Annual Accountability Report

2022

UNIVERSITY OF CALIFORNIA

University of California Accountability Framework

As a public entity, the University is accountable to the people of California and must remain accountable to them for its actions, past and present, and for its future development. Accountability will be demonstrated:

- by the transparency of the decision-making processes that govern the University and its campuses, medical centers, and laboratories;
- by the manner in which key performance indicators are disclosed to and discussed with the broader public.

universityofcalifornia.edu/accountability

Contact: accountability@ucop.edu

University of California
Annual Accountability Report 2022
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UC Accountability Report

Vice President Kamala Harris visited UCSF April 21 to draw attention to the critical need for addressing disparities nationwide in health care for Black people during pregnancy. In an afternoon event at the UCSF Rutter Center, Harris met with leaders of EMBRACE, a nearly four-year-old clinical program that was developed to provide perinatal care for Black mothers, Black pregnant individuals, and their families from an intentional angle of racial consciousness.

Maternal mortality is not only a health care issue, Harris said: it is also a housing issue, a transportation issue, and an environmental issue.

"We are here today, to lift up the tremendous work that is being done by this group of extraordinary leaders," she said. "Here at UCSF, at EMBRACE, you have helped build a model of culturally competent care. You include partners and family members in perinatal care...You have brought together extraordinary staff. In being a national model, this is lifting up exactly the design that is necessary to see [across] the planet outcomes that you all have been producing here."

"Our program is (about) more than just surviving, it's about thriving," said Dr. Jackson, a UCSF obstetrician and gynecologist who co-founded EMBRACE. "We celebrate life, we celebrate family, we celebrate joy, Black joy...So when you think to yourself what is their secret sauce, why does EMBRACE work? It's us."

# UC Accountability Report 2022 Executive Summary

As part of its transparency efforts, the University of California produces the UC Accountability Report to provide greater awareness of University operations. This annual report, along with the online UC Information Center (ucal.us/infocenter), allows the public to learn more about the University, and UC leadership to identify areas of strength and opportunities to improve the system and UC campuses.

The 2022 UC Accountability Report Executive Summary highlights accountability indicators relevant to goals associated with the University of California's multi-year plan: UC 2030. The UC 2030 plan is a collective effort of UC leadership — the President, Chancellors, and Board of Regents — to identify campus and systemwide goals that support California, including the need to help the state recover with equity from the COVID-19 pandemic.

UC for California

For more than 150 years, UC has helped California flourish. As the state's public research university, UC has educated generations of students, and its research has provided solutions and policy support to issues facing the state, strengthened existing industries and created new ones, and attracted talent, dollars, and business into California. Educating graduate and undergraduate students within this setting emphasizes an inquiry-based education that expands current research capacity and creates the next generation of faculty and researchers, doctors and lawyers, artists and explorers, business owners and engaged citizens. As California has grown, so has the University.

Undergraduate and graduate enrollment, with campus opening date
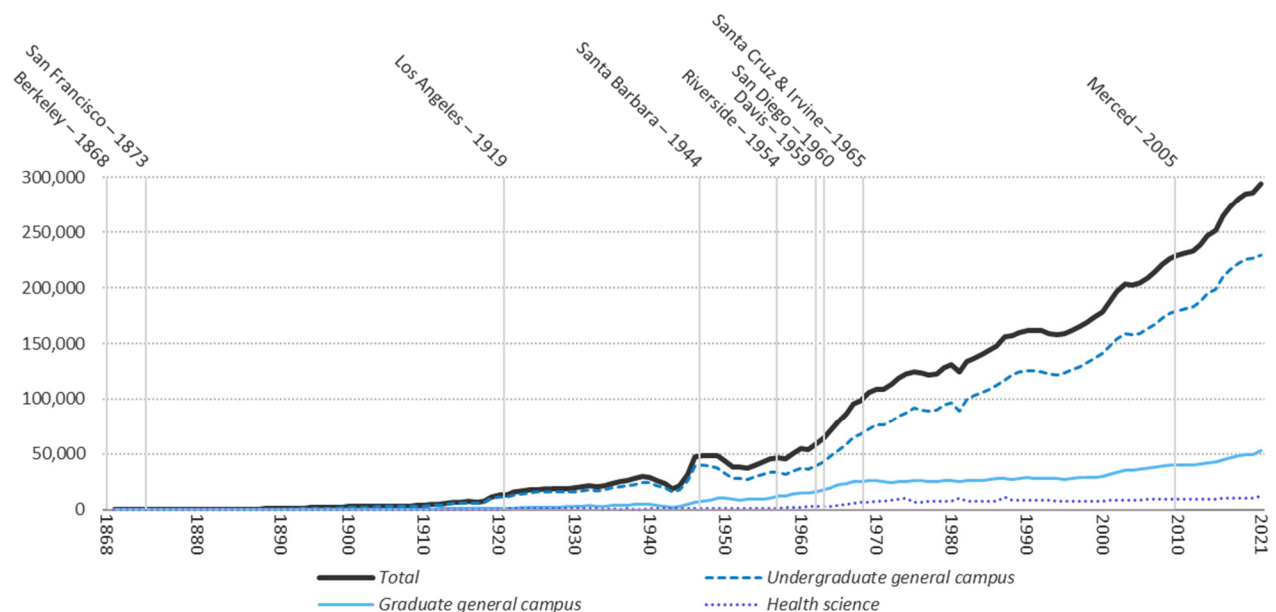
California is one of the few states in the U.S. where minority groups make up more than half of the population. Low-income, first generation and underrepresented (African American, American Indian, and Chicano/Latino(a)) students make up the majority of California public high school students — they represent the new generation of California. But these populations have lower levels of educational attainment, less economic opportunity, and greater health disparities — inequities that were further exacerbated during the COVID-19 pandemic.

The University seeks to better reflect California's diversity and ensure that student, faculty, and staff populations thrive. To promote inclusive access and success requires addressing historic inequities and systemic racism that underserved communities have faced. As one example, the University is committed to recognizing and acknowledging historic wrongs endured by Native Americans. One way it seeks to remedy that past is through the UC Native American Opportunity Plan, which waives tuition and fees for California residents who are members of federally recognized Native tribes.

This year's UC Accountability Report features stories about faculty, students, and staff who reflect UC's diversity, and UC efforts that advance educational equity and strengthen the University's teaching, research, and public service mission. The photo above is of UC San Diego's School of Medicine's inaugural American Indian Medical Student Blessing Ceremony and Blanket Presentation, and introduces the University of California Health chapter.

The University established its UC 2030 goals to illustrate how it could meet California's needs, particularly through expanding opportunities for undergraduate and graduate students across the educational pathway and narrowing achievement gaps, along with growing and diversifying the faculty. This summary will provide a status report detailing progress to the UC 2030 goals. It is important to note the negative impact the pandemic has had on faculty, students, and staff who were personally affected by COVID-19, with individuals often facing personal loss and expanded care-giving and family responsibilities. Overcoming those impacts will take time, and are likely to slow UC's progress in achieving its 2030 goals.

UC 2030: Advancing the California Dream

The University of California multiyear framework — UC 2030 —— began with a three-point plan on how the University would strengthen California by:

- producing over 200,000 additional degrees, on top of the one million undergraduate and graduate degrees currently projected by 2030;
- achieving a 90 percent overall graduation rate and eliminating gaps for timely graduation and graduate degree attainment for Pell, first-generation, and underrepresented groups;
- investing in the next generation of faculty and research by adding 1,100 ladder-rank faculty by fall 2022 who better represent California's diversity.
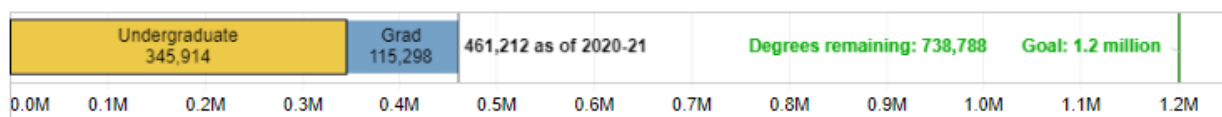
This year, the University added a new goal to have more than 40 percent of UC Ph.D. students coming from UC, California State University (CSU), other Hispanic Serving Institutions (HSI), Historically Black Colleges and Universities (HBCU), and Tribal Colleges and Universities (TCU). By "growing our own" academic doctoral students, UC could expand access for more Californians and support efforts to diversify future faculty.

At the end of this executive summary is a dashboard displaying UC 2030 systemwide goals; listed below are relevant UC Accountability Report indicators, which set the baseline and highlight existing challenges and opportunities to achieve these goals.

Goal 1: Producing 200,000 more undergraduate and graduate degrees by 2030

The Public Policy Institute of California (PPIC) estimates that California will face a shortfall of 1.1 million workers with at least a bachelor's degree between 2014 and 2030, in large part due to baby boomers leaving the workforce. The University of California has set a goal to add 200,000 degrees over the one million currently projected — or 1.2 million undergraduate and graduate degrees. To date, UC has added over 460,000 undergraduate and graduate degrees or just over 38 percent of the 1.2 million total.

Goal #1: Award 1.2 million degrees between 2015-16 and 2029-30

Undergraduate 345,914	Grad 115,298	461,212 as of 2020-21	Degrees remaining: 738,788	Goal: 1.2 million

| 0.0M | 0.1M | 0.2M | 0.3M | 0.4M | 0.5M | 0.6M | 0.7M | 0.8M | 0.9M | 1.0M | 1.1M | 1.2M |

At the undergraduate level, much of this improvement will be accomplished by increasing timely graduation, with all campuses proposing improvements that will yield a systemwide goal to increase four-year freshman graduation rates by eight points, from 68 percent to 76 percent, and two-year transfer graduation rates by 13 points, from 57 percent to 70 percent.

When campuses shifted to remote instruction, undergraduates took more units (i.e., courses) and there was also a significant increase in students enrolling in the summer. As a result, there was an increase in graduation rates, particularly four-year freshman and two-year transfer graduation rates, at the system level and on most campuses, which helped make progress to degree attainment goals.

However, ***there are some early indicators the pandemic may hinder future progress to achieving degree attainment goals.*** The University is tracking some concerning trends seen with the return to in-person instruction, including a decline in average units taken. In 2021–22, the average units taken across each term was lower when compared to the remote instruction period

Average Units Taken, by Academic Term, 2018-19 to 2021-22

| Undergraduates	Average Units Attempted (3WK)		
Academic Year	Fall	Winter	Spring
2016-17	14.5	14.8	14.7
2017-18	14.5	14.8	14.7
2018-19	14.5	14.8	14.7
2019-20	14.6	14.8	15.0
2020-21	14.8	15.0	14.8
2021-22	14.4	14.7	14.5

(shaded in green) and pre-pandemic levels. If continued, this could impact a student's ability to make timely progress to completing a degree.

Of the additional 200,000 degrees UC will produce, over 40,000 will be graduate degrees, and this growth will primarily be achieved through increased graduate enrollment across the system. ***While UC undergraduate enrollment has grown, funding for graduate enrollment has not kept pace, which both restricts the opportunity for bachelor degree recipients to get a graduate degree and UC's ability to meet graduate degree attainment goals.***

Graduate enrollment growth would increase mentorship and teaching assistant support for undergraduates, along with expanding research capacity for campuses. For academic doctoral students, more than half remain in California and the majority work in higher education — 25 percent of UC faculty and 20 percent of California State University faculty have a UC Ph.D. — and these graduate students become the future professoriate.

Half of UC academic doctoral and master's graduates who stay in California work in higher education.

4.3.6 Industry of employment of UC graduate academic students in CA, by year after graduation, Universitywide 2000 to 2018 graduating cohorts
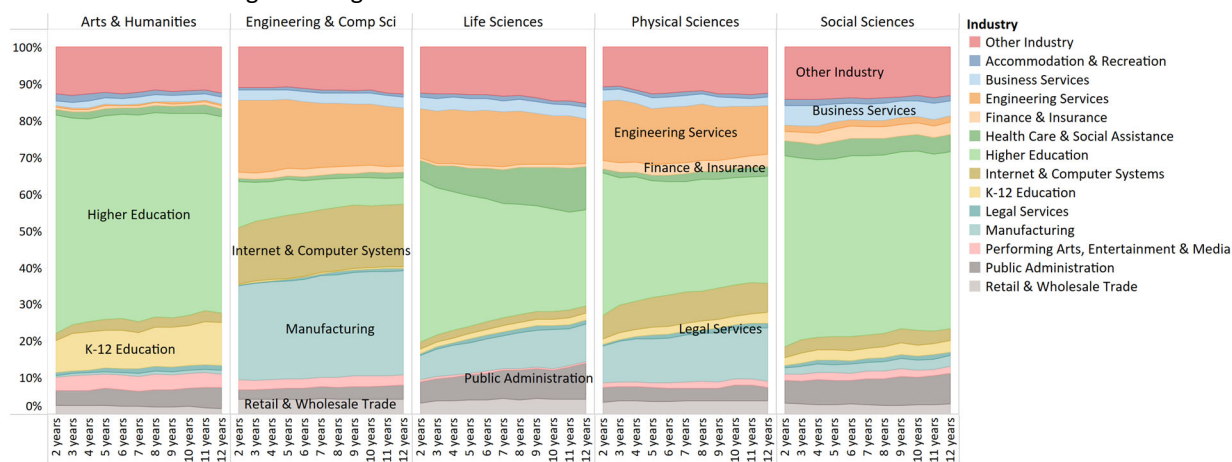
Source: California Employment Development Department and UC Corporate Student System

For UC Ph.D.'s who do not choose a career in academia, many conduct research and provide expertise that strengthen California's businesses and high-skilled and high-tech industries. UC's professional degree recipients span disciplines such as law, medicine, nursing, business, education, architecture, public policy, and the arts and in many growing fields in California. Graduate student growth is needed to address the California Futures Foundation projection of a shortfall of 21,000 advanced-degree holders by 2030 for jobs in health care, technology, and other fields.[1]

Goal 2: Ensuring the California Dream is for everyone
For undergraduates, the emphasis of this goal is currently two-fold: ensuring that nine out of ten freshman and transfer entrants leave UC with a degree, and eliminating timely graduation gaps for first-generation, Pell grant recipients, and underrepresented students.

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[1] https://collegefutures.org/wp-content/uploads/2019/10/making-room-for-success_2019-oct.pdf

Goal #2: Increase freshman and transfer grad rates

Freshman 6-year / Transfer 4-year

Close grad rate gaps — All, Pell, First gen, Underrep. group

Freshman 4-year / Transfer 2-year
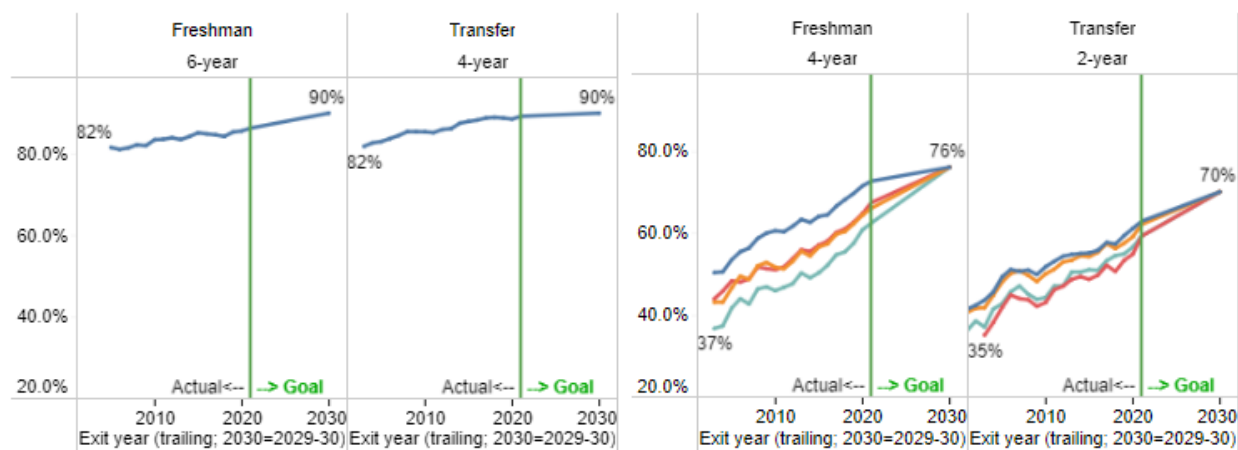
Over the last 15 years, UC graduation rates have improved, particularly four-year freshman and two-year transfer graduation rates. Over that time, UC has been unable to close double-digit gaps in timely graduation for Pell, first-generation, and underrepresented groups, particularly for freshman entrants. There was some short-term progress during the pandemic: students took more units and degree completion rates improved, including among Pell, first-generation, and underrepresented student groups.

UC's gap in timely graduation for Pell and non-Pell recipients closed during the remote instruction period.

3.1.6 Freshman graduation rates by Pell Grant recipient status
Universitywide
Cohorts entering fall 2015, 2016, and 2017
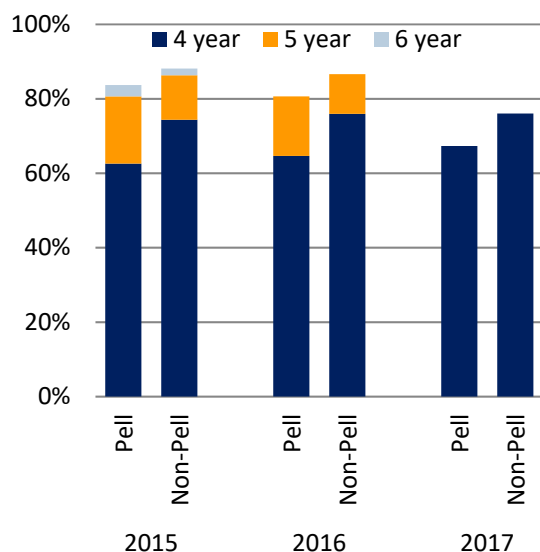
3.1.7 Transfer graduation rates by Pell Grant recipient status
Universitywide
Cohorts entering fall 2017, 2018, and 2019
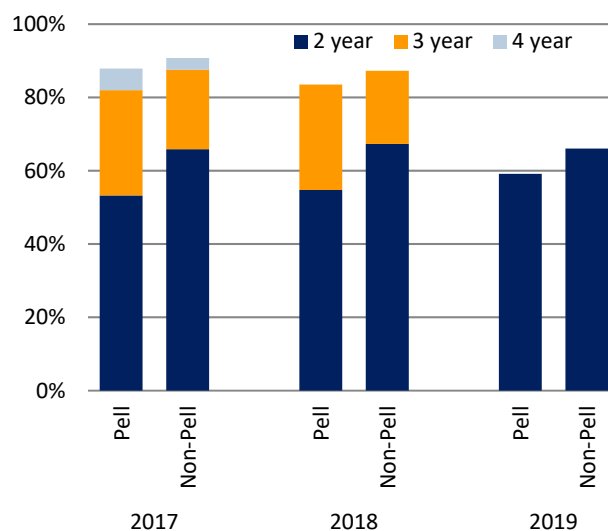
Source: UC Data Warehouse. Pell Grant recipients are those who received a Pell Grant at any point during their time at UC.

However, these gains may be short-lived, with recent declines in first-year retention and even greater declines for Pell, first-generation, and underrepresented students. For example, first-year freshman retention rates dropped 3.6 points for Pell grant recipients, 3.3 points for first-generation students, and 3.2 points for URG students (0.7 points for African American, 0.3 for American Indian, and 3.6 points for Hispanic/Latino(a).

UC's first-year retention rates declined with the return to in-person instruction.

3.2.1   First-year retention rates
UC systemwide
Cohorts entering fall 2010 to fall 2020
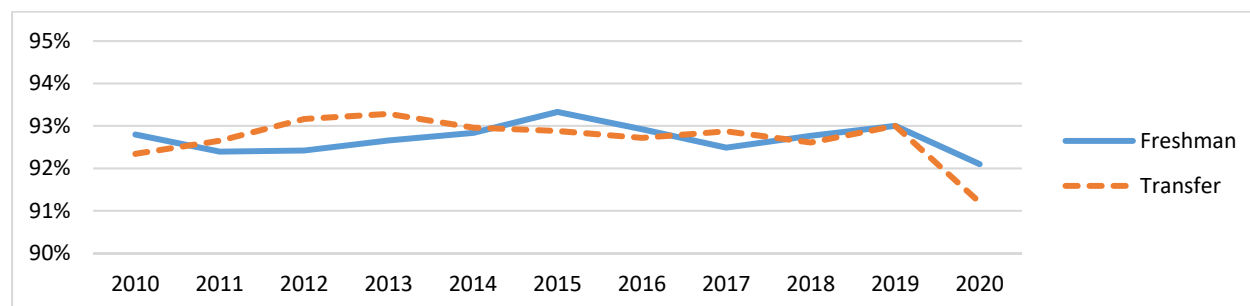
Missed learning for K–12 and California Community College (CCC) students due to the pandemic is resulting in greater declines in incoming academic preparation, which is one likely contributor to the decline in first-year retention. UC research has found that larger differences in graduation rates can be explained by high school unweighted grade point average (GPA), which is used as a proxy measure for academic preparation for entering freshmen. Gaps in graduation rates between the lowest GPA category ("bottom third") and highest GPA category ("top third") are much wider than the gaps between groups (e.g., African American and White) when comparing the same GPA categories. The same is true for incoming transfers (see indicator 3.1.11).

Academic preparation explains more of the difference in freshman graduation rates than race/ethnicity, Pell recipient status, or first-generation status alone.

3.1.10   Freshman graduation rates by HS GPA (top, middle, and bottom thirds) and race/ethnicity, Pell Grant recipient status, and first-generation status
Universitywide
Cohort entering fall 2015
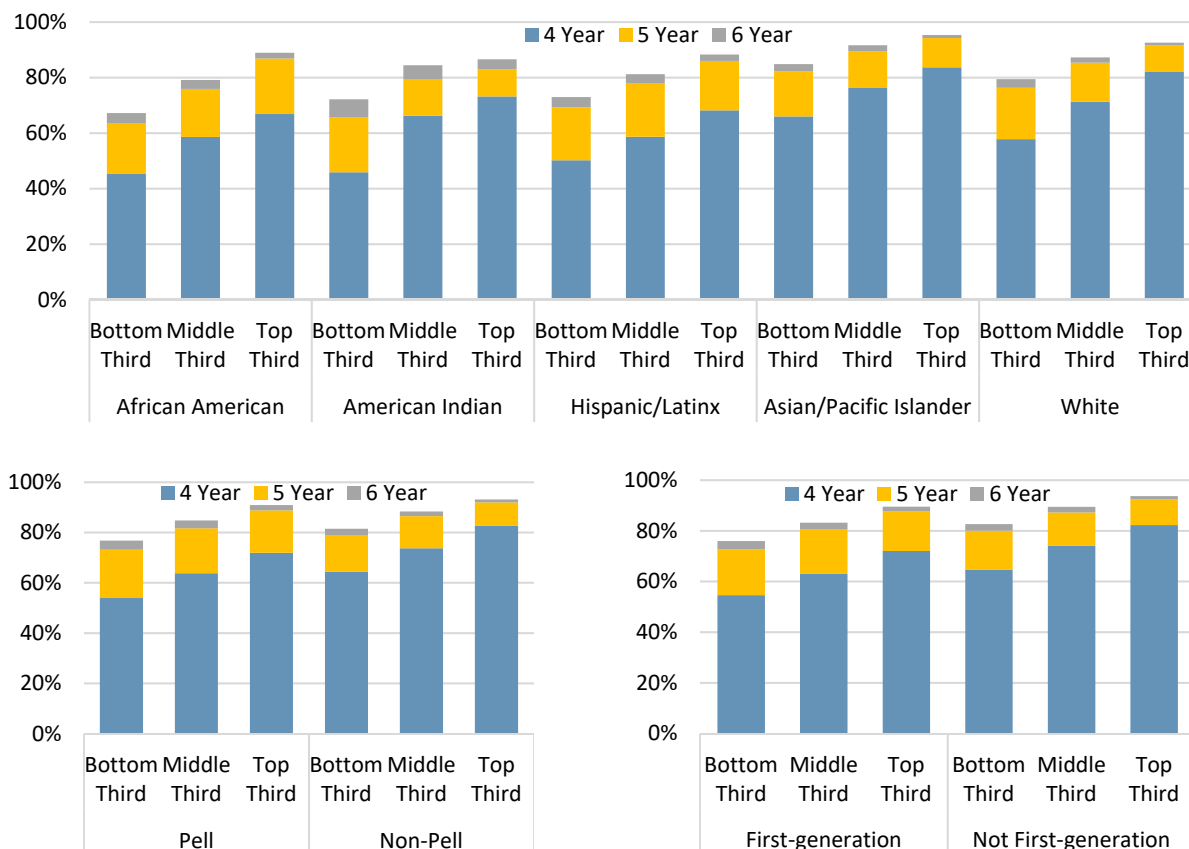
Source: UC Data Warehouse

As a result, UC campuses are increasing efforts to expand pre-matriculation and first-year programming for freshman and transfer entrants. This includes expanding summer bridge/transfer edge opportunities and living-learning communities, along with increased curricular support, including redesigning gateway courses to eliminate equity gaps. With an expected increase in students coming in with lower levels of academic preparation and other pandemic-related challenges (e.g., caring for family members, need to work), *UC may have greater challenges improving timely graduation and is at risk of not being able to eliminate equity gaps.*

For graduate students, the emphasis of this goal is to increase the proportion of incoming UC Ph.D. students who received their undergraduate degree from UC, CSU, HBCU, other HSI, and TCU institutions from 27 to over 40 percent.

Growing Our Own Initiative
UC PhD doctoral students from UC, CSU, HBCUs, other HSIs, and TCUs (Universitywide)

	2019	2020	2030 Goal
	27%	28%	**41%**

By expanding outreach efforts to these institutions that are more diverse than the current UC Ph.D. population, will support UC's efforts to diversify the future professoriate.

Entering academic doctoral students from UC, CSU, HBCUs, HSIs, and TCUs are more racially/ethnically diverse than students from other undergraduate institutions.

4.2.2 Academic doctoral entering student enrollment by undergraduate institution and race/ethnicity
Universitywide
Fall 2017–2021
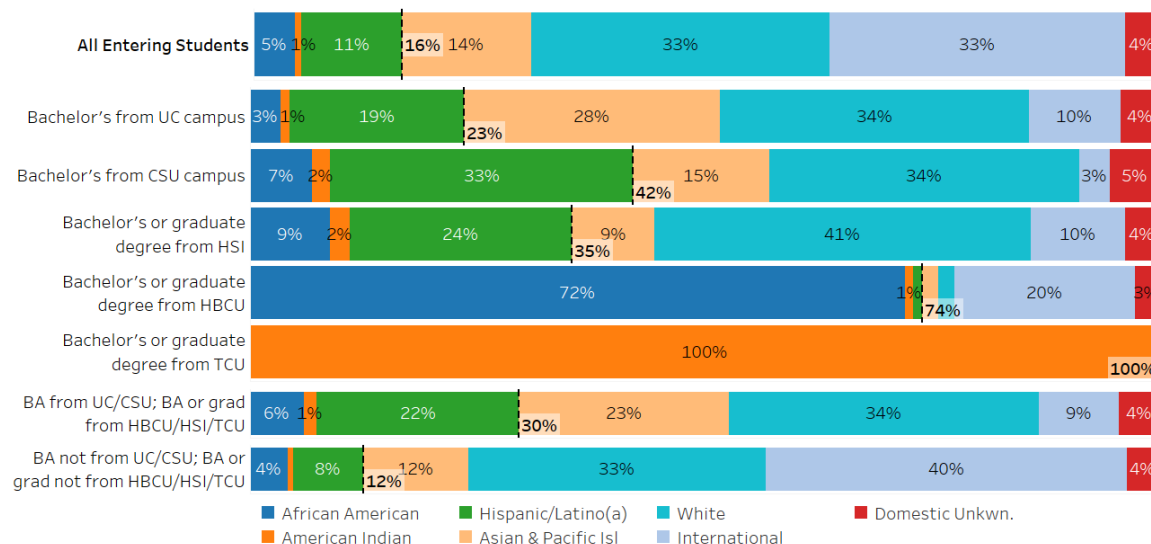
Note: rounding may account for differences in URG subtotals.

Goal 3: Investing in the next generation of faculty and research

UC needs to grow and diversify the faculty to strengthen the University's teaching, research, and public service mission and support UC undergraduate and graduate students. Based on campus input, the University set a goal to add 1,100 net new faculty by 2022. As of 2021, UC has added around 340 faculty (just over 30 percent of the 1,100 goal).

Goal #3:

Add 1,100 ladder-rank non-recall faculty over 4 years:
Universitywide headcount

	2018	2019	2020	2021	2030 goal
Headcount	10,484	10,678	10,861	10,826	11,584
Progress	0	194	377	342	1,100

In 2021, the University faculty headcount declined over the prior year, with campuses scaling back faculty recruitment in the face of the economic uncertainty caused by the COVID-19 pandemic and an increase in faculty separations and retirements. As with other populations, UC faculty faced increased workload and stress during the pandemic, the struggle to shift courses to remote instruction, stalled research and scholarship, and increased anxiety due to work-life balance issues, health concerns, and dependent care responsibilities. Newer, more diverse faculty were hit particularly hard by the pandemic, making it increasingly difficult to make progress to tenure and some choosing to leave the University. As the following figures show, while UC hires are more diverse than incoming students, the proportion of underrepresented faculty separating from the institution is even greater, which will stall UC efforts to grow and diversify the faculty. A Joint Academic Senate-Administration Mitigating COVID-19 Impacts on the Faculty Working Group issued a final report[1] with five recommendations on ways to address COVID-19 impacts on the faculty. The highest-priority recommendations focused on how to fairly account for these impacts in the academic advancement process and, important to the University of California's mission, proposed campus approaches to give faculty the resources and time necessary to recover from disruptions to research and scholarship.

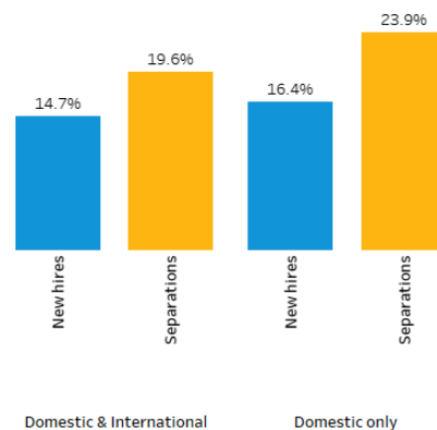[1] https://regents.universityofcalifornia.edu/regmeet/may22/a6.pdf

UC's new faculty are more diverse than existing faculty, but separations of URG faculty exceed that of new hires.

Diversify faculty, implement best hiring and retention practices:
Ladder-rank non-recall diversity (Universitywide) Domestic

Hispanic/Latinx	New	9.9%
	All	8.0%
Am Ind/Nat Amer	New	0.9%
	All	0.6%
Black/Afr Amer	New	6.7%
	All	4.3%
Nat Haw/Pac Isl	New	0.1%
	All	0.1%
Asian	New	13.5%
	All	13.6%
White	New	58.0%
	All	68.5%
Two or more	New	2.2%
	All	1.6%
Unknown	New	8.8%
	All	3.4%

New: new hires between 2011-12 and 2020-21; All: Oct 2021

Underrepresented tenure-track faculty, 2011-12 to 2020-21, Universitywide

Domestic & International		Domestic only	
New hires	Separations	New hires	Separations
14.7%	19.6%	16.4%	23.9%

To reach the faculty hiring goal by 2022 goal, UC would need to add an additional 758 faculty. ***UC is not on pace to meet this faculty hiring goal.***

The California Governor and University Join in a Compact to Advance Key UC 2030 Goals

The University and Gov. Gavin Newsom have mutually agreed to prioritize advancement of student-focused, shared goals, including closing equity gaps and growing undergraduate and graduate students. Under a compact agreed upon in the 2022–23 state budget, UC will receive annual five percent increases to its core budget over each of the next five years, with the understanding that it will focus resources on achieving UC's 2030 goals, including growing and diversifying the faculty and narrowing student achievement gaps.

UC 2030 dashboard

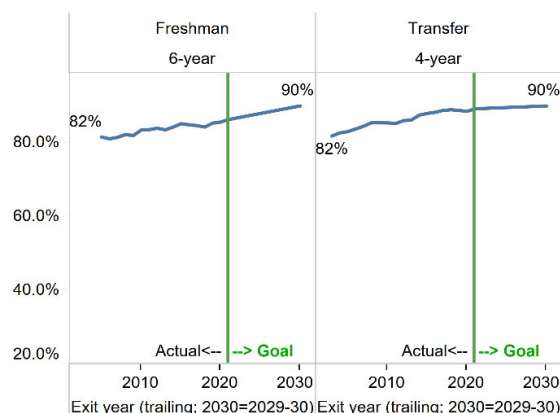This dashboard highlights key goals of the UC 2030 framework.

UC has goals to (1) produce 200,000 more undergraduate and graduate degrees on top of the 1 million already projected for a total of 1.2 million degrees; (2) achieve a 90 percent overall graduation rate and close graduation gaps for Pell, first-generation and underrepresented groups; and (3) invest in faculty and research by adding 1,100 ladder rank faculty over the next four years. The "Growing Our Own Graduate Enrollment" initiative aims to: (1) Increase the number and proportion of UC Ph.D. students who come from institutions with historically high diverse student populations and (2) Increase the number and proportion of UC undergraduates who go on to earn a Ph.D.
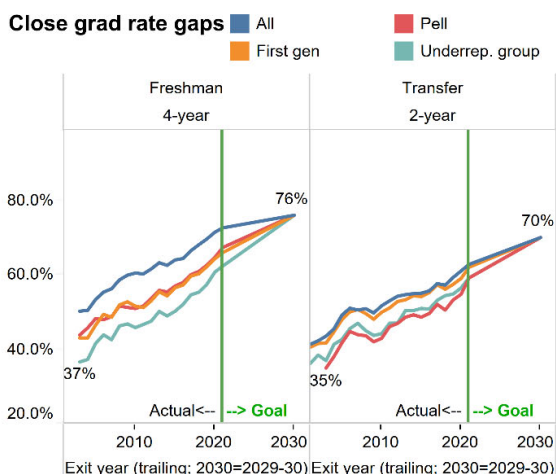
Select campus
Universitywide

Goal #1: Award 1.2 million degrees between 2015-16 and 2029-30

| Undergraduate 345,914 | Grad 115,298 | 461,212 as of 2020-21 | | Degrees remaining: 738,788 | Goal: 1.2 million |

| 0.0M | 0.1M | 0.2M | 0.3M | 0.4M | 0.5M | 0.6M | 0.7M | 0.8M | 0.9M | 1.0M | 1.1M | 1.2M |

Goal #2: Increase freshman and transfer grad rates

Freshman 6-year — 82% rising to 90% goal
Transfer 4-year — 82% rising to 90% goal

Exit year (trailing; 2030=2029-30)

Close grad rate gaps

Legend: All, Pell, First gen, Underrep. group

Freshman 4-year — 37% to 76%
Transfer 2-year — 35% to 70%

Exit year (trailing; 2030=2029-30)

Goal #3:

Add 1,100 ladder-rank non-recall faculty over 4 years: Universitywide headcount

	2018	2019	2020	2021	2030 goal
Headcount	10,484	10,678	10,861	10,826	11,584
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Diversify faculty, implement best hiring and retention practices: Ladder-rank non-recall diversity (Universitywide) Domestic

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Unknown	New	8.8%
	All	3.4%

New: new hires between 2011-12 and 2020-21; All: Oct 2021

F'21 UC PhD doctoral students diversity (Universitywide)

Hispanic/Latino(a)	1st Year	11.8%
	All	11.0%
African American	1st Year	6.2%
	All	4.4%
American Indian	1st Year	0.5%
	All	0.8%
Pacific Islander	1st Year	0.3%
	All	0.3%
Asian	1st Year	14.8%
	All	13.7%
White	1st Year	29.9%
	All	33.3%
Domestic Unknown	1st Year	2.2%
	All	3.9%
International	1st Year	34.3%
	All	32.7%

Dashboard Notes and Data Sources

UC historical fall enrollment, 1869 to present provides enrollment trends for undergraduate, graduate, and health science students by campus:
universityofcalifornia.edu/about-us/information-center/historical-enrollment

Degrees awarded include the leading summer and the full academic year:
universityofcalifornia.edu/infocenter/degrees-awarded-data

Graduation rates are based on entering cohorts but labeled by the exit academic year, which is a leading year. For example, the six-year graduation rate for 2019 in the graph reflects students who entered in fall 2014 and graduated in the 2019–20 year (including the trailing summer):
universityofcalifornia.edu/infocenter/ug-outcomes

Ladder-rank non-recall faculty are October payroll snapshot headcounts:
universityofcalifornia.edu/infocenter/uc-employee-headcount

The Accountability Report website**:** accountability.universityofcalifornia.edu

The UC Information Center**:** universityofcalifornia.edu/infocenter

Undergraduate Students

Admissions and Enrollment

First-year student Sariel Sandoval is a recipient of a very rare Generation Change Scholarship from UC Berkeley.
The award is given to domestic non-resident students who are "game changers, trailblazers, solution seekers and revolutionaries… students with the potential to leverage a UC Berkeley education to change their world for the better."

"It's admirable that this 18-year-old from a very rural town in Montana that's very isolated and not as connected to the world decided to take a challenge into her own hands," said Whitney Williams, who ran for governor of Montana in 2020 and today is CEO of williamsworks, a social impact consultancy. "Her hustle is really remarkable," continued Williams, People who have been through so much in their lives, particularly women and people of color, have a relentlessness that makes them successful.

Sandoval felt led to speak out in state speech and debate championships about issues affecting her community, including cultural appropriation, the disappearance and murder of Indigenous women, public commitment to high-quality Native American educational content in all K-12 classrooms, and the dismantling of privilege. Along her educational journey, Sandoval also found a passion and high aptitude for math.

Sandoval's plan? "… I am a dedicated worker who intends to come back after college to help my people, tribe and community,"

UNDERGRADUATE STUDENTS — ADMISSIONS AND ENROLLMENT

Goals

One of the University of California's highest priorities is to ensure that a UC education remains accessible to all Californians who meet its admissions standards. This goal is articulated in California's Master Plan for Higher Education, which calls for UC to admit all eligible freshmen and transfers, with freshman eligibility designed to capture the top 12.5 percent of California public high school graduates.

Of the over 250,000 applications for admission in fall 2021, about 204,000 students applied as freshmen and 46,000 as transfers. Campus admission decisions are based on a comprehensive review of qualifications and establish the incoming California resident class size based on State funding. UC's total undergraduate enrollment of California residents increased by more than 1,500 in fall 2021 compared to the prior year, with a total increase of almost 21,000 since fall 2015.

For 2021–22, UC is expected to achieve its goal to enroll two new freshman to one new transfer California resident undergraduates, excluding Merced, for the fifth year in a row. The UC Transfer Pathways support this goal by helping community college students prepare for transfer admission to the most popular majors at UC campuses. Expanding on its campus-based Transfer Admission Guarantees (TAGs), UC developed the Pathways+ option for community college students who want to both secure guaranteed admission to a TAG campus in a particular major while also preparing for admission to all campuses that offer the major. The first cohort for the Pathways+ program enrolled in fall 2021.

Admissions — freshmen

UC utilizes a comprehensive review process to make admission decisions, considering not only completion of rigorous college preparatory courses and high school GPA, but also talents, special projects, accomplishments in light of life experiences and circumstances, extracurricular activities, and community service. UC eliminated the standardized testing requirement for freshman applicants starting with the fall 2021 incoming class. The University also made temporary adjustments to its admission requirements, including suspending the grade requirement for A–G courses taken between the spring 2020 and summer 2021 terms.

The rapid growth in freshman applications to UC over the past two decades demonstrates the increased demand for a college education, the growth of California's population, and UC's continued popularity. UC continues to meet its Master Plan goals of guaranteeing admission to California resident applicants who are either in the top nine percent of high school graduates statewide or the top nine percent of graduates from their own high schools. Qualified freshman applicants are offered an opportunity to be admitted to another UC campus if they do not receive an offer of admission from the UC campuses where they applied.

Admissions — transfers

Almost all transfer students enter UC as upper-division juniors. Campus enrollment targets are based on State funding as well as capacity in major programs at the upper-division level.

UC's Transfer Pathways identify a common set of lower-division courses for each of 20 of the most popular majors among transfer applicants. The Transfer Pathways present a clear roadmap for prospective transfers to prepare for their majors and be well positioned to graduate in a timely fashion from any UC campus. In fall 2021, the fourth year of the Transfer Pathways, those indicating Pathway-based preparation represented 49 percent of all CCC admits and 50 percent of all California Community College (CCC) enrollees. Many of these students also participated in other preparatory programs such as TAG and Intersegmental General Education Transfer Curriculum (IGETC).

Transfer Pathways Majors

Anthropology	Computer Science	Molecular Biology
Biochemistry	Economics	Philosophy
Biology	Electrical Engineering	Physics
Business Administration	English	Political Science
Cell Biology	History	Psychology
Chemistry	Mathematics	Sociology
Communication	Mechanical Engineering	

In April 2018, UC signed an agreement with the CCCs to guarantee a place within the UC system to students who complete one of the Transfer Pathways and achieve the requisite grade point average (GPA). The new Pathways+ program launched in August 2019.

Enrollments

The University enrolled over 230,000 undergraduates in fall 2021. The University enrolls freshman and transfer students from almost every county of California.

Undergraduate Enrollment, Fall 2021

New Freshmen	51,728
New Transfers/Other[1]	21,837
Continuing Students	156,964
TOTAL	230,529

Source: UC Data Warehouse

As academic qualifications have improved over the last decade, UC has maintained access for populations historically underserved by higher education. In fall 2021, 33 percent of new undergraduates received Pell Grants, a marker for low-income status. About 38 percent of UC's entering students are first-generation, meaning neither parent graduated from a four-year college — 47 percent of transfer students and 35 percent of freshman students. The first-generation share of transfer students has been fairly steady for the past decade, but the freshman share has declined in recent years (1.2.1). First-generation students are more likely to be from an underrepresented group (URG: African American, Hispanic/Latino(a) and Native American/Alaska Native students), to have a first language other than English, to enter as a transfer student, to be female, and/or to have a lower income than students with at least one parent who graduated from a four-year college (1.2.2).

The share of freshman applicants, admits, and enrollees from underrepresented groups (URGs) has not kept pace with the share of California public high school graduates from URGs, leading to increasing equity gaps over the last two decades. In 2021, 58 percent of California public high school graduates were from underrepresented groups while 38 percent of new freshman enrollees at UC were from these groups, for a 20-percentage point gap (down from 23 percentage points in 2020) (1.2.3). Similarly, the share of transfer applicants, admits, and enrollees from

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[1] Other types of new students include those enrolling for a second baccalaureate or with limited status (not seeking a bachelor's degree).

URGs does not reflect the share of transfer-ready CCC students who are from URGs. In 2020, 50 percent of CCC transfer-ready students were from URGs while 35 percent of UC transfer students from UC were from URGs, for a 15-percentage point gap (up from 12 percentage points in 2019) (1.2.4).

The share of all undergraduates who are nonresident domestic and international students has increased in recent years, though their proportion is still much lower than at comparable public research universities. In 2020–21, the share of all undergraduates paying nonresident tuition went down slightly (1.4.4). In May 2017, UC adopted a policy[1] affirming that nonresident undergraduates "will continue to be enrolled in addition to, rather than in place of, funded California undergraduates at each campus." The policy also capped nonresident enrollment at 18 percent for five UC campuses (Davis, Merced, Riverside, Santa Barbara, and Santa Cruz) and, for the remaining four campuses (Berkeley, Irvine, Los Angeles, and San Diego), at the proportion each campus enrolled in 2017–18. The policy went into effect for the 2018–19 academic year.

Having California students learn and live alongside students from backgrounds and cultures different from their own is part of a world-class educational experience. California students also benefit from the extra tuition paid by nonresident undergraduates, which is about $31,000 more per year than the amount paid by residents. That tuition helps to fund faculty hires, instructional technology, student advising, and other services that directly benefit California students.

Admissions and enrollment trends

Freshman applicants have gone up from 73,000 to 204,000 over the past two decades, averaging five percent growth per year. In fall 2021, the number of applicants increased 18 percent compared to the previous year, while the number of students admitted went up 11 percent and the number of enrollees went up 11 percent (1.1.1). The fall 2021 incoming cohort applied to UC and made choices about whether and where to attend college during the COVID-19 pandemic. Application, admit, and enrollment numbers are all up from the year before but admitted students were still deciding to come to UC at a lower rate than in recent pre-pandemic years, leading campuses to admit a higher proportion of applicants in order to meet enrollment goals. The elimination of the standardized testing requirement may have encouraged more freshman applicants in fall 2021 compared to previous years. A more comprehensive analysis will be conducted to examine the influence of this admissions policy change on student application behavior and learning outcomes.

Fall transfer applicants more than doubled over the last 20 years, with average annual growth of four percent. In fall 2021, transfer applicants increased by seven percent, and admits increased by two percent compared to the previous year, while enrollees went down one percent (1.1.2).

The Master Plan specifies that the University maintain a 60:40 ratio of upper- to lower-division students, which corresponds to a 2:1 ratio of new California resident freshmen to new California resident transfers. UC has moved from 2.3:1 in 2016–17 to an estimated 2.1:1 in 2021–22 (Universitywide). Excluding Merced, the ratio for 2021–22 is estimated to be 2.0:1, meeting the systemwide goal five years in a row. The University continues to work toward achieving this ratio for each campus each year (except Merced) (1.1.3). Overall undergraduate enrollment (new and continuing students) continued to grow in fall 2021. Total enrollment was almost 231,000 in fall 2021, up two percent from the year before. This includes an increase in California residents of over 1,500 from the year before with a total increase of almost 21,000 since fall 2015 (1.1.4).

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[1] Regents Policy 2109: Policy on Nonresident Student Enrollment: regents.universityofcalifornia.edu/governance/policies/2109.html.

Academic preparation

Freshmen entering UC are increasingly well prepared, as shown by changes in the number of college preparatory courses and high school GPA over time (1.3.1). Transfer students are also increasingly well prepared, as measured by college GPA over time (1.3.2).

Geographic origins and nonresidents

UC has a lower proportion of out-of-state undergraduates than other public AAU universities. In fall 2021, only 17.9 percent of UC's enrollees were out-of-state or international, compared with 30.1 percent for other AAU public institutions (1.4.1).

About 36 percent of freshmen and 48 percent of transfer students entering UC campuses come from within 50 miles of their campus. These numbers are relatively stable and have changed only slightly over the past few years (1.4.2, 1.4.3).

The percentage of all undergraduates paying nonresident tuition went down slightly in 2020–21 (1.4.4).

Looking ahead

Enrollment of new freshman increased in fall 2021 after being fairly steady for the last few years. Enrollment of transfer students has been fairly steady for the last few years, including fall 2021. Overall enrollment will need to grow for UC to meet its goal of awarding an additional 200,000 degrees (for a total of 1.2 million) by 2030. State funding is crucial for reaching this goal. UC also continues to work to close equity gaps.

For more information

Information on admissions: admission.universityofcalifornia.edu

Data on UC admissions:
universityofcalifornia.edu/infocenter/admissions-residency-and-ethnicity
universityofcalifornia.edu/infocenter/freshman-admissions-summary
universityofcalifornia.edu/infocenter/transfer-admissions-summary
universityofcalifornia.edu/infocenter/admissions-source-school
universityofcalifornia.edu/infocenter/transfers-major

Data on UC fall enrollment:
universityofcalifornia.edu/infocenter/fall-enrollment-headcounts

Data on equity gaps:
universityofcalifornia.edu/about-us/information-center/gap-analysis

Demand for UC admission from freshman applicants remains high.

1.1.1   Freshman applicants, admits, and enrollees
Universitywide and UC campuses
Fall 1994 to 2021

Universitywide, unduplicated, 1994 to 2021

203,842

131,662

51,727

By campus, fall 2021

■ *Applicants* ■ *Admits* ■ *Enrollees*
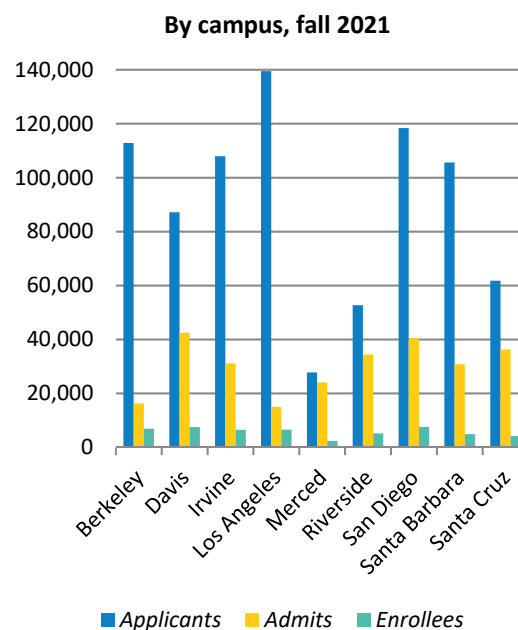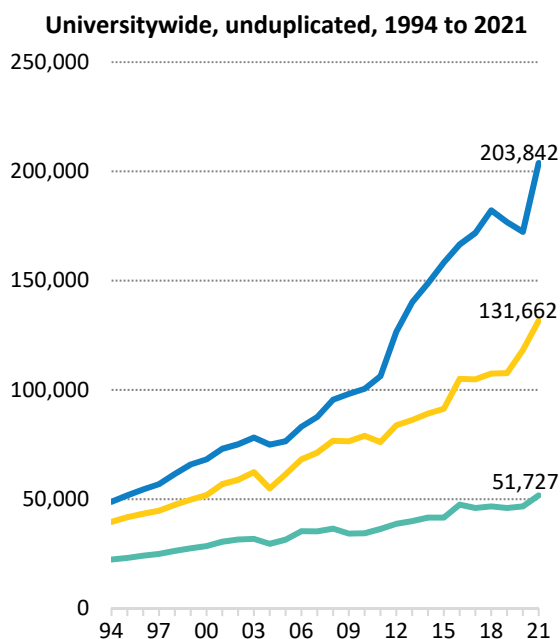
Source: UC Data Warehouse[1]

After two years of declines, unduplicated freshman applicants increased 18 percent from 2020 to 2021 to a record high of almost 204,000. Coming after a period of rapid growth from 2011 to 2019, this resulted in total growth of 92 percent from 2011 to 2021 (or seven percent per year). This growth over the last decade represents about 98,000 applicants, including about 43,000 California residents

Most campuses admit less than half of freshman applicants. Many applicants apply to more than one UC campus; in fall 2021, UC applicants applied to an average of 4.0 campuses. Freshman applications increased at all campuses in fall 2021. For data tables on UC freshman applicants, admits, and enrollees by campus over time, see: universityofcalifornia.edu/infocenter/admissions-residency-and-ethnicity.

[1] Admits and enrollees here include applicants guaranteed admission who are not offered admission at a campus to which they applied but who are referred to and admitted by another campus. Some campuses admit fall applicants for a subsequent term (winter or spring). These "rollover" admits and enrollees are excluded in this indicator. Students who apply to multiple UC campuses are counted only once in the Universitywide indicator. A change in accounting for referral students is responsible for the apparent drop in 2011 admits. Beginning that year, UC Merced admitted only students who indicated interest in a referral offer, rather than every student who qualified for an offer.

Transfer applicants, admits, and enrollees are higher than ever.

1.1.2 Transfer applicants, admits, and enrollees
Universitywide and UC campuses
Fall 1994 to 2021

Universitywide, unduplicated, 1994 to 2021

By campus, fall 2021

■ *Applicants* ■ *Admits* ■ *Enrollees*
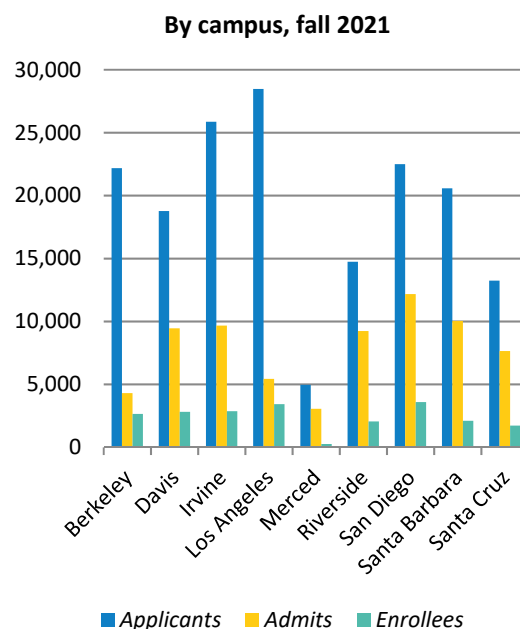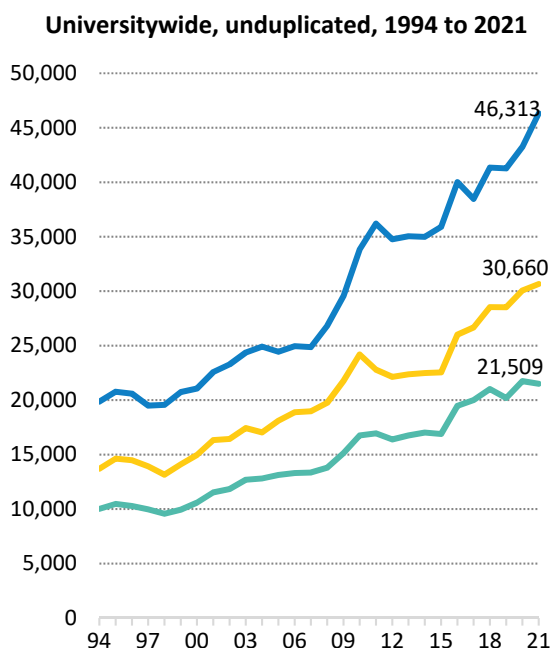
Source: UC Data Warehouse[1]

Transfer applications increased by seven percent and admits increased by two percent, while enrollees decreased by one percent in fall 2021. Over 46,000 transfer students applied, over 30,000 were admitted, and over 21,000 enrolled in fall 2021. Consistent with UC's commitment to transfer students from California Community Colleges (CCCs), fall enrollment of new CCC California resident transfers has more than doubled since 1994, from

8,400 to 20,200. The average transfer applicant applies to 3.7 UC campuses, compared to 4.0 for the average freshman applicant.

For data tables on UC transfer applicants, admits, and enrollees by campus see:
universityofcalifornia.edu/infocenter/admissions-residency-and-ethnicity.

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[1] Admits and enrollees here include the referral pool. Some campuses admit fall applicants for a subsequent term (winter or spring). These "rollover" admits and enrollees are excluded in the graphs here, which only show fall data.

UC has met the systemwide goal of a 2:1 ratio of new California resident freshmen to transfer students and is on track to meet the goal at all campuses.

1.1.3 New California resident freshmen and transfer students
Universitywide
2008–09 to 2021–22

New CA resident freshman enrollees · New CA resident transfer enrollees · New CA freshman to new CA transfer ratio
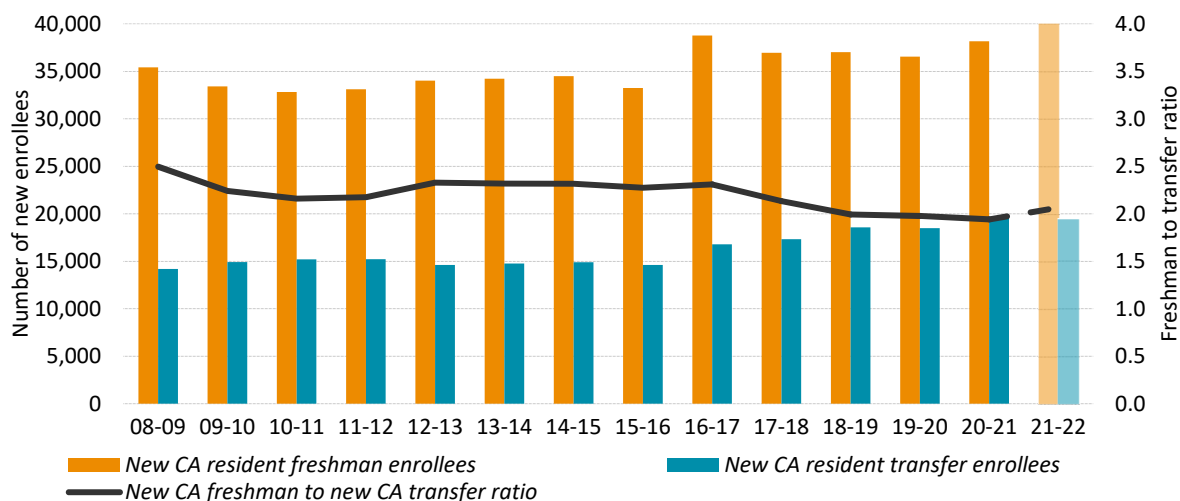
* The actual figures for 2021–22 are not yet available and may differ from the estimated figures shown here.

Source: UC Data Warehouse and UC campuses[1]

The California Master Plan calls for UC to accommodate all qualified resident California Community College (CCC) transfer students. It specifies that the University maintain at least a 60:40 ratio of upper-division (junior and senior) to lower-division (freshman and sophomore) students to ensure adequate upper-division spaces for CCC transfers. To do so, UC aims to enroll one new California resident transfer student for every two new California resident freshmen, or 67 percent new resident freshmen to 33 percent new resident transfer students.[2] UC has moved from 2.3:1 in 2016–17 to an estimated 2.1 in 2021–22 (Universitywide). Excluding Merced, the ratio for 2021–22 is also estimated to be 2.0:1, meeting the systemwide goal five years in a row.[3] Davis and Riverside did not meet the goal in 2021–-22 primarily due to unexpectedly large freshman classes.

2021–22*	% New CA resident freshmen	% New CA resident transfers	Ratio of new CA freshmen to new CA transfers
Berkeley	67%	33%	2.0
Davis	67%	33%	2.1
Irvine	66%	34%	1.9
Los Angeles	61%	39%	1.6
Merced	88%	12%	7.2
Riverside	69%	31%	2.2
San Diego	66%	34%	2.0
Santa Barbara	66%	34%	2.0
Santa Cruz	69%	31%	2.2
Universitywide, all campuses	67%	33%	2.1
Universitywide, excl. Merced	66%	34%	2.0

[1] Full year headcount enrollment.
[2] Nearly all (96 percent) of California resident transfer students in 2020–21 came from CCCs.
[3] Merced is excluded from the 2:1 ratio goal that was part of the Budget Framework agreement with the State of California.

UC's fall undergraduate headcount grew slightly between fall 2020 and fall 2021, including over 1,500 additional California residents.

1.1.4 Undergraduate headcount enrollment
Universitywide and UC campuses
Fall 2008 to 2021

Universitywide, 2008 to 2021

By campus, fall 2021

Source: UC Data Warehouse
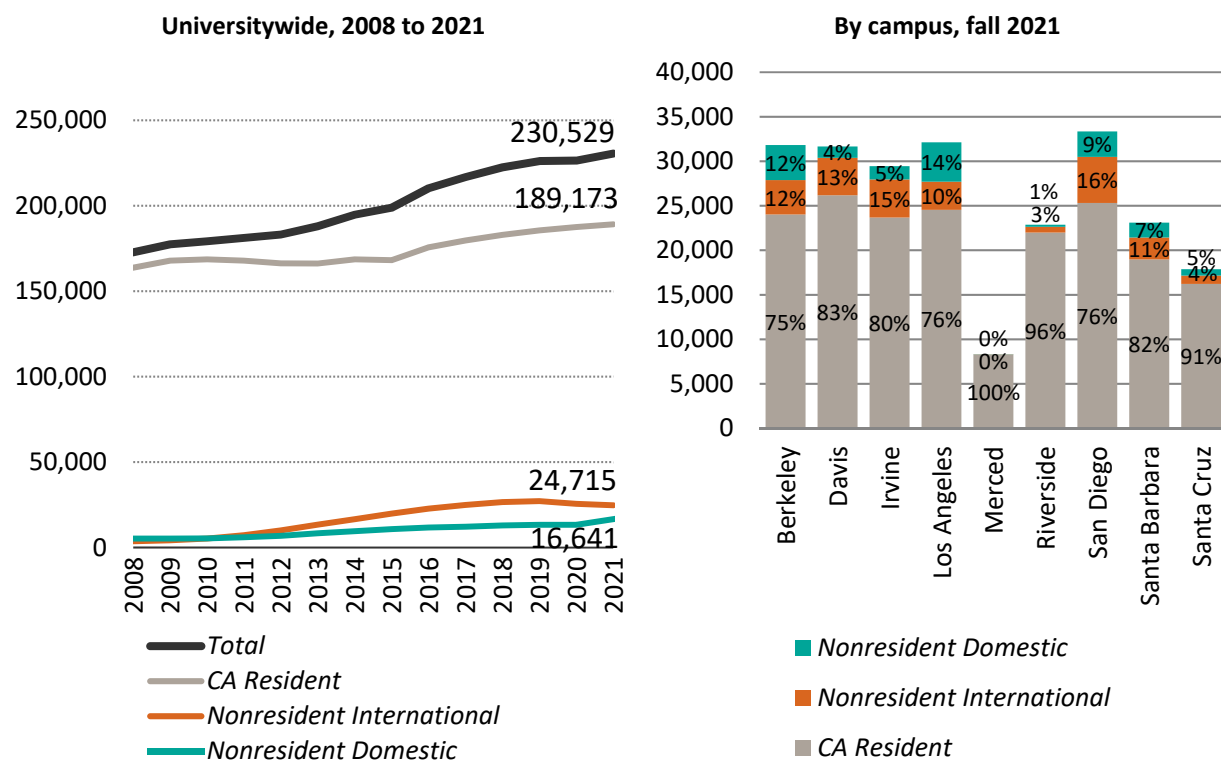
The University and the state share the goal of expanding access to a UC education. The University enrolled over 1,500 additional California residents in fall 2021 compared to fall 2020, with a total increase of almost 21,000 since fall 2015.

About half of UC's entering transfers and about one third of UC's entering freshmen are first-generations students.

1.2.1   Entering students by first-generation status[1]
Universitywide
Fall 2011 to 2021
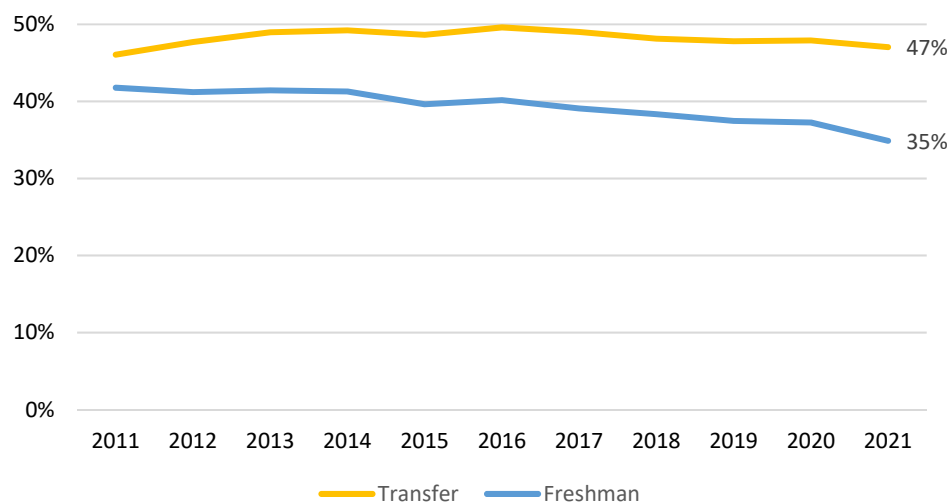
Source: UC Data Warehouse[1]

Almost half (47 percent) of entering transfer students were first-generation in fall 2021 compared to just over one-third (35 percent) of entering freshman students. The first-generation share of transfer students has been fairly steady over the past decade, while the first-generation share of freshman students has declined in recent years.

[1] First-generation students are those whose parent(s) did not complete a four-year college degree. Total of first-generation students is 28,193 (38.3 percent); not-first-generation students total 43,270 (58.8 percent); and missing/unknown are 2,102 (2.9 percent).

UC's entering first-generation students are more likely to be from an underrepresented group (URG), to enter as transfer students, and/or to be Pell Grant recipients.

1.2.2   Entering students by first-generation status, race/ethnicity, first language spoken at home, entry level, Pell Grant status, and gender
Universitywide
Fall 2021

Race/Ethnicity

Legend: International, Unknown, White, Asian/Pac. Isl., Hispanic/Latinx, American Indian, African American

First Language

Legend: Unknown, First language English only, First language English and another language
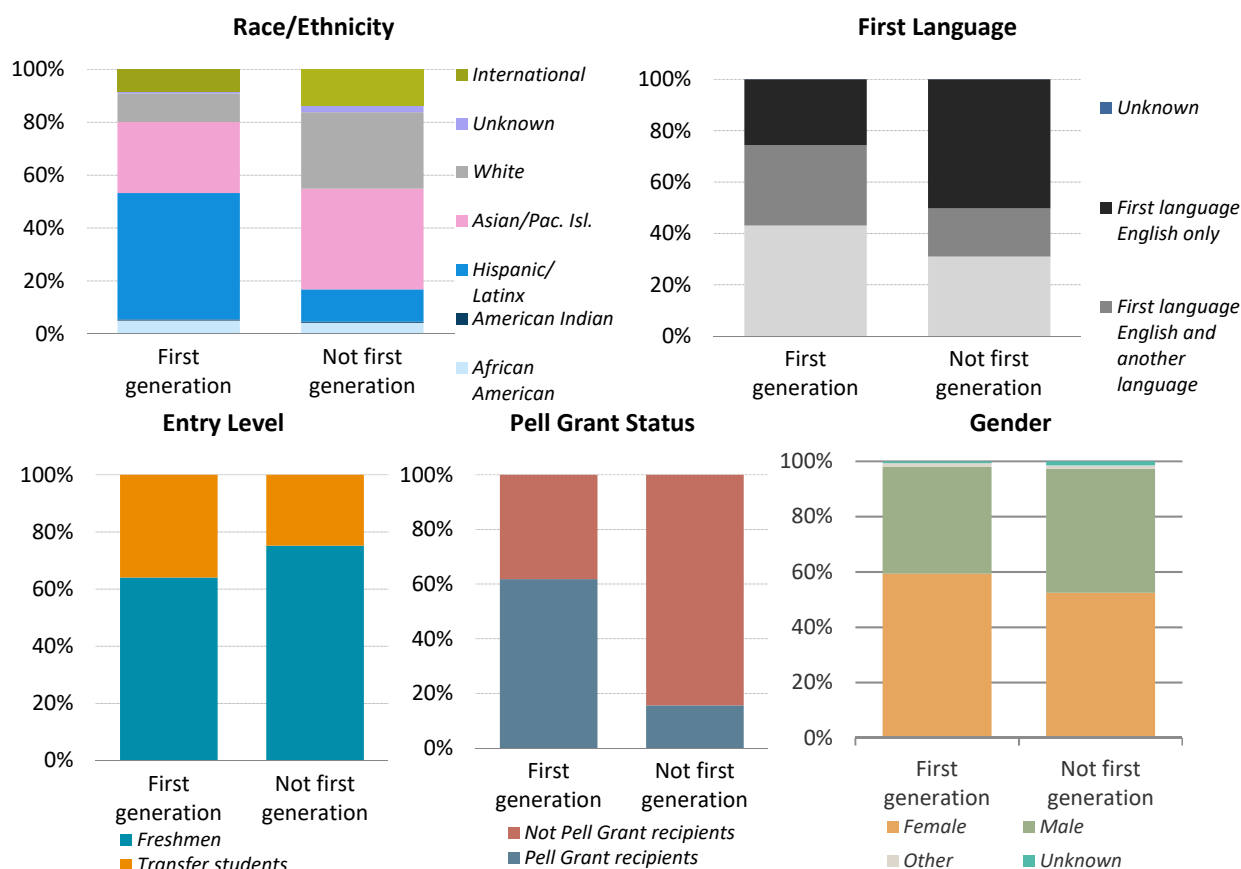
Entry Level

Legend: Freshmen, Transfer students

Pell Grant Status

Legend: Not Pell Grant recipients, Pell Grant recipients

Gender

Legend: Female, Male, Other, Unknown

Source: UC Data Warehouse[1]

Over half (53 percent) of entering first-generation students in fall 2021 are from URGs, compared to 17 percent of not-first-generation students. Over two-fifths (43 percent) of first-generation students' first language was not English, versus 31 percent for others. Over one-third (36 percent) of first-generation students entered as transfers, versus 25 percent for others. Over three-fifths (62 percent) of first-generation students are lower-income Pell Grant recipients, versus 16 percent for others. And nearly three-fifths (59 percent) of first-generation students are female, compared to just over half (52 percent) of others. In all cases, the gaps between first-generation and not-first-generation students grew slightly between 2020 and 2021.

[1] Those with unknown first-generation status are excluded from this indicator. Pell Grant receipt is used as a proxy for low-income status. Less than .01 percent of entering students have an unknown first language. Gender is unknown for one percent of students and students in the "other" gender category make up less one percent of the total. The "other" gender category includes Different Identity, Genderqueer or Nonbinary Gender, Trans Female/Trans Woman, and Trans Male/Trans Man

The gap between the share of URG high school graduates and URG freshman enrollees decreased in 2021, but still persists.

1.2.3 Underrepresented Groups (URGs) as a share of California public high school graduates vs.
a share of freshman applicants, admits, and new enrollees from California public high schools
Universitywide
Fall 1989 to Fall 2021

URG share of CA public HS graduates vs. URG share of freshman applicants, admits, new enrollees from CA public HS
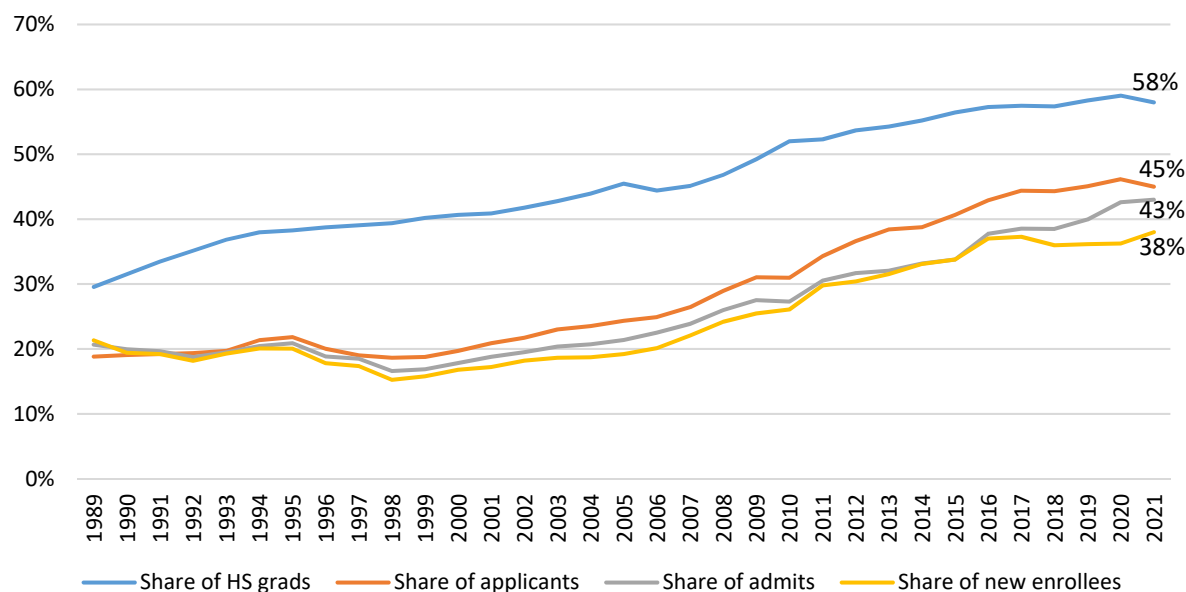
Source: UC Data Warehouse, UC Admissions Digest, California Department of Education, California Department of Finance

Before Proposition 209 took effect in 1998, the gap between the share of URGs among CA public high school graduates and the share of URGs among UC freshman enrollees from CA public high schools was in the eight to 22 percentage point range, with most years below 20 percentage points. This gap has stayed in the 20-25 percentage point range since 1998. In 2021, 58 percent of California public high school graduates were from underrepresented groups (URGs) while 38 percent of new freshman enrollees at UC were from these groups, for a 20-percentage point gap (down from 23 percentage points in 2020).

Generally, the gaps for UC freshman applicants and admits (vs. CA public high school graduates) are smaller than the gap for UC freshman new enrollees. For example, the gap for UC freshman applicants has been between 13 and 21 percentage points since 1998 while the UC freshman admit gap has been between 15 and 25 percentage points. In 2021, the applicant gap was 13 percentage points and the admit gap was 15 percentage points.

The gap between the share of transfer ready CCC students who are from URGs and the share of CCC transfer new enrollees who are from URGs has grown in recent years.

1.2.4   Underrepresented Groups (URGs) as a share of transfer-ready[1] California Community College (CCC) students vs. a share of UC transfer applicants, admits, and new enrollees from CCCs
Universitywide
Fall 1996 to Fall 2020

URG share of transfer ready CCC students vs. URG share of UC transfer applicants, admits, new enrollees from CCCs
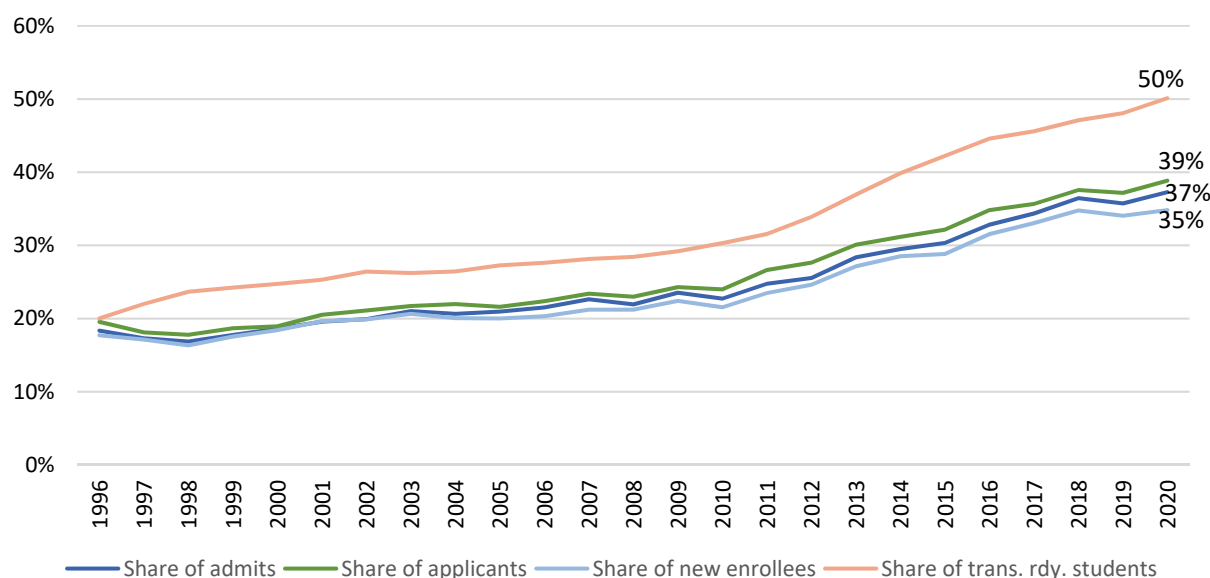
Source: UC Data Warehouse, California Community Colleges Chancellor's Office

The gap between the URG share of transfer ready CCC students and the URG share of UC transfer enrollees from CCCs has gone from six percentage points in 2003 to 15 percentage points in 2020.

The gaps between the URG share of transfer ready CCC students and the URG share of UC transfer applicants and admits are generally lower than the gap for new enrollees. The applicant gap has grown from five percentage points in 2003 to 13 percentage points in 2020. The admit gap has gone from four percentage points in 2003 to 11 percentage points in 2020.

[1] Transfer-ready students are those who have successfully completed a transferable English and a transferable math course and have earned 60+ transferable units with a 2.00+ GPA. These data reflect the number of students who reach this status each year. "Transfer-ready" is a proxy for students who are ready for UC admission.

Freshmen entering UC are increasingly well prepared.

1.3.1   A–G (college preparatory)[1] courses and weighted, capped high school grade point average (GPA)[2] of
         entering freshmen, as share of class
         Universitywide
         Fall 2008 to Fall 2021

Yearlong A–G courses
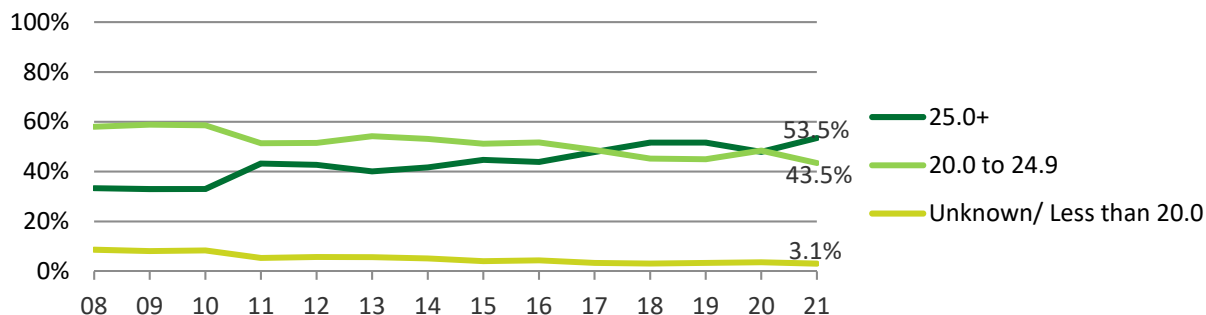
High school weighted, capped GPA
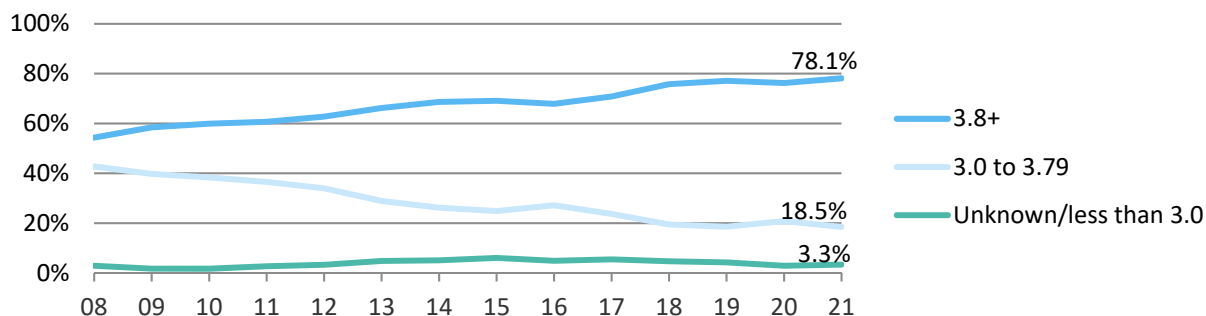
Source: ApplyUC data (A–G courses) and UC Data Warehouse (GPA)

The academic indicators of UC's entering freshmen have improved over time, as reflected by an increase in the share of students completing 25 or more college-preparatory courses and having a 3.8 or higher high school GPA. From 2008 to 2021, the first indicator went up from 33 percent to 53 percent, while the second went up from 54 percent to 78 percent.

[1] A–G courses refer to those high school courses that UC has reviewed and approved as college preparatory. The minimum number of required A–G courses is 15.
[2] Weighted, capped GPA means that students may receive a maximum of eight semesters of honors credit. More information is available at admission.universityofcalifornia.edu/freshman/california-residents/admissions-index/index.html.

UC transfer students in fall 2021 were better prepared academically than their counterparts a decade ago, as measured by their grades.

1.3.2   College grade point average (GPA)[1] of entering transfer students, as share of class
Fall 2008 to Fall 2021
Universitywide
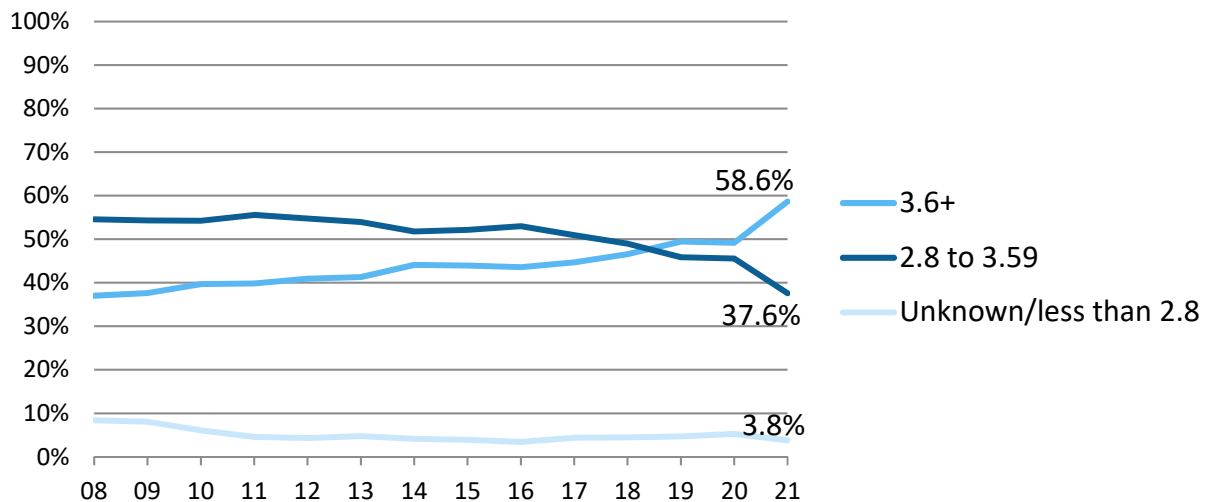
Source: UC Data Warehouse and UC Corporate Student System

The academic qualifications of transfer students entering UC have improved over time, as reflected by an increase in the share of students having a 3.6 or higher college GPA, from 37 percent in fall 2008 to 59 percent in fall 2021. The notable increase in high GPAs in fall 2021 may be partially due to the increase in Pass/No Pass grading during the COVID era.

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[1] The transfer GPA is based on grades for college-level academic courses from the college(s) where students were previously enrolled.

UC has consistently had a substantially lower proportion of out-of-state undergraduates than other AAU universities in recent years. In fall 2021, only 17.9 percent of UC's enrollees were out-of-state or international, compared with 30.1 percent for other AAU Public institutions.

1.4.1   Residency of undergraduate students
Universitywide and comparison institutions
Fall 2021
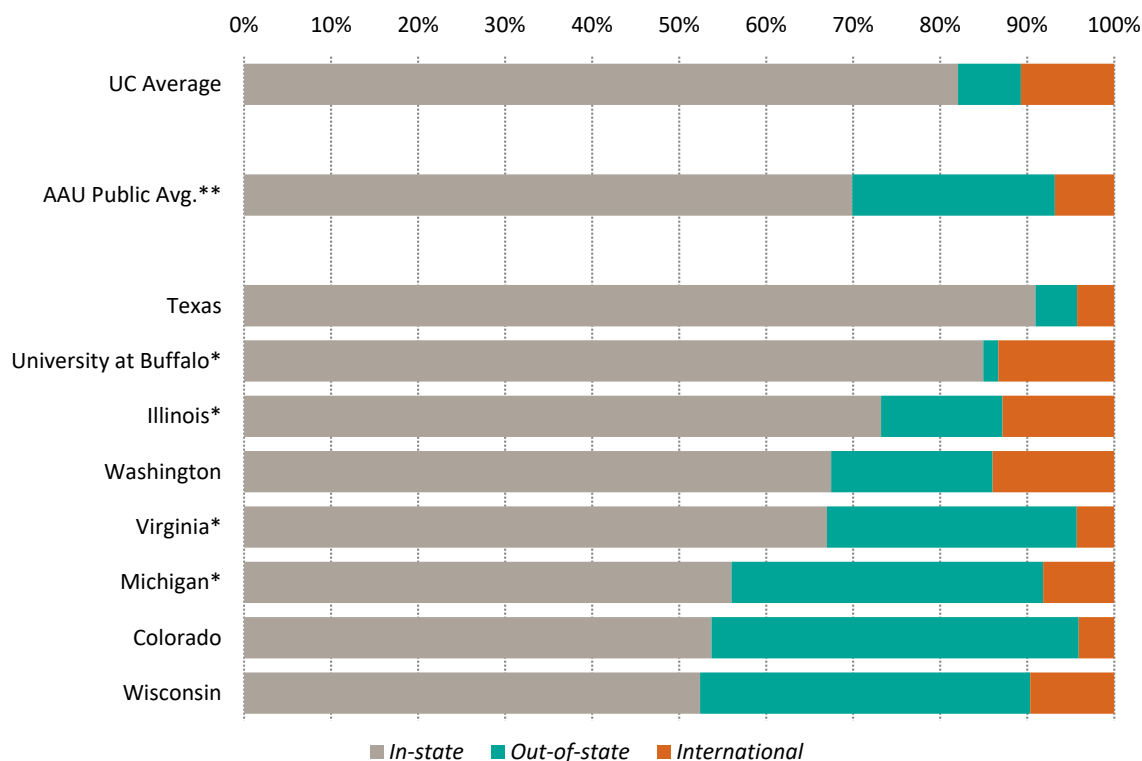
Source: UC Data Warehouse (UC numbers) and Common Data Set (comparator numbers)
* UC's four comparison public institutions. **AAU public average excludes UC; also excludes University of Missouri Columbia and University of Florida because data not available.

UC's priority is to enroll California residents. Campuses enroll nonresident students based on available physical and instructional capacity and the campus' ability to attract qualified nonresident students.

Nonresidents provide geographic and cultural diversity to the student body. They also pay the full cost of their education. In 2021–22, systemwide tuition and fees for a nonresident undergraduate were $41,196, compared to $11,442 for California resident students.

Nonresident applicants must meet higher criteria to be considered for admission. The minimum high school GPA for nonresident freshmen is 3.4, compared to 3.0 for California freshmen. The minimum college GPA for nonresident transfer students is 2.8, compared to 2.4 for California residents.

The proportion of undergraduate students paying nonresident tuition declined slightly in 2020–21.

1.4.2 Percentage of undergraduate enrollees paying nonresident tuition by academic year[1]
Universitywide
2008–09 to 2020–21
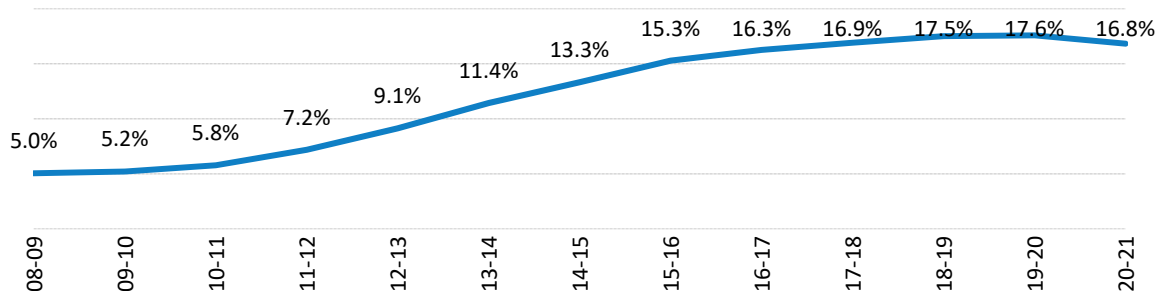
Source: UC Data Warehouse

Systemwide, the share of all undergraduates paying nonresident tuition declined slightly from 17.6 percent in 2019–20 to 16.8 percent in 2020–21. Over the last decade, this share rose from 5.8 percent in 2010–11 to 16.8 percent in 2020–21. From 2009–10 to 2015–16, the proportion of undergraduates paying nonresident tuition went up from 5.2 percent to 15.3 percent. This increase coincided with a period of reductions in State funding for UC due to the Great Recession. Starting in 2016–17 as enrollment of new California residents increased, the proportion of undergraduates paying nonresident tuition leveled off in the 16-18 percent range. During the COVID-19 pandemic, the percentage dropped to 16.8 in 2020–21.

The proportion of nonresident students at individual campuses varies depending on a campus' capacity, and its ability to attract nonresident students, as well as its nonresident cap under a policy approved in May 2017, which applies to total undergraduate numbers. Under the policy, effective in 2018–19, nonresident enrollment was limited to 18 percent at five UC campuses. At the other four campuses where the proportion of nonresidents already exceeded 18 percent — UC Berkeley, UC Irvine, UCLA, and UC San Diego — nonresident enrollment is capped at the proportion that each campus enrolled in 2017–18.

[1] This chart uses year average headcount enrollment, the average headcount across all terms in the academic year (three quarters or two semesters). Not all nonresident students pay nonresident tuition. Some have statutory exemptions, such as AB 540 students, children of UC employees, and others designated by the State. AB 540 students are considered California residents for tuition purposes as established by Assembly Bill 540, passed in 2001.

UC campuses attract freshmen from nearby regions and the major urban areas of California, with a systemwide local attendance rate of 36 percent.

1.4.3   Percentage of new CA resident freshman enrollees whose home is within a 50-mile radius of their campus
UC campuses[1]
Fall 2021
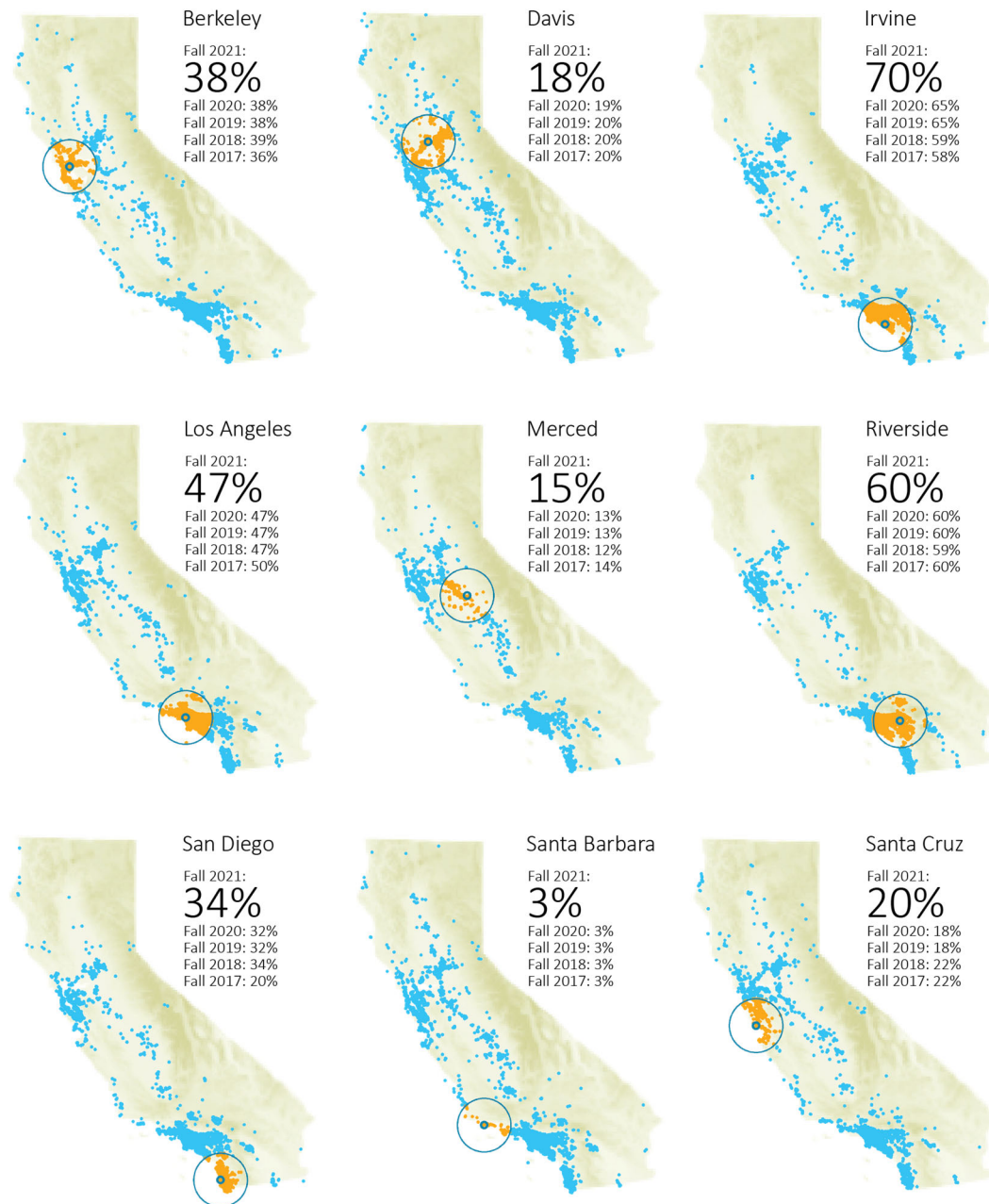
Berkeley

Fall 2021:
38%
Fall 2020: 38%
Fall 2019: 38%
Fall 2018: 39%
Fall 2017: 36%

Davis

Fall 2021:
18%
Fall 2020: 19%
Fall 2019: 20%
Fall 2018: 20%
Fall 2017: 20%

Irvine

Fall 2021:
70%
Fall 2020: 65%
Fall 2019: 65%
Fall 2018: 59%
Fall 2017: 58%

Los Angeles

Fall 2021:
47%
Fall 2020: 47%
Fall 2019: 47%
Fall 2018: 47%
Fall 2017: 50%

Merced

Fall 2021:
15%
Fall 2020: 13%
Fall 2019: 13%
Fall 2018: 12%
Fall 2017: 14%

Riverside

Fall 2021:
60%
Fall 2020: 60%
Fall 2019: 60%
Fall 2018: 59%
Fall 2017: 60%

San Diego

Fall 2021:
34%
Fall 2020: 32%
Fall 2019: 32%
Fall 2018: 34%
Fall 2017: 20%

Santa Barbara

Fall 2021:
3%
Fall 2020: 3%
Fall 2019: 3%
Fall 2018: 3%
Fall 2017: 3%

Santa Cruz

Fall 2021:
20%
Fall 2020: 18%
Fall 2019: 18%
Fall 2018: 22%
Fall 2017: 22%

Source: UC Data Warehouse and UC Corporate Student System

[1] California residents are defined here as those with permanent addresses in California.

Local enrollment rates for transfers are higher than for freshmen, with 48 percent enrolling at a UC campus within 50 miles of their homes.

1.4.4   Percentage of new CA resident transfer enrollees whose home is within a 50-mile radius of their campus
UC campuses[1]
Fall 2021

Berkeley

Fall 2021:
46%
Fall 2020: 50%
Fall 2019: 50%
Fall 2018: 49%
Fall 2017: 47%

Davis

Fall 2021:
35%
Fall 2020: 37%
Fall 2019: 37%
Fall 2018: 35%
Fall 2017: 33%

Irvine

Fall 2021:
68%
Fall 2020: 70%
Fall 2019: 70%
Fall 2018: 70%
Fall 2017: 71%

Los Angeles

Fall 2021:
65%
Fall 2020: 68%
Fall 2019: 67%
Fall 2018: 66%
Fall 2017: 69%

Merced

Fall 2021:
33%
Fall 2020: 36%
Fall 2019: 36%
Fall 2018: 31%
Fall 2017: 36%

Riverside

Fall 2021:
62%
Fall 2020: 64%
Fall 2019: 64%
Fall 2018: 64%
Fall 2017: 67%

San Diego

Fall 2021:
31%
Fall 2020: 38%
Fall 2019: 38%
Fall 2018: 35%
Fall 2017: 26%

Santa Barbara

Fall 2021:
12%
Fall 2020: 15%
Fall 2019: 15%
Fall 2018: 16%
Fall 2017: 14%

Santa Cruz

Fall 2021:
31%
Fall 2020: 38%
Fall 2019: 38%
Fall 2018: 36%
Fall 2017: 38%

Source: UC Data Warehouse and UC Corporate Student System

[1] California residents are defined here as those with permanent addresses in California.

Undergraduate Students

Affordability

When Ebelechukwu Eseka ("Ebele" for short) emigrated to the U.S. from Ghana as a sophomore in high school, her strategy was to keep quiet and try to blend in. She was reluctant to speak up, even when she was put into classes that were far beneath her academic ability.

Eseka was named a Promise Scholar at UC Santa Barbara, a program the provides financial help to high-achieving, first generation students from low-income households. She also benefitted from Pell Grant funding and state aid that allowed her to graduate without debt and take advantage of internships and leadership opportunities that built her confidence and taught her to speak out.

As a second-year student, she participated in the UCDC program, where she worked as an aide in Dianne Feinstein's office. "It was an amazing experience, and a little terrifying," she said. "People were calling the office constantly. I got to learn what Californians are thinking and what's important to them."

She now plans to apply to law school to become an immigration attorney. Her ultimate goal: create a nonprofit that combines legal aid and paperwork processing help with other support services to help immigrants find their footing in their new country. "It's a big goal, but I know it's achievable," she said.

"Freshman me was so timid, silenced by the challenge of immigration and fitting in. Now I ask a lot of questions, I'm not afraid to take risks and try new things. I found my voice at UC Santa Barbara. I am so proud of who I am today!"

UNDERGRADUATE STUDENTS — AFFORDABILITY

Goals

The goal of the University's undergraduate financial aid program is to ensure that the University remains accessible to all academically eligible California students, regardless of their financial resources.

Affordability is among UC's highest priorities. The University has maintained a strong record of enabling families from all income levels to finance a high-quality education, and it closely monitors the impact of its pricing decisions and financial aid programs.

Maintaining inclusive access

The total cost of attendance and the composition of undergraduates in terms of financial resources set the framework for what is required to provide adequate financial support.

For in-state students who live on campus, the total annual cost of attendance, which comprises tuition and fees and other expenses (e.g., living and personal expenses, books and supplies, transportation, and health care), has remained relatively flat over the last several years, ranging from $35,000 to $41,000 across UC. This figure compares to about $27,000 on average at other Association of American Universities (AAU) public institutions and around $71,000 for the AAU private institutions (2.1.1).

The income profile indicators demonstrate that the University remains accessible to low-income students. Between 2008–09 and 2020–21, the proportion of UC in-state undergraduates in the lowest income categories increased from 30 percent to 37 percent, with offsetting declines among middle- and upper-middle-income families (2.2.2). These trends reflect both the manageability of UC's net cost for low-income families, and the decline in the incomes of UC families since the 2009 economic recession.

In fall 2021, 34 percent of all UC undergraduates received a Pell Grant, which is a federal grant for low-income students with family incomes typically under $50,000. Pell Grant recipients comprise a higher share of UC's student body than they do at both AAU public (21 percent) and AAU private (16 percent) institutions (2.2.1).

Financing a UC education

UC is able to provide access to students across the economic spectrum thanks to a financial aid program that considers how much parents can afford; federal, state, and University gift aid or grants; and a manageable student "self-help" contribution from work or borrowing.

Gift aid dramatically reduces the net cost of attendance (total cost of attendance less gift aid) for students and enables those from low- and middle-income backgrounds to enroll in sizable numbers and proportions. The resulting inflation-adjusted net cost of attendance for in-state students from families in the lowest income bracket (less than $60,000) has declined or remained stable since 2004–05.

Federal and state governments provide critical support through the Pell Grant and Cal Grant programs. In addition, UC's commitment to affordability is evident in the University's strong systemwide financial aid program. As a result of this robust institutional financial aid program, which combines support from different sources, 55 percent of California resident undergraduates paid no tuition in 2020–21. Furthermore, over two-thirds of UC's own grant program helps students cover non-fee costs such as room, board, and book expenses.

Both UC and the State of California have made it a priority to provide financial support to undocumented students, with 2020–21 marking the tenth year that state and University financial aid has been available to undocumented Californians. Approximately 4,200 undocumented students received Cal Grants or need-based UC grants in 2020–

21, totaling $90 million. The California Dream Loan Program continues to provide student loans to undocumented Assembly Bill (AB) 540 students at CSU and UC.

The Legislature has provided $2.5M in UC's annual budget for the Dream Loan program, which has been matched by UC's own funding of $2.5M each year. Undocumented students who qualify for a waiver of nonresident supplemental tuition under AB 540 have been eligible for Cal Grants and UC grants since 2013 under the California Dream Act.

An undergraduate's self-help requirement can be met through a combination of work and loans. UC relies on student surveys — including the UC Undergraduate Experience Survey (UCUES) and Cost of Attendance Survey — to measure how much students work. UCUES data show that over 50 percent of undergraduates do not work. Studies indicate that 20 hours of work per week is the threshold at which undergraduate academic performance may be adversely affected, and UC's financial aid programs are structured to expect no more than 20 hours. Nevertheless, in the most recent UCUES survey (2020), ten percent of students reported working more than 20 hours per week, the same share as two years earlier.

For the academic year 2020–21, about 25 percent of California undergraduates relied on federal student loans to help finance their education, with loan amounts averaging $5,900. Federal borrowing declined significantly in 2020–21 due to a number of pandemic-related factors, including lower student budgets as a result of living at home or off campus; more federal grant support from Higher Education Emergency Relief) (HEERF) grants; and COVID Emergency grants from the state of California and the University for undocumented students. Parental borrowing under the federal PLUS program also declined to about four percent, with the average PLUS loan amount increasing to about $19,200 per year.

Since 2014–15, California's Middle Class Scholarship program has provided a new source of gift assistance for students at UC and the California State University with household incomes of up to $191,000 who receive limited or no need-based financial aid. In 2020–21, UC students received $37 million in Middle Class Scholarship awards.

Addressing basic needs

Universities across the nation are attempting to address student basic needs. UC provides unprecedented access to low-income students and has prioritized efforts to address food and housing insecurity. Spring 2020 UCUES survey results show 39 percent experience low to very low food security (20 percent report very low food security) and four percent report being homeless. The UC Office of the President (UCOP) has partnered with UC Systemwide Basic Needs Committee members to share data collection efforts and findings with intersegmental groups, including our California State University and California Community College colleagues, and has presented survey results to the UC Board of Regents Special Committee on Basic Needs.

The Regents Special Committee on Basic Needs issued a series of recommendations related to assessing and supporting student basic needs. Among the recommendations was to expand UC student access to the state CalFresh program. To facilitate this, the Committee recommended conducting research on the barriers to CalFresh eligibility and trends in CalFresh enrollment across the UC system. UCOP is partnering with the California Policy Lab to conduct research on student participation in the CalFresh program, with findings expected in 2022. Furthermore, UC Financial Aid Offices contacted students who were eligible to apply for CalFresh during the 2020–21 and 2021–22 academic years to encourage them to apply.

Limiting cumulative debt

The proportion of undergraduates leaving with debt is lower than a decade ago. About 43 percent of the class of 2020–21 graduated with debt, with an average amount of $18,400. This translates into a monthly repayment amount of about $195 for ten years at a five percent annual interest rate. This level of debt is manageable,

considering that a typical graduate who takes out loans earns about $3,500 a month within two years after graduation (2.3.5). Cumulative debt declined in 2020–21 due to the lower levels of borrowing in the most recent year due to the pandemic-related factors noted above. The most recent comparison data show average debt of $27,500 for public four-year institutions and $33,400 for private nonprofit four-year institutions (2.3.7). UC President Michael Drake has also created a debt-free path to UC that would eliminate the need to borrow for qualifying students.

Pandemic impact

The 2020 COVID pandemic disrupted the University's education delivery, moving nearly all courses online. The pandemic also had several impacts on students, parents, and how they paid for college costs. Both graduate and undergraduate students were impacted and both received emergency grant support from the federal government, the State of California, and UC.

Students who were living in on-campus housing were largely forced to move home with their families or into off-campus housing. Those who would have faced hardship moving off-campus were provided with accommodation. Because living off-campus and, particularly, with their families, is less expensive, the aggregate financial need for students was reduced. This reduction in aggregate need extended into 2020–21.

The federal Coronavirus Aid, Relief, and Economic Security (CARES) Act and Higher Education Emergency Relief Funds (HEERF) Act provided $69 billion directly to colleges and universities. In 2020–21, UC campuses received $112 million through HEERF grant awards, providing an average of $1,100 to 111,000 recipients. UC and State funds supplemented CARES emergency grants with $4 million to provide equivalent support for undocumented students, which provided an average award of $1,200 to 3,340 students.

Looking forward

In 2021, the Board of Regents approved the Tuition Stability Plan. Beginning fall 2022, tuition will be adjusted for each incoming undergraduate class but will subsequently remain flat until the student graduates, for up to six years. For undergraduates who first enrolled in fall 2021 or earlier — including all current undergraduates — tuition will stay flat at current rates for the duration of their enrollment, up to six years. Furthermore, the proportion of new tuition revenue set aside for financial aid will increase from 33 percent to 45 percent, expanding the University's own need-based financial aid. For graduate students, tuition will remain flat in constant dollars, adjusted annually for inflation.

For more information

UC costs and financial aid, including financial aid estimators: admission.universityofcalifornia.edu/paying-for-uc

Trends in UC financial aid: ucop.edu/enrollment-services//data-and-reporting

Data tables with downloadable figures on financial aid awarded by year, campus, and award type: universityofcalifornia.edu/infocenter/financial-support

Data tables with downloadable figures on total and net cost of attendance by campus and residency: universityofcalifornia.edu/infocenter/net-cost

Dashboard with typical student debt, earnings, percentages of graduates with debt, and debt payoff calculators: universityofcalifornia.edu/infocenter/uc-alumni-work

UC resident tuition and fees and total costs have remained relatively flat over the last several years, and while they still exceed the national average for other AAU public institutions, they remain below the average for AAU private institutions.

2.1.1   Total cost of attendance for undergraduate, in-state residents
Universitywide and comparison institutions, 2020 inflation-adjusted dollars
2006–07 to 2020–21
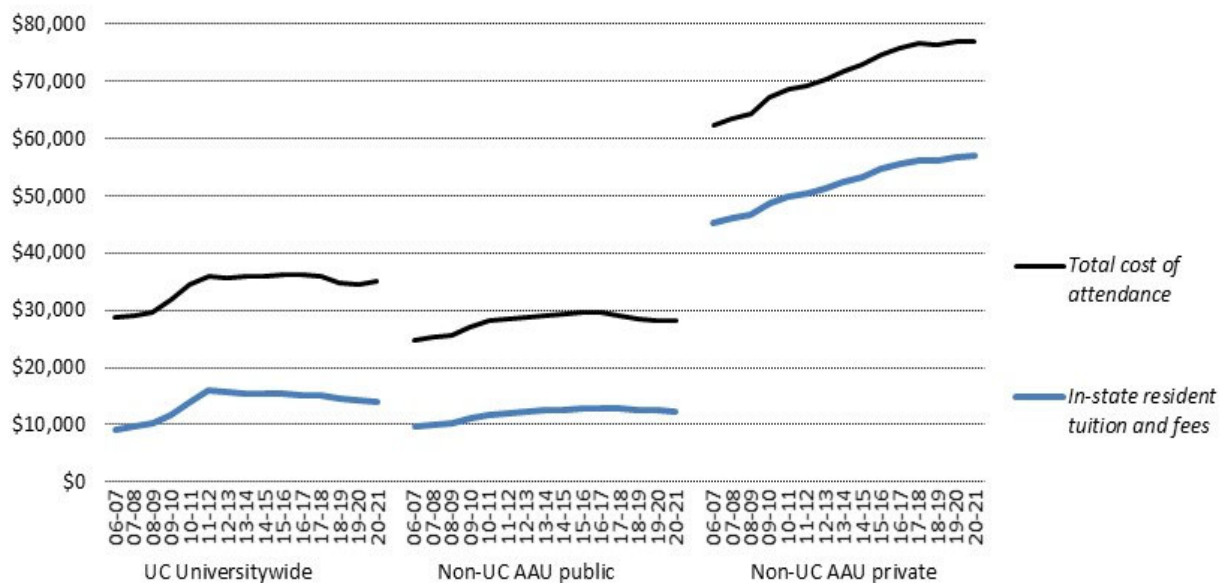
Source: IPEDS[1]

The total cost of attending college includes tuition and fees as well as living expenses, books and supplies, transportation, health insurance, and personal expenses. The total cost of attendance is higher at UC than at AAU public comparison institutions primarily because of higher costs beyond tuition and fees, especially the high cost of living in California.

UC tuition and fees and the total cost of attendance have remained relatively flat over the past several years.

[1] Charges are for in-state students living on campus. Averages are simple averages. Weighted averages for UC can be found at ucop.edu/student-affairs/data-and-reporting/student-budget-tables/index.html. A list of the 28 non-UC AAU public and 26 AAU private institutions in the comparison groups can be found in the data glossary.

Regardless of income, the net cost of attendance after financial aid for California resident students has remained stable or declined since 2010–11. The net cost of attendance for nonresident students is higher and has grown.

2.1.2   Net cost of attendance by family income and California residency
Universitywide, 2020 inflation-adjusted dollars
2006–07 to 2020–21
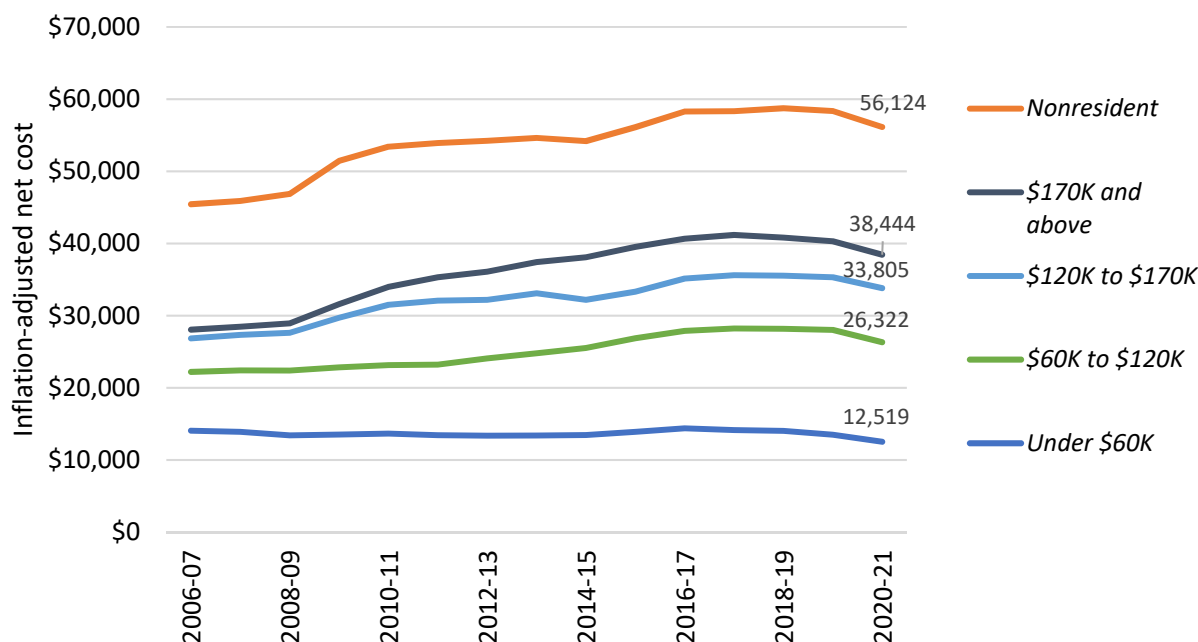
Source: UC Corporate Student System[1]

A general measure of the University's affordability is its average net cost of attendance. This represents the total cost of attendance at the University for undergraduates after taking into account scholarships and grants. Scholarships and grants reduce the net cost of attending UC for students at all income levels but have the greatest impact on students from low- and middle-income families.

The availability of scholarships and grants has mitigated the impact of cost increases on students from families earning less than $100,000.

Between 2006–07 and 2020–21, net cost has declined by about $1,500 in inflation-adjusted dollars for in-state students in the lowest income category due to this scholarship and grant support. Net cost declined across all income groups in 2020-21 due to the lower living expenses students experienced from living at home during the COVID-19 pandemic, and federal grants from the Higher Education Emergency Relief fundsNonresident students face a much higher net cost of attendance because they face higher charges and, since 2016–17, have not been eligible to receive institutional need-based grant aid.

[1] Income ranges are approximate. Independent students are excluded. Net cost is the full cost of attendance less any grants, scholarships, and fee exemptions. Income is based on amounts reported in either the Free Application for Federal Student Aid (FAFSA) or the UC Application for Undergraduate Admission, or, if missing, is imputed based on demographic profiles.

UC enrolls a higher percentage of Pell Grant recipients than public or private peers.

2.2.1   Undergraduate Pell Grant recipients
            UC and comparison institutions
            2019–20
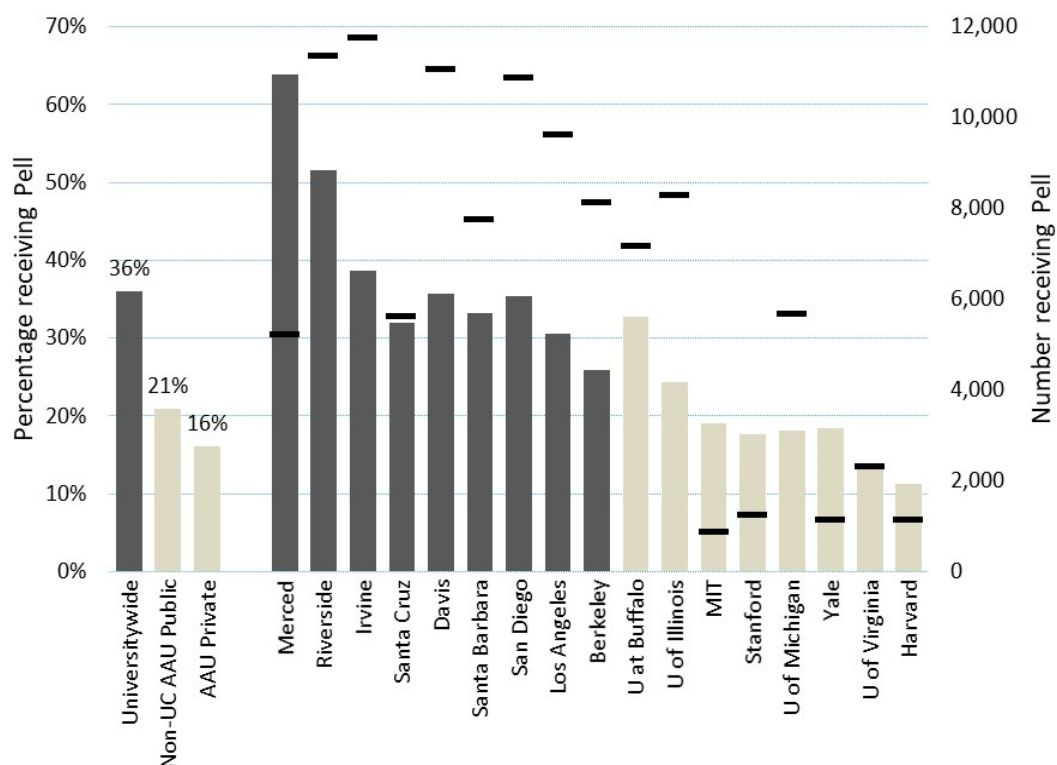
Source: IPEDS[1]

The percentage of undergraduate students with Pell Grants, a federal aid program for low-income students, provides a useful means to compare different institutions in terms of their accessibility for low-income students. It is also a useful indicator for comparing the socio-economic diversity of an institution's undergraduate student population.

The data shown above represent the most recent year for which data on comparison institutions are available. The proportion of UC undergraduates

receiving Pell Grants went up from 31 percent in 2008–09 to 36 percent in 2019–20. This is primarily a result of increased federal spending, which made more students eligible for Pell Grants, as well as the economic downturn from the 2009 recession, which caused broad declines in family income. By fall 2021, 34 percent of UC undergraduates and 40 percent of CA Residents received Pell Grants. Nationally, the percentage of Pell Grant recipients has declined steadily since 2010–11, partially due to changes in the economy and other factors.

[1] Percentage reported is that of students who received Pell Grants at any time during the 2019–20 year as a percentage of all undergraduates. Note that Pell Grant eligibility criteria change annually because of the federal appropriations process and other formula changes. Thus, trend analysis of Pell recipients would not be a valid measure of changes in low-income students but rather would reflect the changes in eligibility criteria. A list of the institutions in the AAU comparison groups can be found in the data glossary.

A large proportion of UC students come from low-income families, particularly among in-state students.

2.2.2 Undergraduate income distribution
Universitywide
2020 inflation-adjusted dollars

Legend:
- Unknown
- $185K or over
- $154K to $185K
- $124K to $154K
- $93K to $124K
- $62K to $93K
- $31K to $62K
- Under $31K
- Independent

Income Distribution Universitywide, CA Residents

Income Distribution Universitywide, Nonresidents
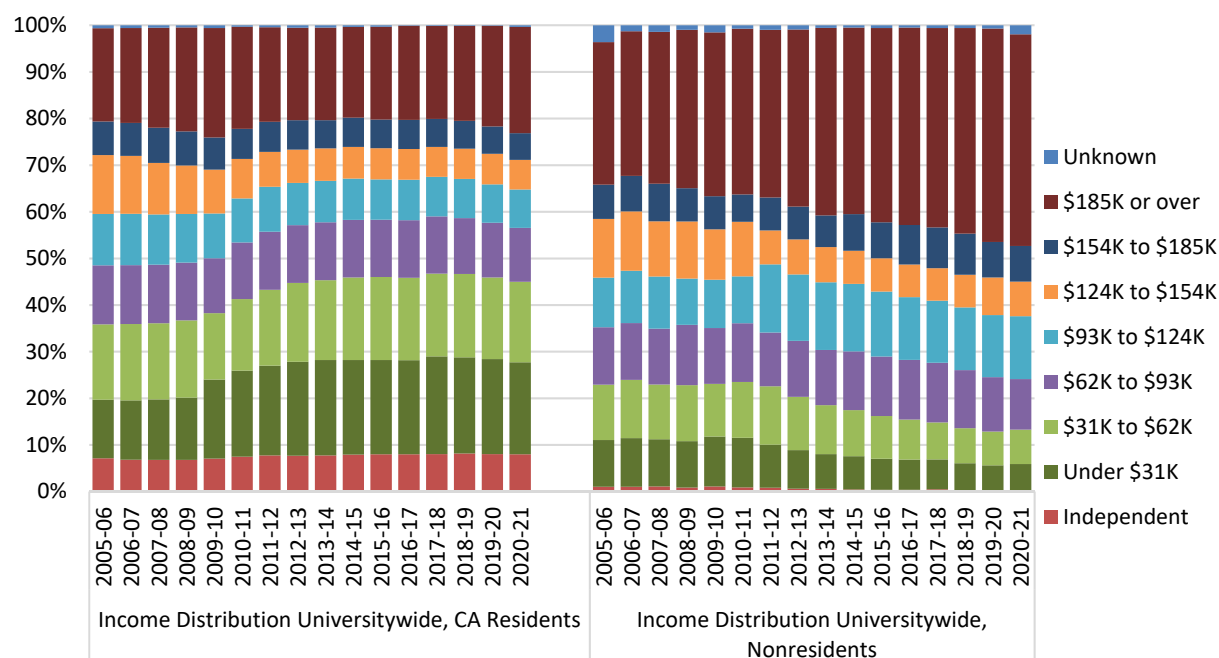
Source: UC Corporate Student System[1]

In-state students are more likely to be from low-income families, with 20 percent in the lowest income category in 2020–21. Since 2008–09, the proportion of low-income CA resident students increased noticeably, with an offsetting decline among middle- and upper-middle-income families. During the last two years, however, the income distributions of CA resident families have stabilized.

This suggests that the University's financial aid programs keep the net cost of attendance within reach of CA resident and low-income families.

Conversely, more than 45 percent of nonresident students came from families in the highest income category in 2020–21. This proportion has increased steadily over the years while those in the lower- and middle-income categories have decreased.

Nonresidents are generally not eligible for UC financial aid.

[1] Note that prior to 2007–08, an increasing number of students at one campus with parent incomes above $100,000 were incorrectly categorized as having an income of $100,000. This problem was fixed in 2007–08, resulting in an apparent (but not actual) decline in the percentage of students shown in the $120K to 150K category and a corresponding increase in the percentage shown in higher income categories.

More than half — six of ten — UC students felt that the cost of attendance was manageable. This proportion has been relatively stable over the past several years.

2.3.1   Student response to "With grants and scholarships, if any, the total cost of attending the school is manageable"
Universitywide and comparison institutions
2011–12 to 2019–20
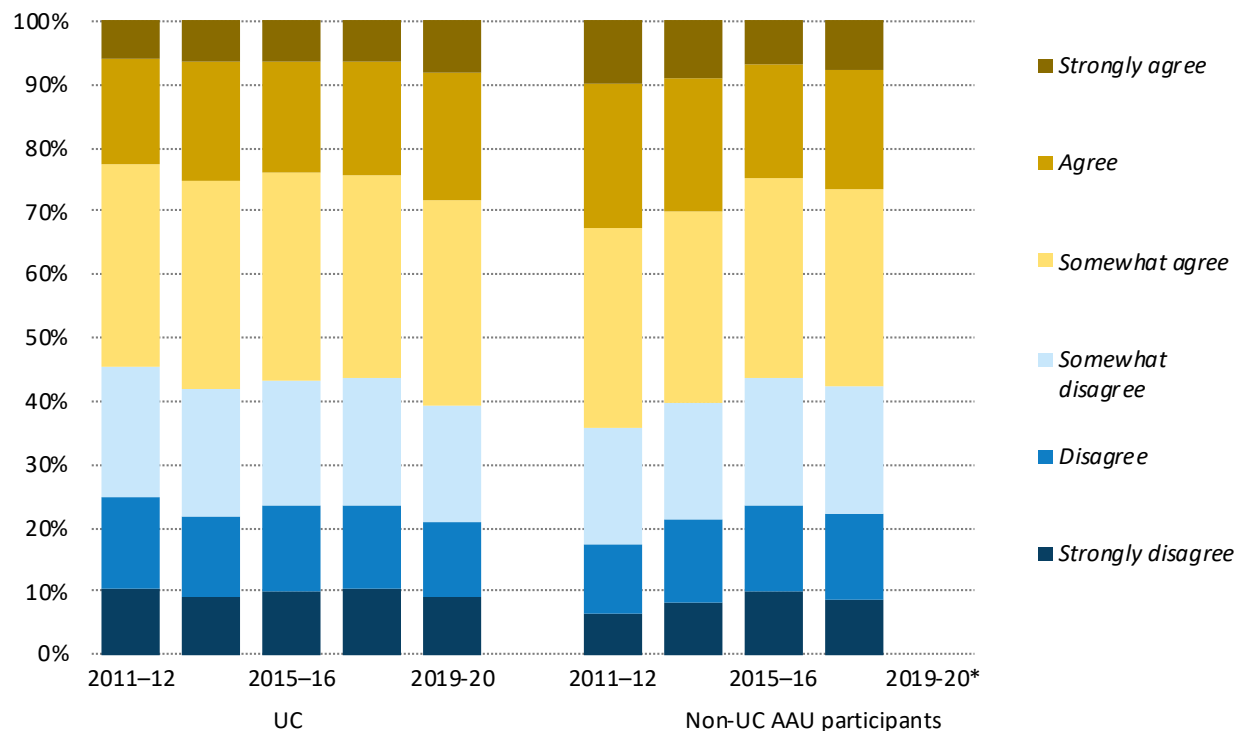
* Results not shown since only two non-UC AAU universities participated in SERU survey in 2020.
Source: UCUES and SERU[5]

Sixty percent of UC undergraduates in spring 2020 felt that the cost of attendance was manageable. This figure has risen gradually from 55 percent since the spring 2012 UCUES survey. In the most recent year available, fifty-eight percent of survey respondents at other participating American Association of University (AAU) institutions agreed that the cost of their education was manageable.

The list of non-UC AAU participants in this comparison was not the same for all four years shown. The non-UC schools included University of Minnesota, Rutgers University, University of Pittsburgh, USC, Texas A&M University, University of Virginia, University of Michigan, Indiana University, Purdue University, University of Iowa, University of Washington, University of Oregon, University of Texas at Austin, University of Florida, University of North Carolina, University of Kansas, and Michigan State University.

Universitywide, 44 percent of undergraduate students reported being food insecure and five percent reported experiencing homelessness.

2.3.2   Percent of students who are food insecure or are experiencing homelessness
Universitywide and by campus
2019–20
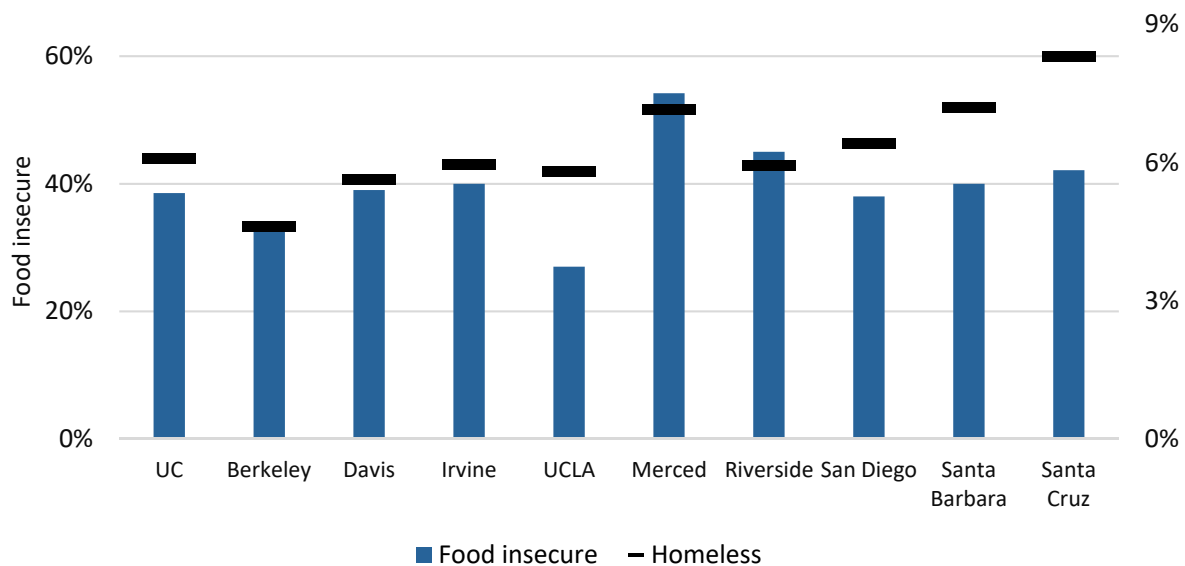
Source: UCUES 2020

A growing body of research has revealed that basic needs insecurity, the lack of the minimum necessary supports for well-being, jeopardizes student success. Recognizing basic needs support as a key facilitator of student degree attainment, UCOP collaborated with the UC Systemwide Basic Needs Committee, which comprises campus representatives, to institutionalize data collection concerning student basic needs.

Forty-seven percent of undergraduates experienced food insecurity in 2018. UC's goal is to reduce that by half, to 24 percent, by 2025.

2.3.3   Percent of students who experienced food insecurity in 2018 and 2020, with the 2025 Goal
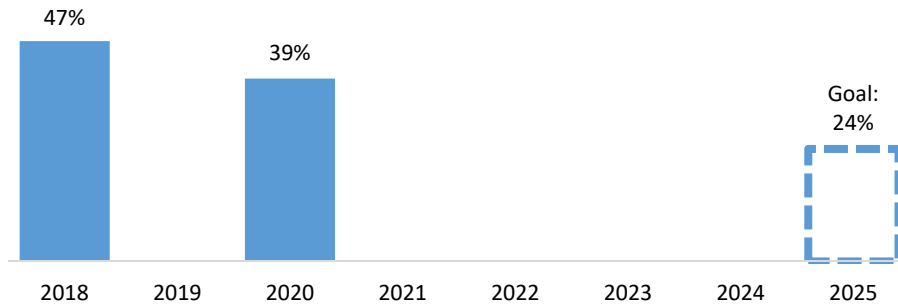

Source: UCUES and GUEA

UC has also set a goal to reduce undergraduates experiencing housing insecurity from seven percent, in 2020, to 3.5 percent, by 2025.

2.3.4   Percent of students who experienced housing insecurity in 2020, with the 2025 Goal

Source: UCUES and GUEA

Since 2016, UCOP has included items related to basic needs in UCUES, using the U.S. Department of Agriculture (USDA) standard for food insecurity measures, while developing the indicator for homelessness to track a broader measure of housing insecurity. The food insecurity survey replaced the 2016 two-item module with a six-item module developed by the USDA. The six-item module distinguishes between low and very low food security (combined to identify students experiencing food insecurity), while the two-item module can only be used to identify students experiencing food insecurity.

The inclusion of food and housing insecurity items in UCUES will allow the University to measure the impact of basic needs campus services and track the University's progress in improving student basic needs. Also, it should be noted that students who responded to the 2020 UCUES were taking online classes, so they may have been staying with parents or family members, which may have affected the results. To guide the University in its journey to reduce basic needs insecurity, the Regents' Special Committee on Basic Needs issued a 2020 report, which established long-term aspirational goals to reduce food and housing insecurity at the University by 50 percent by 2025.

The average inflation-adjusted debt at graduation of student borrowers has gradually declined to $18,000 over the past 20 years, while the percent graduating with no debt has increased.

2.3.5   Student loan debt burden of graduating seniors, inflation-adjusted
Universitywide
2000–01 to 2020–21 (average debt of those with debt shown above each year)
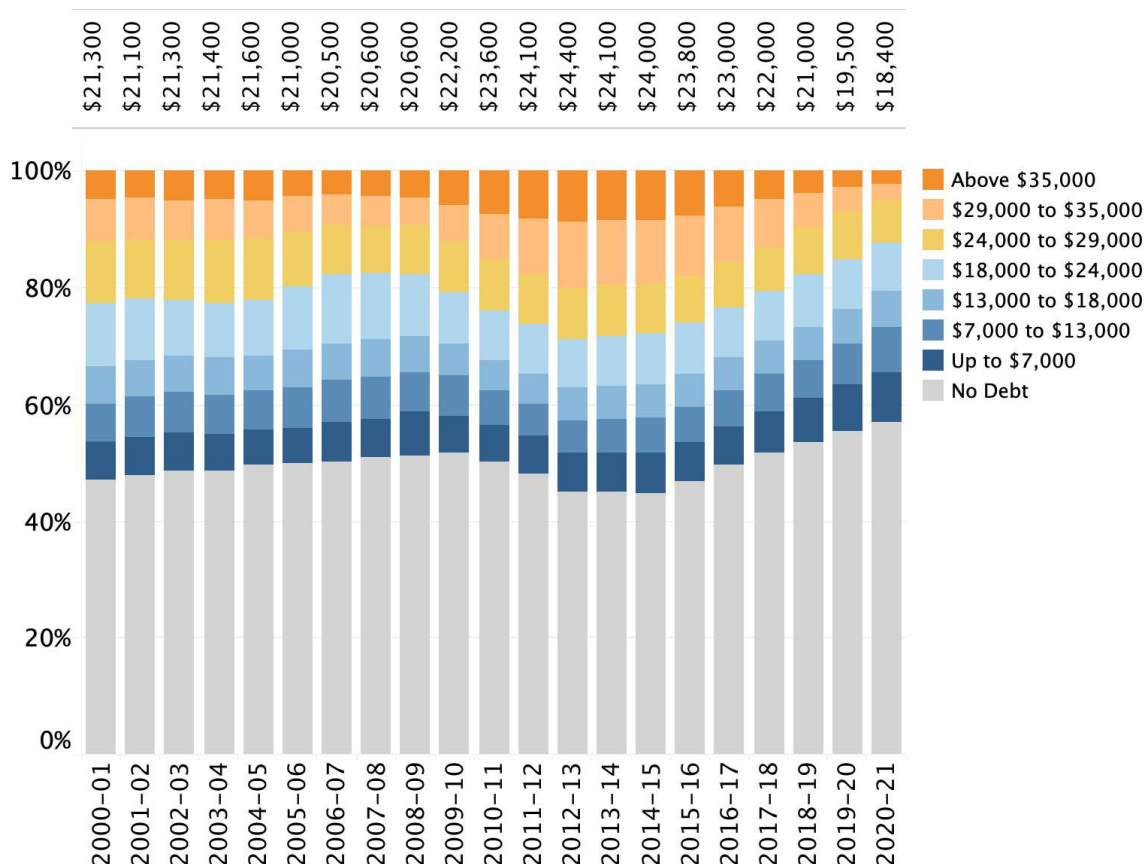
Source: UC Corporate Student System

Fifty-seven percent of UC undergraduates graduate with no debt at all. For those who do borrow, the average student loan debt at graduation in 2020–21 was about $18,400. The monthly repayment for this amount is about $195 for ten years at the five percent average interest rate that typically applies to student loans. Lower payments are available with longer repayment periods. For more information about estimated loan repayment amounts using this rate, visit the "Loans and Earnings" tab of the UC Alumni-at-work dashboard at:
universityofcalifornia.edu/infocenter/uc-alumni-work.

These figures reflect the borrowing of all graduating UC students. California resident students, however, are more likely than out-of-state students to graduate with debt. In 2020–21, about 50 percent of UC graduates who originally entered as California resident freshmen had student loan debt upon graduation, compared to only 13 percent of out-of-state students. In-state graduates' average debt, however, was significantly lower than that of the out-of-state students who borrowed ($17,700 vs. $29,300).

The proportion of low and middle-income students graduating with loan debt in 2020–21 was lower than what it was 20 years ago, whereas with higher income students the proportion graduating with debt has been rising.

2.3.6 Student loan debt burden of graduating seniors by parent income
Universitywide, 2020 inflation-adjusted dollars
2001–2002 to 2020–21
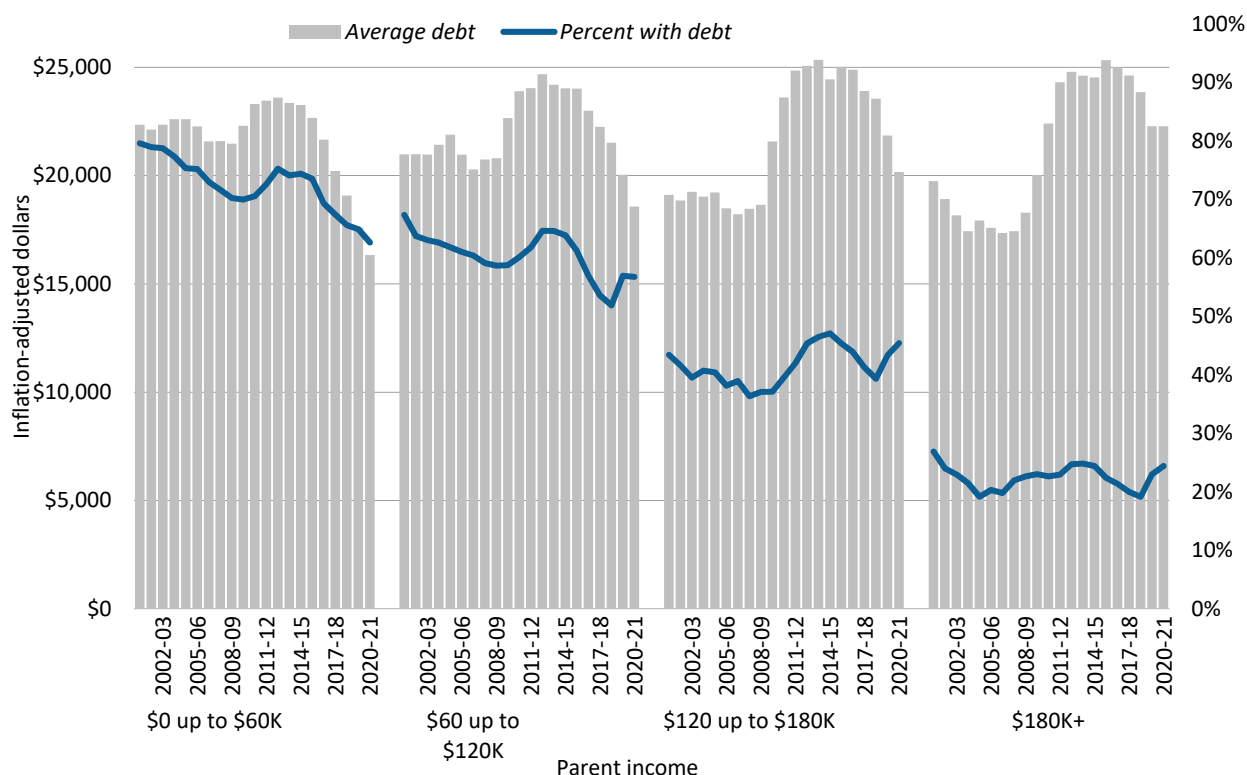
Source: UC Corporate Student System

The proportion of students who borrow decreased steadily from 2000–01 through 2009–10 for students in nearly every income category. From 2010–11 through 2012–13, student borrowing increased, both in percentage and in cumulative amount. This uptick in borrowing may reflect a combination of higher costs and a reduction in other borrowing alternatives (e.g., home equity loans). In the last year, however, student borrowing remained the same or decreased slightly for the lowest two income categories and for the highest income category. UC student debt remains below the national average for both public and private non-profit four-year institutions.

2.3.7 Average cumulative loan debt
UC and national comparison institutions
2019–20 graduates

Merced	$17,413
Davis	$17,736
Irvine	$18,398
Berkeley	$18,468
Santa Barbara	$19,034
UC Average	**$19,220**
Riverside	$19,707
San Diego	$19,969
Los Angeles	$20,200
Santa Cruz	$21,189
Public four-year	$27,539
Private nonprofit four-year	$33,389
National Average	**$28,950**

Source: Common Data Set and TICAS. National average excludes private for-profit institutions.

By five years after graduation, over 90 percent of students have no debt or manageable debt-to-earnings ratios of less than ten percent.

2.3.8   Percent of UC undergraduate alumni with no debt or manageable debt-to-earnings ratios (below ten percent) at two and five years after graduation by degree major
Universitywide and by Campus
Undergraduate graduating cohorts 2000–2018 who are working in California

Legend: ■ No debt   ■ Manageable debt

Campus	Period	All Fields No debt	All Fields Manageable	All Fields Total	Arts & Humanities No debt	Arts & Humanities Manageable	Arts & Humanities Total	Social Sciences No debt	Social Sciences Manageable	Social Sciences Total	Physical Sciences No debt	Physical Sciences Manageable	Physical Sciences Total	Engineering & CS No debt	Engineering & CS Manageable	Engineering & CS Total	Business No debt	Business Manageable	Business Total
UC System	2 years out	44%	41%	85%	42%	36%	78%	40%	42%	82%	45%	39%	84%	49%	46%	94%	47%	45%	92%
UC System	5 years out	44%	48%	91%	42%	44%	87%	40%	50%	90%	44%	47%	91%	49%	48%	97%	47%	49%	96%
Berkeley	2 years out	51%	40%	91%	44%	40%	84%	47%	42%	90%	54%	37%	91%	62%	37%	99%	62%	36%	98%
Berkeley	5 years out	50%	45%	94%	44%	45%	90%	46%	47%	93%	52%	43%	95%	59%	40%	99%	59%	39%	99%
Davis	2 years out	45%	43%	87%	44%	37%	82%	41%	43%	84%	45%	42%	87%	48%	48%	96%	48%	47%	95%
Davis	5 years out	45%	49%	93%	45%	45%	90%	42%	50%	92%	44%	49%	93%	46%	52%	98%	48%	50%	98%
Irvine	2 years out	42%	42%	84%	40%	37%	77%	40%	43%	83%	43%	37%	81%	49%	42%	91%	45%	49%	94%
Irvine	5 years out	43%	48%	91%	42%	45%	86%	41%	50%	91%	44%	46%	90%	50%	46%	96%	46%	51%	97%
Los Angeles	2 years out	46%	39%	86%	44%	36%	80%	42%	42%	84%	48%	37%	85%	62%	36%	98%	57%	39%	96%
Los Angeles	5 years out	46%	46%	92%	45%	43%	87%	42%	49%	91%	47%	46%	92%	60%	40%	99%	56%	42%	98%
Merced	2 years out	29%	48%	77%	32%	38%	70%	26%	44%	71%	32%	44%	76%	29%	55%	84%	31%	55%	86%
Merced	5 years out	30%	57%	87%	32%	49%	80%	29%	57%	86%	32%	55%	87%	29%	59%	88%	32%	61%	93%
Riverside	2 years out	32%	45%	76%	29%	37%	65%	28%	44%	72%	34%	39%	73%	37%	51%	88%	34%	55%	89%
Riverside	5 years out	32%	55%	87%	30%	51%	81%	28%	57%	84%	34%	53%	87%	37%	57%	94%	35%	61%	95%
San Diego	2 years out	42%	42%	84%	41%	35%	76%	39%	42%	81%	43%	39%	82%	47%	44%	91%	44%	49%	93%
San Diego	5 years out	42%	49%	91%	41%	44%	85%	40%	50%	90%	42%	48%	90%	48%	48%	96%	44%	53%	97%
Santa Barbara	2 years out	45%	39%	84%	42%	36%	78%	42%	41%	82%	47%	37%	85%	52%	42%	93%	52%	44%	96%
Santa Barbara	5 years out	46%	46%	91%	44%	44%	87%	41%	49%	90%	47%	45%	92%	52%	45%	97%	53%	45%	98%
Santa Cruz	2 years out	40%	39%	79%	42%	32%	73%	37%	39%	76%	40%	39%	79%	42%	48%	90%	43%	49%	92%
Santa Cruz	5 years out	41%	47%	88%	43%	41%	84%	37%	50%	87%	41%	47%	88%	42%	53%	95%	45%	52%	97%

Source: UC Corporate Student System and EDD Quarterly Earnings

Students who graduate from UC's baccalaureate programs go on to achieve positive earnings trajectories and have manageable student loan repayment obligations. The benchmark used to evaluate manageability is the percentage of average earnings required to repay a student's debt at graduation based upon a standard ten-year repayment plan at five percent interest. UC considers debt that requires between five percent and nine percent of a student's postgraduate earnings to be manageable. Students may choose alternative repayment plans (e.g., income-based plans) based on their individual circumstances. These can increase debt manageability for students with high levels of debt and/or low income, but can result in higher interest costs over time.

About 85 percent of UC baccalaureate recipients systemwide have a debt-to-earnings ratio of ten percent or less at two years after graduation and over 90 percent do at five years after graduation.

Graduates in arts, humanities, and social science programs are somewhat more likely to have debt ratios in excess of ten percent at two and five years after graduation. This stems from a variety of factors, including the lower average earnings associated with industries in which these graduates tend to work. (See 3.3.3 for earnings by major and industry in Chapter 3.)

Undergraduate Student Success

Aspiring novelist Woody Brown is going to have quite the author's bio on a future dust jacket.

"I grew up a mighty weird autistic kid who was presumed to be retarded because I couldn't speak," he says. "My intelligence was not fully acknowledged until I went to Pasadena City College, where they accepted me and my upward trajectory began." Three years later Woody graduated with a 4.0 and honors, and got accepted to UCLA.

Now in his senior year, Brown celebrates the "intellectual revelation" he's experienced at UCLA as an English major. His accomplishments became evident when the English department honored him with the 2020-2021 Christopher Zyda Creative Writing Award.

"I am so happy that people are interested in my story," Brown says. "Not only am I acting as a tour guide to my world for those who are unfamiliar with it, but I also have a larger mission. I want to act as a role model for others like me, to show that the door to success in the mainstream world is not locked against us."

UNDERGRADUATE STUDENT SUCCESS

Filling California's gap in degree recipients

The Public Policy Institute of California projects the state in 2030 will face a shortfall of 1.1 million workers who have at least a bachelor's degree. UC has committed to adding more than 160,000 bachelor's degree recipients by 2029–30, by increasing graduation rates and improving timely graduation. By 2030, UC's goal is to have nine of ten undergraduates leave with a degree, and to improve four-year freshmen graduation rates to 76 percent, and two-year transfer graduation rates to 70 percent. In addition, UC's goal is to eliminate gaps in timely graduation for California's Pell Grant recipients, first-generation students, and underrepresented groups (URG). UC seeks to partner with the State by receiving financial support to scale up promising programs and strategies that will help campuses achieve these goals. To date, UC has not received this financial support. Below is a progress report on these critical goals and other undergraduate alumni outcomes.

UC's four-year graduation rates for freshmen have risen significantly over the past 21 years — from 46 percent for the 1997 entering cohort to 73 percent for the 2017 cohort. The most recent six-year graduation rate, for the 2015 entering cohort, is 86 percent (3.1.1), which has increased by seven percentage points since 1996. The six-year graduation rate is 89 percent when this measure includes students who transfer to non-UC institutions (3.1.2) and still graduate within six years. In addition, time to degree has steadily improved. The most recent freshman entrants are taking an average of 4.12 years (3.1.12) to graduate, an improvement on the 2000 cohort, which took 4.33 years.

Transfer entrants have made similar gains, with two-year graduation rates increasing from 37 percent for the 1997 entering cohort to 63 percent for the 2019 cohort (3.1.3). The most recent four-year graduation rate for transfers (2017 entering cohort) is 89 percent, an increase of about ten percentage points since 1997. The average time to degree is 2.4 years for the 2014 cohort, an improvement from 2.6 years for the 1996 cohort (3.1.12).

Although the overall freshman and transfer graduation rates have increased and are showing good progress toward UC 2030 goals, there are still gaps in rates between subgroups (3.1.4, 3.1.5, 3.1.6, 3.1.7, 3.1.8, 3.1.9, and 3.1.10). Low-income students, first-generation students, URG students, and less academically prepared students have lower average graduation rates, especially four-year graduation rates for freshmen, and two-year graduation rates for transfers. Additionally, academic preparedness seems to explain more of the difference in graduation rates than the other aforementioned student characteristics.

Improving graduation rates and eliminating gaps

The UC Office of the President and campuses have employed predictive analytics to obtain a better understanding of factors that influence graduation rates. Findings indicate that pre-college factors such as academic preparedness measured by high school GPA, the rigor of students' high school or transfer courses, and demographics are related to, but only explain a small portion of, variance in time to degree and graduation rates. Campus climate, access to courses, student sense of belonging, student engagement in academic and civic activities, basic needs, and success in the first year at college, among many other factors, are important to college completion and timely graduation.

To address challenges facing students and campuses, and reach UC's goal of improving graduation rates, UC campuses have identified, and where possible are expanding, a wide range of programs to promote the academic success of undergraduates and eliminate gaps in graduation rates, particularly for new generation students (which includes URG, Pell Grant recipients, and first-generation students). These include expanding orientation, advising, and counseling services; increasing on-campus multicultural activities and work opportunities; redesigning and removing achievement gaps in entry courses with large enrollments; streamlining course prerequisites, course sequences, and degree requirements; summer research and summer bridge programs; increasing access to summer session courses; developing pedagogical strategies for the diversification of classrooms and instruction; and conducting learning analytics to assist students who might need additional support. Increased State support would help campuses scale up these programs, particularly those that seek to eliminate equity gaps.

Students who take longer to graduate leave with more debt, have lower lifetime earnings, and are less likely to go on to graduate school. Recognizing the importance of early student success for on-time graduation, UC campuses are specifically making efforts to improve first-year student success. Many campuses offer summer bridge, transfer edge, extended orientation, and/or first-year seminars to assist students with the transition to UC. Campuses are also making advising mandatory for first-year students. Many UC campuses offer first-year students the opportunity to work on a research project with a faculty member. UC recently launched the systemwide First-Generation Faculty Initiative, which connects first-generation students to both faculty and staff mentors.

Undergraduate outcomes

The number of undergraduate degrees awarded by UC grew from about 32,900 degrees in 2000–01 to about 49,400 degrees in 2014–15, and 62,700 degrees in 2020–21 (3.3.1). Increases in the size of the entering freshman class and improving graduation rates contributed to this growth. As mentioned earlier, UC has proposed to improve degree attainment and produce 200,000 more degrees in addition to the projected baseline of one million degrees over the next 15 years, between 2015–16 and 2029–30. About 80 percent of these additional degrees (160,000) would be at the undergraduate level. UC is making progress to achieve that goal.

UC undergraduate alumni enroll at graduate schools or work in various industries. Four years after graduation, more than one-quarter of bachelor's degree recipients have enrolled in graduate or professional programs. More than half are working in key industries such as health care, K–12 education, finance & insurance, public administration, social assistance, higher education, engineering, and internet and computer systems. Many alumni work in industries that closely align with the majors they chose. By ten years after graduation, 56 percent of engineering & computer science majors work in engineering, manufacturing, or internet and computer systems; 30 percent of life science majors work in health care; and 34 percent of arts & humanities majors are working in K–12, higher education, or performing arts and entertainment.

UC alumni working in California surpass the typical earnings of other California bachelor's degree recipients (aged 25 and over) by six years after graduation. Additionally, on average, UC graduates break even on their educational investment between four to six years after graduation. The earnings trajectory of UC alumni increases rapidly; ten years after graduation they double what they were earning two years after graduation, on average (3.3.2). Economic success is prevalent for all socioeconomic groups, including students whose families qualified for federal Pell Grants. Within five years of graduation, the majority of Pell Grant recipients earn an average income higher than their parents' combined incomes during the time those students attended UC (approximately $50,000).

Looking forward

UC campuses have identified promising strategies that, if increased in scale, could help achieve ambitious UC 2030 goals. The University has not yet received State funding to expand these programs and strategies. The current data available indicate some effects from the shift to remote instruction on student retention. However, the long-term impact of the COVID-19 pandemic on student success and retention is unclear. UC will continue to track these measures, including for UC's future freshman and transfer entrants coming from California high schools and community colleges, who may have widely varying experiences during the period of remote instruction and returning to the classroom fulltime.

For more information

UC 2030 systemwide and campus dashboards:
universityofcalifornia.edu/infocenter/uc-2030-dashboard

Graduation rates and goals by campus, gender, Pell, residency status, race/ethnicity, and other factors:
universityofcalifornia.edu/infocenter/ug-outcomes

Eliminating gaps in timely graduation:
regents.universityofcalifornia.edu/regmeet/sept19/b2.pdf

UC's report on Advising Strategies to Support Timely Graduation:
ucop.edu/institutional-research-academic-planning/_files/Advising_strategies.pdf

UC's undergraduate alumni outcomes, including employment industries and earnings:
universityofcalifornia.edu/infocenter/uc-undergraduate-alumni-outcomes

Beyond economic impact, understanding societal impacts and public value of a UC degree:
regents.universityofcalifornia.edu/regmeet/mar21/b2.pdf

Fiat Lux: What is the value of a UC degree?
ucop.edu/institutional-research-academic-planning/_files/value-of-degree-full-report.pdf

Total degrees awarded by degree type, campus, gender, and race/ethnicity:
universityofcalifornia.edu/infocenter/degrees-awarded-data

UC's role in enabling low-income students to achieve intergenerational economic mobility
universityofcalifornia.edu/infocenter/climb-mobility-analysis

First-generation college students
universityofcalifornia.edu/about-us/information-center/first-generation-college-students

UC First-Generation Faculty Initiative
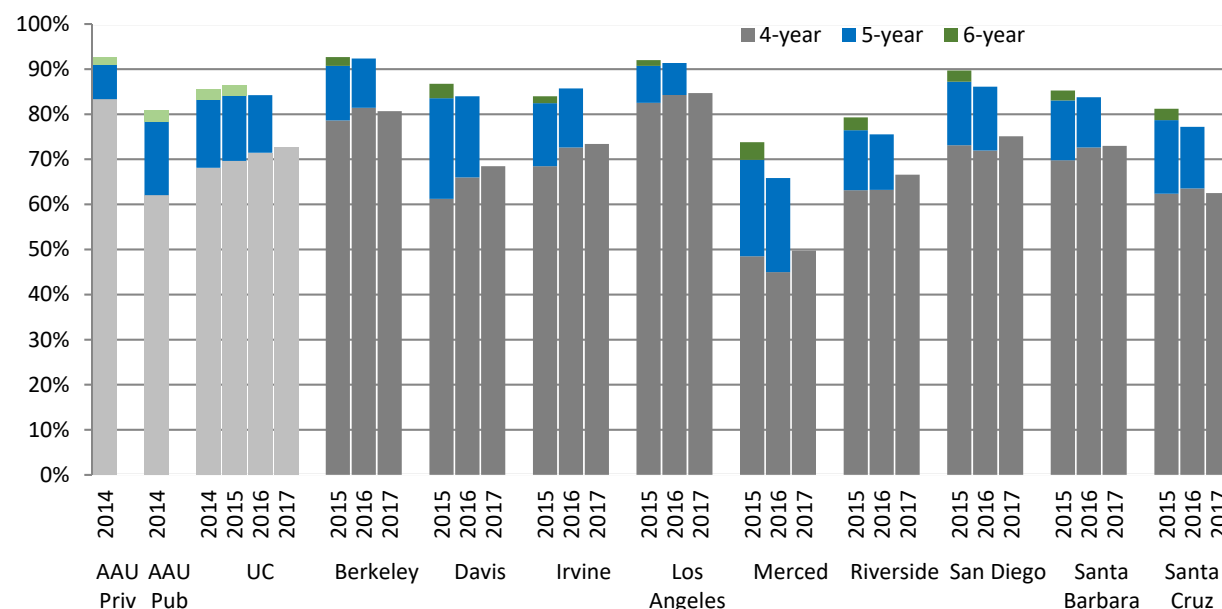universityofcalifornia.edu/news/uc-first-generation-faculty-students-you-ve-got-and-we-re-here-help

Over 85 percent of UC freshmen graduate within six years, a higher rate than comparable AAU public universities.

3.1.1   Freshman graduation rates
UC and comparison institutions
Cohorts entering fall 2015, 2016, and 2017; fall 2014 cohort for AAU comparison

Source: UC Data Warehouse and IPEDS[1]

UC's six-year graduation rate is higher than that of comparable AAU public institutions. UC's four-year graduation rates for freshmen have risen significantly since 1997, from 46 percent for the 1997 entering cohort to 73 percent for the 2017 cohort. Since 2010, UC has improved four-year graduation rates by about ten percentage points; UC Riverside, UC San Diego, and UC Davis have improved four-year graduation rates by about 19, 16, and 13 percentage points, respectively. These improvements are due to factors including campus programs supporting four-year completion, improvements in academic preparation of incoming students, and the current cost of a UC education, all of which motivate students to complete their

degrees in a timely fashion.

UC's latest freshman six-year graduation rate is 86 percent, which is a five-percentage point increase over the past twenty years.

By 2030, UC is striving to raise four-year completion to 76 percent and six-year completion to 90 percent. UC is seeking financial support from the State to achieve these goals.

More information on trends in UC freshman graduation rates can be found at: universityofcalifornia.edu/infocenter/ug-outcomes and progress in achieving UC 2030 goals can be found at: universityofcalifornia.edu/infocenter/uc-2030-dashboard.

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[1] Comparison IPEDS data are available for more limited years. The AAU comparison institutions are in the data glossary. AAU comparison is for the 2014 cohort, the most recent data available. Graduation rates are weighted by total cohort size. Institutions with missing data are excluded for that year. Freshmen are those students who entered a university directly from high school and who have not matriculated at another postsecondary institution prior to enrollment. UC statistics give credit to the originating campus for inter-UC campus transfers.

The six-year graduation rate of UC freshmen is close to 90 percent when students who finished their degrees at a non-UC institution are included.

3.1.2 Freshman graduation rates, including those who graduated from a non-UC institution
Universitywide and UC campuses
Cohort entering fall 2015
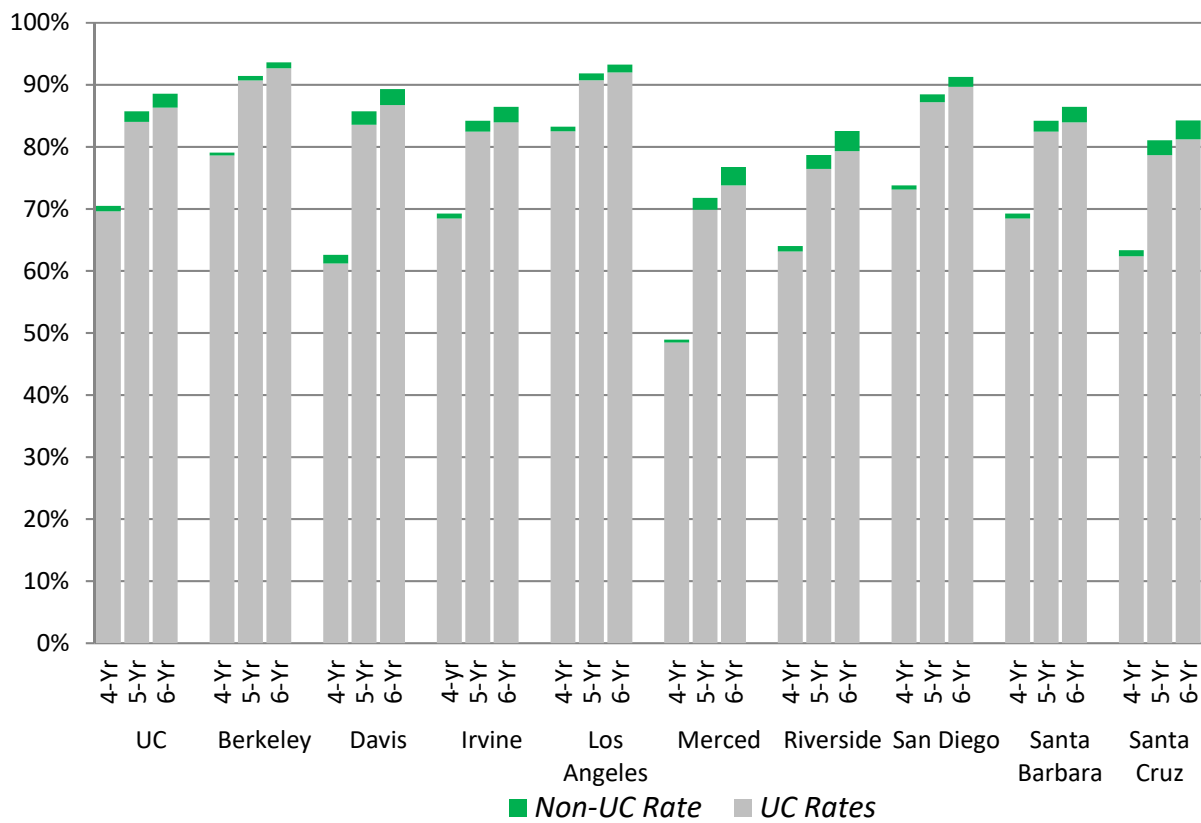
Source: UC Data Warehouse and the National Student Clearinghouse[1]

The extended graduation rate of students who begin their studies as freshmen at UC includes those who transfer to a non-UC institution and complete their bachelor's degree within four, five, or six years.

By this measure, UC's overall six-year graduation rate is about 89 percent. The effect of the extended graduation rate varies by UC campus, with Berkeley having fewer students who earn a degree outside of the UC system, while the six-year rates at Merced, Riverside, and Santa Cruz improve by as much as three percentage points when students who complete their degree at a non-UC school are included.

[1] Intercampus transfers within UC are counted as graduates of their originating UC campus. In this graph, non-UC rates only include those who transferred to non-UC institutions and graduated with a bachelor's degree.

More than 60 percent of transfer students graduate within two years and close to 90 percent in four years.

3.1.3   Transfer graduation rates
Universitywide and UC campuses
Cohorts entering fall 2017, 2018, and 2019
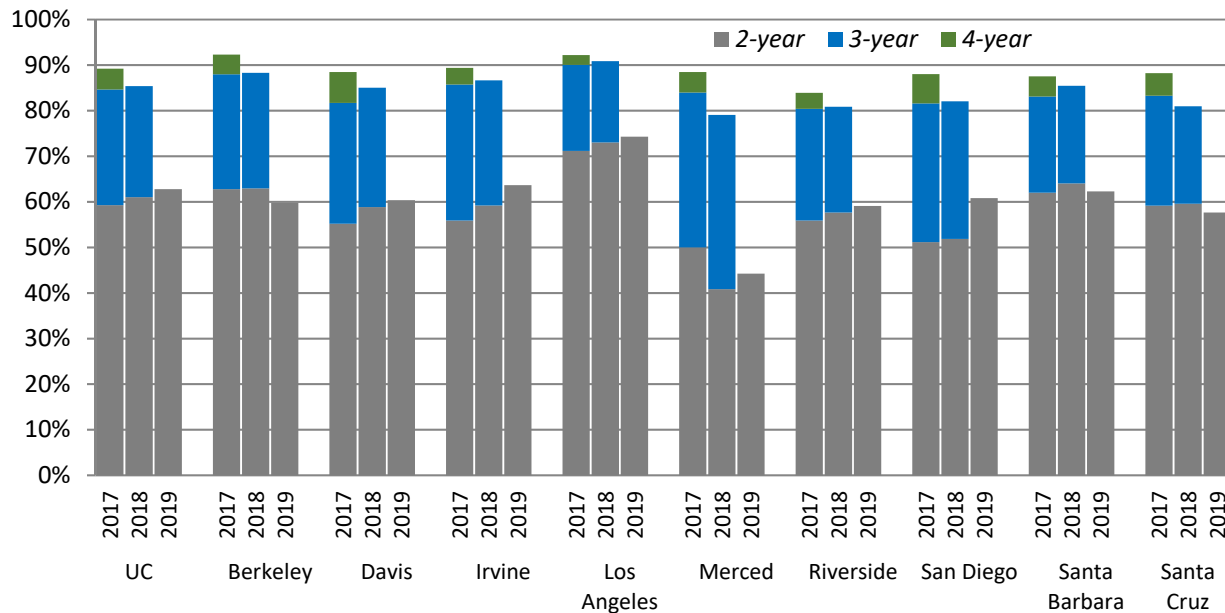
Source: UC Data Warehouse[1]

The two-year graduation rate for transfers is currently at 63 percent, the highest since 1995. The four-year rate is 89 percent. The two-year graduation rate varies across campuses and for the most recent year, UC Berkeley, UC Santa Barbara, and UC Santa Cruz have seen slight decreases of two to three percentage points from the previous year's rate. Campuses attribute the decreased graduation rates to challenges related to the COVID-19 pandemic. More information on trends in UC transfer graduation rates can be found at: universityofcalifornia.edu/infocenter/ug-outcomes.

UC is striving to improve two-year graduation rates to 70 percent by 2030. UC is seeking financial support from the State to expand programs and services to achieve these ambitious goals. Progress in achieving UC 2030 goals can be found at: universityofcalifornia.edu/infocenter/uc-2030-dashboard.

[1] Comparison data on graduation rates for transfer students are not available. UC statistics give credit to the originating campus for inter-UC campus transfers.

Underrepresented group (URG) students at UC graduate at higher rates when compared to URG students at other AAU public institutions, but gaps exist with other UC peers.

3.1.4 Freshman graduation rates by race/ethnicity
Universitywide, AAU public, and AAU private
Cohorts entering fall 2015, 2016, and 2017
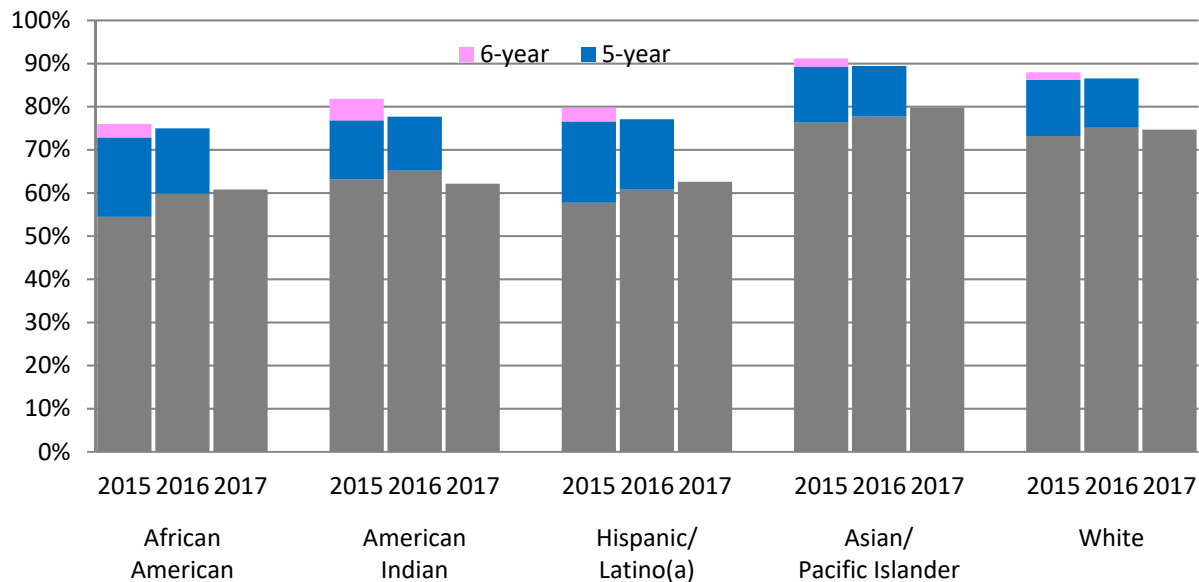
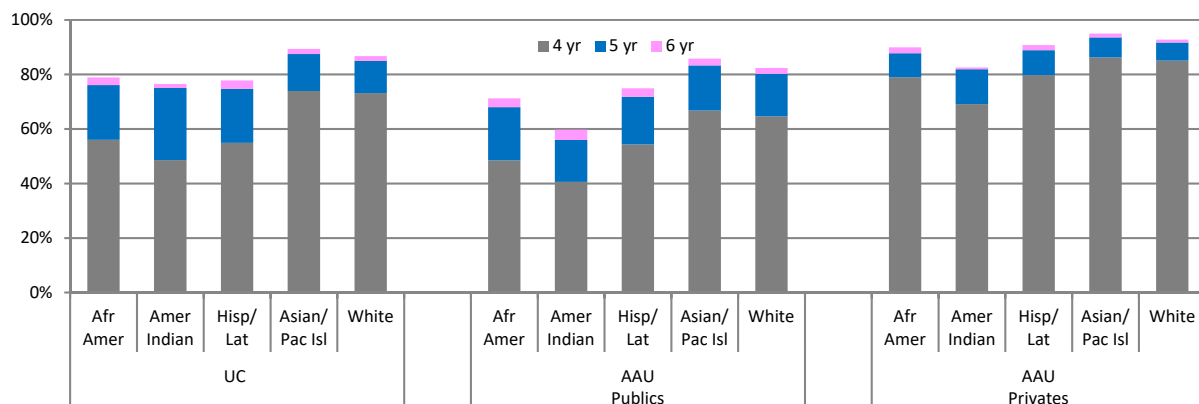Source: UC Data Warehouse and IPEDS

By 2030, UC is looking to eliminate graduation gaps for underrepresented groups. All racial/ethnical groups except American Indian students have improved their four-year graduation rates from that of the previous cohort. Compared to the overall four-year rate of 70 percent, however, African

American students have a 61 percent rate, American Indian a 62 percent rate, and Hispanic/Latino(a) a 63 percent rate.

More information on trends in UC freshman graduation rates by campuses and demographic detail can be found at:

universityofcalifornia.edu/infocenter/ug-outcomes.

UC and comparison institutions, cohort entering fall 2014

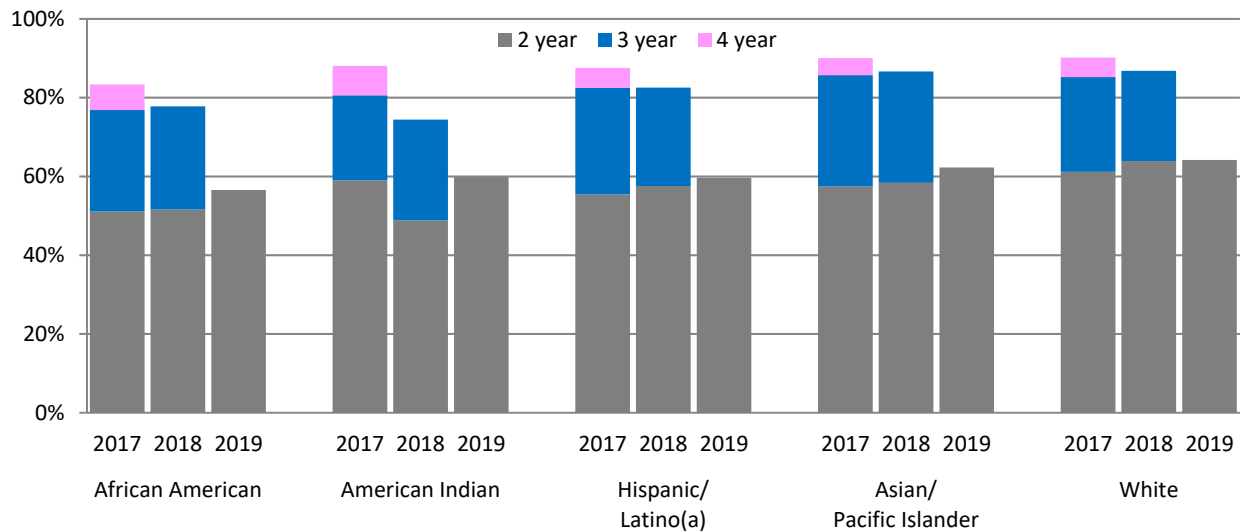

Source: UC Data Warehouse and IPEDS

Regardless of race/ethnicity, transfer students graduate at a high rate, and the rate for two-year graduates of all racial/ethnic groups is rising.

3.1.5   Transfer graduation rates by race/ethnicity
Universitywide
Cohorts entering fall 2017, 2018, and 2019

Source: UC Data Warehouse

The rate for two-year graduates of all racial/ethnic groups is rising. While graduation gaps are smaller for transfer students than for students who enter as freshmen, gaps still remain. By 2030, UC is looking to eliminate graduation gaps for underrepresented groups and raise the overall on-time graduation rate.

More information on trends in UC transfer graduation rates by campus and demographic detail can be found at:

universityofcalifornia.edu/infocenter/ug-outcomes.

Over 84 percent of freshman Pell Grant students graduate within six years, and 88 percent of transfer Pell Grant students graduate within four years.

3.1.6 Freshman graduation rates by Pell Grant recipient status
Universitywide
Cohorts entering fall 2015, 2016, and 2017
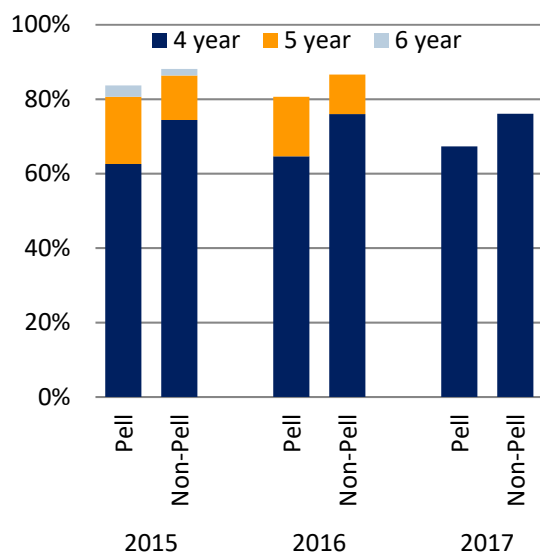
3.1.7 Transfer graduation rates by Pell Grant recipient status
Universitywide
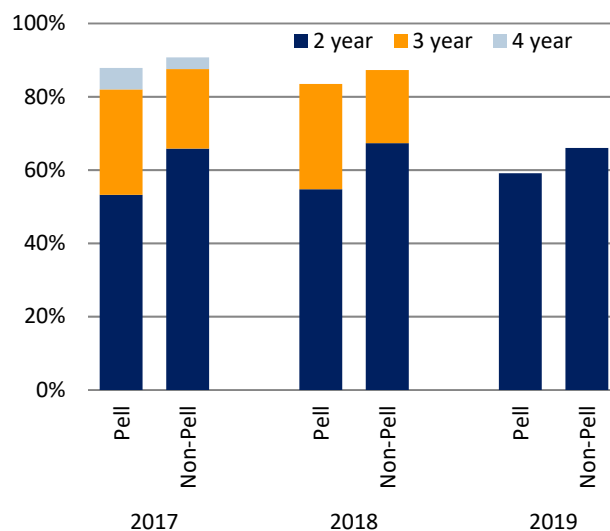Cohorts entering fall 2017, 2018, and 2019

Source: UC Data Warehouse. Pell Grant recipients are those who received a Pell Grant at any point during their time at UC.

Freshman Pell Grant recipients graduate at rates comparable to non-Pell recipients: 84 percent and 88 percent, respectively. Although there is a nine-percentage point gap at the four-year mark between freshman Pell recipients (67 percent) and non-Pell recipients (76 percent), this gap is reduced to four percentage points at the six-year mark.

For the transfer 2017 cohort, Pell and non-Pell Grant recipients graduated at comparable rates of 88 percent and 91 percent, respectively, within four

years. However, the two-year graduation rate gap between Pell and non-Pell Grant recipient transfer students is seven percentage points, down by five percentage points from the 2018 cohort.

More information on trends in graduation rates can be found at universityofcalifornia.edu/infocenter/ug-outcomes.

Over 82 percent of freshman first-generation students graduate within six years, and 88 percent of transfer first-generation students graduate within four years.

3.1.8 Freshman graduation rates by first-generation status
Universitywide
Cohorts entering fall 2015, 2016, and 2017

3.1.9 Transfer graduation rates by first-generation status
Universitywide
Cohorts entering fall 2017, 2018, and 2019

Source: UC Data Warehouse
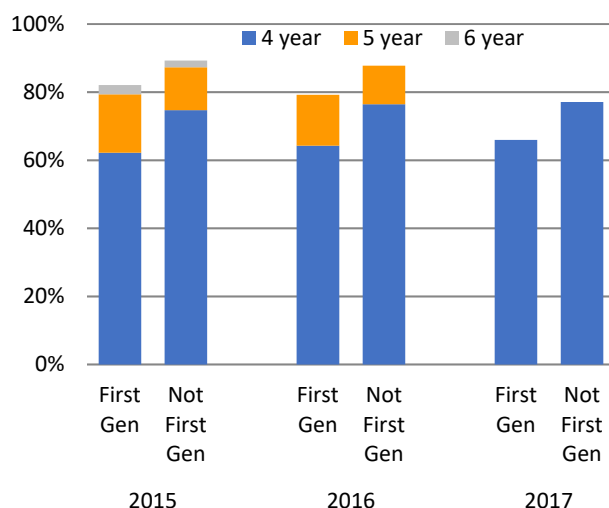
Freshman first-generation students have improved their four-year graduation rate from that of the previous cohort. Although there is an 11-percentage point gap at the four-year mark between freshman first-generation students (66 percent) and students who are not first-generation (77 percent), this gap is reduced to eight percentage points at the six-year mark.

For the transfer 2017 cohort, first-generation and non-first-generation students graduated at
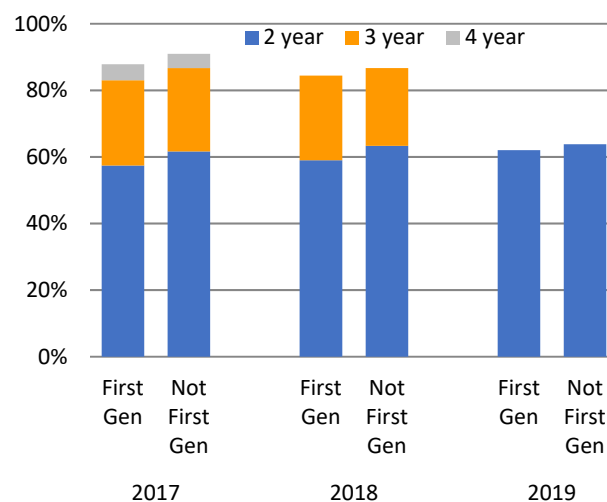
comparable rates of 88 percent and 91 percent, respectively, within four years. The two-year graduation rates of first-generation and non-first-generation transfer students are also comparable at 62 percent and 64 percent, respectively. The two-year graduation rate gap has decreased by two percentage points from the 2018 cohort.

More information on trends in graduation rates can be found at universityofcalifornia.edu/infocenter/ug-outcomes.

Academic preparation explains more of the difference in freshman graduation rates than race/ethnicity, Pell recipient status, or first-generation status alone.

3.1.10 Freshman graduation rates by HS GPA (top, middle, and bottom thirds) and race/ethnicity, Pell Grant recipient status, and first-generation status
Universitywide
Cohort entering fall 2015
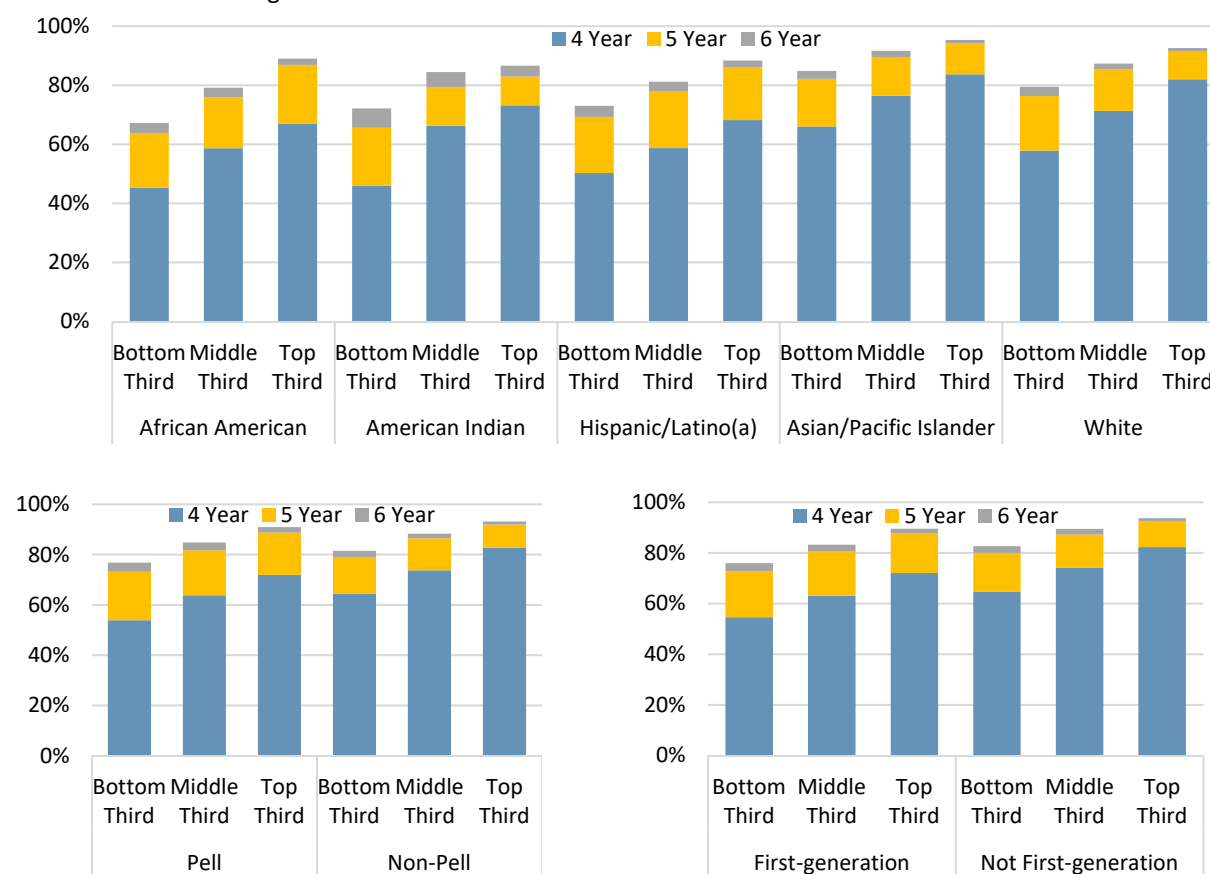
Source: UC Data Warehouse

There are differences in graduation rates for freshman students with different characterstics, such as URG students, Pell Grant recipients, and first-generation students compared to students who are not part of those respective groups (as detailed in indicators 3.1.4, 3.1.6, and 3.1.8). However, larger differences in graduation rates are explained by high school unweighted grade point average (GPA), which is used as a proxy measure for academic preparation of entering freshman students.

The within-group gaps for graduation rates between the lowest GPA category ("bottom third") and highest GPA category ("top third") are much wider than the gaps between groups when comparing the same GPA categories. For example, there is an 18-percentage point gap in four-year graduation rates for Pell Grant recipients in the bottom GPA tercile (54 percent) compared to Pell Grant recipients in the top GPA tercile (72 percent).

However, the four-year graduation rate gap between Pell Grant recipients and non-Pell recipients in all GPA terciles is about ten percentage points. The gaps are similar when looking at high school GPA within race/ethnicity categories and when looking at first-generation and non-first-generation students.

More information on trends in graduation rates can be found at universityofcalifornia.edu/infocenter/ug-outcomes.

Academic preparation explains more of the difference in transfer graduation rates than race/ethnicity, Pell recipient status, or first-generation status alone.

3.1.11 Transfer graduation rates by incoming transfer GPA (top, middle, and bottom thirds) and race/ethnicity, Pell Grant recipient status, and first-generation status
Universitywide
Cohort entering fall 2017
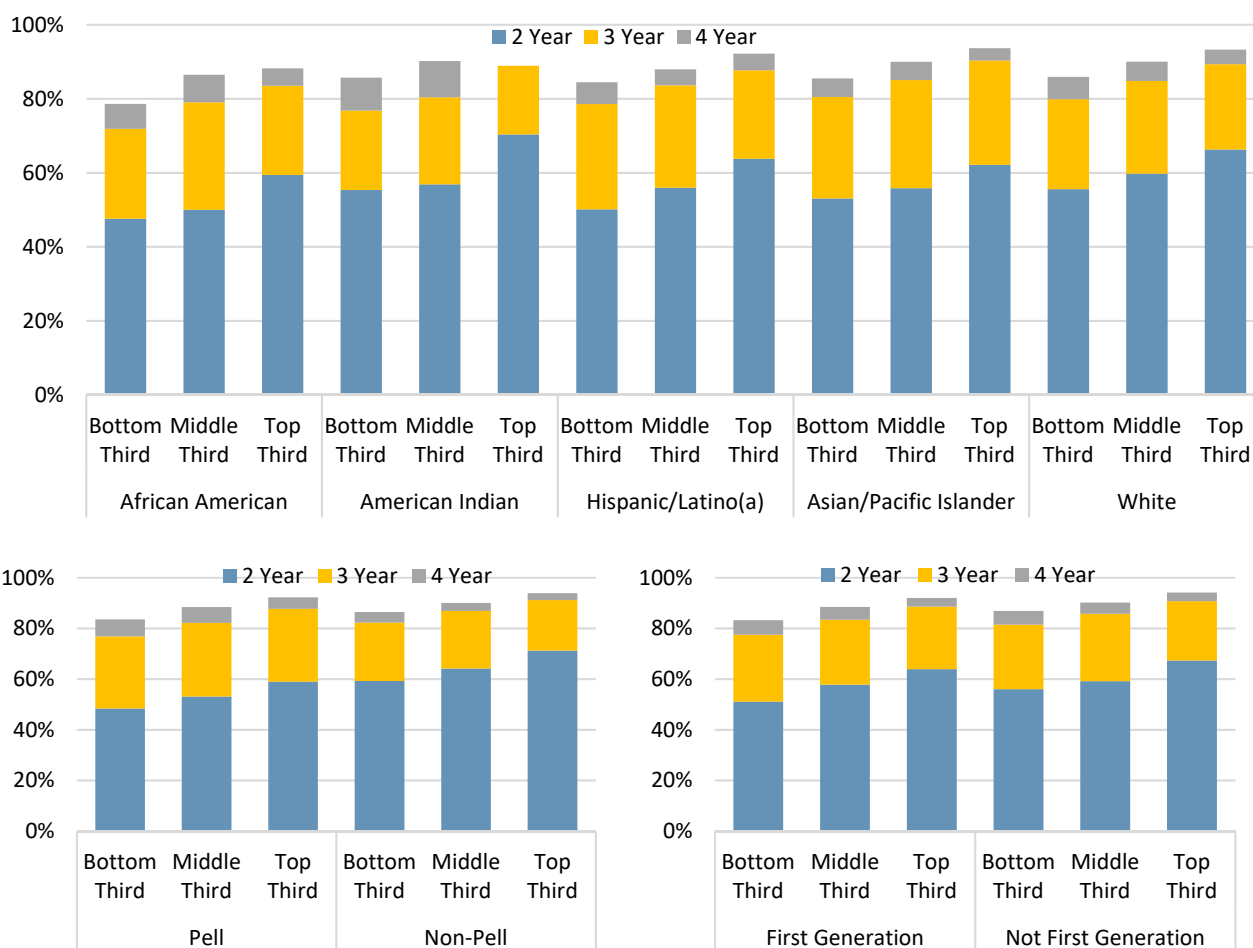
Source: UC Data Warehouse

As with freshman students, there are differences in graduation rates for transfer students with different characterstics, such as URG students, Pell Grant recipients, and first-generation students compared to students who are not part of those respective groups (as detailed in indicators 3.1.5, 3.1.7, and 3.1.9).

However, larger differences in graduation rates are explained by transfer grade point average (GPA). The within-group gaps for graduation rates between the lowest GPA category ("bottom third") and highest GPA category ("top third") are wider than the gaps between groups when comparing the same GPA categories.

For example, there is a 13-percentage point gap in two-year graduation rates for first-generation students in the bottom GPA tercile (51 percent) compared to Pell Grant recipients in the top GPA tercile (64 percent).

However, the two-year graduation rate gap between Pell Grant recipients and non-Pell recipients in all GPA terciles ranges from one to five percentage points. With that said, the within-group four-year graduation rate gap shrinks to about nine percentage points between the top and bottom GPA categories and the between-group gaps shrink to one to four percentage points across all GPA categories for first-generation students.

The gaps are similar when looking at transfer GPA within race/ethnicity categories and when looking at Pell Grant recipient and non-Pell Grant recipient students.

Academic preparation is an important factor to consider for those who seek to eliminate equity gaps in graduation rates and may help campuses create preemptive initiatives for students in their first year on campus.

UC has adopted goals to eliminate graduation gaps by 2030 and is seeking funds from the State to support investment in programs and services needed to help achieve these ambitious goals.

More information on trends in graduation rates can be found at universityofcalifornia.edu/infocenter/ug-outcomes.

Undergraduate students at UC are graduating more quickly than in previous years.

3.1.12   Average time to degree
Universitywide and UC campuses

Fall 2014 entrants

Freshman

4.33   4.12

Transfer

2.55   2.38

Freshman   Transfer students
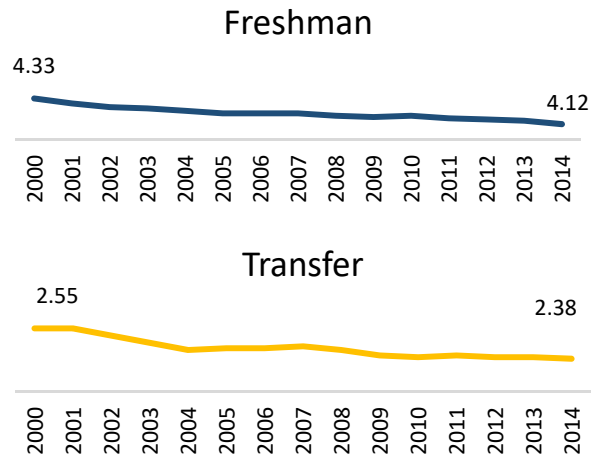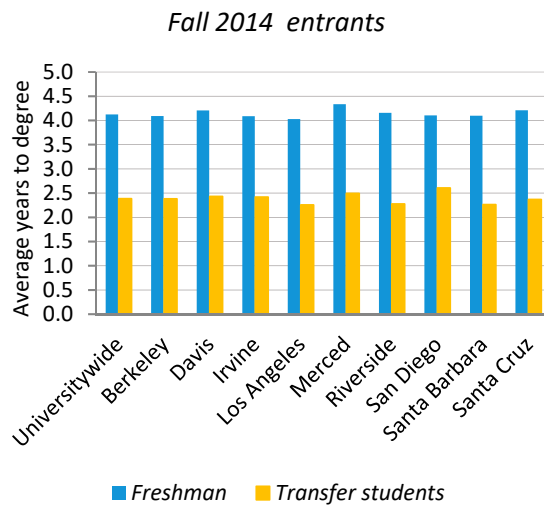
Source: UC Corporate Student System
Average time to graduation only includes students who graduated from UC within seven years.

The average time to earn a bachelor's degree at UC has decreased fairly steadily since 1994. Students entering as freshmen in 2014 took an average of 4.12 years, down from 4.33 years in 2000.

For students entering as transfers, the average time to degree is 2.38 years, down from 2.55 years in 2000. More information on trends in UC time to degree can be found at universityofcalifornia.edu/infocenter/ug-outcomes.

Retention rates are high, but UC is monitoring recent declines.

3.2.1   First-year retention rates
UC systemwide
Cohorts entering fall 2010 to fall 2020
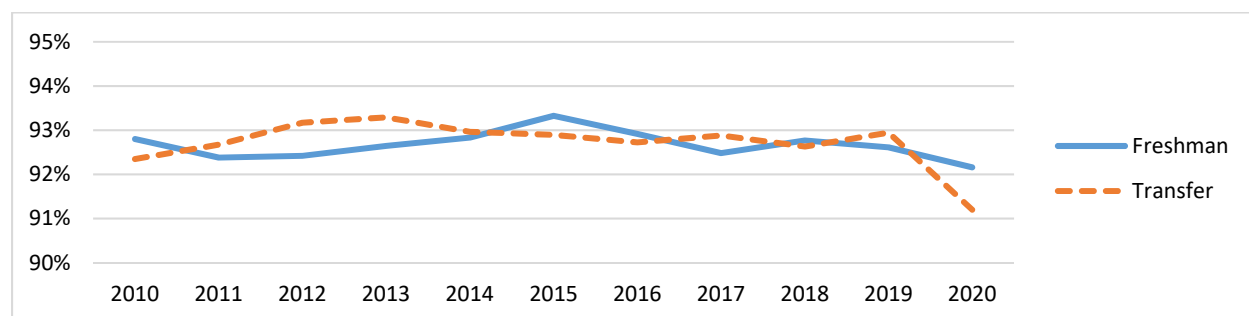
Source: UC Data Warehouse

3.2.2   First-year retention rates
UC and comparison institutions
Cohorts entering fall 2020

Freshmen		Transfers	
AAU Private	92%	Universitywide	91%
Non-UC AAU Public	92%	Berkeley	92%
Universitywide	93%	Davis	91%
Berkeley	96%	Irvine	93%
Davis	93%	Los Angeles	95%
Irvine	94%	Merced	80%
Los Angeles	96%	Riverside	88%
Merced	86%	San Diego	91%
Riverside	91%	Santa Barbara	88%
San Diego	94%	Santa Cruz	88%
Santa Barbara	91%		
Santa Cruz	88%		
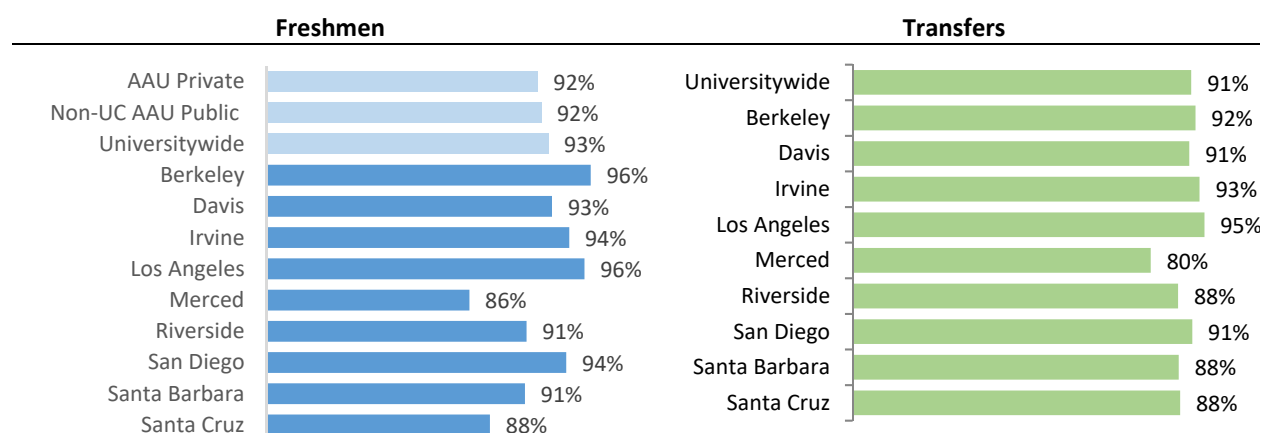
Source: Freshman data from IPEDS.[1] Transfer data from UC Data Warehouse. Comparison data are not available for transfers.

[1] Freshmen are first-time, full-time, degree-seeking students from the fall who enroll again in the next fall term. The most recent available comparison data available from IPEDS is for 2020.

3.2.3 First-year retention rates universitywide and for Pell Grant recipients, first-generation, and URG students
Freshmen and transfer students
Cohorts entering fall 2019 and fall 2020

Freshmen

2019		
Universitywide		93%
Pell		93%
First-generation		92%
URG		91%

2020		
Universitywide		92%
Pell		89%
First-generation		88%
URG		88%

Transfers

2019		
Universitywide		93%
Pell		94%
First-generation		93%
URG		93%

2020		
Universitywide		91%
Pell		92%
First-generation		91%
URG		91%
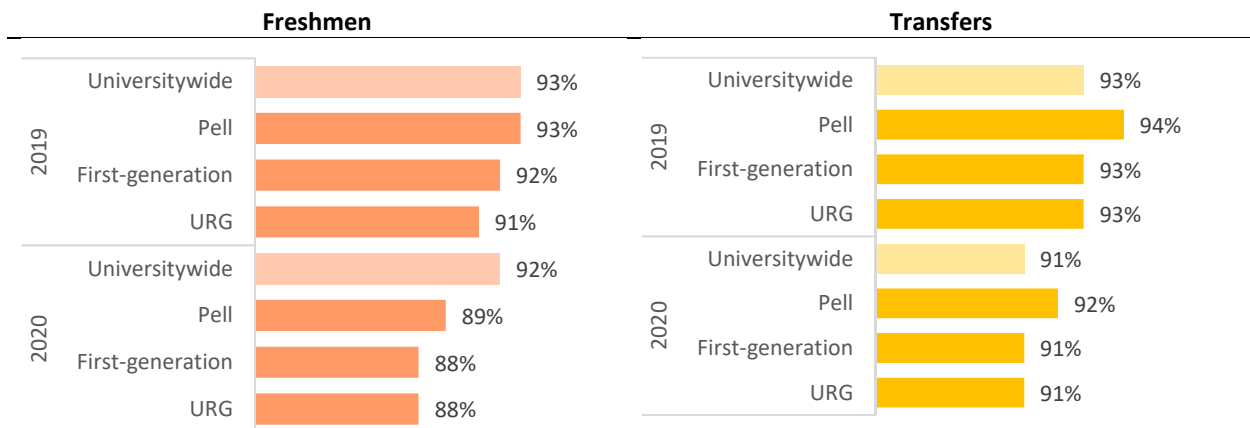
Source: UC Data Warehouse

The current Universitywide retention rate is 93 percent. This is comparable to non-UC AAU public institutions (92 percent) and AAU private institutions (92 percent). The Universitywide retention rate is 92 percent for freshmen students and 91 percent for transfer students, representing slight decreases from the previous year (93 percent for freshmen and transfer students, respectively). A few campuses have seen decreases in transfer student retention rates of nine (UC Merced) and four (UC Riverside and UC San Diego) percentage points. Campuses attribute the decreased retention rates to challenges related to the COVID-19 pandemic.

Additionally, Pell Grant recipients, first-generation students, and URG students have a seen a decline in retention rates of three to four percentage points, respectively, for the 2020 entering cohort compared to the 2019 entering cohort. For transfer students, the retention rates for Pell Grant recipients, first-genration students, and URG students are comparable to the Universitywide rate. However,

the retention rates for these groups have followed the overall retention rate for transfer students and indicate a two-percent decline for the 2020 cohort compared to the 2019 entering cohort.

For students leaving in good academic standing (GPA ≥ 2.0), some campuses are expanding honors programs or providing opportunities for undergraduate research as early as the freshman year. For those leaving in poor academic standing (GPA < 2.0), some UC campuses are using Summer Bridge or early orientation. Campuses are also looking into housing and residential programs and cohort programs to integrate undergraduates.

Like entering freshmen, transfer students benefit from a smooth transition to UC. Several UC campuses have summer programs to support transfer students. More information on trends in UC retention rates can be found at:
universityofcalifornia.edu/infocenter/ug-outcomes.

Social science, life sciences, and engineering and computer science are the largest segments of bachelor's degree recipients.

3.3.1 Undergraduate degrees awarded by discipline
UC and comparison institutions
2019–20

	Engineering & Computer Science	Physical Sciences	Life/Health Sciences	Social Sciences	Arts & Humanities	Business	Other
AAU Private (57,050)	20%	7%	15%	22%	14%	10%	12%
Non-UC AAU Public (200,697)	20%	5%	16%	17%	9%	14%	20%
UC (62,746)	16%	8%	19%	29%	11%	6%	11%
Berkeley (9,096)	22%	9%	18%	24%	9%	4%	14%
Davis (8,636)	13%	5%	23%	28%	10%	7%	14%
Irvine (8,955)	22%	6%	18%	27%	7%	12%	8%
Los Angeles (9,418)	10%	9%	19%	41%	15%	0%	6%
Merced (1,522)	22%	6%	27%	26%	4%	12%	4%
Riverside (5,541)	12%	6%	16%	30%	15%	16%	5%
San Diego (7,933)	18%	10%	24%	19%	6%	1%	22%
Santa Barbara (6,583)	6%	12%	15%	38%	15%	1%	12%
Santa Cruz (5,062)	20%	6%	21%	24%	17%	6%	6%

Source: IPEDS

About 43 percent of all undergraduate degrees awarded by UC in 2018–19 were in science, technology, engineering, and mathematics (STEM) fields. This is similar to the proportion at AAU public and private comparison institutions (41 and 42 percent, respectively).

Overall and across most disciplines, undergraduate degree recipients double their earnings between two and ten years after graduation.

3.3.2   Inflation-adjusted average and median alumni wages by selected majors, two, five, and ten years after graduation
Universitywide
2000–01 to 2017–18 graduating cohorts, combined, sorted by popularity

	After 2 years		After 5 years		After 10 years	
	Mean	Median	Mean	Median	Mean	Median
Arts & Humanities						
Arts	$34,835	$30,312	$51,357	$45,636	$75,072	$62,630
English/Literature	$38,745	$35,111	$57,995	$52,566	$85,557	$72,000
Foreign Language	$38,678	$34,135	$57,711	$51,448	$86,665	$71,915
History	$39,268	$34,760	$62,348	$54,027	$94,546	$76,478
Other Humanities	$36,709	$32,479	$57,582	$57,107	$72,835	$71,031
Philosophy	$39,644	$34,127	$59,932	$51,482	$101,647	$75,982
Professional						
Nursing	$87,784	$88,432	$111,640	$108,796	$134,479	$128,818
Business	$57,998	$54,194	$84,229	$74,492	$128,224	$103,538
Agriculture	$55,393	$53,329	$79,061	$72,548	$117,839	$101,088
Architecture	$51,297	$48,875	$68,401	$63,389	$90,368	$81,622
STEM						
Computer Science	$93,395	$83,810	$130,013	$107,491	$167,182	$132,394
Engineering	$75,717	$72,025	$105,184	$94,221	$147,853	$124,493
Physics	$55,054	$49,400	$83,101	$76,506	$123,459	$105,928
Biology	$40,592	$38,129	$67,068	$59,464	$116,432	$97,260
Chemistry	$46,876	$45,261	$66,929	$61,923	$112,750	$96,982
Mathematics	$58,781	$53,574	$86,357	$75,084	$117,634	$97,590
Geology	$45,595	$43,885	$64,776	$61,111	$90,546	$81,596
Social Sciences						
Economics	$57,774	$54,238	$84,619	$74,972	$127,886	$103,173
Political Science	$45,240	$41,100	$72,681	$61,487	$113,591	$93,234
Geography	$45,244	$41,638	$71,019	$62,075	$107,494	$82,791
Psychology	$38,721	$34,838	$61,006	$54,434	$91,733	$77,771
Anthropology	$36,915	$32,347	$54,193	$48,018	$82,070	$68,396
Sociology	$41,610	$38,034	$62,471	$55,841	$89,117	$75,799
All Disciplines						
All Majors	$49,235	$43,270	$73,413	$63,529	$109,100	$89,175

Source: California Employment Development Department and UC Corporate Student System. Includes alumni employed in the state of California only. Amounts are inflation-adjusted to 2021 dollars.

Alumni employment data provide evidence of UC's contribution to the California economy and its role as an engine of economic mobility. UC enrolls a greater percentage of low-income students (from the bottom 20 percent of the income distribution) than other four-year institutions in California. Recent data made available through a partnership with the Equality for Opportunity Project show that more than one in three UC alumni who come from the bottom 20 percent of income rise to the top 20 percent of income as adults, based on the entering cohorts of 1999 to 2005. Moreover, comparisons using this national data show UC bachelor's degree recipients working in California tend to earn about 20 percent more than UC graduates who work outside of California. More information on the Equality of Opportunity Project can be found at: ucop.edu/institutional-research-academic-planning/_files/CLIMB-a-mobility-analysis.pdf.

Over time, an increasing share of degree recipients go on to work across diverse California industries, particularly health care, public administration, education, and technology- and internet-related fields.

3.3.3 Industry of employment of UC bachelor's graduates by discipline and years after graduation
Universitywide
2000–01 to 2018–19 graduating cohorts, combined
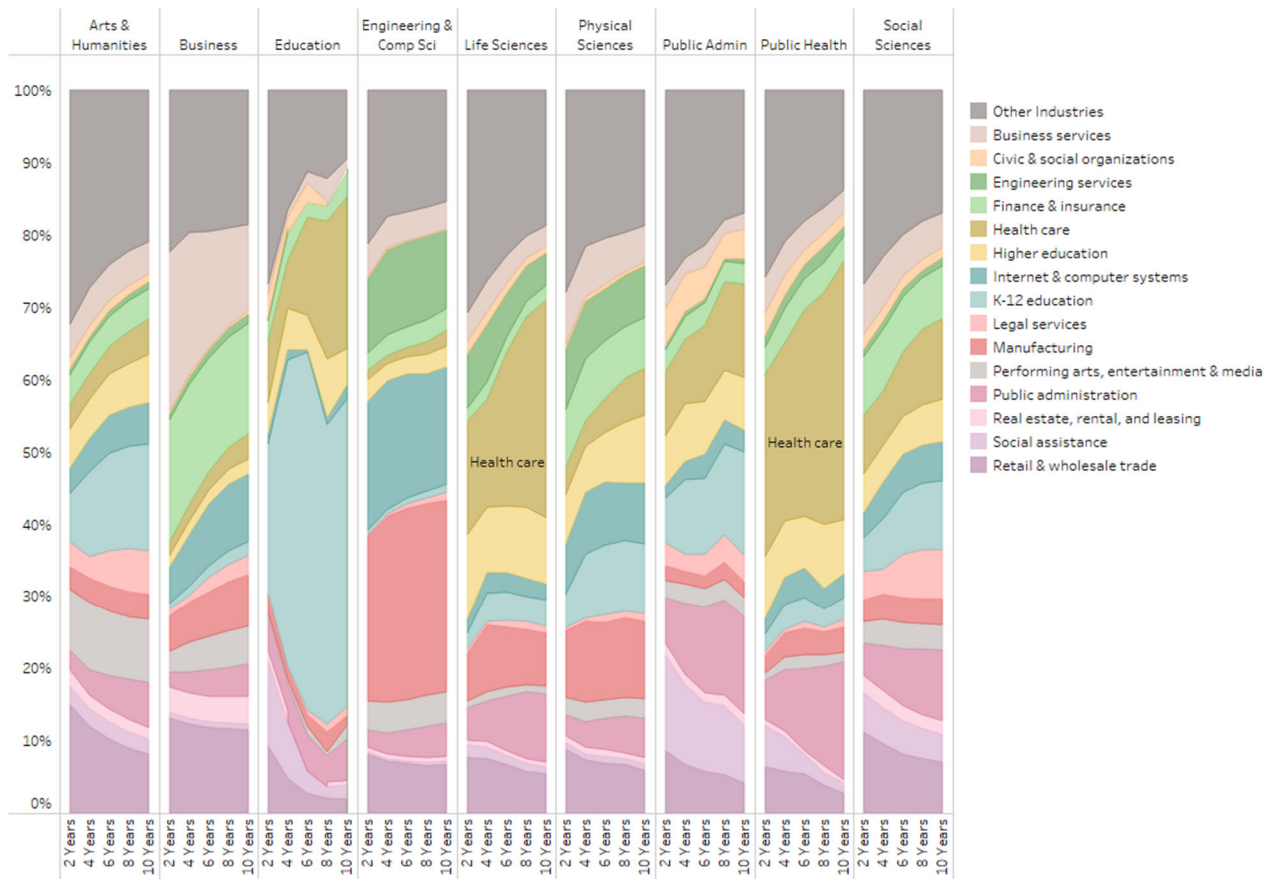
3.3.4   Median alumni wages by industry of work for selected majors, five years after graduation
Universitywide
2000–01 to 2015–16 graduating cohorts, combined
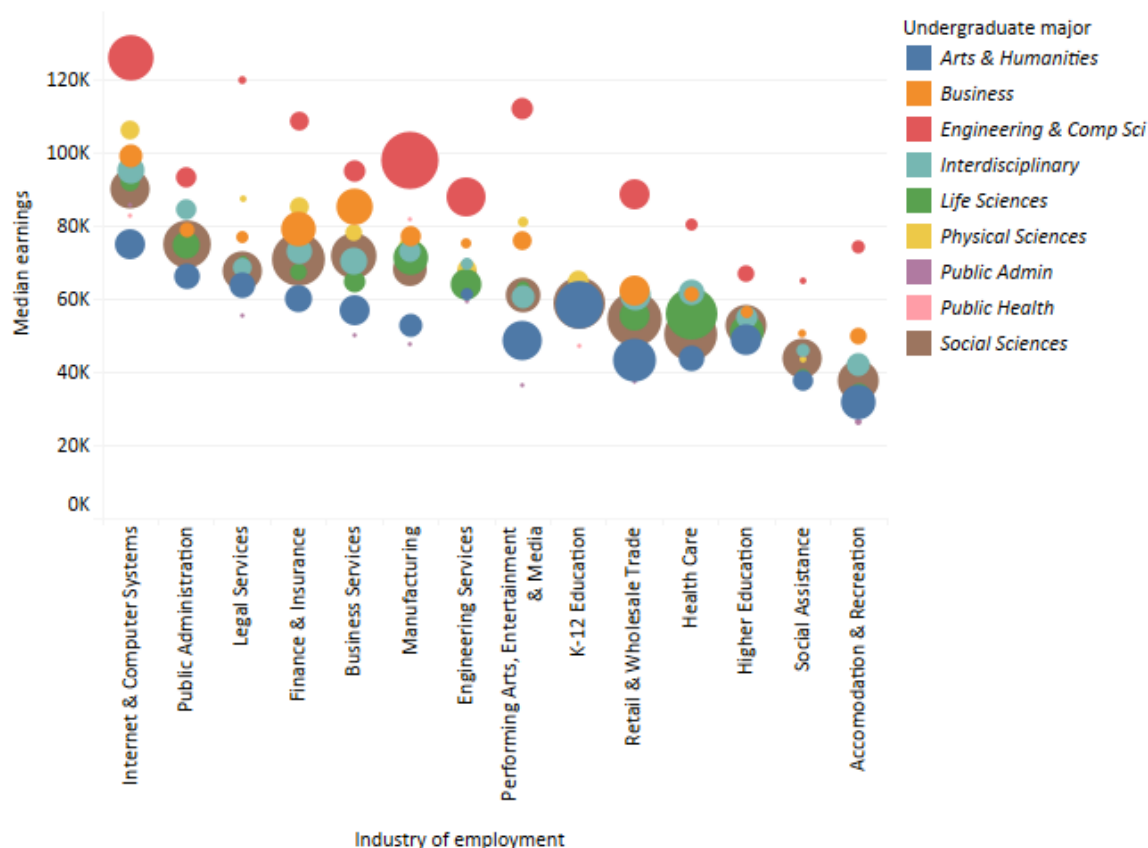
Note: Bubble size corresponds to percentage of alumni within majors employed in the industry. The largest bubble is 43 percent and the smallest is <1 percent.

Source: California Employment Development Department and UC Corporate Student System. Includes alumni employed in the state of California only. Amounts are inflation-adjusted to 2021 dollars.

UC graduates go on to work in a wide range of industries in California. Over time, bachelor's degree graduates move to high-skill industries such as education, health care, public administration, engineering, and internet and computer systems.

A significant number of UC graduates go on to become educators within California's K–12 and higher education systems. About four percent of UC graduates work in the states K–12 education system right after graduation and about eight percent do so within ten years of receiving their UC degree.

A large number of UC graduates also work in the state's health care and social assistance workforce. At ten years after graduation, about 13 percent work in health care or social assistance (31 percent among life science majors).

A large share of Engineering and Computer Science majors work in the Internet & Computer Systems and Manufacturing industries, with median salaries of about $126K and $98K, respectively. Business majors are likely to work in the Business Services or Finance & Insurance industries where median earnings reach $85K and $79K. Arts & Humanities graduates are most likely to work in K–12 Education, where median salaries are much lower, at about $58K at five years after graduation.

Thirty-six percent of undergraduate degree recipients go on to earn a graduate degree, the majority of which are masters-level degrees.

3.3.5   UC undergraduate alumni graduate degree attainment by campus
2000 to 2015 graduating cohorts, combined, as of spring 2021
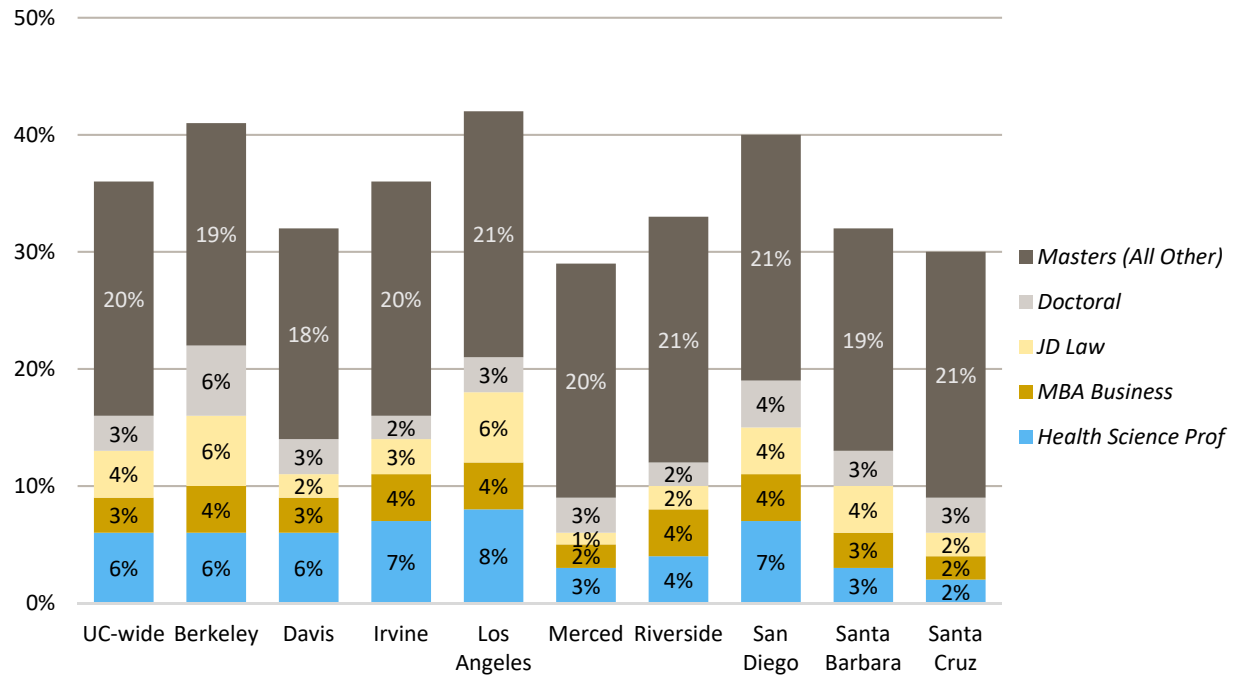
Source: UC Information Center

Earning a graduate degree is a major objective of many undergraduates who attend a research university. Nearly 40 percent of undergraduate students go on to earn a graduate degree after their undergraduate studies at UC.

The UC Information Center (universityofcalifornia.edu/infocenter/alumni-grad-outcomes) provides more details on graduate degree attainment by race/ethnicity, gender, Pell grant eligibility, and entry status. By 2030, UC aims to increase access to graduate degrees for populations that currently are less likely to attend graduate school.

Graduate Academic Students and

Graduate Professional Students

UC Merced Applied Mathematics Ph.D. student Cory Mccullough is teaching statistics to incarcerated students at two local prisons through the Merced College Rising Scholars Program.

In his early 20s, Cory Mccullough battled addiction and stole to support his habits. The Dos Palos native spent several stints in prison as early as 2011 for commercial burglary. Education was the last thing on his mind. Motivated by the desire to make a life for his kids, he enrolled at Merced College. Like many adult community college students, it took more than one attempt for the passion to learn to stick. But it did and he was a member of two honor societies: Phi Theta Kappa and Alpha Gamma Sigma.

Now, the former inmate finds himself in the joint again, this time not behind bars but helping incarcerated people forge their paths to higher education. The third-year UC Merced Ph.D. candidate is using his experiences and education to teach incarcerated students through the Merced College Rising Scholars Program. The program partners with the California Department of Corrections and Rehabilitation and serves 600 students at two state prisons in Chowchilla: Valley State Prison and Central California Women's Facility.

"They are exceedingly driven (as students) because they don't want to go back to where they've been. No other students I know have that kind of dedication." Like Mccullough recognized, education can be the key to changing circumstances.
"It means a lot for me to go in there and show them that they can do something different with their lives," Mccullough said.

GRADUATE ACADEMIC AND GRADUATE PROFESSIONAL STUDENTS

Goals

California's Master Plan for Higher Education gives the University of California the responsibility of enrolling and preparing graduate academic and professional students to help meet the needs of California and the nation and to further the UC mission of teaching, research, and public service. Thus, reviving adequate support for the University of California is important, as its graduate education enterprise fuels California's role as a national and international leader.

UC's goals for graduate education are to offer outstanding degree programs, advance research, support undergraduate instruction, and prepare students to join a professional workforce or innovate on behalf of it. UC produces the leaders of the future — the teachers, artists, thinkers, innovators, scientists, inventors, doctors, lawyers, and nurses; and it creates an environment of exploration and discovery that stimulates innovation and invention. UC's internationally renowned graduate education enterprise serves to drive California's economy and its role as a global leader. UC graduate education allows California to grow, create jobs, drive industry, tackle unique challenges facing the state, and help improve the everyday lives of its inhabitants.

Types of graduate degrees

UC awards both graduate academic degrees and graduate professional degrees.

Graduate academic degrees — These include academic doctoral and academic master's degrees in education, life sciences, physical sciences, social sciences, arts, humanities, and engineering/computer science. The largest proportion of graduate academic degrees awarded at UC is in the STEM fields — science, technology, engineering, and mathematics. From the 2016–17 to 2020–21 academic years, more than 70 percent of UC graduate academic degrees were awarded in STEM fields.

Graduate professional degrees — UC's professional degrees include professional master's and professional practice degrees in fields such as law, medicine, nursing, business, education, architecture, public policy, and the arts. The graduate professional category includes professional master's degrees (e.g., M.B.A., M.Ed.) and professional practice degrees (e.g., J.D., M.D.). In the field of medicine, UC offers the nation's largest instructional program in health care and health sciences.

The University maintains multiple funding models for its graduate professional programs. Many partially State-supported programs (e.g., M.B.A., law, medicine) assess professional degree supplemental tuition (PDST), which allows the professional schools to ensure their excellence, accessibility, and inclusiveness, and assists with affordability (by requiring return-to-aid for tuition revenue). Programs assessing PDST commit substantial resources to student financial support, including grants and scholarships. Since PDST began in 1994, both the number of professional degree programs that charge PDST and the amount charged have increased. Currently over 60 graduate professional programs charge PDST, ranging from $8,000 to $51,000 per year in addition to systemwide tuition and campus-based fees.

Other UC graduate professional programs, primarily master's programs, follow a self-supporting funding model. The largest are business and management programs. These programs receive no State support and are funded entirely by revenues generated by the program and other non-State revenues. Self-supporting programs allow the University to serve additional students beyond those supported through State resources. They also fulfill higher education and workforce needs. Some self-supporting programs serve nontraditional populations such as full-time employees, mid-career professionals, and international students with specialized goals. Many programs are offered through an alternative mode of delivery, such as online or hybrid instruction, alternative scheduling, or at off-campus locations.

Graduate enrollment share

UC's graduate education enterprise enrolls over 64,000 students, with doctoral students representing the largest number (29,200), and professional (26,500) and master's (8,200) comprising the remainder. Despite its size, UC's graduate education enterprise represents a smaller share of its total enrollment than that of its peers. Graduate students comprise 21 percent of total student enrollment at UC, which is lower than the proportion of graduate enrollment among other Association of American Universities (AAU) public (28 percent) and private (56 percent) peer institutions. In addition, while the graduate share of UC's total enrollment has remained relatively constant over the last decade at 21 percent, the doctoral enrollment percentage has declined. The graduate professional percentage has risen steadily (4.2.1). Despite these enrollment trends, UC research degree production is comparable to other public university competitors. For example, in number of research degrees produced and percentage of research degrees produced in comparison to other types of degrees, UC compares favorably to its competitors. While enrollment needs will vary by program, it is important that academic doctoral student enrollment be supported at sufficient levels to drive UC's research enterprise and support faculty innovation and retention.

As discussed in the Executive Summary, UC is pursuing a multi-year framework with the goal of increasing degree attainment and producing 200,000 more degrees through 2030, in addition to the projected one million degrees UC already expects to grant. About 40,000 of these additional degrees would be at the graduate level.

Supporting diverse career paths and making research accessible

To promote and highlight the work of master's and doctoral students across UC campuses, UC holds an annual research communication competition called UC Grad Slam (gradslam.universityofcalifornia.edu). The event challenges its ten participants — the winners of each campus's Grad Slam — to distill years of academic research into a three-minute presentation free of technical lingo. Grad Slam encourages students to communicate their research in a clear and compelling way to non-specialists — a skill that employers need and value. Campuses provide workshops and resources for students to develop this skill set. The contest also demonstrates to the public that UC research benefits their lives in both ordinary and quite extraordinary ways. While UC was unable to hold the 2020 installment of systemwide Grad Slam due to the coronavirus pandemic, Grad Slam returned in a virtual format in 2021. In 2022, the systemwide Grad Slam returned to an in-person competition but without a public audience due to continued pandemic-related limitations. The event was livestreamed, and the winner was Justin Lee from UC Berkeley for his talk on how genetic engineering could be used to stop COVID from replicating inside the body. Also taking home prizes for their outstanding talks were Amanda Quirk of UC Santa Cruz, who won second place for explaining her research into how galaxies collide; Rachel Sousa of UC Irvine, who snagged third place for her talk on how math can help us find a cure for cancer; and Wei Gordon of UCSF, who won the People's Choice award for a talk on mutations that help fruit-eating mammals metabolize sugar.

UC Graduate Student Experience Survey (UCGSES)

In 2021, UC launched the UC Graduate Student Experience Survey (UCGSES). This systemwide survey was developed based on the UC Graduate Well Being Survey, Ph.D. Career Pathways Survey, and UC campus graduate and professional student surveys. This survey will be administered every two years to solicit graduate and professional students' opinions on a broad range of academic and co-curricular experiences, including instruction and training, advising, basic needs, student services, and campus climate.

Results showed that about 65 percent of academic doctoral respondents reported they were confident in their financial situation and could get by financially without having to cut back on what was important to them. At the same time, about one-third reported that financial hardship had impeded their success in their program. Findings also revealed differences in financial confidence and hardship exists among students across disciplines. For example, students in Arts, Humanities, and Social Sciences were less likely to report that they were confident in their financial situation compared to other disciplines, and more than half of respondents in Arts and Humanities reported financial hardship had impeded their success. In addition, students from underrepresented racial/ethnic groups (Black/African American, American Indian, and Hispanic/Latino(a)), first-generation students, women, and LGBTQ students reported being less confident in their financial situation than other students. One way UC campuses plan to help increase academic doctoral student financial confidence is by providing multi-year funding/support offers at the time of admission to provide greater assurance regarding the amount and consistency of financial support students can expect throughout their program. Presently, the minimum duration of support offered to students upon admissions varies. However, it is a UC goal for campuses to ensure that all academic doctoral students will receive a minimum of a five-year funding package upon admission. This is the current practice at UC Irvine, UC San Diego, and UC Santa Cruz.

Additionally, African American and American Indian graduate and professional students are less likely than other students to feel that their culture is respected on campus. These data are presented in Chapter 7: Diversity, indicators 7.2.3 and 7.2.4, and the whole UCGSES survey can be explored at this dashboard: universityofcalifornia.edu/about-us/information-center/UCGSES-data-tables

Equity and inclusion: Expanding academic pathways

A more diverse and inclusive community of scholars at all levels has been a longstanding goal for UC, but progress at the doctoral, postdoctoral, and faculty levels has lagged compared to the undergraduate level. UC's difficulties reflect challenges in both enrolling individuals from underrepresented groups in doctoral programs and in attracting and hiring them as postdoctoral scholars and faculty. Improving retention of faculty from underrepresented groups is also important. Improving climate and inclusion at UC continues to be critical to its excellence and future. There is a new systemwide initiative aimed at improving inclusion within UC's academic community. It is:

Growing Our Own: Graduate Enrollment and Diversifying Ph.D. Pathways Initiative — To support and enhance the career path to the professoriate, the UC Council of Vice Chancellors (COVC) developed this important new systemwide effort. The initiative aims to increase the number and proportion of UC undergraduate degree recipients who earn an academic doctoral degree, and to increase the number and proportion of UC academic doctoral graduates from UC, California State University (CSU), other Hispanic-Serving Institutions (HSIs), Historically Black Colleges and Universities (HBCUs), and Tribal Colleges and Universities (TCUs). With this initiative, UC aims to build sustainable pathways for students from first-generation, low-income, and underrepresented racial/ethnic groups to the professoriate, in California and beyond. The initiative recognizes the importance of multiple interventions and partners — scaled up and sustained over time — to identify and cultivate talent for California's

future professoriate. The initiative seeks to expand existing programs at UC, create stronger connections among institutions of higher education for identifying and cultivating talent, and prioritize academic doctoral training for California undergraduates who collectively come from backgrounds as diverse as California itself. Using relevant data, each UC campus established growth targets achievable by 2030 for Ph.D. enrollments from UC undergraduates and students from CSU, HBCU, HSI, and TCU institutions, ranging from 27 to 40 percent. To achieve the growth targets, each campus has developed a plan aligned with the systemwide Growing Our Own strategic framework. In order for UC to maximize progress and appropriately widen the pathways to California's professoriate, particularly for first-generation students and scholars from underrepresented communities of color, additional investment from the state is needed.

Growing Our Own is providing an infrastructure to better elevate, connect, and advance a range of pathways and inclusion efforts. Below are a few examples of such programs:

UC LEADS — The **U**niversity of **C**alifornia **L**eadership **E**xcellence through **A**dvanced **D**egree**S** (UC LEADS) program prepares promising UC undergraduate students for advanced education in science, technology, engineering, and mathematics (STEM) fields. The program prepares underrepresented UC undergraduate students for doctoral education opportunities at a UC campus.

From its inception in 2000, 1,153 scholars participated in UC LEADS, celebrating 20 years of programmatic effort and yielding significant outcomes. Ninety-nine percent of UC LEADS scholars graduate with their undergraduate degree, 76 percent pursue graduate school or have already earned degrees in a master's or doctoral program, and 48 percent of UC LEADS scholars attended UC for graduate school. Given the importance of gender and ethnic equity within STEM-based doctoral programs, it is notable that 50 percent are women, 53 percent are first-generation college students, and 52 percent are from underrepresented minority groups. Thirty-seven UC LEADS alumni are now working as tenure track faculty, including seven within the UC system, while another 12 are employed in non-tenure track faculty positions, and 11 hold other academic career positions. Others work around the world as industry and government scientists, teachers, medical doctors, and entrepreneurs. It is also worth noting that 28 percent of scholars who enroll in a UC graduate program do so at the campus where they spent their second UC LEADS summer experience — further illustrating the impact and significance of the relationships that students build through this program.

UC-Hispanic Serving Institutions Doctoral Diversity Initiative (UC-HSI DDI) — Launched in fall 2019, the UC-HSI DDI aims to improve faculty diversity by enhancing pathways to the professoriate for underrepresented students from California Hispanic Serving Institutions (HSIs). The UC-HSI DDI includes two components: 1) competitive grant awards to UC faculty/faculty administrators to support short-term and long-term programs/projects to enhance and expand pathways to the professoriate for underrepresented students; and 2) funding to directly support graduate student preparation for the professoriate. Funding includes resources to support a limited number of Ph.D. students (two per campus), named UC President's Pre-Professoriate Fellows (UC PPPF), who are California HSI alumni and have advanced to candidacy at UC. The UC President's Pre-Professoriate Fellowship fosters their interest in and preparation for the professoriate. Additional professional development support for underrepresented Ph.D. students is provided to campus graduate divisions to encourage and help more scholars explore opportunities to help them consider, and pursue, careers in the professoriate. Another goal of the UC-HSI DDI is to enhance the climate of academic programs through interventions, incentives, and efforts that foster an academic culture of inclusion and equity — especially for faculty and students from underrepresented communities.

In two cycles, the UC-HSI DDI grants program has supported ten projects: five small grants (up to $50K) and five large grants (up to $350K). The lead investigators represent projects from seven different UC campuses: Davis, Riverside, and Santa Cruz each with two grants; and Irvine, Los Angeles, Merced, and San Diego each with one

grant. The ten funded grants cover a broad range of disciplines/areas, including five in STEM, three in social sciences, and two interdisciplinary; together, these projects partner with more than 40 institutions and support nearly 450 students. The program has received significant interest, generating 59 grant applications and more than $13M in funding requests in only two cycles. The initiative has also supported 35 UC President's Pre-Professoriate Fellows since the program's inception, three of whom have been awarded the prestigious UC President's Postdoctoral Fellowship.

UC-HBCU Initiative — The University of California-Historically Black Colleges and Universities (UC-HBCU) Initiative was established to increase the number of African Americans completing Ph.D.'s at UC by investing in relationships between UC faculty and HBCUs. The program has raised UC's profile within the HBCU community and facilitated faculty research collaborations in addition to enrolling, retaining and graduating students. UC has hosted 700 UC-HBCU summer interns across nine campuses since it first hosted students in summer 2012. UC currently has 78 Ph.D. fellows enrolled across all ten UC campuses as a direct result of the Initiative: 68 percent in STEM fields, and 32 percent in Social Sciences/Humanities. Thirteen Ph.D. and 16 master's students have graduated. Of the 13 Ph.D. graduates, five (38 percent) have secured tenure track positions in the professoriate, two in California, at UC Irvine and William Jessup University. One graduate is teaching at Penn State, Brandywine, and two have been hired as faculty at HBCUs (Fisk University and Howard University). Two Ph.D. graduates were awarded the President's Postdoctoral Fellowship (PPFP), which helped them to secure faculty appointments, and others have also obtained prestigious postdoctoral appointments and employment positions. These alumni are making important contributions to California, the nation, and the world.

University of California President's Postdoctoral Fellowship Program (PPFP) — The PPFP was established to encourage outstanding women and minority Ph.D. recipients to pursue academic careers at UC. The program offers postdoctoral research fellowships, professional development, and faculty mentoring to outstanding scholars in all fields whose research, teaching, and service will contribute to diversity and equal opportunity at UC. More information about the PPFP is presented in Chapter 5.

Looking ahead

UC is committed to expanding pathways to research and advanced degrees so that innovation can be driven at the highest levels and to propel California to lead the way with a diverse professoriate. Inclusion and equity are critical to the continued success and prominence of UC's research enterprise. In addition to the programs noted above that help advance the Growing Our Own: Graduate Enrollment and Diversifying Ph.D. Pathways initiative, UC is launching two related pilot programs:

UC-California Community College Faculty Internship Program (UC-CCCFIP) 3-year Pilot. This pilot builds on UC Irvine's current faculty internship program with California Community Colleges (the California Community College Internship Program-CCCIP), to support an expansion of the program to include additional UC and CCC campuses, and provide more competitive student stipends to attract Ph.D. students from underserved and diverse communities. This effort will promote pathways into faculty positions at California Community Colleges (CCC). The program will help expose UC students and encourage them to train for the professoriate, engage with undergraduate students from the California Community College system, and model advanced degree aspirations for CCC students. The systemwide pilot will be inclusive of all disciplines, but priority areas/fields will be identified by CCC. The UCI program has served nearly 100 students since it began, many of whom have gone on to careers as professors in CCCs, CSUs, and UCs.

Development of online Introduction to Research/Research Exposure course(s). California has an outstanding public higher education system, with UC, CSU, and CCC. UC's role within the state is unique in that it is a research

university system, yet it has no strategic mechanism to ensure that each and every UC student has research exposure/experience. Beyond a UC course, there is great value in developing research exposure courses, in collaboration with UC's intersegmental partners, that will target California undergraduates at CCC and CSU. This will serve to expose and potentially better position students, from all backgrounds, to consider career opportunities fueled by research, careers that are critical to supporting the state's advanced workforce needs. This project is a long-term pilot effort.

Looking ahead requires prioritizing investing in pathways to success for California undergraduates and focusing on expanding and diversifying California's much-needed pool of workers and innovators to meet the state's advanced workforce needs. This requires ensuring that those pursuing advanced degrees and professoriate opportunities are reflective of the state of California. UC is looking forward to working in collaboration with state leaders to support that vision for California's future. Investing in *Growing Our Own* is key to sowing success.

For more information

UCOP Graduate Studies: ucop.edu/graduate-studies

UC Grad Slam: gradslam.universityofcalifornia.edu

UC-Hispanic Serving Institutions Doctoral Diversity Initiative (UC-HSI DDI): ucop.edu/graduate-studies/initiatives-outreach/uc-hsi-ddi.html

UC LEADS: ucleads.ucop.edu/index.html

UC-HBCU Initiative: ucop.edu/uc-hbcu-initiative/index.html

President's Postdoctoral Fellowship Program: ppfp.ucop.edu/info/index.html

Time to doctorate at UC: universityofcalifornia.edu/infocenter/time-to-doctorate

Doctoral completion rates: universityofcalifornia.edu/infocenter/doctoral-rates

Graduate student financial support and net cost of attendance: universityofcalifornia.edu/infocenter/net-cost

Employment and doctoral experience of Ph.D. recipients: universityofcalifornia.edu/infocenter/employment-and-doctoral-experience-phd-recipients

Doctoral program data: universityofcalifornia.edu/infocenter/doctoral-program

UC Academic Planning Council, Graduate Education Workgroup's Report "Recommendations for Greater Support of Doctoral Education," (June 2019): ucop.edu/graduate-studies/_files/apc-grad-ed-wrkgrp-report.pdf

Growing Our Own: Graduate Enrollment and Diversifying Ph.D. Pathways initiative:
https://regents.universityofcalifornia.edu/regmeet/nov21/a4.pdf

Universitywide graduate academic applications have increased substantially since 2012, while admits and new enrollments have remained relatively flat.

4.1.1 Graduate academic applications, admits, and new enrollees by degree program
Universitywide
Fall 2012 to Fall 2021
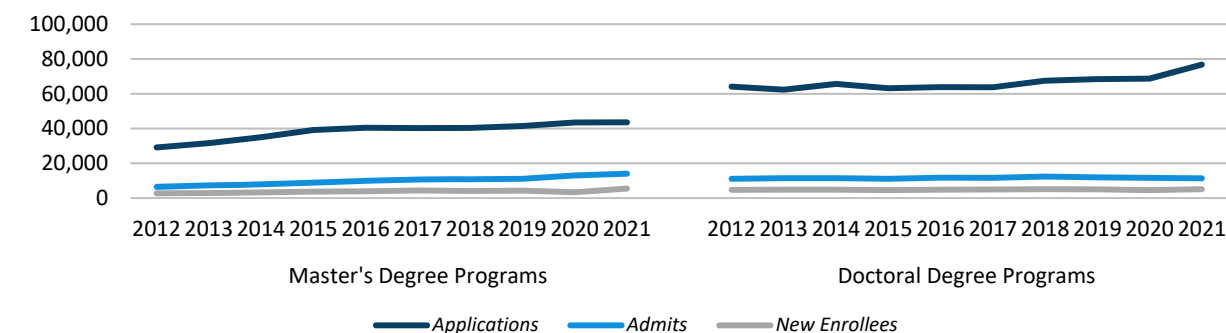
		Master's Degree Programs		**Doctoral Degree Programs**	
		2012	2021	2012	2021
Physical sci/Math	Applications	1,935	2,246	11,596	16,065
	Admits	400	772	2,727	3,159
	New Enrollees	171	264	1,007	1,114
Engineering/Comp sci	Applications	18,478	30,872	17,197	17,202
	Admits	3,849	9,865	2,904	2,887
	New Enrollees	1,447	3,595	1,107	1,265
Life sciences	Applications	2,250	2,870	10,935	14,361
	Admits	735	972	2,048	2,319
	New Enrollees	406	508	943	1,121
Social sciences	Applications	992	1,075	12,097	14,668
	Admits	382	629	1,562	1,279
	New Enrollees	153	248	665	658
Arts & Humanities	Applications	3,952	3,715	7,253	8,127
	Admits	510	441	1,161	876
	New Enrollees	322	291	562	504
Interdisciplinary/Other	Applications	1,551	2,803	4,998	6,355
	Admits	572	1,340	718	810
	New Enrollees	220	559	433	461

Source: UC Corporate Student System. A small number of professional doctoral programs are also included in these data. Universitywide applications and admits are duplicated in this report since students often apply to more than one campus.

The demand for UC academic master's and doctoral programs has increased since 2012. Applications for admission grew from 93,000 in 2012 to 120,300 in 2021. Nearly all of this increased demand has come from prospective international students, with international applications growing from 46,400 to 63,900. Engineering and computer science programs have higher demand from international students than do other disciplines. Recent survey data compiled by the Council of Graduate Schools show a similar nationwide trend of growth, with engineering as the most popular field.[1]

Since 2012, admits increased from 17,500 to 25,300 in 2021, and new enrollments increased from 7,400 to 10,588. Though applications are now predominantly (53 percent) from international students, both admits and new enrollments of domestic students exceed those of international students.
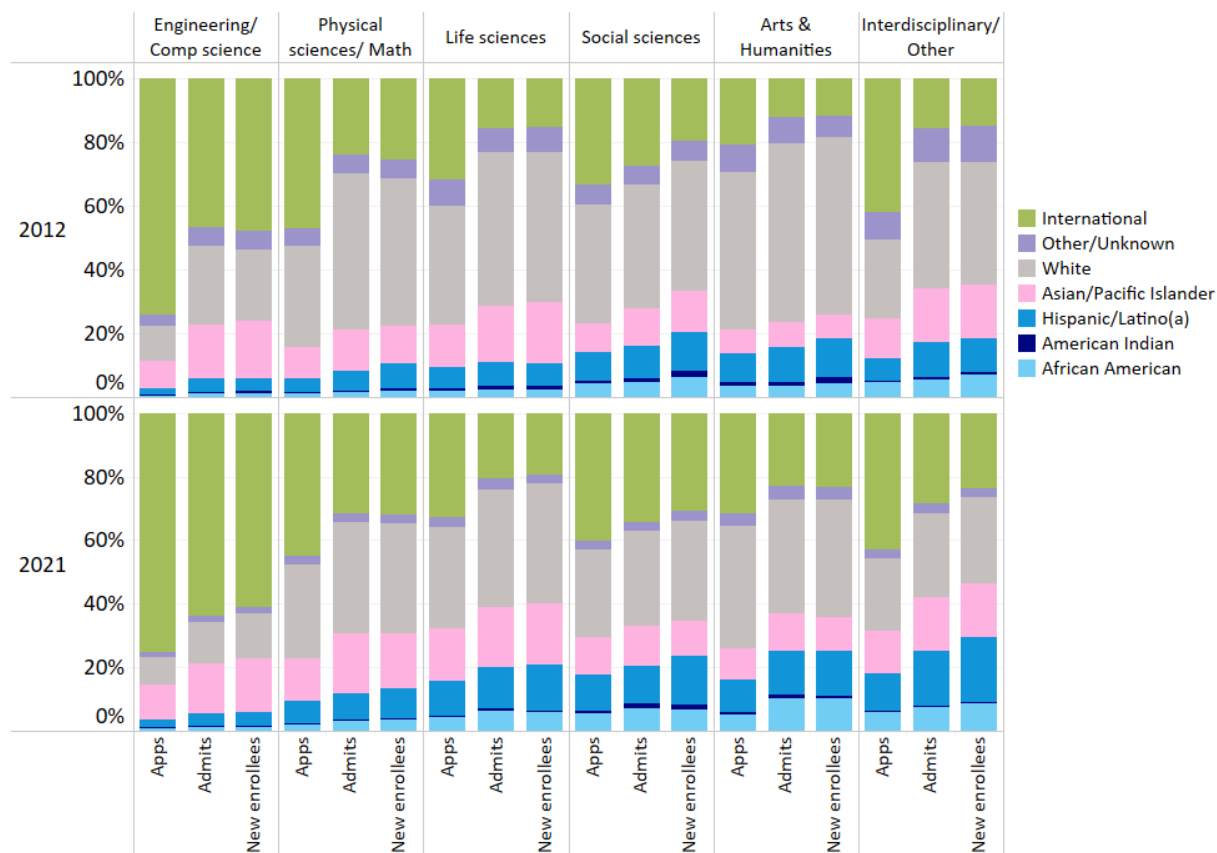
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[1] cgsnet.org/ckfinder/userfiles/files/2017_International_Survey_Report_Final.pdf

Since 2012, the number and share of graduate academic admissions have significantly increased for international students.

4.1.2 Graduate academic applications, admits, and new enrollees by race/ethnicity and discipline
Universitywide
Fall 2012 and 2021

Source: UC Data Warehouse

International students represent the majority of applicants, admits, and new enrollees in engineering and computer science graduate programs. The share of international students in all other disciplines also increased between 2012 and 2021. Social science and humanities programs have the highest shares of enrollment among students from underrepresented racial/ethnic groups, and those shares increased between 2012 and 2021.

Given recent events, including political decisions affecting visas and the COVID-19 pandemic, UC and the national higher education community are examining the impact on international students and UC degree programs.

Graduate enrollment, as a share of UC's total undergraduate and graduate enrollment, has increased slightly due to growth of self-supporting programs.

4.2.1   Graduate enrollment share of total
Universitywide
Fall 2002 to Fall 2021
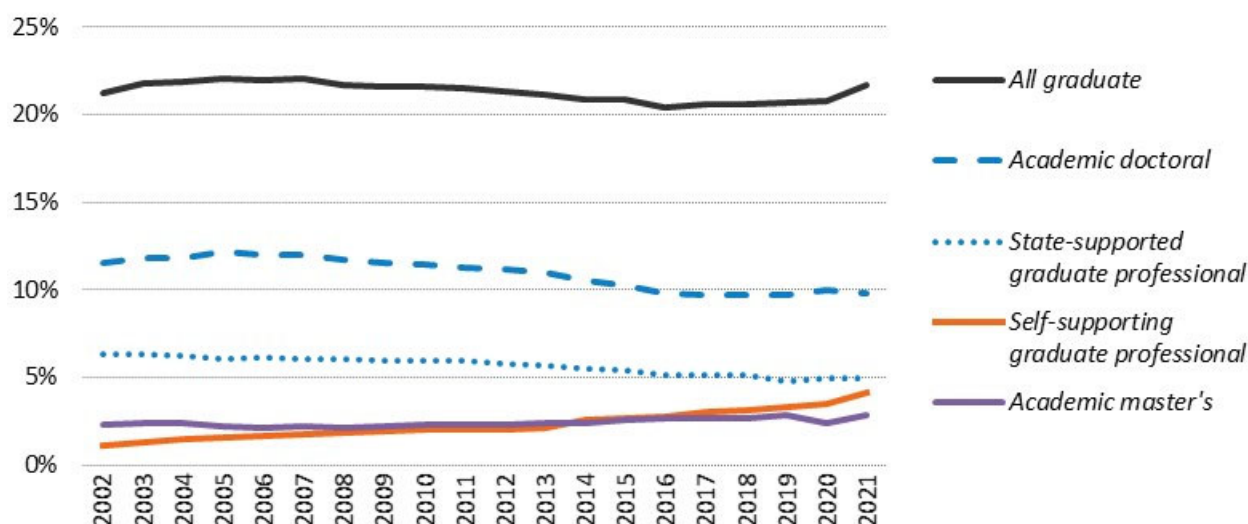
Source: UC Corporate Student System. Academic master's students include post-baccalaureate, teaching-credential students. Graduate professional includes professional master's (e.g., M.B.A., M.Ed.) and professional practice (e.g., J.D., M.D.) degrees.[1]

With 21 percent graduate enrollment in 2021, including health science students, UC was lower than the average for non-UC AAU[1] public institutions, at 28 percent, and the average for AAU private institutions, at 56 percent.

In fall 2021, the proportion of academic doctoral students varied across UC's general campuses, from eight percent at Riverside, Santa Cruz, and Merced to 12 percent at Berkeley. At San Francisco, an exclusively graduate health-sciences campus, academic doctoral students made up 31 percent of fall 2021 enrollments. Since 2011, the share of academic doctoral students has declined at most campuses due to more rapid growth in the undergraduate, master's, and professional populations, and, in part, to the resources necessary to support enrollment of academic doctoral students in greater numbers.

UC awards 23 percent of California's graduate academic master's degrees, 62 percent of its academic doctoral degrees, and 20 percent of its graduate professional practice degrees.

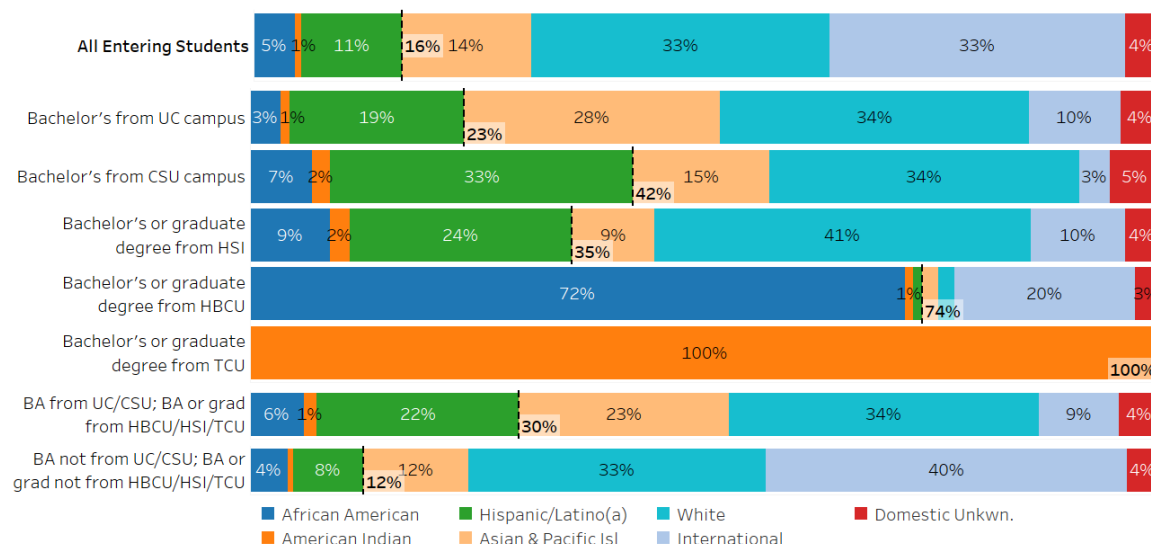| Percent of students who are academic doctoral		
	Fall 2011	Fall 2021
San Francisco	26%	31%
Berkeley	16%	12%
Los Angeles	12%	11%
Davis	11%	10%
Santa Barbara	11%	10%
San Diego	11%	9%
Riverside	9%	8%
Irvine	10%	9%
Santa Cruz	7%	8%
Merced	4%	8%
Universitywide	11%	10%
	(26,094)	(29,205)

Source: UC Data Warehouse

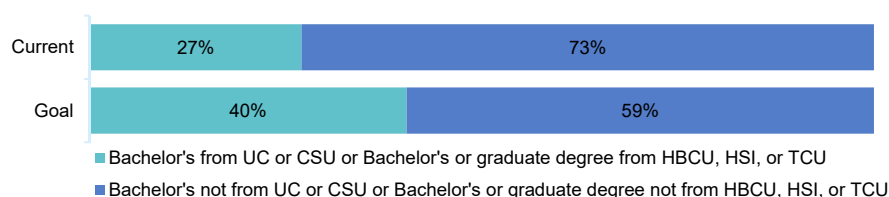[1] A list of the institutions in the AAU comparison groups can be found in the data glossary.

Entering academic doctoral students from UC, CSU, HBCUs, HSIs, and TCUs are more racially/ethnically diverse than students from other undergraduate institutions.

4.2.2 Academic doctoral entering student enrollment by undergraduate institution and race/ethnicity
Universitywide
Fall 2017–2021

Category	African American	American Indian	Hispanic/Latino(a)	URM subtotal	Asian & Pacific Isl	White	International	Domestic Unkwn.
All Entering Students	5%	1%	11%	16%	14%	33%	33%	4%
Bachelor's from UC campus	3%	1%	19%	23%	28%	34%	10%	4%
Bachelor's from CSU campus	7%	2%	33%	42%	15%	34%	3%	5%
Bachelor's or graduate degree from HSI	9%	2%	24%	35%	9%	41%	10%	4%
Bachelor's or graduate degree from HBCU	72%		1%	74%	1%		20%	3%
Bachelor's or graduate degree from TCU		100%		100%				
BA from UC/CSU; BA or grad from HBCU/HSI/TCU	6%	1%	22%	30%	23%	34%	9%	4%
BA not from UC/CSU; BA or grad not from HBCU/HSI/TCU	4%		8%	12%	12%	33%	40%	4%

Current percent of all academic doctoral students from UC/CSU/HBCU/HSI/TCU and Growing Our Own goal

	Bachelor's from UC or CSU or Bachelor's or graduate degree from HBCU, HSI, or TCU	Bachelor's not from UC or CSU or Bachelor's or graduate degree not from HBCU, HSI, or TCU
Current	27%	73%
Goal	40%	59%

■ Bachelor's from UC or CSU or Bachelor's or graduate degree from HBCU, HSI, or TCU
■ Bachelor's not from UC or CSU or Bachelor's or graduate degree not from HBCU, HSI, or TCU

Source: UC Corporate Student System. HSIs exclude UC HSI and CSU HSI campuses.

While about 16 percent of all entering UC academic doctoral students are from underrepresented racial/ethnic groups, 30 percent of those entering from UC, California State University (CSU), Historically Black College and Universities (HBCU), Hispanic Serving Institutions (HSI; non-UC/CSU), or Tribal Colleges and Universities (TCU) are from an underrepresented racial/ethnic group. Enrolling a higher proportion of students from these priority institutions will accelerate the growth in racial/ethnic diversity of the overall academic doctoral population and more rapidly translate into more diverse Ph.D. graduates entering the workforce and the professoriate. The recently launched systemwide initiative, "Growing Our Own: Graduate Enrollment and Diversifying Ph.D. Pathways," prioritizes enrolling students from UC, CSU, HBCUs, other HSIs, and TCUs. This initiative seeks to increase the proportion of UC Ph.D.'s that come from these priority institutions from 27 to 40 percent.
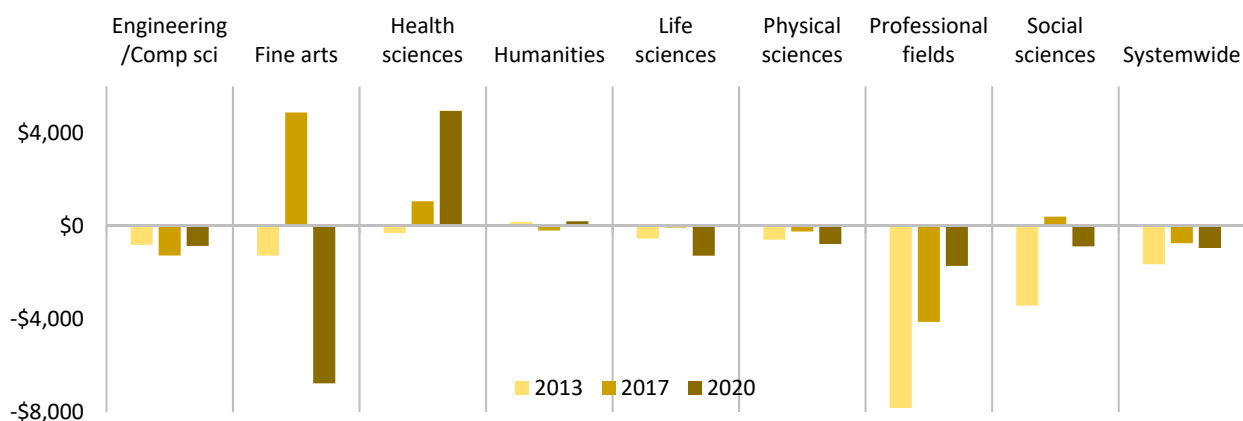
UC net stipends remain below competitive offers, although the gap decreased substantially between 2013 and 2020.

4.2.3   Average net stipend offered to graduate academic doctoral students admitted to UC compared with their first-choice non-UC schools
Universitywide
2013, 2017, and 2020

By residency
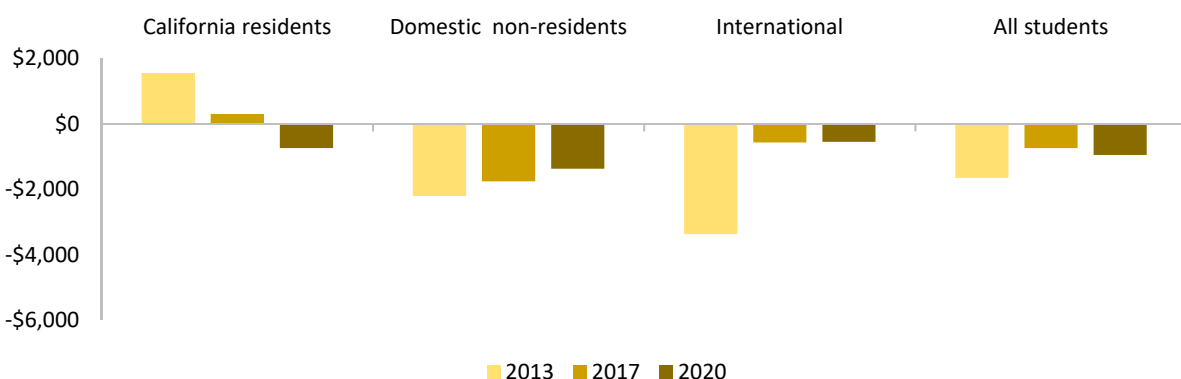
By broad discipline

Source: UC Graduate Student Support Survey. Graduate academic professional doctoral programs include EdD, D.Env., DrPH., D.P.T. and D.N.S.

Doctoral students are crucial to a university's research enterprise and instructional programs. To attract the most highly qualified applicants, universities offer aid packages that include the cost of tuition and stipends. Net stipend is the amount of aid that students have for living expenses after tuition and fees are paid. It does not include loans that the student may be offered. The "stipend gap" varies by discipline, as shown in the chart above. Since 2013, UC has made considerable progress in closing the net stipend gap with competing institutions, reducing it from $1,600 to about $900 in

2020. However, a considerable gap remains between UC's average net stipend and growing living costs in California. Inadequate support poses challenges in recruitment of students, and for enrolled students, inhibits their ability to appropriately meet basic living needs. California's high cost of living is also detrimental to UC faculty recruitment and retention. This is a significant problem with negative implications for graduate education and UC research which, without intervention, will negatively impact California's industry innovation and the ability of the state to meet its advanced workforce needs.

More than half of UC doctoral students graduate without debt. Doctoral students in the physical and life sciences have seen smaller increases in debt since 2006–07 and graduate with less average loan debt than those in the social sciences and arts and humanities.

4.2.4   Academic doctoral students' graduate debt at graduation, by discipline, domestic students
Universitywide
Graduating classes of 2006–07 to 2020–21 (every two years)
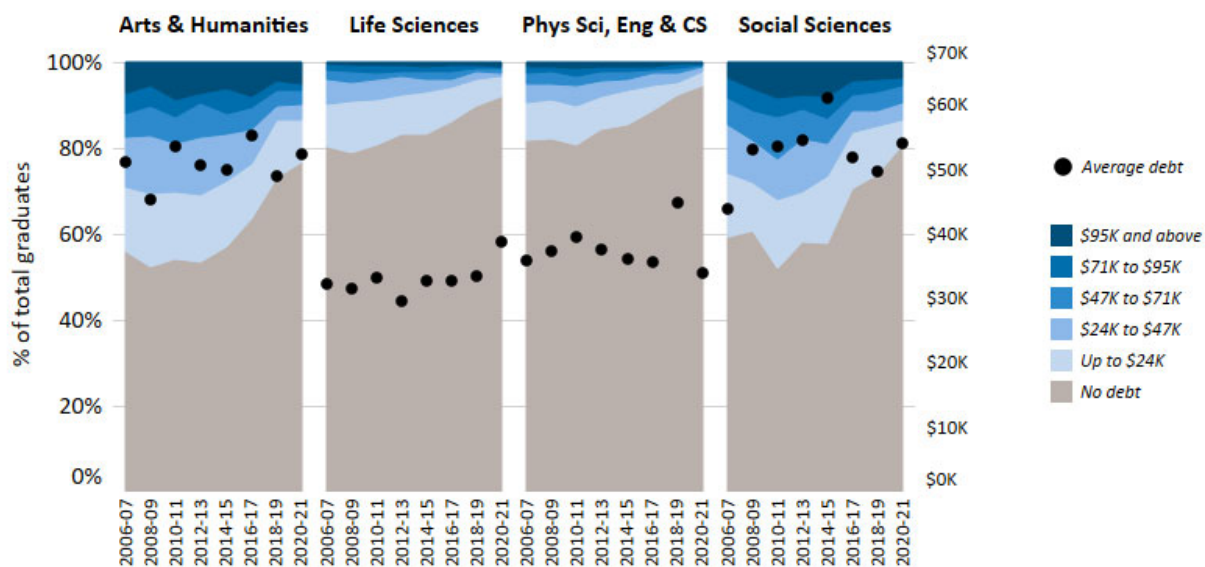
Source: Corporate Student System[1]

Depending on the field of study, between 73 percent (arts and humanities) and 93 percent (physical and life sciences) of UC doctoral students take on no additional debt during graduate school.

Several factors account for the difference in debt burden between doctoral students in the physical and life sciences and those in other disciplines. Physical and life science students are more likely to be supported by research grants, which facilitates their ability to spend more time on research, rather than carrying consistent teaching assistant responsibilities, as is the more common funding model in arts and humanities and some social sciences. Generally, graduate student researchers are funded at higher levels than teaching assistants. In addition, physical and life science programs take less time on average to complete than do programs in the social sciences or arts and humanities (partly due to the noted funding model differences).

[1] Debt categories are inflation-adjusted in 2020 dollars using CA CPI-W. "Other" includes interdisciplinary and professional fields. Life sciences include health sciences.

Graduates with the highest debt levels come from professional schools that charge higher supplemental tuition.

4.2.5 Graduate professional degree student debt at graduation, by discipline, domestic students
Universitywide
Graduating classes of 2006–07 to 2020–21 (every two years)
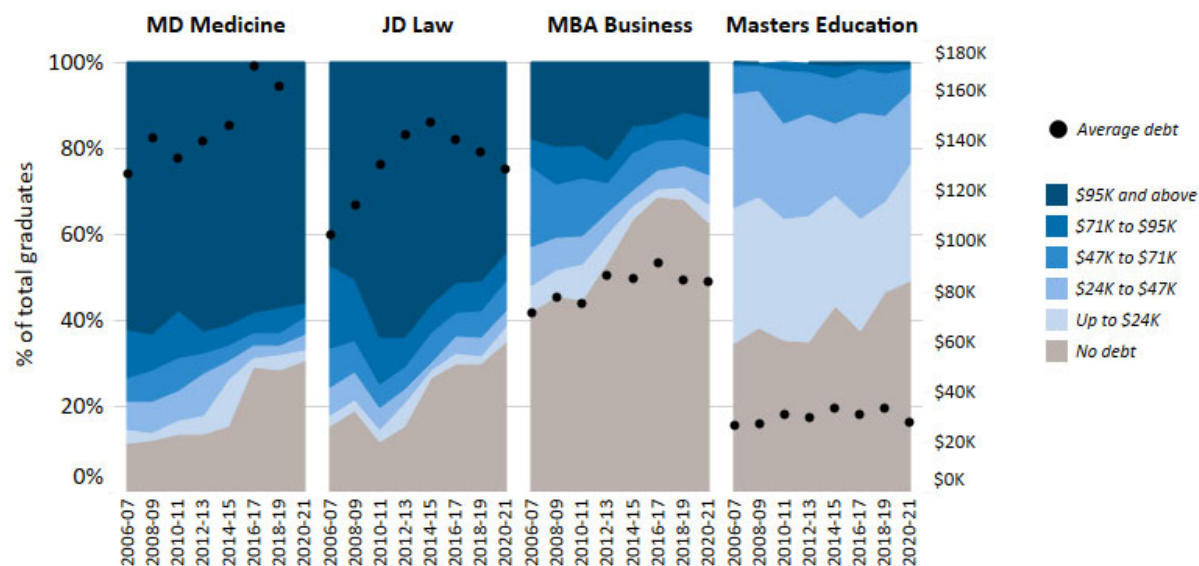
Source: UC Corporate Student System[1]

On average, 48 percent of the aid awarded to graduate professional degree students comes in the form of loans rather than fellowships or grants. By comparison, loans constitute three percent of the aid awarded to graduate academic students. Graduate funding models require greater reliance on loans for professional degree students, as their programs are of shorter duration, and many fields offer potentially higher incomes after graduation.

Most graduate professional degree students finance part of their education by borrowing. The increases since 2006–07 in average inflation-adjusted debt levels of graduating professional degree students vary considerably. Increases in graduate debt result from a combination of factors, including steady growth in tuition, cost of living increases, and greater student reliance on federal student loan programs.

[1] Average debt is among graduates with debt. Debt categories are inflation-adjusted in 2020 dollars using CA CPI-W.

Like other major research universities, UC awards a high proportion of graduate academic degrees in science, technology, engineering, and mathematics (STEM) fields.

4.3.1   Graduate academic degrees awarded by discipline
UC and AAU private and public comparison institutions
Number of degrees grouped in 3-year intervals: 2008–09 to 2010–11, 2011–12 to 2013–14, 2014–15 to 2016–17, 2017–18 to 2019–20; campus-level data for 2017–18 to 2019–20.
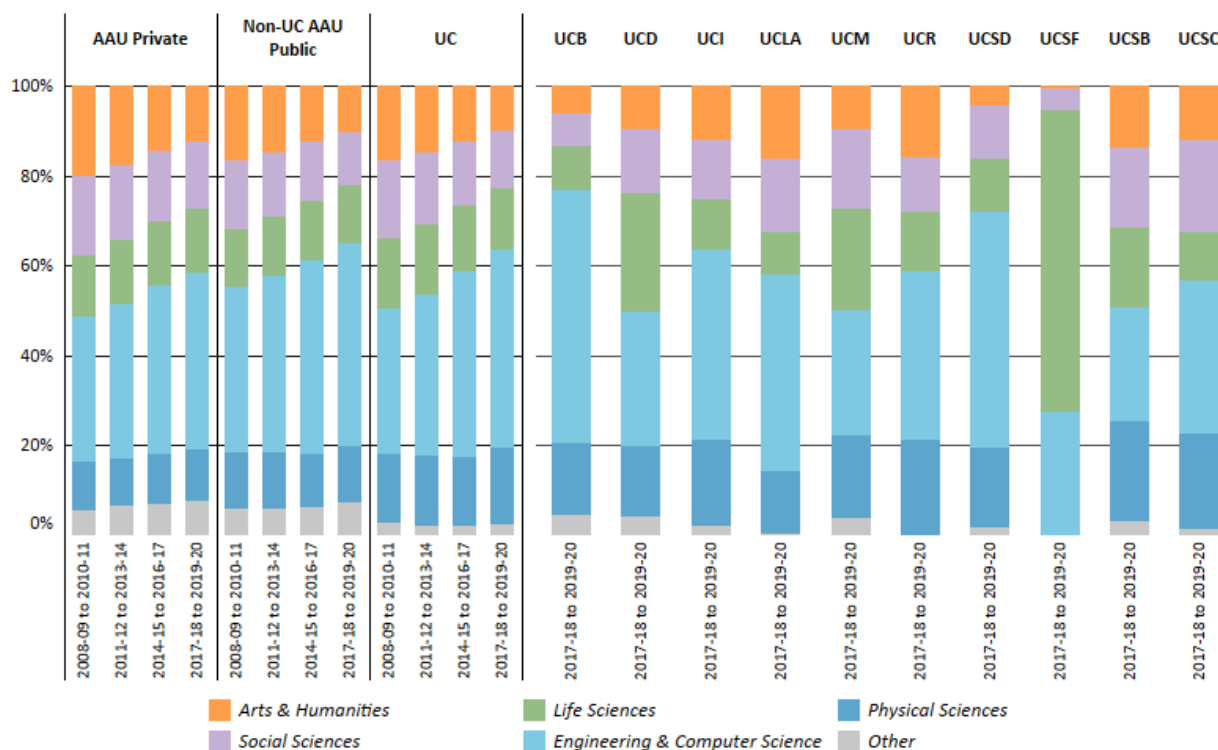
Source: IPEDS[1]

UC graduates have had major impacts on the nation and the world — creating much of California's biotechnology and computer industries, developing research breakthroughs that have led to major medical advances, shaping ideas about our world and culture, creating the economic and social infrastructure of our communities, and assuming political leadership in California and the nation.

UC's graduate STEM programs reflect the predominant industries in California's economy. In addition to leading all California institutions in the production of engineering and computer science degrees, UC far outpaces them in the production of degrees in the biological sciences — key to driving the growth of California's biotechnology sector.

Since 2008–09, the number of graduate academic degrees awarded at UC grew by 38 percent, compared to 60 percent at the group of AAU private institutions and 32 percent for the group of non-UC AAU public institutions.

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[1] "Other" includes interdisciplinary and academic degrees in otherwise professional fields, such as architecture, communications, and public administration.

UC's doctoral completion rate increased in nearly every field over the two most recent cohorts studied.

4.3.2   Doctoral completion rates after ten years, by broad field
Universitywide
Fall 2003–2005, 2006–2008, and 2009–2011 entry cohorts
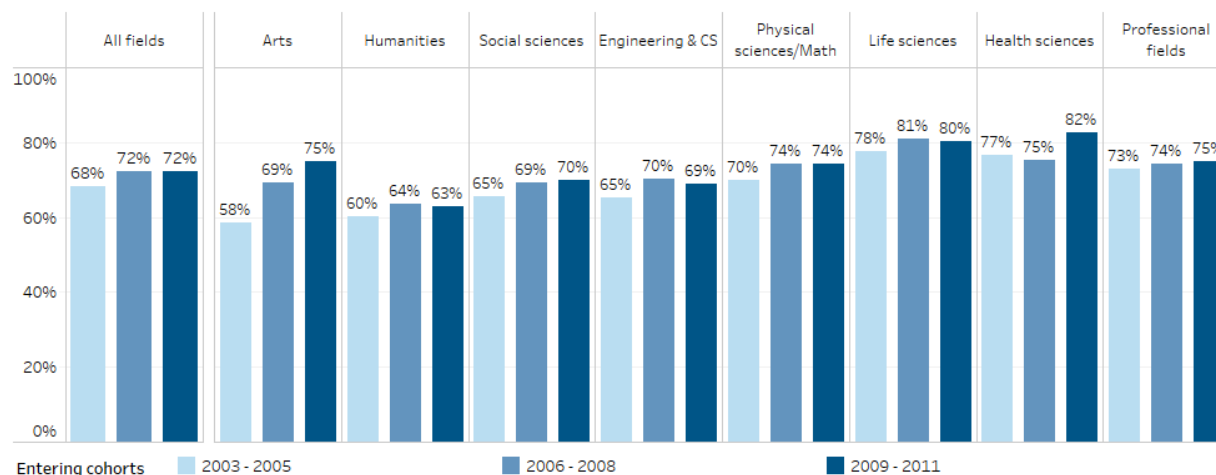
Source: UCOP Corporate Student System

The Universitywide ten-year doctoral completion rate across all fields for the fall 2009–11 entering cohorts was 72 percent. This is an increase from the 68 percent completion rate reported for the 2003–05 cohort. Among broad disciplines, life sciences and health sciences continue to have the highest completion rates. Engineering and computer sciences, social sciences, and humanities showed the lowest rates, owing to the longer normative time in those fields and different financial support models, although both experienced an increase compared to previous cohorts.

The overall improvement in ten-year completion rates may be attributed to at least two factors. First, student demographics have shifted to include a larger percentage of international students, who, as a group, have a higher ten-year completion rate than the overall cohort's rate. (A variety of factors influence this difference, including different tuition rates for international students, which can drive motivation/expectation to complete programs sooner rather than later.) Second, shifts over time in enrollment toward disciplines with higher completion rates (STEM fields) affect the overall ten-year completion rate.
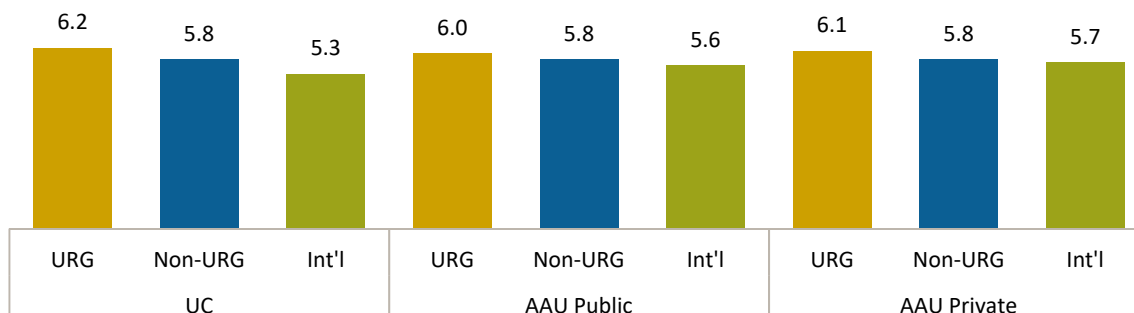
The Doctoral Completion Rates dashboard is available at:
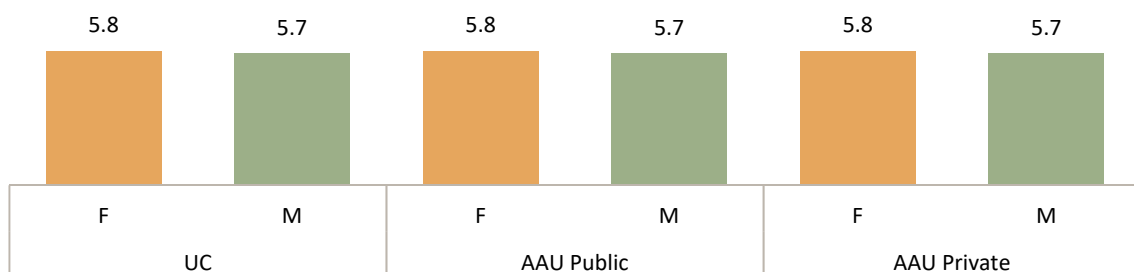universityofcalifornia.edu/infocenter/doctoral-rates

UC's median time-to-doctorate by race/ethnicity and gender compares well with AAU institutions.

4.3.3   Median time-to-doctorate, by ethnicity and gender
Universitywide, AAU public and AAU private comparison institutions
2015 to 2017 exit cohort

By race

	UC			AAU Public			AAU Private		
	URG	Non-URG	Int'l	URG	Non-URG	Int'l	URG	Non-URG	Int'l
	6.2	5.8	5.3	6.0	5.8	5.6	6.1	5.8	5.7

By gender

	UC		AAU Public		AAU Private	
	F	M	F	M	F	M
	5.8	5.7	5.8	5.7	5.8	5.7

Source: Survey of Earned Doctorates, National Opinion Research Center

The median number of years required to complete a doctoral degree at UC (elapsed time-to-doctorate) is comparable to that at other major research universities. Men and women complete the doctorate in about the same amount of time at UC. Students from underrepresented groups (URG) have longer time-to-doctorate at UC and comparison institutions, whereas international students required substantially less time to complete the doctorate.

It should be noted that while UC's URG completion rate is comparable to that of non-UCs, the gap between UC URGs and non-URGs is the largest among the comparison groups. While at this point, it is a small difference, it is important to raise awareness and continue to track outcomes.

The Time to Doctorate dashboard is available at: universityofcalifornia.edu/infocenter/time-to-doctorate

UC's median time-to-doctorate varies by race/ethnicity, gender, and discipline.

4.3.4 Median time-to-doctorate, by race/ethnicity and discipline
Universitywide
2018 through 2020 exit cohort
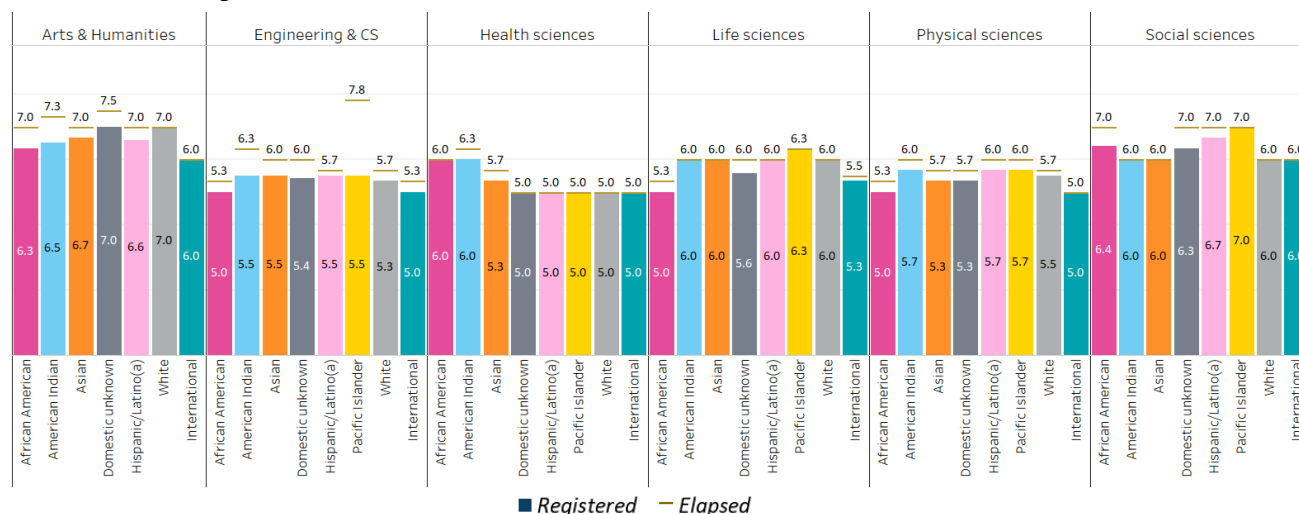
4.3.5 Median time-to-doctorate, by gender and discipline
Universitywide
2018 through 2020 exit cohort
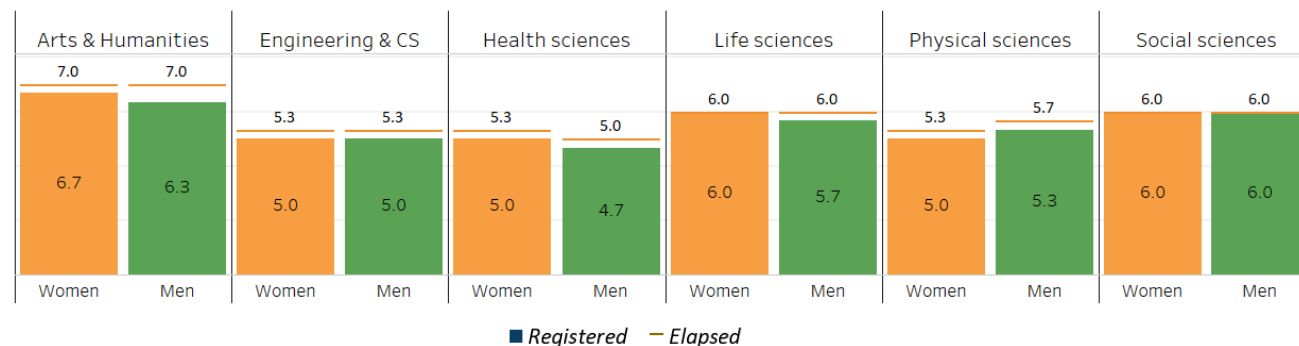
Source: UCOP Corporate Student System. Caution should be exercised in the interpretation of the American Indian and Pacific Islander groups due to small cell sizes.

In engineering and computer sciences and physical sciences, African American and international students had shorter registered time-to-doctorate (RTD) than their peers. In the social sciences, African American, Hispanic/Latino(a), and Pacific Islander students had longer RTD than American Indian, Asian, White, and international students. International students have shorter elapsed time-to-doctorate (ETD) and RTD in arts and humanities, engineering and computer science, life science, and physical science disciplines.

Men and women generally have comparable time-to-doctorate, with exceptions in health sciences, where women have a longer ETD and RTD; and the arts and humanities and life sciences, where women have a longer RTD. Women in the physical sciences have shorter ETD and RTD than men.

The Time to Doctorate dashboard is available at:
universityofcalifornia.edu/infocenter/time-to-doctorate

More than half of UC's academic doctoral degree recipients plan to stay in California, a greater share than those who attended high school or college in California.

4.3.6   Origin and planned destination of UC academic doctoral degree recipients
Universitywide
2009–10 to 2018–19
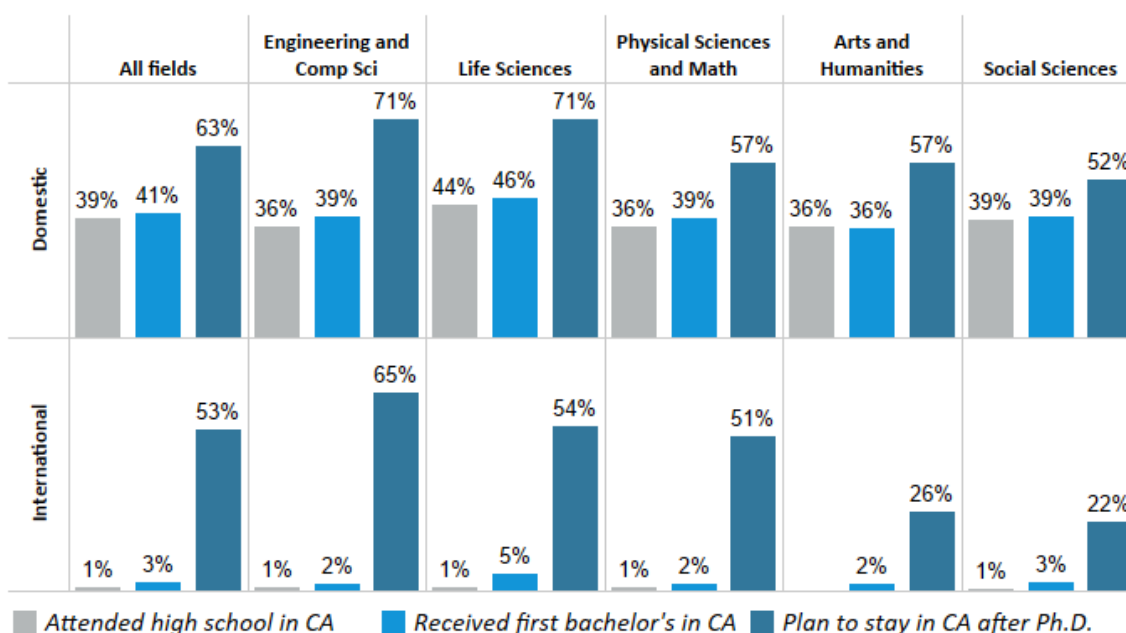
Source: Survey of Earned Doctorates

The most recent data for UC's doctoral degree recipients, based on those graduating between 2009–10 and 2018–19, show that over half plan to stay in California. Sixty-three percent of domestic doctoral degree recipients intend to stay, though only 41 percent of this cohort received their bachelor's degrees in California, and only 39 percent attended high school in California. This proportion is higher in engineering, computer science, and life sciences fields, indicating that UC graduates are an important force in California's robust economy in these areas.

Though a negligible share of UC's international (not a U.S. citizen nor permanent resident) doctoral recipients attended high school or college in California, half intend to stay after graduation.

The Survey of Earned Doctorates (SED) is conducted for all individuals receiving a research doctoral degree. It is sponsored by the National Science Foundation, National Institutes of Health, U.S. Department of Education, U.S. Department of Agriculture, National Endowment for the Humanities, and the National Aeronautics and Space Administration.

Half of UC academic doctoral and master's graduates who stay in California work in higher education.

4.3.7   Industry of employment of UC graduate academic students in CA, by year after graduation
Universitywide
2000 to 2018 graduating cohorts
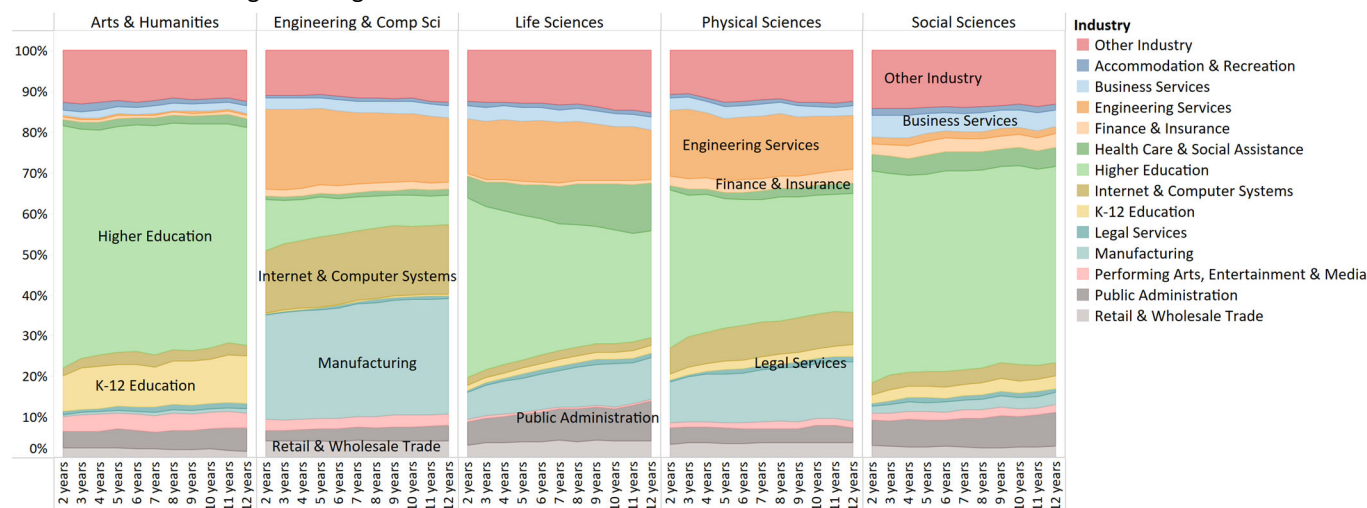
Source: California Employment Development Department and UC Corporate Student System[1]

Graduates of UC academic doctoral and master's degree programs go on to work in a broad range of industries in California. UC's engineering and computer science programs supply workers to the state's high-skilled and high-tech industries. Since 2000, over 28,000 graduates of these programs have entered the California workforce, with 34 percent working in the manufacturing sector and 26 percent working in engineering services. Another 25 percent go on to work in the state's internet and computer services industry. About 17 percent of engineering and computer science graduates go on to teaching and research positions in the state's college and university systems.

More than 59,000 graduates of UC academic doctoral and master's degree programs in fields other than engineering/computer science have entered the California workforce since 2000. Nearly half of them (49 percent) have gone on to work in the state's higher education workforce, which

includes all of the two-year and four-year colleges, both public and private. This highlights the critical role of UC's graduate academic programs in producing the cadre of faculty who teach California's future college-educated workforce and conduct research that advances the state and national economies.

The contributions of UC academic doctoral and master's graduates to the state workforce go beyond higher education. About 16 percent of the employed graduates of UC physical sciences and life sciences programs work in the state's manufacturing sector, while another 21 percent work in the engineering industry. This shows that the skills gained in UC academic doctoral and master's programs are both applicable and relevant to key high-tech industries.

The job market for doctoral and master's degree recipients is nationwide, and those who leave California are not tracked in this data source.

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[1] Includes very small numbers of graduate professional students, who do not affect the overall picture.

Like other major research universities, UC awards a high proportion of professional degrees in business.

4.4.1 Graduate professional degrees awarded by discipline
UC and AAU private and public comparison institutions
Number of degrees grouped in 3-year intervals: 2008–09 to 2010–11, 2011–12 to 2013–14, 2014–15 to 2016–17, 2017–18 to 2019–20; campus-level data for 2017–18 to 2019–20.
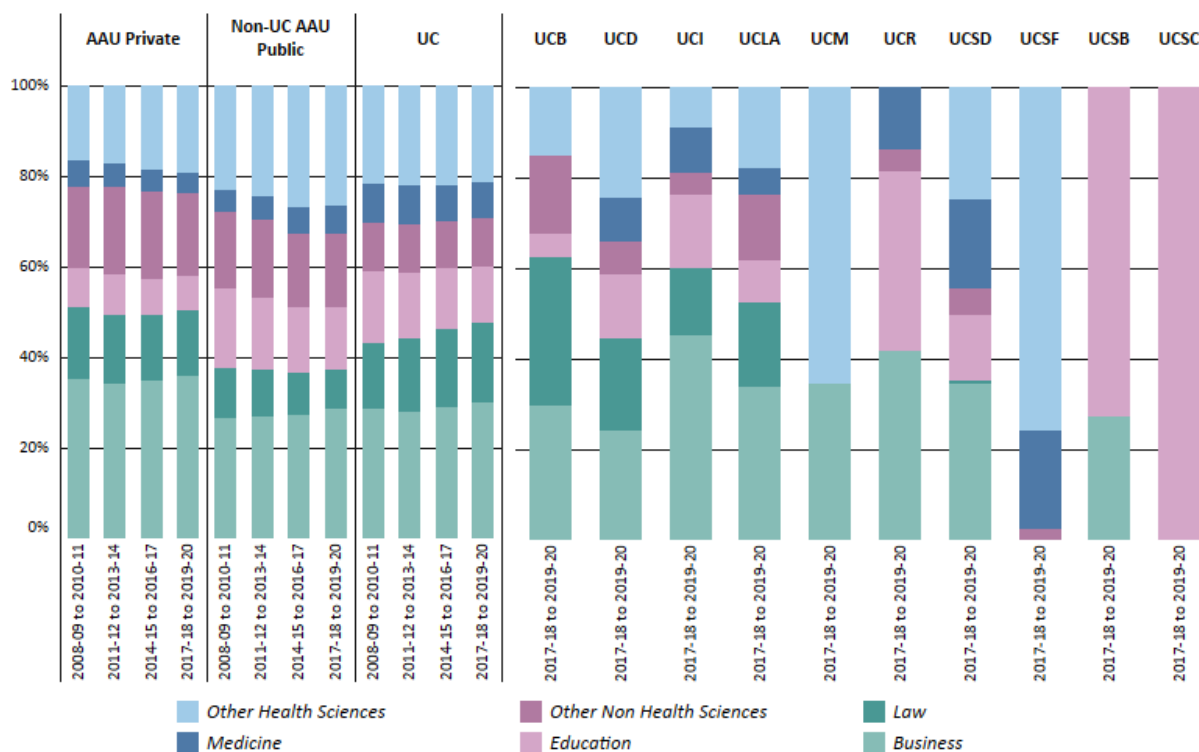
Source: IPEDS[1]

The proportion of professional degrees awarded by UC is comparable to AAU private and public institutions, with the greatest proportion of degrees awarded in business. The number and size of graduate professional degree programs vary by campus, with UCLA awarding the greatest number of professional degrees.

UC has also grown in the proportion of law degrees, in part due to the School of Law at UC Irvine, which opened in 2009.

Since 2003, UC has opened new professional schools in several other areas, including the Rady School of Management at UC San Diego in 2003, the School of Medicine at UC Riverside in 2013, the Sue and Bill Gross School of Nursing at UC Irvine in 2017, the School of Public Health at UC San Diego in 2019, and the School of Pharmacy and Pharmaceutical Sciences at UC Irvine, which began enrollment in fall 2021.

[1] UC Merced added a professional master's program in public health in 2017. "Other" includes disciplines such as public administration, architecture, communications, and library science.

UC professional programs prepare graduates for careers related to their field of study.

4.4.2   Industry of employment of UC graduate professional students in California, by year after graduation
Universitywide
2000 to 2018 graduating cohorts
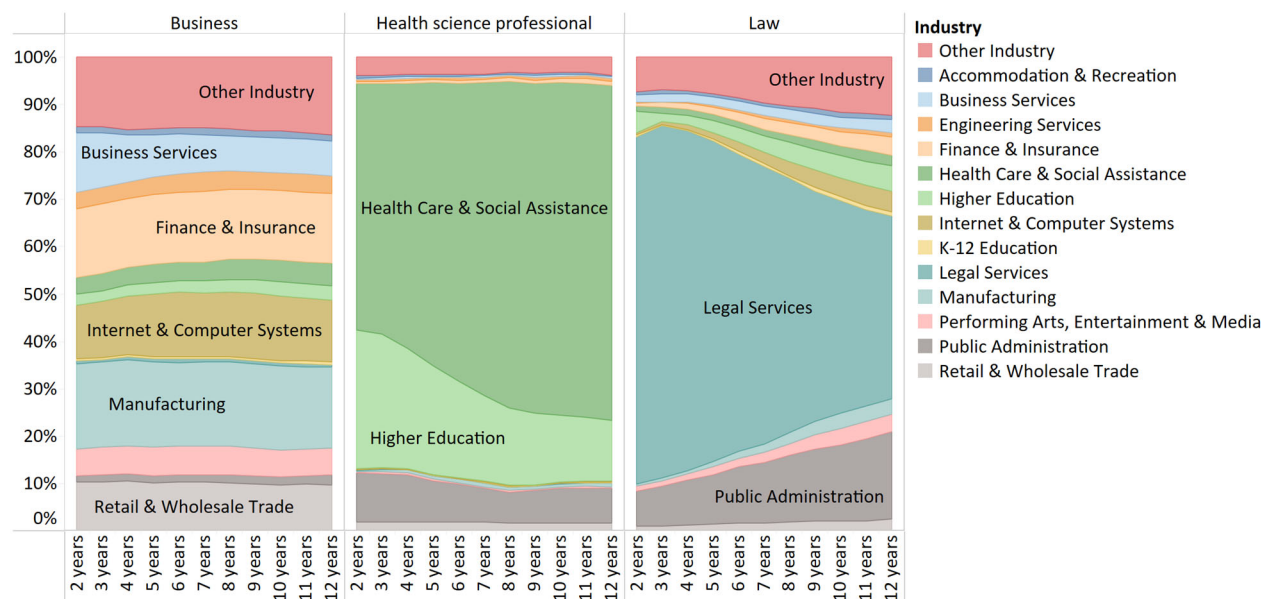
Source: California Employment Development Department and UC Corporate Student System[1]

Graduates of UC Master of Business Administration (MBA) programs contribute significantly to the state's high-skilled and high-tech industries. The 26,000 UC MBA graduates who have entered the California workforce since 2000 have worked in a wide array of industries, including manufacturing (26 percent), finance and insurance (20 percent), retail and wholesale trade (19 percent), and internet and computer systems (23 percent).

Over 16,000 graduates of UC health science professional practice programs (e.g., M.D., D.D.S., Pharm.D.) have gone on to work in California since 2000. The majority of these graduates (72 percent) go on to work in the state's health care and social assistance sector. This highlights UC's role, per the Master Plan, as the state's sole public provider of many health science professional practice degrees and validates UC's success in fulfilling that role. UC health science graduates also play key roles in other areas of public service in the state, including 39

percent who go on to work in the state's higher education system and 27 percent who work in state government at some point after receiving their degrees.

UC law school graduates go on to work in two main areas — legal services and government. Of the 13,000 UC law school graduates who have worked in California since 2000, about 79 percent eventually find positions in the legal services industry. Another 18 percent go on to work in the public sector as government prosecutors and public defenders, and in other public agency roles. A large percentage of law school graduates start off in legal services initially after receiving their degree (73 percent), but by ten years after graduation this percentage has fallen to about 45 percent. The percent of UC law school graduates in government rises from seven percent to 16 percent over the same period.

[1] Includes very small numbers of graduate academic students (e.g., Ph.D. business), which do not affect the overall picture.

Faculty and Other Academic Employees

A new interdisciplinary research center at the University of California, Riverside, will critically examine the experiences of athletes across all levels of competition with the aim of driving education, outreach, and advocacy in the field. Housed within UCR's Graduate School of Education, the Center for Athletes' Rights and Equity makes the case for athletes' rights as a civil rights issue, emphasizing the crucial need for scientific research on athletes' experiences to enhance their safety and well-being.

Eddie Comeaux, the center's founding director, is an associate professor of higher education at UCR and expert in intercollegiate athletics, racial equity and policy issues, and college student engagement. "I don't just study athletes," Comeaux said. "I study students who happen to be athletes." He's interested in not only helping them better understand their personal rights and educational goals, but also navigate the legal and financial gray areas that often accompany segueing into professional athletics. With that in mind, the center's efforts will seek to address issues of equity, fairness, inclusion, and justice for athletes both at the high school and college levels and beyond.

He noted another issue that remains to be addressed on campuses is gender equity, especially when it comes to women — and women of color, in particular — ascending to senior leadership roles such as athletics directors. Moreover, on many campuses men's athletics programs continue to receive significantly more funding than women's programs, including for recruitment activities and scholarships, Comeaux said.

FACULTY AND OTHER ACADEMIC EMPLOYEES

Overview

The University of California's distinguished faculty and other academic appointees serve as a rich source of innovation, discovery, and mentorship. They provide top-quality education to students, develop groundbreaking research, and serve California's diverse communities. Despite the operational and financial challenges created by the COVID-19 pandemic for more than two years, UC faculty and other academic appointees have risen to the challenge of engaging in the University's mission of teaching, research, and service in a hybrid environment. Recognizing the challenges faculty and other academic appointees faced, the University of California adopted numerous programs and exceptions to policy, providing flexibility to faculty and other academic appointees to conduct their work. The UC Provost and Executive Vice President also appointed an Academic Senate-Administration Working Group to make recommendations for mitigating the impact of COVID-19 on UC faculty.

Describing the academic workforce

Faculty are the most prominent face of UC's academic workforce, but there are many other academic roles, totaling nearly 51,000 full-time equivalents (FTE) across more than 74,500 individuals. Over 59 percent of faculty are in general campus schools and colleges, while the remaining 41 percent are in the health sciences.

Ladder-rank and equivalent faculty are the core of the faculty in advancing the UC's tripartite mission of teaching, research, and public service. These faculty can advance to tenure or equivalent status.[1] In the past decade, ladder-rank and equivalent faculty FTE have increased by over 18 percent.

In-Residence, Professor of Clinical (e.g., Medicine), Health Sciences Clinical Professor, and Adjunct Professor series faculty are found

Academic FTE and Headcount, October 2021

	FTE	Headcount
Faculty - Ladder-rank and Equivalent	10,799.5	11,677
Faculty - Clinical/In-Residence/Adjunct	8,219.3	9,062
Faculty - Lecturers	2,490.2	4,096
Other Academic Employees	6,132.8	8,579
Postdoctoral Scholars	5,266.4	6,136
Medical Interns/Residents	6,250.4	6,433
Student Teaching/Research Assistants	11,813.8	28,610
Grand Total	**50,972.4**	**74,593**

at all campus locations. However, their numbers are concentrated in the health sciences schools; their duties vary in their focus on research, clinical care, and teaching. Lecturers are focused on instruction and are hired into part-time and full-time positions. Lecturers can achieve continuing status. In the past decade, the total FTE of lecturers has increased by 46 percent.

Postdoctoral scholars conduct research under the general oversight of a faculty mentor. They are typically paid through research contracts and grants, so their numbers concentrate in the medical and STEM fields and vary with available grant funding.

Other academic appointees include academic researchers; cooperative extension advisors and specialists in cooperative extension; librarians; faculty administrators such as Deans; university extension instructors; graduate students appointed as Teaching Assistants and Research Assistants; and residents, interns, and other trainees in medicine and other academic health sciences programs.

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[1] Security of Employment or the tenure-equivalent of associate and full agronomists and astronomers.

Diversity

The University of California is committed to diversity and excellence in its faculty and academic workforce. The proportion of women, African American, and Hispanic/Latino(a) faculty continues to grow, as newer faculty cohorts are more diverse than past cohorts.

In the past decade, the share of Universitywide ladder-ranked faculty who are African American increased from 2.6 percent to 3.5 percent, and the share who are Hispanic/Latino(a) increased from 5.5 percent to eight percent. The number of African American faculty members went from 252 to 406, a 61 percent increase, and the number of Hispanic/Latino(a) faculty members increased from 542 to 935, a 72 percent increase.

Among tenured and tenure-track faculty, UC compares favorably in terms of the proportions of women, African American, and Hispanic/Latino(a) faculty relative to the comparison of eight peer research institutions.[1] Still, UC continues to work to identify opportunities to diversify the faculty and improve recruitment processes and campus climate by tracking recruitment data, by sharing best practices in mentoring and professional development, and by enhancing work-life balance programs.

Various programs have been put in place to strengthen faculty diversity:

Advancing Faculty Diversity — The State of California awarded UC a total of $11.5 million in one-time funds for five fiscal years, from 2016–17 to 2019–20, and in 2021–22 to develop an innovative and focused program to increase faculty diversity at UC. The Advancing Faculty Diversity (AFD) program awards these funds on a competitive basis to campus units implementing new measurable interventions in the faculty recruitment process. Some of the successful interventions that correlate with hiring diverse faculty include the use of contributions to diversity statements early in the evaluation process; targeting potential faculty earlier in their careers through support for postdoctoral work; outreach by faculty to actively recruit candidates; revised evaluation practices, including the use of rubrics to guide decision-making; strong leadership and sustained and strategic involvement from unit leaders; mentoring programs targeted to support new faculty hires; introducing new voices, including students, in the recruitment and evaluation process; building of new faculty, equity, and inclusion data dashboards; research on and support for pathways to faculty leadership positions; and examinations of whether service loads differ by gender or race/ethnicity. In 2018–19, UCOP committed additional funds ($500,000) to initiate awards in support of improved academic climate and retention in selected pilots, and made a commitment of $3 million per year in ongoing funds to support additional projects in faculty recruitment and in improved climate and retention projects to create academic climates to support UC's diverse student body and meaningfully engage faculty throughout their UC careers. Since its inception, a total of 55 recruitment and improved climate and retention projects have been funded through the competitive AFD program, with all ten campuses receiving at least one award.

President's Postdoctoral Fellowship Program (PPFP) — Established in 1984, the program recruits top scholars who are committed to underserved and minority communities to pursue faculty careers at UC. Between 2017–18 and 2021–22, 124 fellows were hired as UC ladder-rank faculty at all ten UC campuses. In addition, 21 fellows have been successfully recruited for UC faculty positions that will begin in 2022–23, with 13 others still under consideration. Through Presidential support, UC has increased the number of incentives available to departments that hire fellows and has expanded eligibility for hiring incentives to include the health sciences and professional schools. The program is nationally recognized and leads a partnership of top universities that participate in recruiting top postdoc talent.

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[1] The comparison eight institutions are University of Illinois, University of Michigan, University at Buffalo, University of Virginia, Harvard University, Massachusetts Institute of Technology, Stanford University, and Yale University.

Hiring and retention

Overall hiring of UC faculty generally outpaces availabilities of U.S. doctoral degree recipients by race, ethnicity, and gender, with some notable differences by field. STEM fields have a more limited ability to diversify based on Ph.D. availabilities. UC is also looking at the diversity of its own student populations, including bachelor and graduate degree recipients, to increase the diversity of UC's future professoriate.

Faculty hires have recently plateaued, after several years in which hiring had increased steadily as UC recovered from severe budget cuts a decade ago and as enrollment growth demanded greater teaching capacity. Faculty separations have grown modestly, primarily due to increasing retirements. In addition to the focus on hiring a diverse faculty, UC must consider and address retention issues. The introduction to Chapter 7 highlights several initiatives to improve climate and retention. Since 2016, UC has engaged the Collaborative on Academic Careers in Higher Education (COACHE) at the Harvard Graduate School of Education to design and administer a Faculty Retention and Exit Survey. A summary of the latest results can be found in this May 2022 Regents Item: regents.universityofcalifornia.edu/regmeet/may22/a3.pdf. Average faculty salaries at UC have improved somewhat in recent years; however, they still trail those at many comparison institutions, particularly a benchmark of the average salaries at the "Comparison 8," a group of four public and four private institutions.

UC 2030 goals

As part of the multi-year framework adopted by the UC Regents in early 2019, known as UC 2030 — Advancing the California Dream, UC is hoping to receive additional State support to hire 1,100 ladder-rank faculty between 2018–19 and 2022–23 (5.3.6). Since setting the hiring goal, the University's faculty has grown by nearly 340, or about 3.3 percent. To reach the hiring goal by 2022–23, UC needs to add 758 faculty, or seven percent, over the next year. The University will not be meeting this goal as the requisite hiring rate is over double that of recent trends. Nonetheless, with growth, UC is hoping to continue to increase the diversity of its ladder-rank faculty, which also involves retaining faculty who contribute to that diversity.

For more information

UC Academic Senate: universityofcalifornia.edu/senate

UCOP Academic Personnel and Programs: ucop.edu/academic-personnel-programs

UC employee headcount data: universityofcalifornia.edu/infocenter/uc-employee-headcount

UC employee FTE data: universityofcalifornia.edu/infocenter/employee-fte

UC employee diversity data: universityofcalifornia.edu/infocenter/uc-workforce-diversity

Annual wage reporting: universityofcalifornia.edu/infocenter/annual-wage-reporting

Faculty diversity website: ucop.edu/faculty-diversity/index.html

UC 2030 goals: universityofcalifornia.edu/infocenter/uc-2030-dashboard

UC faculty have increased to accommodate a growing student body, relying more on ladder-rank faculty today than in years past.

5.1.1   General campus faculty FTE total by type
Universitywide, October 2011 to 2021
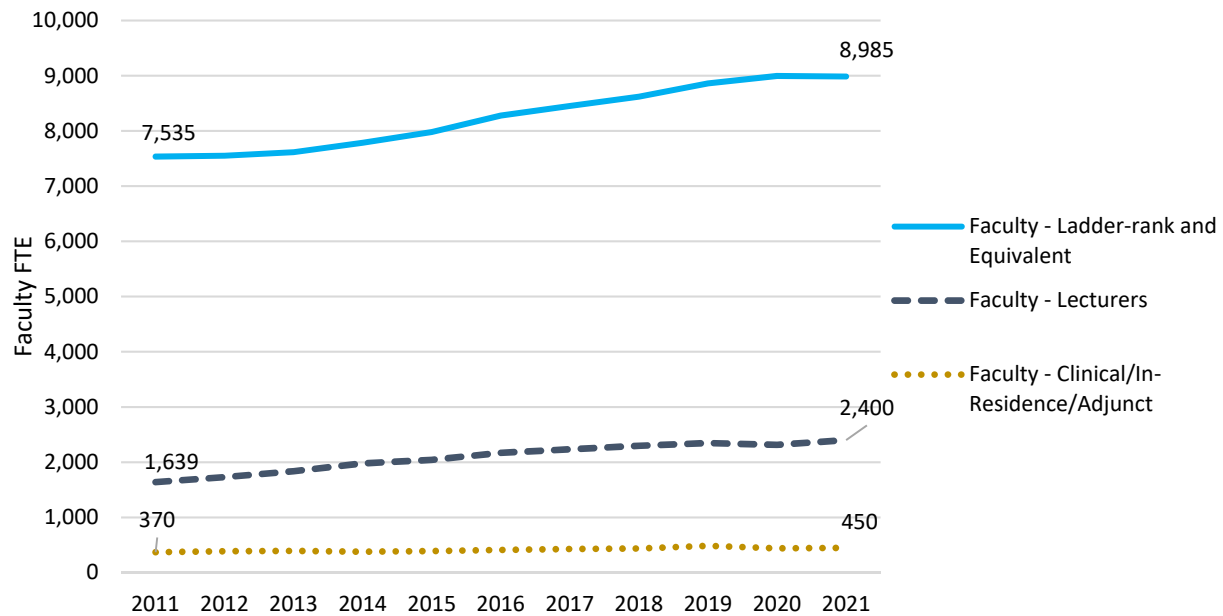
Source: UC Corporate Personnel System

General campus faculty serve in non-health sciences disciplines (such as arts, humanities, social sciences, biological and physical sciences, engineering, law, business, education, etc.) where the majority of UC student degrees are earned.

Total general campus faculty FTE has increased by 24 percent (2,291 FTE) in the past decade. Ladder-rank faculty FTE has grown by 1,450, or 18 percent, making up about 76 percent of all faculty FTE.

While FTE in all faculty categories has grown, the most pronounced increase has been among lecturers, who increased by over 46 percent during this period. At UC, lecturers are not required to engage in research or service responsibilities and therefore focus on teaching. Lecturers help meet the instructional needs of UC's growing enrollment.

General campus faculty are mostly concentrated in arts, humanities, and the social sciences.

5.1.2 General campus faculty headcount by discipline
Universitywide, October 2021
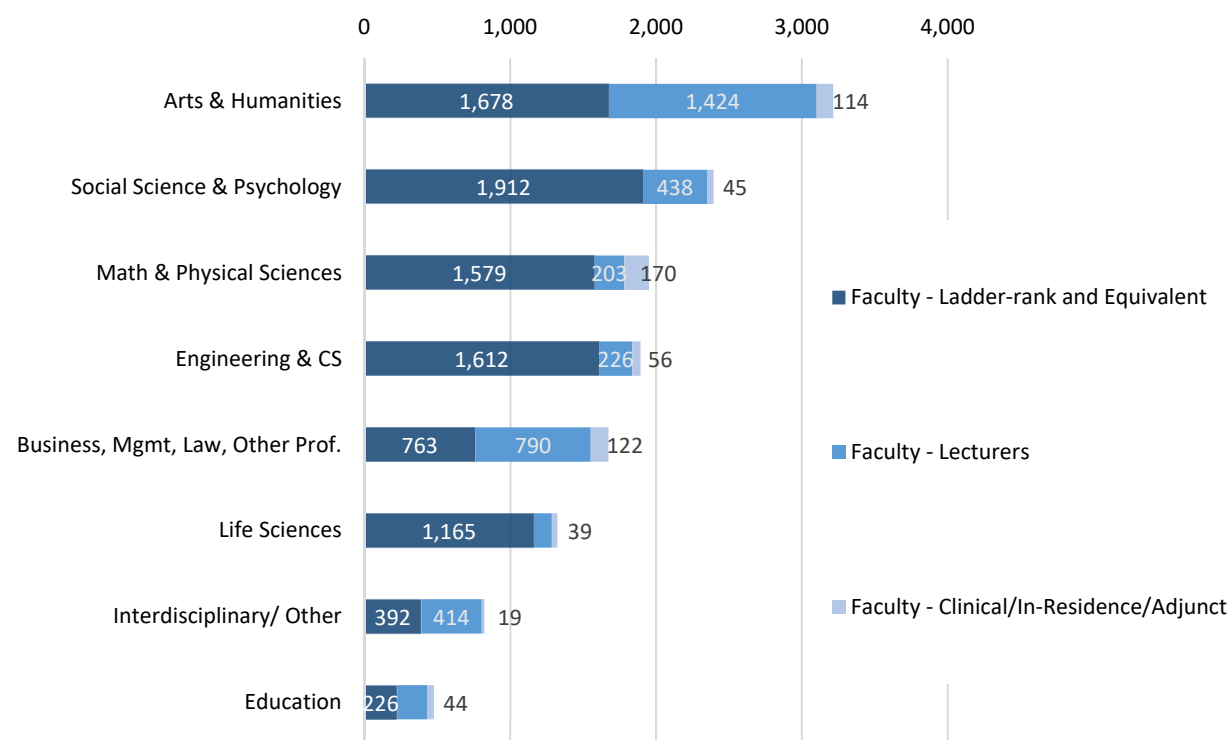
Faculty are employed in hundreds of departments across the ten campuses. General campus faculty — the focus of this chart 5.1.2 and the previous chart 5.1.1 — are spread across a spectrum of disciplines. The disciplines with the most undergraduate majors also tend to have the most faculty. By contrast, most health sciences faculty serve in the schools of medicine, with smaller numbers in other health sciences disciplines such as dentistry, nursing, pharmacy, veterinary medicine, optometry, and public health.

Different disciplines rely on varying types of faculty to fulfill their teaching and research missions. Ladder-rank faculty are the mainstay of the University's mission of teaching, research, and service. These faculty are employed throughout all academic disciplinary areas. Lecturers are concentrated in certain disciplines, such as the arts and humanities, often to support general education requirements in those areas. Lecturer positions are also common in professional schools.

The non-faculty academic workforce has increased steadily, particularly student appointees (teaching assistants and research assistants) and medical interns. Total FTE in other categories aligns closely with faculty FTE and the availability of research funding.

5.1.3   Non-faculty academic workforce FTE
Universitywide, October 2011 to 2021
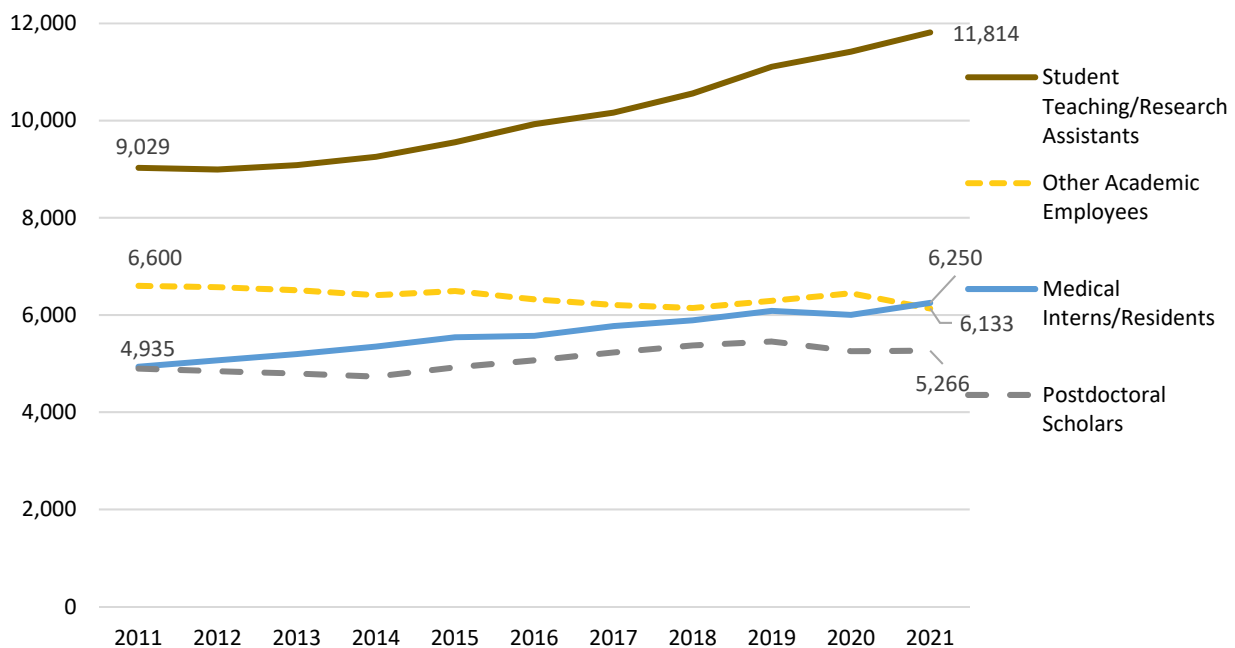
Source: UC Corporate Personnel System

The non-faculty academic workforce has expanded alongside student and faculty growth in the last decade, increasing by 4,000 FTE, or 15.7 percent, over this period.

Student teaching and research assistants as well as health sciences residents and interns have increased in number. Student teaching and research assistants hold part-time appointments in conjunction with their graduate studies. FTE of student assistants and residents/interns has increased in tandem with enrollment increases and expansion of health sciences programs over this time.

Changes in the FTE of postdoctoral scholars and academic researchers are connected to the relative availability of research funding. Contracts and grants from external sponsors support the vast majority of researchers in the academic workforce, with the federal government providing most research funding. Chapter 9, Research, provides additional details on the composition of the research workforce.

Postdoctoral scholars are concentrated in medicine, science, and engineering, as well as at campuses with larger research programs in those fields.

5.1.4 Postdoctoral scholar headcount
By campus and discipline
October 2021

	San Diego	San Francisco	Berkeley	Los Angeles	Davis	Irvine	Santa Barbara	Riverside	Santa Cruz	Merced	
Medicine	477	945		355	171	49		16			**2,013**
Life Sciences	131		302	75	296	119	9	107	33	7	**1,079**
Math & Physical Sciences	240		233	143	62	79	105	51	74	26	**1,013**
Engineering & CS	164		209	127	70	86	160	42	37	25	**920**
Other Health Sciences	33	164	21	74	69	23					**384**
Interdisciplinary/ Other	35	.	180	43	37	16	22	6	3	3	**345**
Social Science & Psychology	43		61	59	33	12	15	3	2	2	**230**
Business, Mgmt, Law, Other Prof.	5		34	21	3	4		.			**67**
Education	4		5	10	12	16	1	5			**53**
Arts & Humanities	3		5	7	3	3	4	3	4		**32**
	1,135	**1,109**	**1,050**	**914**	**756**	**407**	**316**	**233**	**153**	**63**	**6,136**

Source: UC Corporate Personnel System

Postdoctoral scholars have completed their doctoral degrees and conduct research under the direction and supervision of faculty mentors in preparation for academic or research careers. Since most of their funding comes from contracts and grants, they are particularly prevalent in fields that receive large amounts of grant funding, such as medicine, life sciences, physical sciences, and engineering.

Campuses with large research programs in these fields consequently have larger postdoctoral populations.

The diversity of UC's academic workforce differs among the types of employees.

5.2.1 Academic workforce race/ethnicity by type
Universitywide, October 2011 to 2021
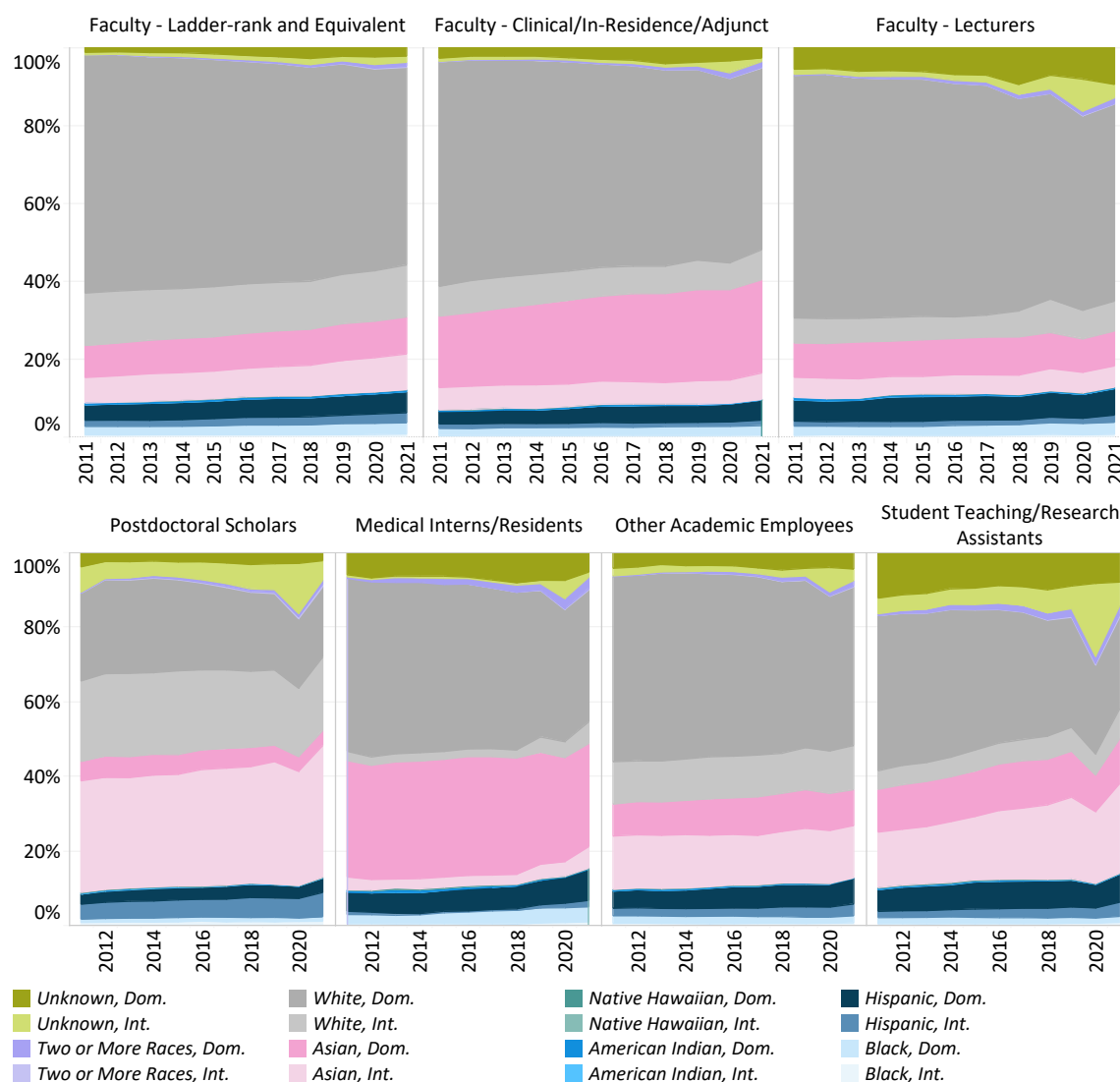
Source: UC Corporate Personnel System

All academic positions have increased in racial/ethnic diversity in the last decade. Positions occupied by students and recent graduates (e.g., teaching assistants, research assistants, postdocs, residents/interns) tend to be more diverse, reflecting increasing diversity in graduate student populations. Ladder-rank faculty diversity has been the slowest to change, due to long tenures and limited availability of candidates in some disciplines.

The significant number of international academics reflects a global academic marketplace. University of California Office of the President (UCOP) is exploring ways to improve data quality and reverse the recent trend of growth in the share of the population with unknown race/ethnicity. Campus, discipline, and age detail are available through the UC Information Center (universityofcalifornia.edu/infocenter/uc-workforce-diversity).

Gender diversity has increased or maintained parity for every academic group but still falls short of parity in several academic appointee categories.

5.2.2   Academic workforce gender by type
Universitywide, October 2011 to 2021
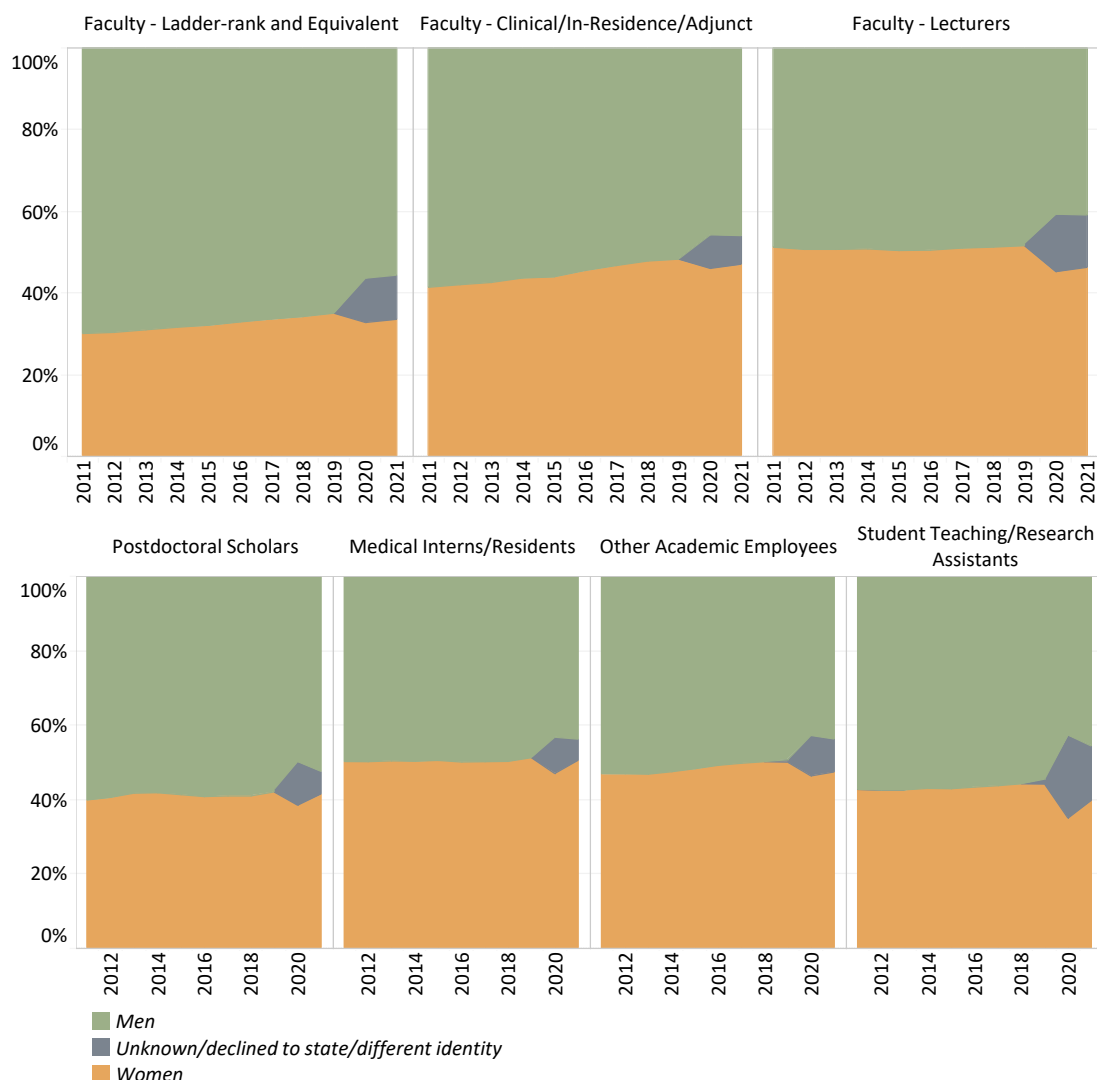
Source: UC Corporate Personnel System

Women make up a third of ladder-rank faculty and equivalent series. Similarly, two out of every five postdoctoral scholars and student research/teaching assistants are women. The ratio of women among Clinical/In-Residence/Adjunct Faculty and Ladder-rank Faculty has risen steadily in the last decade. Gender diversity takes longer to change in populations such as ladder-rank faculty, where turnover is low and tenures are long. Gender ratios among postdoctoral scholars and student assistants have remained relatively steady. Due to the California Gender Recognition Act (SB-179), UC recently revised self-reporting options for gender identity and sexual orientation, resulting in an increase in the number of employees without gender information in UC's centralized system of payroll, benefits, and human resources (UCPath).

UC has greater diversity in terms of women and Hispanic/Latino(a) faculty than most of its peers.

5.2.3   Percent of tenure and tenure-track faculty who are women and/or African American or Hispanic/Latino(a) UC and comparison institutions, Fall 2020

	Women	African American	African American Female	Hispanic/Latino(a)	Hispanic/Latino(a) Female
Berkeley	35%	3.9%	1.7%	5.9%	2.1%
Davis	39%	2.4%	1.6%	6.8%	3.3%
Irvine	39%	3.5%	1.4%	6.3%	3.0%
Los Angeles	36%	4.5%	2.2%	8.0%	2.9%
Merced	45%	1.6%	1.0%	14.6%	7.3%
Riverside	36%	3.8%	2.2%	6.9%	2.5%
San Diego	30%	2.9%	1.7%	6.7%	2.5%
San Francisco	36%	4.3%	1.9%	4.7%	1.2%
Santa Barbara	39%	2.2%	1.2%	6.9%	3.7%
Santa Cruz	43%	3.1%	1.4%	10.7%	5.5%
Buffalo	34%	2.5%	1.3%	2.3%	1.1%
Michigan	36%	4.7%	2.3%	3.9%	1.8%
Virginia	32%	4.8%	2.1%	3.2%	1.1%
Illinois	36%	4.3%	2.1%	6.9%	2.6%
Harvard	31%	4.1%	1.4%	3.9%	1.6%
MIT	24%	3.2%	1.0%	4.5%	0.8%
Stanford	29%	1.7%	0.8%	4.2%	1.6%
Yale	37%	3.8%	2.0%	4.4%	1.9%

Source: IPEDS

IPEDS data does not capture race and ethnicity for employees who are not U.S. citizens or permanent residents. Therefore, the UC data shown here may differ from other analyses of faculty demographics.

Relative to the "Comparison 8" universities (four public institutions: Illinois, Michigan, University at Buffalo, Virginia; four private institutions: Harvard, MIT, Stanford, Yale), most UC campuses have a greater share of faculty who are women. Most UC campuses are at or above the private institutions but below the public ones for African American faculty and African American women faculty shares. Most UC campuses exceed the comparison share of Hispanic/Latino(a) and Hispanic/Latino(a) women faculty.

However, UC faculty do not reflect the diversity of California or UC's graduate and undergraduate students. One of the UC 2030 goals is to expand the pathway to the professoriate to help grow and diversify the faculty.

UC's hiring of women, African American, and Hispanic/Latino(a) faculty generally meets or exceeds the national availability of doctorates, with variation among disciplines.

5.3.1 African American new assistant professors compared with national availability by discipline group
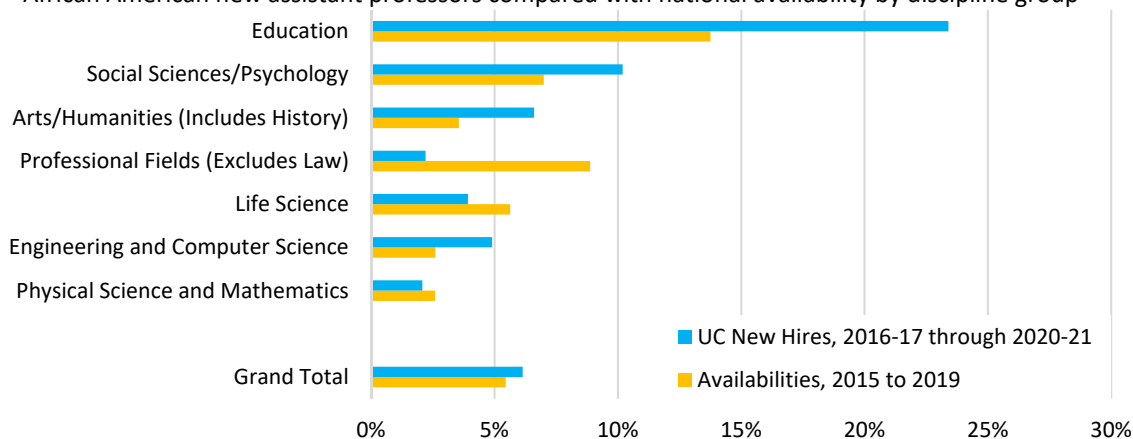
Legend:
- UC New Hires, 2016-17 through 2020-21
- Availabilities, 2015 to 2019

5.3.2 Hispanic/Latino(a) new assistant professors compared with national availability by discipline group

Legend:
- UC New Hires, 2016-17 through 2020-21
- Availabilities, 2015 to 2019
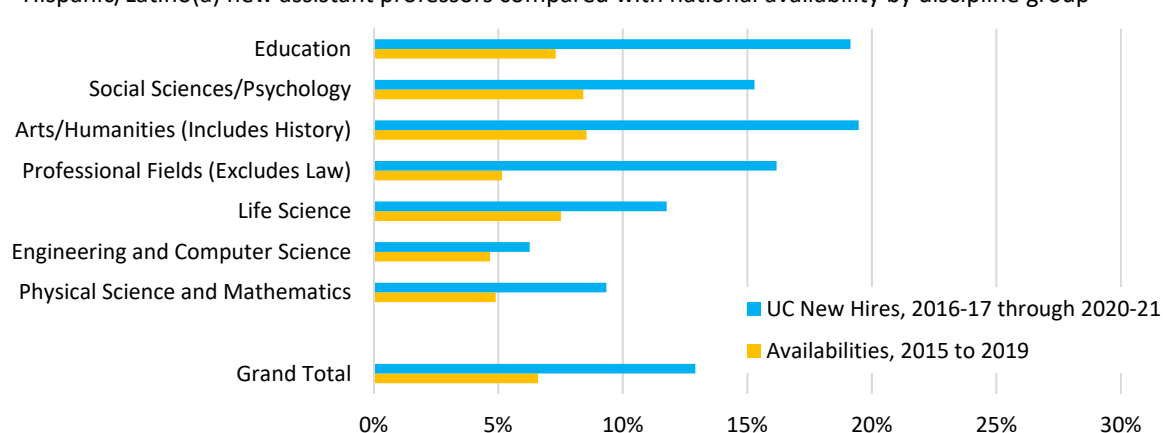
5.3.3 Women new assistant professors compared with national availability by discipline group

Legend:
- UC New Hires, 2016-17 through 2020-21
- Availabilities, 2015 to 2019
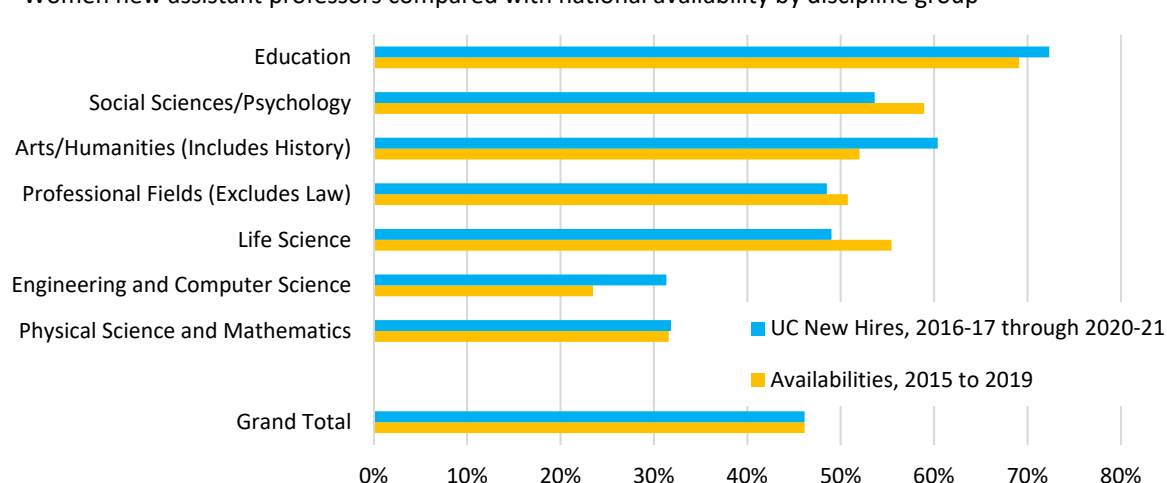
Source: UC Academic Personnel and Program Administration and Survey of Earned Doctorates

UC remains committed to diversifying its faculty and taking full advantage of the available pools of qualified candidates. The percentage of women in UC's new hires between 2016–17 and 2020–21 was on par with the national availability pool. Similarly, the percentages of African American and Hispanic/Latino(a) new assistant professors were above the corresponding national availability pool. Some disciplines at UC have diversified more than others, relative to the availability pools in their field.

Hiring of new faculty has ebbed and flowed over the years in response to budget cuts and enrollment growth. Separations have been more consistent, year over year.

5.3.4 New hires and separations of ladder-rank and equivalent faculty
Universitywide, 2010–11 to 2020–21
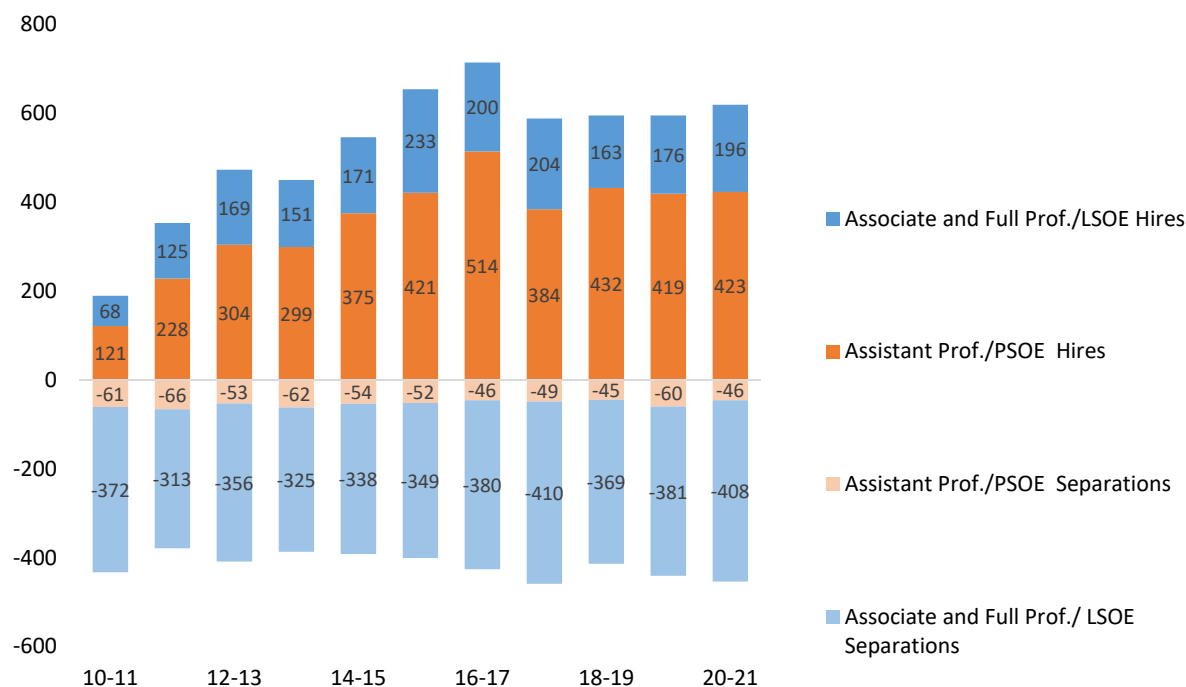
Source: UC Academic Personnel and Program Administration,
LSOE: Lecturer with Security of Employment; PSOE: Potential for Security of Employment

Faculty numbers have grown over time, as hiring has generally outpaced separations. Separations have grown modestly, especially among tenured faculty, as the number of retirements has steadily increased. Other factors that can affect hiring and separations include shifts in the economy and fluctuations in State funding that affect the University's budgets. The COVIDd-19 pandemic has affected faculty recruitment efforts, but hiring has not been reduced as much as had been feared. Still, there is potential for further effects of the pandemic on recruitments to be reflected in lower faculty hiring in coming years.

Since 2016, UC has partnered with Harvard's Collaborative on Academic Careers in Higher Education (COACHE) (coache.gse.harvard.edu) on a research project to survey faculty who leave UC for employment at other universities or who consider outside offers but elect to stay at UC. This Retention and Exit Study is aimed at understanding and improving the experience of UC faculty members, as well as improving recruitment and retention. A summary of the latest results can be found in this May 2022 Regents Item: regents.universityofcalifornia.edu/regmeet/may22/a3.pdf.

UC faculty salaries have increased, but remain below the comparison institution benchmark.

5.3.5 Average ladder-rank general campus faculty salaries by rank
UC and comparison institutions,
2010–11 to 2020–21

Professor

Private 4 comparison

Comparison institution benchmark

University of California

Public 4 comparison

Associate Professor

Private 4 comparison

Comparison institution benchmark

University of California

Public 4 comparison

Assistant Professor

Private 4 comparison

Comparison institution benchmark

University of California

Public 4 comparison
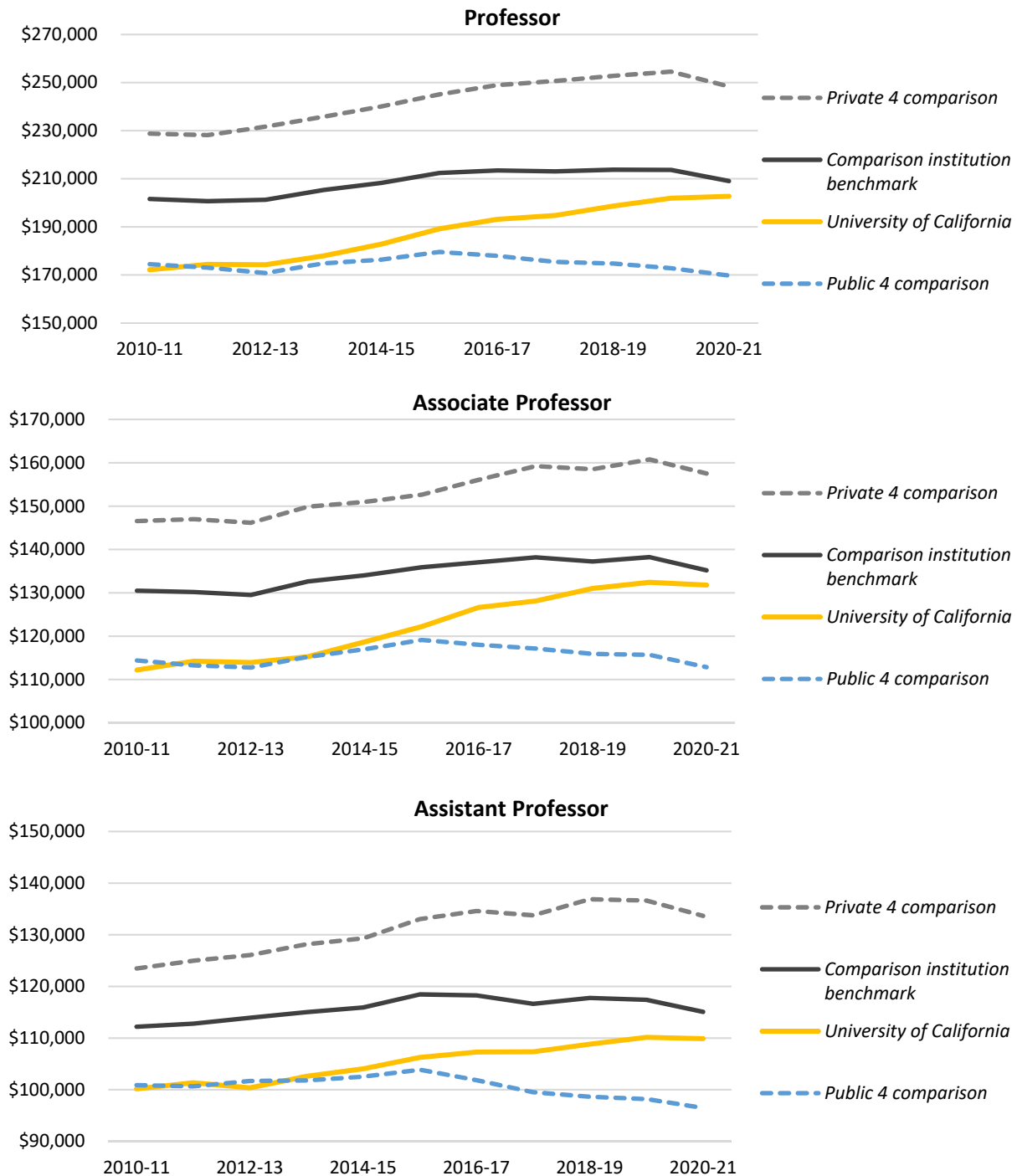
Source: UC Corporate Personnel System, AAUP faculty salary survey

UC faculty salaries have improved in recent years, yet they continue to lag behind the comparison benchmark UC uses to assess the competitiveness of its faculty salaries. UC sets the benchmark using the average salaries of the "Comparison 8" universities (four public: Illinois, Michigan, University at Buffalo, Virginia; four private: Harvard, MIT, Stanford, Yale).

UC's faculty salaries fall below those of the comparison private institutions, but have recently been pulling ahead of the four public institutions as UC has increased investment in faculty salaries, while salaries at the public comparison institutions have remained flat or even decreased. This comparison incorporates an inflation adjustment based on the Consumer Price Index (CPI), but it does not factor in the cost of living, which is especially high in most of California compared to the regions of the public peers assessed here.

Growth in UC ladder-rank faculty is critical to upholding quality in instruction, research, and public service.

5.3.6   UC ladder-rank faculty headcount, excluding recall faculty*
Universitywide
October 2011 to 2021
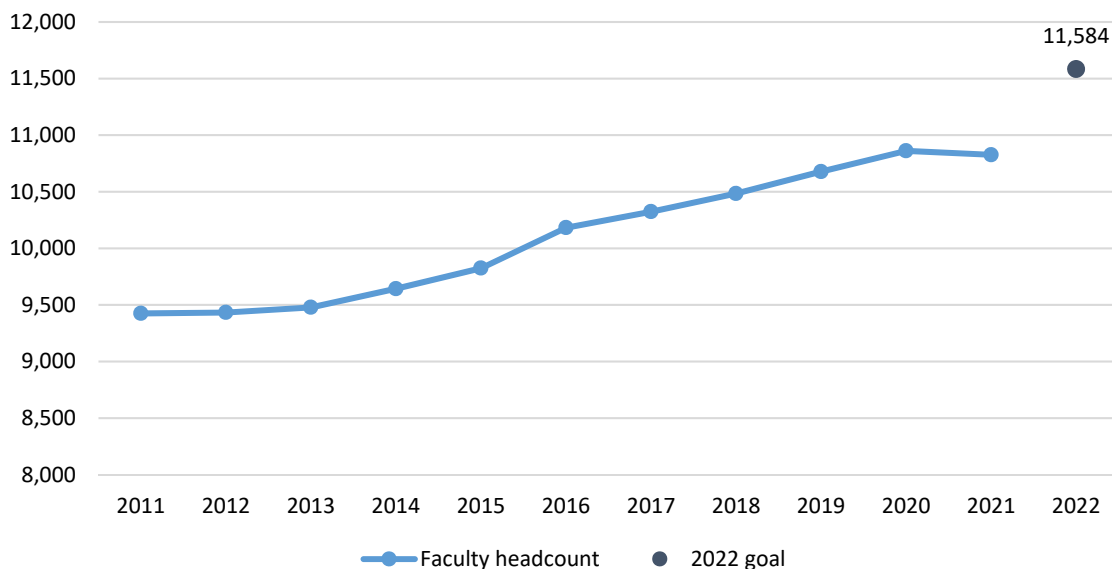
Source: UC Corporate Personnel System

* Recall faculty are retired faculty who return part-time for temporary instruction and/or research needs. They are excluded here to focus on more permanent faculty appointments only.

Growth among UC ladder-rank and equivalent (LRE) faculty has been modest over the last couple of decades, relative to the growth in the student body. One of UC's goals in the multi-year framework adopted by the UC Regents in 2019 is investing in the next generation of the professoriate.

To fulfill this, UC seeks to grow non-recall LRE faculty by 1,100 between 2018–19 and 2022–23. UC would need to add 758 LRE faculty in the next year to achieve this goal. Based on recent trends in faculty growth, the University will not meet this goal.

After four years, UC leadership will assess progress toward advancing undergraduate and graduate degree attainment and diversifying the professoriate.

UC continues to develop various pathways to the diverse professoriate as a part of its 2030 goals.

5.3.7   UC pathways to professoriate

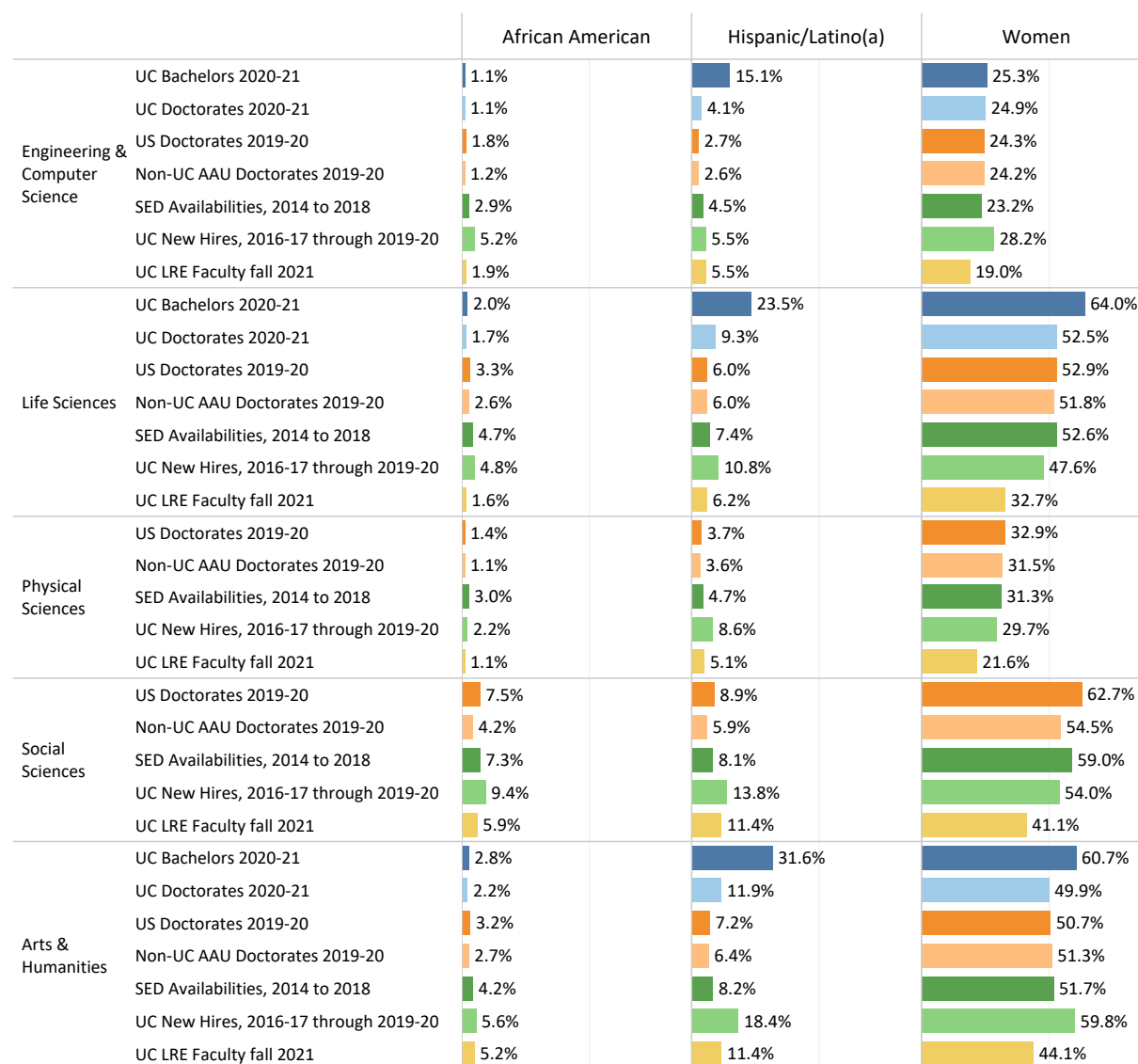|		African American	Hispanic/Latino(a)	Women
Engineering & Computer Science	UC Bachelors 2020-21	1.1%	15.1%	25.3%
	UC Doctorates 2020-21	1.1%	4.1%	24.9%
	US Doctorates 2019-20	1.8%	2.7%	24.3%
	Non-UC AAU Doctorates 2019-20	1.2%	2.6%	24.2%
	SED Availabilities, 2014 to 2018	2.9%	4.5%	23.2%
	UC New Hires, 2016-17 through 2019-20	5.2%	5.5%	28.2%
	UC LRE Faculty fall 2021	1.9%	5.5%	19.0%
Life Sciences	UC Bachelors 2020-21	2.0%	23.5%	64.0%
	UC Doctorates 2020-21	1.7%	9.3%	52.5%
	US Doctorates 2019-20	3.3%	6.0%	52.9%
	Non-UC AAU Doctorates 2019-20	2.6%	6.0%	51.8%
	SED Availabilities, 2014 to 2018	4.7%	7.4%	52.6%
	UC New Hires, 2016-17 through 2019-20	4.8%	10.8%	47.6%
	UC LRE Faculty fall 2021	1.6%	6.2%	32.7%
Physical Sciences	US Doctorates 2019-20	1.4%	3.7%	32.9%
	Non-UC AAU Doctorates 2019-20	1.1%	3.6%	31.5%
	SED Availabilities, 2014 to 2018	3.0%	4.7%	31.3%
	UC New Hires, 2016-17 through 2019-20	2.2%	8.6%	29.7%
	UC LRE Faculty fall 2021	1.1%	5.1%	21.6%
Social Sciences	US Doctorates 2019-20	7.5%	8.9%	62.7%
	Non-UC AAU Doctorates 2019-20	4.2%	5.9%	54.5%
	SED Availabilities, 2014 to 2018	7.3%	8.1%	59.0%
	UC New Hires, 2016-17 through 2019-20	9.4%	13.8%	54.0%
	UC LRE Faculty fall 2021	5.9%	11.4%	41.1%
Arts & Humanities	UC Bachelors 2020-21	2.8%	31.6%	60.7%
	UC Doctorates 2020-21	2.2%	11.9%	49.9%
	US Doctorates 2019-20	3.2%	7.2%	50.7%
	Non-UC AAU Doctorates 2019-20	2.7%	6.4%	51.3%
	SED Availabilities, 2014 to 2018	4.2%	8.2%	51.7%
	UC New Hires, 2016-17 through 2019-20	5.6%	18.4%	59.8%
	UC LRE Faculty fall 2021	5.2%	11.4%	44.1%

Source: UC Academic Personnel and Program Administration, UC Corporate Personnel System, Survey of Earned Doctorates (SED availabilities include non-US citizens who earned doctorates at U.S. universities)

Investing in the next generation of the diverse professoriate is one of the three goals of the UC 2030 framework. UC continues to deploy the strategy of growing the graduate and future professoriate pathway, including additional ladder-rank faculty to increase UC's capacity to grow graduate student numbers. While UC is hiring new faculty from historically underrepresented groups, it is also cultivating an internal talent pool by creating more research opportunities for undergraduate students and working to encourage more students from underrepresented groups to pursue doctoral degrees.

Staff

"Lack of leadership opportunities can prompt women to leave their careers too soon, feeling unappreciated or unrecognized in the workplace," says Shohreh Bozorgmehri, founder of Women in Technology at UCI and chair of the advocacy group's inaugural board of advisors. "It's important that women have access to a solid network of allies, sponsors or mentors to feel valued and thrive."

"Women in Technology at UCI was created from the aspiration to bring awareness to the challenges and unique experiences of women and minorities working in tech on campus, Technology is integral to all aspects of the business of higher education, but right now only less than a third of tech professionals are identified as women. By working to develop a more gender-diverse and equitable workplace, we maximize the benefits of diverse perspectives and creative ideas that advance our institution's mission."

WiT held an "Allyship That Makes an Impact" webinar in February 2021 that drew 331 attendees for a discussion of how allies can support women and minorities in technology. These conversations inspired the development of the Better Allies Book Club, sponsored by UCI's Office of Information Technology to support the creation of an inclusive workplace through everyday actions.

In March 2021, WiT launched Applause, an annual peer recognition program spotlighting women who are building a culture of inclusion, equity and empowerment in their IT workplace. The organization has also sponsored career coaching for high-potential women.
"We should also continue challenging bias head-on and practicing a culture of 'allyship' to support minority groups. It's important to acknowledge that anyone could make a difference by becoming an ally to women and minorities."

STAFF

Overview

The three-pronged mission of the University of California includes teaching, research, and public service, none of which can be accomplished without the support of staff who organize and facilitate all that is required to do the work of the University. Despite the operational and financial challenges created by the COVID-19 pandemic in 2020 and 2021, UC employees quickly rose to the challenge of engaging in the University's mission of teaching, research, and service in a remote environment. Recognizing the challenges faced by employees, the University of California adopted numerous programs and exceptions to policy, providing flexibility to the staff to conduct their work.

Non-academic staff employees constitute over 70 percent of UC's workforce and are responsible for health services, student services, instruction and research support, compliance, and general administration (6.1.1). In October 2021, this group included 158,264 individuals. Overall, this staff workforce represented over 121,520 full-time equivalent (FTE) employees in that month.

Staff workforce

- About six out of every ten UC staff FTE are working for the University of California Health system. These frontline workers (including doctors, nurses, administrators, technicians, and allied health professionals) are playing a critical role in California's response to the COVID-19 pandemic. Over 97 percent of these employees are supported by non-core funds, typically the revenues generated by hospital services.
- Students often work part-time on campus as part of their financial aid packages or for research experience. As UC campuses returned to in-person instruction, student employee headcount at general campus rose from 18,100 in October 2020 to 27,200 in October 2021.
- General campus, non-student employees are the remainder of the University's staff, at 43,672 FTE. This includes student services employees, career advisors, IT specialists, research administration, laboratory staff, food and auxiliary service workers, accountants, maintenance and janitorial staff, safety workers, and analysts (6.1.1).

Diversity

The University of California is committed to diversity and excellence in its staff workforce. Staff at UC are majority women and increasingly ethnically diverse across all personnel groups (6.1.2). However, there are variations among the different employee groups, with less diversity and women representation among senior positions. A more diverse academic and staff population is an increasingly important attribute of a thriving public research university system.

Staff compensation

Over the past decade, UC has relied less on core funds (State funds, tuition and fees, and other general funds) to cover the staff payroll. While UC has about 26,187 more staff FTE than ten years ago — largely due to University of California Health and student staff growth — fewer FTE are paid on core funds (6.2.1). About 17 percent of staff are paid using core funds.

General campus career staff salaries have stayed relatively flat compared to inflation for the past decade and have increased modestly for some University of California Health professionals. Staff salaries tend to lag behind comparable market positions, and the lack of increases beyond inflation could affect staff satisfaction and turnover (6.2.2, 6.2.3). Chancellor compensation falls on the lower end when compared to peer institutions (6.2.4).

Staff separations and satisfaction

UC's separation rate among career staff in 2021 is about eight percent (6.3.1), which is lower than it has been in a decade. More than one quarter of staff separations are due to retirement and reflect the baby-boomer generation exiting the workforce. Still, a large portion of separations are due to resignations to accept another job, to move out of the area, or for other reasons (6.3.2). The 2019 Council of University of California Staff Assemblies (CUCSA)/Systemwide Human Resources Engagement Survey shows some improvement in employee engagement since 2017 in the areas of organizational change, communication, and sustainable engagement, but that UC is still below the national norm in eight out of nine employee engagement categories. While voluntary separation is often influenced by a combination of factors, employee engagement can give us a window into the areas that might be contributing to the loss of employees to other organizations or geographic areas.

For more information

Employee headcount data: universityofcalifornia.edu/infocenter/uc-employee-headcount

Employee FTE data: universityofcalifornia.edu/infocenter/employee-fte

Workforce diversity data: universityofcalifornia.edu/infocenter/uc-workforce-diversity

Staff workforce profile: universityofcalifornia.edu/infocenter/staff-workforce-profile

Annual wage reporting: universityofcalifornia.edu/infocenter/annual-wage-reporting

Chancellors compensation: ucop.edu/institutional-research-academic-planning/_files/executive-compensation-aau-chancellors.pdf
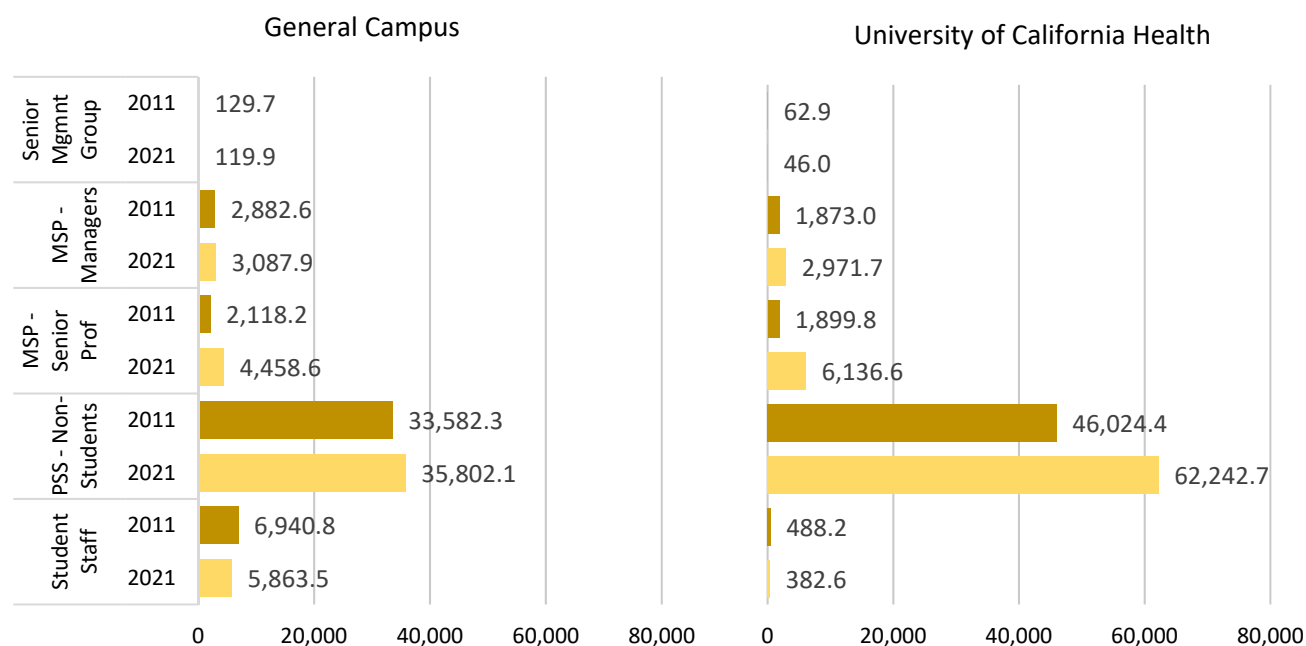
CUCSA/Systemwide Human Resources Engagement Survey: ucop.edu/human-resources/staff/employee-relations-staff/engagement-survey.html

University of California Health staff has grown significantly as health services have expanded, while general campus non-student support staff growth (12.3 percent) has lagged behind overall student enrollment growth (27.4 percent) over the past decade.

6.1.1   Staff Full-time Equivalent (FTE)
Universitywide, October 2011 to 2021

General Campus

Senior Mgmnt Group	2011	129.7
	2021	119.9
MSP - Managers	2011	2,882.6
	2021	3,087.9
MSP - Senior Prof	2011	2,118.2
	2021	4,458.6
PSS - Non-Students	2011	33,582.3
	2021	35,802.1
Student Staff	2011	6,940.8
	2021	5,863.5

University of California Health

2011	62.9
2021	46.0
2011	1,873.0
2021	2,971.7
2011	1,899.8
2021	6,136.6
2011	46,024.4
2021	62,242.7
2011	488.2
2021	382.6

Source: UC Corporate Personnel System

* In 2017 and 2018, several job titles were reclassified between MSP and PSS groups. Excludes Lawrence Berkeley National Laboratory, Hastings School of the Law, and Associated Students UCLA.
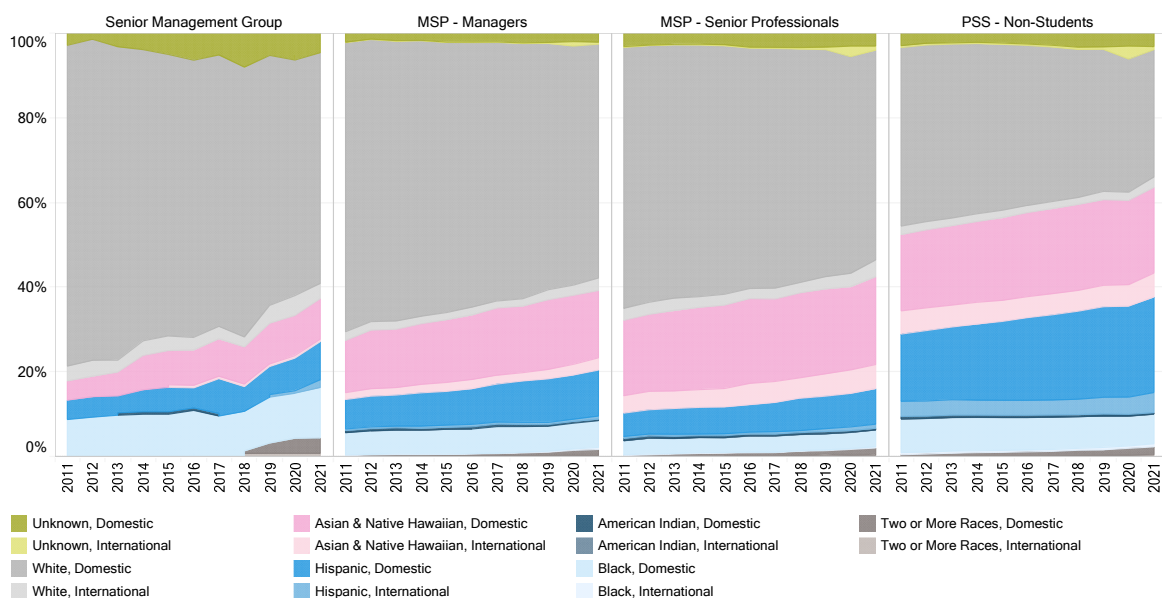
General campus, non-student staff has seen the greatest growth amongst senior professionals, due to both the introduction of Career Tracks and the professionalization of UC's workforce towards high-skilled analysis and technical capabilities. Career Tracks is a function-specific, market-aligned, job classification system that applies consistent interpretations of which positions are Management and Senior Professional (MSP) and which are Professional and Support Staff (PSS). Within PSS, there has been a significant shift away from clerical roles into student services and administrative analysis positions to manage growing campuses and student bodies.

UC operates six health systems with five academic medical centers as well as schools of medicine, dentistry, nursing, and other health sciences education and research programs. Over 59 percent of UC non-academic staff FTE work for the University of California Health system. These frontline workers (including doctors, nurses, administrators, technicians, and allied health professionals) are playing a critical role in California's response to the COVID-19 pandemic. The growth of University of California Health FTE is also driven by service expansions, such as increases in inpatient days as well as outpatient/emergency visits. For more information, refer to Chapter 11: University of California Health.

The proportion of underrepresented staff has grown modestly at all levels in the last decade. Representation of women has grown at the senior professional levels, and has stayed high at the manager and support staff levels.

6.1.2 Racial/ethnic diversity of non-student staff by personnel program
Universitywide, October 2011 to 2021

Unknown, Domestic	Asian & Native Hawaiian, Domestic	American Indian, Domestic	Two or More Races, Domestic
Unknown, International	Asian & Native Hawaiian, International	American Indian, International	Two or More Races, International
White, Domestic	Hispanic, Domestic	Black, Domestic	
White, International	Hispanic, International	Black, International	

6.1.3 Gender diversity of non-student staff by personnel program
Universitywide, October 2011 to 2021

Men   Unknown*   Women
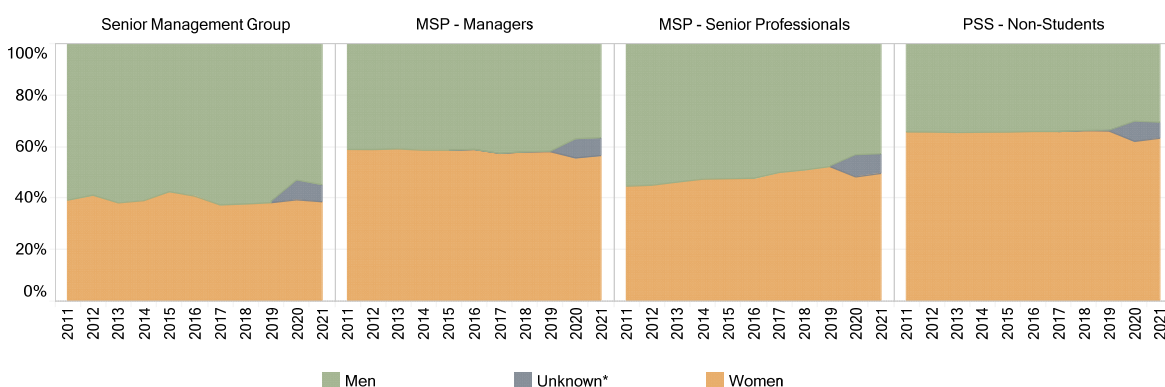
Source: UC Corporate Personnel System, Unknown* category includes both non-binary and no information.

UC has sought to improve representation of historically underrepresented domestic racial/ethnic groups. Diversity has increased steadily at all staffing levels; however, senior management positions remain less diverse. More than half of the managers and professional support staff employees are women. The percentage of women employees h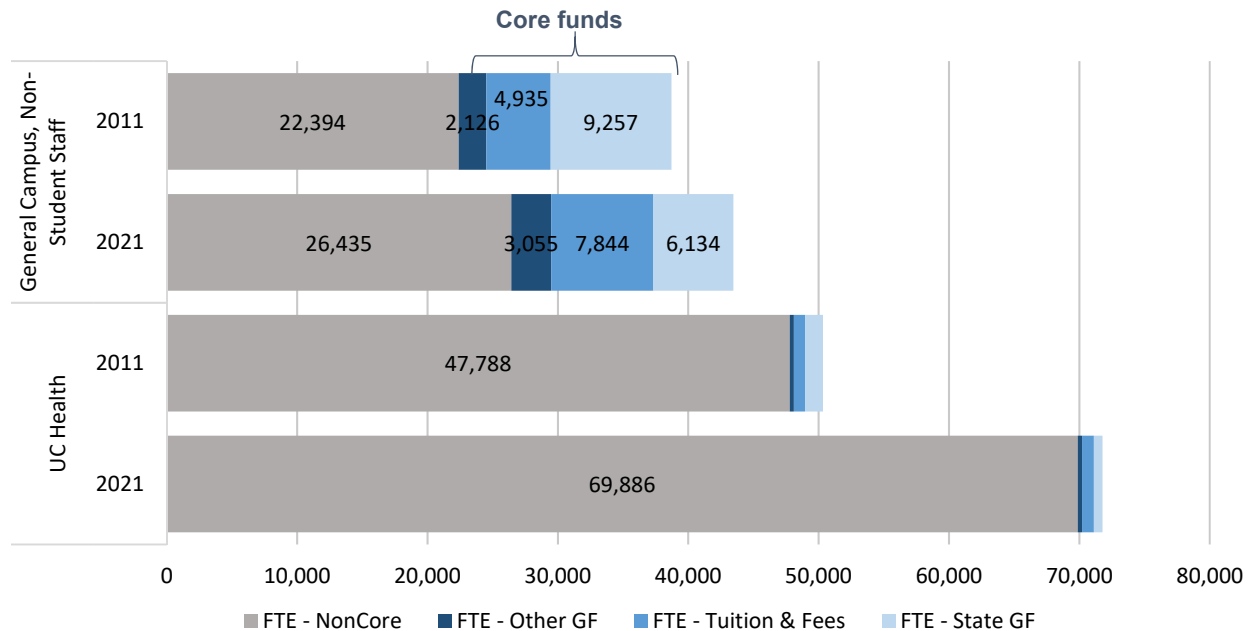as remained steady within the Senior Management Group (SMG), while Senior Professionals have nearly equal gender representation. As a result of the California Gender Recognition Act (SB-179), UC recently revised self-reporting options for gender identity and sexual orientation, resulting in an increase in number of employees without gender information in UC's centralized system of payroll, benefits, and human resources (UCPath).

In the last decade, the number of staff supported by non-core funds has increased.

6.2.1   Non-student staff FTE by fund source
General campus and University of California Health, October 2011 and 2021

Core funds

| | 2011 | 22,394 | 2,126 | 4,935 | 9,257 |
| | 2021 | 26,435 | 3,055 | 7,844 | 6,134 |

General Campus, Non-Student Staff

UC Health

| | 2011 | 47,788 |
| | 2021 | 69,886 |

0   10,000   20,000   30,000   40,000   50,000   60,000   70,000   80,000

■ FTE - NonCore   ■ FTE - Other GF   ■ FTE - Tuition & Fees   ■ FTE - State GF
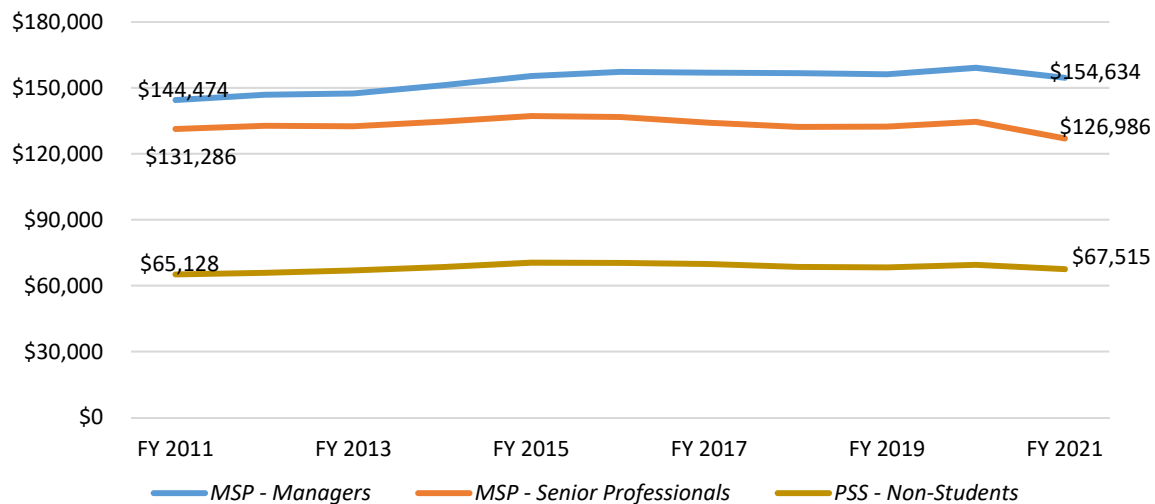
Source: UC Corporate Personnel System

General campus employees are increasingly paid with non-core funds such as research funds, auxiliary revenues, and other sources. Though overall general campus staff increased modestly, overall core-funded staff has decreased. Only 16 percent of staff FTE were funded by core funds in 2021, down from 21 percent a decade ago.

University of California Health almost exclusively relies on non-core funds, particularly from hospital revenues, to support its staff. Despite adding about 21,400 FTE, even fewer FTE today are paid on core funds than a decade ago.
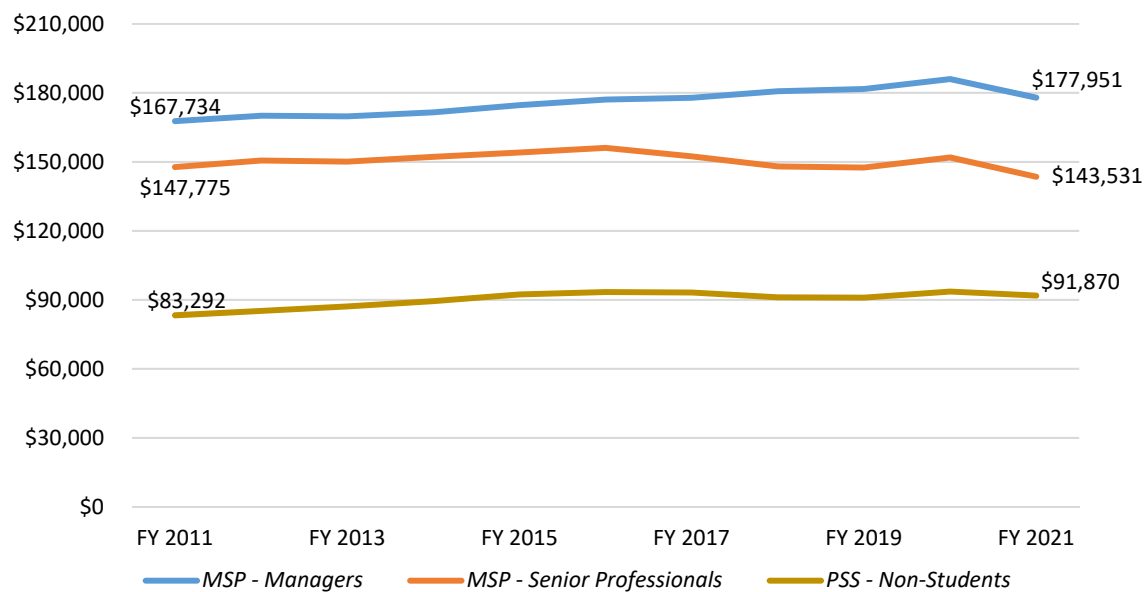
Over the past decade, inflation-adjusted salaries have been relatively flat for general campus staff, with slight declines for MSP employees.

6.2.2 General campus career staff average inflation-adjusted base salaries by personnel program, FY 2011 to 2021

MSP - Managers   *MSP - Senior Professionals*   *PSS - Non-Students*

6.2.3 University of California Health career staff average inflation-adjusted base salaries by personnel program, FY 2011 to 2021

MSP - Managers   *MSP - Senior Professionals*   *PSS - Non-Students*

Source: UC Corporate Personnel System; California CPI-W used for inflation adjustment

Over the past ten years, salaries in inflation-adjusted dollars have increased modestly for general campus career Professional and Support Services (PSS) staff and Managers. At the same time, UC employees are contributing more to their health care costs and to the UC retirement system, putting downward pressure on the competitiveness of UC's total compensation compared with the regional labor markets where University centers are located.
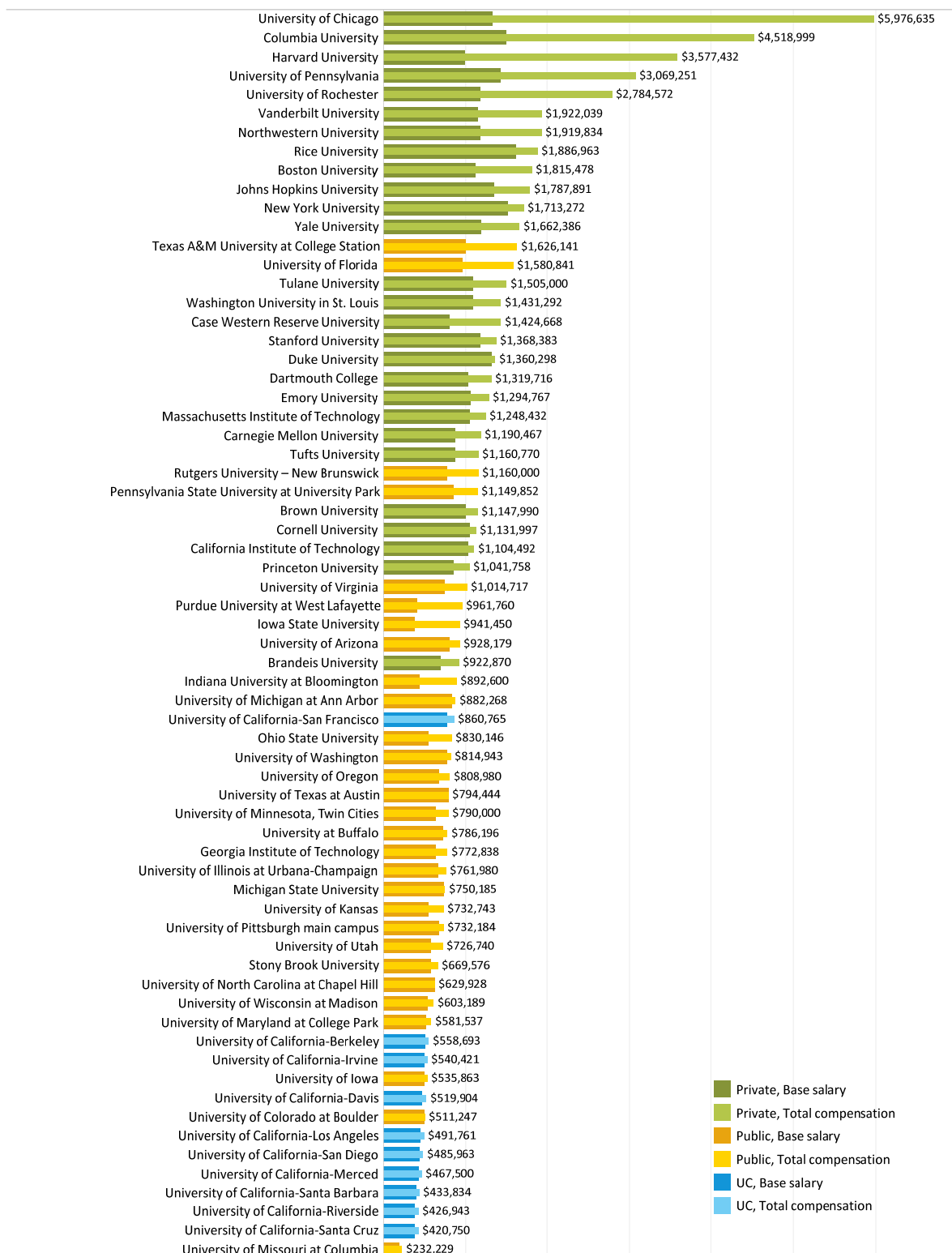
Salaries among University of California Health career staff have been increasing moderately in real dollars for Professional and Support Services (PSS) staff and Managers. This reflects market trends in wages for hospital staff and growing demand for health care professionals.

As a result of COVID-19 economic challenges, the financial measures taken during FY 2021 to achieve additional operational and salary savings have resulted in a slight decline in the average inflation-adjusted base salaries for most of the employees, more notably for Managers and Senior Professionals.

UC chancellors are among the lowest-paid when compared to their Association of American Universities (AAU) peers.

6.2.4 Base salaries and additional pay for UC and AAU institution leaders

Institution	Amount
University of Chicago	$5,976,635
Columbia University	$4,518,999
Harvard University	$3,577,432
University of Pennsylvania	$3,069,251
University of Rochester	$2,784,572
Vanderbilt University	$1,922,039
Northwestern University	$1,919,834
Rice University	$1,886,963
Boston University	$1,815,478
Johns Hopkins University	$1,787,891
New York University	$1,713,272
Yale University	$1,662,386
Texas A&M University at College Station	$1,626,141
University of Florida	$1,580,841
Tulane University	$1,505,000
Washington University in St. Louis	$1,431,292
Case Western Reserve University	$1,424,668
Stanford University	$1,368,383
Duke University	$1,360,298
Dartmouth College	$1,319,716
Emory University	$1,294,767
Massachusetts Institute of Technology	$1,248,432
Carnegie Mellon University	$1,190,467
Tufts University	$1,160,770
Rutgers University – New Brunswick	$1,160,000
Pennsylvania State University at University Park	$1,149,852
Brown University	$1,147,990
Cornell University	$1,131,997
California Institute of Technology	$1,104,492
Princeton University	$1,041,758
University of Virginia	$1,014,717
Purdue University at West Lafayette	$961,760
Iowa State University	$941,450
University of Arizona	$928,179
Brandeis University	$922,870
Indiana University at Bloomington	$892,600
University of Michigan at Ann Arbor	$882,268
University of California-San Francisco	$860,765
Ohio State University	$830,146
University of Washington	$814,943
University of Oregon	$808,980
University of Texas at Austin	$794,444
University of Minnesota, Twin Cities	$790,000
University at Buffalo	$786,196
Georgia Institute of Technology	$772,838
University of Illinois at Urbana-Champaign	$761,980
Michigan State University	$750,185
University of Kansas	$732,743
University of Pittsburgh main campus	$732,184
University of Utah	$726,740
Stony Brook University	$669,576
University of North Carolina at Chapel Hill	$629,928
University of Wisconsin at Madison	$603,189
University of Maryland at College Park	$581,537
University of California-Berkeley	$558,693
University of California-Irvine	$540,421
University of Iowa	$535,863
University of California-Davis	$519,904
University of Colorado at Boulder	$511,247
University of California-Los Angeles	$491,761
University of California-San Diego	$485,963
University of California-Merced	$467,500
University of California-Santa Barbara	$433,834
University of California-Riverside	$426,943
University of California-Santa Cruz	$420,750
University of Missouri at Columbia	$232,229

Legend:
- Private, Base salary
- Private, Total compensation
- Public, Base salary
- Public, Total compensation
- UC, Base salary
- UC, Total compensation

Source: The Chronicle of Higher Education Executive Compensation Report and institutional data sources

UC chancellors continue to be among the lowest-paid university leaders compared with their AAU peers. Nine UC chancellor salaries fall among the lowest third in this group. UC San Francisco, an exclusively graduate health science campus, is the only exception.

In response to the COVID-19 pandemic and reduction in UC revenues, the UC President and UC Chancellors voluntarily agreed to reduce their salaries by ten percent. The UC Board of Regents approved pay raises for all nine UC chancellors with undergraduate student bodies on January 2022. Given the corresponding implementation timeline, this pay increase is not reflected in the 2021 data presented here.

The separation rate among staff was eight percent in FY 2021, up from 7.7 percent in the previous fiscal year. Retirement is the leading reason for separation.

6.3.1 Separation rates for career staff by campus and overall, FY 2021
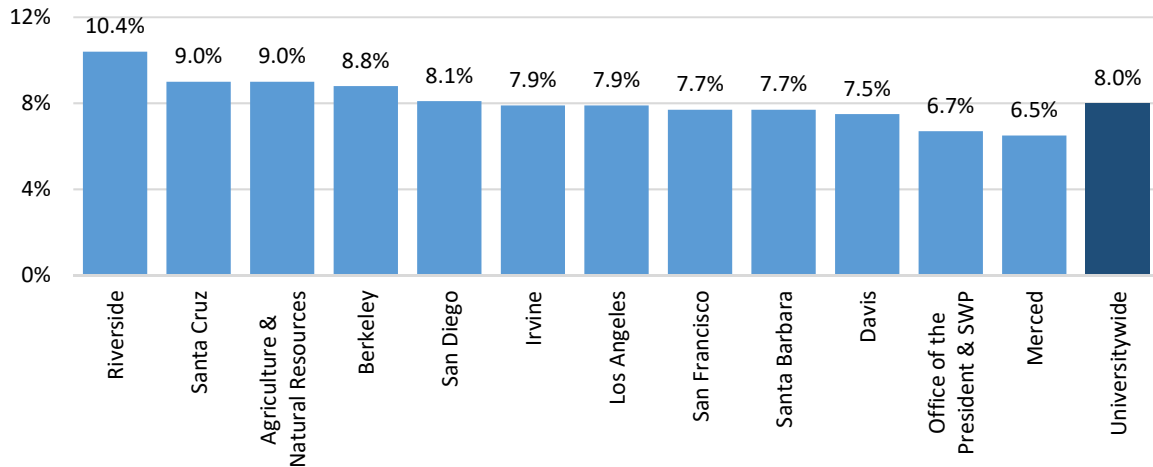
6.3.2 Separation reasons for career staff, FY 2021
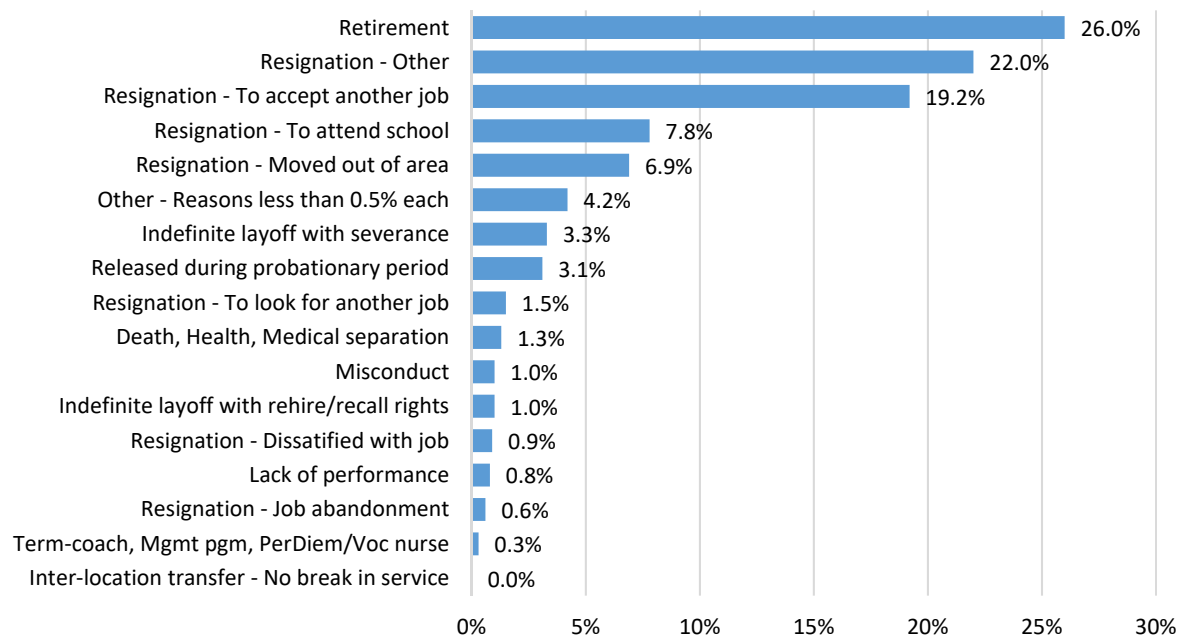
Source: UC Corporate Personnel System

Campuses experience a wide range of separation rates among their career staff, which may reflect different mixes of employees, work environments, and local job markets. High turnover is often expensive in terms of lost productivity, lost institutional knowledge, and replacement costs.

About 26 percent of separations were due to retirement, a result of the aging baby-boomer population. Resignations that are not retirement follow the widely reported Great Resignation trend. About 59 percent of separations were resignations in 2021.

Diversity

UC Irvine is one of five UC campuses federally-designated as a Hispanic-Serving Institution (HSI), meaning that Hispanic/Latinx students make up more than a quarter of the student body.

The University of California was honored with a 2021 Higher Education Excellence in Diversity Award from INSIGHT Into Diversity magazine. UC won the award based on its strong commitment to diversity and inclusion, particularly its focus on recruiting and retaining diverse students and staff, Lenore Pearlstein, publisher of INSIGHT Into Diversity magazine, said in a press release. The other factor was the high level of support by UC leaders for UC's diversity and inclusion efforts.

"We strive to reflect California's full diversity across our campuses every day. Respecting and celebrating diverse views, life experiences and backgrounds is essential to UC's standing as a world-class institution," said Yvette Gullatt, vice president for Graduate and Undergraduate Affairs, vice provost for Equity, Diversity and Inclusion, and chief diversity officer for the University of California. "We're pleased and proud to see that commitment recognized today."

A few highlights of UC's commitment to serving all Californians:
- UC admitted its most diverse class of California freshmen in history this year, with 43 percent of students coming from underrepresented racial and ethnic groups;
- Five of UC's nine undergraduate campuses are federally designated Hispanic-Serving Institutions and the remaining campuses are expected to follow suit soon;
- UC has a strong partnership with the nation's Historically Black Colleges and Universities, which is helping it diversify its ranks of graduate students;
- 40 percent of UC undergraduates are among the first in their families to attend college;
- Nearly 1 in 3 UC undergraduates has transferred from a community college;
- A presidential policy, adopted this year, ensures that all individuals are identified by their accurate gender identity and lived or preferred name on University-issued documents and in UC's information systems.

DIVERSITY

Goals

The University of California strives to create diverse, equitable, and inclusive communities for students, faculty, and staff. The University supports initiatives that increase the representation of historically underrepresented populations and foster inclusive living, learning, and working environments.

The University's diversity goals are established in Regents Policy 4440: University of California Diversity Statement, which states, in part:

- Because the core mission of the University of California is to serve the interests of the State of California, it must seek to achieve diversity among its student bodies and among its employees.
- The State of California has a compelling interest in making sure that people from all backgrounds perceive that access to the University is possible for talented students, staff, and faculty from all groups.
- Therefore, the University of California renews its commitment to the full realization of its historic promise to recognize and nurture merit, talent, and achievement by supporting diversity and equal opportunity in its education, services, and administration, as well as research and creative activity.

The public health, economic, and social crises of COVID-19 have tested the University's ability to meet these goals. In addition to reviewing diversity and equity gains and gaps, this introduction includes student survey information about how the COVID-19 pandemic and the shift to remote learning impacted diverse university populations.

Findings

UC is making progress in several key areas related to diversity, equity, and inclusion. These include:

- Increases in the percentage of first-generation undergraduate enrollment and persistence.
- Increases in the percentage of underrepresented groups (URG)[1] graduate students for enrollment and persistence.
- Increases in the percentage of URG faculty.
- Increase in the percentage of URG staff at campuses/locations and University of California Health.

At the same time, there are challenges and areas in which progress needs to be made. These include:

- Enrollment rates are low for Hispanic/Latino(a) undergraduates compared to their admission rate.
- Undergraduate African American students are less likely than other ethnic groups to agree that they are respected on campus.
- African American and American Indian graduate and professional students are less likely than other students to feel that their culture is respected on campus.
- A graduation gap persists between URG undergraduates and White and Asian American undergraduates (presented in Chapter 3 of this report).
- The proportion of women and URG faculty is low, compared to availability pools in most disciplines (presented in Chapter 5).
- The proportion of URG faculty separations is greater than URG faculty hires (presented in Executive Summary).

[1] URG students include African American, American Indian, and Hispanic/Latino(a)

- Senior Management (SMG) ranks are lacking in racial/ethnic diversity, compared to entry-level and professional staff ranks at UC.

Evaluating diversity

UC evaluates its diversity outcomes in a variety of ways: current demographic characteristics and trends of its students, faculty, and staff; analysis of the academic pipeline from entry to exit; and survey data that reveal perceptions of campus climate, experiences of campus life, and remote learning during the COVID-19 pandemic.

Chapters 1 through 6 present an overview of trends for undergraduate, graduate academic and graduate professional students, faculty, and staff. This feeds into a holistic analysis of University diversity, equity, and inclusion outcomes using the demographic characteristics of race/ethnicity, gender, first-generation college-going status, and international student status.

Pipeline

UC diversity outcomes are also assessed by examining the various steps along the academic pipeline. In the undergraduate pipeline from high school graduation to the end of the first year at UC, about six in ten California public high school twelfth-graders come from historically underrepresented groups. However, only less than four in ten of these twelfth-graders who enrolled in UC and persisted past their first year came from underrepresented ethnic groups. This is a strong indication that UC is not retaining the diversity of its students enrolled from California public high schools equitably after the first-year college experience.

The University of California's multi-year framework — UC 2030 — focuses on expanding the pipeline to and within the University. For example, one part of eliminating timely graduation gaps for underrepresented groups is that a greater proportion will go on to graduate school, and one of the goals of growing graduate enrollment is to increase spaces for these students. UC's increasing diversity of doctoral students will expand the availability pool of potential faculty hires, supporting efforts to diversify the professoriate.

Surveying students about diversity on campus

This chapter presents responses to the UC Undergraduate Experience Survey (UCUES), administered every two years to all undergraduates. The University's goal is to have all its students feel respected on campus, regardless of race/ethnicity, nationality, religious affiliation, gender identity, gender expression, sexual orientation, or political beliefs.

UCUES data show most undergraduates feel students of their race/ethnicity are respected on campus, but the proportion of African American respondents sharing this perspective is lower than other groups. Among religious identifications, Muslim and Jewish students are less likely to feel respected. LGBTQ+ students are also less likely to feel respected, as are students identifying as politically conservative.

Impacts of COVID-19 on diverse student populations

Spring 2020 UCUES results showed 64 percent of undergraduates responding had high confidence (somewhat to very high) about using tools for remote learning, with slightly less confidence for first-generation, African American, and Hispanic/Latino(a) students. First-generation students from underrepresented populations were more likely to lack appropriate equipment and study spaces and to have greater family responsibilities due to COVID-19. With the COVID-19 pandemic, many students returned home. First-generation, Pell Grant recipients, and underrepresented students were less likely to have both adequate access to the internet and appropriate study space, making remote instruction a greater challenge when compared to peers. Thirty-five percent of all undergraduates were very concerned about having access to an appropriate study space, but it was at least ten points higher for first-generation, Pell Grant recipients, and underrepresented students.

UC campuses attempted to assess and meet the technology needs of students by providing laptops and internet hotspots. For example, UC Berkeley conducted a student technology survey to estimate the funds needed to purchase laptops in its Student Technology Equity Program (STEP). Other UC campuses used a range of outreach efforts — communications with deans and department chairs, student service and advising units, and prompts on campus learning management systems — to identify students who needed technology support.

Looking forward — diversity initiatives

UC has made considerable investments in 2020 and 2021 to diversify the faculty, staff, and student body. It has sustained support for programs that promote the recruitment and retention of underrepresented faculty populations; expanded implicit bias training opportunities for student leaders, faculty, staff, and senior administrators; enhanced university information systems and operational processes to more fully recognize historically underserved populations; and rolled out initiatives designed to transform specific campuses and locations to be anti-racist and Black-thriving places to work and learn.

Implicit bias trainings — The 2018 California Budget Act included a one-time appropriation of $1.2 million to contract out and implement an anti-bias training pilot program for administrators, faculty, staff, and student leaders at the campuses of the University of California and the California State University. The pilot program was branded Moving Beyond Bias, and it includes content on racial, gender, and religious bias. Regional trainings took place in Oakland, Sacramento, and Northridge. Due to the COVID-19 pandemic, further trainings and sessions were conducted virtually. The training module was customized and delivered to UC admissions officers and readers, the CSU Chancellor's Office, and the CSU Academic Senate. Two Moving Beyond Bias ecourses are currently under production, one version for a general staff audience and a second version for UC admissions officers and readers.

(new) **Anti-discrimination policy working group** – A systemwide workgroup consisting of policy subject matter experts and diversity, equity, and inclusion leaders was convened to advise on critical policy issues to support the development of a Presidential policy on discrimination and harassment that applies to all employees and students. The policy will address education and training, employment practices in hiring and retention, and prevention. The workgroup will develop procedures for implementation of policy at all UC locations to unify responses and ensure appropriate actions, in response to allegations of discrimination and harassment. The policy will undergo systemwide comment and review in fall 2022 with the intention of issuing the policy in summer 2023.

Anti-racism initiatives and resources — In the wake of the George Floyd murder, demand for anti-racism trainings, listening sessions, educational opportunities, resources, and commitments to institutional change increased dramatically across the UC system. Chief diversity officers and other diversity, equity, and inclusion professionals continue to be frontline responders, innovators, and leaders in this climate. A systemwide landing page of anti-racism trainings, webinars, healing sessions, and resources has been created (diversity.universityofcalifornia.edu), and continues to be refreshed and curated. The site also includes resources on anti-Asian racism and highlights long-term initiatives to address gaps in African American representation, outcomes and feelings of belonging and respect, such as UC Irvine's Black Thriving Initiative, UC Merced's Valuing Black Lives Initiative, and UC San Diego's Black Academic Excellence Initiative.

(new) **Minority serving institution** — The University is poised to be the leading exemplar of a research-intensive public university system that is also home to minority-serving institutions (MSI). With five undergraduate campuses already designated by the US Department of Education as Hispanic-Serving Institutions (HSI), four institutions recognized as Emerging HSIs, and two Asian American Native American Pacific Islander Serving Institutions (AANAPISI), the system is drawing upon its strengths in research, teaching, and service to propel the University forward as a minority-serving research institution. The successful model of the UC HispanicServing Institutions Initiative is being replicated to develop a similar initiative for AANAPISI status at more of the undergraduate campuses. The key for both of these initiatives is to move from *enrolling* to *serving,* which requires intentional and strategic planning to build a minority-thriving research university system that exceeds student outcomes for marginalized and underrepresented groups.

(new) **Tribal citizenship and affiliation** — Enhancements have been made to the undergraduate application to improve recognition of the tribal citizenship, affiliation, and diversity of Native American and Alaska Native applicants. Starting with the 2022 undergraduate application cycle, questions about tribal citizenship will be added to the citizenship and residency section of Apply UC, and additional disaggregated tribal affiliation options will be added to the demographic racial and ethnic section for federal reporting. The new changes, reflecting guidance provided by the President's Native American Advisory Council, enable the University to collect, report, and compare demographic data on Native American and Alaska Native populations within and across populations with greater nuance and attention to tribal affiliation and sovereignty.

(new) **UC Native American opportunity plan** – Staring with fall 2022, UC's Native American Opportunity Plan ensures that in-state systemwide Tuition and Student Services Fees are fully covered for California students who are also enrolled in federally recognized Native American, American Indian, and Alaska Native tribes. The plan applies to new and continuing undergraduate, graduate, and professional school students in state-funded degree programs who don't already qualify for financial aid that covers their tuition. The plan increases UC's affordability, advances student diversity and inclusive excellence, and acknowledges historical wrongs endured by Native Americans. The plan is increasing interest in the University among Native American communities. California's Native American tribes and other external organizations may provide scholarships to Native American students who are not members of a federally recognized tribe.

UC gender recognition and lived name policy — Following the 2019 passage of the Gender Recognition Act (California Senate Bill 179), the University drafted and passed the Gender Recognition and Lived Name Policy on November 17, 2020, which states that the University "must provide the minimum three equally recognized gender options on university-issued documents and IT Resource systems — woman, man and nonbinary — and an efficient process for current students and employees and UC alumni and affiliates to retroactively amend their gender designations and lived names on University-issued documents, including eligible academic documents, and in IT resource systems." The new change enables the University to collect and report demographic data and visualizations that compare outcomes for individuals whose genders are woman, man, and nonbinary.

Systemwide advisory workgroup on students with disability — In order to achieve equitable experiences for all students at UC and to address the increasing population of students with disabilities at the undergraduate, graduate, and professional student levels, a systemwide advisory workgroup focused on UC students with disabilities was formed in fall 2021 and will convene through 2023. A workgroup of dedicated subject matter experts, faculty, and students are responsible for a close examination of the current student experience and will make recommendations for the future culture and practices of UC in support of students with disabilities. Approximately seven percent of UC students identify as disabled. According to 2020–-21 data, the most frequent accommodation is psychological followed by learning disability.

UC community safety plan — After national unrest and movements for racial justice in 2020, UC convened a summit, inclusive of students, faculty, staff, and subject matter experts on UC's current and future campus safety practices. From the summit emerged a plan released in 2021 that represents a transformational change for UC toward a more data-driven, service-oriented, community-centric approach to campus safety. Under this new model, a multidisciplinary team of mental health professionals, campus police, social service providers, police accountability boards, and other personnel will work together to prioritize the well-being of the entire UC community. This reimagined structure will ensure that the most appropriate responders are deployed to meet community-specific needs with tailored care, resources, and services. The plan also puts in place important new measures to ensure accountability and transparency in how UC approaches campus safety. New advisory bodies that reflect UC's diverse campus communities will provide independent oversight. A centralized data dashboard will track the progress UC is making across the system, providing information needed to answer timely questions and continually improve. Real-time platforms will empower anyone to provide immediate feedback on interactions with campus safety staff.

President's Postdoctoral Fellowship Program (PPFP) — Established in 1984, the program recruits top scholars who are committed to underserved and minority communities to pursue faculty careers at UC. Between 2017–18 and 2021–22, 124 fellows were hired as UC ladder-rank faculty at all ten UC campuses. In addition, 21 fellows have been successfully recruited for UC faculty positions that will begin in 2022–23, with 13 others still under consideration. Through Presidential support, UC has increased the number of incentives available to departments that hire fellows and has expanded eligibility for hiring incentives to include the health sciences and professional schools. The program is nationally recognized and leads a partnership of top universities that participate in recruiting top postdoc talent.

Advancing Faculty Diversity (AFD) — The State of California awarded UC a total of $11.5 million in one-time funds for five fiscal years, from 2016–17 to 2019–20, and in 2021–22, to develop an innovative and focused program to increase faculty diversity at UC. The Advancing Faculty Diversity (AFD) program awards these funds on a competitive basis to campus units implementing new measurable interventions in the faculty recruitment process. Some of the successful interventions that correlate with hiring diverse faculty include the use of contributions to diversity statements early in the evaluation process; targeting potential faculty earlier in their careers through support for postdoctoral work; outreach by faculty to actively recruit candidates; revised evaluation practices, including the use of rubrics to guide decision-making; strong leadership and sustained and strategic involvement from unit leaders; mentoring programs targeted to support new faculty hires; introducing new voices, including students, in the recruitment and evaluation process; building of new faculty, equity, and inclusion data dashboards; research on and support for pathways to faculty leadership positions; and examinations of whether service loads differ by gender or race/ethnicity. In 2018–19, UCOP committed additional funds ($500,000) to initiate awards in support of improved academic climate and retention in selected pilots, and made a commitment of $3 million per year in ongoing funds to support additional projects in faculty recruitment and in improved climate and retention projects to create academic climates to support UC's diverse student body and meaningfully engage faculty throughout their UC careers. Since its inception, a total of fifty-five recruitment and improved

climate and retention projects have been funded through the competitive AFD program, with all ten campuses receiving at least one award. A May 2022 Regents item, linked below, provides additional details and context.

For More Information

Undergraduate admissions data: universityofcalifornia.edu/infocenter/admissions-residency-and-ethnicity

Graduate admissions data: universityofcalifornia.edu/infocenter/graduate-admissions

Fall enrollment at a glance: universityofcalifornia.edu/infocenter/fall-enrollment-glance

Degrees awarded data: universityofcalifornia.edu/infocenter/degrees-awarded-data

UCUES COVID-19 and remote learning dashboard: universityofcalifornia.edu/infocenter/ucues-covid-19

Moving Beyond Bias: movingbeyondbias.org/

Gender Recognition and Lived Name Policy: policy.ucop.edu/doc/2700693/GRLN

UC Anti-racism Resources: diversity.universityofcalifornia.edu/anti-racism-resources/

May 2022 Regents item on Advancing Faculty Diversity: regents.universityofcalifornia.edu/regmeet/may22/a3.pdf

UC freshman enrollees do not reflect the diversity of California's high school graduates.

7.1.1 Racial/ethnic distribution of the UC undergraduate pipeline
Universitywide
Fall 2020 new freshman cohort from California public high schools

	9th grade cohort	HS Grads (2019-20)	HS Grads w/ A-G (2019-20)	UC Apps (F'20)	UC Admits (F'20)	UC Enrollees (F'20)	UC 1-yr Persisters (F'21)
Other/Unknown (top)	3.1	3.2	3.5	2.2	2.4	2.5	2.2
Two or More Races	23.1	24.1	26.5	5.8	5.7	6.2	6.6
White				18.8	18.5	18.2	18.9
Pacific Islander	0.5	0.5	0.4	0.2	0.2	0.2	0.2
Asian	12.1	13.3	19.2	26.8	30.6	36.7	38.4
Hispanic/Latino(a)	54.1	52.7	45.4	42.7	39.8	33.7	31.3
African American	5.7	5.2	4.1	3.4	2.7	2.5	2.5

Legend (right side): Other/Unknown, Two or More Races, White, Pacific Islander, Asian, Hispanic/Latino(a), American Indian, African American

Source: California Department of Education, UC Data Warehouse

About six in ten California public high school 9th-graders are from historically underrepresented ethnic groups (American Indian, African American, Hispanic/Latino(a)). However, less than four in ten of these 12th-graders who enrolled in UC and persisted past their first year were from underrepresented ethnic groups. At almost every point of the eligibility and enrollment process, fewer students from underrepresented ethnic groups are included.

Gaps still exist between the share of high school graduates and the share of UC applicants, admits and new enrollees for African Americans and Hispanic/Latino(a).

7.1.2 Share of high school graduates, applicants, admits, and enrollees
Universitywide

African American Freshmen

Hispanic/Latino(a) Freshmen (NOTE SCALE)

— Share of HS grads

····· Share of applicants

---- Share of admits

— Share of new enrollees
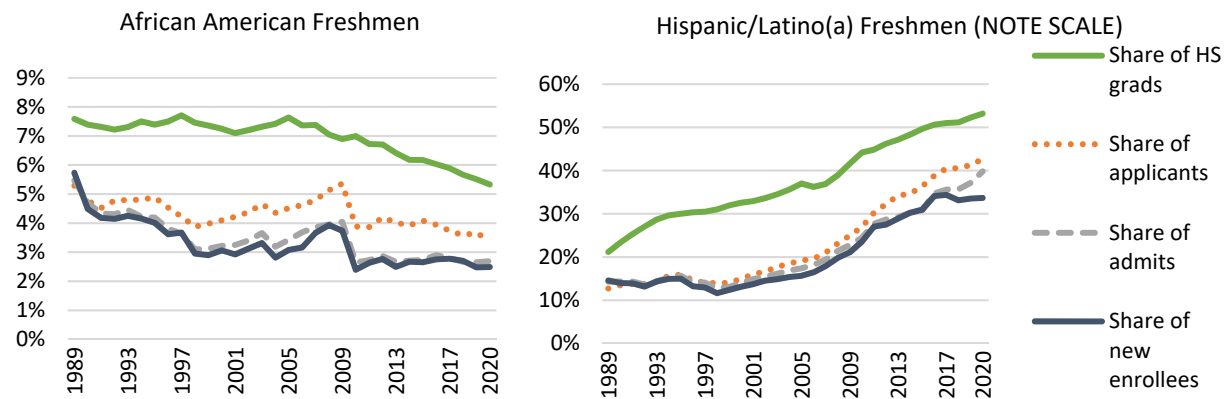
Source: UC Information Center Data Warehouse, California Department of Finance, and California Department of Education.

Gaps that still exist between the share of high school graduates and the share of UC applicants, admits, and new enrollees for some racial/ethnic groups. Over time, changes in admissions policy have affected these trends, such as:

- 1998 Proposition 209 prohibits use of race/ethnicity and gender;

- 2001 Eligibility in the Local Context (ELC) program starts;

- 2002 Regents policy on comprehensive review goes into effect;

- 2012 Implementation of Entitled to Review (ETR) policy, elimination of SAT II requirement, and ELC expanded from top four percent to top nine percent.

Gaps still exist between the share of transfer-ready California community college students and the share of UC applicants, admits, and new enrollees for African Americans and Hispanic/Latino(a).

7.1.3   Share of transfer-ready students at California community college student applicants, admits, and enrollees
Universitywide
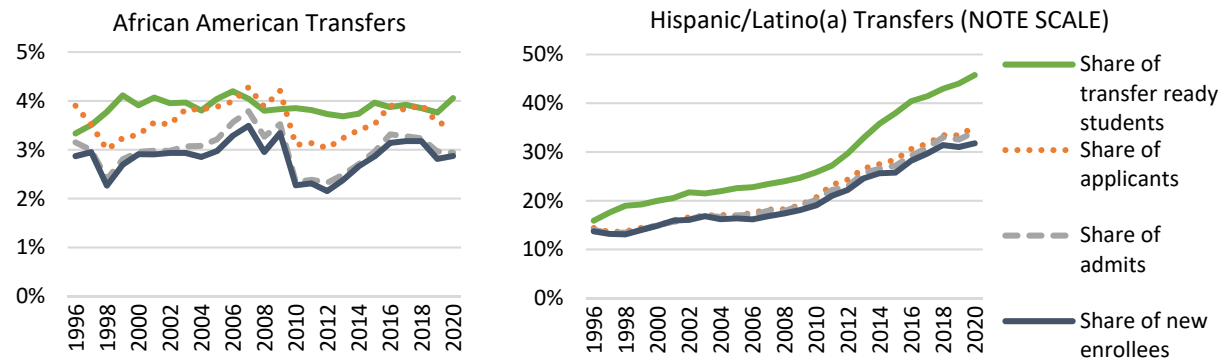
Source: UC Information Center Data Warehouse and California Community Colleges Chancellor's Office

Gaps that still exist between the share of transfer-ready CA community college students and the share of UC transfer applicants, admits, and new enrollees for some racial/ethnic groups. Over time, changes in admissions policy have affected these trends, such as:

- 1998 Proposition 209 prohibits use of race/ethnicity and gender;

- 2002 Regents policy on comprehensive review goes into effect;

Transfer-ready students are those who have successfully completed a transferable English and a transferable math course and have earned 60+ transferable units with a 2.00+ GPA. These data reflect the number of students who reach this status each year.

UC academic doctoral programs are a strong draw for international students who did not earn their bachelor's degree in the United States.

7.2.1 Racial/ethnic distribution of US BA/BS degree recipients from US and UC institutions compared to UC doctoral applicants, admits, and enrollees
Universitywide
2019–20
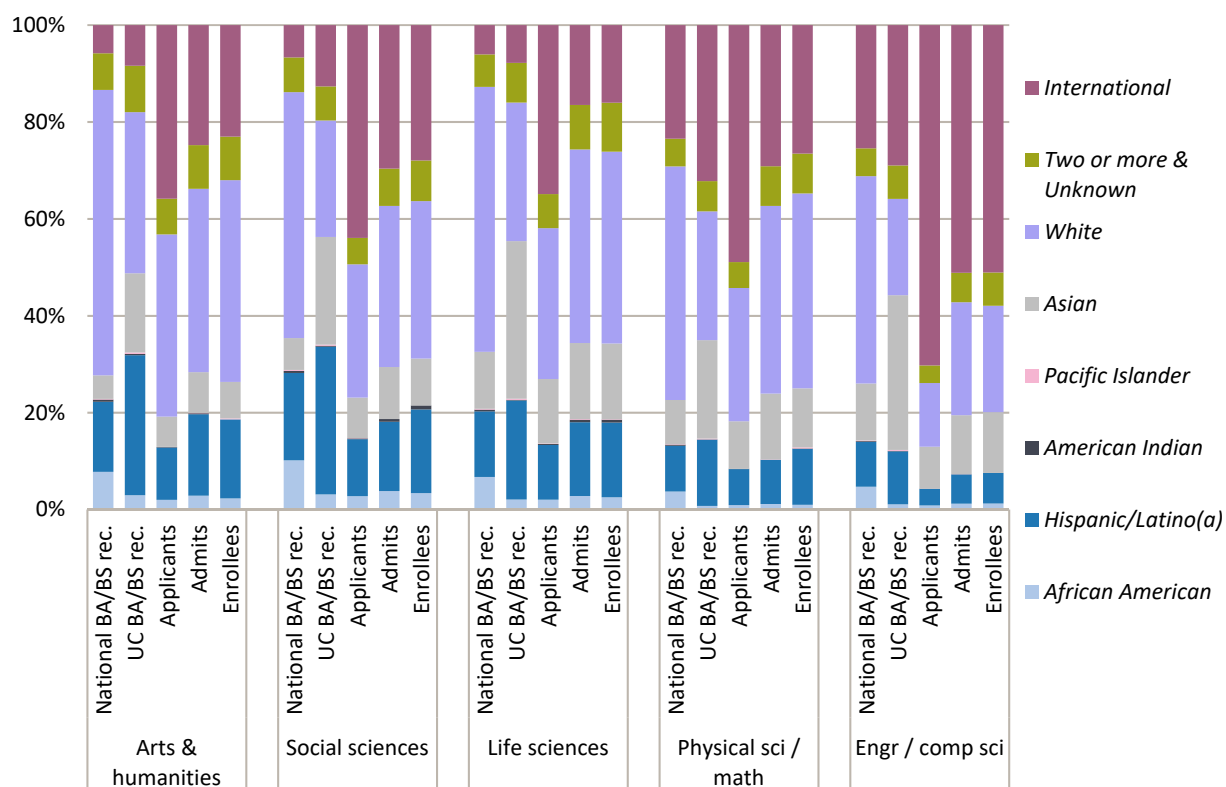
Sources: Integrated Postsecondary Educational Data System; UC Information Center Data Warehouse

UC's graduate programs draw students from across the nation and around the world, including its own undergraduate students, who make up about one-tenth of UC's graduate students. As a result, UC's efforts to diversify its undergraduate students also help to diversify its graduate academic population.

Because recent Ph.D. recipients create the talent pool for new faculty, a critical means for increasing the diversity of the faculty is to increase the diversity of doctoral degree recipients.

In graduate academic doctoral programs, UC is approaching parity with the gender diversity of U.S. institutions, in most fields.

7.2.2   Gender distribution of US BA/BS degree recipients from US and UC institutions compared to UC doctoral applicants, admits, and enrollees
Universitywide
2019–20
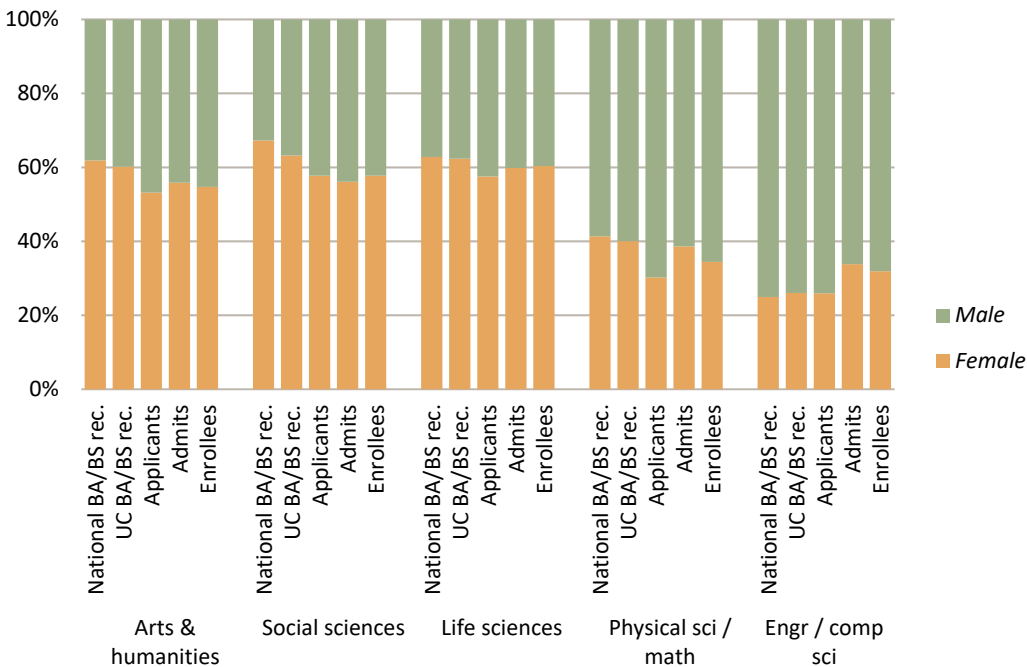
Sources: Integrated Postsecondary Educational Data System; UC Information Center Data Warehouse

Female students make up less than half of U.S. Bachelor's degree recipients and UC doctoral students in Physical Sciences and Engineering & Computer Science. At the graduate level, female representation among UC doctoral enrollees from U.S. colleges and universities is within five percentage points of the female representation among all U.S. Bachelor's degree recipients in all fields except Engineering & Computer Science, where the representation of women is actually higher than that of U.S. Bachelor degree recipients.

African American and American Indian graduate and professional students are less likely than other students to feel that their culture is respected on campus.

7.2.3 Response to "I feel included by my peers"
Universitywide and UC campuses
Spring 2021
Percent who agree or strongly agree

	Berkeley	Davis	Irvine	Los Angeles	Merced	Riverside	San Diego	San Francisco	Santa Barbara	Santa Cruz	Systemwide
African American	66%	66%	64%	64%	71%	66%	83%	67%	44%	68%	65%
American Indian	72%	61%	50%	63%	100%	50%	100%	33%	33%	71%	61%
Hispanic/Latino(a)	69%	70%	62%	64%	67%	62%	71%	63%	42%	63%	65%
Asian/Pacific Islander	72%	74%	67%	70%	68%	69%	65%	74%	67%	77%	71%
White	69%	74%	70%	69%	62%	68%	70%	74%	63%	69%	69%
International	71%	74%	67%	74%	72%	67%	71%	60%	57%	71%	70%

The other choices provided were "somewhat agree, somewhat disagree, disagree, and strongly disagree."
Source: UC Graduate Student Experience Survey

7.2.4 Response to "My culture is respected by my peers"
Universitywide and UC campuses
Spring 2021
Percent who agree or strongly agree

	Berkeley	Davis	Irvine	Los Angeles	Merced	Riverside	San Diego	San Francisco	Santa Barbara	Santa Cruz	Systemwide
African American	68%	70%	70%	74%	86%	77%	83%	71%	63%	74%	72%
American Indian	80%	74%	100%	75%	100%	65%	100%	67%	67%	43%	72%
Hispanic/Latino(a)	76%	83%	75%	76%	74%	84%	79%	69%	68%	73%	77%
Asian/Pacific Islander	82%	85%	77%	81%	73%	81%	78%	85%	78%	81%	81%
White	84%	88%	84%	83%	76%	77%	86%	88%	80%	88%	84%
International	81%	84%	79%	84%	83%	80%	83%	80%	69%	78%	81%

The other choices provided were "somewhat agree, somewhat disagree, disagree, and strongly disagree."
Source: UC Graduate Student Experience Survey

The University of California Graduate Student Experience Survey (UCGSES) is a systemwide survey that offers valuable insight about population-based experiences of respect and belonging. The survey was administered for the first time in Spring 2021.

The complete data tables for UCGSES are available at the UC Information Center: universityofcalifornia.edu/about-us/information-center/UCGSES-data-tables

American Indian, African American, and Hispanic/Latino(a) graduate and professional students report that members of their racial and ethnic group are less likely to feel included by their peers compared to other racial and ethnic groups. In addition, African American and American Indian graduate and professional students report that they are less likely to feel as if they are respected by their peers compared to other racial and ethnic groups at the University.

Undergraduates have the highest proportion of underrepresented students. Faculty are less diverse overall.

7.3.1 Racial/ethnic distribution of students and faculty, domestic population only
Universitywide
Selected years, fall 2012 to 2021
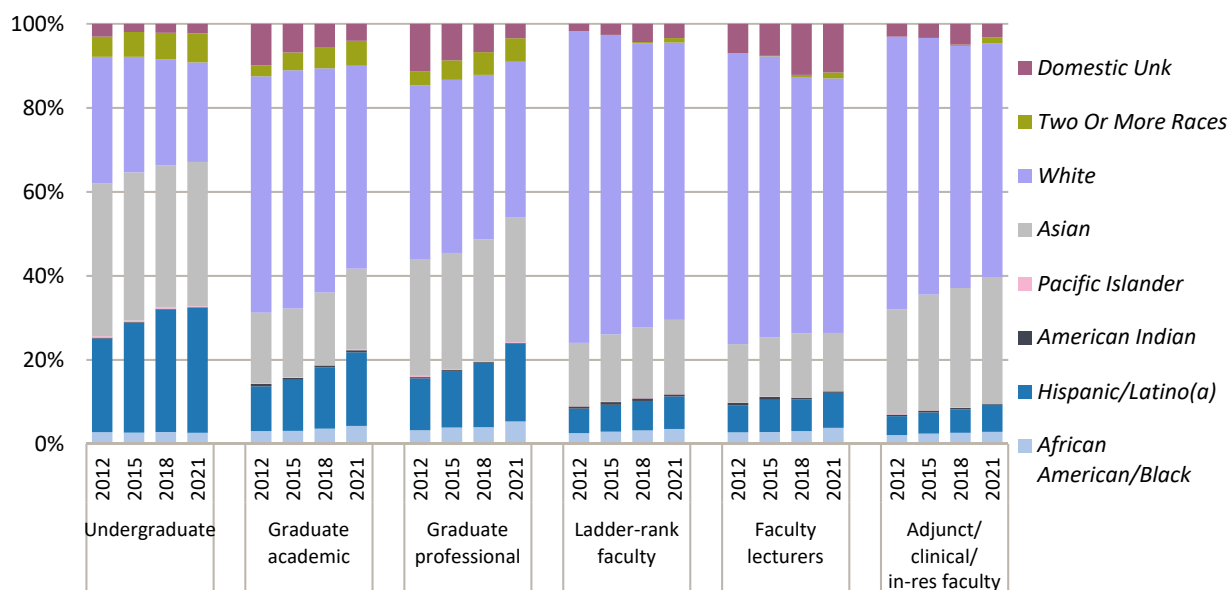
Source: UC Information Center Data Warehouse. Undergraduates include approximately 300 postbaccalaureate teaching credential students. Only includes U.S. citizens and permanent residents.

International students and faculty are excluded from the graph above for comparability purposes. Hispanic/Latino(a) share of the population has risen for all groups. The African American share of the population has been flat for undergraduates, but has grown among graduate students and faculty.

Graduate students, both academic and professional, are more likely to be White. This is also true for faculty.

Information on availabilities compared to hires by discipline group is presented in Chapter 5.

African American undergraduate students are less likely than other students to feel that students of their race/ethnicity are respected on their campus.

7.4.1 Response to "Students of my race/ethnicity are respected on this campus"
Universitywide and UC campuses
Spring 2020
Percent who agree or strongly agree

	Berkeley	Davis	Irvine	Los Angeles	Merced	Riverside	San Diego	Santa Barbara	Santa Cruz	Grand Total
African American	20%	38%	25%	22%	36%	36%	22%	26%	24%	28%
Hispanic/Latino(a)	38%	58%	55%	43%	77%	70%	46%	50%	48%	55%
Native American	57%	72%	67%	63%	56%	69%	65%	78%	58%	66%
Asian/Pac Isl	64%	66%	66%	63%	68%	69%	57%	50%	54%	63%
White	76%	82%	71%	82%	67%	70%	75%	83%	78%	78%
International	61%	57%	58%	53%	67%	60%	54%	52%	55%	57%

The other choices provided were "somewhat agree, somewhat disagree, disagree, and strongly disagree."
Source: UCUES. Caution should be exercised in interpretation of the Native American group due to small cell sizes. Pacific Islander will be separated from Asian in the reporting of the next UCUES survey.

7.4.2 Response to "I feel I belong at this university"
Universitywide and UC campuses
Spring 2020
Percent who agree or strongly agree

	Berkeley	Davis	Irvine	Los Angeles	Merced	Riverside	San Diego	Santa Barbara	Santa Cruz	Grand Total
African American	42%	49%	40%	48%	43%	47%	26%	43%	38%	42%
Hispanic/Latino(a)	45%	55%	52%	50%	63%	58%	41%	55%	47%	52%
Native American	52%	64%	33%	63%	56%	62%	40%	59%	42%	52%
Asian/Pac Isl	51%	55%	50%	56%	50%	46%	40%	52%	43%	49%
White	60%	64%	55%	65%	55%	53%	49%	68%	52%	59%
International	55%	54%	53%	53%	73%	56%	47%	52%	51%	54%

The other choices provided were "somewhat agree, somewhat disagree, disagree, and strongly disagree."
Source: UCUES. Caution should be exercised in interpretation of the Native American group due to small cell sizes. Pacific Islander will be separated from Asian in the reporting of the next UCUES survey.

The University of California Undergraduate Experience Survey (UCUES) offers insight into population-based experiences of respect and belonging.

African American students report that members of their racial and ethnic group are less likely to be respected on campus compared to other racial and ethnic groups, and this outcome is consistent across all UC campuses. Overall, African American students report that they are less likely to feel as if they belong at the University.

Undergraduate students vary widely in whether they feel their religious beliefs are respected.

7.4.3   Response to "Students of my religious beliefs are respected on this campus"
Universitywide
Spring 2020
Percent who agree or strongly agree
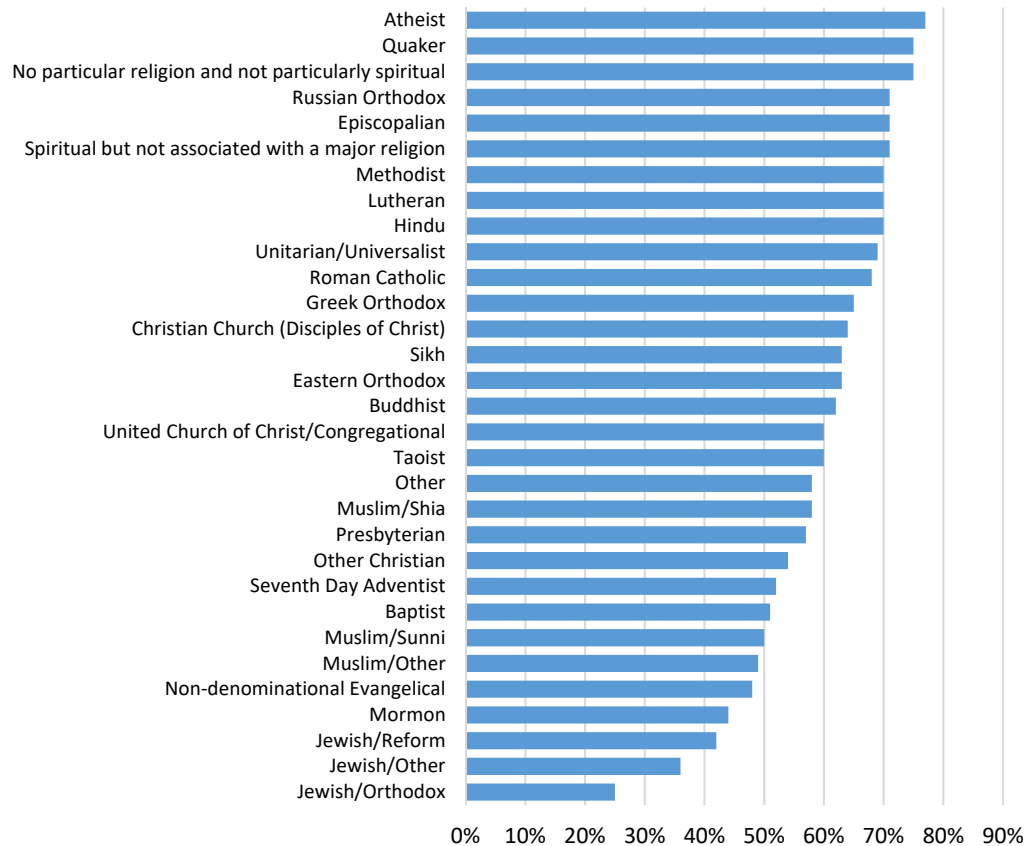
The other choices provided were "somewhat agree, somewhat disagree, disagree, and strongly disagree."
Source: UCUES

UC undergraduate students represent a diverse range of religions, sects, and faith traditions, including atheism. However, less than 50 percent of students who self-identify with Muslim and Jewish traditions report that their religious beliefs are respected on campus. Less than 50 percent of Non-denominational Evangelical Christians and Mormons also reported their religious beliefs are respected on campus.

Undergraduates who identify as LGBQ are less likely to feel respected on campus than those who do not.

7.4.4   Response to "Students of my sexual orientation are respected on this campus," Universitywide, Spring 2020
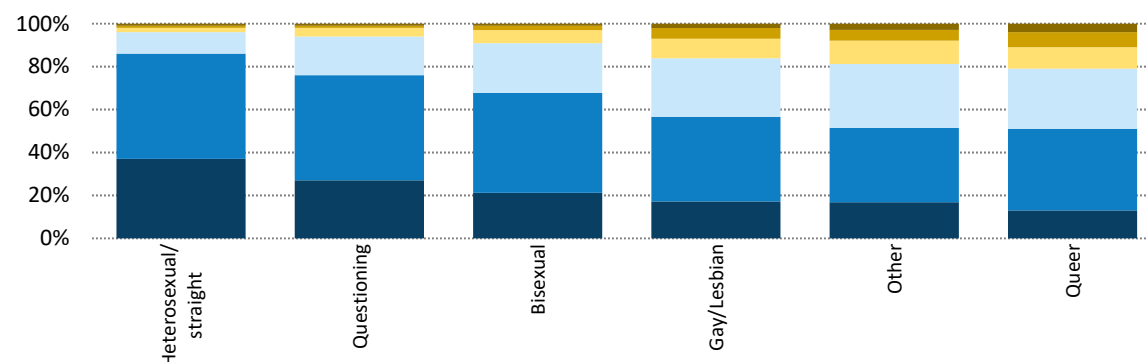
7.4.5   Response to "Students of my sexual orientation are respected on this campus," by race/ethnicity
Students who agree or strongly agree, Universitywide, Spring 2020

	Heterosexual/ straight	Questioning	Bisexual	Gay/lesbian	Other	Queer	Grand Total
African American	86%	65%	56%	49%	46%	48%	78%
Hispanic/Latino(a)	87%	74%	64%	53%	49%	49%	81%
Native American	88%	75%	73%	57%	42%	64%	81%
Asian/Pac Isl	86%	76%	66%	58%	49%	48%	82%
White	90%	83%	71%	60%	60%	58%	84%
Unknown	85%	69%	70%	55%	54%	46%	81%
International	82%	69%	72%	62%	49%	50%	80%

7.4.6   Response to "I feel that I belong at this university," by sexual orientation, percent who agree or strongly agree, Spring 2020

	Berkeley	Davis	Irvine	Los Angeles	Merced	Riverside	San Diego	Santa Barbara	Santa Cruz	Grand Total
Heterosexual/ straight	54%	59%	52%	59%	61%	52%	44%	59%	47%	54%
Gay/lesbian	51%	57%	54%	55%	57%	56%	46%	54%	50%	53%
Bisexual	51%	51%	46%	52%	52%	51%	37%	53%	50%	49%
Queer	42%	55%	32%	40%	60%	50%	33%	38%	44%	43%
Questioning	42%	44%	45%	43%	51%	44%	37%	51%	50%	44%
Other	39%	56%	41%	45%	44%	50%	35%	38%	35%	43%

The other choices provided were "somewhat agree, somewhat disagree, disagree, and strongly disagree." Source: UCUES. Caution should be used in interpretation of Native American, queer, questioning and "other" groups due to small cell sizes. Source: UCUES. Gender identity by race/ethnicity is not shown due to small cell sizes and lack of response.

Undergraduate students questioning their sexual orientation and students who self-identify as bisexual, gay, lesbian, other, and queer are less likely to feel respected than their peers who self-identify as heterosexual and straight. When race and ethnicity are added, African American LGBQ students are less likely to feel respected.

Counts and shares by sexual orientation are available on the Campus Climate tab of universityofcalifornia.edu/infocenter/ucues-data-tables-2020

Undergraduates who identify as other than male or female are less likely to feel respected on campus than those who do not.

7.4.7   Response to "Students of my gender are respected on this campus," Spring 2020
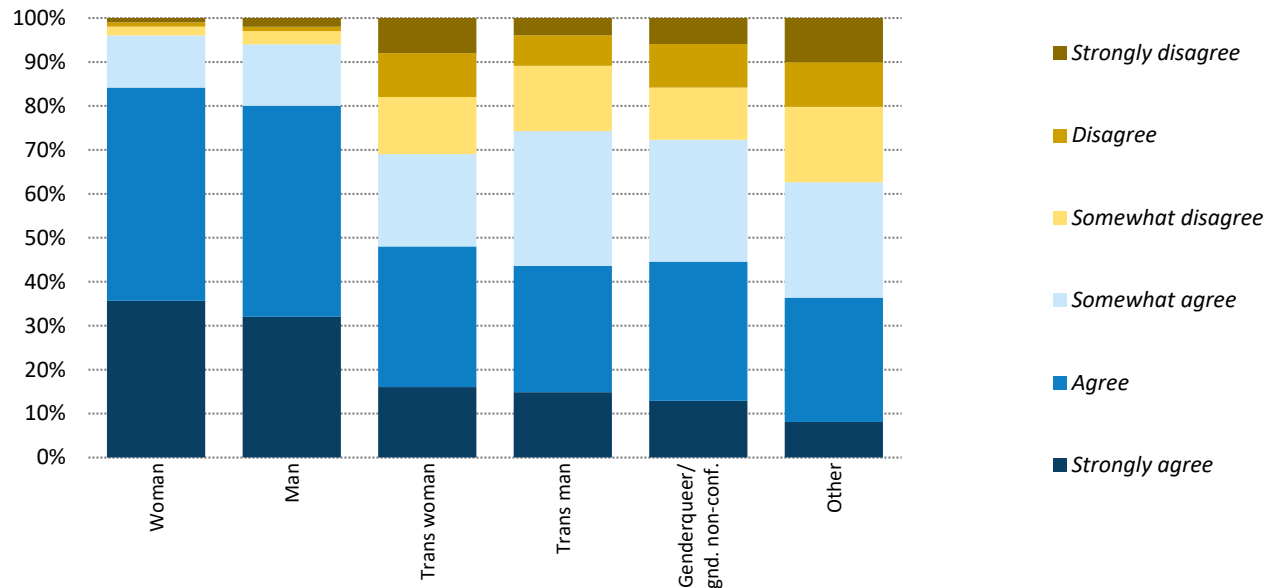
Source: UCUES

In terms of UC's diverse gender communities, transwomen, transmen, gender queer, gender non-conforming and students that identify with another gender not listed are less likely to feel respected than their peers who are women and men. For this year's report, the gender data cannot be further disaggregated by race and ethnicity due to the limited number of individuals across racial and ethnic groups indicating that they are transgender, gender queer, and gender non-conforming.

Counts and shares by gender are available on the Campus Climate tab of: universityofcalifornia.edu/infocenter/ucues-data-tables-2020

Very conservative undergraduates are less likely to feel that students of their political views are respected on campus than those with liberal or moderate political opinions.

7.4.8 Response to "Students of my political beliefs are respected on this campus,"
Universitywide
Spring 2020
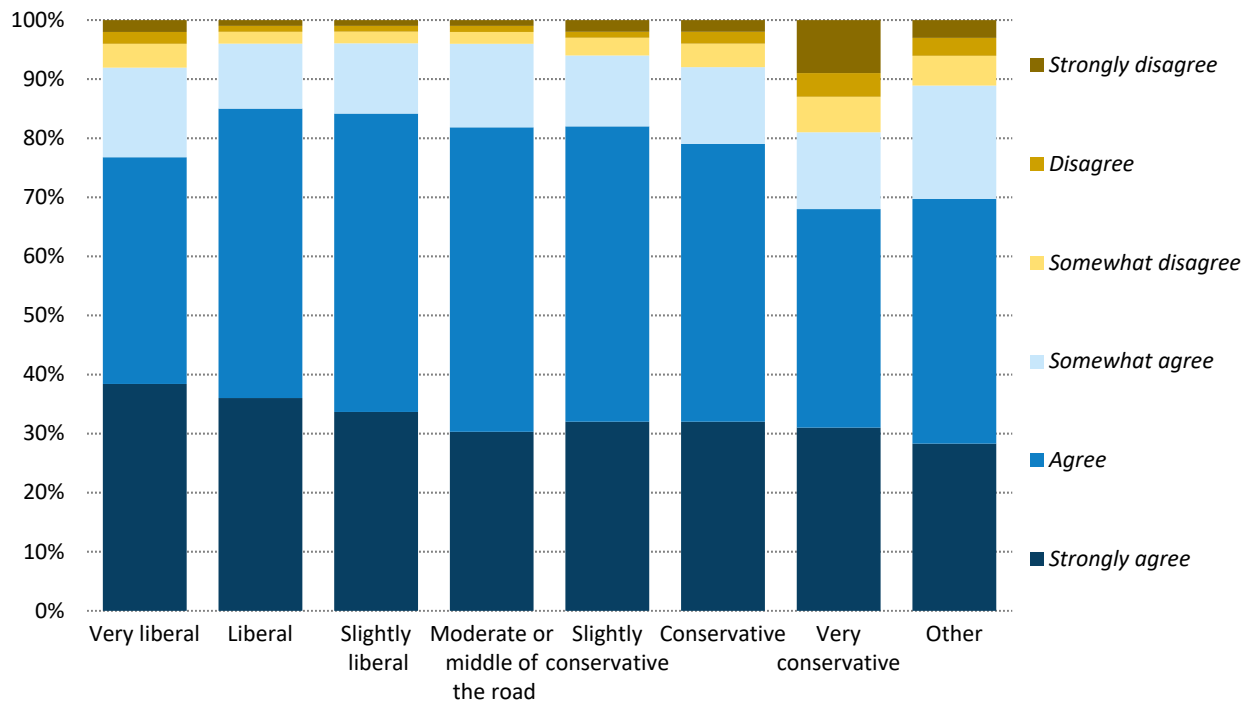
Source: UCUES

Data of counts and shares by political orientation are
available on the last tab of:

universityofcalifornia.edu/infocenter/ucues-data-tables-
2020.

Teaching and Learning

Academic departments in ecology, evolution, and conservation biology are increasingly aware of the need to address longstanding barriers and challenges faced by Black, Indigenous, and People of Color (BIPOC) in these disciplines. A diverse group of faculty, staff, and students in the Department of Ecology and Evolutionary Biology (EEB) at UC Santa Cruz has now compiled a set of tools and strategies which departments can use to address shortcomings in equity and inclusion.

Published August 9 in *Nature Ecology & Evolution*, the recommendations are based on a review of the literature in an effort to identify evidence-based interventions for fostering anti-racism in the classroom, within research labs, and department-wide. "There's nothing novel in our recommendations. These are empirically-based approaches developed by people who study these issues, and we've put them all in one place and tailored them for the disciplines of ecology, evolution, and conservation biology," said first author Melissa Cronin, a Ph.D. candidate in ecology and evolutionary biology at UCSC. Cronin said she and senior author Erika Zavaleta, professor of ecology and evolutionary biology, saw a growing need for an easily accessible set of resources to help departments wanting to address historic and current inequities in their fields.

Cronin and Zavaleta recruited a diverse group of students, faculty, and staff within their department to work on the paper, which has 26 coauthors. "It was a really positive and constructive experience for our department to work together on this paper," Cronin said. "And we built on this incredibly rich tradition of scholarship at UC Santa Cruz in critical race studies, a field which historically has not always intersected with the STEM fields."

TEACHING AND LEARNING

Overview

The University of California provides its students with a rich learning environment created by faculty engaged in both teaching and academic research. Student learning at UC involves classes, seminars, and lab sections enhanced by collaboration with faculty and researchers. Through these activities, faculty and students engage in a learning process that helps develop critical thinking, communication, and problem-solving skills, as well as discipline-specific knowledge.

Educating students and the public

UC's faculty are principally responsible for maintaining UC's academic excellence and promoting student success. Student retention, graduation rates, and measures of effectiveness are presented in Chapter 3. This chapter focuses on the learning experience of UC's undergraduate and graduate students, reporting what skills they have learned, their engagement with faculty and their peers, and satisfaction with their UC experience. A majority of both undergraduate and graduate students report improvement in academic skills. This chapter also reports on the composition and workload of instructional staff across different academic disciplines and professional programs.

Expanding learning opportunities beyond students on campus demonstrates the connection between the teaching and the public service missions of the University. UC Extension offers adult professional and continuing education programs to Californians and people around the world, enrolling hundreds of thousands of Californians in its programs each year.

Promoting educational effectiveness

UC is committed to continuous improvement of instruction and employs a range of pedagogical and assessment strategies to enhance and support student learning. Campuses offer pedagogical development and training for faculty and teaching assistants to promote the use of evidence-based teaching practices and improve the quality of teaching and learning. UC's teaching and learning centers and offices of instructional development train hundreds of instructors each year, improving the quality of education for students in all disciplines across all ten campuses.

UC promotes educational effectiveness by supporting assessment of student learning. Assessment strategies include the development of program-level student learning outcomes and integration of evidence of student learning into academic program reviews. Programs across UC are undertaking curriculum redesign and improvement as a result of assessment work. Much of this aligns with the expectations of regional accrediting agencies, in particular the WASC Senior College and University Commission (WSCUC). As part of WSCUC accreditation, UC campuses assess five main core competencies of student learning: writing, oral communication, quantitative reasoning, information literacy, and critical thinking. Each UC campus posts its WSCUC accreditation reports online.

Innovative instructional offerings

UC faculty develop and teach an ever-expanding catalog of online courses and programs, expanding learning opportunities for UC and non-UC undergraduates, graduates, and professional students. Through the UC cross-campus enrollment system, UC provides undergraduates access to high-demand courses offered at other UC campuses, increasing flexibility and opportunities for degree completion.

For non-UC students considering matriculation at a four-year university or resuming their studies, UC offers for-credit online courses that may transfer to other colleges and universities. UC Online provides courses that span a wide range of disciplines. UC Extension offers online continuing education courses, professional certificates, and post-baccalaureate programs for those seeking to advance their education and to enhance their professional skills.

In addition to online courses, UC leverages instructional technologies to enhance instruction and promote success. UC continues to develop and refine hybrid courses using multimedia resources, videos, podcasts, e-books, and other technology-based tools. UC follows best instructional practices to embed innovative technologies into course design and focuses on creating online and face-to-face learning experiences that encourage collaboration and maximize faculty-student and peer-to-peer interactions. Increasingly, UC courses utilize a flipped model of instruction, where lectures and other traditional classroom content are provided online, and classroom time is dedicated to group discussions, problem-solving activities, and other experiential exercises.

Ongoing assessment and data-driven approaches to teaching and learning are integral parts of UC's use of technology. Several UC campuses have adopted assessment systems that use online conceptual models and adaptive learning tools to determine students' knowledge quickly and accurately. Based on responses to questions, the software determines concepts or topics where each student needs to focus. Assessment and LEarning in Knowledge Spaces (ALEKS) uses web-based adaptive tools to provide students with individualized feedback and learning pathways in entry-level math and chemistry courses. As part of the 2015 state budget framework agreement, three UC campuses engaged in a pilot study of the impact of adaptive learning technologies on student success and as a mechanism to strengthen instruction. The primary finding of the study was that when students use adaptive learning technology as intended, results are positive in relation to a student's overall performance in the course to which it is applied.

UC is enhancing student learning opportunities and success by expanding summer course offerings (in-person and online) to reduce students' time to degree and enrich their academic experience. Offering bridge experiences and orientation during summer also helps incoming students transition to campus life and prepare them for the rigorous courses at the undergraduate level.

The impact and lessons of the pandemic

As a result of the COVID-19 pandemic, UC campuses shifted almost all of Spring 2020 courses to remote instruction and most courses remained remote during the academic year 2020–21. Faculty and staff did an historic and commendable job adapting almost all courses to remote in a matter of days or weeks. Campuses ramped up efforts to provide students the necessary technology, along with academic and counseling support to help students succeed in this environment. UC has been collecting and will continue to collect data and research about learning outcomes during this period. Among the most significant impacts of remote instruction is that students, on average, increased the number of units they were taking per term and enrollment in summer session increased dramatically.

To keep the University community informed of the impact of the pandemic on instruction, a series of Regents items were presented with the most up-to-date information that was available at the time of presentation. In addition, remote instruction provided the opportunity for Regents' presentations that focused more generally on best practices available within the University to improve pedagogy and student success with the goal of reducing equity gaps in learning. Here is a listing of relevant Regents' items from the past two years

> *Update of Covid-19 Impact on the University of California: Academic and Student Issues*, May 20, 2020, regents.universityofcalifornia.edu/regmeet/may20/a1.pdf

> *Planning and Evaluation of Covid-19 Academic and Student Impacts*, September 16, 2020, regents.universityofcalifornia.edu/regmeet/sept20/a1.pdf

Twenty-First Century Skill Development for University of California Students, November 18, 2020, regents.universityofcalifornia.edu/regmeet/nov20/a1.pdf

The Future of Instruction: Designing Equitable Classrooms and Technology-Enhanced Learning at the University of California, January 20, 2021, regents.universityofcalifornia.edu/regmeet/jan21/a4.pdf

Using Curricular Innovations and Enhancements to Address Equity Gaps, March 17, 2021, regents.universityofcalifornia.edu/regmeet/mar21/a1.pdf

Fulfilling the Academic Mission: Academic Senate Survey of UC Faculty and Instructors About Their Experiences During the Pandemic, March 2020 to May 2021, July 21, 2021 regents.universityofcalifornia.edu/regmeet/july21/a1.pdf

Instruction and Research at the University of California: COVID-19 Impact and Plans for Fall 2021, July 21, 2021 regents.universityofcalifornia.edu/regmeet/july21/a2.pdf

Discussion Innovations in Assessment and Grading at the University of California, March 16, 2022 regents.universityofcalifornia.edu/regmeet/mar22/a3.pdf

Discussion Academic Integrity at the University of California, March 16, 2022 regents.universityofcalifornia.edu/regmeet/mar22/a4.pdf

This dashboard includes the results of UC Undergraduate Experience Survey (UCUES) questions that were specific to remote instruction and other accommodations due to the pandemic: universityofcalifornia.edu/infocenter/ucues-covid-19.

This dashboard has pandemic-specific questions from the UC Graduate Student Experience Survey: universityofcalifornia.edu/about-us/information-center/UCGSES-COVID-19-survey

For more information

Campus websites: universityofcalifornia.edu/uc-system/parts-of-uc

Summer enrollment: universityofcalifornia.edu/infocenter/summer-enrollment

UC Education Abroad Program: universityofcalifornia.edu/infocenter/uc-eap

Undergraduate research experiences: universityofcalifornia.edu/infocenter/uc-undergraduate-student-research

Adaptive Learning Technology Pilot Report: ucop.edu/institutional-research-academic-planning/_files/BFI-Adaptive-Learning-Technology-Report.pdf

UC undergraduates experienced significant improvement between their freshman and senior years in multiple areas, including reading and comprehension, critical thinking, research competency, and understanding of their chosen field of study.

8.1.1   Self-reported skill levels from first year to senior year
Seniors who entered as freshmen
Universitywide, Spring 2020

■ *Excellent*   ■ *Very good*   ■ *Good*   ■ *Fair*   ■ *Poor*   ■ *Very poor*
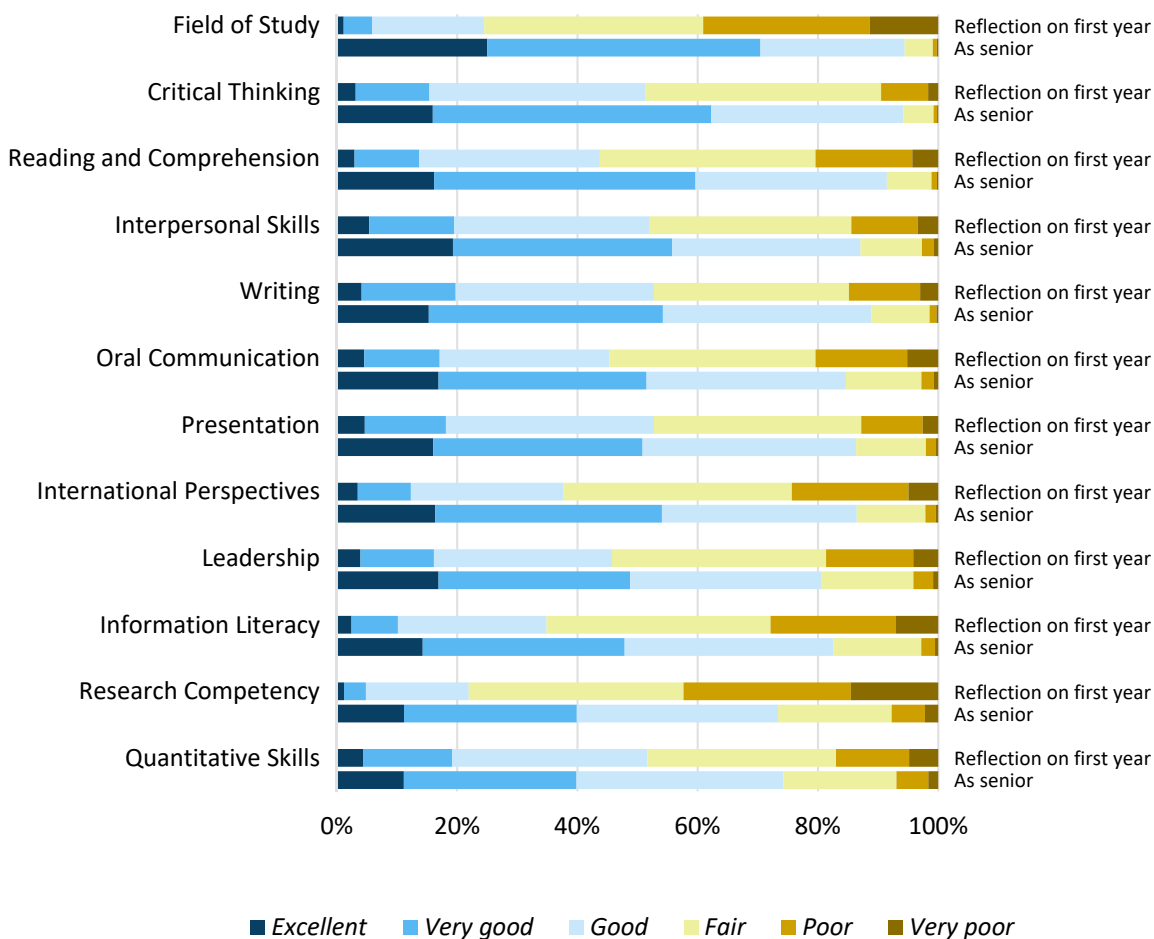
Source: UCUES

The University of California Undergraduate Experience Survey (UCUES), which is conducted every two years, provides a valuable source of information on how UC undergraduates view their educational experience. These indicators also show students' perception of how much they have developed core competencies of student learning. In UCUES, students are asked to reflect on their skill levels between their freshman and senior years. During this period, UC students self-reported significant improvements in all areas, including reading and comprehension, critical thinking, research competency, understanding international perspectives, and understanding of their chosen field of study.

Research participation is high among UC's seniors across racial/ethnic and gender groups. Seventy percent of students completed research as part of their coursework and one-third assisted faculty in research.

8.1.2   Students completing a research project or research paper as part of their coursework
Universitywide seniors
Spring 2020
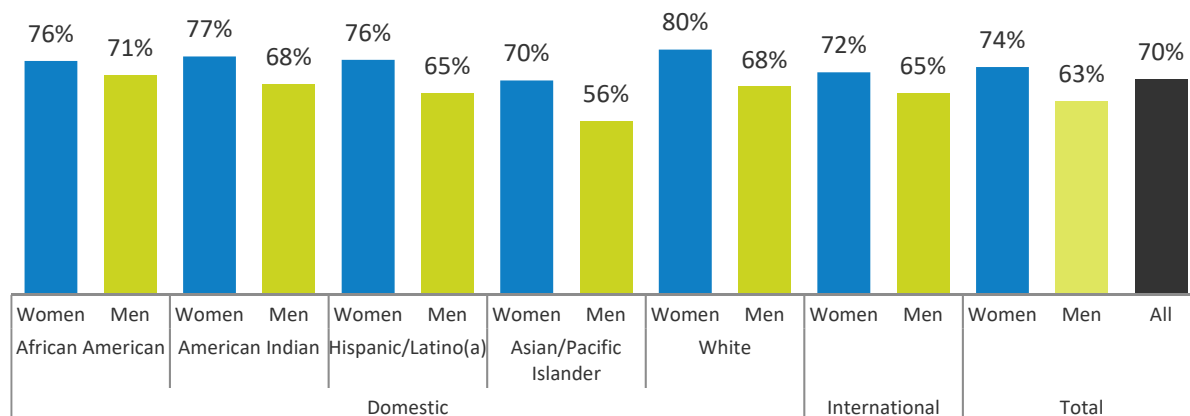
Source: UCUES

8.1.3   Students assisting faculty in conducting research
Universitywide seniors
Spring 2020
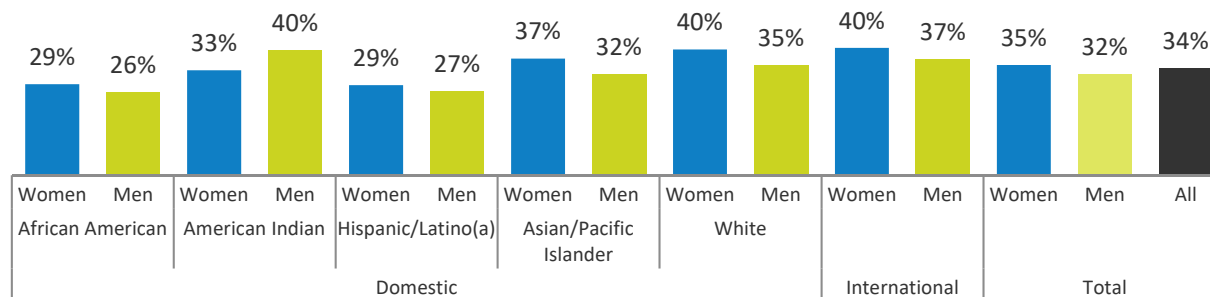
Source: UCUES

One of the benefits of attending an academic research university is the opportunity for undergraduates to conduct research, both through class research projects and by assisting faculty with their research. Overall, a high percentage of undergraduates reported that they participated in research. Women were more likely than men to indicate research coursework and participation.

Engagement varies by discipline, with Arts and Humanities showing higher levels of engagement.

8.1.4 Student responses to questions about areas of engagement
Universitywide
Spring 2020

During this academic year, how often have you contributed to a class discussion?
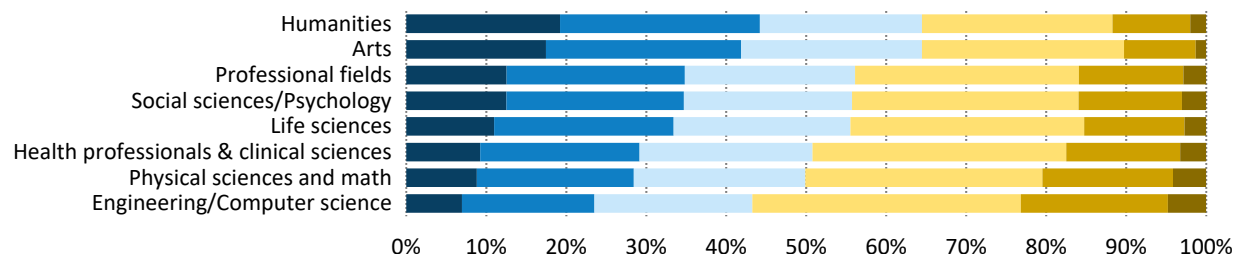
During this academic year, how often have you found a course so interesting that you did more work than was required?
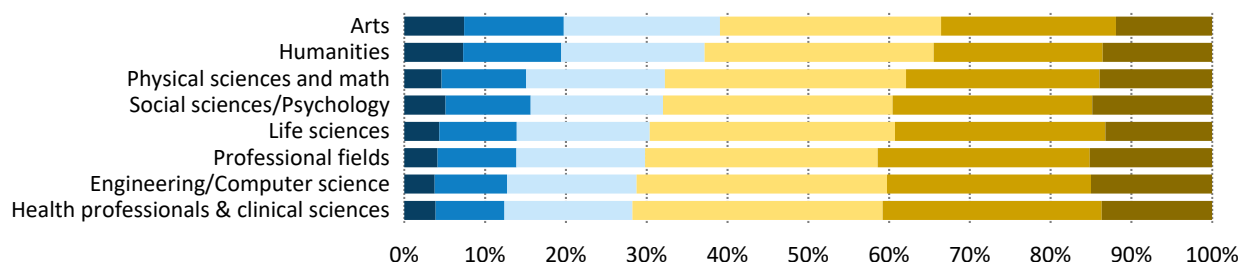
During this academic year, how often have you worked with a faculty member on an activity other than coursework?

■ Very Often ■ Often ☐ Somewhat Often ☐ Occasionally ■ Rarely ■ Never
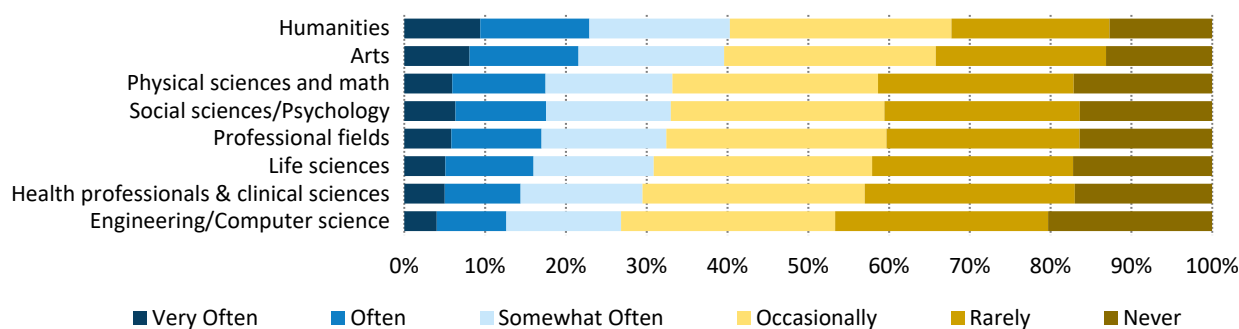
Source: UCUES

More than half of students reported that they contributed to class discussions at least somewhat often, and more than one-third at least somewhat often went beyond required coursework in a class they found interesting. Forty-one percent worked with a faculty member on an activity other than coursework, such as research or creative projects, at least once.

For the UC system overall and for most campuses, the percent of students who were satisfied (somewhat through very satisfied) has remained as high as about 80 percent.

8.1.5   Student satisfaction with overall academic experience
Universitywide and UC campuses
Spring 2012 to 2020
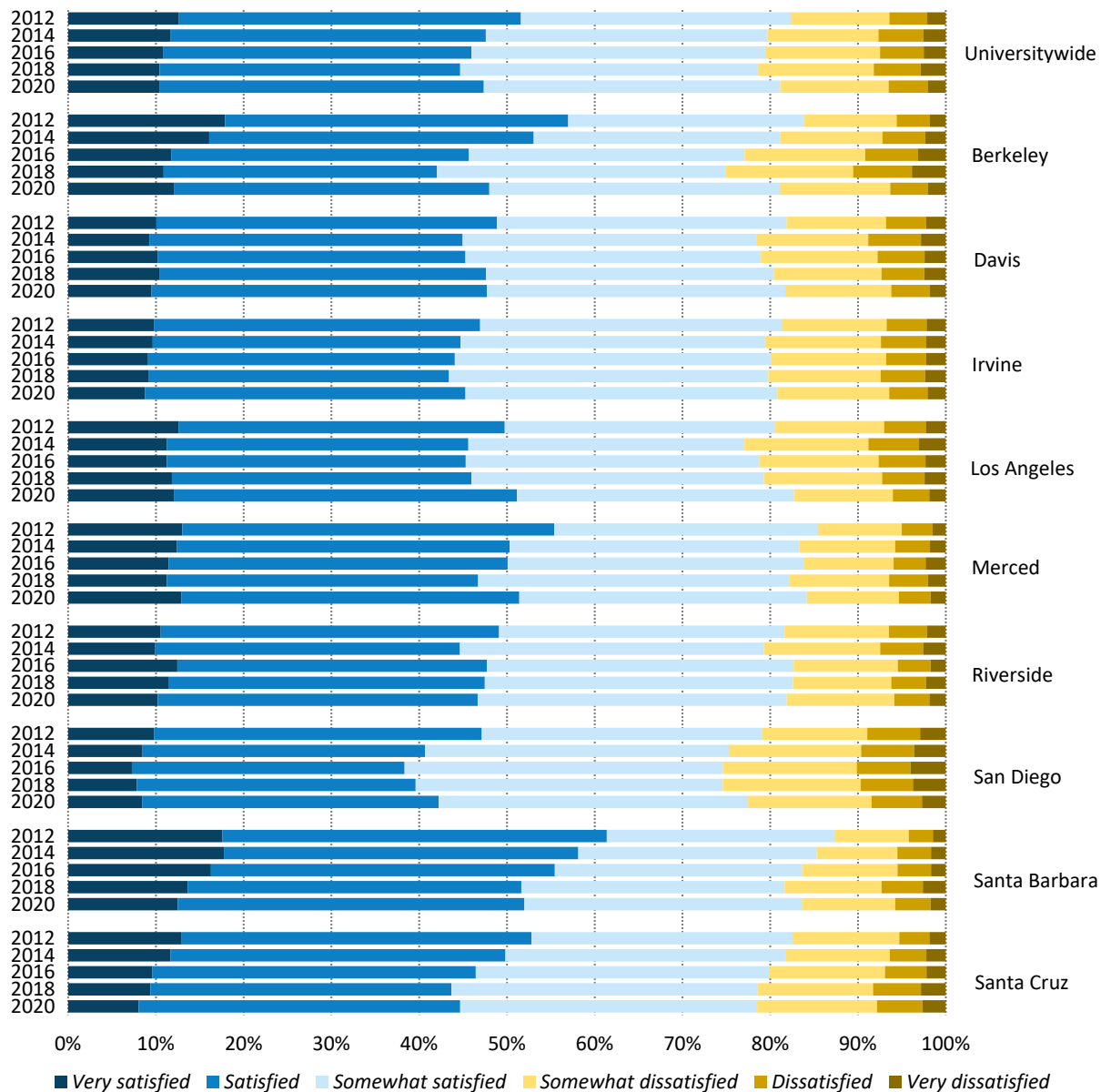
Source: UCUES.

While overall fairly high, student satisfaction has generally declined since 2012.

The proportion of undergraduate students taking at least one course online has increased from one percent in 2012-13 to six percent in 2019-20.

8.1.6   Share of undergraduates taking at least one course online
Universitywide and comparison institutions
2013–14 to 2019–20
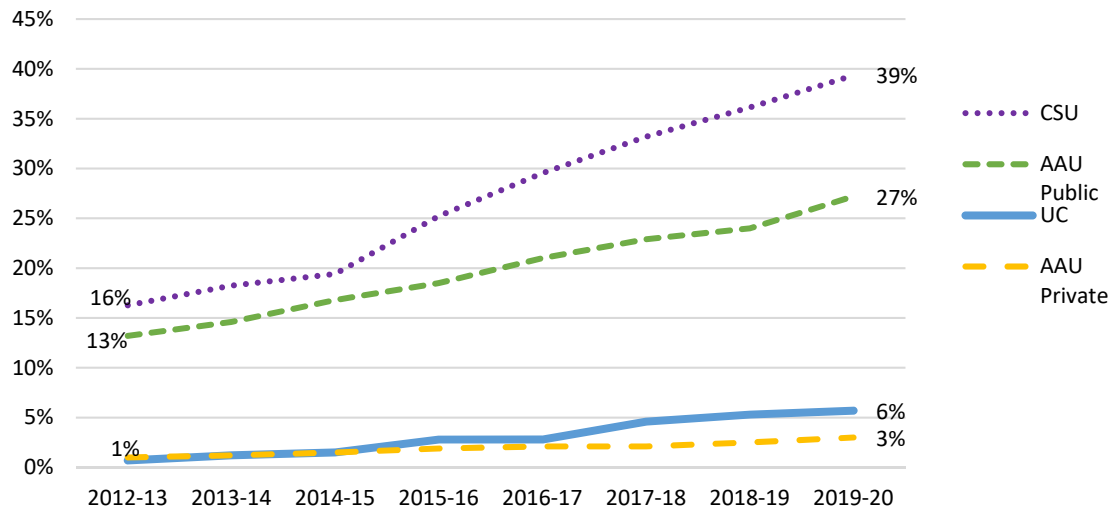
Source: IPEDS

The proportion of undergraduate students taking at least one course online has increased from one percent in 2012–13 to six percent in 2019–20. In 2019–20, three percent of all undergraduate units, or approximately 279,000 out of 9.8 million, were delivered online. The Governor's 2022–23 Budget is proposing to double that number by 2030.

The COVID-19 pandemic was associated with an increase in the proportion of summer enrollment as a percentage of academic year enrollment.

8.1.7 Summer enrollment as a percentage of Fall-Winter-Spring enrollment
Universitywide and UC campuses
2007–08 to 2020–21
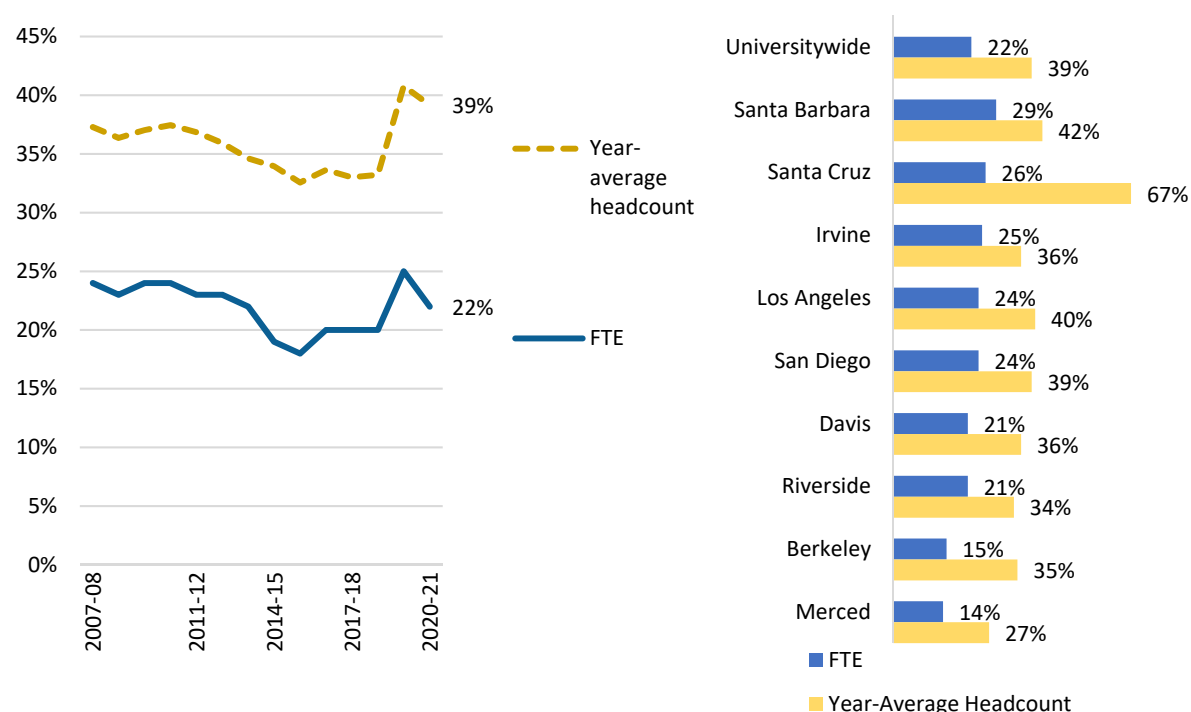
Summer is counted as a trailing term: e.g., the 2020–21 year includes summer 2021. Source: Budget Analysis and Planning

The systemwide summer 2021 headcount was approximately 39 percent of that in the 2020–21 fall, winter, and spring terms, ranging from 27 to 67 percent by campus. Summer enrollments represent 22 percent of an average academic year term's full-time equivalent (FTE) student enrollment.

The growth over the last two years is partially attributable to the transition to remote instruction resulting from, and occurring during, the COVID-19 pandemic. In the 2016 summer session, the University piloted three initiatives aimed at increasing summer enrollment through alternative pricing models. In the following years, campuses applied best practices established by the pilot programs to increase summer enrollment.
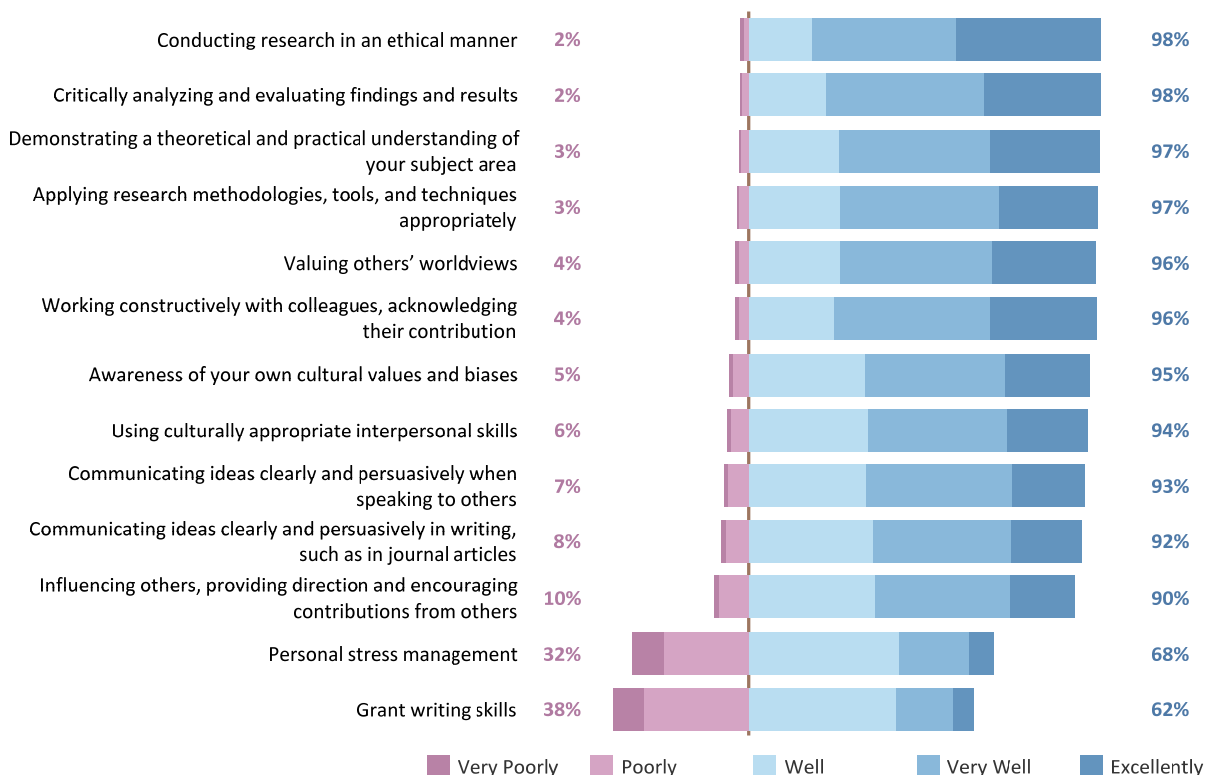
Expansion of summer enrollments has resulted in more efficient uses of facilities and accelerated time-to-degree for undergraduates, making room for more students during the academic year. Campuses have offered a greater breadth of courses during the summer to maximize efficiency and student progress toward the degree; campuses offered more than 3,800 primary classes in summer 2020 (the last year for which complete data are available) — 40 percent more than the number of primary classes offered in summer 2000. Students report using summer as a means to graduate on time and enjoy the smaller class sizes and greater faculty contact often provided by summer courses.

UC doctoral students credit their doctoral programs with having strengthened multiple skill sets.

8.2.1   Preparation by skillset
Universitywide
2018 and 2019 combined

How well prepared do you feel you are in the following skillsets?

Skillset	Poorly %		Well %
Conducting research in an ethical manner	2%		98%
Critically analyzing and evaluating findings and results	2%		98%
Demonstrating a theoretical and practical understanding of your subject area	3%		97%
Applying research methodologies, tools, and techniques appropriately	3%		97%
Valuing others' worldviews	4%		96%
Working constructively with colleagues, acknowledging their contribution	4%		96%
Awareness of your own cultural values and biases	5%		95%
Using culturally appropriate interpersonal skills	6%		94%
Communicating ideas clearly and persuasively when speaking to others	7%		93%
Communicating ideas clearly and persuasively in writing, such as in journal articles	8%		92%
Influencing others, providing direction and encouraging contributions from others	10%		90%
Personal stress management	32%		68%
Grant writing skills	38%		62%

Legend: ■ Very Poorly ■ Poorly ■ Well ■ Very Well ■ Excellently

Source: UC Ph.D. Career Pathways Student Survey

The Ph.D. Career Pathways Student Survey, a collaboration between the University of California and the Council of Graduate Schools, was administered in the spring 2018 and 2019 terms. As more years of the survey are administered, this report can track trends over time.

UC doctoral students responded overwhelmingly positively about the preparation received in their programs along the skillsets in the survey, with the exception of stress management and grant writing skills.

Additional data from the survey can be found here: universityofcalifornia.edu/infocenter/doctoral-experience-survey

Over time, the student-faculty ratio has grown worse, as faculty hiring has not kept pace with increasing student enrollment. The latest improvement is related to to temporary enrollment declines related to the pandemic.

8.3.1   General campus student-faculty ratio
Universitywide
2003–04 to 2020–21

All faculty   — — Ladder-rank and equivalent faculty only
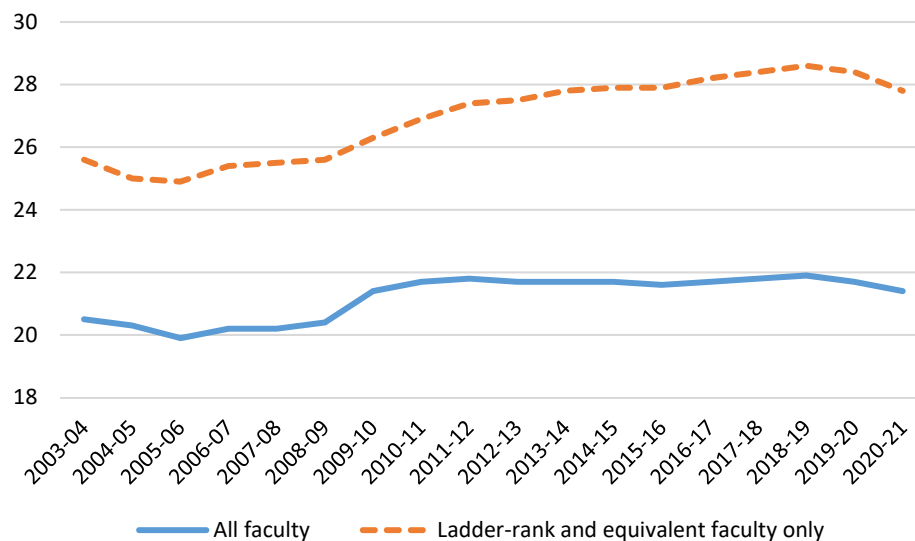
Source: UC Information Center Data Warehouse

One measure of academic quality is the student-faculty ratio. The student-faculty ratio reflects resources available for instruction and the average availability of faculty members to every student. Thus, lower ratios are preferable for students.

Because the student-faculty ratio varies considerably by degree, major, and instructional level (lower-division, upper-division, and graduate), student experiences will vary as well. Indicators 8.3.2 and 8.3.3 on student credit hours (SCH) provide additional insight into the student experience.

The student-faculty ratio has increased, particularly in the last decade. During the most recent recession, campuses responded to uncertainty in State funding by delaying faculty hiring, or deciding not to fill vacant faculty positions on a permanent basis.

While the student-faculty ratio improved slightly in 2019–20, another 893 FTE additional faculty would need to be added to restore the 2005–06 ratio. In 2020–21, likely due to the pandemic, student FTE declined and thus the small improvement in the ratio is due more to this temporary enrollment decline rather than adding new faculty.

As part of its multi-year plan, UC is not on track to hire 1,100 ladder-rank faculty between 2018–19 and 2022–23. More information on the plan can be found here: universityofcalifornia.edu/infocenter/uc-2030-dashboard

The expanding gap between the student-faculty ratio for all general campuses and the ratio for only ladder-rank and equivalent faculty illustrates the trend of hiring lecturers. Additional data can be found here:
universityofcalifornia.edu/infocenter/student-faculty-ratio

At the undergraduate level, full-time permanent faculty and lecturers are teaching increasing numbers of student credit hours.

8.3.2 Student credit hours, by instructional staff and class type
Universitywide
2009–10 to 2020–21
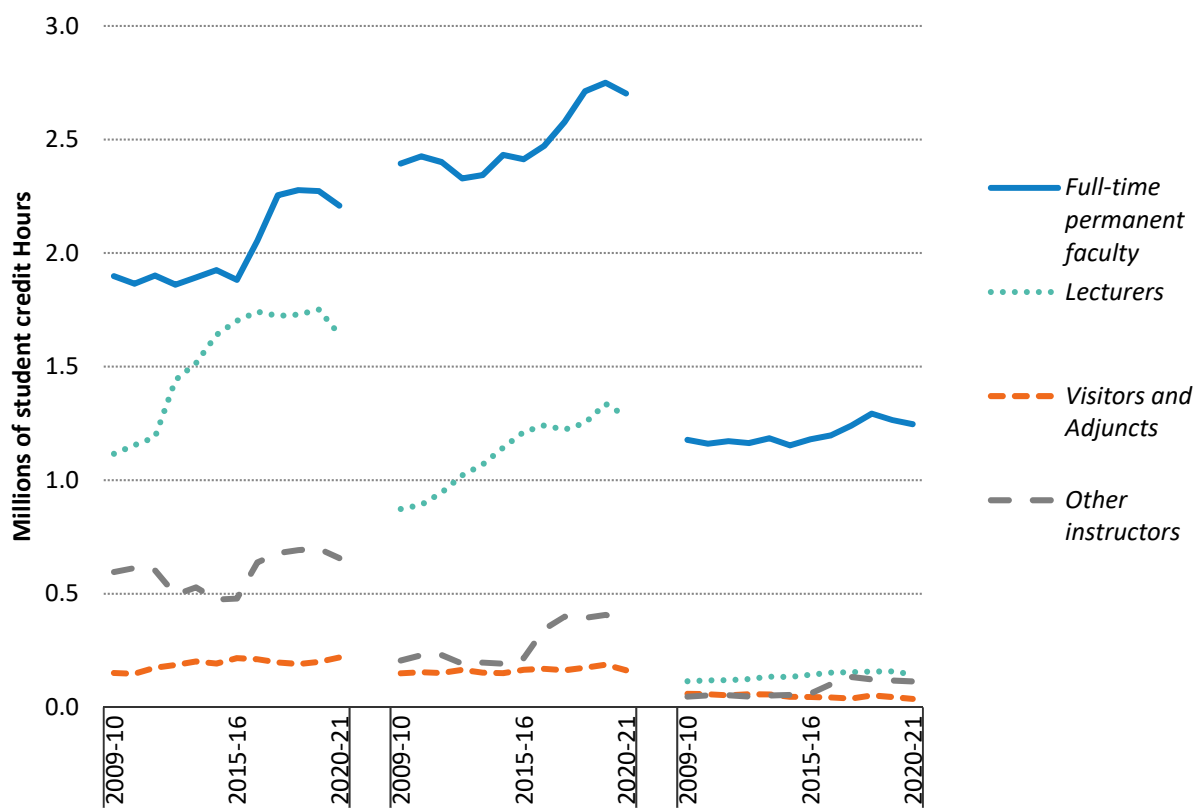
Source: UC Faculty Instructional Activities dataset[1]

Student credit hours (SCH) represent the number of student enrollments in a course multiplied by the number of credits earned from that course. For example, a four-credit class with 50 students generates 200 SCH; a two-credit class of 15 students generates 30 SCH. This measure gives an indication of the relative teaching load across different types of instructors at different levels of instruction.

Lower-division courses such as writing, language, and other required courses are most often taught by lecturers; introductory courses to the major are most often taught by full-time permanent faculty. Upper-division courses, which are core to the student's major, are more likely taught by full-time permanent faculty, as are graduate courses. The decline in 2020–21 is attributable to the COVID-19 pandemic.

[1] Data are for general campus courses only. These data are submitted annually by UC campuses and contain information on all general campus courses taught in that year.

As students enroll in upper-division and graduate classes, they have greater contact with full-time permanent faculty and smaller classes.

8.3.3   Student credit hours, by instructional staff and class type and class size
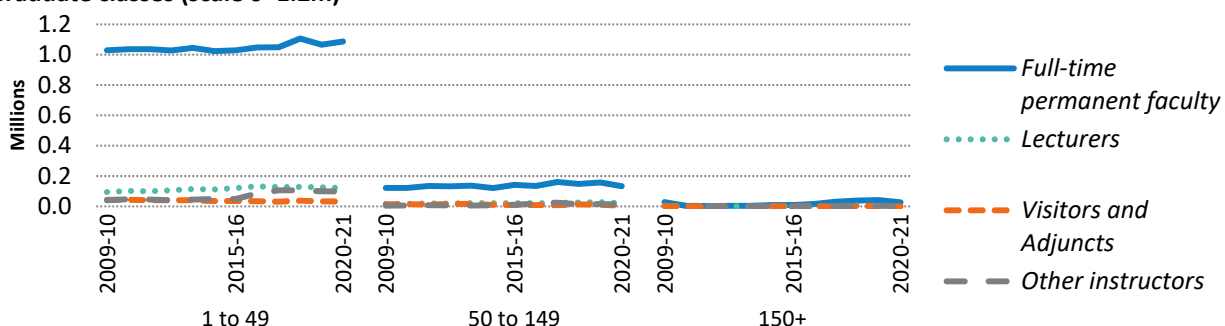Universitywide
2009–10 to 2020–21

Lower-division classes (scale 0–1.8m)
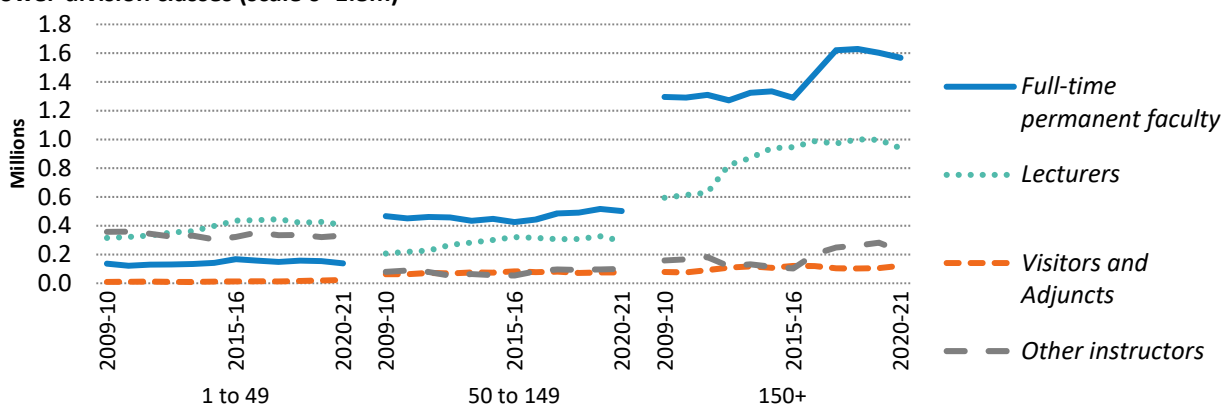
Upper-division classes (scale 0–1.4m)
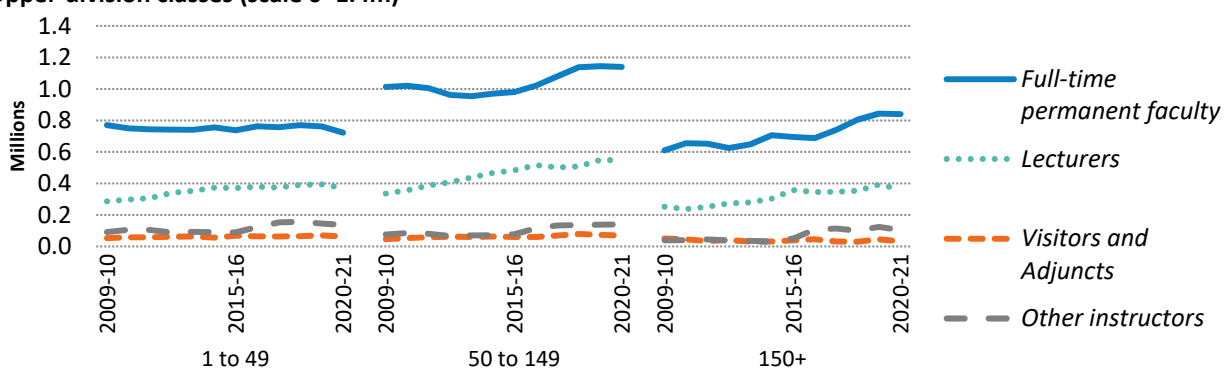
Graduate classes (scale 0–1.2m)

Source: UC Faculty Instructional Activities dataset

In the lower division, full-time permanent faculty generally teach large lecture classes; lecturers generally teach both large sections and smaller classes. In the upper division, student contact with full-time permanent faculty is fairly evenly distributed across classes of all sizes.

Graduate academic students are almost uniformly taught by full-time permanent faculty in classes with fewer than 50 students. The large enrollment increases in 2016–17 and 2017–18 resulted in a substantial uptick in SCH being offered in large lower-division lecture classes.

Research

Ayana Omilade Flewellen, an assistant professor of anthropology at UC Riverside, is a co-founder of the Society of Black Archaeologists and sits on the Board of Diving With A Purpose.

The work Flewellen does on land largely focuses on how African American women in the post-emancipation era dressed their bodies to negotiate the racism, sexism and classism that shaped their lives. "I've come across eyeglasses," they said. "Buttons with wood, bone, metal or ceramic. Beautiful hand-carved stone beads. When you find these things, you think about the craftsmanship that went into it. When you look at objects made with bone, you think about what people were eating, what they had access to and what they created from the little they had."

Flewellen also found doll fragments at the Kingsley Plantation and a marble at an archeological site in St. Croix — objects that touched them the most — they said. "It allowed us to think about how children lived during these times," Flewellen said. "It's not something we talk about often. These objects and remnants of the past help us think more expansively about the human experience."

Flewellen's ground-breaking work is helping transform the field of archeology, said Maria Franklin, professor of anthropology at the University of Texas, Austin from where Flewellen received their master's and doctorate degrees. "The work Ayana and others are doing is aimed at growing ourselves and training others as well as achieving more collaborations with communities and organizations so we can take archeology out of the ivory tower and out into the world," Franklin said. "Whether it's theorizing of the human social condition, doing field work or taking a collection and thinking about it, social justice is the mandate. It should be the goal. We need to see more folks in this field who look like us."

RESEARCH

The broad scope of UC research

The California Master Plan for Higher Education designates the University of California as the primary State-supported academic agency for research. UC research contributes to the state and to the nation through discoveries that improve health, technology, welfare, and the quality of life. Research represents the creation of new knowledge, which can be communicated, curated, and cultivated to benefit society.

UC has more than 800 research centers, institutes, laboratories, and programs that span ten campuses, five medical centers, three Department of Energy National Laboratories, and numerous other research facilities.

Breadth of vision has been a virtue of UC's research since the University's founding more than a century and a half ago. All forms of intellectual inquiry are represented in the research enterprise: the architecture of atoms and the structure of the universe; the study of human cognition and the development of machine learning; the study of human pathogens and the creation of disease-resistant crops; the understanding of ancient and modern histories, cultures, and languages; and mitigation strategies for climate change. The diversity of this vision contributes to society in ways often hard to predict at the outset.

As one example of this vision, UC's Research Grants Program Office (RGPO) makes grants of over $100 million annually from a variety of sources, with over 500 active research awards that provide first-mover advantage to UC and California investigators. RGPO grants catalyze advances in new areas yet to be supported on a large scale by federal and other sources; they also aim to enhance research capacity and excellence across California, making it easier to attract and retain outstanding faculty, to further the careers of undergraduate, graduate, and postdoctoral researchers, and to promote research collaborations.

Evaluating the research enterprise

This chapter presents a largely quantitative description of UC's research. The sources of research funding influence the nature of the research. As California's land-grant university, UC's research enterprise has always received federal support for research, which today accounts for nearly half of all research funding at UC (9.1.1). Most research funds pay the salaries and benefits of the UC research community, of which faculty are only a small proportion (9.1.2). While UC research spans many disciplines, medical research is the largest expenditure component, and its share has grown over the last two decades (9.1.3). UC performs over eight percent of the nation's academic research (9.1.4). Compared to other American Association of University (AAU) public universities, UC has a higher rate of research expenditures per ladder-rank faculty, especially at UC campuses with medical schools (9.1.5). Three Department of Energy national laboratories are affiliated with the University of California: Lawrence Berkeley National Lab, Lawrence Livermore National Lab, and Los Alamos National Lab. The national labs conduct research that is vital to the nation's security, energy future, sustainability, and human health.

This chapter also presents the impact of this research on society. One of the goals of research is the dissemination of important outcomes; the global distribution of downloads from the UC eScholarship repository (9.2.1) indicates how eagerly this knowledge is sought. The frequency with which UC research is cited is another indicator of its quality and importance (9.2.2). UC research advances the economy and global technical leadership through licenses resulting from UC-generated patents (9.2.3).

These measures, however, do not capture the wide range of curiosity-driven research at UC. Quantitative measures emphasize fields that receive sizable funding and produce large numbers of publications, such as medicine, physical and material sciences, and engineering. These measures underrepresent research achievements

in the arts, humanities, social sciences, and theoretical sciences, where work leaves less of a financial footprint, and where results are often disseminated in books or performances rather than in journal articles.

Quantitative measures cannot fully capture the multi-faceted ways by which UC research contributes indirectly and over time to the state, the nation, and the world. UC research advances knowledge in ways that directly improve health, technology, and the quality of life. It enables UC graduate and undergraduate students to participate in research and to receive instruction from the world's foremost researchers, thus enhancing their learning experiences. It makes cutting-edge discoveries readily available to the healthcare, agricultural extension, and other vital public services that UC provides, greatly enhancing their value to the people of California. It creates thoughtful work in the arts and humanities that furthers understanding of our rich diversity and of our place in the world.

UC's research expenditures

While research expenditures track only some of this activity, they can indicate how research changes in scope and focus over time. They also can provide some relative sense of how research institutions compare to one another.

During 2020–21, expenditures for research at UC totaled $7.5 billion, with nearly half sourced from federal funds. Private sources account for 18 percent — 11 percent from nonprofit organizations and seven percent from corporate sponsors. University funds derived from gifts, endowments, general funds, and other sources provided 22 percent. Nearly half of these total research expenditures went to salaries and benefits. Of this amount, nearly one-quarter was paid to faculty; approximately half was paid to staff researchers and other support personnel; and nearly one-quarter was paid to students and postdoctoral scholars.

Budgets for externally-funded research include both a direct cost component — the actual amount spent on salaries, benefits, equipment, and materials directly linked to the project — plus a percentage to cover the facilities and administration overhead required to support the research project, including debt service, maintenance, and libraries. These facilities and administration costs are called "indirect costs."

In 2020–21, indirect costs, estimated using the rates negotiated with federal agencies for recovery of indirect costs on research projects, were over $1.9 billion. The true indirect costs of research, however, are typically higher than the rates research sponsors are willing to pay. Rates negotiated with federal agencies are below true indirect costs. Non-federal research sponsors, including corporations, nonprofits, and the State of California, typically have policies that limit indirect cost recovery from them to rates well below the federal rates. The true costs of UC research exceed recovered amounts by hundreds of millions of dollars annually.

The research community

Research funds principally pay for people's time. Of the roughly 172,500 full-time equivalent (FTE) employees at the University in October of 2021, about 25,000, or 14 percent, were paid with research funds.

UC's research-funded FTE, October 2021

Faculty	Postdoctoral scholars	Student employees	Other academic employees	Other staff employees	Research Total
2,192	4,071	4,583	3,273	10,744	24,963
9%	16%	18%	13%	43%	100%

While faculty serve as principal investigators for research projects, submitting proposals and managing the research, they make up only nine percent of the research community measured in terms of compensated time. However, this figure, principally representing projects with research grants, underrepresents the time faculty spend on research. Virtually every faculty member at UC engages in research, often involving no expenditures other than the faculty member's time. As in all research universities, career advancement at UC (including tenure), requires a significant body of scholarly or creative work. In October of 2021, the research community included 6,136 postdoctoral researchers (roughly equivalent to 4,071 FTE). As shown in Indicator 5.1.4 of this report, postdoctoral scholars are most prominent in medical research and life science fields.

Research results — enhancing instruction

UC research enhances student preparation and experience. Faculty incorporate their research into their courses, providing students with access to insights and discoveries, sometimes before they are published. Postdoctoral scholars, representing one-sixth of the research workforce, contribute to instruction by working with graduate students. Students make up another one-sixth of the research workforce. In October 2021, about 10,084 students were employed as paid research assistants. Though most are graduate students, UC undergraduate students also participate in research; the 2020 UC Undergraduate Experience Survey found that about 36 percent of UC students had been involved in faculty-directed activity other than coursework.

Research results — spurring the economy

Many businesses in California are based on technology developed at UC or rely on the skills of UC graduates. Over the past quarter century, UC has secured more licensable patents than any other U.S. research university.[1] Since 1980, over 1,500 startup companies have been founded around UC inventions, with about 85 percent based in California. UC researchers submit nearly five new inventions per day in such diverse areas as agriculture, technology, biotech, and clean energy. The discoveries made through research become public knowledge through publications and the patent process. These innovations enhance industries, stimulate economies, and improve health and well-being.

Research results — communicating and curating knowledge

Publications are another way to demonstrate the results of research. This chapter compares the impact of UC research publications to global averages and to peer AAU institutions.

The books, periodicals, and journals in which research findings are published are costly and beyond the reach of many researchers, students, and journalists. To ensure that research findings become public, UC has adopted Open Access (OA) policies that are the most comprehensive of any academic institution in the United States. All UC employees must now deposit their research papers, upon publication, in the eScholarship repository operated by UC's California Digital Library (CDL) and grant a non-exclusive license to UC to make those materials openly available. CDL is negotiating agreements that reduce or eliminate the costs of publishing OA with publishers, developing models to transition subscription journals to open access, and supporting tools and services to disseminate research.

UC also disseminates its research directly. In 1893, the University's governing board funded a non-profit publishing program, establishing the UC Press. Today, the UC Press is among the six largest university publishers in the United

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[1] developer.uspto.gov/visualization/university-patent-count-expenditures

States, and publishes nearly 200 books and over four dozen multi-issue journals annually. Of the nation's top university presses, UC Press is the only one associated with a public university.

Research results — improving health

Clinical research projects are another example of cultivating new knowledge to benefit society. During 2020–21, UC received grants funding 1,803 new clinical trial research projects in addition to 1,602 projects already underway. These projects represent a crucial stage in the journey from a scientific discovery to an effective treatment. The percentage of research awards devoted to clinical trials has grown significantly over the past ten years, from about four percent in 2010–11 to 14 percent in 2020–21.

UC research has played a significant role in the fight against the COVID-19 pandemic, with UC researchers receiving a cumulative total of over $152 million for COVID-19 research funding in 106 grants awarded by the National Institutes of Health as of September 20, 2021. UC also participated in clinical trials of significant antiviral compounds.

UC National Laboratories —science in the national interest

Department of Energy (DOE) National Laboratories carry on research with their own management, budgets, personnel, and fiscal years that are distinct from UC's own research enterprise. The three University of California-affiliated DOE National Laboratories — Lawrence Berkeley (LBNL), Lawrence Livermore (LLNL), and Los Alamos (LANL) — are among the nation's premiere multi-disciplinary research and development (R&D) laboratories for energy and national security. The University has played a public service role in directly managing LBNL and participating in the organizations that manage LLNL and LANL. These Laboratories also support UC's educational mission. LBNL's budget is about $1.2 billion; LLNL about $2.5 billion; and LANL about $3.2 billion. The labs have a wide range of economic impacts, from the direct salary and benefits paid to employees in the regional economy and procurements from small and large businesses across the nation, to licensing income, US and foreign patents, and research and development awards.

UC Natural Reserve System — science promoting environmental stewardship

The UC Natural Reserve System (NRS) manages a network of protected natural areas throughout California, representing most of California's major habitat types, including coastal tide pools, inland deserts, lush wetlands, and redwood forests. Its 41 sites include more than 47,000 acres, making it the largest university-administered reserve system in the world. These lands provide undisturbed environments to conduct research, enhance student educational experiences, and provide sites for public service programs.

In 2020, the NRS launched a program enabling undergraduates from backgrounds underrepresented in the field sciences to devote an entire summer to research at one or more NRS reserves. Undergraduates and a UC faculty mentor apply as a team for a Field Science Fellowship to pursue a project of the student's own devising. The fellowship is intended to give students a taste of a career in the field sciences, develop enduring relationships with mentors, and to help diversify the ranks of environmental scientists.

Looking forward — uncertainties in federal research funding

With federal funding supporting about half of UC research, the vitality of the UC research enterprise is dependent on agencies whose funding is reviewed annually. Hence, long-term prospects for federal research sponsorship are always uncertain. However, UC is proactive in developing strong relationships with these

agencies to advise them on funding priorities. The near-term future is promising for funding to support climate and environmental science, artificial intelligence, civil and cyber infrastructure, and medicine.

Whatever changes in priorities are embodied in the federal budget, one certainty is that federal funding is becoming increasingly competitive. At the National Institutes of Health, only one proposal is funded for every five received, compared to about 32 percent fifteen years ago, even though total appropriations for research have increased. UC is competitive in garnering these awards, but this effort comes at a cost. The administrative effort of drafting, reviewing, submitting, and tracking proposals is one of the less-visible costs of conducting research — costs that are not fully recovered from federal sponsors.

For more information

UCOP Research & Innovation: ucop.edu/research-innovation

A map of the economic impact of UC research activity in California: ucop.edu/institutional-research-academic-planning/_files/UC-research-impacts-in-california.pdf

Federal funds support most of the research conducted at UC. Salaries and benefits represent more than half of all research expenditures.

9.1.1 Total research expenditures by source,
Universitywide, 2009–10 to 2020–21
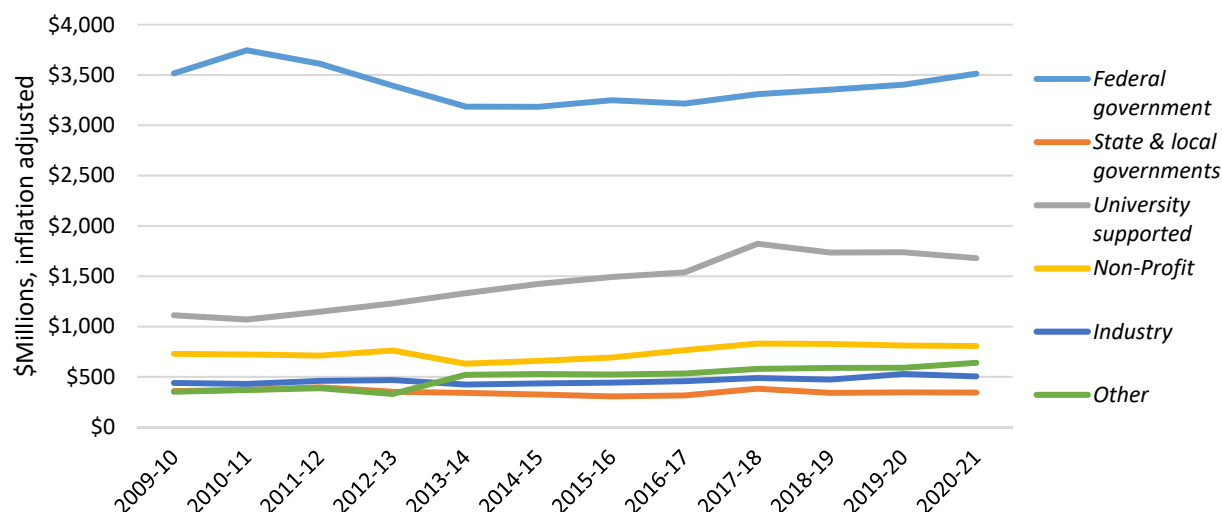
Source: National Science Foundation (NSF) Higher Education Research & Development survey. Expenditures have been adjusted for inflation and reflect the NSF's methodology for calculating indirect costs.

9.1.2 Total research expenditures by cost type,
Universitywide, 2020–21

$Millions

	$Millions
Salaries and Benefits (48%)	$3,668
Capitalized Equipment (16%)	$223
Utilities, services, and other (14%)	$1,071
Subcontracts (11%)	$617
Indirect costs (11%)	$1,911

Employee category	Salaries
Faculty (24%)	$872
Postdoctoral Scholars (12%)	$432
Students (12%)	$439
Other Academics (20%)	$722
Other Staff (33%)	$1,202
Research Total	**$3,668**
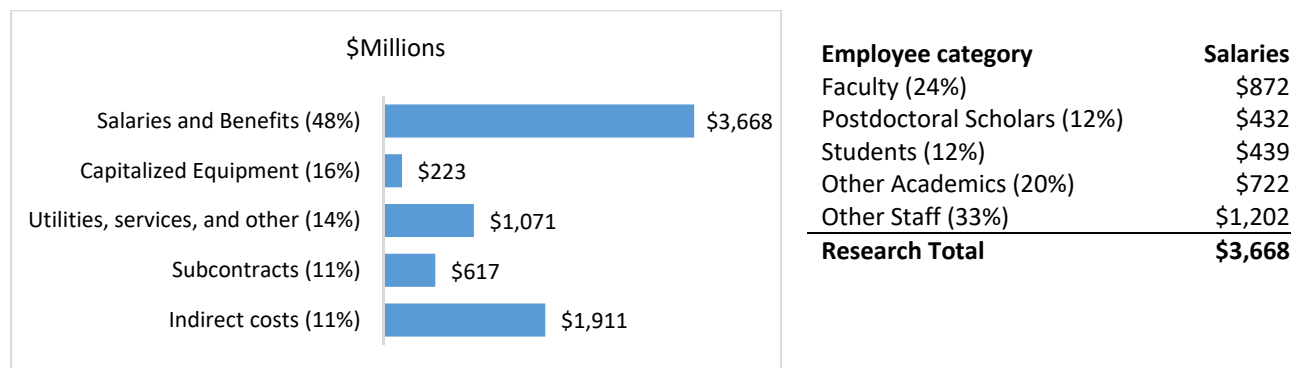
Source: National Science Foundation (NSF) Higher Education Research & Development survey. Indirect costs are calculated using the NSF's methodology.

UC's total research expenditures for 2020–21 were about $7.5 billion. Of this total, 47 percent came directly from federal agencies; about three-quarters of this federal support for research was provided by the National Institutes of Health and the National

Science Foundation. In inflation-adjusted terms, total research expenditures have been flat over the past four years, with modest increases in federal support offset by decreases in University support.

Science, technology, engineering, and mathematics (STEM) and medical fields represent the majority of all research expenditures.

9.1.3 Total research expenditures by discipline
Universitywide, 2009–10 to 2020–21
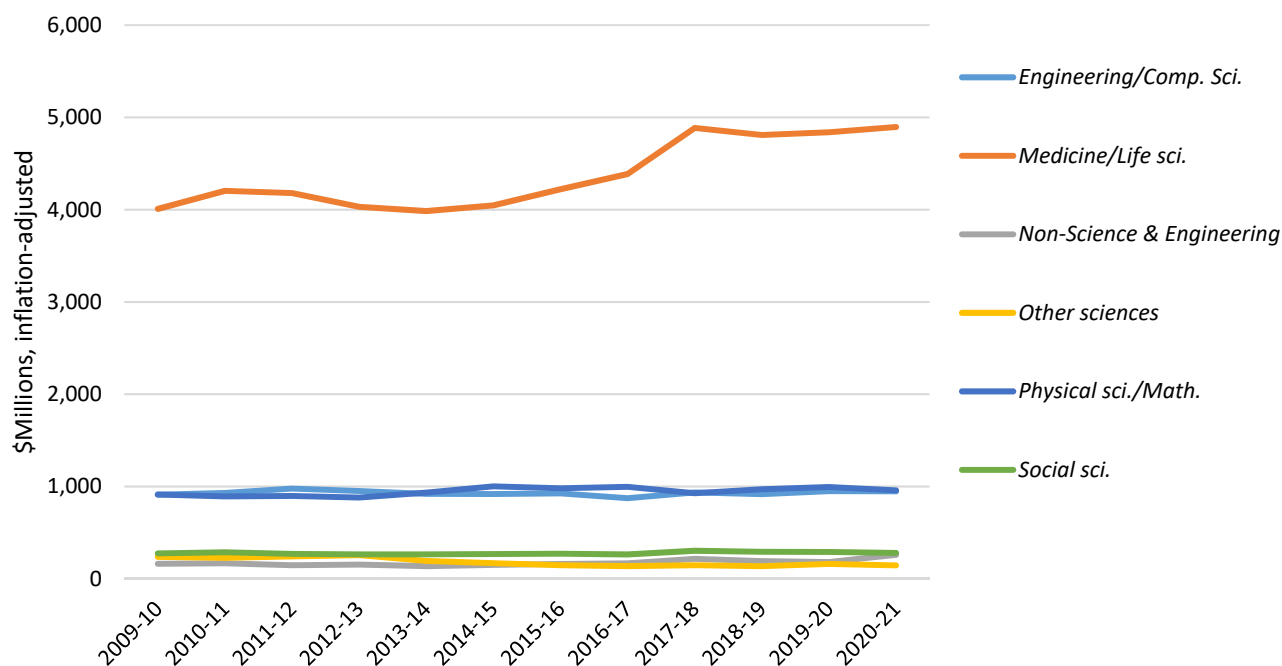
Source: National Science Foundation (NSF) Higher Education Research & Development survey. Expenditures have been adjusted for inflation and reflect the NSF's methodology for calculating indirect costs.

Research expenditures in all STEM (science, technology, engineering, and mathematics) and medical fields represented over 90 percent of total research expenditures each year during the past decade. This figure reflects the availability of funding and parallels the nationwide pattern. About two-thirds of all research expenditures are associated with medicine and life sciences, which largely reflects the funding priorities of external sponsors, especially those of the federal government.

Measures based on expenditures greatly understate UC's strong commitment to research in the arts and humanities, social sciences, and professional disciplines, which make important contributions to scholarship and the quality of life, yet are far less financially demanding than STEM disciplines in terms of the physical infrastructure and support staff required for sustaining UC's leadership in these areas.

Expenditures data reflect UC's continuing competitiveness in securing federal awards and its ongoing successful relationships with the private sector, particularly in disciplines that require more intensive investments in laboratories, equipment, and their associated staff. UC is the largest single recipient of funding from the two leading federal agencies that fund most academic STEM research: the National Institutes of Health and the National Science Foundation. UC generally receives five to six percent of the NIH's annual appropriations for research and seven to eight percent of the NSF's annual research appropriations.

UC accounts for well over eight percent of direct research expenditures at all US universities. Average research expenditures per ladder-rank faculty are higher at UC than its AAU public peers.

9.1.4 Direct research expenditures
US 4-year universities, 2019–20

	Direct Research expenditures	Percent of US total
UC Universitywide	$5.5 B	8.5%
Other public universities	$34.8 B	53.5%
Private universities	$24.7 B	38.0%

Source: IPEDS. Excludes for-profit institutions, which conduct a negligible share of research. This figure is slightly different from the NSF's direct expenditure calculation due to differences in how IPEDS treats non-functional expenses.

9.1.5 Average direct research expenditures per ladder-rank faculty
UC and AAU comparison universities
2012–13 to 2019–20
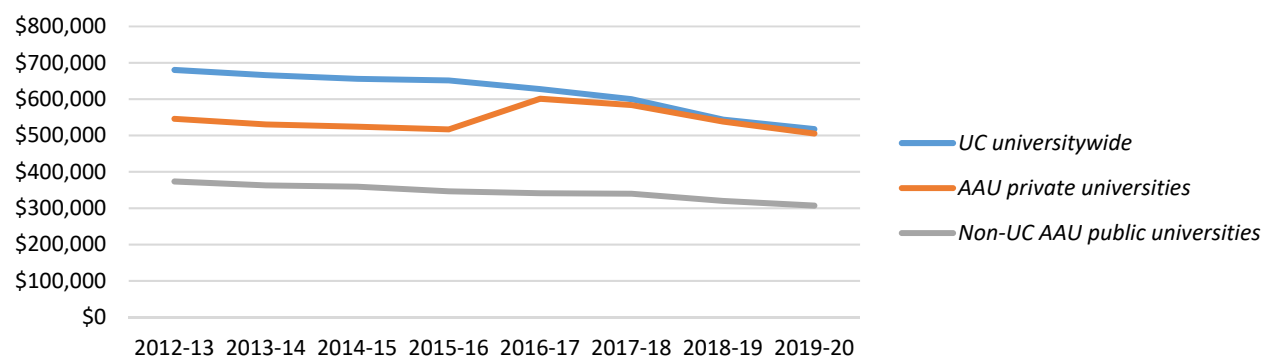
Source: IPEDS. Expenditures have been adjusted for inflation.

In the most recent year available, UC spent an average of $517,000 in externally sourced research funding per tenured and tenure-track faculty member, compared to $505,000 per faculty member for Association of American Universities (AAU) private institutions, and $307,000 for AAU public institutions. The largest single source of research sponsorship is the National Institutes of Health, and campuses with medical schools and hospitals are in the best position to compete for these funds. The second-largest source of research support is the National Science Foundation.

With the exception of UC Berkeley, all of the top-ranked UC campuses for research expenditures per ladder-rank faculty have medical schools. Twenty-one out of the 27 AAU Private institutions and 22 out of the 36 non-UC AAU Public institutions have an accredited medical school.

UC Location	Research expenditures per ladder-rank faculty
San Francisco*	$3,567K
San Diego	$635K
Los Angeles	$532K
UC AVERAGE	**$517K**
Berkeley	$484K
Davis	$406K
Irvine	$261K
Santa Barbara	$244K
Santa Cruz	$227K
Riverside	$193K
Merced	$179K

*UC San Francisco is an exclusively health sciences campus, where many non-ladder-rank (clinical) faculty also conduct significant research.

UC's Open Access policies continue to add to a growing body of freely available research publications in eScholarship, UC's open-access repository and publishing platform, expanding the global reach of UC's research findings.

9.2.1   eScholarship downloads of UC scholarly materials
Universitywide
Through January 2022
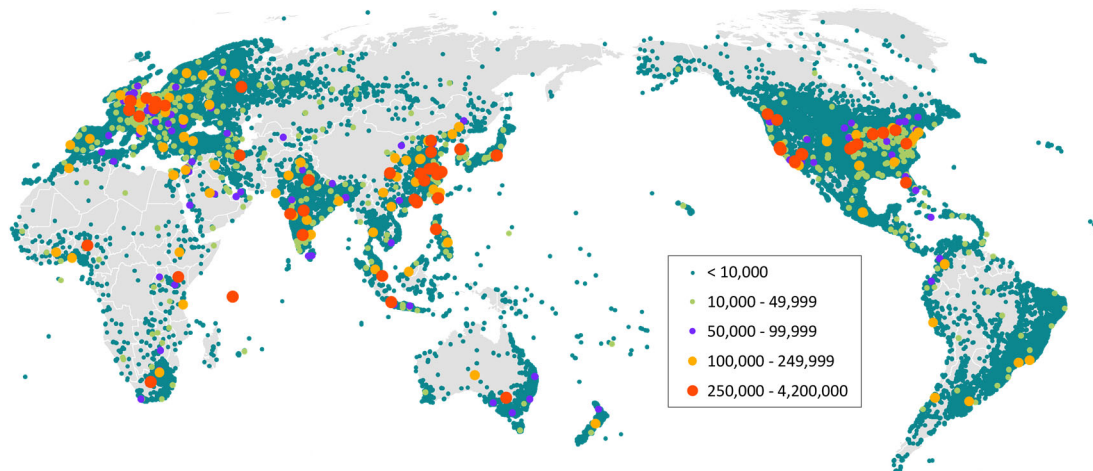
Source: California Digital Library

This map shows the geographic distribution and concentration of views for scholarly materials in eScholarship, UC's open access (OA) publishing platform and institutional repository managed by the California Digital Library. eScholarship contains over 325,000 individual items, including research articles, working papers, electronic theses and dissertations, as well as 90 open access journals that are published on the platform. Since 2002, UC-sponsored research and journals in eScholarship have been viewed and/or downloaded over 100 million times by readers around the world.

In April 2022, eScholarship will celebrate 20 years of supporting UC-affiliated scholars in making their work openly available to the global public. Interest in this institutionally supported service has grown tremendously in the past two years, as the increased demand for ready access to scholarship has prompted researchers to seek more efficient, open, and equitable publishing strategies.

The University of California is a major research presence at both the state and national levels, with impacts above both global averages and AAU peers.

9.2.2 UC research publication performance, by Field-Weighted Citation Impact (FWCI) and discipline group
Universitywide
2016 to 2021

Source: SciVal® database, Elsevier B.V., scival.com (downloaded February 11, 2022)

As a premier research university, UC creates and disseminates new knowledge. The publication of UC research findings creates an ever-growing foundation for scientific discovery and social impact.

The quality and impact of UC research publications can be characterized by the Field-Weighted Citation Impact (FWCI) SciVal® tool, which was created by Elsevier. The FWCI tool takes into account differences in research publication practices across disciplines and normalizes impact against a global baseline. The FWCI tool can benchmark the impact of publications regardless of differences in

publication length, discipline, age, and type. In any given disciplinary area, the global average FWCI is equal to 1.00; publications with FWCI greater than 1.00 have been cited more frequently than would be expected, while publications with FWCI less than 1.00 have been cited less than would be expected. The UC average FWCI is 1.87, or nearly twice the global average.

UC's publication impact is particularly high in the fields of arts and humanities, economics, computer science, engineering, and medicine.

Licenses covering UC patents issued to California businesses contribute to the state's economy.

9.2.3 New licenses for UC patents issued to California businesses
Universitywide
2010–11 to 2020–21
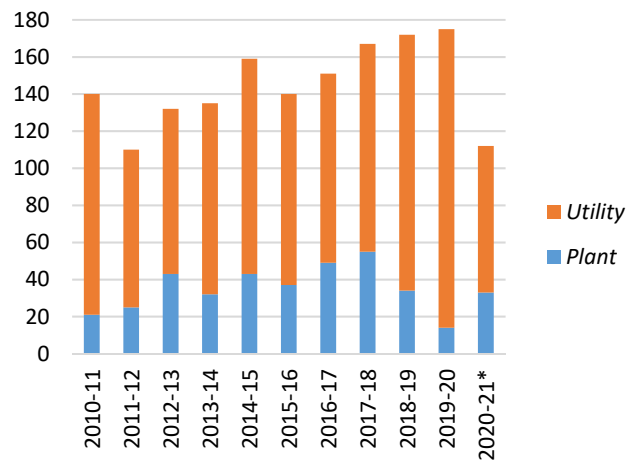
*Does not include UC San Diego

Source: UC Knowledge Transfer Office

UC research often leads directly to new patentable inventions and other innovations; bringing them to the marketplace is part of the UC public service mission. UC inventions take two paths to the marketplace: they may be licensed to an existing company or they may become the cornerstone of a new startup company.

Invention commercialization promotes technological advances, generates economic benefits, and helps support UC's research enterprise. UC's patents are commercialized under utility licenses and plant licenses.

Utility licenses cover inventions protected by utility patents, such as processes, machines, manufactured items, or compositions of matter, and are often issued exclusively to a single licensee. Plant licenses cover plant cultivars and are often licensed non-exclusively to nurseries and distribution centers.

From the high-tech centers of San Diego and Silicon Valley to the agriculture of the Central Valley, UC licenses its technologies throughout California. In 2020–21, UC issued 79 utility licenses and 33 plant licenses to 98 California businesses.

Public Service

Hijab Khan of Pakistan is an environmental engineering student 7,500 miles and a pandemic away from UC Davis. But still, she has inspired at least one student here, gained a mentor and had what she considers one of the most valuable experiences of her life.

Khan is one of three female students from Pakistan who participated — virtually — in two summer courses and individual mentorships at UC Davis through the U.S.-Sister2Sister Exchange Program. "Without a doubt, it is one of the best experiences of my life," said Khan, who is entering her final year of undergraduate study at the University of Engineering and Technology in Lahore, Pakistan.

Led by American University and funded primarily by the U.S. Department of State, Sister2Sister enables about 20 Pakistani women each summer to participate in undergraduate courses at American universities. The courses are mostly in the fields of science, technology, engineering and mathematics, or STEM. The program invited UC Davis to be a hosting partner, and this was the campus's first summer to do so. A total of eight universities provided opportunities for 16 Pakistani women.

"It's the perfect fit for us given UC Davis' emphasis on access and equity in STEM education as well as on global engagement and learning," said Michael Lazzara, associate vice provost of academic programs and partnerships for Global Affairs. Sister2Sister aims to help young women "overcome cultural limitations that inhibit their participation" in pursuing competitive careers, and to contribute to Pakistan's economy, according to the program's website. "The ability of these young women to complete university is not a given," said Beth Broome, senior advisor to the provost on STEM Strategies at UC Davis.

PUBLIC SERVICE

Part of the UC mission

Along with teaching and research, UC contributes to the well-being of the state's population and economic growth through its public service efforts. UC's impact goes well beyond its on-campus activities. UC has a significant presence in nearly every community throughout California.

Educational outreach forms a crucial part of UC's service to the state, including a network of world-class museums, libraries, herbaria, and other facilities open to the public for shared learning. Every UC campus administers hundreds or thousands of community-based programs across a range of foci, from community and social services to teacher professional development and K–12 student services.

The University exhibits a steadfast commitment to public service in part through support of sustainable agriculture, environmental stewardship, healthy families, and education. UC Agriculture and Natural Resources (UC ANR), the UC Natural Reserve System (NRS), the community-based programs of the Division of Diversity and Engagement, and all ten campuses are highlighted in this chapter.

UC Agriculture and Natural Resources

UC's land-grant history

The Morrill Land-Grant Acts emphasized that the role of the University is to develop "useful and practical information … and to promote scientific investigations and experiments." The Acts created a federal-state partnership for agricultural research and technology transfer. The University of California was chartered in 1868 as California's land-grant university. Subsequently, the Hatch Act of 1887 established state Agricultural Experiment Stations. In 1914, the Smith-Lever Act established Cooperative Extension services to extend university research through outreach and education. UC's Division of Agriculture and Natural Resources is UC's land-grant arm. State legislation incorporated county governments to become the third legal partner, such that today, UC ANR represents a three-way partnership with federal, state, and county governments.

UC ANR personnel and programs deliver resources from the UC system to Californians — even if there is no campus nearby. UC ANR forms teams, across UC and beyond, to develop innovative, multidisciplinary, science-based solutions to complex issues. UC Cooperative Extension (UCCE) is the education and outreach arm, serving all 58 California counties by bringing UC research to local communities. UC ANR's mission is to engage UC with the people of California to achieve innovation in research and education that supports:

- Sustainable, safe, and nutritious food production and delivery
- Economic success in a global economy
- A sustainable, healthy, and productive environment
- Science literacy and youth development programs

UC ANR statewide network

UC ANR operates a statewide network of researchers and educators dedicated to the development and application of knowledge to address local agricultural, environmental, and health issues. This network of local UC Cooperative Extension sites and Research and Extension Centers (RECs) is often the face of the University to Californians with no other connection to the University. In 2021, close to 150 Cooperative Extension Advisors were conducting

research, outreach, and education in all 58 counties from local UCCE offices. Nine statewide RECs provide education for the public and places for researchers to conduct field experiments. Approximately 560 Agricultural Experiment Station researchers are located at three campuses, and 120 Cooperative Extension Specialists are located at six campuses, RECs, and county offices. UC ANR maintains and enhances connections that engage UC with the people of California through more than 3,000 local partnership programs (10.1.1).

UC ANR's statewide California Naturalist Program promotes stewardship of the state's natural resources through education and service. The program has worked with over 60 partner organizations that deliver the courses and have certified a community of over 4,000 participants. The program established a framework for operationalizing Justice, Equity, Diversity, and Inclusion (JEDI) efforts using a Four "R's" approach: 1) investing in Relationships, 2) focusing on local and cultural Relevance in its content, 3) breaking down barriers to Recruitment or access, and 4) promoting individual and program Responsibility and accountability. In 2021 over 500 certified California Naturalist volunteers supported conservation and restoration efforts across 45 counties, including close to 400 hours in environmental and climate justice. In addition, the program formed new relationships with tribal communities, including the California Tribal College and the Anahuacalmecac School.

The UC Master Gardener Program extends to the public research-based information about food gardening and sustainable landscaping. In 2021 there were 6,100 UC Master Gardener volunteers in 53 California counties. Given the context and restrictions posed by the COVID-19 pandemic, the program offered classes and plant clinics online, expanded and maintained demonstration gardens as allowed by public health orders, provided an online system for plant sales, and increased social media outreach to share science-based gardening information. The UC Master Gardener volunteers contributed over 415,000 public service hours with an estimated value of almost $14 million. Public participants adopted gardening practices that increased access to fresh produce, which has been especially important given the increased food insecurity experienced during the COVID-19 pandemic. Over half of the more than 830 members of the public who participated in the volunteer-led public education events reported that they applied gardening practices that reduced food loss. Close to 100 volunteers donated produce to community programs that distribute food to individuals in need of food assistance. In Ventura County alone, over 450 pounds of fruits and vegetables were harvested from the local UC Master Gardener sites and donated to local hunger relief agencies.

UC ANR's statewide 4-H Youth Development Program uses a positive youth development framework and promotes experiential, inquiry-based science learning. In response to the COVID-19 stay-at-home orders, the program pivoted to remote instruction, and was able to engage close to 50,000 youth aged 5–19 working in partnership with over 6,700 caring adult volunteers. Nearly 89 percent of 4-H youth statewide who responded to a program evaluation survey indicated that they respect the differences and strengths of individuals on the team. Critical teamwork skills are increasingly important as California and the U.S. are becoming more racially and ethnically diverse. These outcomes are fostered through ongoing efforts to integrate more equity and Latino(a) youth development practices into its programming. For example, in UCCE Santa Clara County, all programs are free, program materials are culturally relevant and in Spanish and English, and transportation is provided for youth to participate in events. 4-H staff engage in familial relationships with youth and parents, and communicate via *WhatsApp* since most youths do not have access to the Internet at home. Long-term impacts will increase the diversity and sense of belonging for diverse youth and families in 4-H and increase Latino(a) youths' access to various career pathways.

UC ANR manages two statewide nutrition education programs: the California Expanded Food and Nutrition Program (EFNEP) in 24 counties, and the CalFresh Healthy Living, University of California Program (CFHL,UC) in 32 counties. EFNEP delivers research-based nutrition education to limited-resource families with young children to improve healthy lifestyle choices. In 2021, EFNEP had over 9,200 enrolled in educational series. Program

evaluation findings from 2021 indicate that EFNEP adult graduates statewide averaged a $41.63 savings in their monthly grocery budget, which is a $500 savings per year. Given the COVID-19 pandemic's significant disruption to family finances from cascading shutdowns and layoffs, this extra money monthly made a difference. CFHL,UC operates under a joint agreement involving the USDA, California Department of Social Services, and UC Cooperative Extension to serve persons eligible for the federal Supplemental Nutrition Assistance Program (SNAP). In 2021 CalFresh Healthy Living, UC partnered with 254 SNAP education sites to make policy, systems, and environmental changes that reached more than 28,400 people. Statewide these sites adopted or enhanced food access and edible gardening strategies, such as new or expanded edible gardens at 93 sites and initiating or expanding mechanisms for: distributing seedlings and/or other materials to families or communities for home gardening at 84 sites; use of garden produce for meals and snacks at 22 sites; and distributing produce to families/communities at 17 sites.

Impact: Developing an inclusive and equitable society

One of UC ANR's seven public values is developing an inclusive and equitable society. UC ANR is committed to reaching all segments of the state's population. The COVID-19 pandemic brought to light the importance of essential workers in maintaining food system resiliency and, at the same time, worsened the inequities they face. In particular, farmworkers experienced exacerbated challenges in maintaining healthy, safe, and sustainable livelihoods during the pandemic, given dense living and working conditions and vulnerable legal status. UC ANR works internally to build cultural competency skills and develop proactive policies to increase diversity and inclusiveness and promote equity. UC ANR academics live and work in California communities, building trust and credibility to solve local problems together. Through these efforts, UC ANR strives to foster greater access to social and economic opportunity and advancement for all Californians. A few highlights from 2021 follow, which further illustrate how the food system also benefits through workforce retention, improved food safety, and protected water quality.

Working with small-scale farmers from socially disadvantaged communities
The new Irrigated Lands Regulatory Program aims to protect groundwater quality and requires farmers to report data to regional water quality coalitions. Complying with the proposed regulations is especially challenging for these growers due to language and cultural barriers. In 2021, a UCCE community-based academic provided one-on-one technical assistance that helped over 50 socially disadvantaged farmers complete the required paperwork to comply with water regulations, avoid costly fines, and protect groundwater quality.

To support food safety compliance for small-scale, culturally diverse growers in California, UCCE established a partnership with the California Department of Food and Agriculture (CDFA) — the Produce Safety Technical Assistance Program. A website was developed including information on food safety in multiple languages (English, Spanish, Mandarin, Hmong, Iu Mien), and six UC ANR Community Education Specialists were hired across four counties to support small farm food safety efforts with funding from CDFA. As part of this program, UCCE conducted a survey to determine the consumer preparation practices of Hispanic and Asian specialty crops, which received over 6,000 responses. The information was used to provide recommendations to the U.S. Food and Drug Administration (FDA) so that proper edits could be made to the Food Safety Modernization Act Produce Safety Rule. UCCE was invited to present the data to FDA in summer 2021 to advocate for the addition of 14 of the Hispanic and Asian specialty crops to the "Rarely Consumed Raw List."

Improving living and working conditions for California's food system and farm workers
A UC Cooperative Extension (UCCE) Specialist at UC Berkeley working on social justice in agriculture conducts evaluation research on social certification in agriculture. The researcher works with the Equitable Food Initiative

(EFI) in its continuous improvement process to strengthen its social certification and workforce development program. EFI's primary goal is to improve the working conditions of farmworkers in California and beyond. To date, EFI has implemented many of the evaluation-based recommendations from a 2017 UCCE report. Between 2017 and 2021, the number of EFI-certified farms increased from 19 to 48 and, relatedly, the number of workers on certified farms increased from 10,000 to more than 57,000, magnifying the impact of UCCE's recommendations that improve the working conditions of farmworkers.

Increasing diversity, inclusiveness, and cultural competency in California's workplaces
Another UCCE Specialist located at UC Berkeley served on the California FarmLink Board and helped establish a new Diversity, Equity, and Inclusion (DEI) Committee to assess and develop principles and best DEI practices for this organization. California FarmLink helps provide farmers with equitable access to lending, education, and land. A survey was administered to like-minded non-profits assessing the status of DEI principles, practices, challenges, and successes the organizations had with implementing DEI practices. The report from this survey was presented to the organization and at the Eco-farm conference, which draws statewide, national, and international participation of over 1,600 people. As a result of this effort, the California FarmLink organization increased the adoption of new DEI principles and practices, and increased diversity of the board in both racial and farmer representation. In this way, UCCE helped promote workplace diversity, equity, and inclusiveness.

Another UCCE scientist was the lead on a $1M grant from the National Institutes for Health for community-based participatory research. A course in human subject research ethics was developed so that the community researchers could receive their Collaborative Institutional Training Initiative certifications. Community researchers from three Northern California Tribes were engaged: The Mechoopda Indian Tribe of the Chico Rancheria, the Grindstone Indian Rancheria of Wintun-Wailaki Indians, and the Round Valley Indian Tribes. Two clinics, the Northern Valley Indian Clinic, Inc., and the Round Valley Indian Health Center, also collaborated with this project. All community and clinic partners, 40 people total, passed the course to be certified to conduct research with human subjects on federally funded projects.

Educational partnerships

For nearly 50 years, the University of California's Student Academic Preparation and Educational Partnerships (SAPEP) programs have helped prepare California students for higher education (10.3.1). Program activities are centered on student academic preparation, community college articulation support, school and community partnerships, and online and technology-assisted services. SAPEP programs served nearly 108,000 K–12 students at more than 2,000 public schools, and over 20,000 community college students at 112 community colleges in 2020–21, the most recent year available.

The goal is to promote achievement by supporting academic preparation and college readiness. Programs include the Early Academic Outreach Program (EAOP), which focuses on "a–g" course completion (a prerequisite for admission to UC and CSU); K–20 Regional Intersegmental Alliances (aka P–20), creating ties between campuses, schools, local communities, and business organizations; The Puente Project, focusing on college-preparatory English skill development; Transfer Prep, focusing on community college transfer support; and Mathematics, Engineering, Science Achievement (MESA), focusing on STEM (science, technology, engineering, and mathematics) skills development.

Legend:
- MESA College Prep centers (18)
- MESA College Prep participants (>14,000)
- MESA University Programs (13)
- MESA Community College Program centers (40)
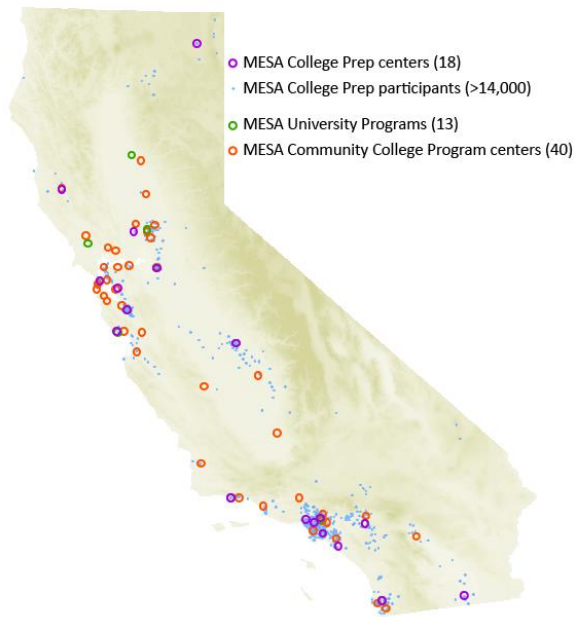
The Mathematics, Engineering, Science Achievement (MESA) program integrates UC's core missions of teaching and public service by focusing on the academic preparation of students at K–12 schools, community colleges, and four-year universities. Through its three components — the MESA College Prep Program (formerly known as MESA Schools Program or MSP), the MESA Community College Program (MCCP), and the MESA University Program (formerly known as MESA Engineering Program or MEP) — MESA serves more than 23,500 California students annually.

MESA College Prep centers are housed in 18 locations and serve more than 14,000 students at about 350 K–12 schools. Centers offer classes that reinforce math and science content standards. MESA activities include workshops aimed at strengthening study skills and monitoring progress.

The MESA Community College Program (MCCP) manages 40 centers at community colleges, serving around 4,500 students annually. These centers provide academic excellence workshops, orientation courses, academic advising, and counseling activities to help community college students transfer to a four-year university in a timely manner.

The MESA University Program operates 13 centers located in public (UC and CSU) and private universities across the state. Serving nearly 5,000 students annually, these centers assist college students in attaining four-year degrees in engineering and computer science by providing tutoring and academic skills workshops. In partnership with local industry leaders, MESA University Program centers also provide career and professional development opportunities for students. In addition to the activities UC undertakes to strengthen K–12 and community college students academically, UC plays an important role in preparing California's teacher workforce. UC's Teacher Education Programs prepare teacher candidates to engage students in rigorous, relevant, and inquiry-based educational experiences. Located at eight UC campuses, Teacher Education Programs recruit, prepare, and support educators who are committed to academic excellence, equity, and integrity, and to cultivating the highest levels of achievement and opportunity for all students.

UC also provides ongoing support to educators already in the workforce through professional development programs. For example, the California Subject Matter Project (CSMP) is a network of nine discipline-based statewide projects, providing more than 1,800 professional development events for educators at more than 4,000 schools each year. CSMP professional learning opportunities are aligned with state-adopted standards and are collaboratively designed by K–12 and university educators to enhance learning for all students (10.3.2).

Social and economic impact

Including the programs of ANR, the Natural Reserve System, and UC's educational partnerships mentioned above, the University of California administers more than 20,000 community-based programs across the state. Because the well-being of every California citizen and community is important, all campuses sponsor and manage programs far from their locations. For example, UC San Diego, near the southern border of California, runs clinical internship sites in Crescent City and other communities near the northern border of California; UC Davis, in the Central Valley, runs the Oiled Wildlife Care Network in Morro Beach on the central coast; and UC Santa Barbara, on the California Coast, runs the Outdoor Science Education Program in several locations on the east side of the Sierra Nevada range. All of UC's community-based programs may be discovered and explored at: ucal.us/maps.

UC's social impact

Through community and social services programs and cultural resources and arts programs, UC administers internship and field study programs that connect students and alumni with their communities; volunteer centers working on issues such as domestic violence, fair housing advocacy, and employment training; arts education and outreach programs that teach art, dance, drama, music, and digital arts in the community (10.4.1).

UC's economic impact

Through business and economic development programs and public policy programs, UC facilitates internships offered in partnership with local companies, where students gain both UC credits and professional experience. Other programs bring local high-tech and green-tech companies together with motivated individuals to foster student participation in community economic development (10.4.1).

As California's economy becomes increasingly dependent on highly educated workers, the role of the University of California in training the state's future workforce becomes more vital. Industries relying on skilled workers in the STEM fields represent a major component of California's economy. UC awards half of the state's bachelor's degrees in STEM fields.

More than 1.2 million UC alumni are known to live and work in California (10.4.2). They are leaders, volunteers, and contributors to the vitality of its communities, businesses, and culture. UC's operations also add significantly to the state's economy. With approximately 210,000 employees, UC is California's third-largest employer (10.4.3). True to its land-grant mission, the UC system touches many aspects of life in California. The UC public service mission has evolved in tandem with the changing needs of our state and local communities, and has developed programs and partnerships that improve the lives of all Californians.

UC Natural Reserve System

Note about the UC Natural Reserve System (NRS): While the NRS has public service at the core of its mission and has always been represented in the Public Service chapter of the UC Accountability Report, it is, in fact, part of the Research and Innovation Division of the University of California. This year, information about the NRS has been moved to the Research chapter. One indicator of its public service impact remains here as 10.2.1.

For more information

UC in California interactive map (website): ucop.cisr.ucsc.edu
(includes California counties, regions, campuses, UC system, and California elected representative districts)

UC Information Center public service (dashboards): universityofcalifornia.edu/infocenter#public-service

Division of Agriculture and Natural Resources (website): ucanr.edu

Natural Reserve System (website): ucnrs.org

MESA Programs (website): mesa.ucop.edu

CalTeach (website): calteach.universityofcalifornia.edu

Early Academic Outreach Program (EAOP) (website): eaop.universityofcalifornia.edu/index.html

The Puente Project (website): puente.berkeley.edu

California Subject Matter Project (website): csmp.ucop.edu

UC's Division of Agriculture and Natural Resources brings the power of UC research and education to local communities across California.

10.1.1   UC Division of Agriculture and Natural Resources programs
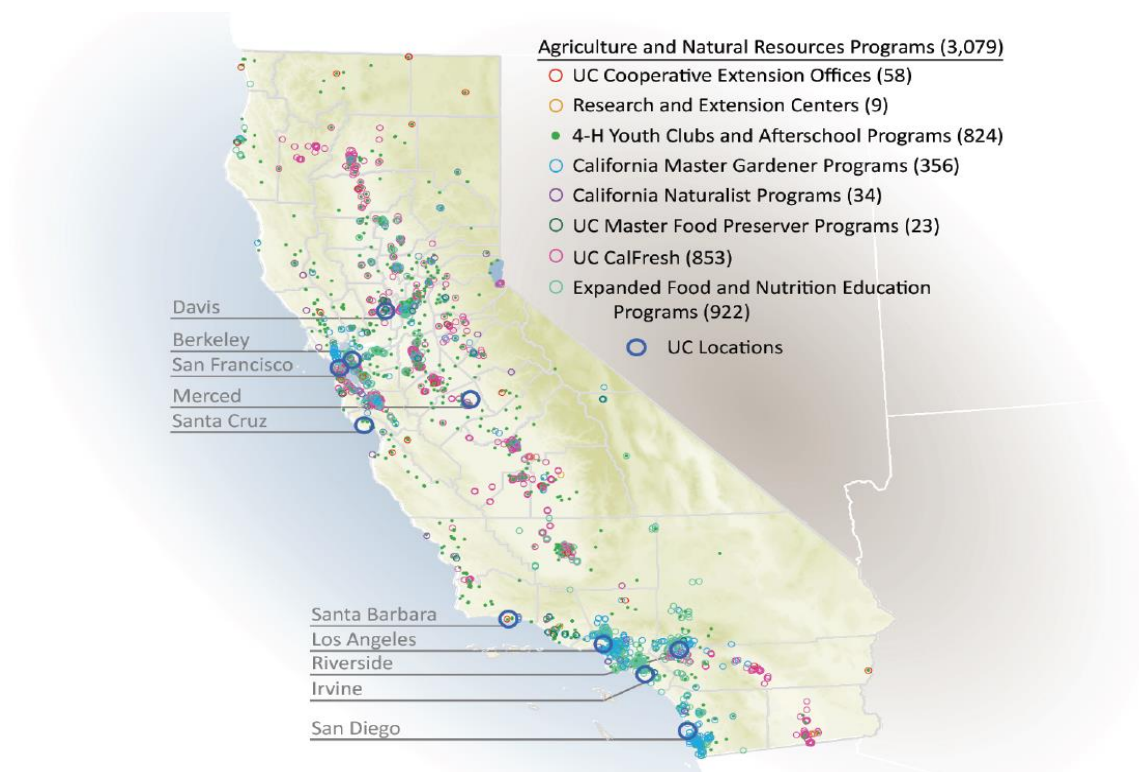
Source: UC campuses, most recent data from 2018

UC's land-grant arm, Agriculture and Natural Resources (ANR), operates several of California's most important agriculture and nutrition awareness and education programs, including Cooperative Extension, Research and Extension Centers, the 4-H youth development statewide program, the California Master Gardener program, the California Naturalist program, the UC Master Food Preservers program, UC CalFresh, and Expanded Food and Nutrition Education programs.

The UC Natural Reserve System covers more than 750,000 acres and represents most of California's major ecosystems.

10.2.1   UC Natural Reserve System
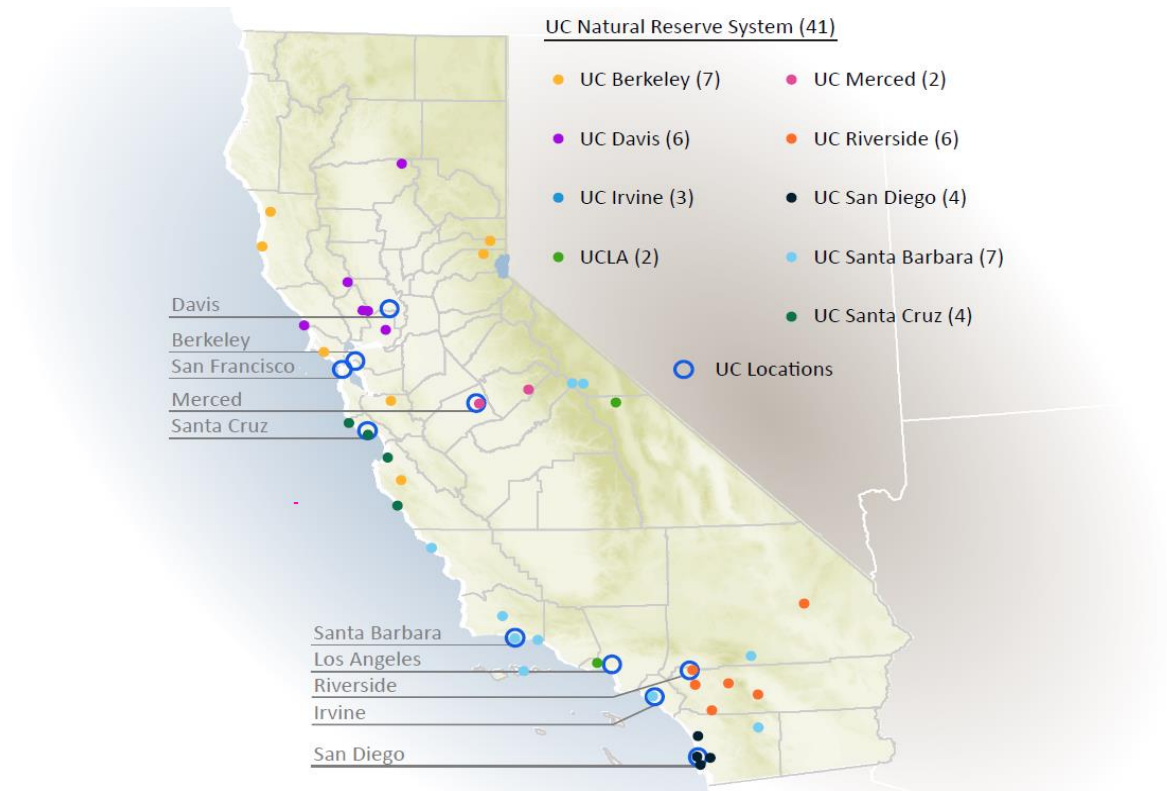
Source: UC campuses

As a major component of UC's environmental stewardship role, the UC Natural Reserve System (NRS) manages a network of protected natural areas throughout California. Its 41 sites include more than 756,000 acres, making it the largest university-administered reserve system in the world.

These lands provide undisturbed environments to conduct research, enhance student educational experiences, and provide sites for public service programs. In 2019, Point Reyes Field Station and Lassen Field Station joined the NRS as partnership reserves, which are jointly managed with the National Park Service at Point Reyes National Seashore and Lassen Volcanic National Park, respectively. For more information, go to universityofcalifornia.edu/infocenter/UC-NRS.

UC programs improve academic skills of K–12 and community college students across California.

10.3.1 UC K–12 and community college student services programs

K–12 Student Services (5,093)
- ○ Learning Centers, Tutoring and Other Programs (3,847)
- ○ MESA (415)
- ○ P-20 Partnerships (463)
- ○ EAOP (331)
- ○ The Puente Project (37)

Community College Student Services (633)
- ▫ Transfer Prep (387)
- ▫ Academic Support Programs (70)
- ▫ UC Davis Health Externships (77)
- ▫ The Puente Project (60)
- ▫ MESA (39)

○ UC Locations

Davis
Berkeley
San Francisco
Merced
Santa Cruz

Santa Barbara
Los Angeles
Riverside
Irvine
San Diego

Source: UC campuses, most recent data from 2018

Student Academic Preparation and Educational Partnerships (SAPEP) programs such as the Early Academic Outreach Program (EAOP), Mathematics, Engineering, Science Achievement (MESA), and The Puente Project are designed to increase completion of college preparatory ("a–g") courses, support enrollment directly from high school into four-year institutions, and support preparedness to transfer from community colleges to four-year institutions.

Students who participate in SAPEP programs are more likely to complete "a–g" courses (84 percent of SAPEP participants in AY2019–20 vs. 52 percent of California public high school graduates) and attend California public two- and four-year universities (72 percent of SAPEP participants in AY2019–20 vs. 55 percent of California public high school graduates[1]).

In 2020–21, SAPEP programs served nearly 108,000 K–12 students at more than 2,000 public schools, and over 20,000 community college students at 112 community colleges. In addition, over 24,000 parents/guardians of K–12 students and nearly 7,000 teachers, counselors, and school administrators also participated in SAPEP programs.

[1] Comparison data are for the Class of 2018, the most recent year available from the California Department of Education's DataQuest (see dq.cde.ca.gov/dataquest/).

UC helps prepare California's teacher workforce and strengthens the skills of teachers throughout their careers.

10.3.2 UC teacher professional development and teacher preparation programs
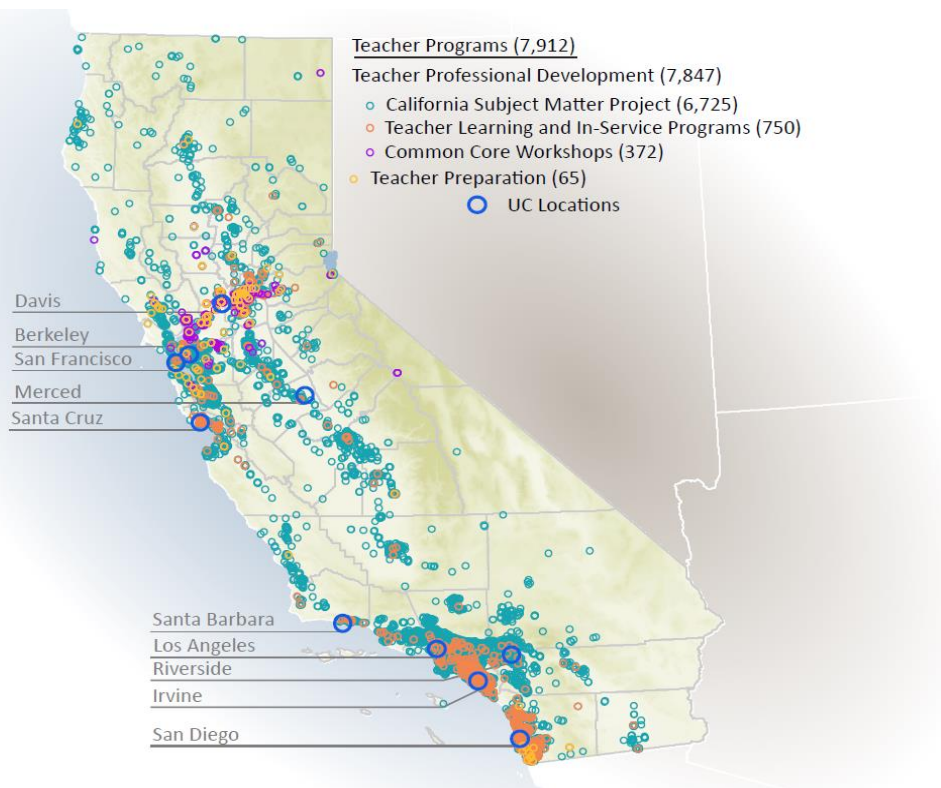
Source: UC campuses, most recent data from 2018

The University of California plays an important role in preparing teachers for their careers and providing them professional development. UC manages more than 7,800 teacher professional development programs and 65 teacher preparation programs.

The California Subject Matter Project, for example, creates sustainable teacher learning communities throughout California. Its network of nine discipline-based projects supports professional development to improve instructional practices and student achievement.

Teacher professional development activities include teacher workshops related to Common Core State Standards, writing, mathematics, and in-service teacher training.

Teacher preparation programs include CalTeach, a component of the Science and Mathematics Initiative (SMI). Through this program, UC recruits and prepares its undergraduates majoring in mathematics and science for teaching careers, and provides special coursework and field experiences in K–12 schools. Since its inception in 2005, CalTeach has served more than 15,000 UC undergraduates, many of them now credentialed STEM educators in California public schools.

UC is involved in communities across California through a wide range of local-level service programs.

10.4.1   UC programs for community and social services, cultural resources and arts, university extension, business and economic development, and public policy
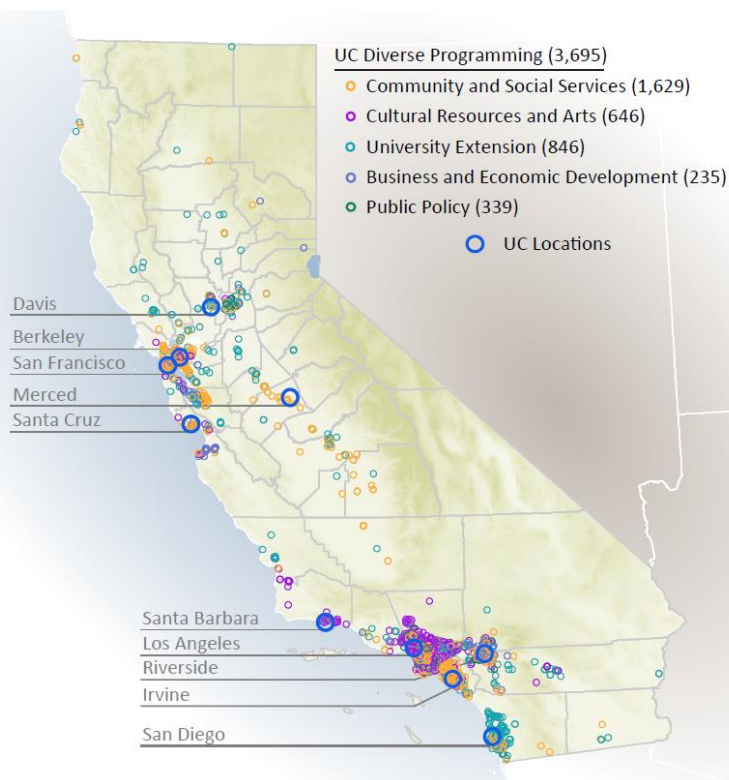
UC administers around 1,630 programs providing community and social services throughout the state, and about 650 arts education and outreach programs that expose students and community members to art and culture through performing arts, theater, cultural events, and other activities. The University operates 235 business-related programs statewide.

Serving about 500,000 course registrants, almost 850 UC University Extension programs offering some 17,000 different courses encourage lifelong learning for all Californians. Additionally, nearly 340 public policy programs engage the community and raise awareness of public policy issues.

Of UC's more than two million living alumni, many reside within California.

10.4.2   Location and industry of employment of UC alumni since 2000, in California
Fall 2015
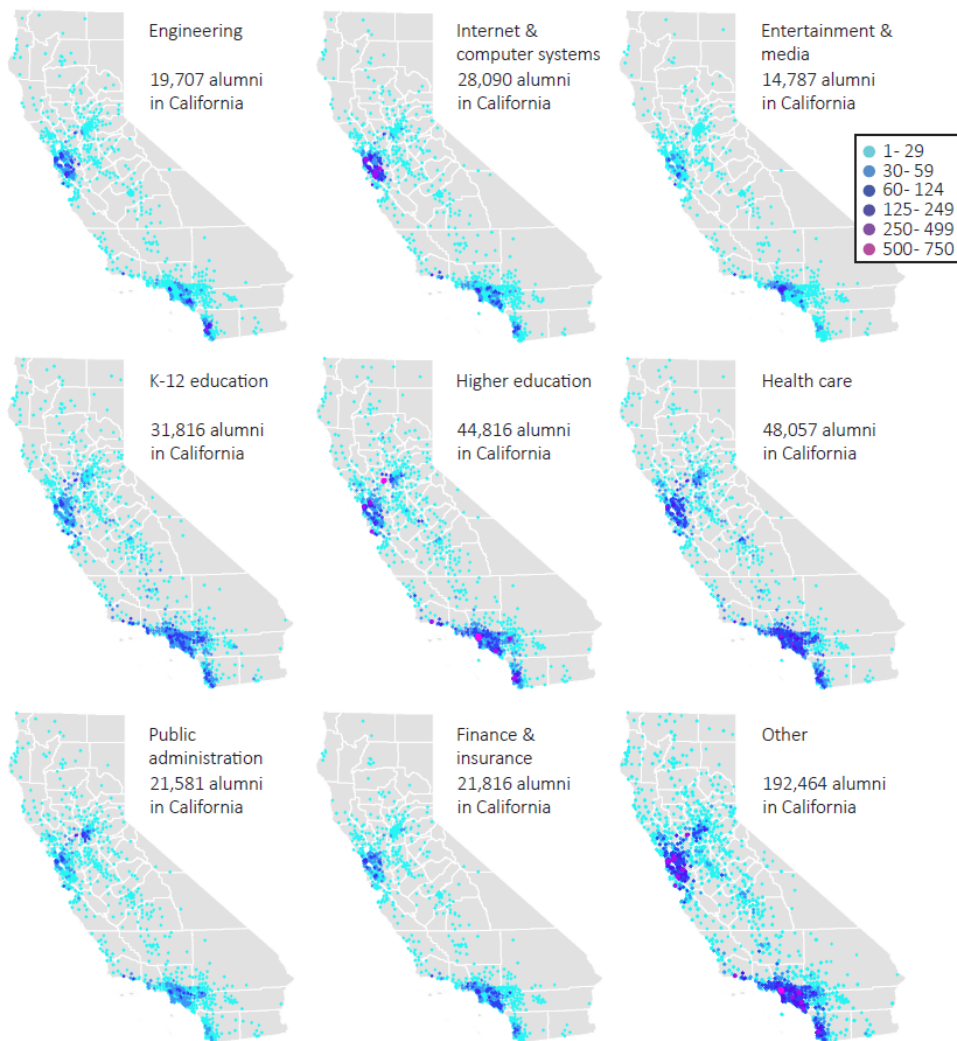
Source: UC campuses, EDD; Other includes industries such as retail & wholesale, manufacturing, transportation, construction, legal services, and others.

Campus alumni offices maintain recent residential address information for more than 85 percent of those alumni. These maps display the distribution across California of UC graduates in each of eight different industries, as reported by California Employment Development Department (EDD).

The industry with the largest employment of young UC graduates is health care, employing about 12 percent of these alumni, followed by higher education.

UC is one of California's largest employers, with over 230,000 employees.

10.4.3 Faculty, academics, and staff employees; retirees, in California, 2022
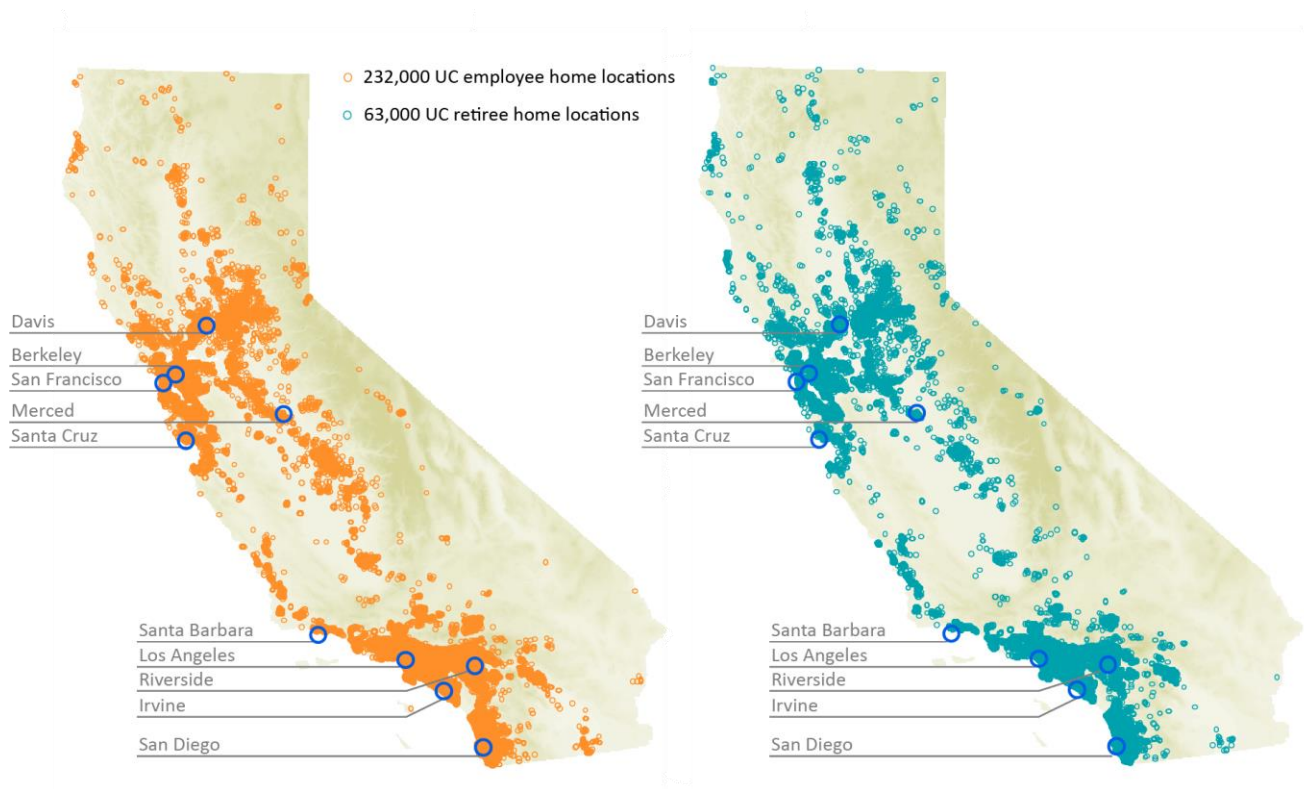
Source: UC Information Center Data Warehouse

The University of California employs approximately 232,000 faculty, academics, and staff in California, making it the state's third-largest employer. With employees residing throughout the state, UC's economic impact goes well beyond its ten campus locations. Members of its workforce purchase goods and contribute to local economies across the state.

In addition to the current employees shown on this map, more than 63,000 of UC's more than 82,000 retirees reside in California, and their UC pension benefits also contribute to the communities in which they reside.

University of California Health

On the evening of Nov. 10, the School of Medicine held their inaugural American Indian Medical Student Blessing Ceremony and Blanket Presentation. Blanket ceremonies are a pan-Indigenous practice that celebrate individuals going through life-changing events. On this night, eight Native American medical students would be recognized for their growing contributions to the community, as they transitioned from students to student-doctors.

This ceremony is the latest in a series of recent initiatives by the School of Medicine to promote Native American recruitment, retention and educational programming. A sense of community pride was shared amongst the Native students, staff, faculty and local representatives in the crowd.

The night began by addressing the university's role as a land grant institution. UC San Diego was built on the unceded territory of the Kumeyaay Nation, whose people remain a vital part of the local community. San Diego County also has the highest number of Tribal Nations in the country, but still only 1 percent of UC San Diego medical students identify as American Indian or Alaska Native.

"Being a land grant institution gives you a responsibility to serve not just Tribal communities on that land, but across the entire country," said Alec Calac, a public health MD/PhD student and member of the Pauma Band of Luiseño Indians, a local Tribe in San Diego County. "As the region's only academic medical center, we have an affirmative obligation to educate Tribal members. I think UC San Diego has done a lot of honest introspection on this in recent years, and the presence of these eight students shows we've come a long way."

University of California Health

Improving health and well-being for all

Health is a crucial concern in all California communities, and we are facing many challenges – from deadly viruses and accelerating climate change to global conflict and migration. Guided by its tripartite mission of teaching, research, and public service, the University of California has a bold vision: to improve the health and well-being of all people living in California now and in the future by better educating and training the inclusive workforce of tomorrow; delivering exceptional care; and discovering life-changing treatments and cures. This expansive aim is appropriate for the University of California, which is home to the country's largest academic health system comprising 20 health professional schools, six academic health centers, ten student health centers, the systemwide Global Health Institute, and self-funded health plans.

The health division within the UC Office of the President connects the people and resources of the health enterprise and coordinates key systemwide activities where the power of UC's health expertise and resources working together adds value. Initiatives flow from a long-term strategic framework to keep the system at the forefront of clinical, educational, and research excellence. Among the top priorities are promoting health equity through the elimination of health disparities, and creation of more inclusive opportunities for students, faculty, and employees. The vision for the health system also centers on ensuring it is a data-driven, learning, health care organization achieving excellence across all of its functions. Operationally, the health division also focuses on identifying opportunities to achieve economies of scale for the system. The systemwide Leveraging Scale for Value program generated $204M in value for FY 2021 and has delivered a cumulative benefit of approximately $1.7 billion since its inception.

The outcomes of the University's commitment to improving health and well-being for all are demonstrated in many ways, including through $3.9B in community benefits delivered by UC's academic health centers and faculty practices in FY 2020.

Learning and adapting for what's ahead

Experiences during the past several years have cast a brighter light on the realities and impact of health disparities, climate change, and migration on the human condition. UC's health care delivery, education, and research teams have demonstrated their resiliency during these difficult times and now are embracing and acting on lessons collectively learned. Initiatives have begun addressing urgent issues that will surely dominate the health field during the years to come.

The critical role of data in the pursuit of improved health equity became apparent during the pandemic. COVID-19 has disrupted lives, interrupted health maintenance and care, and further highlighted existing health disparities. To improve health equity, systemwide efforts are leveraging advancements made in data gathering, integration, and modeling by the Center for Data-driven Insights and Innovation that were critical for the COVID-19 response. Data sets integrating information from UC's six academic health centers and faculty practices have been analyzed and categorized using state and national indices including the California Healthy Places Index, the Social Vulnerability Index, and the Area Deprivation Index, which give a more accurate representation of UC patient demographics. The enhanced data help identify best practices and monitor quality improvement outcomes by social indices, race, and ethnicity. In another example of enhanced data use, the systemwide Quality & Population Health program brought UC's health services research community together to identify drivers of a disparity in blood pressure for Non-Hispanic Black patients. The drivers will be used to help design improvement work at each academic health center.

The importance of supporting the health of the most vulnerable in our interconnected world was evident as historic numbers of unaccompanied minor children came across the southern border of the United States at the same time as the COVID-19 crisis. UC's academic health centers mobilized to care for them, supporting the health of these children while also helping mitigate risks from potential COVID-19 spread. A systemwide rapid response brought multi-disciplinary teams of UC child health professionals to two major intake sites in the state, supported by UC resources including laboratory, radiological, and emergency equipment; electronic medical records; medical supplies; pharmaceuticals, and vaccines. During the five-month response in spring 2021, UC teams provided state-of-the-art preventative and interventional care for nearly 5,000 children and adolescents. All children received triage visits on arrival and full exams within 24-48 hours. UC providers were available 24/7 on-site and delivered an additional 11,000 urgent care visits and nearly 8,800 doses of vaccines. Approximately 16 percent of children had COVID-19, most infected prior to arrival. Infection prevention processes prevented forward transmission within the emergency sites or in the community. In addition to medical care, culturally-sensitive psychological, social, and dietary support was extended to all, ensuring availability of trauma-informed care. In addition to being valued by the children, this work enhanced the educational experience for many graduate medical residents and fellows and provided lessons learned for creating culturally sensitive, trauma-informed care.

Climate issues have become one of the most serious threats to health. Accelerating emergence of new viruses, declines in air quality, natural disasters, and food supply disruptions are all among the climate-related impacts that must be addressed by health professionals and systems. For many years, UC has been working to update its health operations to cause less impact on the environment and its communities. Health teams across the system have made progress on sustainability goals and will be using learnings from that work to update systemwide goals and take additional actions. Existing efforts led to the system being named a 2021 Climate Champion by Health Care Without Harm, and all of UC's academic health centers being recognized by Practice Greenhealth as 2021 Environmental Excellence Award winners. Additionally, a grant from America's Essential Hospitals is helping share across the system best practices developed at UCSF Health that reduce carbon emissions from anesthesia gases as well as actions for reducing energy consumption in operating rooms.

With these and other learnings in mind, the health division has launched a deep-dive strategic planning process to create the next five-year strategic plan to prioritize the areas where systemwide collaboration can add additional value and ensure ongoing resilience, learning, and excellence.

COVID-19 response and prevention continue

The pandemic continues to impact UC's health system. UC's academic health centers have remained on the front lines of response, including caring for patients during the winter 2021–22 surge driven by the omicron variant, with COVID-19 hospitalizations at UC academic health centers reaching a high on January 20, 2022. Since identification of COVID-19 in the State through mid-April 2022, UC hospitals have cared for more than 100,000 patients with COVID-19. Vaccination has been a focus of UC's prevention work and has included administering more than 1.5 million COVID-19 vaccine doses as of mid-April 2022, including numerous clinics in medically underserved areas working with community partners.

The work in prevention and monitoring also involved enhanced data support as the Center for Data-driven Insights and Innovation created more robust vaccine reporting to the State and expanded data in its regularly published COVID-19 dashboards. This reporting gave public health officials and the public an understanding of the level of community spread of the virus, the burden on hospitals and the outcomes of the robust testing efforts engaged in by UC labs. The data provided evidence-based inputs for decision making by public health authorities as well as for individuals evaluating their own personal risks.

UC's health experts were equally engaged in informing UC campus response and prevention as detailed in a research study published in November 2021 in PLOS ONE. The mitigation efforts informed by the UC Systemwide

COVID-19 Public Health Workgroup to reduce COVID-19 on the ten University of California campuses minimized campus transmission and outbreaks and limited spread to surrounding communities. UC Student Health and Counseling centers served as a pivotal resource in the on-campus COVID-19 pandemic response, allowing the campuses to return to in-person learning in fall 2021. Since the onset of the COVID pandemic, the Student Health and Counseling centers have tracked more than one million doses of COVID-19 vaccine; followed more than two million COVID-19 surveillance tests for students, staff, and faculty; diagnosed more than 13,000 cases of COVID and arranged quarantine and isolation for more than 28,000 students across the system. In addition, Student Health and Counseling centers provided ongoing primary care and behavioral health care via telehealth and medications-by-mail to many of UC's 294,000 students during this period.

Improving access and equity through the next generation of health care professionals

As the most populous state in the nation with nearly 40 million people, California has a critical need to ensure robust access to quality health care. This need will become even greater as the state's population grows and becomes increasingly diverse and older, while facing myriad health needs. While some geographic areas have a sufficient supply of health providers, other regions in the central part of the state have far fewer health professionals than needed.

UC's health sciences programs are a vital source of the state's future dentists, doctors, nurses, optometrists, pharmacists, public health professionals, and veterinarians. The University is the largest and one of the most comprehensive health sciences training programs in the nation, with over 15,500 students. Based on historical averages, more than 70 percent of graduates from these programs will remain in California after graduation or residency. This high rate of retention reflects the University's long-standing commitment to the admission and training of California students pursuing future careers in the health professions.

University of California's 20 health sciences schools are:

- **Dentistry** (UCLA, UCSF)
- **Medicine** (UCD, UCI, UCLA, UCR, UCSD, UCSF)
- **Nursing** (UCD, UCI, UCLA, UCSF)

- **Optometry** (UCB)
- **Pharmacy** (UCI, UCSD, UCSF)
- **Public Health** (UCB, UCLA, UCSD)
- **Veterinary Medicine** (UCD)
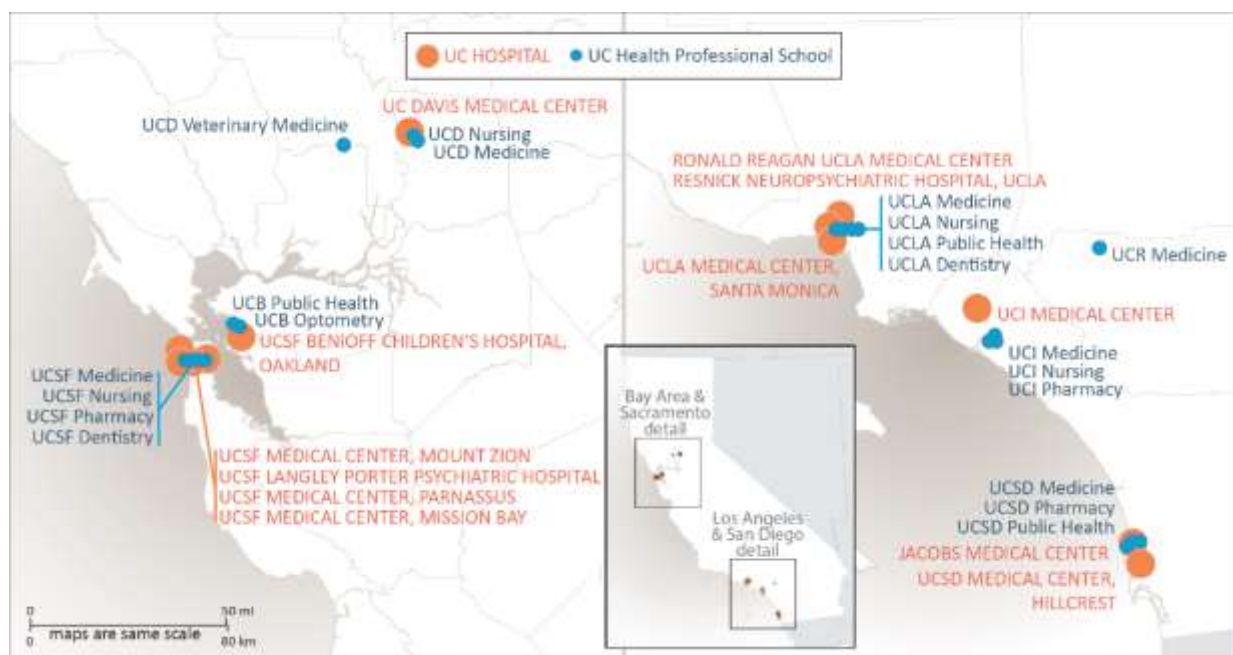
The caliber of UC's health professional programs is demonstrated in the rankings produced by U.S. News & World Report, current as of April 2022.

Category	UC Berkeley	UC Davis	UC Irvine	UCLA	UC San Diego	UC Riverside	UCSF
Best Medical Schools – Research	--	51 (tie)	51 (tie)	19	20	95-124***	3 (tie)
Best Medical Schools – Primary Care	--	8	61 (tie)	13	32	94-124***	2
Best Nursing Schools – Masters	--	23	42 (tie)	19	--	--	11
Best Graduate Schools Public Health	8	19* (tie)	31*	10	****	--	--
Best Pharmacy Schools**	--	--	****	--	18	--	2
Best Veterinary Medicine Schools**	--	1	--	--	--	--	--

* Indicates a degree program rather than a school.

** Indicates these graduate schools were ranked in previous years and remain current as of publication date. USN&WR does not rank dental or optometry programs.

*** Indicates a grouped ranking.

****Schools not evaluated. UC San Diego Herbert Wertheim School of Public Health and Human Longevity Science began enrolling students in fall 2020. UCI School of Pharmacy & Pharmaceutical Sciences began enrolling students in fall 2021.

US News & World Report includes a diversity ranking for medical schools. Four of the six UC medical schools are among the top fifteen in the nation for diversity in the rankings published in April 2022.

National Rankings of Medical Schools Based on Diversity

- #3 UC Davis School of Medicine
- #11 UC Riverside School of Medicine (tie)
- #11 UCSF School of Medicine (tie)
- #14 David Geffen School of Medicine at UCLA

To make progress toward health equity, we must have health care providers who reflect the diversity of our communities. Health sciences graduates must be prepared and better trained to address the cultural, social, and economic factors, health practices, and potential environmental hazards that affect health outcomes. In 2004, UC launched a systemwide medical education program intended to help address state needs, collectively referred to as "UC Programs in Medical Education," or UC PRIME. These medical student educational programs include innovative training opportunities focused on meeting the health needs of California's historically underserved populations. In the 2021–22 academic year, 366 medical students (more than ten percent of all UC medical students) were enrolled in the six UC PRIME programs. New funding from the State will enable growth in PRIME enrollment over six years, including the launch of new PRIME programs focused on American Indian/Alaska Native communities and those facing Black/African American groups and communities.

Additional efforts toward diversifying the physician workforce and training them to effectively serve communities impacted by health disparities are occurring at UC teaching programs in the central region of the State. UCSF Fresno is the largest physician training program between Sacramento and Los Angeles, with 600+ physicians and rotating medical students trained each year and 550,000+ patient visits annually at clinical partner sites. Approximately 40 percent of all UCSF Fresno 2021 physician-trained graduates remain in the Central Valley.

At UCR, the School of Medicine has recruited nine classes of high-quality, diverse students. The current first-year class is composed of 86 matriculants: 63 percent are female, 41 percent self-identify as being underrepresented in medicine. In addition, 56 percent of students in the current first-year class are from socioeconomically and/or educationally disadvantaged backgrounds, approximately 63 percent have ties to the region, and 35 percent are the first in their family to complete a bachelor's degree.

Following four years of medical school, graduates enter another period of training — Graduate Medical Education (GME). In March 2022, UC medical school graduates had a 'match rate' of 99 percent into GME residency programs and of those, 41 percent matched at a UC hospital. GME programs provide in-depth training that may last three to seven years depending on the area of specialization. All of UC's academic health centers provide GME training programs and fund a substantial number of them without traditional federal support. In the 1960s, Medicare began paying for a substantial portion of the cost of residency programs. In 1997, it limited the number of funded residencies. The cap on Medicare-funded residencies has not been revised upward since then, despite a growing and aging national population with more health care needs. As a result, and in support of its teaching and public service missions, UC academic health centers began absorbing costs for residency training positions. In the 2020–21 academic year, UC trained 5,266 medical residents. Of those, 860 positions receive no direct federal GME direct support, resulting in an annual cost of $113 million to the University.

Delivering quality, accessible care

UC's health system includes six academic health centers, five of which own or operate their own hospitals and one that leverages a community-based training and care delivery platform. The hospitals of UC Davis Health, UCI Health, UCLA Health, UC San Diego Health, and UCSF Health admitted 162,735 patients in FY 2021 for 1,090,958 inpatient days. The hospitals also provided 5,993,965 hospital-based outpatient clinic visits. When combined with outpatient services of the health professional schools, University of California Health provided nearly 9.3 million outpatient visits. The care delivered is often for patients with complex medical conditions as shown by the system's 2.25 Case Mix Index weighted average, which was higher than the levels reported by 96 percent of other California hospitals in FY 2020, the most recent year statewide data is available.[1]

UC's health system is an essential part of California's health care safety net system. Care is provided regardless of whether a person has health insurance or the type of health insurance they have. The academic health centers are supported almost entirely by reimbursement for clinical services paid by Medi-Cal (Medicaid), Medicare, and commercial payers. Systemwide, in FY 2021, 34 percent of inpatient days were associated with Medi-Cal, 36 percent with Medicare, 29 percent with private market payers, and one percent with self-paying patients. Together, UC's academic health centers are the second-largest provider of Medi-Cal hospital services by most measures, despite operating less than 6 percent of the acute care beds in the state.[2] Additionally, UC providers help ensure Medi-Cal enrollees have reliable access to primary care by providing services at Federally Qualified Health Centers. In FY 2021, UC also provided $2.6 billion in unreimbursed care including care in excess of reimbursement for patients with health insurance from publicly sponsored programs such as Medi-Cal and Medicare.

Clinical quality is an area of distinction. All five UC academic health centers that own or operate hospitals are ranked among California's top hospitals, and two are on the national honor roll, according to U.S. News & World Report, which has ranked hospitals for more than three decades.

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[1] Case Mix Index for California hospitals from California Health & Human Services Open Data Portal data.chhs.ca.gov/dataset/case-mix-index/resource/3ed58730-7dbb-4a48-bae5-0e66929c44f7?view_id=506617c4-8b11-4a21-bff6-b2eb7298c9cb

[2] American Hospital Directory cites 74,925 non-federal, short-term, acute care staffed hospital beds in CA. ahd.com/states/hospital_CA.html

The :

Best Hospitals, Nationally
#3 UCLA Health
#9 UCSF Health

Best Hospitals, California
#1 UCLA Health
#3 UCSF Health
#5 UC San Diego
#7 UC Davis
#15 UCI

UC's health system is known for giving patients access to medical research discoveries and innovations through clinical trials. The approximately 4,700 clinical trials happening across the UC system involve new vaccines and drugs, new technologies for diagnosing and treating illnesses, and new strategies for staying healthy – and include work in areas ranging from cancer and diabetes to COVID-19 and transplants.

Health care for UC students is also a priority. UC's ten Student Health and Counseling centers offer a wide range or primary care medical and mental health services to UC's student populations, including primary care, ancillary services such as lab and x-ray, pharmacy, counseling, and psychiatry as well as specialty care, available at some campuses. Additionally, Student Health and Counseling centers have collaborated with UC's academic health centers to build the capacity to make available a comprehensive array of reproductive and sexual health services to all students who desire them, including health education, screening, prevention, prophylaxis, and treatment for sexually transmitted infections including HIV, and extensive birth control methods including long-acting reversible contraceptives and medication abortion. Students are provided easy, affordable access to care through UC's self-funded Student Health Insurance Plan (UC SHIP) that offers high-quality, low-cost health insurance to all registered students, with medical, prescription, dental, and vision benefits. The plan is one of the largest self-funded student insurance plans in the United States, with current enrollment of approximately 130,000 students.

Delivering more together

The work to improve health equity is an area of priority for collaboration. The Quality & Population Health program brings expertise and resources together from across the system to improve care and outcomes, including for individuals who face challenging social and economic situations. The foundation for this work is in the increasingly complex use of data to identify and understand health disparities, which has been enhanced through new dashboards developed with the Center for Data-driven Insights and Innovation. The Quality & Population Health team uses data for more than 835,000 UC ambulatory patients with cancer, diabetes, and hypertension, and those receiving primary care, to measure improvements across the UC systemwide quality metrics it has developed. Quality & Population Health is able to share best practices across the system and has already helped drive an 11 percent improvement across three diabetes and hypertension metrics.

Other systemwide initiatives to address health disparities using data include a commitment to the nationwide Health Equity Pledge alongside approximately 40 other health care organizations. Pledge participants collect, stratify, and review data about race, ethnicity, language, and sex across top metrics and will share anonymized, aggregate-level information to inform best practices across the country. Additionally, CORDS — a unified, secure data set created at the system level during the COVID-19 pandemic — now has more than 640 million data points. The CORDS data set is a robust resource for UC researchers investigating COVID-19, resulting in 15 peer-reviewed papers and numerous research abstracts to date as well as state and national media attention.

Cancer is another area in which UC's combined health expertise adds value for patients. The UC Cancer Consortium brings together the University's five comprehensive cancer centers, each of which holds the highest designation from the National Cancer Institute. Together, these centers collaborate on research and clinical trials, share best practices to provide the highest quality care, and promote health equity by addressing cancer health disparities, including for 10,000 active cancer patients covered by Medi-Cal who received care last year through one of UC's cancer centers. A new initiative has been the pilot of a multi-campus molecular tumor board where physicians and researchers come together in a collaborative forum to discuss new cancer therapeutic options based on each patient's unique biomarker profile.

For more information

UNIVERSITY OF CALIFORNIA SYSTEMWIDE ECONOMIC, FISCAL, AND SOCIAL IMPACT ANALYSIS REPORT: UC HEALTH IMPACT: regents.universityofcalifornia.edu/regmeet/feb21/h5.pdf

UC Budget for Current Operations, 2022-23: ucop.edu/operating-budget/_files/rbudget/2022-23-budget-detail.pdf

UC-trained health professionals in California: universityofcalifornia.edu/infocenter/uc-health

Medical Centers Annual Financial Report: finreports.universityofcalifornia.edu/index.php?file=/med_ctr/20-21/medical-center-reports-2021.pdf

University of California Health: health.universityofcalifornia.edu/

More UCH reports and resources: health.universityofcalifornia.edu/reports

UC is currently training over 15,500 health care professionals.

11.1.1   Health sciences students by discipline, fall 2021
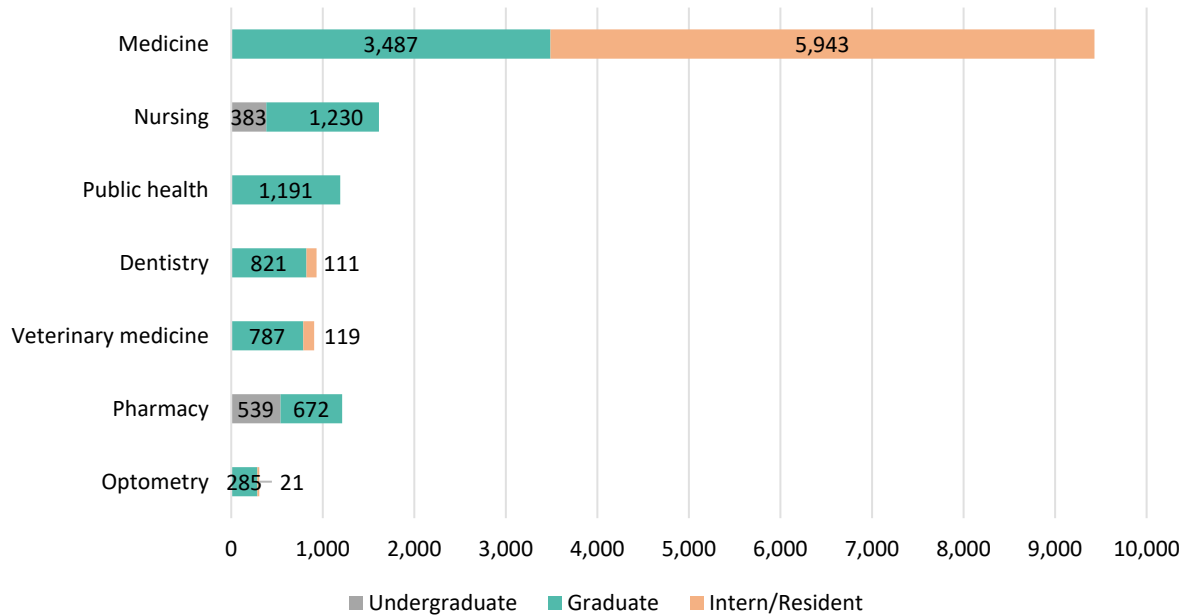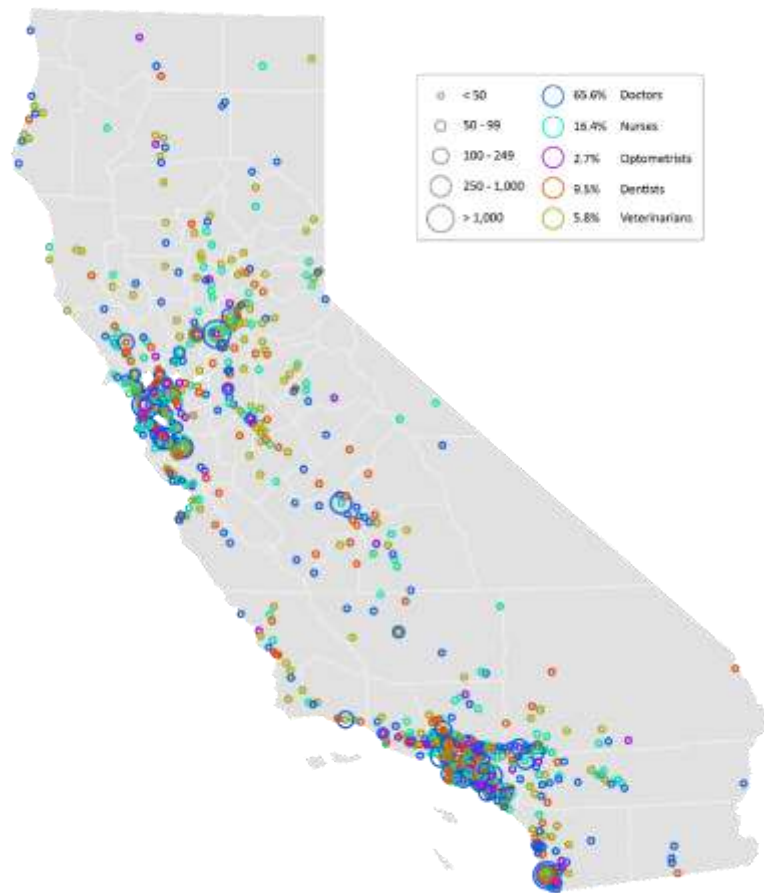

Source: UC Information Center Data Warehouse

Over 15,500 students are enrolled in University of California's health sciences schools and residency programs. This next generation of caregivers is an important part of California's future as its population grows, ages, and becomes more diverse.

UC-trained health sciences professionals remain in California in high numbers.

11.1.2   Location of doctors, nurses, dentists, optometrists, and veterinarians trained by UC since 1999 and currently licensed in California

Source: UC Information Center Data Warehouse and the CA Department of Consumer Affairs

Based on the 2021 California licensure of 2011–2019 graduates of UC health sciences' schools and residency programs, approximately 74 percent of UC health science students and 61 percent of health residents are expected to remain in the state after completing training or education.

This high rate of retention makes UC Health one of the principal sources for the training of health professionals for California.

2005–2010 students and residents retained in California, combined:

Doctors	62%
Dentists	62%
Veterinarians	67%
Nurses	72%
Optometrists	77%

UC is addressing medical needs in California's underserved communities.

11.2.1 Medically underserved areas and populations

All of University of California's health sciences schools emphasize public service and caring for the underserved. These programs include:

UC PRIME: California has large regions that are Medically Underserved Areas (MUAs) and other regions with distinct Medically Underserved Populations (MUPs). UC PRIME (Programs in Medical Education) is a unique systemwide initiative with programs at each of UC's six medical schools that supplement standard training with additional curriculum tailored to meet the needs of various underserved populations. Each program has a dedicated area of focus, targeted student recruitment, supplemental criteria for admission, relevant curricular content, and dedicated faculty mentorship. Since inception, UC PRIME programs have produced more than 600 medical school graduates. In the 2021–2022 academic year, 366 UC medical students enrolled in PRIME, with 68 percent coming from underrepresented groups in medicine.

New UC PRIME programs are planned for Fall 2022, focused on the needs of American Indian/Native American (AI/NA) communities and Black/African American (Black/AA) communities in California. Enrollment of 48 new PRIME students in each program is planned, resulting in 96 new UC medical students per year once the programs are fully enrolled. These students will be preparing for a career serving underserved Black and Native American patients.

UC Riverside: Persistent shortages in certain areas also led to the creation of a different kind of medical school at UC Riverside. UC Riverside's medical school focuses on the recruitment and retention of students with regional ties and with an emphasis on training for future physicians pursuing careers in family medicine, obstetrics and gynecology, psychiatry, pediatrics, general surgery, and internal medicine — specialties with significant shortages.

UC Riverside embeds its students and residents in community-based health organizations, many of which serve people with the lowest incomes and access to care. Additionally, the school uses funds from foundations and individual donors to waive tuition and fees for graduates who agree to practice medicine in underserved areas for five years.

UCSF School of Medicine Fresno Branch Campus: In 1975, UCSF Fresno was established as a regional graduate medical education campus of UCSF. This occurred with support from the state legislature and the Veterans Administration to address physician shortages in California's San Joaquin Valley (SJV). Today, UCSF Fresno is the largest physician training program between Sacramento and Los Angeles, with 600+ physicians and rotating medical students trained each year; 300 core and 400 volunteer UCSF faculty in Fresno; 550,000+ patient visits annually at clinical partner sites; and 300+ research studies, clinical trials, and public service projects. Roughly 40 percent of all UCSF Fresno 2021 physician-trained graduates are staying in the Central Valley, and 75 percent of all graduates are remaining in California.

Inflation-adjusted health science professional degree fees have leveled off after incurring sharp increases during years of declining State support. Average debt levels are increasing.

11.3.1 Average total charges for health professional degree students, Universitywide, 2010–11 to 2021–22

Source: UC Budget Analysis and Planning
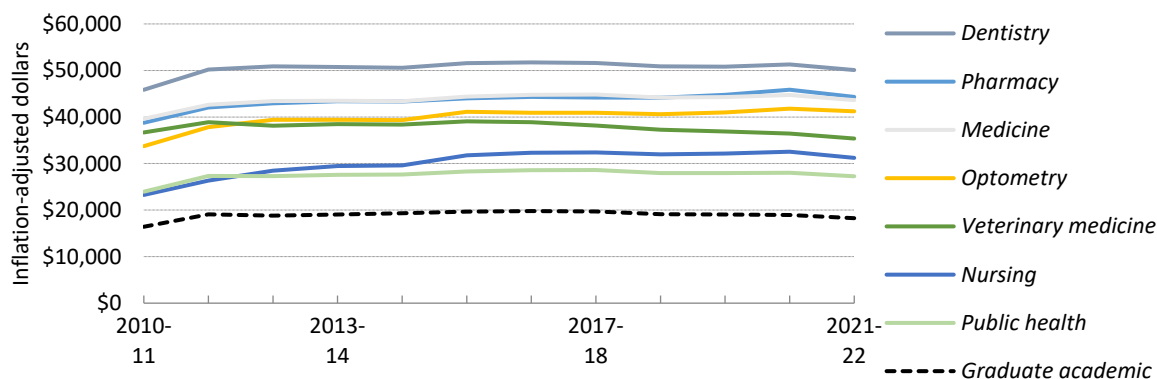
11.3.2 Health sciences professional degree student debt at graduation, Universitywide, 2010–11 to 2020–21

Source: UC Information Center Data Warehouse
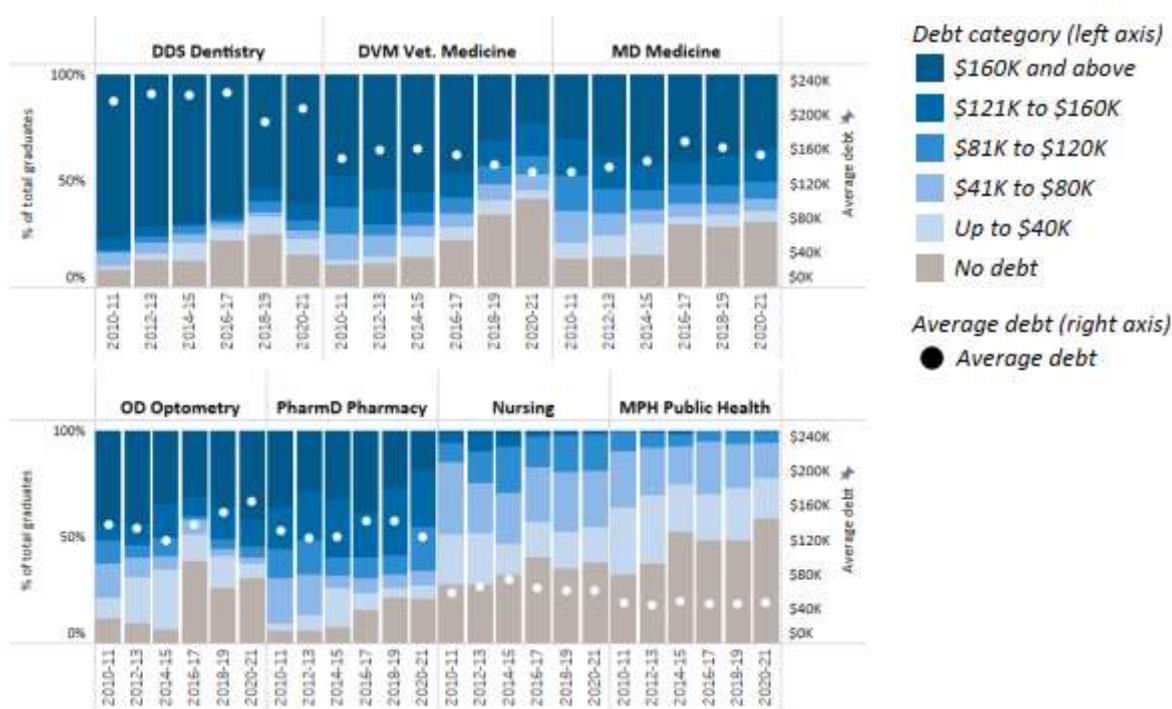
The rising cost of graduate education has not been matched by increases in State support. In fact, State support declined significantly during recurring State fiscal crises, which caused the University to increase tuition, campus-based fees, and professional degree supplemental tuition (PDST). This cost-shifting has contributed to students taking on increasing amounts of debt. At least one-third of the revenue raised from professional school fees is used to provide financial aid to current students.

As academic health centers and safety net hospitals, UCH hospitals are destinations for some of the most critically ill patients in the state. A large share of these patients are from Medicare or Medi-Cal.

11.4.1   Patient complexity (Case Mix Index)
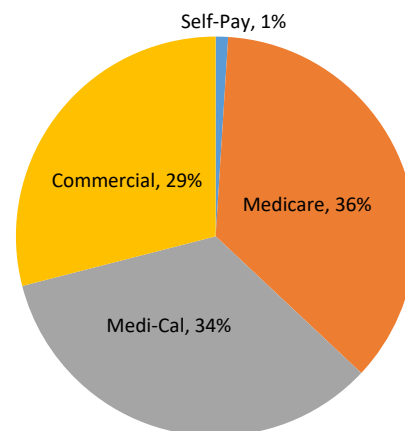UC medical centers
2021, 2020, and 2019 fiscal years

	2021
Davis	2.22
Irvine	2.14
UCLA	2.36
San Diego	2.12
San Francisco	2.35

■ 2021 ■ 2020 ■ 2019

One way to understand the health needs of hospitalized patients is the Case Mix Index (CMI). Index values above 1.0 indicate increasingly poor health. In most acute care hospitals in California CMIs are between 1.1 and 1.5.
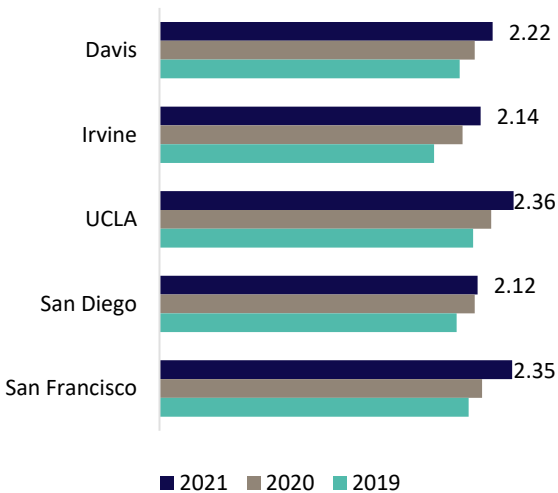
11.4.2   Patient days
UC medical centers
2021, 2020, and 2019 fiscal years

	2021
Davis	204,367
Irvine	132,746
UCLA	254,777
San Diego	216,667
San Francisco	282,401

■ 2021 ■ 2020 ■ 2019

Source: UC Medical Center Audited Financial Statements

11.4.3   Inpatient days by patient type
2020-21

Self-Pay, 1%
Commercial, 29%
Medicare, 36%
Medi-Cal, 34%

Source: UC Budget for Current Operations
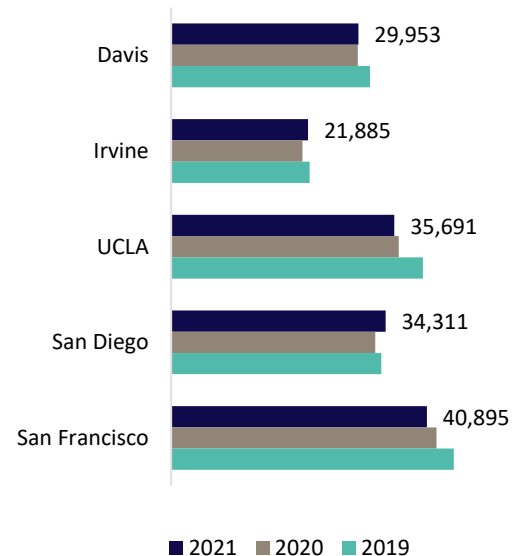
UC academic health centers and UC schools of medicine accommodate millions of outpatient visits every year.

11.4.4 Outpatient visits
UC medical centers
2021, 2020, and 2019 fiscal years

Davis 1,148,637
Irvine 1,075,474
UCLA 821,898
San Diego 430,364
San Francisco 2,517,592
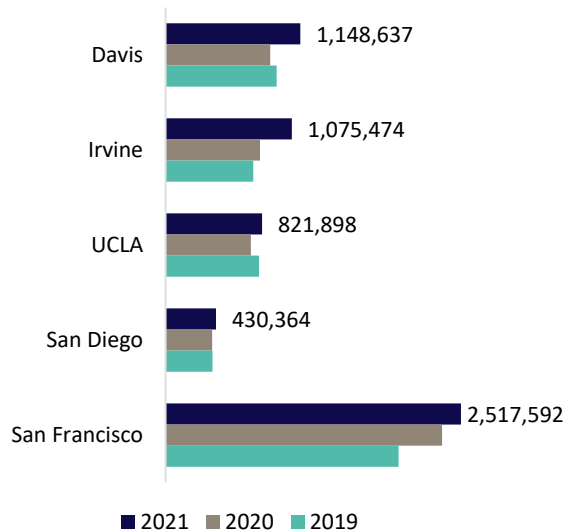
■ 2021 ■ 2020 ■ 2019

11.4.5 Hospital admissions
UC medical centers
2021, 2020, and 2019 fiscal years

Davis 29,953
Irvine 21,885
UCLA 35,691
San Diego 34,311
San Francisco 40,895

■ 2021 ■ 2020 ■ 2019

Source: UC Medical Center Audited Financial Statements

Supplementing its inpatient capacity, University of California Health provides robust outpatient services. Outpatient services include clinic visits, primary care network, home health and hospice, and emergency visits.

UC's five National Cancer Institute (NCI)-Designated Comprehensive Cancer Centers are saving lives through expert cancer care, research, and innovation for all Californians.

**11.4.6** Cancer patient disease distribution, xxxx-xx
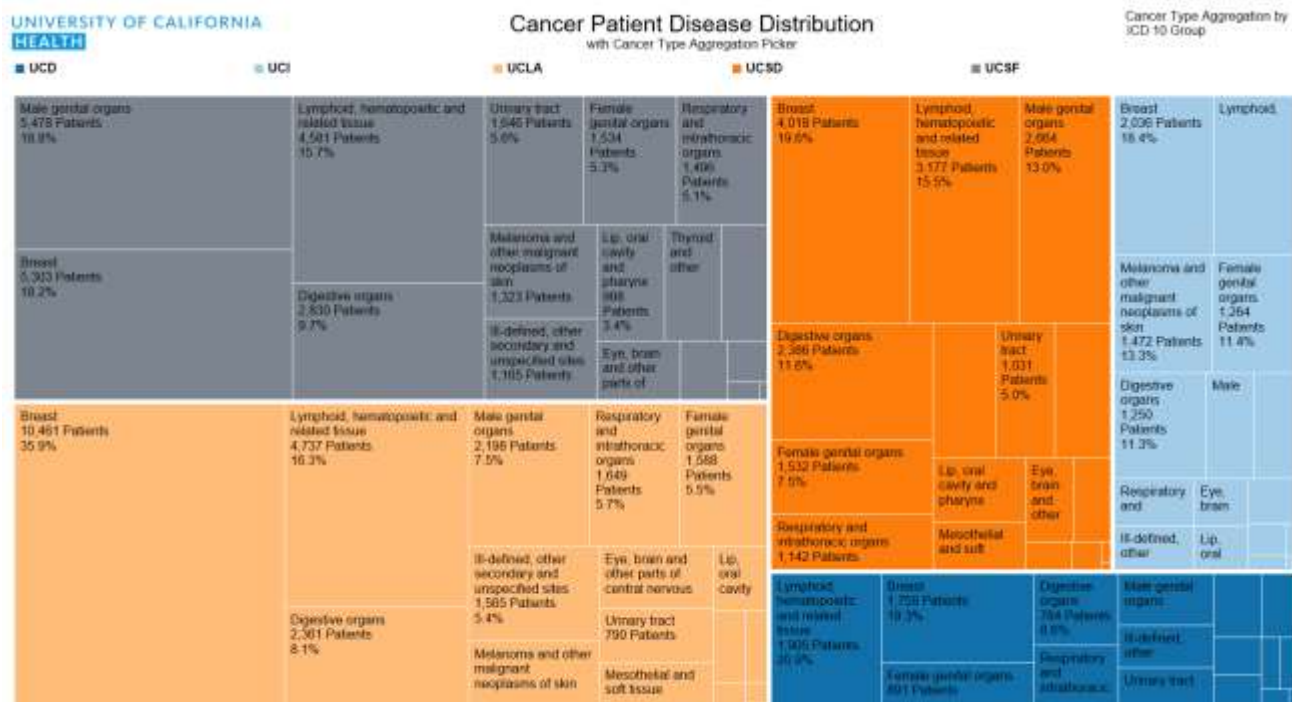
The UC Cancer Consortium brings together specialists from across UC's five NCI-designated comprehensive cancer centers to address challenges in specific cancer types. As part of the Consortium, expert teams across centers are collaborating to advance care and outcomes in diseases such as lung cancer, pancreatic cancer, hematologic malignancies, pediatric cancers, and ovarian cancer. Through the work of the Consortium, UC physicians and researchers are not just providing the most up-to-date cancer care, they are developing it and setting standards for care. Each year, the cancer centers enroll participants in approximately 1,000 clinical trials of promising investigational drugs, treatments, and devices.

Medical and dental practice income helps support three-quarters of the instructional expenditures in the health sciences.

11.5.1 Health sciences instructional expenditures by category and fund source, 2020–21
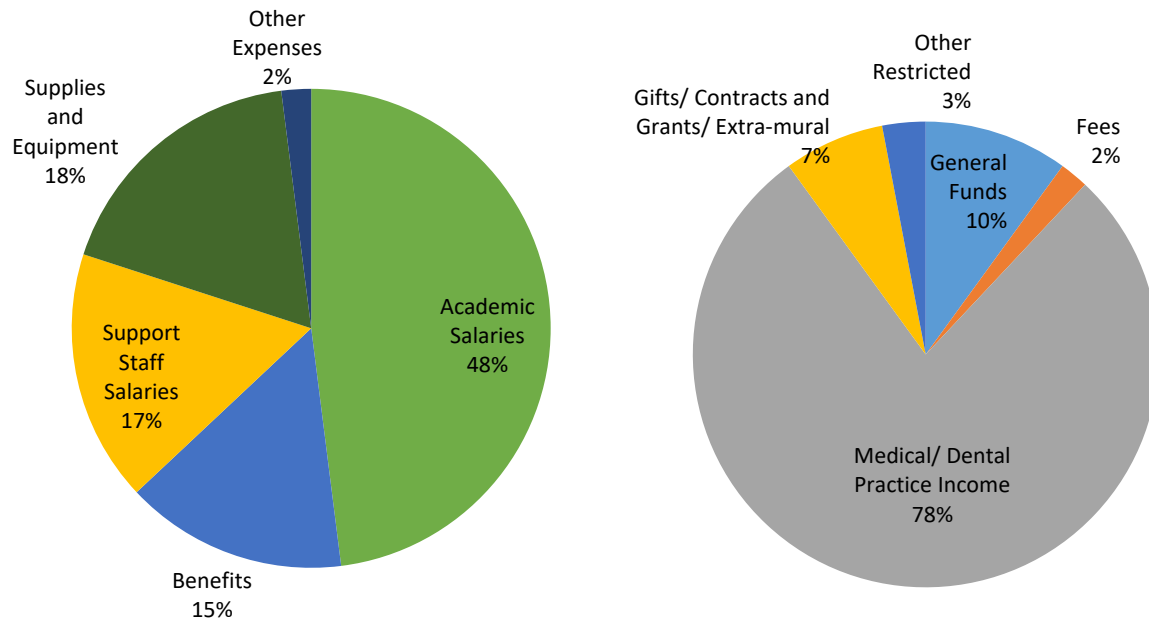
Source: UC Budget for Current Operations

Although part of the University of California, only a small portion of University of California Health's funding comes from the State's General Fund. The overwhelming majority comes from reimbursements and payments for clinical services.

Three-quarters of the instructional expenditures at the health sciences schools are supported by medical and dental practice income. State and UC general funds only provide about 13 percent of revenue.

Institutional Performance

As the novel coronavirus began to spread, teams across University of California knew that the need to translate scientific discovery into therapies and vaccines to fight COVID-19 would be urgent. At the same time, the growing pandemic highlighted widespread inequalities in health and the urgency of achieving greater health equity.

UC's five Clinical and Translational Science Award (CTSA) teams were already positioned to address needs at the intersection of COVID-19 and health equity, but the process of securing funding for research and community outreach programs often can be slow. UC Biomedical Research Acceleration, Innovation and Development (UC BRAID) took action to support immediate projects by creating a grant program to enable UC CTSAs to quickly respond to the need for COVID-19 related clinical trials and vaccination efforts that are inclusive and benefit vulnerable communities.

Dr. Carrie L. Byington, Executive Vice President, University of California Health, and an infectious disease expert, opines, "The inequality in health across our state and nation is now even more apparent as we see the disproportionate impact of COVID-19 in communities of color and lower socioeconomic areas. The problems leading to health disparities will take years to address. In the short term, we must start working toward better diversity in the clinical trials that translate the wealth of scientific research in our state and nation into benefits for all. The UC BRAID grants have helped create momentum for addressing these issues."

INSTITUTIONAL PERFORMANCE

Overview

UC requires significant resources and planning to support its instruction, research, and public service missions. The indicators in this chapter provide insight into the financial health of the University, the state of capital and space resources, and the environmental sustainability of campus operations. This chapter now also includes information on the UC Community Safety Plan, which re-envisions safety at the University of California locations.

Financial trends

The University's revenues, totaling over $41.6 billion in 2020–21 (excluding Department of Energy laboratories), fund its core mission and a wide range of support activities. Over one-third comes from the five UC medical centers, which have collectively nearly doubled in size in the past decade. Contracts and grants, which help sustain the University's research mission and reflect UC's preeminence in research, are the next largest source of funds.

The impact of the COVID-19 pandemic through fiscal year 2020-21 resulted in large revenue losses across various areas of the University. Reductions in services such as nonessential patient care, housing and dining, and other auxiliary functions, including student refunds for cancelled contracts, resulted in revenue losses of about $2.28 billion as of June 30, 2021. As of that date, these losses were partially offset by federal Higher Education Emergency Relief Funds (HEERF) I - III — Coronavirus Aid, Relief, and Economic Security Act (HEERF I), Coronavirus Response and Relief Supplemental Appropriations Act (HEERF II), and American Rescue Plan (HEERF III) — totaling $753 million in institutional funding intended to help with costs associated with the pandemic such as facilities cleaning, COVID patient care, and remote instruction. The University also received an additional $605 million in HEERF I-III funding restricted for emergency student financial support.

State General Funds, tuition and fees, and UC General Funds make up the core revenues for the University's instructional mission. State funds were historically the largest single source of support for instruction; however, cuts in State funding over the past two decades reduced this resource. State educational appropriations are less today in inflation-adjusted dollars than they were in 2006–07 and over $1 billion less than what they were in 2000–01, despite substantial enrollment growth. In 2000–01, State funding for UC, including Cal Grants, contributed $19,660 per student —– 75% of the total cost. In 2020–21, the State share declined to $8,790, or 47% of the total cost. From 2000–01 to 2010–11, systemwide tuition and fees were increased to offset the impacts of reduced funding from the State, though financial aid increases made up for those increases for many UC students. In-state tuition at UC has remained flat for nine of the last ten years. Under these circumstances, the importance of alternative sources of funding, such as Nonresident Supplemental Tuition, has increased.

Prior to the COVID-19 pandemic, improvements in the California economy since 2012, combined with the passage of Proposition 30, had brought some stability to the State budget and thus to the University's core budget. Modest increases in State support during times of fiscal stability have not been enough to both fully restore prior funding levels and keep pace with enrollment growth. In addition, the significant impact of the COVID-19 pandemic toward the end of the 2019–20 fiscal year resulted in State budget uncertainty for 2020–21 and 2021–22.

As core revenues per student have declined from $40,602 in 2000–01 to $23,895 in 2020–21, driven primarily by decreases in State General Funds on a per-student basis, the University has sought to increase revenues from other sources. Gift funds have become increasingly important. Private giving has increased; however, over 99 percent is restricted. Gift support tends to be for research, departmental support, and capital projects. The small amounts for instruction and student support cannot offset needs created by enrollment growth that has outpaced

proportional growth in core revenues. Private giving varies significantly by campus and relates to the campus' age, number of alumni, and the presence of health science programs.

As is typical for universities, salaries and benefits for academic and support staff are the largest areas of expenditures. Although the inflation-adjusted expenditures for educating a student at UC have dropped by 29 percent since 2000, reflecting both operational efficiencies and reductions in available resources, the State's share of this cost has fallen even more steeply. Consequently, students and their families now contribute a larger share through tuition and fees.

Chronic shortfalls in priority areas — graduate student support, faculty salaries, the ratio of students to faculty, capital renewal, the need to upgrade outdated information systems, and a focus on sustainability — present ongoing financial challenges.

Capital program and funding

The University maintains approximately 6,000 buildings enclosing 146 million gross square feet on approximately 30,000 acres across its ten campuses, five medical centers, nine agricultural research and extension centers, and the Lawrence Berkeley National Laboratory. With such a substantial infrastructure, the University strives to be a good steward of the capital resources entrusted to its care.

UC's capital program is funded by a combination of State and non-State funds. Historically, most of UC's core academic capital projects were funded by the State. With State funds playing a declining role over the past decade, the University has been forced to rely on other resources. In the past decade, non-State funds, including external financing that utilizes non-State sources to service the debt, have accounted for 80 percent of UC's capital program funding.

During 2020-21, UC approved capital project budgets totaling $4 billion. Almost three-fourths of the cost was met through debt financing, including external financing supported by State General Funds. Non-State sources funded the remaining capital projects.

In 2015–16 and before, most capital projects were aimed at growing core academic programs and replacing aging facilities. In more recent years (2016–17 onward), there has been an increase in projects that address enrollment growth and program improvements. The majority (56 percent) of 2020–21 capital projects were for the medical centers, and a significant number of projects (21 percent) addressed student housing for increased enrollment.

UC sustainability

The University of California is a national leader in sustainability. UC's sustainability commitment began in 2003 with a Regental action that led to the adoption of a Presidential Policy on Green Building Design and Clean Energy Standards in 2004. Demonstrating the University's commitment to wise stewardship of its resources and the environment, the Policy has since expanded to include multiple areas of focus: Climate Protection, Green Building Design, Clean Energy, Sustainable Transportation, Sustainable Building and Laboratory Operations, Zero Waste, Sustainable Procurement, Sustainable Food Service, Water, Sustainability in the University of California Health System, and Health and Well-Being. The University's Sustainable Practices Policy was updated again in 2021.

The University committed to systemwide climate action leadership in 2007, when all ten Chancellors signed the American College & University Presidents' Climate Commitment to achieve carbon neutrality as soon as possible. Furthering this leadership, in November 2013, UC announced an initiative to achieve carbon neutrality by 2025. This initiative will make UC the first major research university system to achieve carbon neutrality. Most recently,

UC Merced became the first public research university in the country to achieve carbon neutrality. Additionally, all campuses, including their health systems, achieved the University's climate policy goal of reducing greenhouse gas emissions to 1990 levels by 2020 (based on reported emissions that will be third-party verified by early 2022).

The University's Carbon Neutrality Initiative has advanced the University's work on climate and carbon neutrality research and education, and furthers its leadership in sustainable business practices. Even as the campuses expand, overall greenhouse gas emissions have continued to drop due to improvements in energy efficiency, developing new sources of renewable energy, and enacting a range of related strategies to cut carbon emissions. For example, the University's Clean Power Program is providing 100 percent clean electricity to eight campuses and three medical centers that are eligible to select an alternative energy provider. The Clean Power Program supplies approximately 30 percent of the University's electricity use from off-campus sources. UC now generates more on-site renewable energy than any other university in the country and has over 100 renewable energy projects across the system. The University also funded 44 students with Carbon Neutrality Initiative Fellowships during the 2020–21 school year to work on projects supporting UC's carbon neutrality goal.

Upfront investments in energy efficiency are often costly, but energy efficiency projects across the system have so far netted approximately $347 million in cumulative avoided utility costs since 2005. Moreover, UC's policy requiring that all new construction projects and major renovations receive LEED® (Leadership in Energy and Environmental Design) certification helps assure that campus growth does not increase energy costs and climate pollution as much as it would otherwise. As of 2021, UC has 384 LEED certifications, the most of any higher education institution in the country. In addition to LEED and energy efficiency requirements, starting in 2019, new buildings were required to take advantage of the University's access to carbon-free electricity and not use fossil-fuel combustion for space and water heating except under special circumstances.

Additionally, UC's fleet continues to move toward zero-emission vehicles. Systemwide, 50 percent of all new light-duty fleet vehicles purchased in fiscal year 2020–21 were electric (zero-emission) or hybrid. There are over 1,400 electric vehicle charging stations throughout the UC system.

UC Community Safety Plan

The UC Community Safety Plan (ucop.edu/community-safety-plan) re-envisions safety at the University of California locations and calls for transforming UC's culture, policies, and practices to ensure that all members of the community feel welcomed, respected, and protected from harm. This plan emerged from robust discussions, including two separate systemwide Presidential Symposia, and Chancellors forming campus-based safety task forces to engage their communities in re-envisioning campus safety and policing. As a result of these discussions, the UC Community Safety Plan is based on the following fundamental guidelines:

1. **Community and service-driven safety**: All members of the UC community should feel valued, welcomed, and free from any threat of physical, psychological, or emotional harm. Individuals should receive high-quality, courteous, and accessible services. Every interaction will be held to a high standard of respect and fairness and will be monitored.

2. **Holistic, inclusive, and tiered response model for safety services**: A tiered response model will match a call for service with the appropriate type of response and responder(s). This holistic approach will include mental health, wellness, basic needs, bias/hate response, law enforcement, emergency response, and other services through interdepartmental partnerships and cross-trainings.

3. **Transparency and continuous improvement through data**: A systemwide dashboard with location-level detail will be created and regularly updated to inform and empower the UC community. Based on new

systemwide reporting requirements and uniform standards for data collection, this information will be used to assess campus safety practices, generate recommendations for best practices, and hold the institution accountable.

4. **Accountability and independent oversight**: A standardized and robust complaint and investigation process will be implemented through police accountability boards to broaden oversight of existing mechanisms for the community to report instances when officer actions may be inconsistent with rules, policies, and the law.

A Community Safety Data Dashboard Workgroup commenced in Fall 2021 to meet the key milestones to demonstrate our commitment to transparency and continuous improvement through data. In the first phase (2021), we posted public reports on Crimes and Use of Force data on the community safety plan website and launched a new systemwide police department workforce report. These reposted Crimes and Use of Force reports reflect data gathered and summarized according to federal and state reporting requirements.

In the second phase (2022), the workgroup will establish a standardized process to collect data from all UC locations on a quarterly basis to support systemwide reporting on community safety. These quarterly submissions will record aggregated numbers of crimes, use of force, stops, complaints, and calls for service. The workforce report will be published annually along with a budget report. The workgroup will develop a systemwide dashboard for these new, central aggregate data collections. The UC Information Center will host the systemwide dashboard starting in 2022 and key metrics will be available for annual reporting in the 2023 publication of the UC Accountability Report.

A systemwide Vehicles, Uniform, and Equipment Workgroup also commenced in Fall 2021 to provide recommendations to the visible elements for every tier in the safety model. This working group is examining similarities in appearance between local (municipal or county) law enforcement vehicles, for instance, to University of California official fleet vehicles. Further, department uniforms and vehicles within each campus may be difficult for the community to distinguish among such different roles as parking enforcement personnel, security desk staff, and sworn officers. The working group will also make recommendations regarding visual identification of new mental health response personnel who could be dispatched in emerging crisis response.

In addition, the UC Office of the President is hiring a full-time position to monitor and support the systemwide implementation of this plan while ensuring it continues to meet the evolving needs of each UC location. In summary, these improvements do not represent the end of this conversation at UC. This community-driven plan is designed to be a living document that all partners will continue to update and adapt together, considering the latest information and data.

For more information

UC's Operating Budget: ucop.edu/operating-budget/budgets-and-reports/index.html

Annual Financial Reports: ucop.edu/financial-accounting/financial-reports/annual-financial-reports.html

Annual Financial Reports (Medical Center): ucop.edu/financial-accounting/financial-reports/medical-center-financial-reports.html

Revenues and Expenses Data Table: universityofcalifornia.edu/infocenter/revenue-and-expense-data

Annual reports on University private support: ucop.edu/institutional-advancement

UC's capital programs: ucop.edu/capital-resources-management/index.html

Annual Major Capital Projects Report: ucop.edu/design-services/resources/major-capital-projects-implementation-reports/index.html

Ten-Year Capital Financial Plan: ucop.edu/capital-planning/resources/index.html

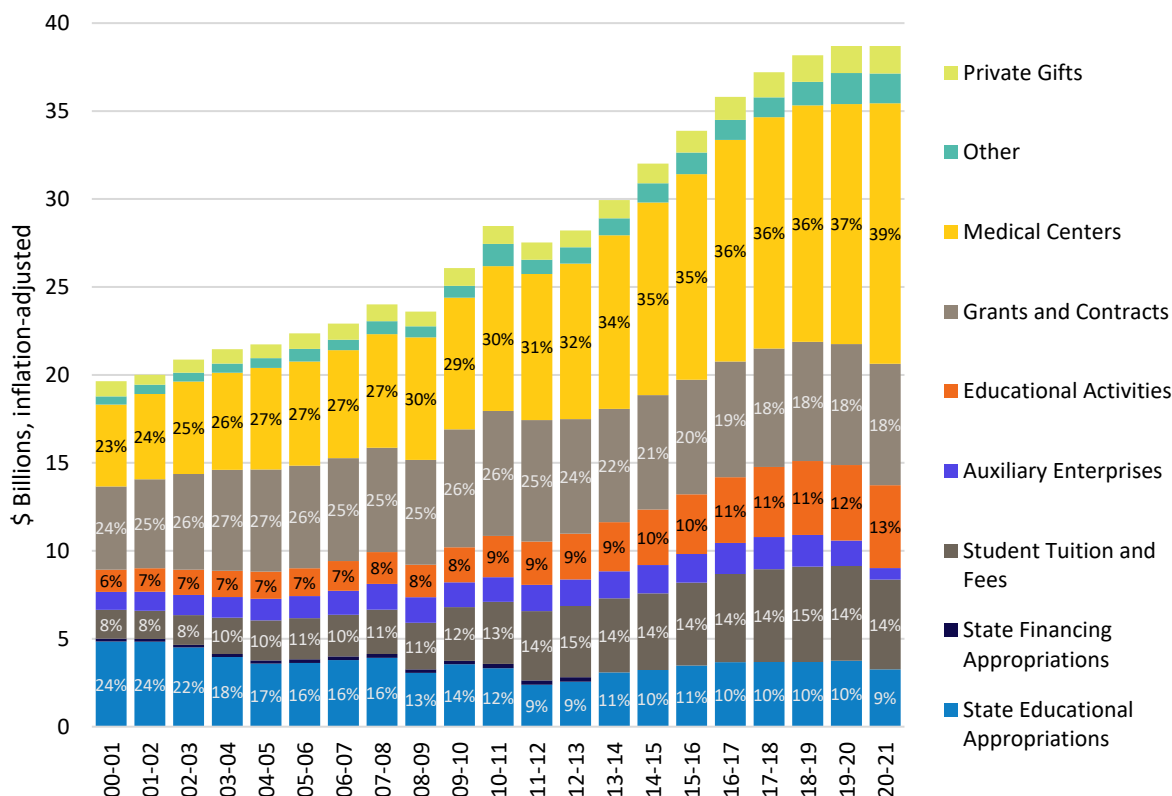Information on UC's sustainability: ucop.edu/sustainability/

Annual Sustainability Reports: ucop.edu/sustainability/policy-areas/annual-reports.html

UC Community Safety Plan: ucop.edu/community-safety-plan/

Over time, UC's varied sources of revenue have grown at different rates.

12.1.1   Revenues by source
Universitywide
2000–01 to 2020–21

Source: UC Revenues and Expense Trend Report. Amounts do not include Department of Energy Laboratories.

Two major trends are reflected in the University's revenue sources over time. First, revenues associated with the University's medical centers and related activities have grown substantially since 2000–01. Medical center revenues now represent 39 percent of all UC revenues. On top of this category, a significant portion of revenues shown as "Educational activities" above is also related to health services.

Second, among the University's core fund revenues, State appropriations now contribute less to the University's operating budget than student tuition and fees. In 2020–21, State General Funds comprised 39 percent of UC's core fund budget, while student tuition and fees comprised 43 percent.

Historically, State funding had been the largest single source of support for the University's core budget. State support has declined from 87 percent of core funds in 1980–81 to 39 percent in 2020–21.

The COVID-19 pandemic further complicated the University's revenue sources. In addition to State and federal budget volatility driven by the pandemic, there were significant impacts to medical centers and auxiliary enterprises. Revenue losses were offset by the 2020 Coronavirus Aid, Relief, and Economic Security Act of 2020 ("CARES Act"), Coronavirus Response and Relief Supplemental Appropriations Act, 2021 ("CRRSAA"), and American Rescue Plan ("ARP"), which provided federal funding via Higher Education Emergency Relief Funds ("HEERF") I, II, and III.

Since 2000–01, available core revenues per student have declined by 30 percent.

12.1.2 Per-student average inflation-adjusted core revenues
Universitywide
2000–01 to 2020–21
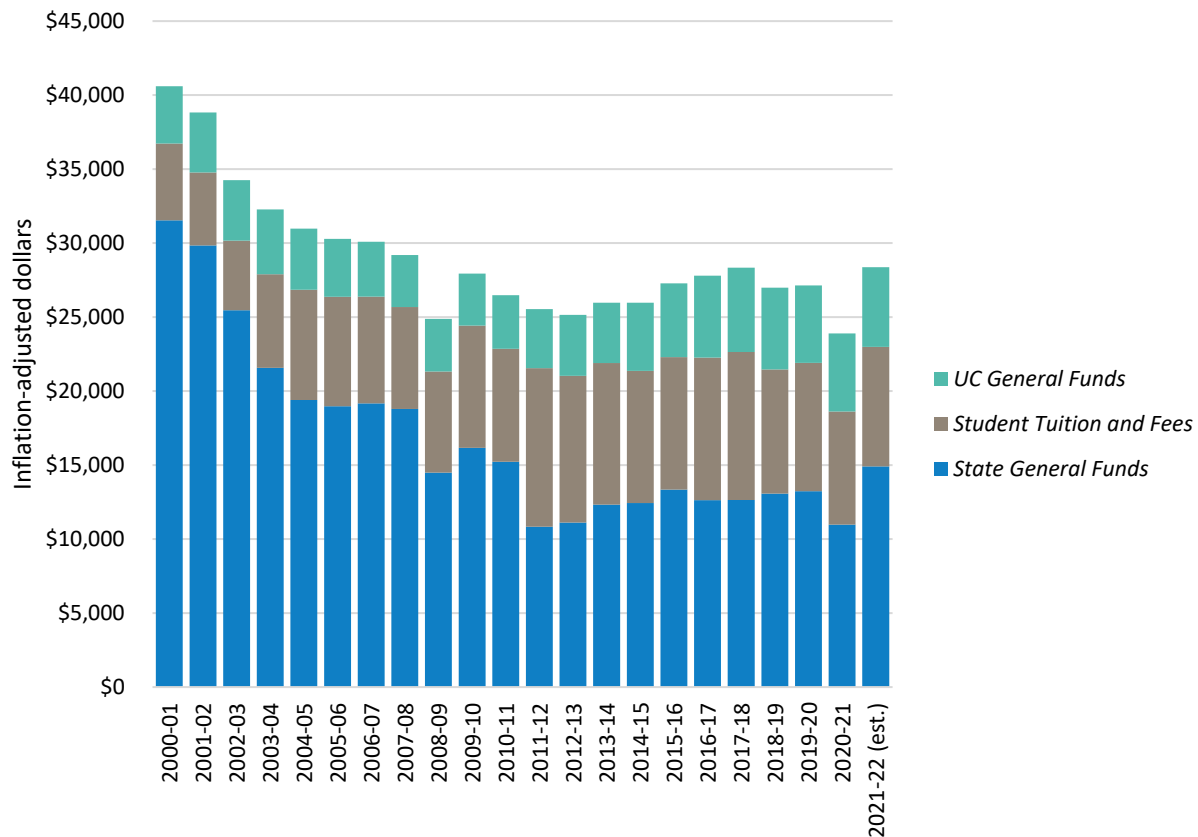
Source: UC Budget Office

Since 2000–01, average inflation-adjusted revenues per student have declined 30 percent. During the same period, the State General Fund portion has fallen even more steeply, by 53 percent.

In some years, the University increased student tuition and fee levels to partly offset the long-term decline in State support. Financial aid increases have covered some or all of these cost increases for families with financial need. These increases in student fee revenue have not, however, fully offset the reduction in State funding per student.

UC General Funds are composed mostly of Nonresident Supplemental Tuition Revenue and indirect cost recovery from research contracts and grants.

Overall, decreases in available core revenues per student have put downward pressure on spending per student, as seen in indicator 12.1.5. Ultimately, this pullback may affect the quality of instruction and the student experience.
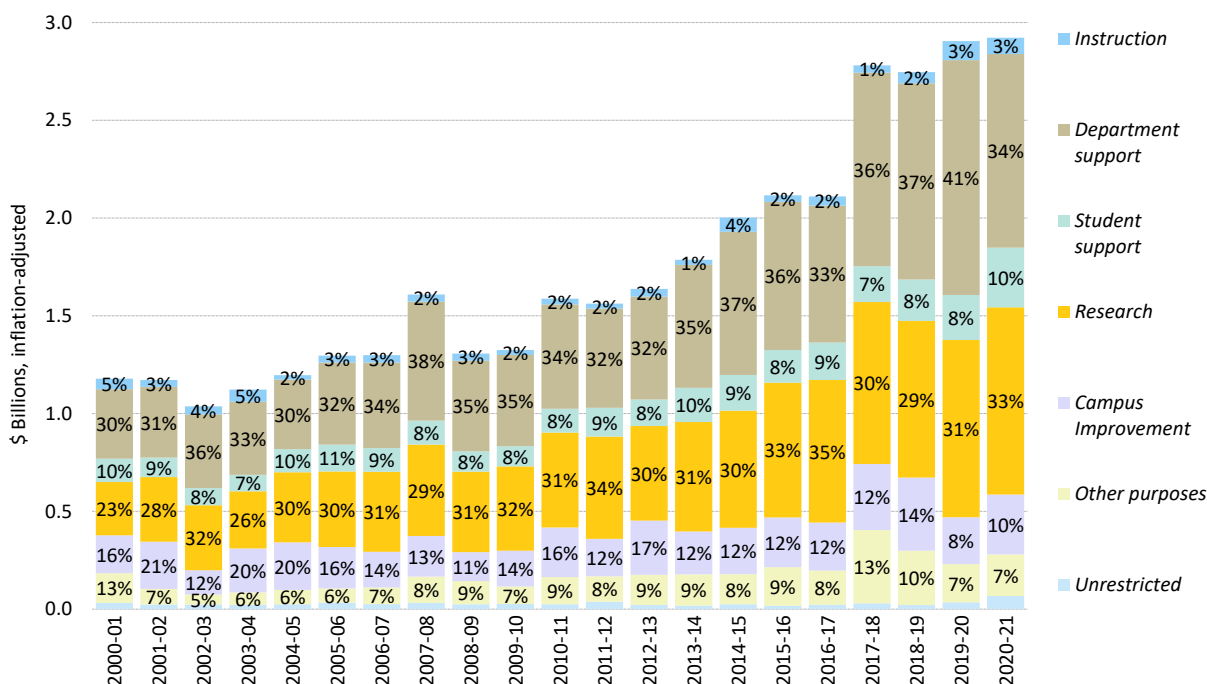
Virtually all gift funds (98 percent) are restricted by donors in how they may be used.

12.1.3 Current giving by purpose
Universitywide
2000–01 to 2020–21

Source: UC Institutional Advancement

The University is energetically pursuing increased philanthropic giving as a means to help address budget shortfalls and expand student financial aid. Philanthropic support has been key to supporting the University, particularly through the challenging impacts of COVID-19.

In 2020–21, new gifts to the University totaled over $2.9 billion. Virtually all of these funds are restricted for specific purposes and are not available to support general operating costs. In addition, approximately $673 million was designated for endowment, so only the income/payout is available for expenditure. Gifts designated for department support are only eligible for use by a specific department or academic division.

In response to the COVID-19 pandemic, campuses received gifts to support remote learning resources, critical student financial needs, procurement of protective equipment, and expansion of infection testing.

The University's remarkable achievement in obtaining private funding in recent years — even during state, national, and global economic downturns — is a testament to UC's distinction as a leader among the nation's public colleges and universities in generating philanthropic funds. These gifts reflect the high regard in which the University is held by its alumni, corporations, foundations, and other supporters.

Personnel costs and medical centers are an increasing portion of UC expenditures.

12.1.4 Expenditures by function and type, Universitywide
2000–01 to 2020–21
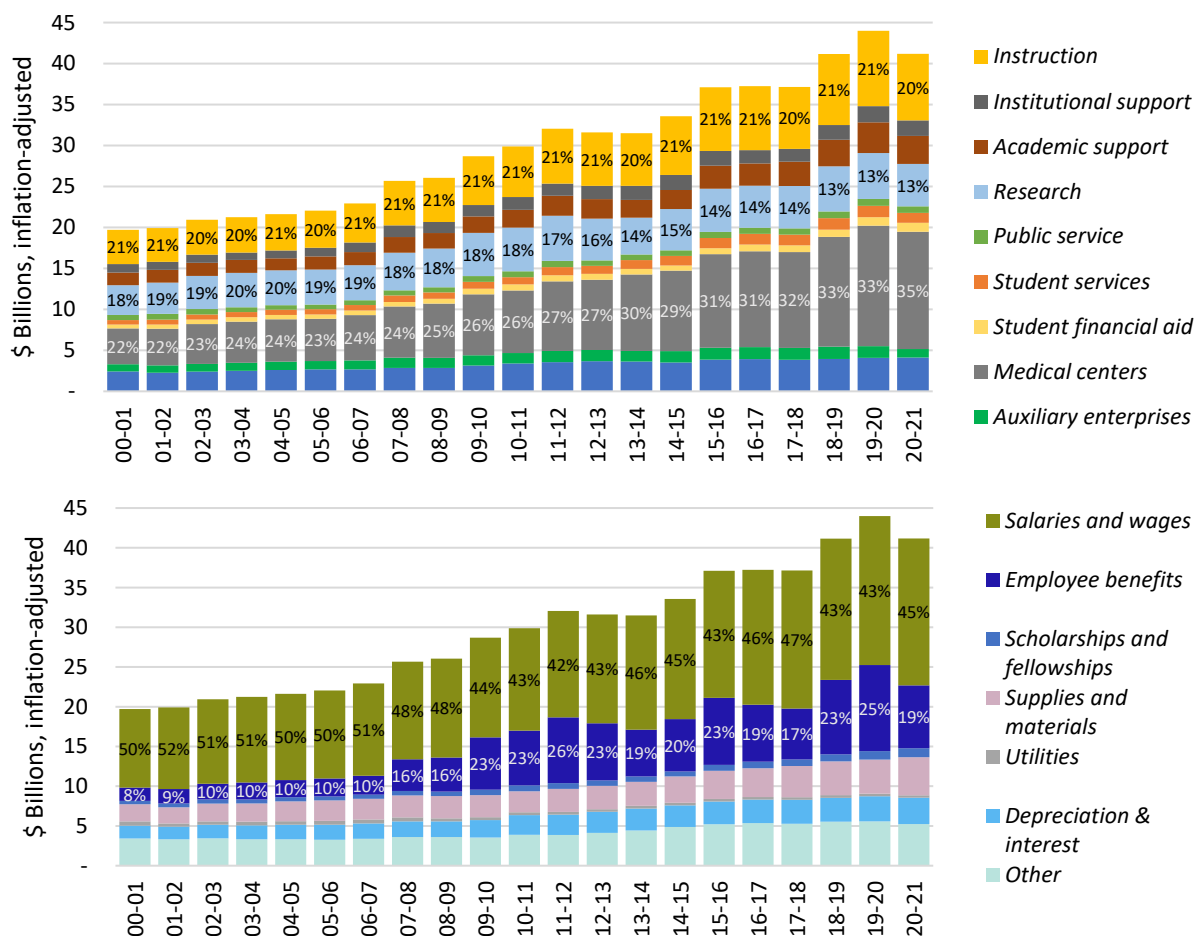
Source: UC Revenue and Expense Trends Report. Amounts do not include Department of Energy Laboratories.

When viewed by function, the combination of instruction, research, and public service accounted for 34 percent of total expenditures during 2020–21, while medical centers (UC's teaching hospitals) accounted for 35 percent. Other expenses by function include interest, depreciation, and miscellaneous expenditures.

Looking at expenditures by type, about 64 percent are dedicated to personnel costs, since higher education, health care delivery, and research are inherently labor-intensive. Salary costs increased both due to higher average salaries and increased full-time equivalent (FTE) employees, particularly at

the medical centers. These increases also affect employee benefits, though benefit costs also fluctuate due to variations in investment returns on the pension and the discount rate for retiree health.

Though medical centers were able to resume elective procedures, treatments, and patient visits, they continued to treat COVID-19 patients, perform testing, and offer vaccination services. Additional impacts of the pandemic were felt at auxiliary enterprises such as student residence and dining services, which were reduced dramatically during the 2020–21 fiscal year.

Since 2000-01, total instructional expenditures per UC student have declined by 29 percent, yet students and their families bear a greater share of that cost.

12.1.5 Average general campus core fund expenditures for instruction per student
2000–01 to 2020–21
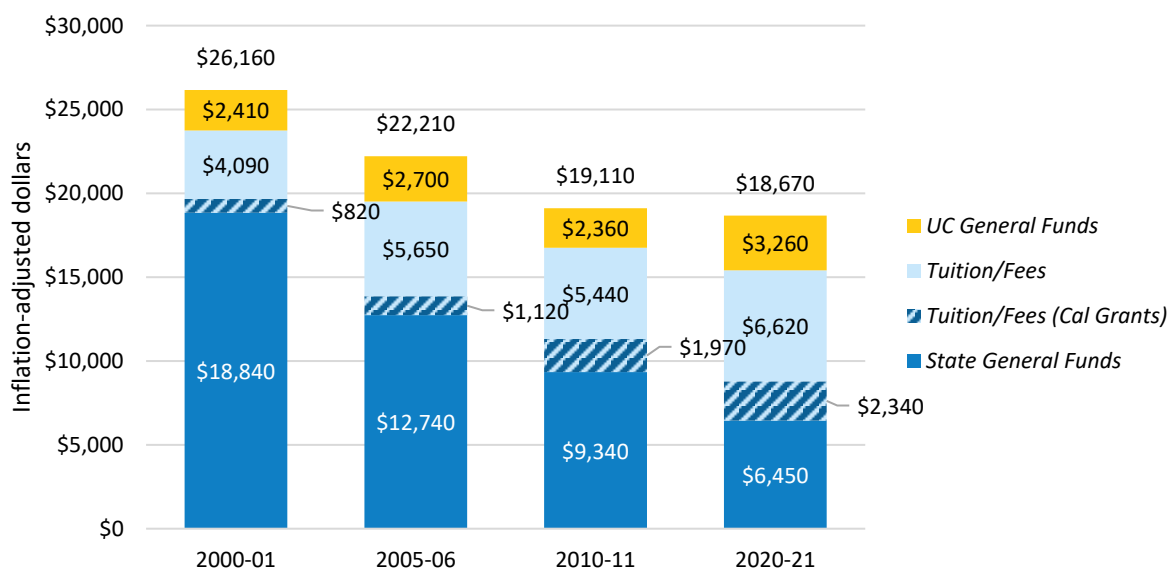
Source: UC Budget Office

Since 2000–01, average expenditures for instruction per student from core funds have declined by 29 percent in inflation-adjusted dollars. Of this amount, the share provided by State support for the University's budget declined from 72 percent in 2000–01 to only 35 percent of the total in 2020–21. In contrast, the contribution from tuition and fees has increased from 19 percent to 48 percent during the same period.

The State's Cal Grant program has covered tuition and fee increases for many California resident undergraduate students. However, even after taking Cal Grants into account, State funding covered only 47 percent of instructional expenditures from core funds in 2020–21 compared to 75 percent in 2000–01.

The majority of UC's capital project funding over the last ten years continues to be derived from non-State fund sources. In 2013–14, changes to the California Education Code allowed UC to direct a portion of its existing State operating funds support to capital.

12.2.1   Sources of capital project funding by year of approval, Universitywide
2011–12 to 2020–21
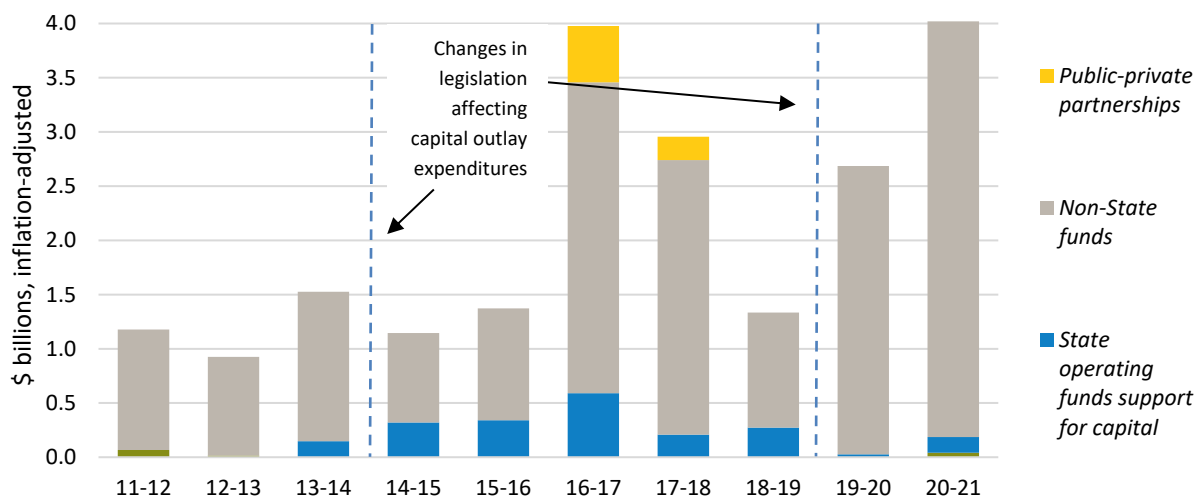
Source: UC Capital Asset Strategies

The University's capital program is driven by the campuses' and medical centers' strategic plans. UC's capital program is funded by a combination of State and non-State funds. The nature of State funds has changed in recent years.

As illustrated in indicator 12.2.1, the dominant source of capital is non-State resources. A General Obligation bond was placed on the March 2020 ballot, but voters did not pass it.

State funds were historically the primary funding source for core academic facilities and seismic compliance for acute care hospitals. Legislation in 2013–14 and 2018–19 enacted a change in how UC could fund its debt service, availability payments, and capital outlay expenditures. UC can direct a portion of its State General Fund appropriations to

fund debt service for State-eligible capital projects. The portion of State General Funds directed to capital does not represent new State funding and is made up of funds redirected from operations to support capital. With improvements in the state's economy, the University's funding included $41 million of new State funds for capital outlay in 2020–21.

Non-State sources fund most of UC's State-eligible capital needs and all self-supporting enterprises, such as housing, parking, athletics, and medical centers. To the extent that non-State funds are used to support core academic capital needs, less funding is available to support other high-priority needs such as deferred maintenance, seismic, and enrollment growth.

The 2020–21 capital project program is heavily supported by external financing.

12.2.2   Sources of capital project spending detail, Universitywide
Project budgets approved in 2020–21
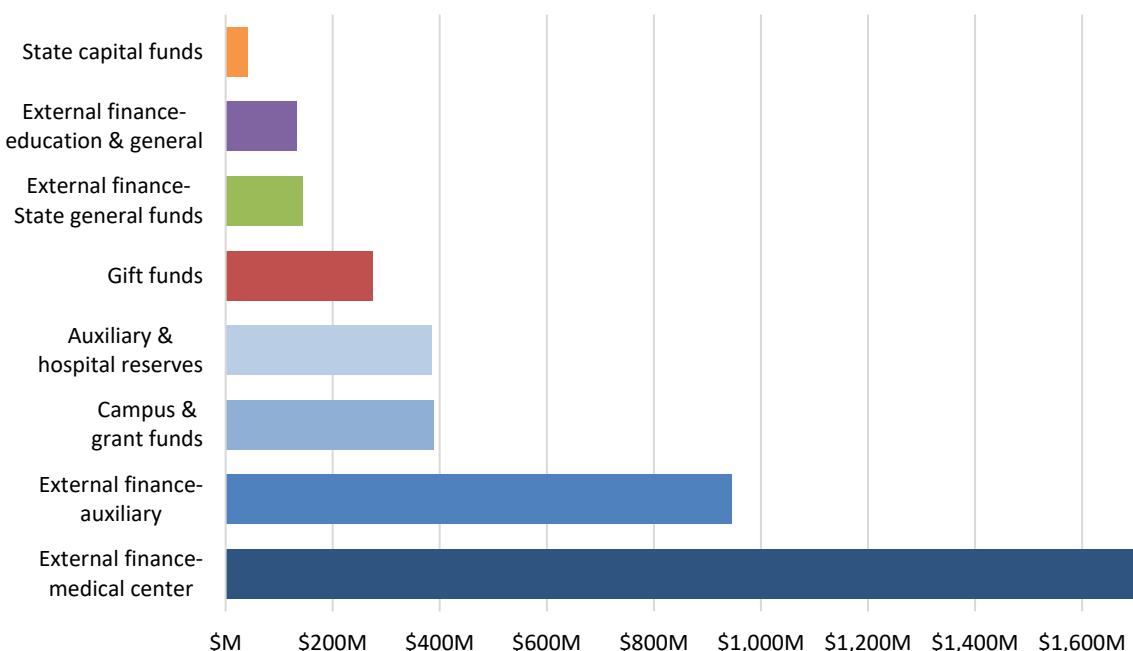
<div style="text-align:right">Source: UC Capital Asset Strategies</div>

The University and each campus carefully consider how to deploy resources to optimize the benefits to academic programs and the University's mission as a whole.

As evidenced in indicator 12.2.2, external financing plays an important role in funding capital needs. About 73 percent of capital project funding in 2020–21 came from non-State supported external financing. The majority of financing supported medical center construction, including the Irvine Campus Medical Complex and UC San Diego's Hillcrest Outpatient Pavilion and Parking Structure. The remainder of non-State financing supports student housing projects (auxiliary) as well as renewal and modernization of instructional and research space and program improvements (education and general).

As referenced in indicator 12.2.1, the University utilizes external financing supported by State General Funds for State-eligible projects, primarily for seismic projects. The University also received some State funds to support capital projects. Campuses also redirect non-State funds to projects that otherwise would have been funded with State resources.

The remainder of UC's capital program is funded by gift funds, campus funds, and other non-State sources. These campus funds are derived from various sources, including indirect cost recovery and investment earnings.

The majority of capital funds approved for expenditure in 2020–21 supported program improvements and projects addressing enrollment growth.

12.2.3   Types of capital projects, based on budgets approved by year
Universitywide
2011-12 to 2020–21
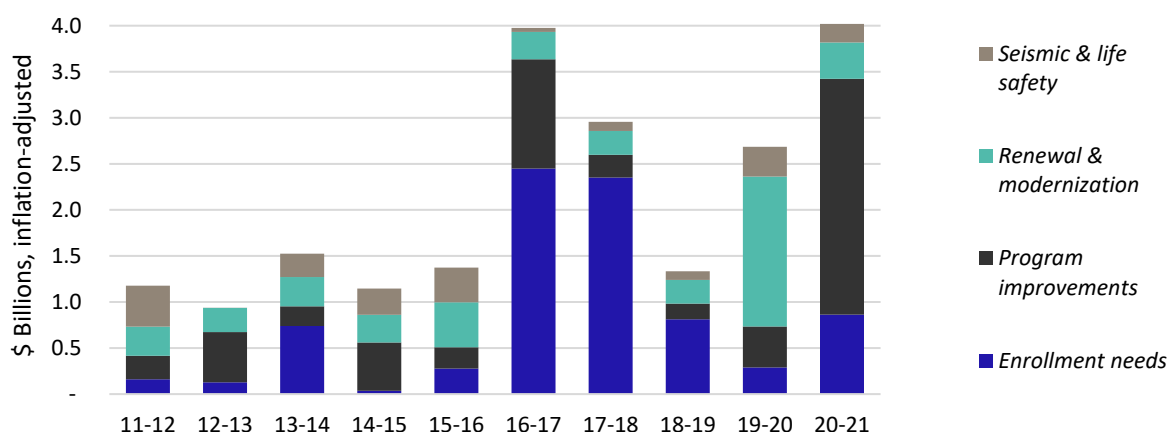
Source: UC Capital Asset Strategies

Program improvements and modern program initiatives require state-of-the-art space, often necessitating the repurposing of existing facilities or new construction. As shown in indicator 12.2.3, UC devoted approximately $2.5 billion for program improvements in 2020–21. About 70 percent of these improvements supported three medical center projects (Irvine Campus Medical Complex, UC San Diego Health's Hillcrest Outpatient Pavilion and Parking Structure, and Mission Bay Block 34 Clinical Building for UC San Francisco). Program improvements also address academic and research priorities.

In 2020–21 alone, UC approved $863 million for projects that address enrollment needs, most notably, housing for the Berkeley campus and a new college at UCSD (Theater District Living and Learning Neighborhood). The campuses are expanding teaching laboratories, classrooms, and student services to meet enrollment increases.

Campus facilities age and must be renewed and modernized to extend the buildings' useful life and improve energy efficiency. In addition, the University continues to review the seismic safety of its facilities. In 2020–21, UC approved almost $600 million for these projects.

UC space has increased by approximately 16 percent in the past decade, with most of the growth targeted for instruction and research and residential uses.

12.2.4 Assignable square footage (ASF)
Universitywide
2010–2021
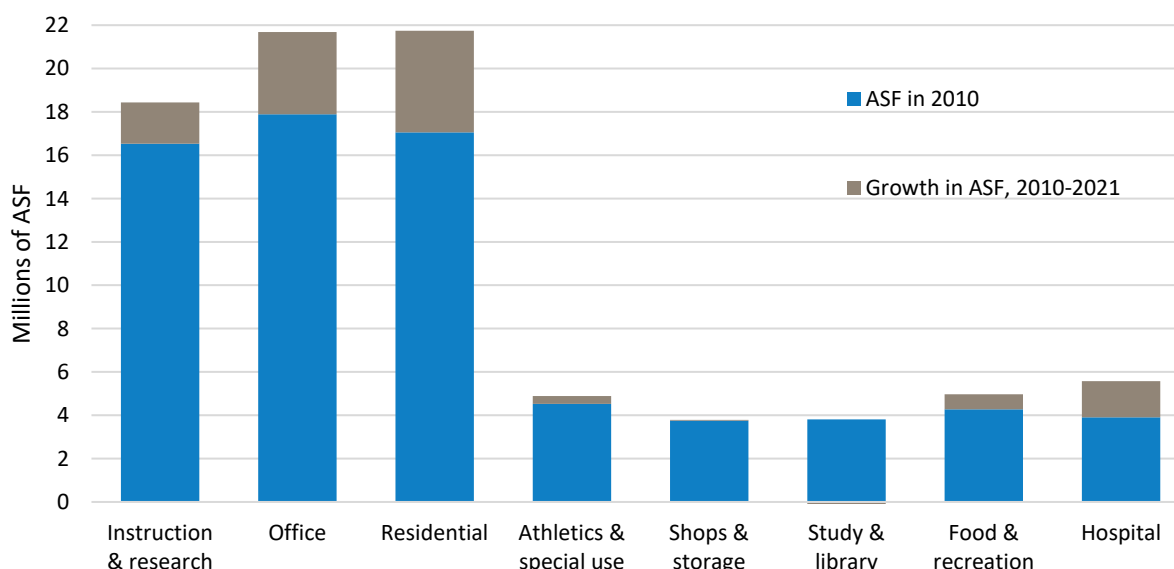
Source: UC Capital Asset Strategies

Assignable square footage (ASF) is the space available for programs or assigned to specific uses. It does not include corridors, bathrooms, or building infrastructure.

Indicator 12.2.4 illustrates the growth in space over the last decade, according to categories for assignable space. Since 2010, space has increased by 13.1 million ASF to 84.8 million ASF.

In the past decade, instructional and research space increased by about 1.9 million ASF, office space by 3.8 million ASF, and residential space by 4.7 million ASF. The space increase for these areas (20 percent) has not kept pace with the increase in fall enrollment (27 percent) for the same period.

Residential space has grown as campuses strive for more on-campus student housing to improve student life in living/learning communities and to reduce environmental impacts from commuting. Increases in the student population have also required additional athletic, recreational, and food service space.

Hospital space has grown in the past decade. All five medical centers experienced growth, but most of the growth in hospital space can be attributed to UCSF Medical Center at Mission Bay (2015) and Ron Conway Family Gateway Medical Building (2015), and the Jacobs Medical Center (2016) and Koman Family Outpatient Pavilion (2018) at UC San Diego Health.

UC has made consistent progress toward its greenhouse gas emission goals.

12.3.1 Greenhouse gas emissions compared to climate goals
Universitywide
2009–2025
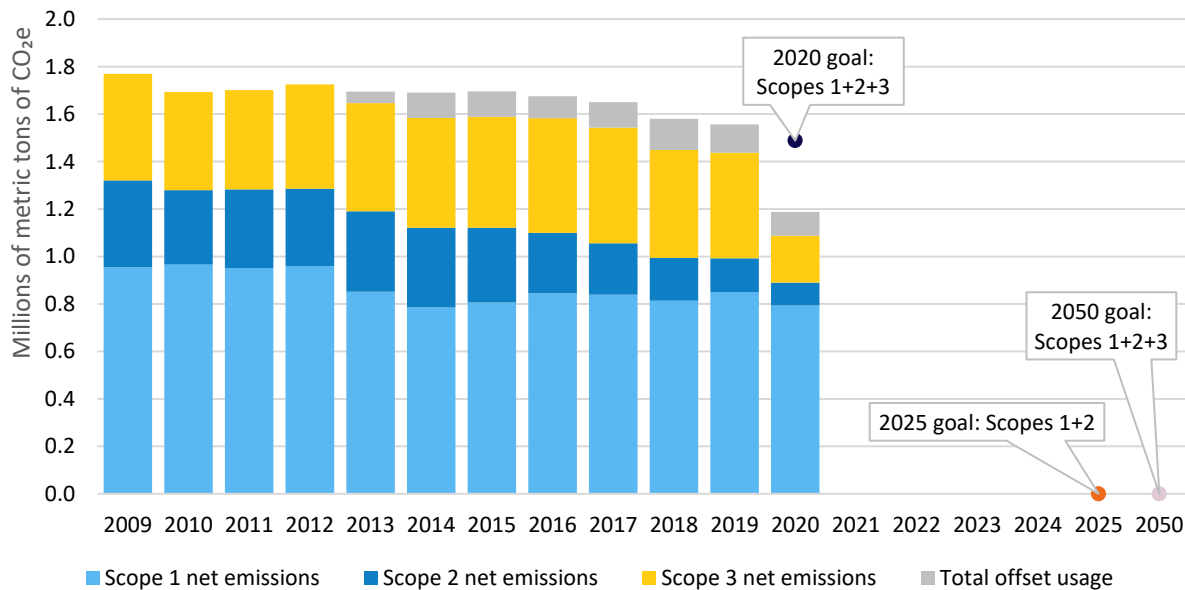
Source: UCOP Energy and Sustainability Office

All campuses, including their health systems, achieved the University's climate policy goal of reducing greenhouse gas emissions to 1990 levels by 2020 (based on reported emissions that will be third-party verified by early 2022). This includes a seven percent decrease in scope 1 emissions and a 33 percent reduction in scope 2 emissions in 2020 compared to 2019. Campuses purchased compliance and voluntary offsets that contribute to their emissions reductions. The magnitude of emissions reductions in 2020, especially for scope 3 air travel and commute emissions, reflect the impact of COVID-19.

The University also generates more on-site renewable energy than any other university in the country, with over 50 megawatts of capacity. UC's inventory of renewable energy supplies includes generation from over 100 on-site and off-site sources.

Energy efficiency upgrades resulted in cumulative net avoided costs for the University of $347 million by the end of 2021.

12.3.2 Cost avoidance from energy efficiency projects
Universitywide
2005–2021
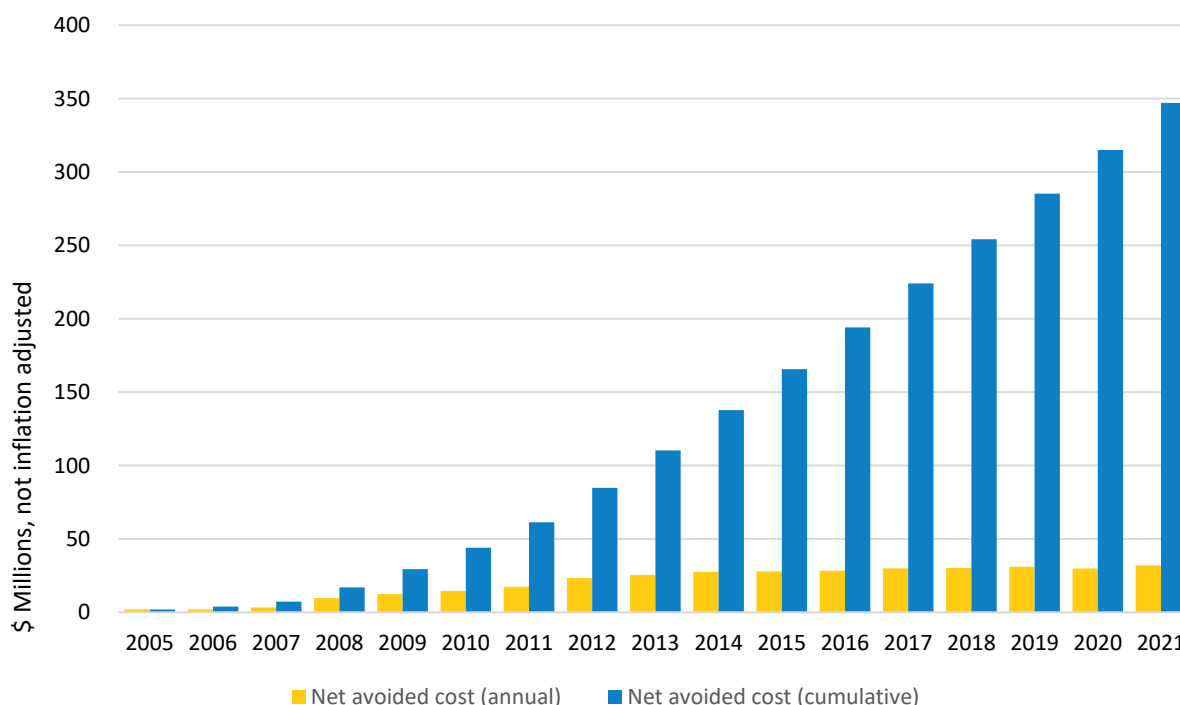
Source: UCOP Energy and Sustainability Office

In 2004, the University formed a statewide energy efficiency partnership program with California State University and the state's four investor-owned utilities to improve the energy performance of higher education facilities. The partnership has provided funding for equipment retrofits and monitoring-based commissioning.

Since its inception, over 100 energy efficiency and new construction projects have registered with the Energy Efficiency Partnership Program, which has allowed UC campuses to avoid approximately $347 million in utility costs while reducing greenhouse gas emissions. Forty-six UC projects participated in the program in 2021.

While campuses have used a portfolio approach to balance projects with shorter and longer paybacks, the future focus on the remaining deeper energy efficiency retrofits to achieve climate goals will result in lower levels of net avoided costs due to larger up-front investments.

By the end of 2021, UC had achieved 384 LEED® certifications, more than any other university in the country.

12.3.3 LEED® certifications
Universitywide
2005–2021 (cumulative)
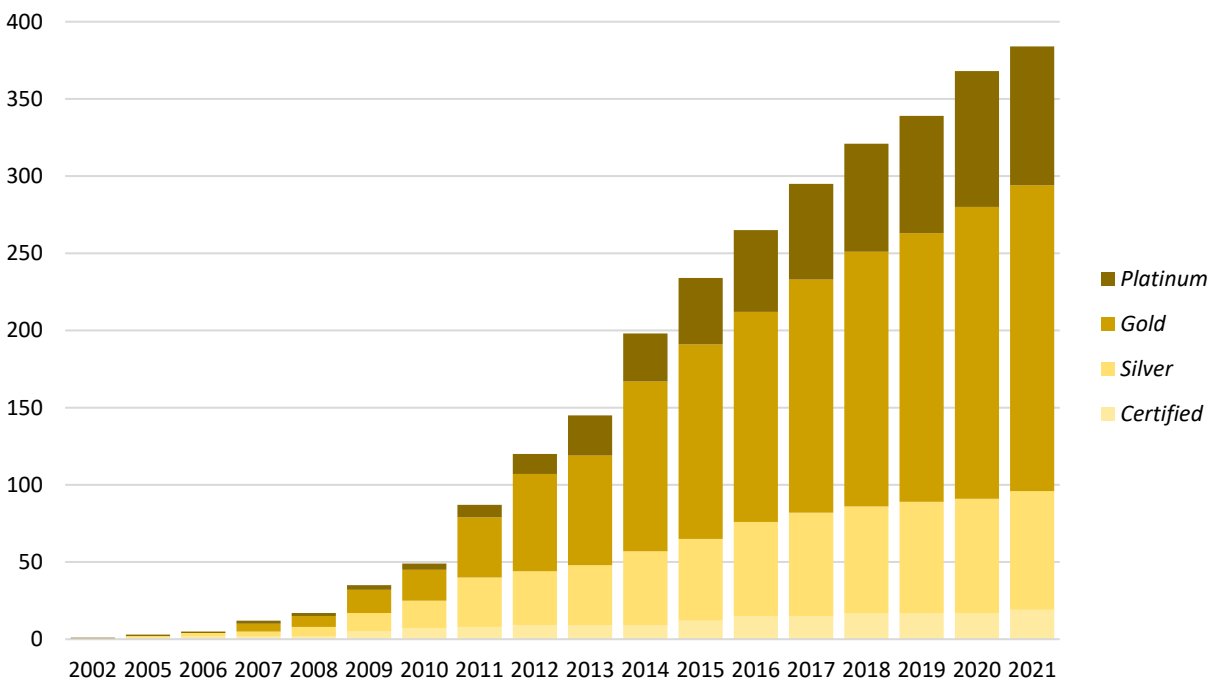
Source: UCOP Energy and Sustainability Office

The University's sustainable practices policy requires that all new buildings and renovations are designed and constructed to a minimum LEED® (Leadership in Energy and Environmental Design) for New Construction Silver rating.

UC has 384 LEED certifications systemwide, representing over 33 million square feet of certified green building space. In 2021, UC added 16 new LEED certifications, including three LEED Silver, nine LEED Gold and two LEED Platinum certifications. UC's total of 384 LEED certifications is the most of any university.

UC LEED® certifications are listed at: ucop.edu/sustainability/policy-areas/green-building/index.html

Awards and Distinctions

For the third consecutive year, U.S. News & World Report has named UC Riverside the top university in the nation for social mobility.

The social mobility category considers the degree to which a university elevates its low-income graduates to a higher standard of living. As rankings leaders such as U.S. News have adjusted their formulas in the past few years, they increasingly consider social mobility among the leading measures of higher education success.

The campus climbed five places this year in the overall rankings, to No. 83. In the past five years, UCR has moved up 41 places in the U.S. News rankings. In its social mobility ranking, U.S. News aggregates two factors that assess the graduation rates of students who receive the Pell Grant, typically awarded to families earning less than $65,000 per year. The factors are Pell Grant six-year graduation rates and Pell Grant graduation rate performance, which considers grant recipients' graduation rates relative to non-Pell Grant recipients' rates. UCR's Pell Grant students' graduation rate is comparable to non-Pell students' graduation rate, 77% to 76%, according to the most recent federal data available. Among UCR's more than 26,000 students, 47% receive a Pell Grant.

"UCR's consecutive placements as a national leader in social mobility showcase the hard work of our students and the dedication of our faculty and staff," Vice Provost and Dean for Undergraduate Education Jennifer Brown said. "It is encouraging that social mobility has become a leading indicator in college rankings, as it signals a movement toward looking at the whole student. It recognizes that all students deserve equitable outcomes in which they are successful entering and finishing college and moving on to amazing opportunities."

AWARDS AND DISTINCTIONS

Overview

Honors and rankings are one way to demonstrate the University's performance and prestige. They reflect reputations and help to position the University nationally and internationally. This chapter first presents metrics of faculty awards and memberships. These represent some of the highest aspirations of research faculty, signaling noteworthy participation and contribution to research and scholarship in a particular area of expertise. In 2021, two UC professors were awarded Nobel prizes: David Card, professor of Economics, UC Berkeley, was awarded the Economic Sciences prize and David Julius, professor of Physiology, UC San Francisco, was awarded the Physiology or Medicine prize.

While the University's faculty demonstrate unparalleled excellence, also notable is the opportunity for students of diverse backgrounds to learn and study with these distinguished researchers and educators. One of the points of pride for the University of California is providing students from the bottom end of the economic spectrum with access to an educational and research environment comparable to the nation's finest private institutions but on a significantly larger scale.

Universities are ranked in numerous ways, with publishers of rankings choosing criteria based on different audiences and different aims. This chapter highlights three well-known rankings. U.S. News and World Report (USNWR) focuses on academic reputation, graduation rates, student selectivity, and financial resources to create its list of America's Best Colleges. The Shanghai Academic Ranking of World Universities ranks institutions around the globe, primarily using faculty research productivity. The Washington Monthly ranking looks at doctoral-granting research universities based on contribution to the public good. Additional rankings for UC campuses are available at the link in the section below. While recognizing that these rankings may be useful sources of information, UC does not endorse any particular ranking system nor does it have specific goals with respect to any of them.

## UC faculty receive prestigious awards as leaders in their fields.

13.1.1   Nobel Prizes by campus affiliation

Seventy faculty and researchers affiliated with the University of California have won 71 Nobel Prizes, adding two new Nobel Prize winners last year.

A list of UC's laureates can be found at nobel.universityofcalifornia.edu.

	Chemistry	Economics	Literature	Medicine	Physics	Peace
Berkeley/ Berkeley Lab	10	6	1	1	9	
Irvine	2				1	
Livermore Lab					1	
UCLA	3	1		1	2	
Riverside	1				1	
San Diego	5	3		6	2	1
San Francisco				6		
Santa Barbara	2	1			4	
Santa Cruz				1		

13.1.2   Prizes, medals, and awards won by UC faculty
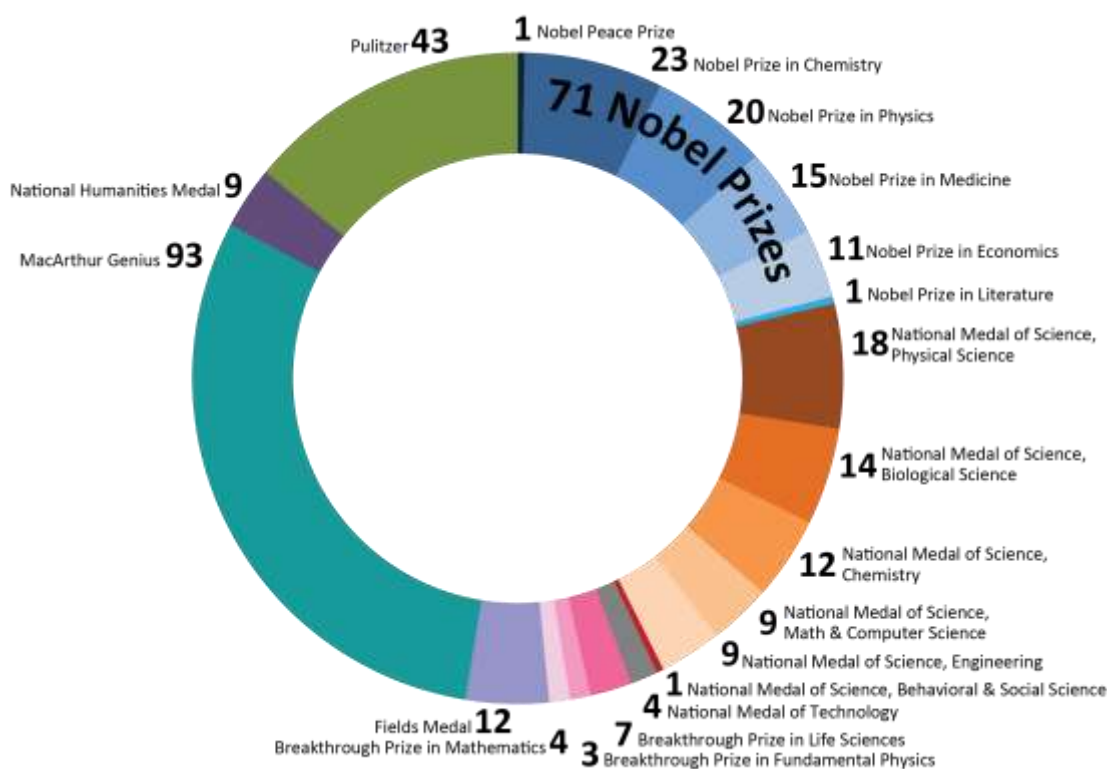
In addition to the prizes, medals, and awards presented in the chart above, many UC faculty are members of prestigious National Academies, providing leadership in service and general welfare to the nation.

National Academy of Sciences	676
National Academy of Engineering	279
National Academy of Medicine	260
National Academy of Inventors	100

Of the top ten national public universities in the U.S. News and World Report ranking, six are UC campuses.

13.2.1   U.S. News: America's Top National Public Universities
2022

	Public	National
UCLA	1	20
UC Berkeley	2	22
Santa Barbara	5	28
San Diego	8	34
Irvine	9	36
Davis	10	38
Riverside	33	83
Merced	38	93
Santa Cruz	46	103

The U.S. News and World Report, in its 2022 national university rankings, focused on academic reputation, financial resources, and selectivity in undergraduate admissions. Its assessment on these metrics placed UC campuses among the very best public universities in the country:

- UCLA and UC Berkeley were ranked first and second as the top public institutions.

- Six UC campuses were among the top ten public institutions in the nation.

- For public and private institutions combined, six UC campuses ranked among the top 50.

Numerical rankings can provide false precision based on very small actual differences among campuses. Campuses are first assigned a score, and the scores are ranked. When the scores are clustered closely, a small change in score can have a large effect on the rank.

UC campuses rank very highly among all public and private universities for social mobility.

13.2.2 U.S. News: Top Performers on Social Mobility
2022

Riverside	1
Irvine	2
Merced	4
Santa Cruz	12
Davis	16*
Santa Barbara	16*
UCLA	21
San Diego	26
Berkeley	82

*tie

The social mobility rankings are based on two ranking factors — Pell Grant graduation rates and Pell Grant graduation rate performance. As quoted on usnews.com/education/best-colleges/articles/how-us-news-calculated-the-rankings:

"Pell Grant graduation rates incorporate six-year graduation rates of Pell Grant students, adjusted to give much more credit to schools with larger Pell student proportions. This is computed as a two-year rolling average.

"Pell Grant graduation rate performance compares each school's six-year graduation rate among Pell recipients with its six-year graduation rate among non-Pell recipients by dividing the former into the latter, then adjusting to give much more credit to schools with larger Pell student proportions. The higher a school's Pell graduation rate relative to its non-Pell graduation rate up to the rates being equal, the better it scores. This, too, is computed as a two-year rolling average."

Four UC campuses appear in the top 25 of the Academic Rankings of World Universities.

13.2.3 Shanghai Ranking Consultancy: Academic Rankings of World Universities
2021

	Global	National
Berkeley	5	4
UCLA	14	11
San Diego	18	14
UCSF	20	16
Santa Barbara	57	31
Irvine	70	35
Davis	100	40
Santa Cruz	151-200	57-62
Riverside	201-300	63-89
Merced	401-500	111-129

The Academic Rankings of World Universities (ARWU) was created in 2003 by Shanghai Jiao Tong University in China to determine the global standing of Chinese research universities. Since 2009, the Shanghai Ranking Consultancy has published these rankings.

The rankings are based entirely on measures of research strength and faculty honors and awards. English-speaking universities, especially those in the United States, tend to dominate the ARWU rankings.

This ranking system emphasizes research outputs, such as total research expenditures. Because research outputs are not normalized by number of faculty, larger institutions tend to rank more highly than smaller ones. Institutions with strong research programs, especially in the sciences, also tend to score higher than those whose major strengths are in the humanities and social sciences.

Washington Monthly ranked six UC campuses in the top 50 institutions.

13.2.4   Washington Monthly Research University Ranking
2021

	National
Berkeley	10
San Diego	12
Davis	14
UCLA	22
Irvine	44
Santa Barbara	49
Riverside	53
Santa Cruz	80
Merced	103

Washington Monthly ranks "National universities —
four-year institutions that award a significant
number of doctoral degrees — based on their
contribution to the public good in three broad
categories: social mobility, research, and promoting
public service."

GLOSSARY

AAU — Association of American Universities. The AAU is a highly selective membership organization of preeminent public and private research universities. AAU currently has 60 American and two Canadian member institutions. In this report, the Canadian institutions are excluded from calculations. Of the ten UC campuses, seven are AAU members: Berkeley, Davis, Irvine, Los Angeles, San Diego, Santa Barbara, and Santa Cruz.

AB 540 — AB 540 is an Assembly bill passed in 2001. It allows undocumented high school students who meet certain requirements to pay in-state, instead of nonresident, tuition at California's public higher education institutions.

Academic Senate — The Academic Senate represents the faculty in the shared governance of the University of California.

Auxiliary enterprises — Auxiliary enterprises are campus services that charge fees for goods and services, and therefore are self-supporting. Examples include student housing, dining facilities, and bookstores.

Clinical faculty — Clinical faculty are instructors in medical and health sciences fields. They include professors in residence, professors of clinical __ (__ being the name of the discipline or specialty), and health science clinical professors. Clinical faculty are not members of the Academic Senate.

Comparison institutions; comparators — UC historically has used eight universities against which to benchmark faculty salaries. The comparison institutions — four public and four private — are: University of Illinois, University of Michigan, University at Buffalo, and University of Virginia (all public); and Harvard, Massachusetts Institute of Technology, Stanford, and Yale (all private).

FTE — Full time equivalent – a unit of measurement of employee or student workload or attendance. Two individuals each engaged in half-time employment constitute a single FTE. In this report, FTE counts are represented with a single decimal to differentiate them from headcounts. (See *headcount*.)

General campus — Used to distinguish the non-health science areas of a campus from the health science areas. Berkeley, Davis, Irvine, Los Angeles, Riverside, and San Diego include both general campus and health science areas. Merced, Santa Barbara and Santa Cruz are general campus only, and San Francisco is an exclusively health science campus.

General funds — General funds include State General Funds, which are funds from the State of California, and UC general funds, which are primarily indirect cost recovery and nonresident tuition.

Graduation rate — The proportion of students in a cohort who finish their degrees within a specified period. Undergraduate graduation rates are generally measured in four-, five- .and six-year increments for entering freshmen, and two-, three-. and four-year increments for transfer students.

Headcount — Headcount is the actual number of individuals without accounting for full- or part-time status. Two students each attending school half-time constitute a headcount of two. (See *FTE*.)

Health sciences instruction — Seven UC campuses offer health sciences instruction. Davis, Irvine, Los Angeles, San Francisco. and San Diego have schools of medicine and other health sciences such as pharmacy, nursing. and dentistry; Riverside has a school of medicine; Berkeley offers health sciences instruction in optometry and public health.

K–12 — Kindergarten through 12th-grade instruction.

Ladder-rank — Ladder-rank faculty are faculty who are tenured or have potential to receive tenure, and generally are members of the Academic Senate.

Master Plan — The Master Plan for Higher Education establishes a system of public higher education in California that defines the roles of public institutions, with the goal of making higher education available to all Californians. The Master Plan was originally drafted in 1960 and has been updated several times to accommodate changing circumstances.

Non-ladder-rank faculty — Non-ladder rank faculty are faculty who are neither tenured nor on track to receive tenure, and generally are not members of the Academic Senate. Non-ladder rank faculty includes lecturers, visitors, adjuncts, instructional assistants, and clinical faculty.

Nonresident — Nonresident students come from outside California to attend a UC campus. They must pay the full cost of attendance.

Pell Grant — The Pell Grant is a federal program that provides need-based grants to low-income individuals for the purposes of obtaining a college degree. A Pell Grant recipient is defined as a student who received a Pell Grant at any point while attending an institution.

Postbaccalaureate teaching credential — The postbaccalaureate teaching credential trains individuals to meet state standards for teacher certification.

Postdoctoral scholar — Postdoctoral scholars are engaged in further research or training in the fields in which they obtained their doctoral degrees for the purpose of gaining additional expertise and skills. Postdoctoral scholars may hold concurrent titles in other academic or staff categories.

SCH, student credit hours – Student credit hours are a measure of faculty teaching workload. SCH are calculated as the number of student enrollments in a course multiplied by the number of credits available from that course. For example, a 4-credit course with 50 students generates 200 SCH; a 2-credit course of 15 students generates 30 SCH.

STEM — Science, technology, engineering, and mathematics. In this report, includes physical sciences and mathematics, life sciences, engineering, computer science, and health sciences.

Transfer students — Transfer students enter UC after completing their freshman- and sophomore-level studies at a California Community College. The Master Plan calls for UC to admit as juniors all qualified California Community College students and specifies that the University maintain a 60:40 ratio of upper-division (junior- and senior-level) to lower-division (freshman- and sophomore-level) students.

UCUES — University of California Undergraduate Experience Survey. UCUES is a biennial survey that solicits undergraduate opinions on all aspects of the UC experience. *See Data Sources entry below for more information.*

Data Sources

Association of American Universities (AAU)

> The Association of American Universities (AAU) is an association of 62 leading public and private research universities in the United States and Canada. A list of the institutions can be found in Table 6 of this glossary. Membership in AAU is by invitation and is based on the high quality of programs of academic research and scholarship and undergraduate, graduate and professional education in a number of fields. Throughout this report, the two AAU institutions in Canada are excluded from the "Non-UC AAU Public" group because they do not submit data to the U.S. Department of Education, the source of the AAU data used here. For more information, visit aau.edu.

American Association of University Professors (AAUP)

> The American Association of University Professors is an organization of professors and other academics in the United States. It conducts an annual survey of faculty compensation, used in this report to compare UC's faculty salaries. More information on the AAUP data set can be found at aaup.org/our-work/research/annual-report-economic-status-profession.

Consumer Price Index (CPI)

> The CPI is a measure of inflation experienced by consumers, and an important indicator of the condition of the economy. It can be used to adjust other economic data for changes in price level and to convert them into inflation-free dollars. For example, retail sales and income data are "deflated" to assess their "real" movements over time. This report uses the calendar year average of the CPI-W (CA), which is the Consumer Price Index for Urban Wage Earners and Clerical Workers.

Integrated Postsecondary Education Data System (IPEDS)

> IPEDS is a system of interrelated surveys conducted annually by the National Center for Education Statistics (NCES) of the Institute of Education Sciences, U.S. Department of Education. IPEDS gathers information from every college, university, and technical and vocational institution that participates in federal student financial aid programs. IPEDS provides basic data needed to describe — and analyze trends in — postsecondary education in the United States, in terms of the numbers of students enrolled, staff employed, dollars expended, and degrees earned. For more information, visit nces.ed.gov/ipeds.

National Student Clearinghouse (NSC)

> The National Student Clearinghouse reports on all institutions that a student has attended or received a degree/credential at. Estimates are conservative due to imperfect matching of students. For more information, visit studentclearinghouse.org/.

Survey of Earned Doctorates (SED)

> The Survey of Earned Doctorates (SED) is a federal survey conducted by the National Opinion Research Center (NORC) for the National Science Foundation and five other federal agencies (National Institutes of Health, U.S. Department of Education, National Endowment for the Humanities, U.S. Department of Agriculture and the National Aeronautics and Space Administration). The SED gathers information annually from new U.S. research doctorate graduates about their educational histories, funding sources and postdoctoral plans.

UC Audited Financial Statements

> UC, like all public entities, is audited by an external auditing firm. UC's external audit is performed by Price Waterhouse Coopers, an independent certified public accounting firm reporting to the Regents. UC's audited financial statements can be accessed at universityofcalifornia.edu/reportingtransparency.

UC Budget for Current Operations

> UC budget documents can be found at ucop.edu/operating-budget/budgets-and-reports/index.html.

UC Corporate Financial System (CFS)

The Corporate Financial System (CFS) contains financial data for all UC campuses. The primary source of data in the CFS is a monthly transmittal file from each of the ten UC campuses. Each campus file contains data reflecting current financial, budgetary, and encumbrance balances, and current month financial activity in the campus' general ledger. More information can be found at data.ucop.edu/subject-area/financial-data-warehouse.html.

UC Corporate Personnel System (CPS)

The Corporate Personnel System (CPS) is a reporting system with demographic, personnel and pay activity data on employees. More information can be found at data.ucop.edu/subject-area/cps-assets/personnel-data-warehouse.html.

UC Data Warehouse

The Data Warehouse is a set of databases and processes that provides information to meet the management, analytical, and operational needs of the UC Office of the President. The databases are created and/or updated with data received from the campuses and other sources. More information can be found at data.ucop.edu/subject-area/index.html.

UC Faculty Instructional Activities dataset ("TIE" data collection)

UC conducts annual data collections from campuses on faculty instructional activities. This data collection was originally undertaken in response to a state reporting requirement that was not renewed. The 2007 annual report to the Legislature was the last mandated report; it can be found at ucop.edu/academic-planning-programs-coordination/_files/documents/fia/fia_annlrpt2007.pdf. Since that time, UC has continued to collect these data for management and accountability purposes.

UC Graduate Student Support Survey

The UCOP Student Affairs department conducts periodic surveys of the competitiveness of UC graduate student support. Reports on this survey can be found at ucop.edu/student-affairs/data-and-reporting/graduate-student-support/index.html.

UC Information Center

The UC Information Center is a website providing a central source of information about the University that allows the public to explore the UC story through data. The site can be accessed at https://www.universityofcalifornia.edu/infocenter.

UC Medical Centers Audited Financial Statements

The UC medical centers, like all public entities, are audited by an external auditing firm. The medical center audited financial statements are published separately from UC's external audit. UC's audited financial statements can be accessed at universityofcalifornia.edu/reportingtransparency.

UC Medical Schools

Six UC campuses include medical schools: Davis, Irvine, Los Angeles, Riverside, San Diego, and San Francisco. More information on these schools can be found at health.universityofcalifornia.edu/medical-centers/.

UC Student Financial Support Annual Reports

These reports, produced by the UCOP Student Affairs department, can be found along with other financial aid information at ucop.edu/student-affairs/data-and-reporting/index.html.

University of California Undergraduate Experience Survey (UCUES)

The University of California Undergraduate Experience Survey (UCUES) biennially solicits student opinions on all aspects of the UC experience. UCUES content is broad and covers most aspects of students' academic and co-curricular experiences. Students evaluate such things as instruction, advising, and student services. More information can be found at www.ucop.edu/institutional-research-academic-planning/services/survey-services/UCUES.html.

Table 1. Broad Discipline Classification

Broad Discipline	CIP Categories Included	
	When Using UC Corporate Data	When Using IPEDS Degree Data
Arts & Humanities	Visual/Performing Arts English Literature Foreign Languages Philosophy History Liberal Arts	Visual/Performing Arts English Literature Foreign Languages Philosophy History Liberal Arts
Life Sciences	Bio/Life Sciences Conservation Science Agricultural Science (select 01 CIPs)	Bio/Life Sciences Conservation Science Agricultural Science (select 01 CIPs)
Physical Sciences, Technology, Engineering, and Mathematics (PSTEM)	Math Physical Science Engineering Computer Science	Math Physical Science Engineering Computer Science
Social Sciences	Area Studies Psychology Social Sciences (except UCSD Pacific Affairs, UCI Criminology) Agricultural Business/Production (select 01 CIPs)	Area Studies Psychology Social Sciences Agricultural Business/Production (select 01 CIPs)
Other Disciplines	Interdisciplinary Other/Unknown Business Architecture Education Public Admin. Law (non-J.D.) Communications Criminology Health Sciences Library Science Social Sciences (UCSD Pacific Affairs and UCI Criminology)	Interdisciplinary Other/Unknown Business Architecture Education Public Admin. Law (non-J.D.) Communications Criminology Health Sciences Library Science Theology Parks & Recreation Military Science Homeland Security

Mapping Developed 1/7/2011, UC Institutional Research and Academic Personnel

Table 2. Faculty Discipline Groupings

Discipline Grouping - Accountability	UAS Discipline	Discipline Grouping - Accountability	UAS Discipline
Arts & Humanities	Fine & Applied Arts	Life Sciences	Biological Sciences
Arts & Humanities	Foreign Languages	Life Sciences	Agriculture & Natural Resources
Arts & Humanities	Letters		
Arts & Humanities	Theology	Math	Mathematics
Business/Management	Business & Management	Medicine	Medicine
Education	Education	Other General Campus Professional	Architecture & Environmental Design
Engineering & Computer Science	Computer & Information Sciences	Other General Campus Professional	Criminology
Engineering & Computer Science	Engineering	Other General Campus Professional	Social Welfare
Interdisciplinary/Other	Interdisciplinary Studies	Other General Campus Professional	Communications
Interdisciplinary/Other	Physical Education	Other General Campus Professional	Library Science
Interdisciplinary/Other	Military Sciences	Other Health Science	Veterinary Medicine
Interdisciplinary/Other	Home Economics	Other Health Science	Dentistry
Law	Law	Other Health Science	Nursing

Discipline Grouping - Accountability	UAS Discipline	Discipline Grouping - Accountability	UAS Discipline
Other Health Science	Pharmacy	Physical Science	Physical Sciences
Other Health Science	Public Health	Social Science & Psychology	Psychology
Other Health Science	Optometry	Social Science & Psychology	Social Sciences
Other Health Science	Other Health Professions	Social Science & Psychology	Area Studies

Table 3. Faculty Categories, Faculty Series, and Class Title Outline Codes

Category	Faculty Series Included	Class Title Outline (CTO) Codes[1]
Faculty – Ladder-rank and Equivalent (LRE)	• Professorial – Tenure, Non-Tenure and Recall[2] • Clinical Prof. of Dentistry – 50% or More • Supervisor of Physical Education – Tenure, Non-Tenure and Recall • Acting Professor – Senate and Non-Senate • Lecturer with Security of Employment and with Potential Security of Employment – 100%, and Recall[3] • Astronomer – Tenure, Non-Tenure and Recall • Agronomist – Tenure, Non-Tenure and Recall	• 010, 011, 012 • 030, 031 • 040, 041, 042 • 114, 124 • 210, 211, 212 • 520, 521, 522 • 530, 531, 532
Faculty – Clinical/In-Residence/Adjunct	• Professor in Residence • Professor of Clinical ___ (e.g., Medicine) • Health Sciences Clinical Professor • Adjunct Professor • Visiting Professor	• 311 • 317 • 341 • 335 • 323
Faculty – Lecturers	• Lecturer • Lecturer with Potential Security of Employment – Part Time • Instructional Assistant (non-student)	• 225 • 221 • 357

[1] The CTO code identifies a group of titles with similar duties and/or conditions of appointment.

[2] "Recall" denotes retired faculty who have been recalled to active service to perform teaching, research, and/or public service duties. They are included in reporting on headcounts and FTE of incumbent faculty, but they are excluded from reporting on faculty new hires and separations.

Note: Faculty members with tenure are conferred the Emeritus title upon retirement. If they return to University service in a paid position, they are appointed in Recall titles. Emeritus faculty without Recall appointments are not included in faculty counts in the Accountability Report.

[3] Lecturers in these titles are also called "Senate Lecturers." They have or are eligible for the equivalent of tenure, and they are represented in the Academic Senate.

Student Level Classification Summary:

UCOP classifies graduate students into five enrollment levels that rely on campus-provided information on program type and student enrollment level. Within UCOP's central student data system, campuses indicate whether each of their programs of study is academic or professional at the master's and doctoral levels. These indications, combined with the actual enrollment level (masters or doctoral) of the student, serve as the determination of whether a student is enrolled in an academic doctoral, professional doctoral, academic master's, or professional master's program. Two exceptions to this rule include: (1) all self-supporting students are treated as professional (master's or doctoral based on level) regardless of how the campus may have classified the program; and (2) all students enrolled in programs associated with professional licensure (law, medicine, and other health professions) are treated as professional practice.

Table 5. AAU Member Universities, as of July 2022 (United States only)

UC	Non-UC Public	Private
Berkeley	Georgia Institute of Technology — Main Campus	Boston University
Davis	Indiana University — Bloomington	Brandeis University
Irvine	Iowa State University	Brown University
Los Angeles	Michigan State University	California Institute of Technology
San Diego	Ohio State University — Main Campus	Carnegie Mellon University
Santa Barbara	Pennsylvania State University — Main Campus	Case Western Reserve University
Santa Cruz*	Purdue University — Main Campus	Columbia University in the City of New York
	Rutgers University — New Brunswick	Cornell University
	Stony Brook University	Dartmouth University*
	Texas A & M University	Duke University
	The University of Texas at Austin	Emory University
	University at Buffalo	Harvard University
	University of Arizona	Johns Hopkins University
	University of Colorado at Boulder	Massachusetts Institute of Technology
	University of Florida	New York University
	University of Illinois at Urbana — Champaign	Northwestern University
	University of Iowa	Princeton University
	University of Kansas	Rice University
	University of Maryland — College Park	Stanford University
	University of Michigan — Ann Arbor	Tulane University of Louisiana
	University of Minnesota — Twin Cities	University of Chicago
	University of Missouri — Columbia	University of Pennsylvania
	University of North Carolina at Chapel Hill	University of Rochester
	University of Oregon	University of Southern California
	University of Pittsburgh — Pittsburgh Campus	Vanderbilt University
	University of Virginia — Main Campus	Washington University in St Louis
	University of Washington — Seattle Campus	Yale University
	University of Wisconsin — Madison	
	University of Utah*	*Joined in 2019.

Table 6. Inflation Adjustments

Unless otherwise noted, all inflation adjustments are to 2021 calendar year dollars using the consumer price index for urban wage earners and clerical workers, California (CPI-W) published by the California Department of Finance at http://www.dof.ca.gov/Forecasting/Economics/Indicators/Inflation/.

Calendar Year	Fiscal/ Academic Year	CCPI-W, CA (1982– 84=100)	Calendar Year	Fiscal/ Academic Year	CCPI-W, CA (1982– 84=100)	Calendar Year	Fiscal/ Academic Year	CCPI-W, CA (1982– 84=100)
1996	1996–97	152.0	2005	2005–06	195.9	2014	2014–15	239.0
1997	1997–98	155.0	2006	2006–07	203.3	2015	2015–16	241.6
1998	1998–99	157.6	2007	2007–08	209.9	2016	2016–17	246.2
1999	1999–00	162.2	2008	2008–09	217.6	2017	2017–18	253.2
2000	2000–01	168.1	2009	2009–10	216.3	2018	2018–19	263.0
2001	2001–02	174.7	2010	2010–11	219.7	2019	2019-20	270.8
2002	2002–03	179.0	2011	2011–12	226.4	2020	2020-21	275.6
2003	2003–04	183.8	2012	2012–13	231.6	2021	2021-22	288.6
2004	2004–05	188.9	2013	2013–14	234.9			

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