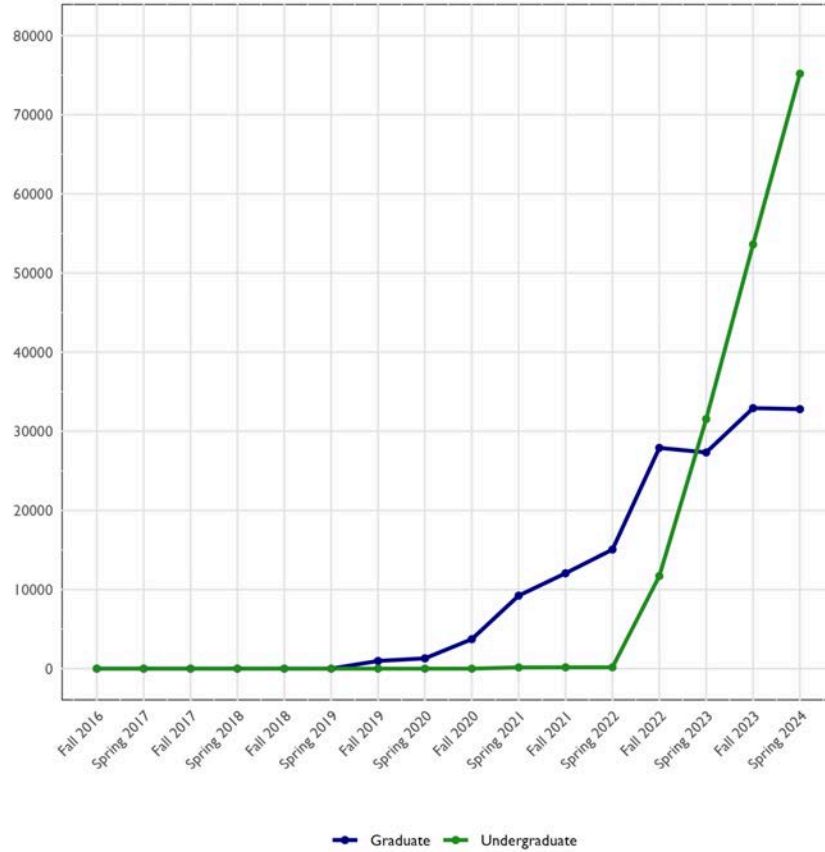


Table I compares the demographic and academic characteristics of students enrolled in LPIE programs in Fall 2023 with those in non-LPIE programs. For undergraduates, participation in CalFresh and the share of students with another CalFresh exemption (whose eligibility would not be affected by their program's LPIE designation) was roughly the same in LPIE and non-LPIE programs. The share of female students was higher in undergraduate programs that were LPIE-approved compared to non-LPIE programs, while the share of students receiving a Pell Grant or who have a disability was lower. For graduate students, the share of students receiving CalFresh benefits and the share of students with another CalFresh exemption was higher in programs that were LPIE-approved. Like undergraduate LPIE students, there was a higher share of female graduate students in LPIE-approved programs in Fall 2023 as compared to non-LPIE programs.

Table 1: Student Characteristics by LPIE Enrollment, Fall 2023

	Undergraduate			Graduate		
	Non-LPIE	LPIE	Total	Non-LPIE	LPIE	Total
CalFresh Enrollment...						
Enrolled in CalFresh (%)	20.15	19.23	19.91	12.92	19.03	16.63
Other CalFresh Student Exemption (%)	42.06	39.98	41.53	67.67	54.69	59.79
Demographics...						
Age	20.12	20.15	20.13	27.56	27.7	27.64
Gender: Female (%)	54.51	58.91	55.63	49.93	54.92	52.96
Gender: Male (%)	42.78	40.03	42.08	46.3	43.13	44.37
Race: White (%)	23	23.32	23.08	39.52	38.94	39.17
Race: Black (%)	4.85	5.71	5.07	7.32	7.5	7.43
Race: Asian (%)	39.93	41.01	40.21	28.3	29.6	29.09
Race: Hispanic (%)	28.62	26.16	27.99	18.19	17.7	17.89
Disabled (%)	6.14	3.92	5.57	3.78	5.77	4.98
Receiving Pell Grant (%)	38.05	35.2	37.32	0	0	0
GPA	3.34	3.45	3.37	3.84	3.74	3.77
Attempted Units (term)	14.04	14.29	14.1	9.94	13.55	12.13
Cumulative Units Earned	111.85	134.68	117.68	69.16	76.43	73.57
Total Students	146,225	50,205	196,430	15,012	23,165	38,177

Note: Sample is UC students who are U.S. citizens or permanent residents and are defined as CalFresh students. Information on collection of race/ethnicity data can be found [here](#).

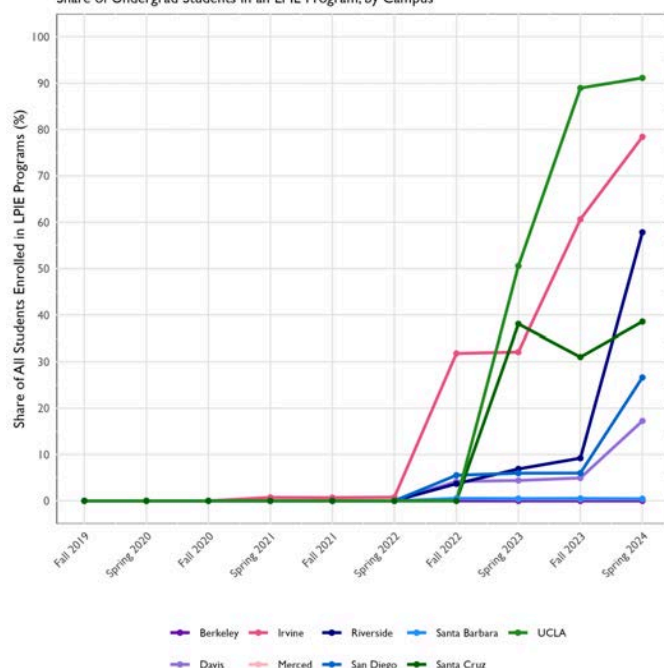
How do LPIE enrollment rates differ across UC campuses?

Figure 2 shows the shares of undergraduate and graduate students enrolled in LPIE-approved programs by campus. In Spring 2024, UCLA had the highest share of undergraduate students in LPIE-approved majors (over 90%), while UC Santa Barbara, Berkeley, and Merced had low or no undergraduate enrollment in LPIE-approved majors.

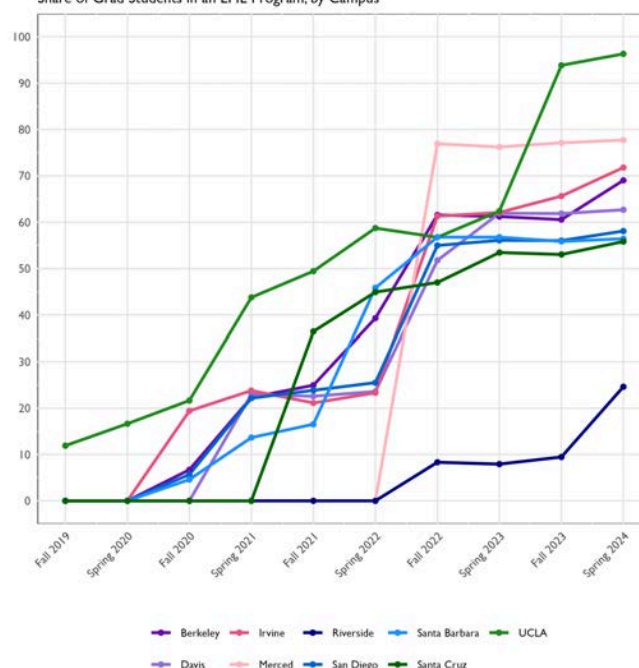
The LPIE designation has been applied more consistently to graduate programs. As can be seen in the righthand panel of Figure 2, in Spring 2024, all UC campuses (except UC Riverside) had over 50% of their graduate students enrolled in LPIE-approved programs, with this rate well above 90% at UCLA.

Figure 2

Share of Undergrad Students in an LPIE Program, by Campus



Share of Grad Students in an LPIE Program, by Campus



Appendix B presents demographic characteristics for LPIE students across the UC campuses.

Do more students enroll in CalFresh when their academic program becomes LPIE designated?

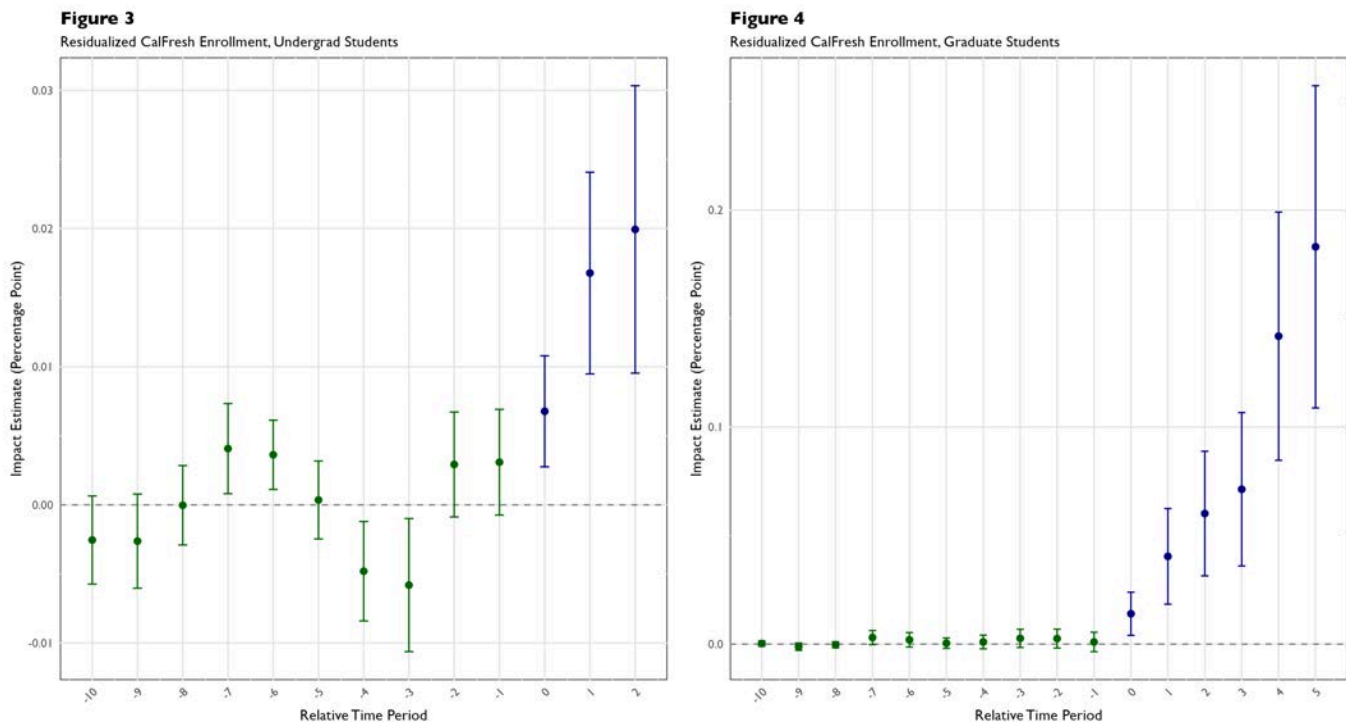
To assess the causal impact of the LPIE designation, we employ a staggered difference-in-differences (DiD) design. Using this statistical method, we can isolate the impact of a major becoming LPIE-approved on student CalFresh participation. A staggered DiD estimates causal effects by comparing students on two dimensions: within a program, before and after it becomes LPIE-approved, and between programs that are and are not LPIE-approved in the same term.

DiD adjusts for differences in student characteristics across programs, so long as they are stable over time. But LPIE designation may coincide with changes in student demographics. To adjust for this, we measure the effects of LPIE designation on CalFresh participation over and above what would be predicted given a program's student composition in a term. To construct this, we estimate a statistical model to predict each student's probability of participating in CalFresh, given his or her demographics and other CalFresh exemptions, then subtract this probability from her actual participation.

Figure 3 shows the causal impact of LPIE designation for undergraduate students. The x-axis is relative time from LPIE approval, measured in terms, and the y-axis presents the estimated effect on the CalFresh participation rate, and the associated confidence interval. In this graph we present results for 10 terms before and 3 terms after LPIE approval, as only one program has more than 3 terms post approval. Figure 3 shows that LPIE approval leads to moderate increases in CalFresh participation. There are some small differences in CalFresh participation before

approval between the LPIE approved and non-LPIE-approved majors, as can be seen in the estimates for relative time < 0 . CalFresh participation increases around 1-2 percentage points in the first three terms after LPIE approval.

Figure 4 demonstrates that LPIE designation of graduate programs leads to large and sustained increases in CalFresh participation. We present results for ten terms before LPIE approval and five terms after for graduate students. Impacts on CalFresh participation grow with the time since designation and average to around 10 percentage points overall. This is a meaningful impact given that (residualized) CalFresh participation among non-LPIE students in Spring 2024 was around 13%.



Note: Impacts are estimated using a staggered difference-in-differences regression model. Each point represents the coefficient estimate for that relative time period and the bars represent the 95% confidence intervals.

How do impacts on CalFresh enrollment vary based on student demographics and socioeconomic background?

Table 2 shows the causal impact of LPIE approval on CalFresh participation for various student subgroups. Here, effects are averaged over all available terms after designation. For undergraduates, effects are concentrated among students who have higher than \$0 Expected Family Contribution (EFC) on their FAFSA forms. (Students with \$0 EFC were automatically exempt until June 2023, whether or not they were in LPIE designated majors.) For graduate students, impacts are positive for all student subgroups.

Table 2: LPIE Impact Estimate, Overall and by Subgroup

	Undergraduate		Graduate	
	<i>Control Mean</i>	<i>Effect</i>	<i>Control Mean</i>	<i>Effect</i>
All Students	0.037	0.018*** (0.004)	0.014	0.103*** (0.021)
Other Exemption	0.041	0.016*** (0.005)	0.021	0.079*** (0.015)
No Exemption	0.03	0.021*** (0.004)	0.014	0.113*** (0.026)
Zero EFC	0.056	0.010 (0.006)	0.043	0.154*** (0.033)
Non-Zero EFC	0.058	0.023*** (0.005)	0.019	0.131*** (0.025)
Pell Grant	0.069	0.016*** (0.005)	—	
Not Pell Grant	0.022	0.020*** (0.004)	—	
White Students	0.024	0.010*** (0.004)	0.013	0.083*** (0.017)
Black Students	0.044	0.017** (0.008)	0.028	0.122*** (0.029)
Asian Students	0.037	0.024*** (0.005)	0.014	0.116*** (0.031)
Hispanic Students	0.054	0.017*** (0.006)	0.017	0.119*** (0.025)

Notes: Aggregate impact estimates (Average Treatment Effects on the Treated) are constructed using the Callaway and Sant'Anna (2021) procedure, using all relative terms available in the data. Standard errors shown in parentheses. Stars denote statistical significance: * p<0.1, ** p<0.05, *** p<0.01

How much did LPIE designation help to close the CalFresh take-up gap?

Prior CPL studies have found that a large share of students who are eligible for CalFresh do not receive benefits (Rothstein et. al 2024). We measure the effect of LPIE designation on the take-up rate of students who we estimate to meet the CalFresh income and citizenship criteria, and thus whose eligibility comes down only to whether they have an exemption. We distinguish three groups of students in each term — those who have other exemptions and are not in LPIEs, those who have other exemptions and are in LPIEs, and those who are in LPIEs but do not have other exemptions. (Note that a student may switch from one group to another over time, particularly when their program is LPIE designated.) Only the third group's eligibility is dependent on their LPIE status.

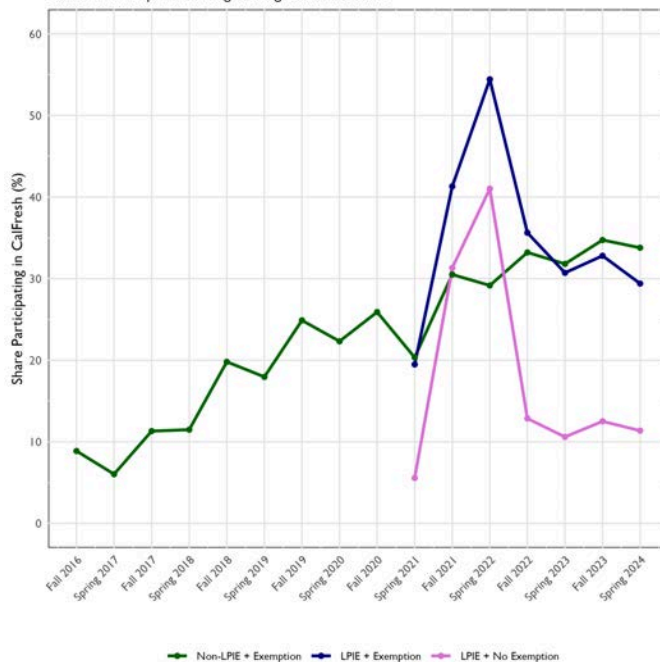
The lefthand panel of Figure 5 plots the share of undergraduate students in each of those groups who are participating in CalFresh. There is a spike in CalFresh participation for undergraduate LPIE students in AY21-22, likely driven by the designation of the UC Irvine Bachelors of Science in Nursing, which saw large increases in

CalFresh participation after LPIE designation. After more students are enrolled in LPIE-approved majors in AY22-23, the take-up rates are the same for students with other exemptions who are and are not in LPIE programs. These results, coupled with the results for the “other exemption” and “no exemption” subgroups presented in Table 2, highlight that the LPIE exemption leads to an increase in CalFresh participation regardless of whether a student has another exemption. However, overall take-up rates are still low, especially for the students with no other CalFresh exemption.

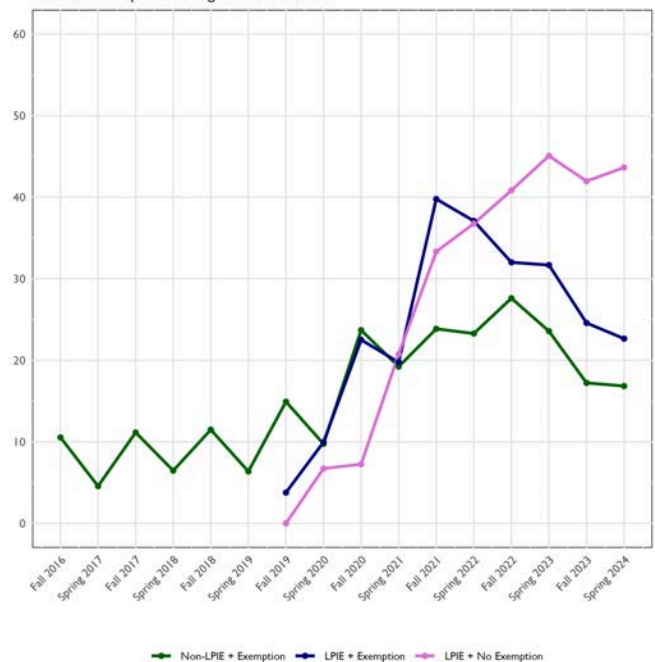
The righthand panel of Figure 5 presents the same plot for UC graduate students. For graduate students, take-up of CalFresh is higher for students enrolled in LPIE programs, whether they have another CalFresh exemption or not. This may indicate that students in LPIE-approved graduate programs are receiving additional outreach or are somehow better informed about their ability to participate in CalFresh, even compared to students in other programs who are likely eligible for benefits. However, take-up rates are still less than 50% for all student groups, meaning the majority of students who are likely eligible for CalFresh are not participating.

Figure 5

CalFresh Participation among Undergraduate Students



CalFresh Participation among Graduate Students



Note: “Exemption” and “No exemption” refer to other exemptions, beyond the LPIE designation.

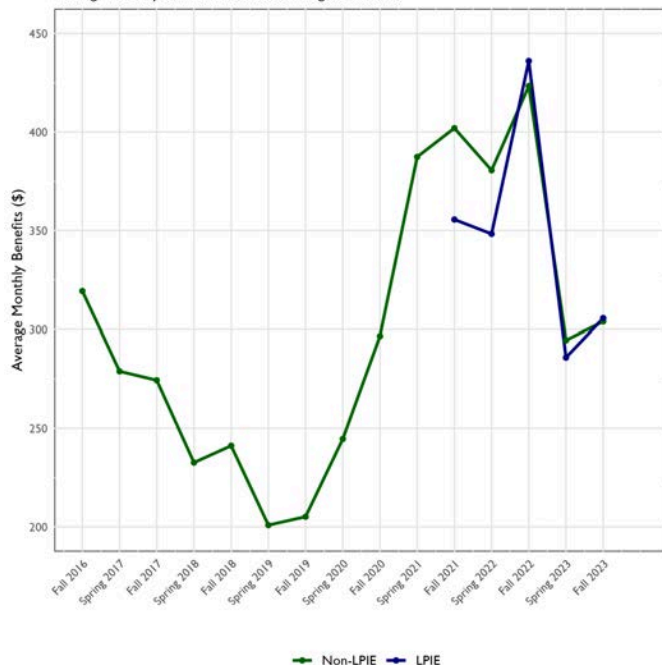
What is the distribution of monthly CalFresh amounts for students brought into CalFresh by LPIE changes?

Figure 6 shows the average monthly CalFresh benefits received based on whether students are enrolled in an LPIE program or a non-LPIE program. The sample for this graph is students who are participating in CalFresh in a given term. LPIE undergraduate students received slightly lower average monthly benefit amounts from Spring 2021 to Spring 2022, but by Fall 2022 students in LPIE and non-LPIE programs were receiving nearly the same amount in

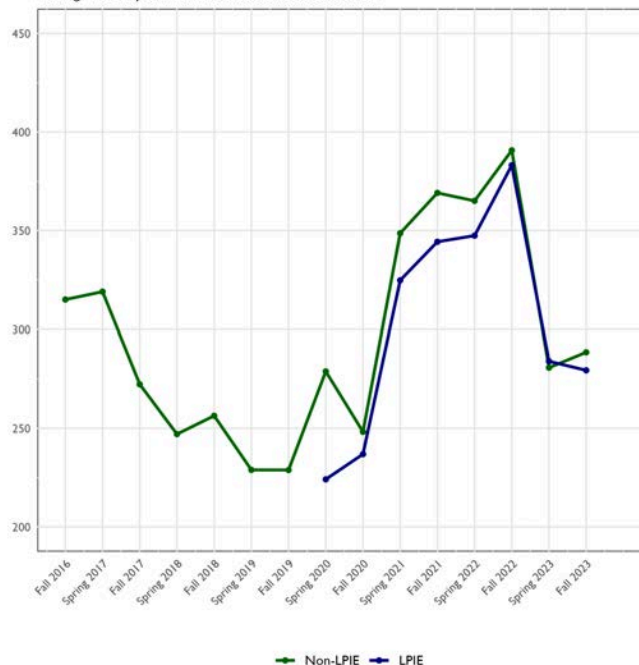
monthly CalFresh benefits. Across time, LPIE and non-LPIE graduate students receive around the same amount in average monthly CalFresh benefits.

Figure 6

Average Monthly CalFresh Benefits, Undergrad Students



Average Monthly CalFresh Benefits, Graduate Students



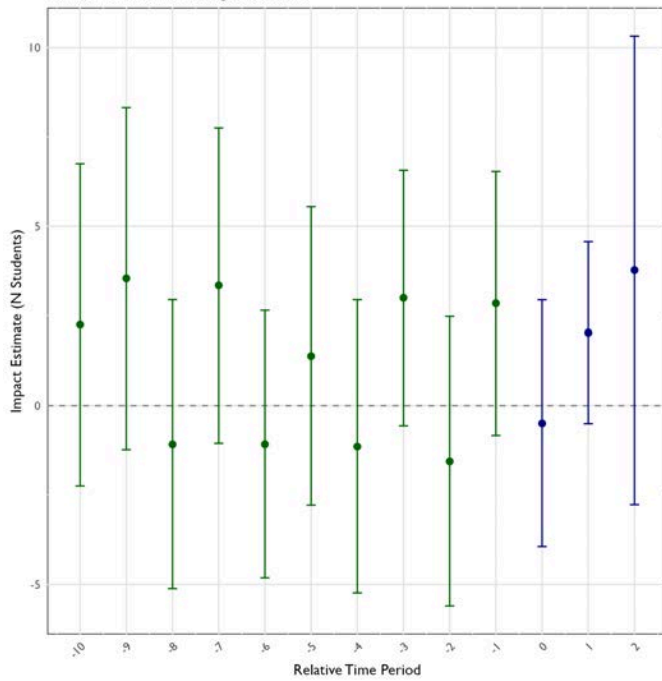
Note: Data from Spring 2024 is not yet available.

Does a program becoming LPIE designated change the makeup of students who enroll in that program (e.g. race, gender, first generation status, parental status)?

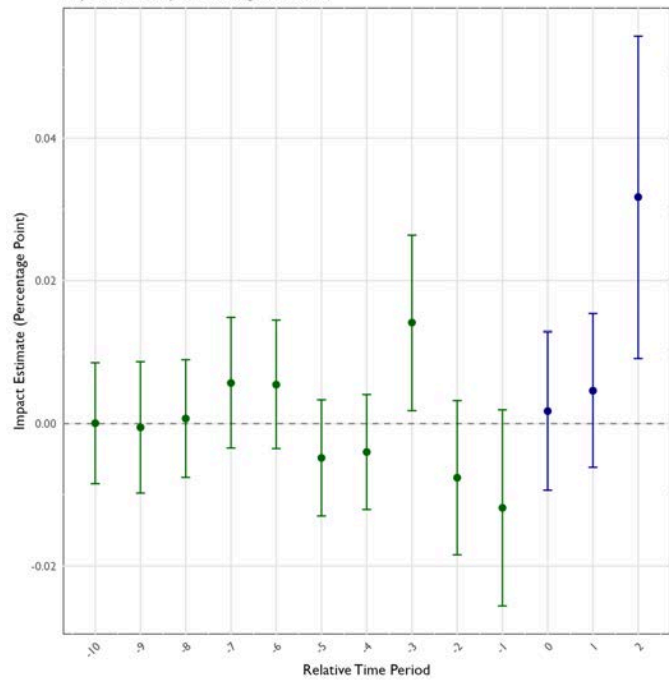
To explore student enrollment impacts, we use the same causal strategy as described above to assess the impact of an LPIE designation on the number of students enrolled in a program and on student characteristics. We focus in particular on the characteristic of having another CalFresh exemption, as students with such exemptions are not directly affected by LPIE designation. Figure 7 shows that at the undergraduate level, enrollment rises in programs that are LPIE-approved, as does the share of students who have other CalFresh exemptions. The latter is the opposite of what one might expect if students are choosing programs in part for their impact on CalFresh eligibility. For graduate students, LPIE designation has no detectable effect on total enrollment, though estimates are noisy. It does reduce the share of enrolled students with other CalFresh exemptions. This is consistent with the idea that the prospect of CalFresh eligibility helps to draw students to programs.

Figure 7

Number of Students, Undergrad Students



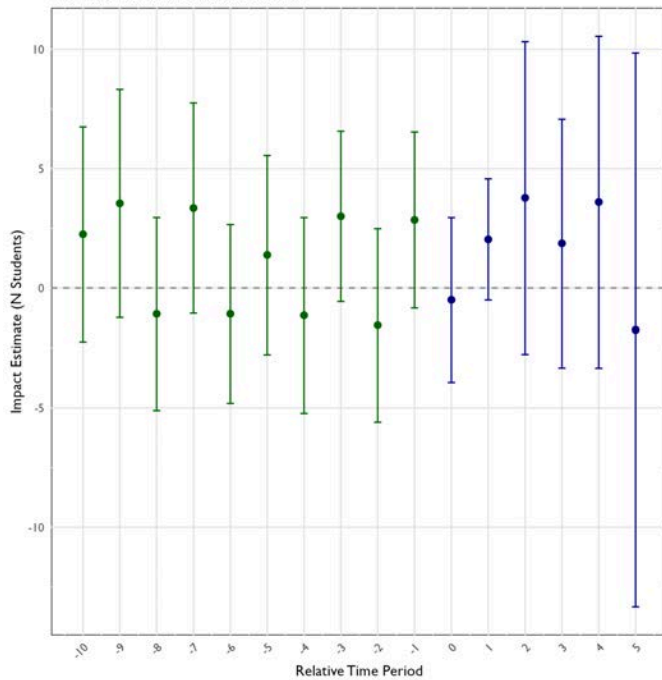
Any Other Exemption, Undergrad Students



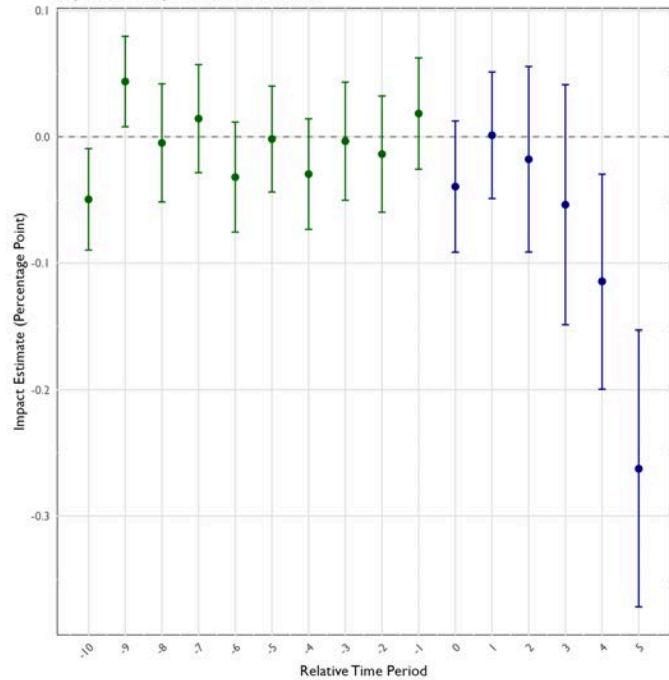
Note: Impacts are estimated using a staggered difference-in-differences regression model. Each point represents the coefficient estimate for that relative time period and the bars represent the 95% confidence intervals.

Figure 8

Number of Students, Graduate Students



Any Other Exemption, Graduate Students



Note: Impacts are estimated using a staggered difference-in-differences regression model. Each point represents the coefficient estimate for that relative time period and the bars represent the 95% confidence intervals.

Conclusion

LPIE designation is intended to expand access to CalFresh benefits to college students through increasing the number of UC students with an exemption to the CalFresh student rule. We find that this policy has been especially impactful for UC graduate students. On average, LPIE designation raises the share of students who receive CalFresh benefits by 10 percentage points. The effect is smaller but still positive for undergraduate students. Overall, these results indicate the LPIE designation is a promising avenue for increasing CalFresh participation among college students.

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Appendix A: Identifying LPIE Majors

The two data sources used to identify whether a student is enrolled in an LPIE major are the UC program of study information (major CIP code and degree type) and the official CDSS LPIE list.⁴ However, these two data sources do not contain exactly the same name for a given major. We conduct a fuzzy merge of the two sources and then hand-check to confirm that the major on the CDSS list is the same as the one in the UC data. Of the 1,055 UC LPIEs which are academic majors⁵, we match 84% to the UC data. This means that for the remaining 16% (around 168 programs), students enrolled in those programs are eligible for the LPIE student exemption but we will not be able to identify them in data. Since we cannot identify them as LPIE students, in this analysis they are included in the non-LPIE group. This is a limitation of this analysis but hopefully a small one given the high overall match rate of the LPIE list to the UC data.

⁴ The CDSS list is available [here](#) and the list of UC majors and programs is available [here](#).

⁵ As opposed to, for example, scholarship programs, which can also be approved as LPIEs.

Appendix B: LPIE Student Characteristics by Campus

LPIE Student Characteristics by UC Campus, Fall 2023

	UC Campus									
	Berkeley	Davis	Irvine	Los Angeles	Merced	Riverside	San Diego	Santa Barbara	Santa Cruz	Total
Undergraduate Students										
Enrolled in CalFresh (%)		31.43	21.74	16.75	–	16.5	24	–	20.64	19.23
Other CalFresh Student Exemption (%)		53.25	38.01	38.91	–	45.03	45.51	–	44.27	39.98
Age		20.53	19.87	20.12	–	20.28	20.12	–	20.99	20.15
Gender: Female (%)		74.05	59.33	61.72	–	53.44	74.99	–	36.17	58.93
Gender: Male (%)		23.1	38.98	38.28	–	44.37	23.05	–	60.31	40.01
Race: White (%)		23.89	15.05	27.59	–	10.93	20.92	–	30.98	23.32
Race: Black (%)		6.67	4.47	6.75	–	6.39	5.94	–	3.54	5.71
Race: Asian (%)		32.7	47.83	38.37	–	36.61	38.62	–	39.04	41.02
Race: Hispanic (%)		33.25	29.35	22.93	–	44.15	31.67	–	22.9	26.14
Receiving Pell Grant (%)		43.33	42.03	30.16	–	53.61	41.18	–	29.76	35.19
GPA		3.37	3.35	3.56	–	3.17	3.39	–	3.35	3.45
Attempted Units (term)		14.19	13.94	14.35	–	14.23	14.2	–	15.17	14.29
Cumulative Units Earned		126.28	119.13	142.09	–	108.01	122.83	–	159.47	134.71
Total LPIE Students		1,260	14,753	25,639	–	1,830	1,683	–	4,913	50,178
Graduate Students										
Enrolled in CalFresh (%)	16.67	31.32	20.26	15.99	–	–	22.8	10.39	6.39	19.03
Other CalFresh Student Exemption (%)	50.95	47.82	48.56	55.12	–	–	51.08	88.34	90.76	54.69
Age	27.84	27.27	27.09	28.16	–	–	27.2	27.81	28.43	27.7
Gender: Female (%)	56.32	60.73	51.34	54.29	–	–	55.33	55.25	46.05	54.92
Gender: Male (%)	41.15	36.38	46.5	45.71	–	–	42.19	42.1	44.2	43.13
Race: White (%)	40.16	39.9	32.69	39.39	–	–	36.31	51.96	49.75	38.94
Race: Black (%)	7.32	6.04	7.45	9.1	–	–	6.57	5.94	4.54	7.5
Race: Asian (%)	31.65	29.15	35.14	27.7	–	–	32.54	18.98	21.18	29.6
Race: Hispanic (%)	14.21	18.64	16.04	19.16	–	–	16.92	19.3	19.16	17.7
GPA	3.76	3.65	3.75	3.75	–	–	3.76	3.89	3.8	3.74
Attempted Units (term)	12.76	14.99	13.45	13.46	–	–	14.6	10.99	13.82	13.55
Cumulative Units Earned	50.45	82.71	78.93	74.71	–	–	103.18	104.78	106.3	76.43
Total LPIE Students	4,714	3,461	3,099	7,350	–	–	2,465	943	595	23,165

Note: Sample is UC students who are U.S. citizens or permanent residents and are defined as CalFresh students. Cells where sample sizes are too small are suppressed, which is reflected by a “–” in the cell. Blank cells represent no LPIE majors/enrollment in Fall 2023.