

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.



The Annual Accountability Report is produced by the Institutional Research and Academic Planning Unit at the University of California Office of the President. We gratefully acknowledge the assistance provided by numerous departments and individuals both at the Office of the President and at UC campuses. Please visit the website below for errata discovered after publication.

universityofcalifornia.edu/accountability

Contact: accountability@ucop.edu

**University of California
Annual Accountability Report 2020
Table of Contents**

	Page
PART I. EXECUTIVE SUMMARY	1
PART II. UNIVERSITYWIDE INDICATORS AND CAMPUS COMPARISONS	
Chapter 1. Undergraduate Students — Admissions and Enrollment	17
1.1 APPLICANTS, ADMITS, AND ENROLLEES	
1.1.1 Freshman applicants, admits, and enrollees	
1.1.2 Transfer applicants, admits, and enrollees	
1.1.3 New California resident freshmen and transfer students	
1.1.4 Undergraduate headcount enrollment	
1.2 DEMOGRAPHIC OUTCOMES	
1.2.1 Entering students by demographics and entering level	
1.3 PREPARATION OUTCOMES	
1.3.1 A–G courses and high school grade point average (GPA), as share of class	
1.3.2 College grade point average (GPA) of entering transfer students, as share of class	
1.4 GEOGRAPHIC ORIGINS AND NONRESIDENTS	
1.4.1 Residency of undergraduate students, UC and comparison institutions	
1.4.2 Percentage of new CA resident freshman enrollees whose home is within a 50-mile radius of their campus	
1.4.3 Percentage of new CA resident transfer enrollees living whose home is within a 50-mile radius of their campus	
1.4.4 Percentage of undergraduate enrollees paying nonresident tuition	
Chapter 2. Undergraduate Students — Affordability	33
2.1 COST OF ATTENDANCE	
2.1.1 Total cost of attendance for undergraduate, in-state residents	
2.1.2 Net cost of attendance by family income and California residency	
2.2 INCOME PROFILE	
2.2.1 Undergraduate Pell Grant recipients	
2.2.2 Undergraduate income distribution	
2.3 COST OF ATTENDANCE AND STUDENT DEBT	
2.3.1 Student response to a UCUES survey question on the affordability of college	
2.3.2 Percent of students experiencing food insecurity and homelessness	
2.3.3 Student loan debt burden of graduating seniors, inflation-adjusted	
2.3.4 Student loan debt burden of graduating seniors by parent income	
2.3.5 Average cumulative loan debt, UC and national comparison institutions	
2.3.6 Debt-to-earnings ratios for UC undergraduate alumni at two and five years after graduation	
Chapter 3. Undergraduate Student Success	47
3.1 GRADUATION RATES	
3.1.1 Freshman graduation rates, UC and comparison institutions	
3.1.2 Freshman graduation rates, including those who graduated from a non-UC institution	
3.1.3 Transfer graduation rates	
3.1.4 Freshman graduation rates by race/ethnicity	
3.1.5 Transfer graduation rates by race/ethnicity	
3.1.6 Freshman graduation rates by Pell Grant receipt status	
3.1.7 Transfer graduation rates by Pell Grant receipt status	
3.1.8 Average time to degree	

3.2 RETENTION RATES AND STUDENT CREDIT HOURS

3.2.1 First-year retention rates for freshmen and transfer students, systemwide

3.2.2 First-year retention rates for freshmen and transfer students by campus

3.3 OUTCOMES

3.3.1 Undergraduate degrees awarded by discipline

3.3.2 Inflation-adjusted alumni wages by selected majors after graduation

3.3.3 Median alumni wages by industry of work for selected majors

3.3.4 UC undergraduate alumni graduate degree attainment by campus

Chapter 4. Graduate Academic and Graduate Professional Students

63

4.1 GRADUATE ACADEMIC ADMISSIONS

4.1.1 Graduate academic applications, admits, and new enrollees by degree program and citizenship

4.1.2 Graduate academic applications, admits, and new enrollees by race/ethnicity and discipline

4.2 GRADUATE ACADEMIC AND PROFESSIONAL ENROLLMENT

4.2.1 Graduate enrollment share of total

4.2.2 Average net stipend offered to academic doctoral students compared with first-choice non-UC schools

4.2.3 Academic doctoral students' graduate debt at graduation by discipline, domestic students

4.2.4 Graduate professional degree student debt at graduation by discipline, domestic students

4.3 GRADUATE ACADEMIC STUDENT OUTCOMES

4.3.1 Graduate academic degrees awarded by discipline

4.3.2 Doctoral completion rates after ten years by broad field

4.3.3 Median ten-year time-to-doctorate by ethnicity and gender

4.3.4 Median ten-year time-to-doctorate by ethnicity and gender, by discipline

4.3.5 Origin and planned destination of UC academic doctoral degree recipients

4.3.6 Industry of employment of UC graduate academic students in CA by year after graduation

4.4 GRADUATE PROFESSIONAL STUDENT OUTCOMES

4.4.1 Graduate professional degrees awarded by discipline

4.4.2 Industry of employment of UC graduate professional students in CA

Chapter 5. Faculty and Other Academic Employees

83

5.1 ACADEMIC WORKFORCE

5.1.1 General campus faculty FTE total by type

5.1.2 General campus faculty headcount by discipline

5.1.3 Non-faculty academic workforce FTE

5.1.4 Postdoctoral scholar headcount

5.2 ACADEMIC WORKFORCE DIVERSITY

5.2.1 Academic workforce by race/ethnicity

5.2.2 Academic workforce by gender

5.2.3 Percent of tenure and tenure-track faculty who are female and/or an underrepresented group

5.3 ACADEMIC HIRING AND RETENTION

5.3.1 Underrepresented new assistant professors compared with national availability by discipline

5.3.2 Female new assistant professors compared with national availability by discipline

5.3.3 New hires and separations of ladder-rank and equivalent faculty

5.3.4 Average ladder-rank general campus faculty salaries by rank

5.3.5 UC ladder-rank faculty headcount, excluding recall faculty

Chapter 6. Staff

99

6.1 STAFF WORKFORCE

6.1.1 Staff Full-Time Equivalent (FTE)

6.1.2 Racial/ethnic diversity of non-student staff by personnel program

6.1.3 Gender diversity of non-student staff by personnel program

6.2 STAFF COMPENSATION

6.2.1 Non-student staff FTE by fund source

6.2.2 General campus career staff average inflation-adjusted base salaries by personnel program

6.2.3 UC Health career staff average inflation-adjusted base salaries by personnel program

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

6.3 STAFF SEPARATIONS

6.3.1 Separation rates for career staff

6.3.2 Separation reasons for career staff

Chapter 7. Diversity

109

7.1 UNDERGRADUATE PIPELINE

7.1.1 Racial/ethnic distribution of the UC undergraduate pipeline

7.1.2 Gender distribution of the UC undergraduate pipeline

7.2 GRADUATE STUDENT PIPELINE

7.2.1 Racial/ethnic distribution of US BA/BS degree recipients from US institutions compared to UC doctoral applicants

7.2.2 Gender distribution of US BA/BS degree recipients from US institutions compared to UC doctoral applicants

7.3 DIVERSITY OF THE UNIVERSITY COMMUNITY

7.3.1 Racial/ethnic distribution of students and ladder-rank faculty

7.3.2 Assistant professor hires compared to ladder-rank faculty

7.4 UNDERGRADUATE CAMPUS CLIMATE

7.4.1 Response to “Students of my race/ethnicity are respected on this campus”

7.4.2 Response to “Students of my religion are respected on this campus”

7.4.3 Response to “Students of my sexual orientation are respected on this campus”

7.4.4 Response to “Students of my gender are respected on this campus”

7.4.5 Response to “Students of my political beliefs are respected on this campus”

Chapter 8. Teaching and Learning

123

8.1 UNDERGRADUATE STUDENT LEARNING AND ENGAGEMENT

8.1.1 Self-reported skill levels from first year to senior year

8.1.2 Students completing a research project or research paper as part of their coursework

8.1.3 Students assisting faculty in conducting research

8.1.4 Student responses to question about areas of engagement

8.1.5 Student satisfaction with overall academic experience

8.2 DOCTORAL STUDENT LEARNING

8.2.1 Doctoral preparation by skillset

8.3 THE INSTRUCTIONAL WORKFORCE

8.3.1 General campus student-faculty ratio

8.3.2 Student credit hours, by instructional staff and class type

8.3.3 Student credit hours, by instructional staff and class type and class size

Chapter 9. Research

135

9.1 RESEARCH EXPENDITURES

9.1.1 Direct research expenditures by source

9.1.2 Direct research expenditures by cost type

9.1.3 Direct research expenditures by discipline

9.1.4 UC share of US research expenditures

9.1.5 Average inflation-adjusted research expenditures per ladder-rank faculty

9.2 RESEARCH IMPACT

9.2.1 eScholarship downloads and deposits

9.2.2 UC research publication performance, by Field-Weighted Citation Impact (FWCI) and discipline group

9.2.3 New licenses for UC technology issued to California businesses

9.2.4 Startups based on UC technology formed per year in California

Chapter 10. Public Service

147

10.1 AGRICULTURE AND NATURAL RESOURCES

10.1.1 UC Division of Agriculture and Natural Resources programs

10.2 NATURAL RESERVE SYSTEM

10.2.1 UC Natural Reserve System

10.3 EDUCATIONAL PARTNERSHIPS

10.3.1 UC K–12 and community college student services programs

10.3.2 UC teacher professional development and teacher preparation programs

10.4 SOCIAL AND ECONOMIC IMPACT

- 10.4.1 UC programs for community and social services, cultural resources and arts, university extension, business and economic development, and public policy programs
- 10.4.2 Location and industry of employment of UC alumni, in California
- 10.4.3 Faculty, academics, and staff employees; retirees, in California

Chapter 11. UC Health

163

11.1 HEALTH SCIENCES STUDENTS

- 11.1.1 Health sciences students by discipline
- 11.1.2 Location of doctors, nurses, dentists, optometrists and veterinarians trained by UC since 1999 and currently licensed in California

11.2 MEDICALLY UNDERSERVED AREAS

- 11.2.1 Medically underserved areas and populations

11.3 HEALTH SCIENCES STUDENT DEBT

- 11.3.1 Average total charges for health professional degree students
- 11.3.2 Health sciences professional degree student debt at graduation

11.4 PATIENT CARE

- 11.4.1 Patient complexity (Case Mix Index)
- 11.4.2 Hospital inpatient days, UC Medical Centers
- 11.4.3 Outpatient visits: UC medical centers and schools of medicine
- 11.4.4 Hospital admissions

11.5 EXPENDITURES

- 11.5.1 Health sciences instructional expenditures by fund source

Chapter 12. Institutional Performance

177

12.1 FINANCES

- 12.1.1 Revenues by source
- 12.1.2 Per-student average inflation-adjusted core revenues
- 12.1.3 Current giving by purpose
- 12.1.4 Expenditures by function and type
- 12.1.5 Average general campus core fund expenditures for instruction per student

12.2 CAPITAL PROJECTS

- 12.2.1 Sources of capital project funding by year of approval
- 12.2.2 Sources of capital spending detail
- 12.2.3 Types of capital projects, based on budgets approved by year
- 12.2.4 Assignable square footage (ASF)

12.3 SUSTAINABILITY

- 12.3.1 Greenhouse gas emissions compared to climate goals
- 12.3.2 Cost avoidance from energy efficiency projects
- 12.3.3 LEED® certifications

Chapter 13. Awards and Distinctions

193

13.1 FACULTY AWARDS

- 13.1.1 Nobel Prizes by campus affiliation
- 13.1.2 Prizes, medals, and awards won by UC faculty

13.2 RANKINGS

- 13.2.1 U.S. News: America's Top National Public Universities
- 13.2.2 Shanghai Ranking Consultancy: Academic Rankings of World Universities
- 13.2.3 Washington Monthly Research University Ranking

PART III. GLOSSARY AND DATA SOURCES

Glossary

199



EXECUTIVE SUMMARY

UC ACCOUNTABILITY REPORT

UC Accountability Report 2020

Executive Summary

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

2020 will forever be known as the year that the COVID-19 pandemic upended virtually every facet of American life. UC has moved quickly to bring the full power of its research and healthcare enterprises to address the crisis. This summary begins with a high-level overview of those efforts, and highlights UC's research role more generally.

2020 marks the centennial of women's suffrage in the United States, as well as the 150th anniversary of women's admission to the UC. Those important milestones are reflected here with a look at the contributions made by UC women since then, and a snapshot of continuing gaps academic positions.

This year will also be remembered for tragic events that sparked a long-overdue national conversation about institutional racism, which continues to plague our country and endanger the lives of Black Americans. The summary next highlights the current efforts across UC, particularly as part of UC's multi-year UC 2030 plan, to better reflect the full diversity of the state and to end long-standing racial disparities in enrollment, graduation rates, attainment of advanced degrees, and faculty representation. The UC 2030 plan is a collective effort of UC leadership — the President, Chancellors, and Board of Regents — to address inequities and strengthen California's future by investing in the next generation of UC graduates, faculty, and research.

Responding to the COVID-19 Pandemic

The World Health Organization (WHO) declared a Public Health Emergency of International Concern to the [coronavirus disease of 2019](#) (COVID-19) on January 30, 2020; Governor Gavin Newsom declared a state of emergency on March 4th. The WHO declared COVID-19 a pandemic on March 11th.

UC has a history of supporting Californians and the world during medical crises. In the 1980s, a mysterious ailment — eventually named human immunodeficiency virus or HIV — was affecting large numbers of gay men. At that time, an HIV diagnosis was treated as the equivalent of a death sentence. But UC physicians and scientists helped pioneer new antiretroviral medications and enhanced patient care to make it a survivable condition. Today, most HIV-positive people who receive care live normal lives, and UC doctors and researchers speak optimistically about finding a cure.

When the current crisis hit, UC medical centers were among the first in California to ramp up operations to care for COVID-19 patients, adding surge beds to increase capacity and strengthen the state's response to the pandemic. UC medical centers and UC research laboratories began in-house testing, along with producing masks, swabs, and hand sanitizer, as well as converting sleep apnea machines into ventilators, to address the shortage of Personal Protective Equipment (PPE) and other supplies. UC has also sent health professionals to locations severely affected by COVID-19, including New York and the Navajo Nation. Now, UC is partnering with the State to train 20,000 people to do contact tracing, an essential role for containing new outbreaks.

UC also responded with accelerated research initiatives. By early April, more than 300 research projects, proposals, and clinical trials for COVID-19 were active, including but not limited to:

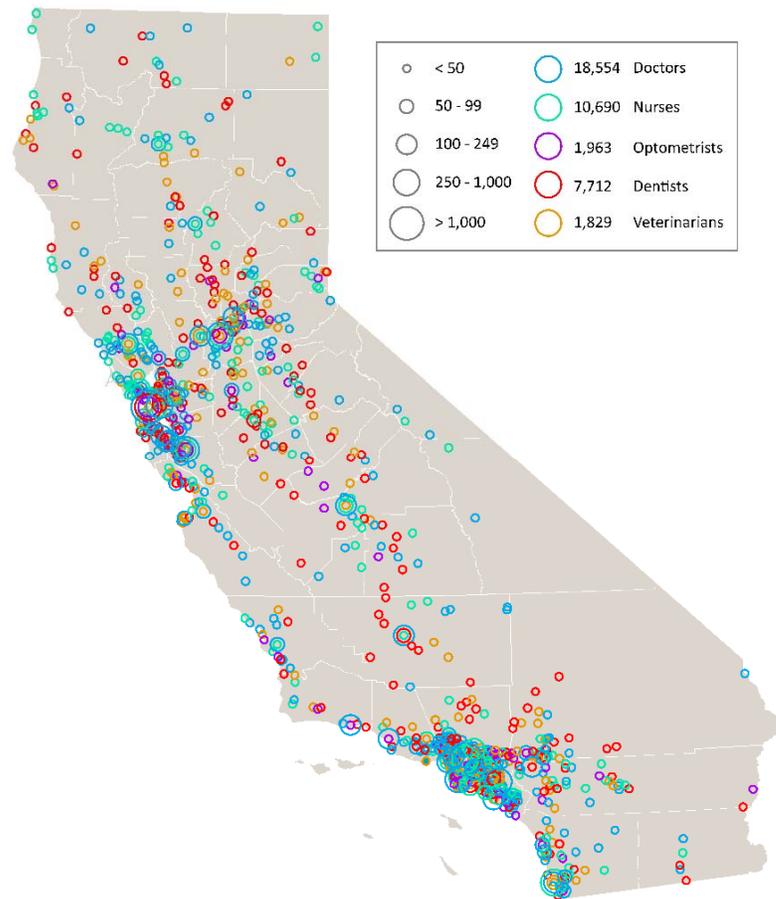
- Testing the safety and efficacy of a range of drugs approved for other conditions, which may be effective for COVID-19, including developing a vaccine with patch delivery technology
- Using machine learning at UC's national lab supercomputers to answer questions about the virus in hours or days, rather than weeks or months

- Mapping a key protein that may aid in the development of a COVID-19 vaccine, along with studying everything from coronavirus mutations, infection prevention and community mobilization to the regulatory, policy and economic implications of the virus.

The University of California houses the largest and one of the most comprehensive health sciences training programs in the nation, with nearly 15,000 students (11.1.1). Based on historical averages, more than 70 percent of graduates from these programs will remain in California after graduation or residency (11.1.2). This makes UC Health one of the principal sources for the training of health professionals for California.

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: CA Department of Consumer Affairs

Serving as California’s Research Powerhouse

The California Master Plan for Higher Education designates the University of California as the primary State-supported academic agency for research, with the State investing in top-tier research faculty to advance that goal. California’s investment in UC faculty and their research benefits both the state and nation. For example, more than half of UC’s \$4.9 billion in direct research expenditures either came directly from the federal government or as federal flow-through funds from other entities (9.1.1), most of these funds originating from outside California.

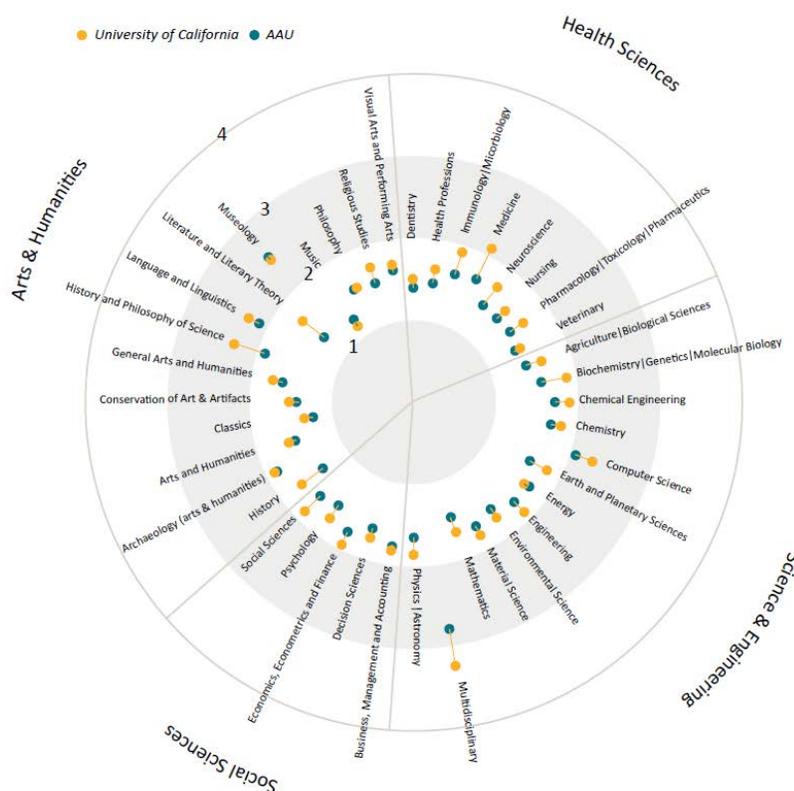
Many businesses in California are based on technology developed at UC or rely on the skills of UC graduates. Over the past quarter century, UC has secured more licensable patents than any other U.S. research university. Since

1976, over 1,000 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. UC research has helped California become the fifth-largest economy in the world.

UC researchers also create and disseminate new knowledge through publications frequently cited by others, particularly in arts and humanities, economics, computer science, engineering, and medicine. As shown below, the impact of UC's research publications is greater than both the global average of 1.00 and the average of its comparison Association of American Universities (AAU) peers in nearly every field.

The University of California is a major research presence at both the state and national levels, its research having greater impact than its peers and overall averages in nearly every field.

9.2.2 UC research publication performance, by Field-Weighted Citation Impact (FWCI) and discipline group Universitywide, 2014 to 2019



Source: SciVal® database, Elsevier B.V., scival.com (downloaded March 18, 2020)

The COVID-19 pandemic has impacts far beyond health care delivery across economic, social, and cultural issues. UC serves as California's research powerhouse and think tank, providing multidisciplinary perspectives to inform these intersecting areas, such as expertise provided by:

- Business, economic, and public policy researchers on economic impact and recovery/reopening plans
- Public health and social welfare researchers on efficacy, usage, and impacts of telemedicine
- Data science and public health researchers on tracking cases to understand trends and differential impacts by race/ethnicity and other factors
- Arts and humanities, social science, and journalism researchers on how music and the arts create community during stay-at-home orders

- Education and psychology researchers on impacts of remote instruction on educational outcomes and student mental health

Charting a Course towards Normal Operations

The COVID-19 pandemic has had a significant impact on the state’s economy and businesses, including the University of California.

UC Health's medical centers are incurring substantial costs for surge expansion, surge staffing, development of testing capabilities, and other expenses. At the same time, revenues are down due to the cancellation of thousands of non-emergency procedures to prepare for a potential COVID-19 patient surge.

The extent of COVID-19 cost on UC operations is not known at this time. Between March and May 2020 alone these costs exceeded \$1.54 billion for the University. The federal government has implemented a series of stimulus bills that by June 15, 2020 had provided UC with over \$750 million towards COVID-19 related costs. However, since pandemic created expenditures continue to rise the full cost to the University will not be known for some time. Disruption to normal operations will place great financial strain on many aspects of the University’s operations. In addition, clinical operations have supported health professional schools in the past, but that revenue source is now constrained. In 2018-19, the health centers provided \$606 million to support the health professional schools.

UC campuses are also looking to continue research operations, which can bring federal funding back into California, and to continue instruction in the fall for undergraduate and graduate students, though the University may need to continue to offer remote instruction.

As UC works to repopulate its campuses and continue critical research projects this fall, it is clear that University activities can accelerate California’s recovery from the fallout of the COVID-19 pandemic. Federal and state investments in UC are a key part of the equation. Together, UC and its governmental partners can address challenges resulting from the COVID-19 pandemic, support economic recovery efforts, and increase degree attainment to support California’s workforce needs.

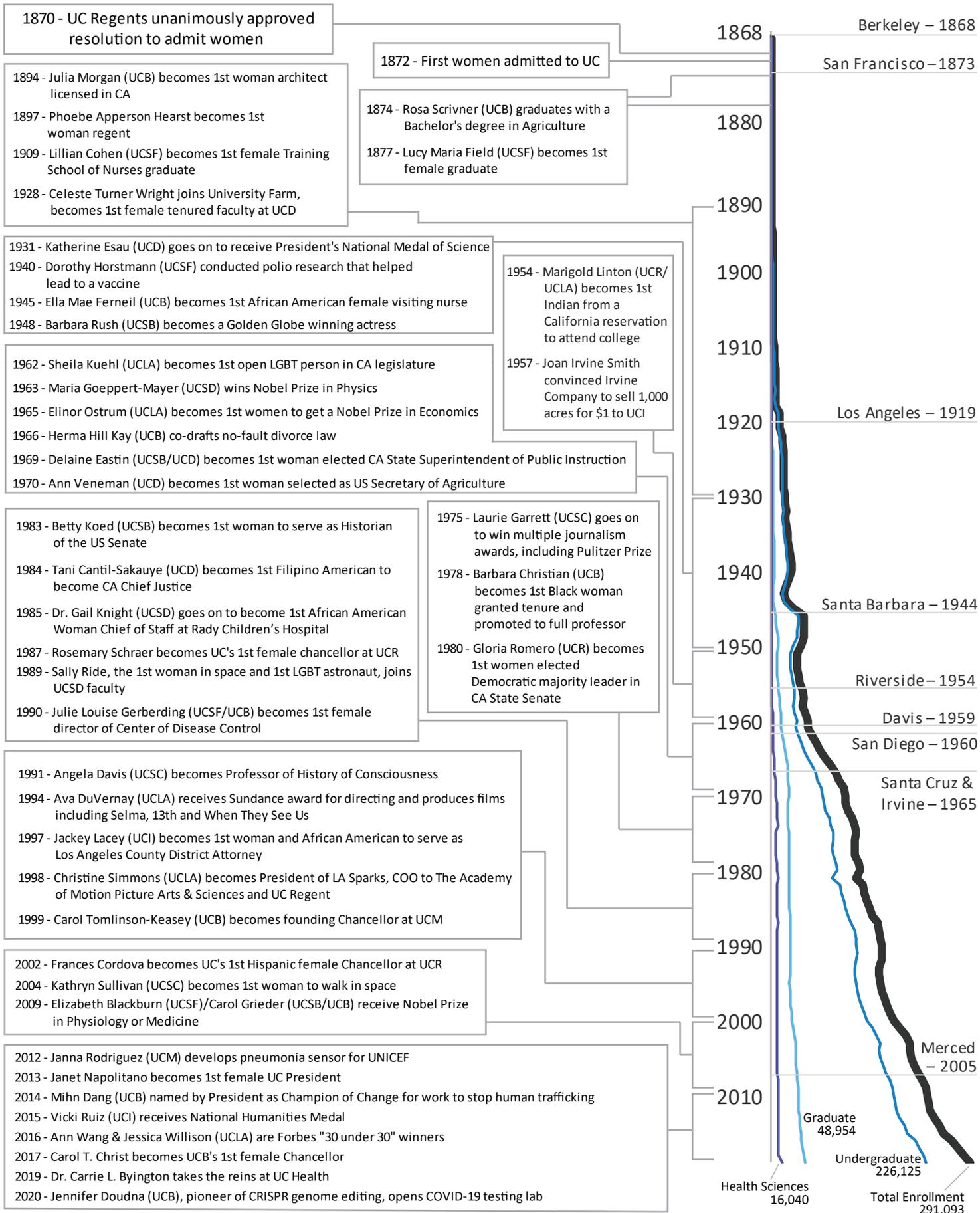
Lifting up Women

The University of California was established on March 23, 1868, when California Gov. Henry Haight signed the Organic Act, setting in motion the audacious idea that California should have a great public university. In keeping with its egalitarian ideals, UC Regents in 1870 unanimously approved a resolution that “young ladies be admitted into the University on equal terms in all respects with young men”—a step many Ivy League colleges did not take for nearly another century.

The first women were admitted to the University in 1872, and the first woman, Rosa Scrivner, graduated with a Bachelor’s degree in Agriculture in 1874. Since then, hundreds of thousands of women have graduated from the University of California and thousands of female faculty and staff have contributed to UC, California, and beyond.

Women have served as UC Regents, chancellors, deans, and as a UC President. They span disciplinary fields and occupations, often the first to break the glass ceiling. They have received numerous honors, including the Nobel Prize, National Humanities Medal, Pulitzer Prize, and Presidential Medal of Science. They have been elected to public office, performed in the arts, and walked in space. UC women are playing influential roles in response to the pandemic, including leading UC Health and driving the research behind clustered regularly interspaced short palindromic repeats (CRISPR) gene-editing technology that holds promise for a COVID-19 vaccine. They teach, mentor, and inspire the next generation of women who will promote opportunities and discoveries to create a better tomorrow. The following graphic highlights a handful of these contributions over time.

UC Women Making History



UC must continue to evaluate its own metrics in this area. Half of California’s population are women, with a higher proportion of women receiving bachelor’s degrees in Arts & Humanities, Life Sciences, and Social Sciences, and lower representation in Physical Sciences and Engineering & Computer Science. Across fields, the proportion of female Ph.D. graduates declines, or in the case of Engineering & Computer Science, remains low, though female representation in professional fields is higher. UC faculty — particularly ladder-rank equivalent (LRE) faculty — do not reflect the gender diversity of UC student populations, though the female share of new hires is above current LRE percentages.

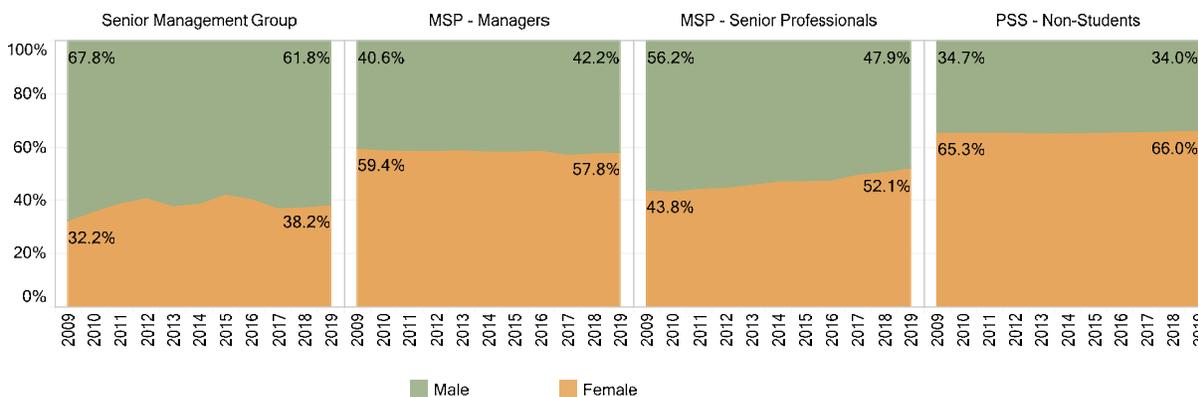
Public high schools and UC student and faculty, percent female

	12th graders	UC Undergraduates			UC Graduate Students			UC Faculty			
		Freshmen	Transfers	Bachelors	Ph.D. Entrants	Ph.D. Grads	Prof Grads	New Hires	Ladder Rank	Clinical/Adjunct	Lecturers
Arts & Humanities				60%	57%	48%		60%	48%	40%	60%
Engin & Comp Sci				24%	25%	26%		27%	19%	12%	25%
Life Sciences				62%	55%	51%		44%	33%	34%	50%
Physical Sciences				41%	31%	30%		26%	23%	36%	43%
Social Sciences				63%	54%	52%		53%	45%	31%	53%
Law							54%		40%	49%	52%
Medicine							52%	50%	27%	48%	
Oth Health Sci							71%		50%	61%	55%
TOTAL	50%	60%	51%	54%	44%	41%	58%	44%	35%	48%	51%

Source: UC Accountability Report (7.1.2, 7.2.2, and 5.3.2), UC Information Center (Graduate Admissions, Degrees Awarded, and Workforce Diversity dashboard)

Gender diversity has increased steadily at all staffing levels; however, more senior positions remain less diverse. More than half of the managers and professional support staff employees are women. The percentage of women employees has grown steadily within the Senior Management Group (SMG), while Senior Professionals have nearly equal gender representation.

6.1.3 Gender diversity of non-student staff by personnel program Universitywide, October 2009 to 2019



Source: UC Corporate Personnel System

UC 2030: Advancing the California Dream

The University of California established its multi-year framework — UC 2030 — with a three-point plan on how the University would strengthen California by:

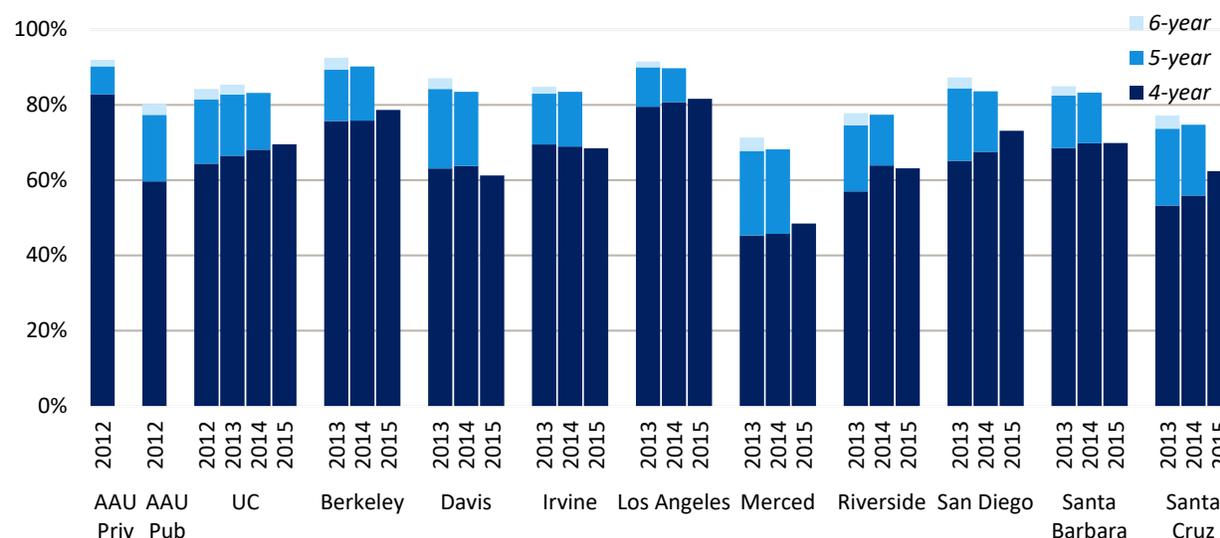
- Producing over 200,000 additional degrees, on top of the one million undergraduate and graduate degrees currently projected

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. Since 2015–16, UC has added over 293,000 undergraduate and graduate degrees or just over 24 percent of the 1.2 million total.

At the undergraduate level, much of this improvement will be made 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.

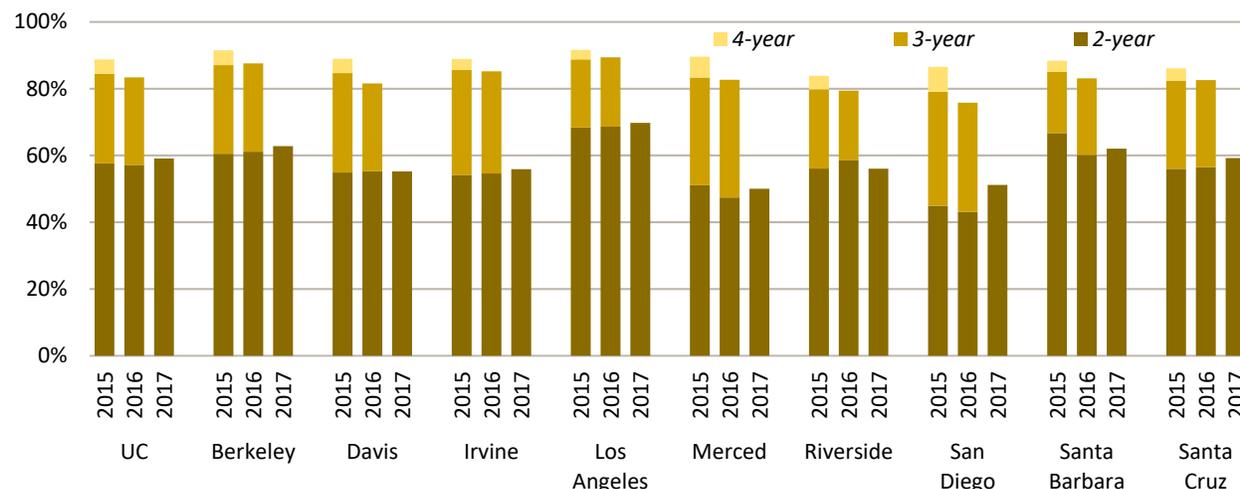
UC four-year freshman and two-year transfer graduation rates gained more than one point.

3.1.1 Freshman graduation rates, UC and comparison institutions
Cohorts entering fall 2013, 2014, and 2015; fall 2012 cohort for AAU comparison



Source: UC Data Warehouse and IPEDS

3.1.3 Transfer graduation rates, Universitywide and UC campuses (fall 2015, 2016, and 2017 cohorts)

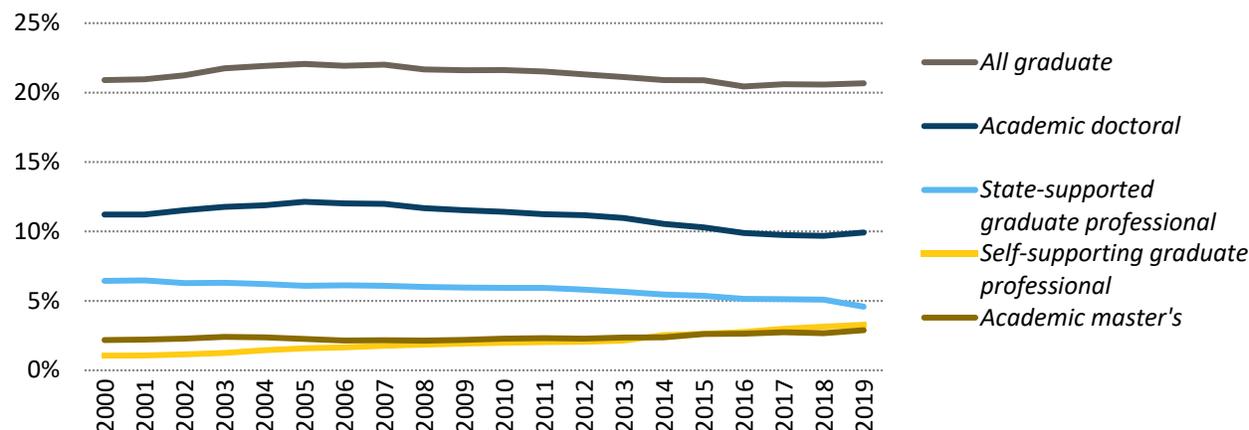


Source: UC Data Warehouse

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. Not only will this growth support degree attainment goals, it will increase the share of graduate students across the system, currently at 21 percent, compared to 27 percent for non-UC Association of American University (AAU) public institutions, and 56 percent for AAU private institutions (4.2.1). This graduate growth will also support both undergraduate degree attainment through teaching and mentorship, while advancing UC research activities.

Graduate enrollment, as a share of UC's total undergraduate and graduate enrollment, has declined slightly and remains well below comparable institutions.

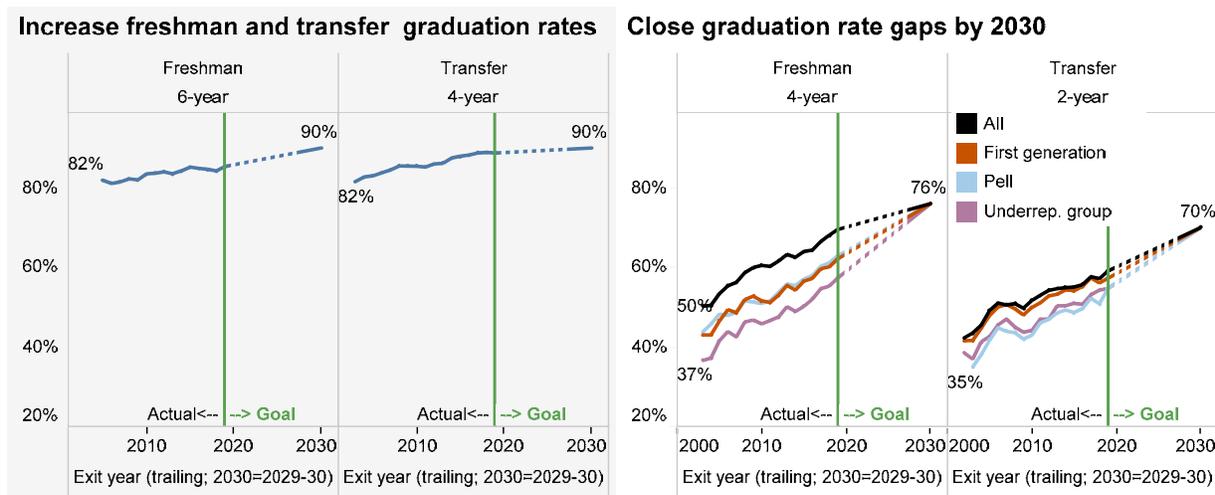
4.2.1 Graduate enrollment share of total, Universitywide Fall 2000 to Fall 2019



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.

Goal 2: Ensuring the California Dream is for everyone

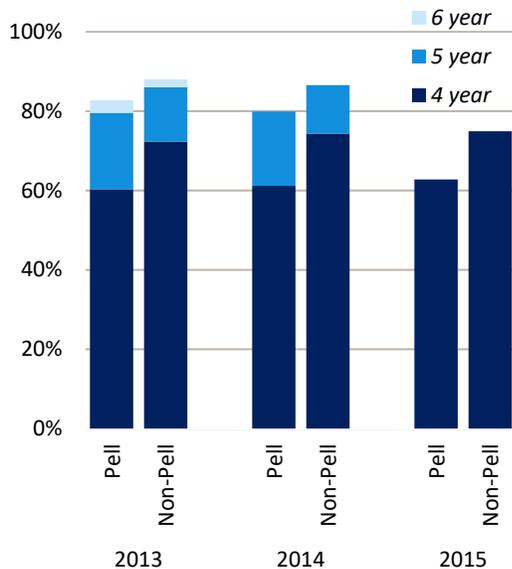
The emphasis of this goal is two-fold: ensuring that nine out of ten freshman and transfer entrants leave UC with a degree, and eliminating timely graduation gaps for first-generation, Pell grant, and underrepresented students.



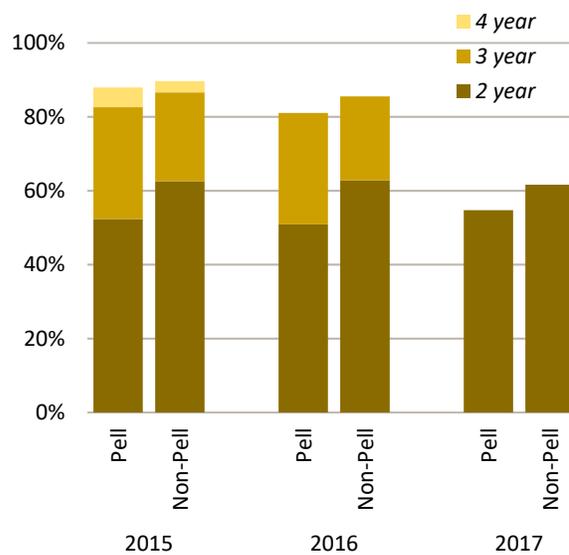
Over the last 15 years, UC graduation rates have improved, particularly four-year freshman and two-year transfer graduation rates. However, UC has been unable to close gaps in timely graduation for Pell, first-generation, and underrepresented groups, particularly for freshman entrants. UC is seeking to eliminate double-digit gaps in timely graduation rates for Pell, first-generation and underrepresented students.

UC's gap in timely graduation for Pell and non-Pell recipients decreased by one point for freshmen and four points for transfers.

3.1.6 Freshman graduation rates by Pell Grant recipient status
Cohorts entering fall 2013, 2014, and 2015



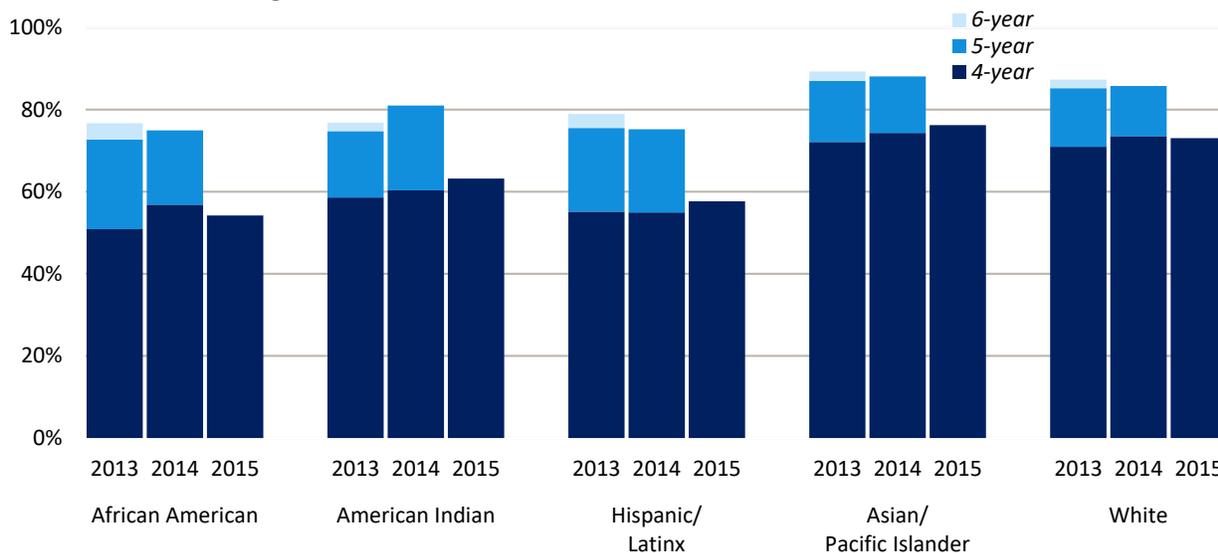
3.1.7 Transfer graduation rates by Pell Grant recipient status
Cohorts entering fall 2015, 2016, and 2017



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

UC's gap in four-year graduation rates dropped by one point for underrepresented students compared to Asian and White peers, though the gap is still around 18 points and grew for African American students.

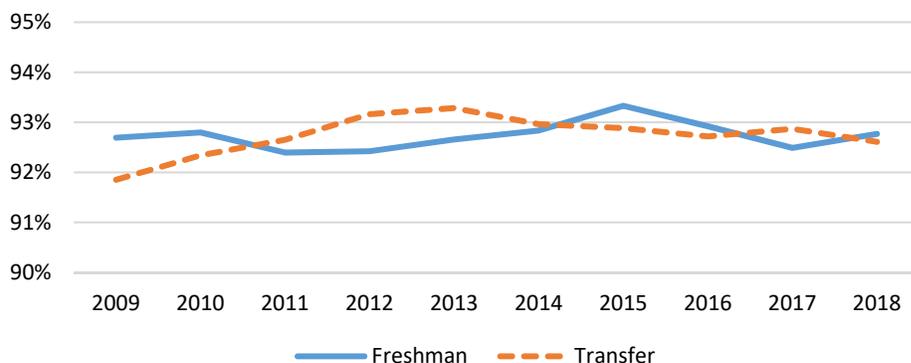
3.1.4 Freshman graduation rates by race/ethnicity
Universitywide, AAU public, and AAU private
Cohorts entering fall 2013, 2014, and 2015



One challenge to achieving these ambitious goals is a recent decline in first-year retention rates, around half a percentage point for freshman and a point for transfer entrants. First-year retention has dropped even further for freshman entrants who are underrepresented (two percentage points), Pell grant recipients (two percentage points), and first-generation (one percentage point), exactly the populations UC is targeting to eliminate graduation gaps. The data highlight that UC is likely to see a drop in graduation rates for these cohorts.

Freshman and transfer retention rates are high, but a recent decline forecasts likely drops in graduation rates.

3.2.1 First-year retention rates, UC systemwide Cohorts entering fall 2008 to fall 2017



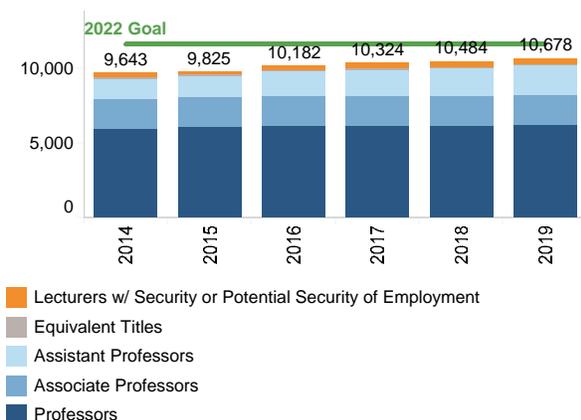
Source: UC Data Warehouse

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

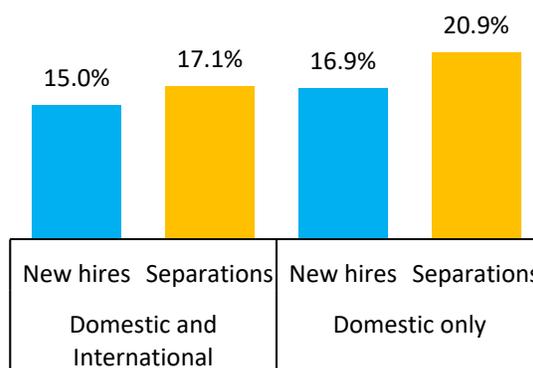
While much of the funding for UC research comes from the federal government, a primary way California promotes UC research activity is through state support for faculty. Campuses estimated what they would need to achieve goals in the multi-year framework. Based on that input, the University has set a goal to add 1,100 net new faculty over the next four years. Over the last year, UC added just under 200 faculty.

While many of the UC 2030 goals may take a decade to achieve, the goal to grow faculty is currently limited to the next four years. In part, this will help UC assess its efforts to further diversify the faculty, which in turn will support student outcomes and benefit UC research. UC's recent hires are more diverse than existing faculty and they meet or exceed national availability pools of recent Ph.D. graduates (5.3.1).

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

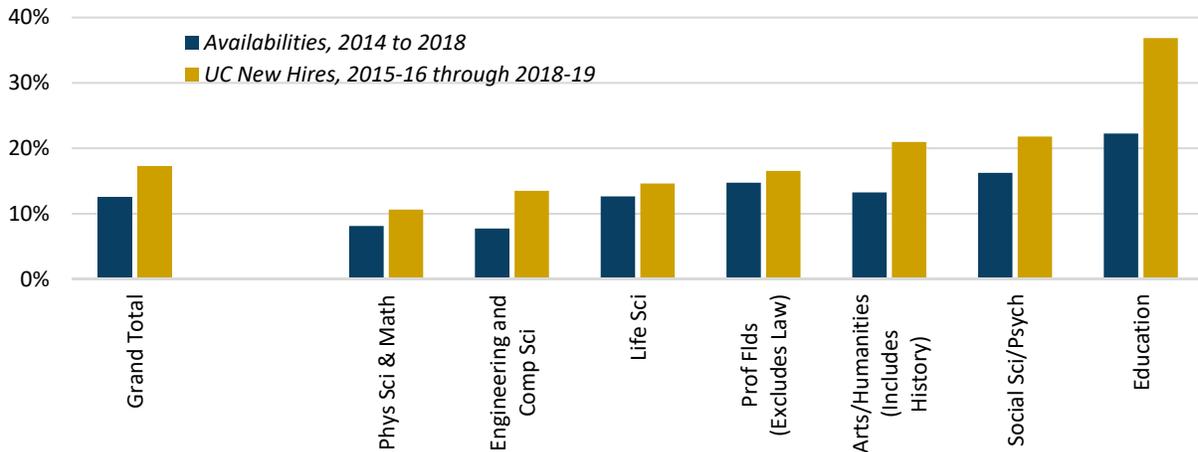


Underrepresented tenure-track faculty, 2009-10 to 2018-19, Universitywide



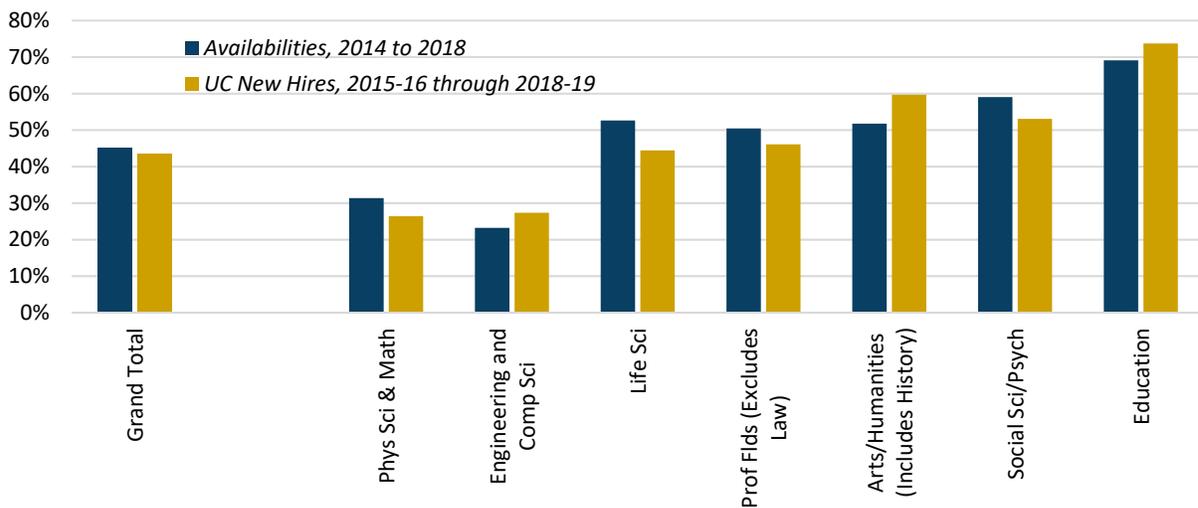
UC's hiring of underrepresented and female faculty overall exceeds or meets the national availability of doctorates, with variation among discipline groups.

5.3.1 Underrepresented* new assistant professors compared with national availability by discipline group Universitywide 2015–16 to 2018–19



* Underrepresented includes those who identify as Black/African American/African, Hispanic/Latinx, and American Indian/Native American.

5.3.2 Women new assistant professors compared with national availability by discipline group Universitywide 2015–16 to 2018–19



Source: UC Academic Personnel and Program Administration and Survey of Earned Doctorates

Dashboard Notes and Data Sources

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 2017 in the graph reflects students who entered in fall 2012 and graduated in the 2017–18 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**

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. It also calls for UC to admit all qualified transfer students from California Community Colleges (CCCs).

Of the nearly 218,000 applications for admission in fall 2019, about 177,000 students applied as freshmen and over 41,000 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. Over the last five years, UC’s enrollment of California residents increased by more than 16,000: 2,500 in fall 2019, 3,000 in fall 2018, 4,000 in fall 2017, and 7,000 in the prior two years combined.

For 2019–20, UC is also estimated to have achieved its goal of enrolling a 2:1 ratio of freshman to transfer California resident undergraduates, excluding Merced, for the third year in a row. The UC Transfer Pathways program supports this goal by helping community college students prepare for transfer admission to the most popular majors at UC campuses. Under a new agreement with the California Community Colleges, UC has created a Transfer Guarantee program, Pathways+, for community college students who meet certain criteria.

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.

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 reach its Master Plan goals by 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 2019, the third year of the Transfer Pathways, those indicating Pathway-based preparation represented 41 percent of all CCC admits and 35 percent of all CCC enrollees. Many of these students also participated in other preparatory programs such as Transfer Admissions Guaranteed (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 California Community Colleges (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 226,000 undergraduates in fall 2019. The University enrolls freshman and transfer students from almost every county of California. UC's Eligibility in the Local Context (ELC) policy is designed to increase the overall geographic diversity of freshman entrants.

Undergraduate Enrollment, Fall 2019

New Freshmen	45,948
New Transfers/Other ¹	21,048
Continuing Students	159,129
TOTAL	226,125

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 2019, 35 percent of new undergraduates received Pell Grants, a marker for low-income status. About 40 percent of UC's entering students are first-generation, meaning neither parent graduated from a four-year college. These students are more likely to be from an underrepresented group (URG, African American, Latinx 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 (1.2.1).

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 2018–19, the share of new undergraduates paying nonresident tuition went up slightly. In May 2017, UC adopted a policy² 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 \$30,000 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.

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

² Regents Policy 2109: Policy on Nonresident Student Enrollment: regents.universityofcalifornia.edu/governance/policies/2109.html.

Admissions and enrollment trends

Freshman applicants have nearly tripled over the past two decades, averaging five percent growth per year. In fall 2019, the number of applicants decreased three percent compared to the previous year, while the number of students admitted went up less than half a percent and the number of enrollees went down two percent (1.1.1).

Fall transfer applicants nearly doubled over the last 20 years, with average annual growth of four percent. In fall 2019, transfer applicants and admits both decreased by less than half a percent compared to the previous year, while enrollees went down four percent after the largest transfer class entered the University in 2018 (1.1.2).

The Master Plan specifies that the University maintain a 60:40 ratio of upper-division 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 2016–7, to an estimated 2.0:1 in 2019–20 (Universitywide). The Universitywide ratio excluding Merced is estimated to be 1.9:1 for 2019–20, achieving the systemwide goal for this metric for a third year. The University continues to work toward achieving this ratio for each campus (except Merced) (1.1.3). Overall undergraduate enrollment (new and continuing students) continued to grow in fall 2019. Total enrollment was over 226,000 in fall 2019, up two percent from the year before. This includes an increase in California residents of over 2,500, following increases of over 7,000 in fall 2016, over 4,000 in fall 2017, and over 3,000 in fall 2018 (1.1.4).

Academic preparation

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

Geographic origins and nonresidents

UC has a lower proportion of out-of-state undergraduates than other public AAU universities. In fall 2019, only 17.9 percent of UC's enrollees were out-of-state or international, compared with 29.5 percent for other AAU public institutions (1.4.1).

About 36 percent of freshmen and 47 percent of transfer students entering UC campuses come from within 50 miles of campus. These numbers are relatively stable and have risen only slightly over the past few years (1.4.2, 1.4.3).

The percentage of all undergraduates paying nonresident tuition has gone up in recent years. The proportion of *new* undergraduate students paying nonresident tuition went up slightly in 2018–19 (1.4.4).

Looking ahead

The University of California Board of Regents at its May 2020 meeting unanimously approved the suspension of the standardized test requirement for all California freshman applicants until fall 2024, providing time for the University to create a new test that better aligns with A–G curricular standards. However, if a new test does not meet specified criteria in time for fall 2025 admission, UC will eliminate the standardized testing requirement for California students. This year's Accountability Report will not include ACT and SAT measures and next year's report will include indicators that better align with goals of UC's new test.

It is unclear how fall 2020 enrollment may be affected by the COVID-19 pandemic, though early indicators continue to show strong demand for students to enroll at UC.

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

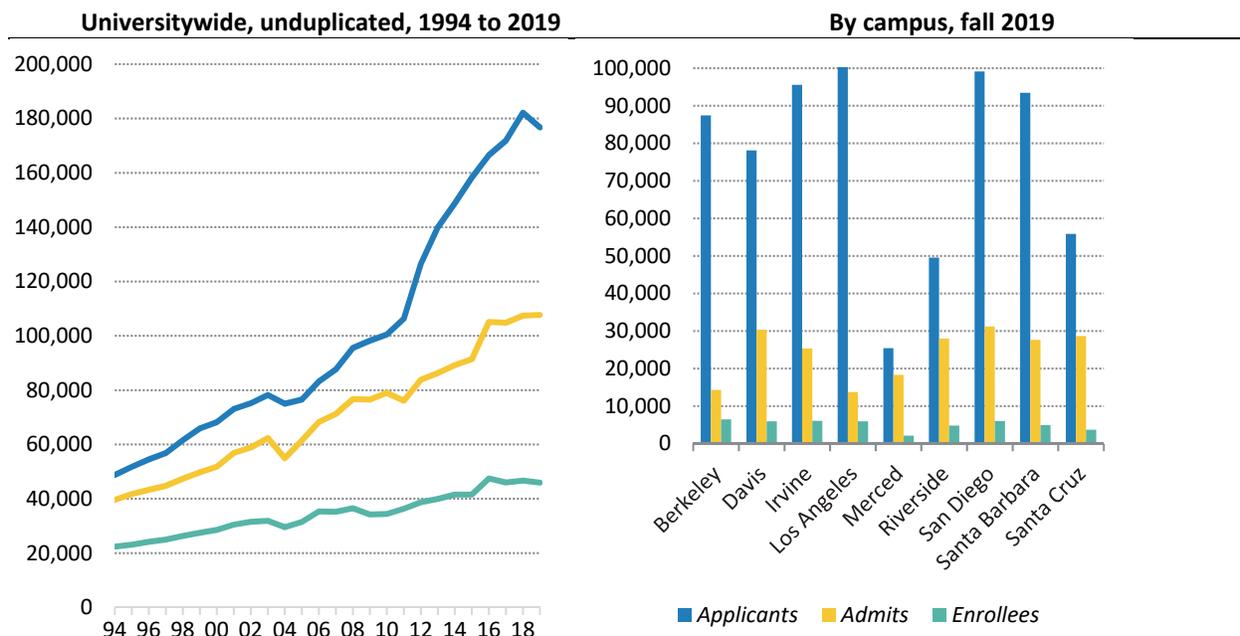
Data on UC fall enrollment:

universityofcalifornia.edu/infocenter/fall-enrollment-headcounts

1.1 APPLICANTS, ADMITS, AND ENROLLEES

Demand for UC admission from freshman applicants remains high.

1.1.1 Freshman applicants, admits, and enrollees Universitywide and UC campuses Fall 1994 to 2019



Source: UC Data Warehouse¹

Although unduplicated freshman applicants went down by three percent in 2019 compared to 2018, they remained above the levels for all years prior to 2018. From 2011 to 2018, applicants increased 71 percent (or about eight percent per year), from about 106,000 to about 182,000, compared to a 42 percent increase in the seven-year period between 2004 and 2011 (or about five percent per year), from about 75,000 to 106,000. The 71 percent growth represents about 76,000 applicants, including about 35,000 California residents.

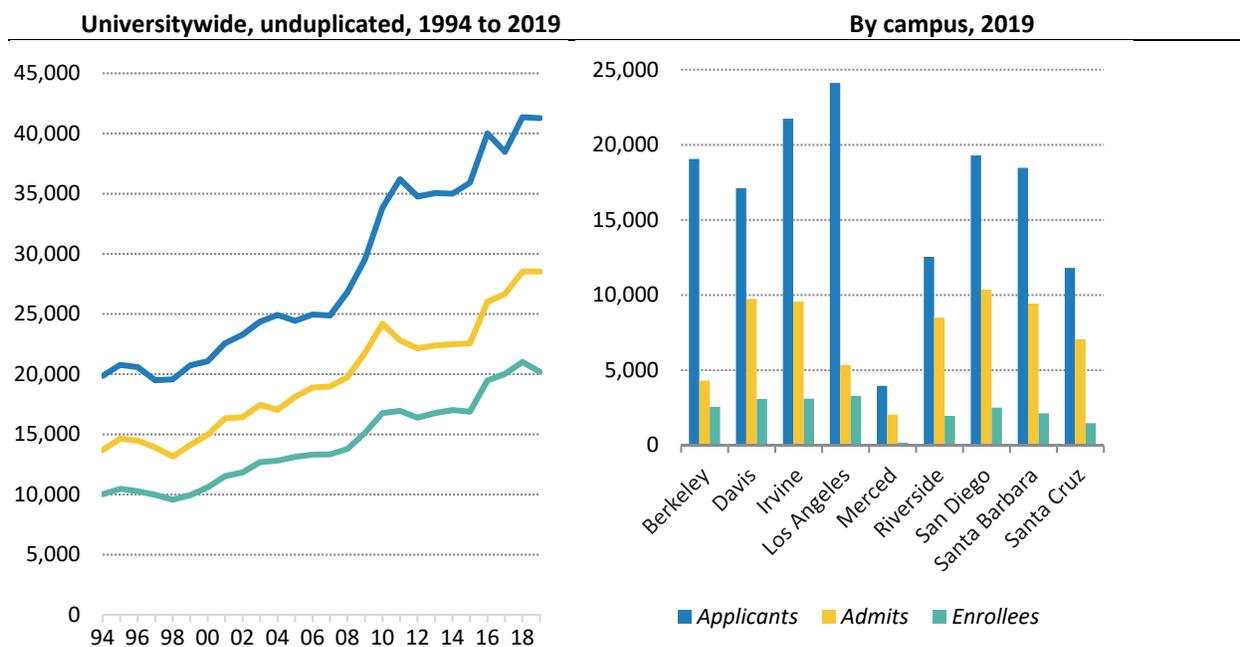
Most campuses admit less than half of applicants. Many applicants apply to more than one UC campus; in fall 2019, UC applicants applied to an average of 3.9 campuses. Freshman applications decreased at Berkeley, Los Angeles, and Santa Cruz and increased slightly for all other campuses in fall 2019. For 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.

1.1 APPLICANTS, ADMITS, AND ENROLLEES

Transfer demand remains strong after a record-breaking fall 2018.

1.1.2 Transfer applicants, admits, and enrollees Universitywide and UC campuses Fall 1994 to 2019



Source: UC Data Warehouse¹

Transfer applications and admits decreased slightly and transfer enrollees went down four percent in 2019 after the largest class of transfer students entered the University in fall 2018. Over 41,000 transfer students applied, about 29,000 were admitted, and over 20,000 enrolled in fall 2019. 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 17,200. The average transfer applicant applies to 3.6 UC campuses, compared to 3.9 for the average freshman applicant.

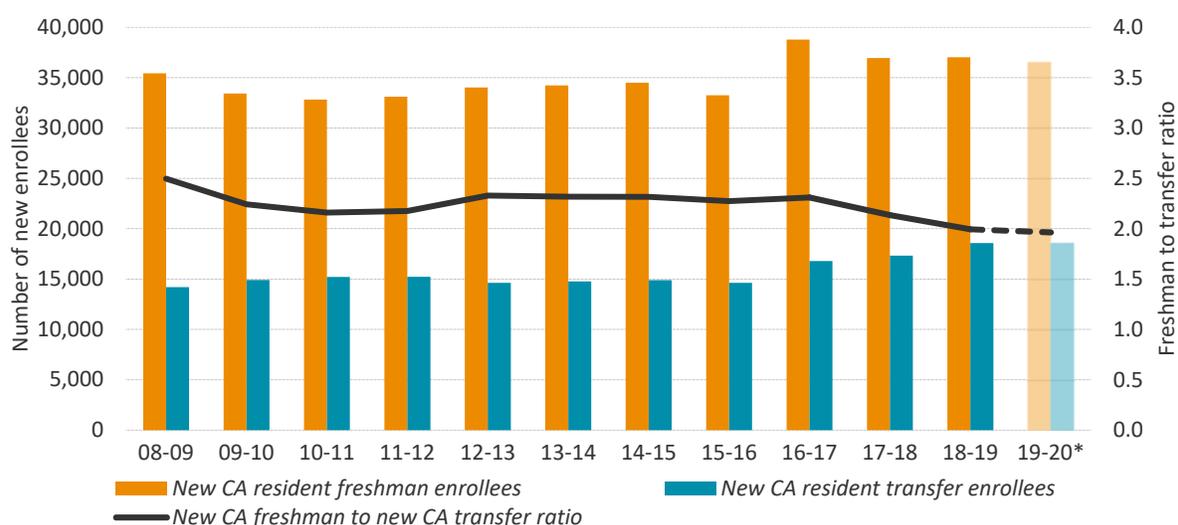
For data tables on UC transfer applicants, admits, and enrollees by campus see: universityofcalifornia.edu/infocenter/admissions-residency-and-ethnicity.

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.

1.1 APPLICANTS, ADMITS, AND ENROLLEES

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

1.1.3 New California resident freshman and transfer students Universitywide 2008–09 to 2019–20



* The actual figures for 2019-20 are not yet available and may differ from the estimated figures shown here.

Source: UC Data Warehouse and UC campuses¹

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 2.0 in 2019–20 (Universitywide). Excluding Merced, the ratio for 2019–20 is estimated to be 1.9:1, meeting the systemwide goal three years in a row.³ Santa Cruz met the goal in 2018–19, San Diego met it in 2019–20, and Riverside is on track to meet it in 2020–21.⁴

2019–20*	% New CA resident freshmen	% New CA resident transfers	Ratio of new CA freshmen to new CA transfers
Berkeley	66%	34%	2.0
Davis	64%	36%	1.8
Irvine	64%	36%	1.8
Los Angeles	62%	38%	1.6
Merced	90%	10%	9.4
Riverside	69%	31%	2.2
San Diego	64%	36%	1.8
Santa Barbara	66%	34%	2.0
Santa Cruz	67%	33%	2.0
Universitywide, all campuses	66%	34%	2.0
Universitywide, excl. Merced	65%	35%	1.9

¹ Full year headcount enrollment.

² Nearly all (95 percent) of California resident transfer students in 2018–19 came from CCCs.

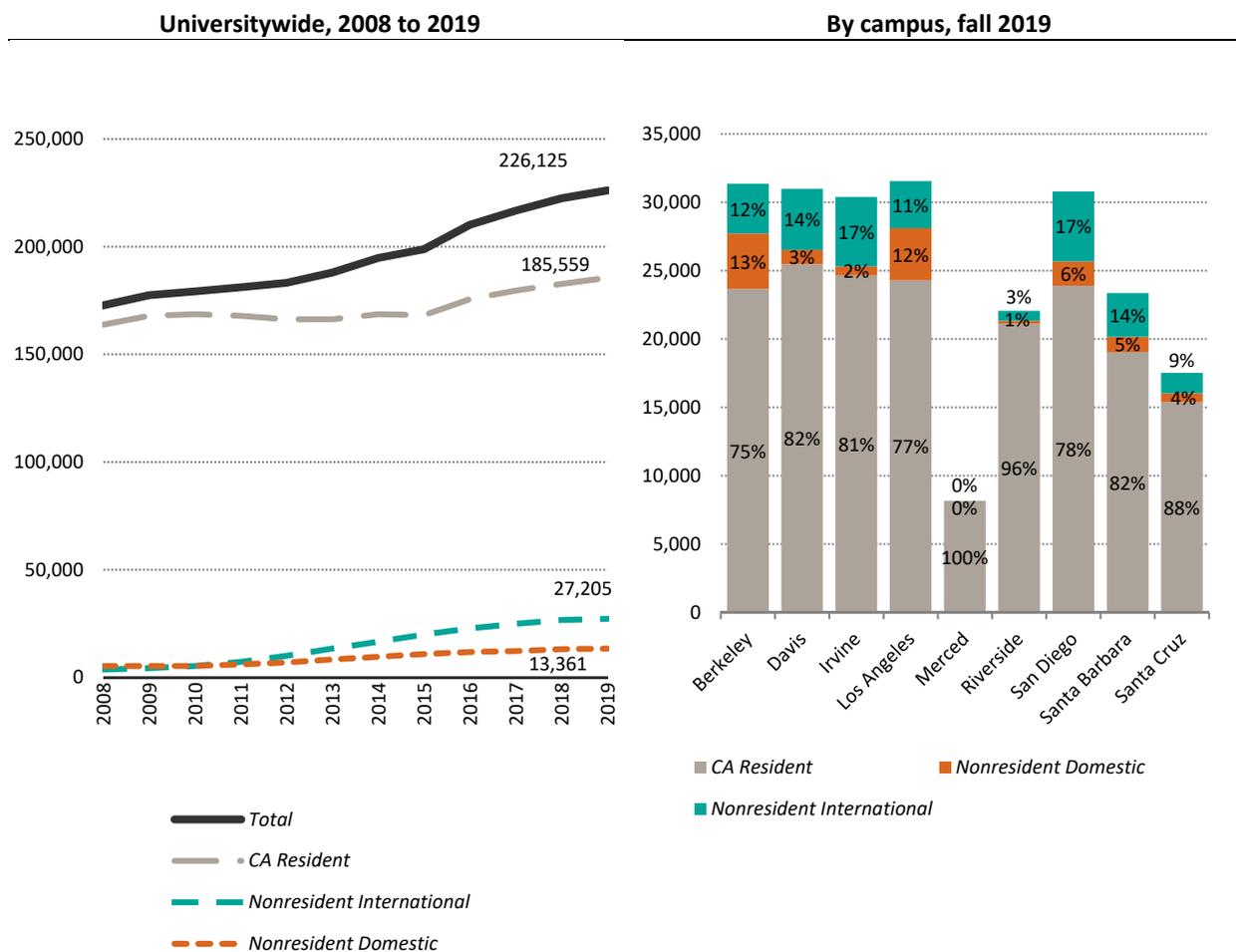
³ Merced is excluded from the 2:1 ratio goal that was part of the Budget Framework agreement with the State of California.

⁴ San Diego was above 2:1 in 2018–19 due to a one-time surge in freshmen.

1.1 APPLICANTS, ADMITS, AND ENROLLEES

UC's fall undergraduate headcount grew by two percent between fall 2018 and fall 2019, including over 2,000 additional California residents.

1.1.4 Undergraduate headcount enrollment Universitywide and UC campuses Fall 2008 to 2019



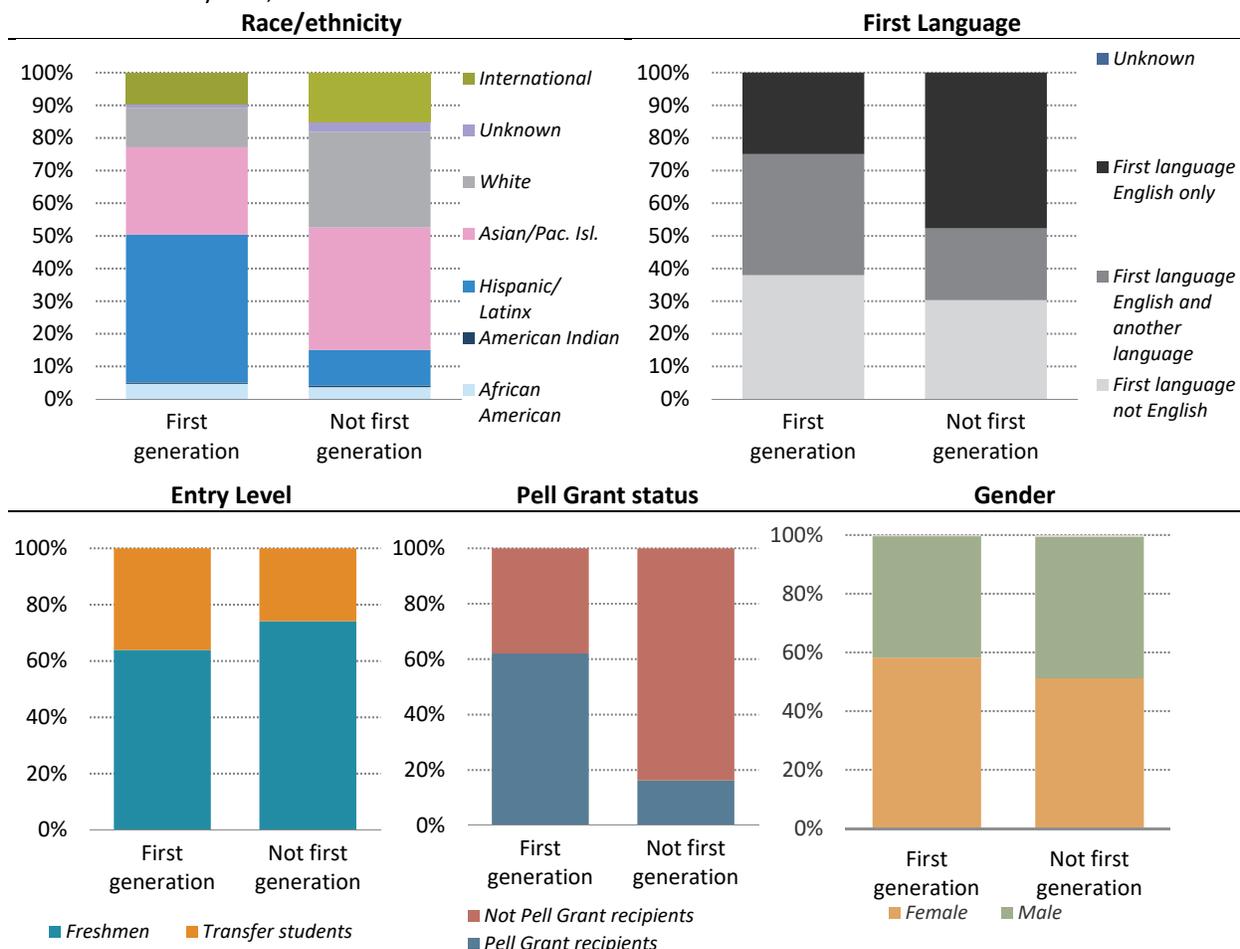
Source: UC Data Warehouse

The University and the state share the goal of expanding access to a UC education. The University enrolled over 2,000 additional California residents in fall 2019 compared to fall 2018, following increases of 3,000, 4,000 and 7,000 in the three prior years, for a total of over 16,000.

1.2 DEMOGRAPHIC OUTCOMES

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.

1.2.1 Entering students by first generation status, race/ethnicity, first language spoken at home, entry level, Pell Grant status, and gender Universitywide, Fall 2019



Source: UC Data Warehouse¹

Half (50 percent) of entering first-generation students in fall 2019 are from URGs, compared to 15 percent of not-first-generation students. Over one-third (38 percent) of first-generation students' first language was not English, versus 30 percent for others. Over one-third (36 percent) of first-generation students entered as transfers, versus 26

percent for others. Nearly two-thirds (62 percent) of first-generation students are lower-income Pell Grant recipients, versus 16 percent for others. And nearly three-fifths (58 percent) of first-generation students are female, compared to just over half (51 percent) of others.

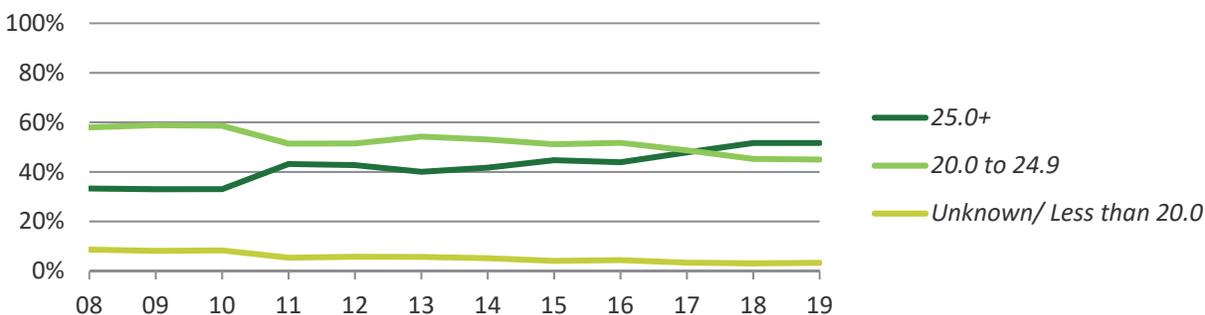
¹ First-generation students are those whose parent(s) did not complete a four-year college degree. Total of first-generation students is 26,946 (40.2 percent); not-first-generation students total 37,504 (56.0 percent); and missing/unknown are 2,546 (3.8 percent). Those with unknown first-generation status are excluded from this indicator. Pell Grant receipt is used as a proxy for low-income status. Less than .02 percent of entering students have an unknown first language.

1.3 PREPARATION OUTCOMES

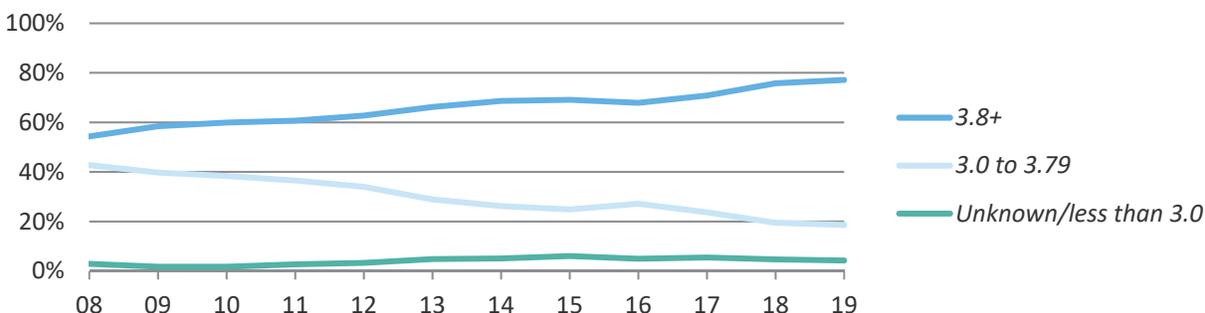
Freshmen entering UC are increasingly well prepared.

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 2019

Yearlong A–G courses



High school weighted, capped GPA



Source: UC Application Processing 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 2019, the first indicator went up from 33 percent to 52 percent, while the second went up from 54 percent to 77 percent.

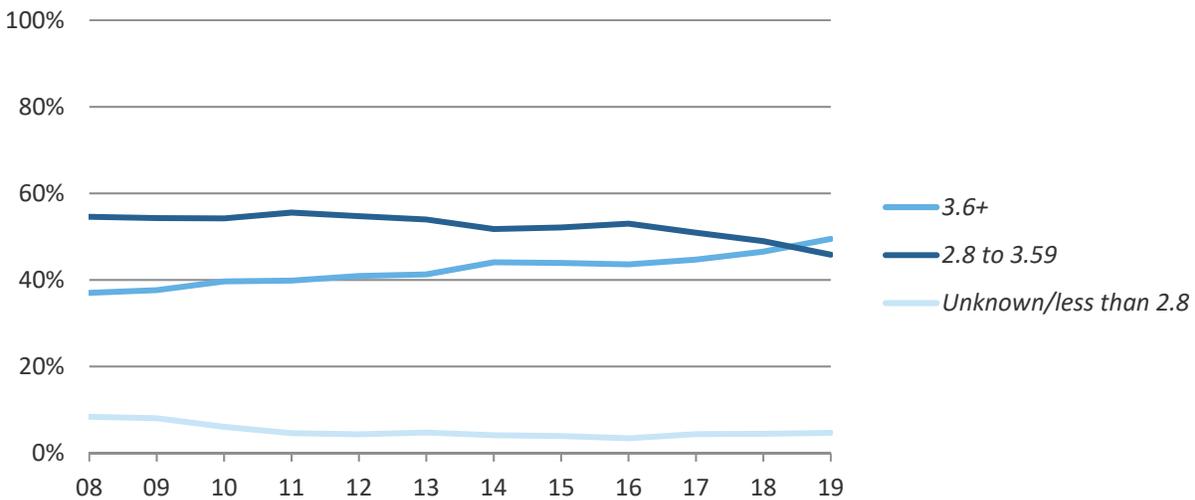
¹ A–G courses refer to those high school courses that UC has reviewed and approved as college preparatory. The minimum number of required A–G courses is 15.

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.

1.3 PREPARATION OUTCOMES

UC transfer students in fall 2019 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 2019 Universitywide



Source: UC Data Warehouse and UC Corporate Student System

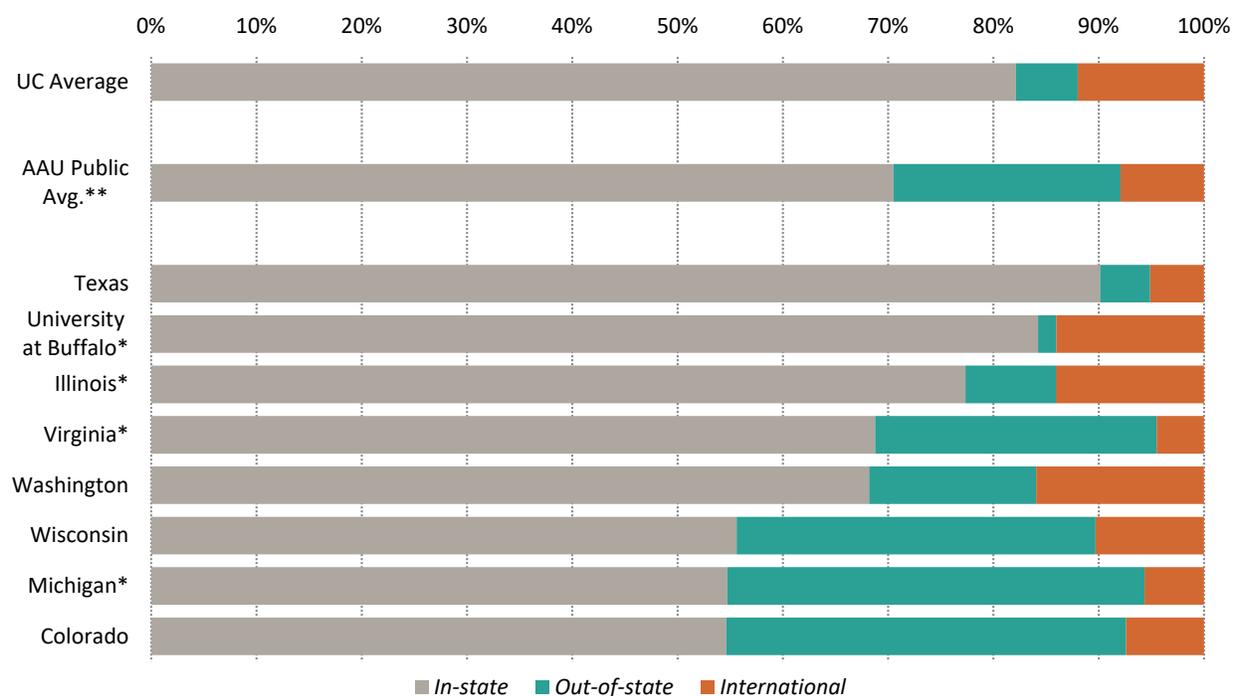
The academic qualifications of transfer students entering UC have improved over time, as reflected by an increase in the share of students having a 3.6 or higher college GPA, from 38 percent in fall 2008 to 49 percent in fall 2019.

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

1.4 GEOGRAPHIC ORIGINS AND NONRESIDENTS

UC has a substantially lower proportion of out-of-state undergraduates than other AAU universities. In fall 2019, only 17.9 percent of UC's enrollees were out-of-state or international, compared with 29.5 percent for other AAU Public institutions.

1.4.1 Residency of undergraduate students Universitywide and comparison institutions Fall 2019



Source: UC Data Warehouse (UC numbers) and Common Data Set (comparator numbers)

* UC's four comparison public institutions.

**AAU public institution average excludes UC; also excludes Univ. of Missouri 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.

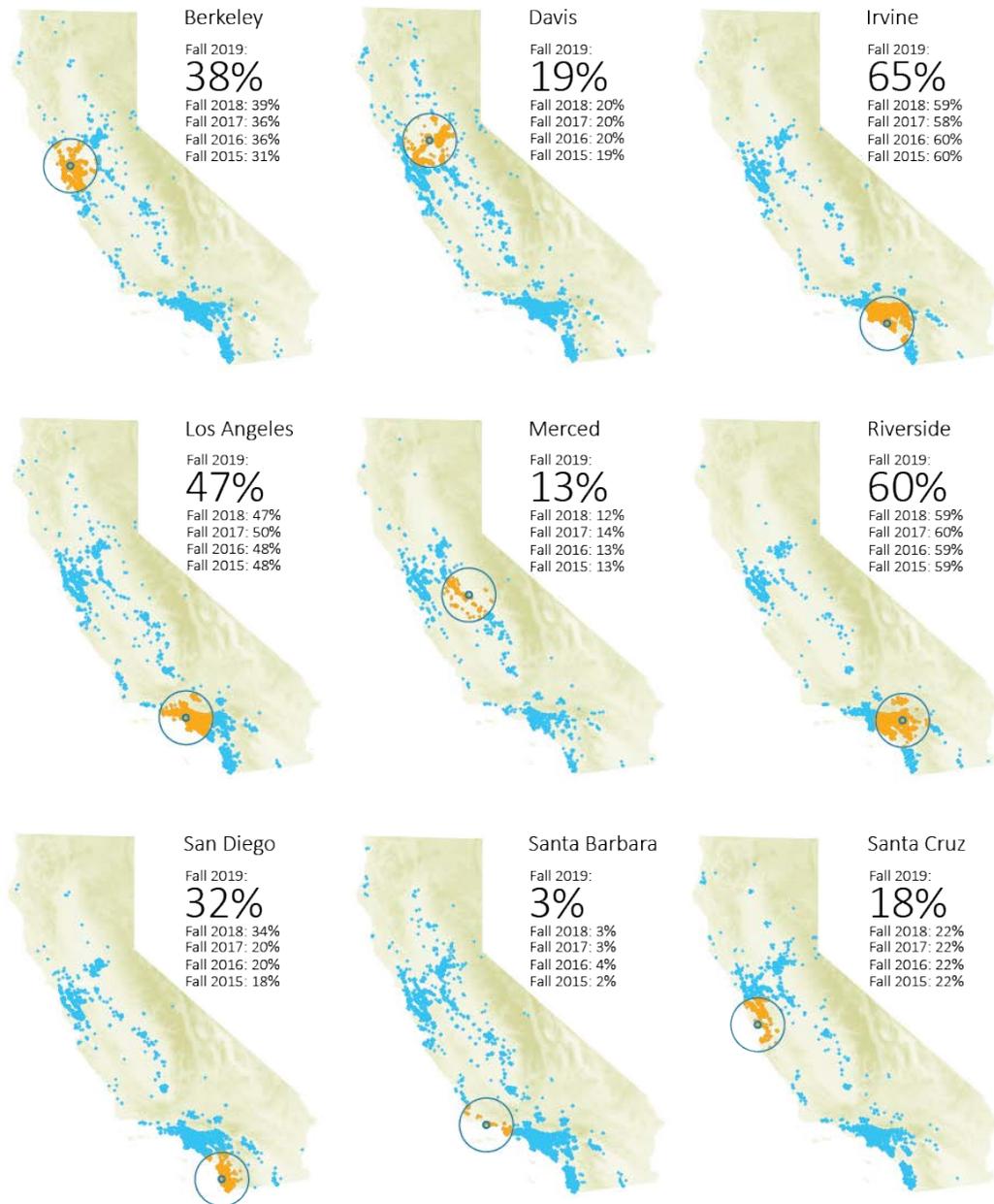
Nonresidents provide geographic and cultural diversity to the student body. They also pay the full cost of their education. In 2018–19, systemwide tuition and fees for a nonresident undergraduate were \$41,562, compared to \$12,570 for California resident students.

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.

1.4 GEOGRAPHIC ORIGINS AND NONRESIDENTS

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

1.4.2 Percentage of new CA resident freshman enrollees whose home is within a 50-mile radius of their campus¹ Fall 2019



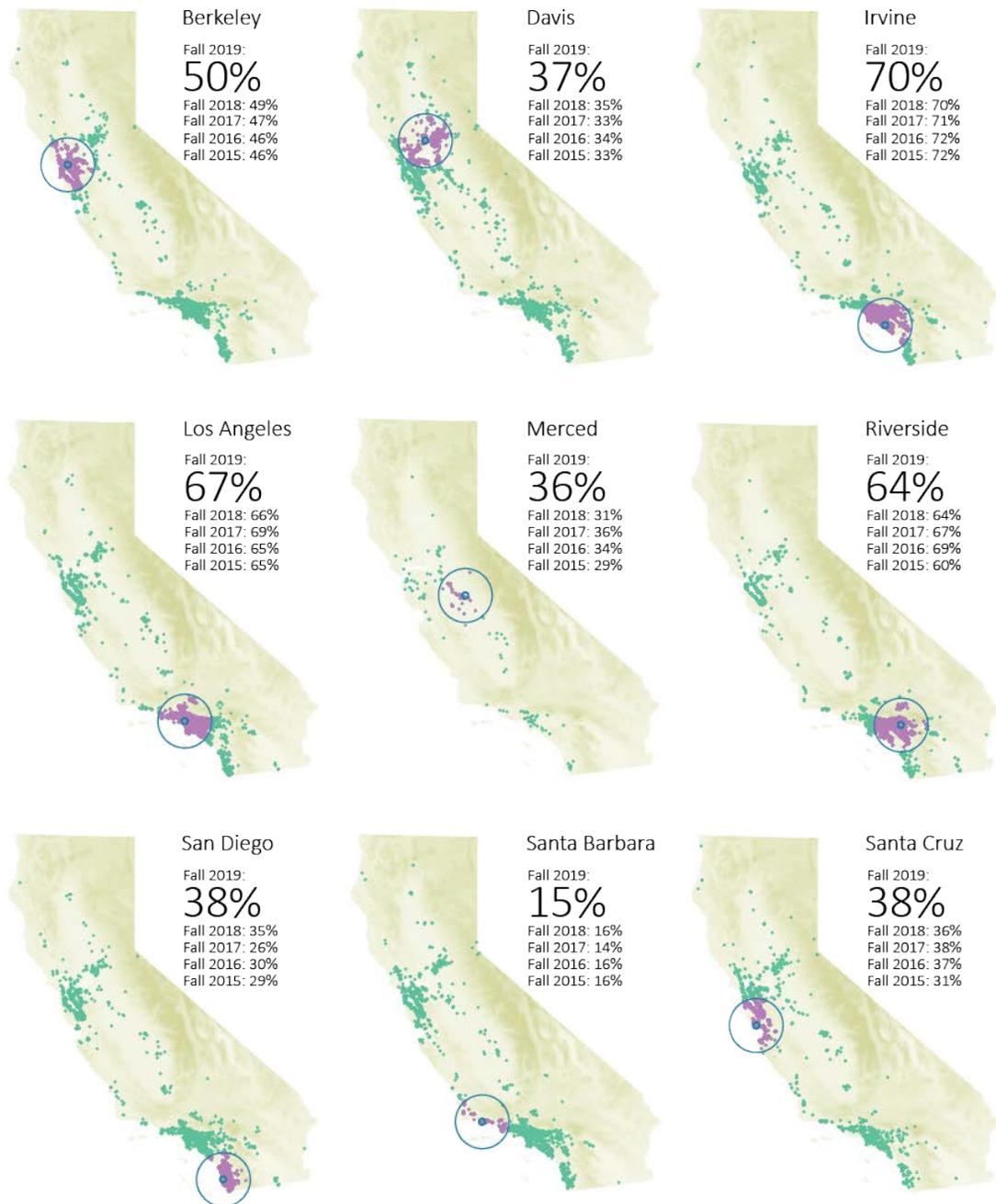
Source: UC Data Warehouse and UC Corporate Student System

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

1.4 GEOGRAPHIC ORIGINS AND NONRESIDENTS

Local enrollment rates for transfers are higher than for freshmen, with 49 percent enrolling at a UC campus within 50 miles of their homes.

1.4.3 Percentage of new CA resident transfer enrollees whose home is within a 50-mile radius of their campus UC campuses¹ Fall 2019



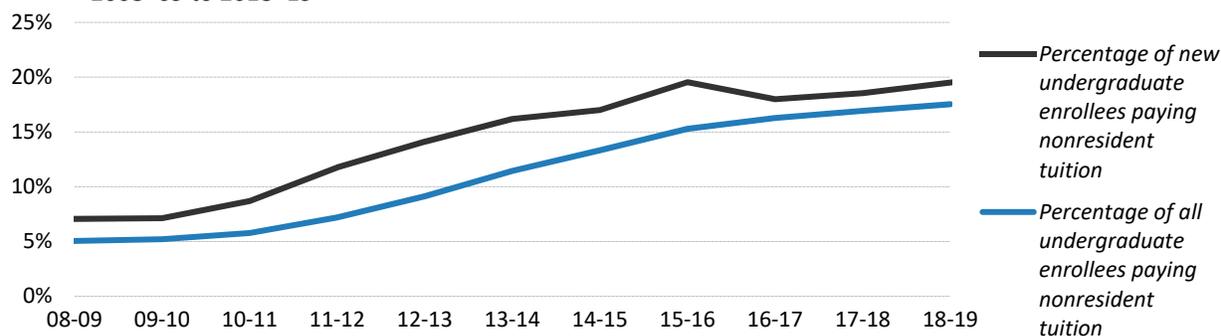
Source: UC Data Warehouse and UC Corporate Student System

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

1.4 GEOGRAPHIC ORIGINS AND NONRESIDENTS

The proportion of new undergraduate students paying nonresident tuition rose slightly in 2018–19.

1.4.4 Percentage of undergraduate enrollees paying nonresident tuition¹ Universitywide 2008–09 to 2018–19



Source: UC Data Warehouse

Systemwide, the share of all undergraduates paying nonresident tuition rose from five percent to 18 percent between 2009–10 and 2018–19. From 2009–10 to 2015–16, the proportion of new undergraduates paying nonresident tuition went up from seven percent to 20 percent before dropping to 18 percent in 2016–17 as enrollment of new California residents increased. In 2017–18 and 2018–19, the proportion of new undergraduates paying nonresident tuition went up slightly, to 19 percent then 20 percent.

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 is 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).

² 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.



CHAPTER TWO

UNDERGRADUATE STUDENTS AFFORDABILITY

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 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 at about \$35,000. 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 2018–19, the proportion of UC in-state undergraduates in the lowest income category increased from 14 percent to 21 percent, with offsetting declines among upper- and upper-middle-income families (2.2.2). These trends reflect both the manageability of UC’s net cost for low- and middle-income families, and the decline in the incomes of UC families since the 2009 economic recession.

In fall 2019, 36 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.

Financing a UC education

UC is able to provide access to students across the economic spectrum thanks to a progressive 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, 57 percent of California resident undergraduates paid no tuition in 2018–19. 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. Approximately 4,500 undocumented students received Cal Grants or need-based UC grants in 2018–19, totaling \$95.8 million. The California Dream Loan Program continues to provide student loans to undocumented Assembly Bill (AB) 540 students at CSU and UC.

The Legislature provided \$2.5M in UC's 2016-17, 2017-18, and 2018-19 budgets for the 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 (2018), ten percent of students reported working more than 20 hours per week, the same share as two years earlier.

For the academic year 2018–19, about 38 percent of California undergraduates relied on federal student loans to help finance their education, with loan amounts averaging \$5,900. Parental borrowing under the federal PLUS program remained at about six percent, with the average PLUS loan amount at about \$17,300 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 \$171,000 who receive limited or no need-based financial aid. In 2018–19, UC students received \$28 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 2018 UCUES survey results show 47 percent experience low to very low food security (27 percent report very low food security) and four percent report being homeless. The UC Office of the President 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.

Limiting cumulative debt

The proportion of undergraduates leaving with debt is lower than a decade ago. About 46 percent of the class of 2018–19 graduated with debt, with an average amount of \$20,000. This translates into a monthly repayment amount of about \$213 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 \$3,300 a month within two years after graduation (2.3.3). Comparison data show the 2017–18 cumulative debt for UC undergraduates was \$21,103, compared to \$27,777 for public four-year institutions and \$33,148 for private nonprofit four-year institutions (2.3.4).

Looking forward

Both the Governor and State Legislature have proposed ideas for reforming and expanding the Cal Grant Program. In 2019–20, Governor Newsom's proposal for Cal Grant awards to parenting students was implemented. The State Legislature requested the California Student Aid Commission (CSAC) propose changes to the Cal Grant Programs. Although the economy puts broad reform on hold, the CSAC recommendations would have benefited UC students by eliminating requirements that disenfranchise nontraditional students.

Under the UC 2030 multi-year plan, UC's goal is to increase timely graduation, which would reduce student debt and the cost of education.

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/student-affairs/data-and-reporting

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

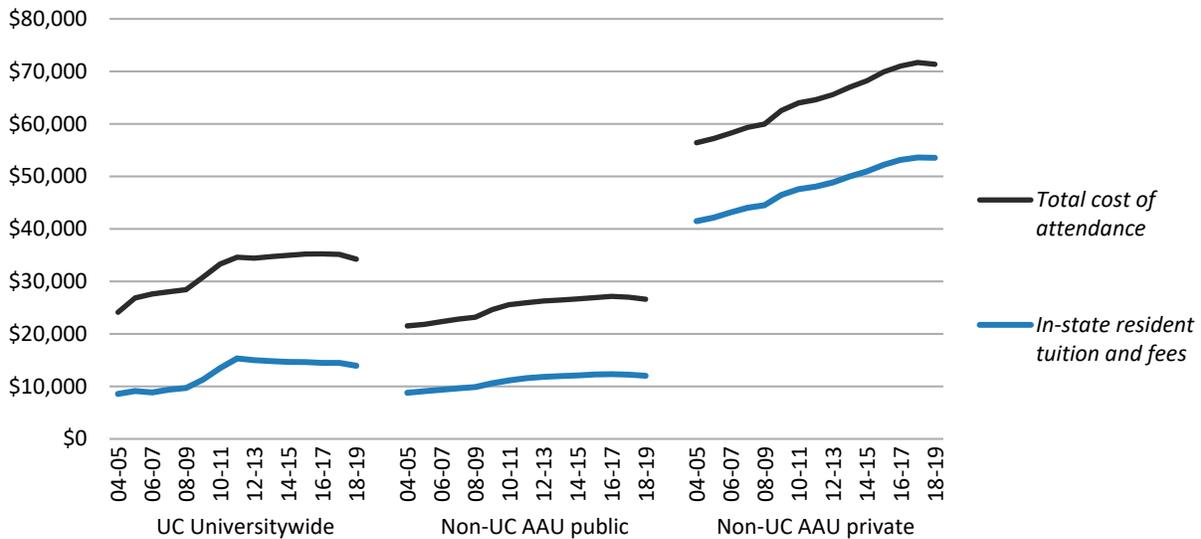
Data tables with downloadable figures on total and net cost of attendance by campus and residency:
universityofcalifornia.edu/infocenter/net-cost

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

2.1 COST OF ATTENDANCE

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, 2018 inflation-adjusted dollars 2004–05 to 2018–19



Source: IPEDS¹

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.

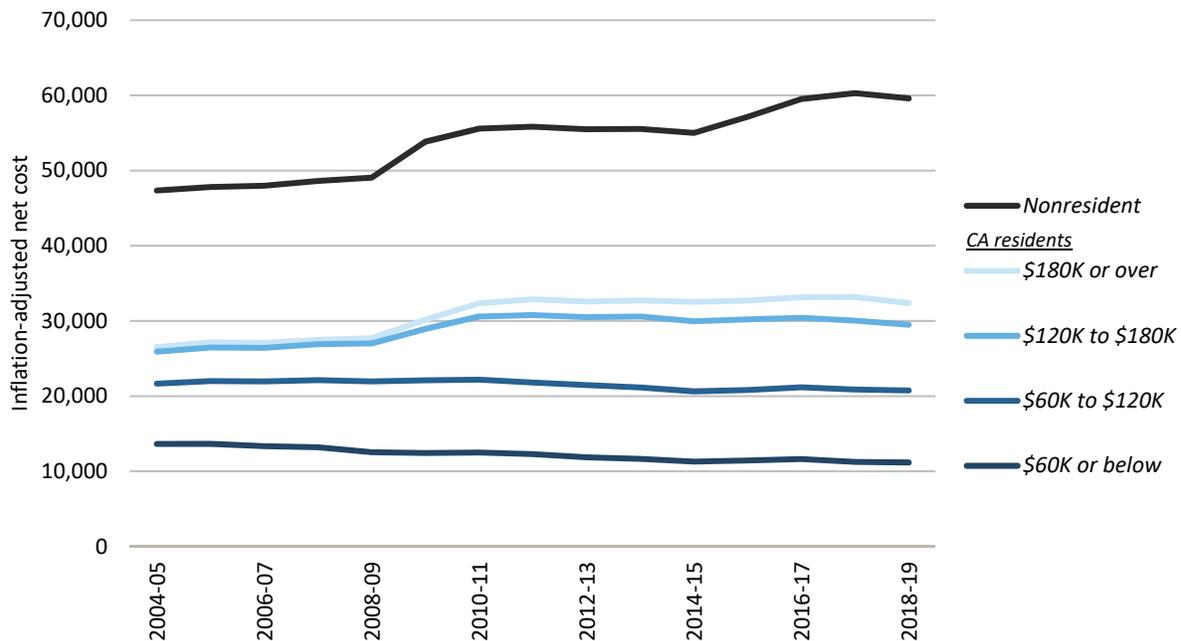
UC tuition and fees and the total cost of attendance have remained relatively flat over the past several years.

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.

2.1 COST OF ATTENDANCE

Regardless of income, the net cost of attendance after financial aid for CA 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, 2018 inflation-adjusted dollars 2004–05 to 2018–19



Source: UC Corporate Student System¹

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 2004–05 and 2018–19, net cost has declined by about \$2,400 in inflation-adjusted dollars for in-state students in the lowest income category due to this scholarship and grant support.

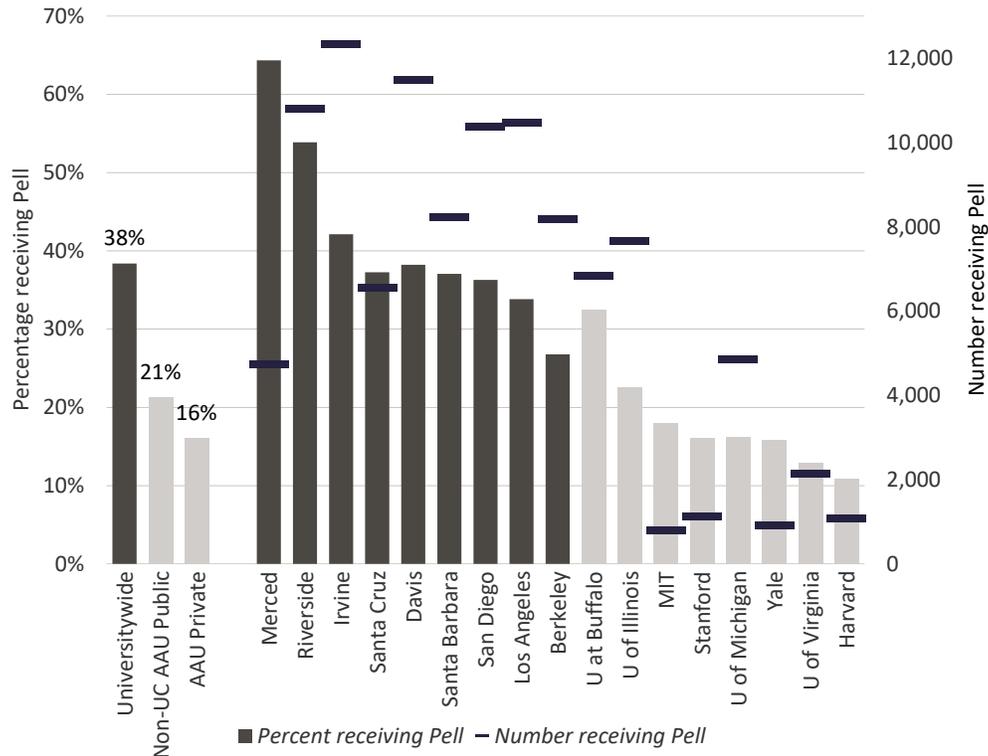
Nonresident students face a much higher net cost of attendance because they face annual supplemental tuition charges of approximately \$29,000, and since 2016–17, have not been eligible to receive institutional need-based grant aid.

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.

2.2 INCOME PROFILE

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 2017–18



Source: IPEDS¹

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.

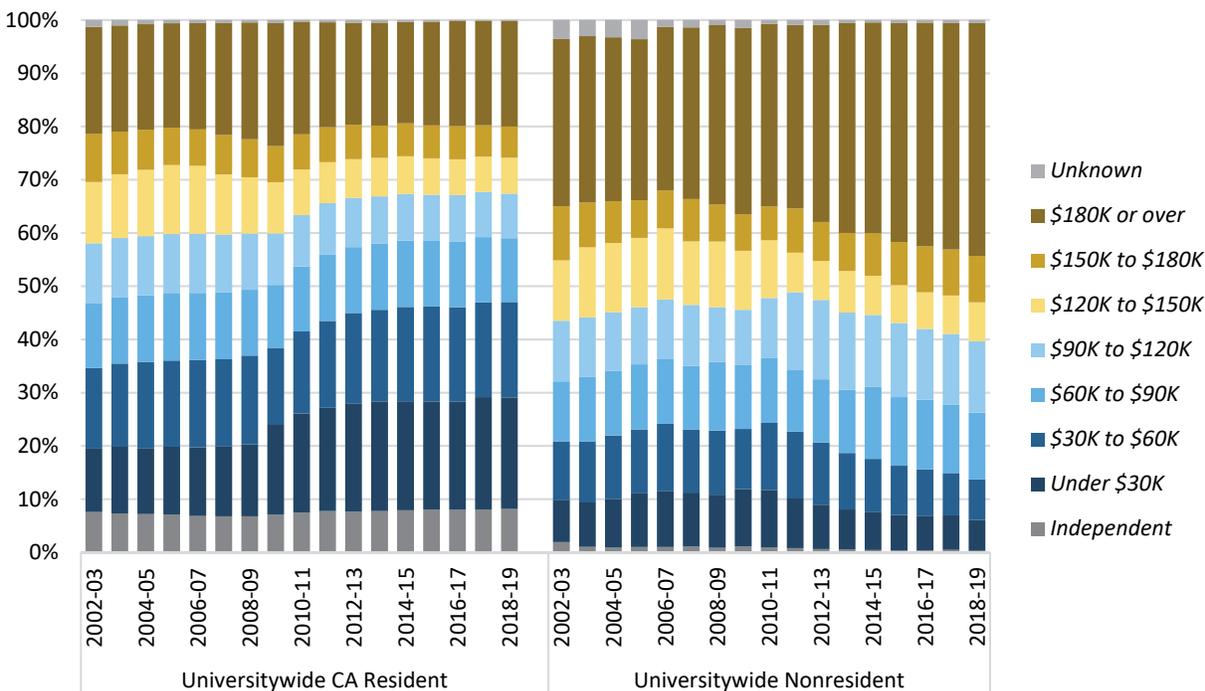
The data shown above represent the most recent year for which data on comparison institutions are available. The proportion of UC undergraduates receiving Pell Grants went up from 31 percent in 2008–09 to 38 percent in 2017–18. This is primarily a result of increased federal spending, which made more students eligible for Pell Grants, as well as the economic downturn, which caused broad declines in family income. In fall 2019, 36 percent of UC undergraduates and 43 percent of CA Residents received Pell Grants. Nationally, the percentage of Pell Grant recipients has declined since 2010–11, partially due to a recovering economy.

¹ Percentage reported is that of students who received Pell Grants at any time during the 2017–18 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.

2.2 INCOME PROFILE

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

2.2.2 Undergraduate income distribution Universitywide 2018 inflation-adjusted dollars



Source: UC Corporate Student System¹

In-state students are more likely to be from low-income families, with 21 percent in the lowest income category in 2018–19. Since 2008–09, the proportion of low-income CA resident students increased noticeably, with an offsetting decline among upper- 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- and middle-income families.

Conversely, more than 43 percent of nonresident students came from families in the highest income category in 2018–19. This proportion has increased steadily over the years while those in the lower- and middle-income categories have decreased.

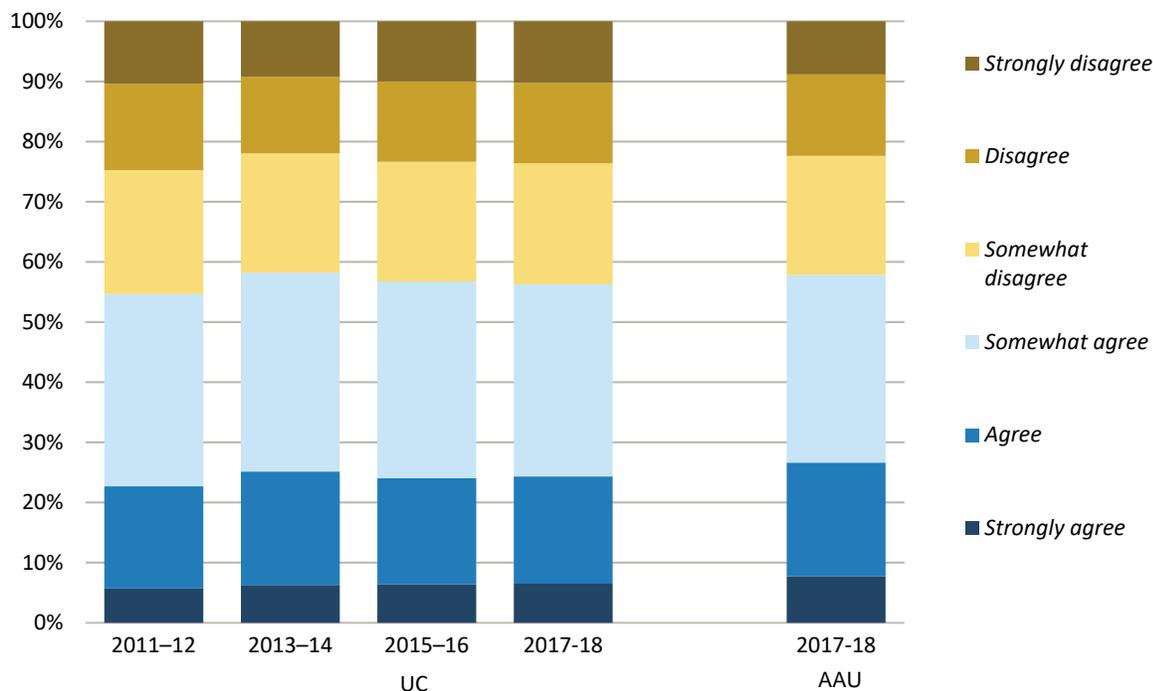
Nonresidents are not eligible for UC financial aid.

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.

2.3 COST OF ATTENDANCE AND STUDENT DEBT

The share of UC students who felt that the cost of attendance was manageable 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 2017–18



Source: UCUES and SERU¹

Fifty-six percent of UC undergraduates in spring 2018 felt that the cost of attendance was manageable. This figure was 57 percent in spring 2016, 58 percent in spring 2014, and 55 percent in the spring 2012 UCUES survey. Fifty-eight percent of survey respondents at other participating American Association of University (AAU) institutions in 2017–18 agreed that the cost of their education was manageable.

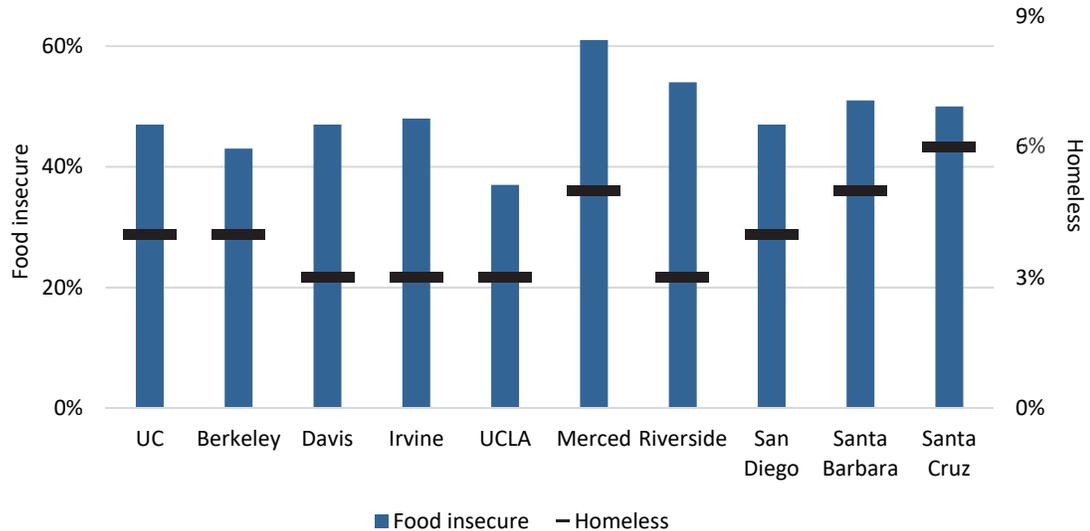
The list of non-UC AAU participants in this comparison was not the same for all four years shown. The non-UC schools included University of Minnesota, Rutgers University, University of Pittsburgh, USC, Texas A&M University, University of Virginia, University of Michigan, Indiana University, Purdue University, 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.

¹ SERU is the Student Experience in the Research University survey, which is administered at a number of AAU institutions.

2.3 COST OF ATTENDANCE AND STUDENT DEBT

Universitywide, 44 percent of 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 2018–19



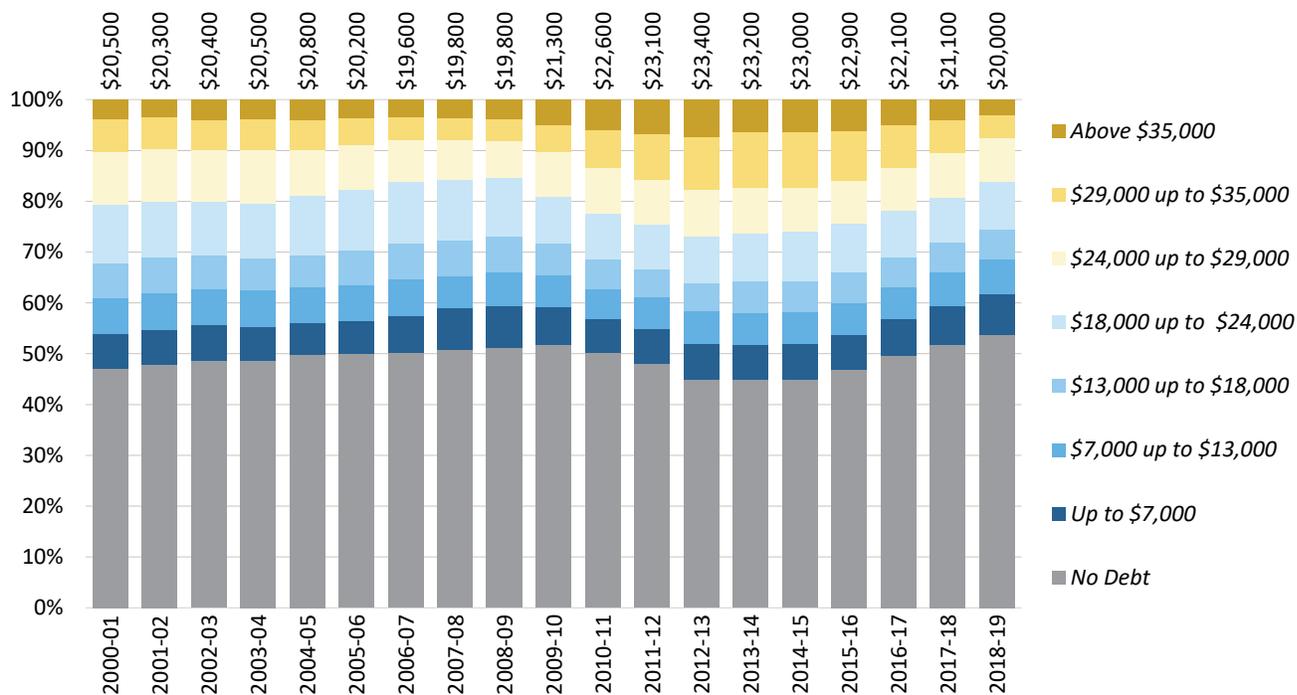
Source: UCUES 2018

Universities across the country are grappling with issues around basic needs. UCOP had partnered with the Regents' Special Committee on Basic Needs and its work with the campus Basic Needs committees to institutionalize data collection. UCOP now includes items concerning students' basic needs in UCUES — using the USDA standard for food insecurity measures. UCOP is also working to improve the starting point indicator on homelessness to be able to track a broader measure of housing insecurity.

2.3 COST OF ATTENDANCE AND STUDENT DEBT

The average inflation-adjusted debt at graduation of student borrowers has remained essentially flat at \$20,000 over the past 17 years, while the percent graduating with no debt increased.

2.3.3 Student loan debt burden of graduating seniors, inflation-adjusted Universitywide 2000–01 to 2018–19 (average debt of those with debt shown above each year)



Source: UC Corporate Student System

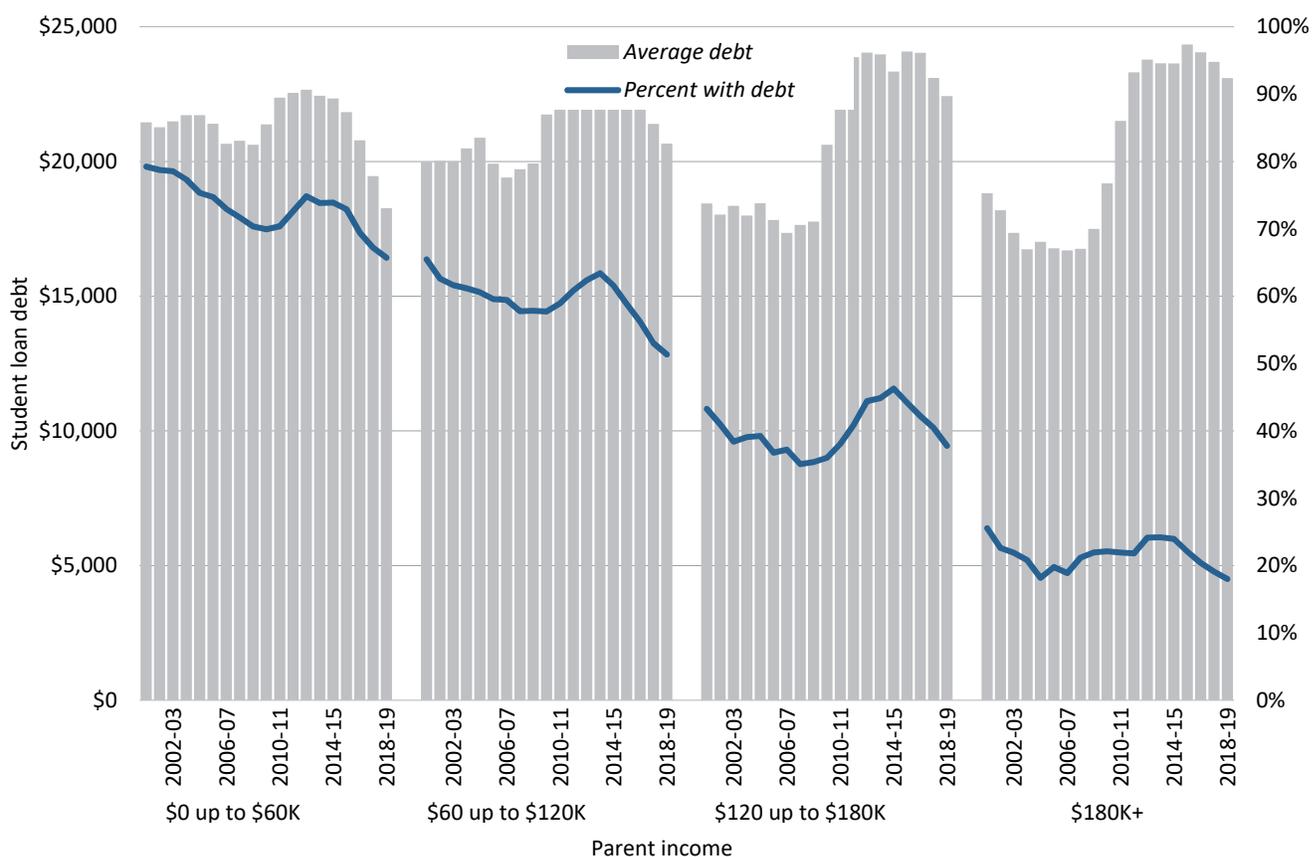
Fifty-two percent of UC undergraduates graduate with no debt at all. For those who do borrow, the average student loan debt at graduation in 2018–19 was about \$20,000. The monthly repayment for this amount is about \$213 for ten years at the five percent average interest rate that typically applies 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 2018–19, about 54 percent of UC graduates who originally entered as California resident freshmen had student loan debt upon graduation, compared to only 15 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 (\$19,400 vs. \$29,900).

2.3 COST OF ATTENDANCE AND STUDENT DEBT

Despite recent increases, the proportion of students graduating with loan debt across all incomes was still lower in 2018–19 than it was 17 years ago.

2.3.4 Student loan debt burden of graduating seniors by parent income Universitywide, 2018 inflation-adjusted dollars 2000–2001 to 2018–19



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.

2.3.5 Average cumulative loan debt UC and national comparison institutions 2017–18 graduates

Berkeley	\$18,225
Davis	\$18,575
Irvine	\$19,039
Merced	\$19,551
Santa Barbara	\$20,004
San Diego	\$21,061
UC AVERAGE	\$21,103
Riverside	\$21,126
Santa Cruz	\$22,092
Los Angeles	\$22,390
Public four-year	\$27,777
Private nonprofit four-year	\$33,148
National Average	\$29,200

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

2.3 COST OF ATTENDANCE AND STUDENT DEBT

By five years after graduation, students from almost all of the UC's baccalaureate programs have debt-to-earnings ratios of less than ten percent.

2.3.6 Debt-to-earnings ratios for UC undergraduate alumni at two and five years after graduation Universitywide and by Campus
Undergraduate graduating cohorts 2000–2016, with student loan debt who are working in California

Campus	Debt-to-earnings 2 years after graduation				Debt-to-earnings 5 years after graduation			
	% of programs with <10% debt-to-income ratios	10th	Median	90th	% of programs <10% debt-to-income ratios	10th	Median	90th
Berkeley	95.3%	3.2%	5.6%	8.1%	100.0%	2.4%	4.0%	5.7%
Davis	96.9%	3.5%	5.8%	8.4%	100.0%	2.4%	3.8%	5.5%
Irvine	86.0%	4.1%	7.3%	10.7%	97.6%	3.0%	4.8%	6.6%
Los Angeles	92.9%	3.9%	6.7%	9.1%	99.1%	2.9%	4.4%	6.1%
Merced	75.0%	5.4%	7.8%	12.2%	100.0%	3.5%	5.0%	6.1%
Riverside	65.5%	5.5%	9.1%	12.1%	98.8%	3.9%	5.6%	7.4%
San Diego	92.7%	4.6%	7.0%	9.2%	100.0%	3.3%	4.7%	6.6%
Santa Barbara	89.2%	4.5%	7.2%	9.9%	98.5%	3.6%	4.8%	6.8%
Santa Cruz	85.5%	3.2%	5.6%	8.1%	100.0%	2.4%	4.0%	5.7%
UC	88.9%	4.3%	7.2%	10.2%	99.3%	2.9%	4.7%	6.6%

Source: UC Corporate Student System

Students who graduate from UC's baccalaureate 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 89 percent of UC baccalaureate programs systemwide have a debt-to-earnings ratio of ten percent or less at two years after graduation and nearly all of them do at five years after graduation.

Some arts, humanities, and social science programs have debt ratios that exceed ten percent two 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 in. (See 3.3.3 for earnings by major and industry in Chapter 3.)



UNDERGRADUATE STUDENT SUCCESS

Trends in graduation rates and goals

Two traditional measures of student success are graduation rates and time to degree. By both measures, UC's undergraduates are highly successful. The four-year graduation rates for freshmen have risen significantly over the past 16 years — from 46 percent for the 1997 entering cohort to 70 percent for the 2015 cohort. The most recent six-year graduation rate, for the 2013 entering cohort, is 85 percent (3.1.1), which has increased by six percentage points since 1996. The six-year graduation rate is 88 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 4.17 years 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 59 percent for the 2017 cohort (3.1.3). The most recent four-year graduation rate for transfers (2015 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 2012 cohort, an improvement from 2.6 years for the 1996 cohort (3.1.8).

Although graduation rates have increased for all students, there are still gaps in rates between subgroups (3.1.4, 3.1.5, 3.1.6, and 3.1.7). New-generation students — that is low-income students, first-generation students, and students from underrepresented groups (URGs) — have lower average graduation rates, especially four-year graduation rates for freshmen and two-year graduation rates for transfers. Assuming the net cost of attendance ranges from about \$11,000 for very-low-income California resident students to about \$30,000 for California residents in the highest income bracket, and assuming that the median early-career salary is around \$40,000, students graduating in four years as opposed to six could benefit from about \$100,000 to \$150,000 in lower costs and additional wages.

UC's goal is to enable all entrants to complete their undergraduate degrees in a timely fashion and to ensure that their education prepares them to be the next generation of leaders for California, the nation, and the world. In its UC 2030 goals, the University of California seeks to increase the four-year graduation rate from 68 percent (2014 cohort) to 76 percent by 2030, and two-year graduation rates from 57 percent (2016 cohort) to 70 percent by 2030.

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 student's high school or transfer courses, standardized test scores, 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, 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. These include expanding orientation, advising, and counseling services; increasing on-campus 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.

Students who take longer to graduate leave with more debt, have lower lifetime earnings, and are less likely to go onto 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 57,000 degrees in 2018–19 (3.3.1). Increases in the size of the entering freshman class and improving graduation rates contributed to this growth. UC has proposed a multiyear framework that seeks 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 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. 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. Recent declines in first-year retention rates signal that future UC graduation rates could also decline and the gaps for new generation students could grow. Furthermore, it is unclear how the COVID-19 pandemic and shift to remote instruction could affect student success and retention.

[For more information](#)

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

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

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

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

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

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

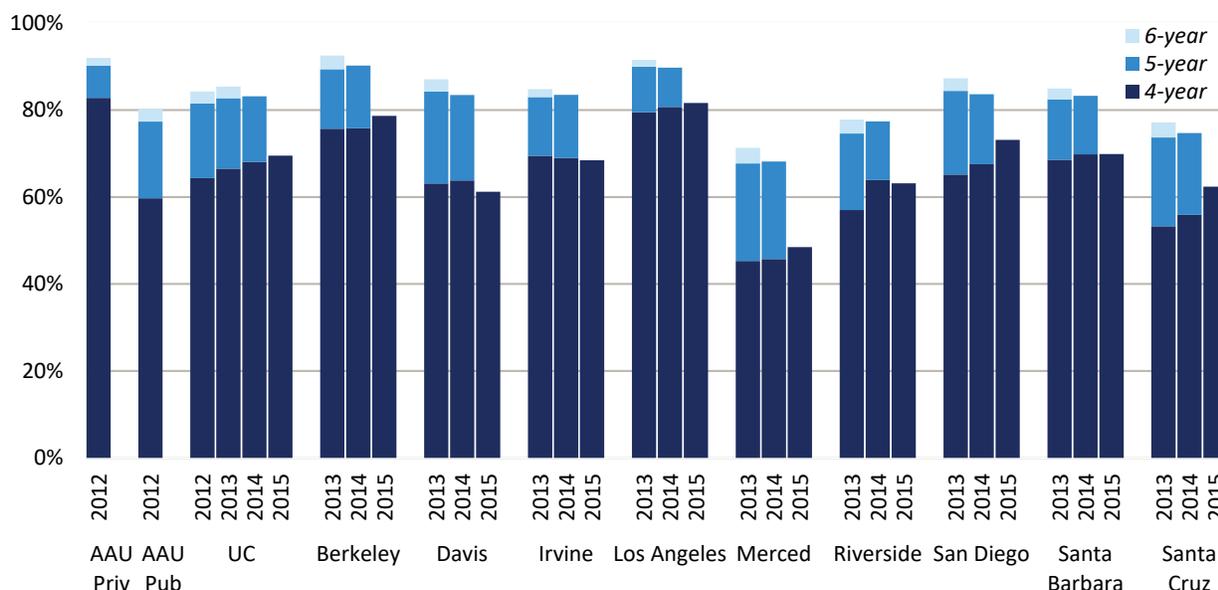
UC's role in enabling low-income students to achieve intergenerational economic mobility
universityofcalifornia.edu/infocenter/climb-mobility-analysis

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

3.1 GRADUATION RATES

Over 80 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 2013, 2014, and 2015; fall 2012 cohort for AAU comparison



Source: UC Data Warehouse and IPEDS¹

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 70 percent for the 2015 cohort. In recent years, UC Riverside and UC Santa Cruz improved their four-year graduation rates by about seven and three 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 timely fashion.

UC's latest freshman six-year graduation rate is 85 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.

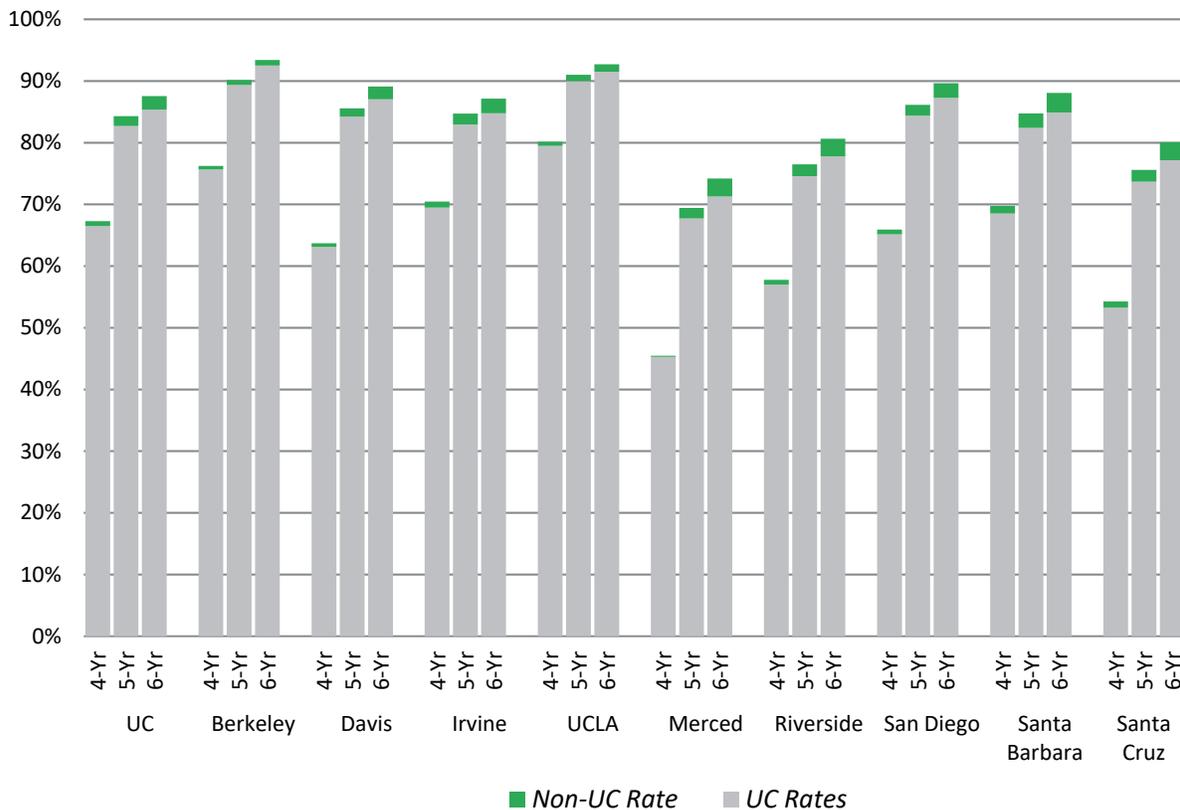
More information on trends in UC freshman graduation rates can be found at: universityofcalifornia.edu/infocenter/ug-outcomes.

¹ Comparison IPEDS data are available for more limited years. The AAU comparison institutions are in the data glossary. AAU comparison is for the 2012 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.

3.1 GRADUATION RATES

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 2013



Source: UC Data Warehouse and the National Student Clearinghouse¹

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.

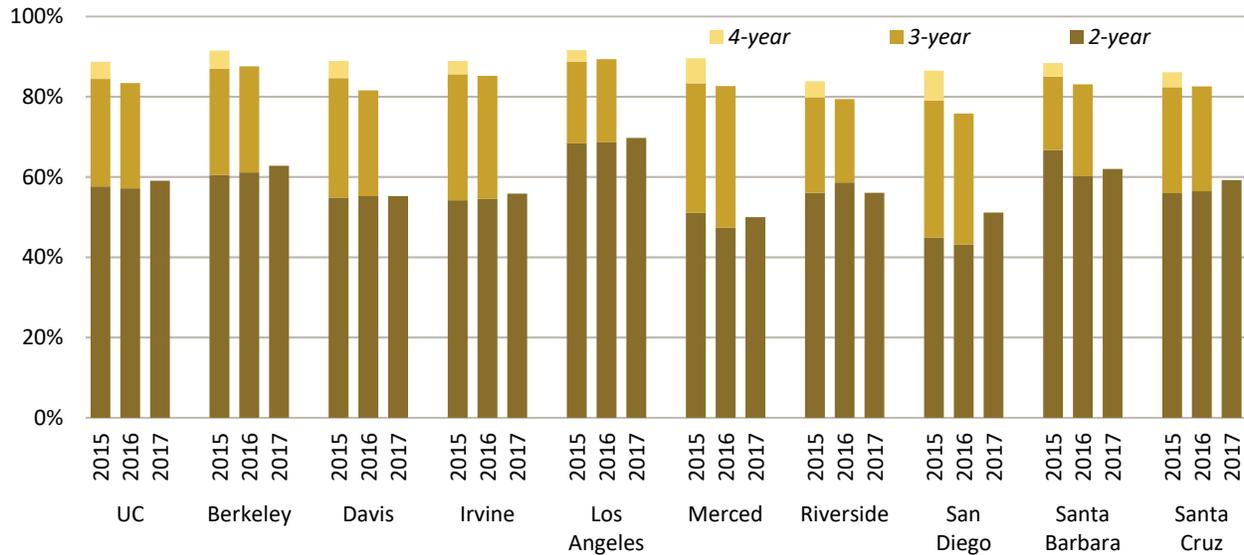
By this measure, UC's overall six-year graduation rate is about 88 percent. The effect of the extended graduation rate varies by UC campus, with Berkeley having fewer students who earn a degree outside of the UC system, while the six-year rates at Merced, Riverside, Santa Barbara, and Santa Cruz improve 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.

3.1 GRADUATION RATES

Nearly 60 percent of transfer students graduate within two years.

3.1.3 Transfer graduation rates Universitywide and UC campuses Cohorts entering fall 2015, 2016, and 2017



Source: UC Data Warehouse¹

The two-year graduation rate for transfers is currently at 59 percent, the highest since 1995. The four-year rate is 89 percent. More information on trends in UC transfer graduation rates can be found at: universityofcalifornia.edu/infocenter/ug-outcomes.

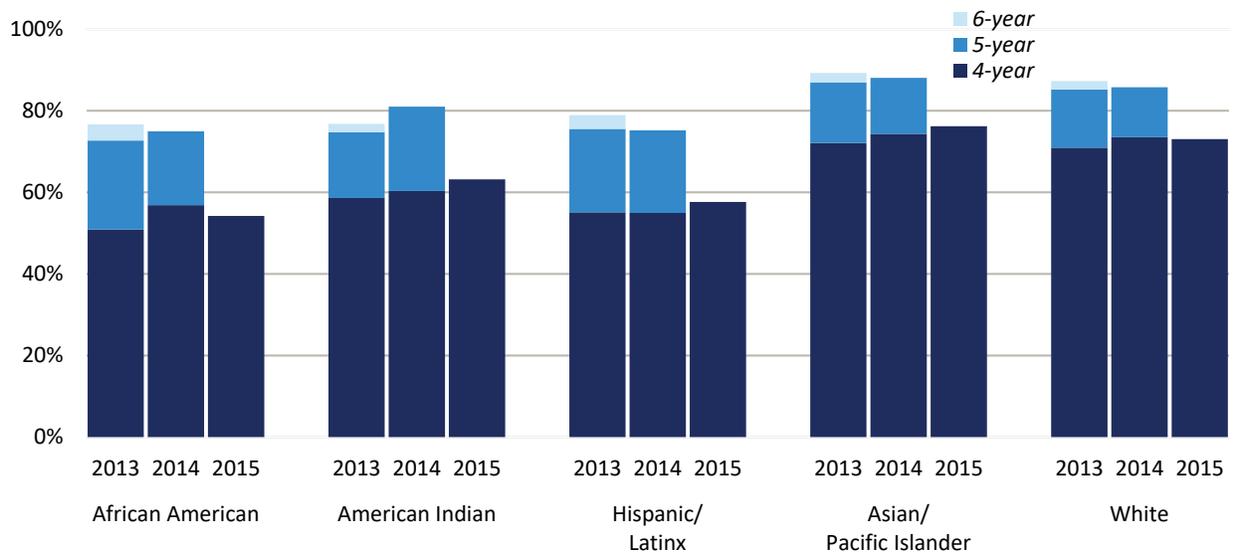
UC is striving to improve two-year graduation rates to 70 percent by 2030. UC is seeking financial support from the state to expand programs and services to achieve these ambitious goals.

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.

3.1 GRADUATION RATES

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 2013, 2014, and 2015

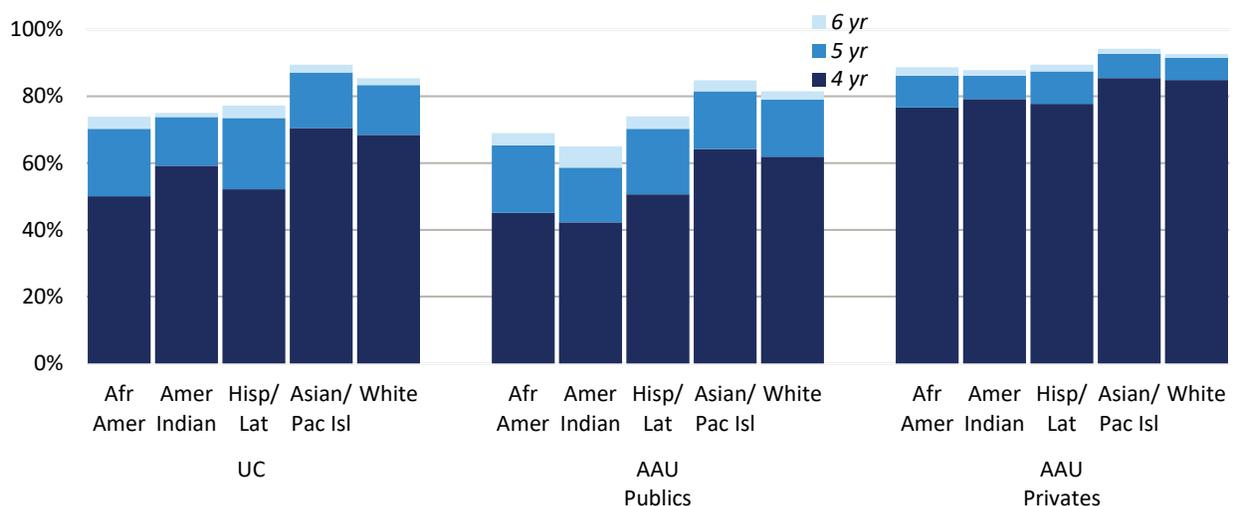


By 2030, UC is looking to eliminate graduation gaps for underrepresented groups. Compared to the overall 4-year rate of 70 percent, African American students have a 54 percent rate, Hispanic/Latinx a 58 percent rate, and American Indian a 63 percent rate.

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

<https://universityofcalifornia.edu/infocenter/ug-outcomes>.

UC and comparison institutions, cohort entering fall 2012

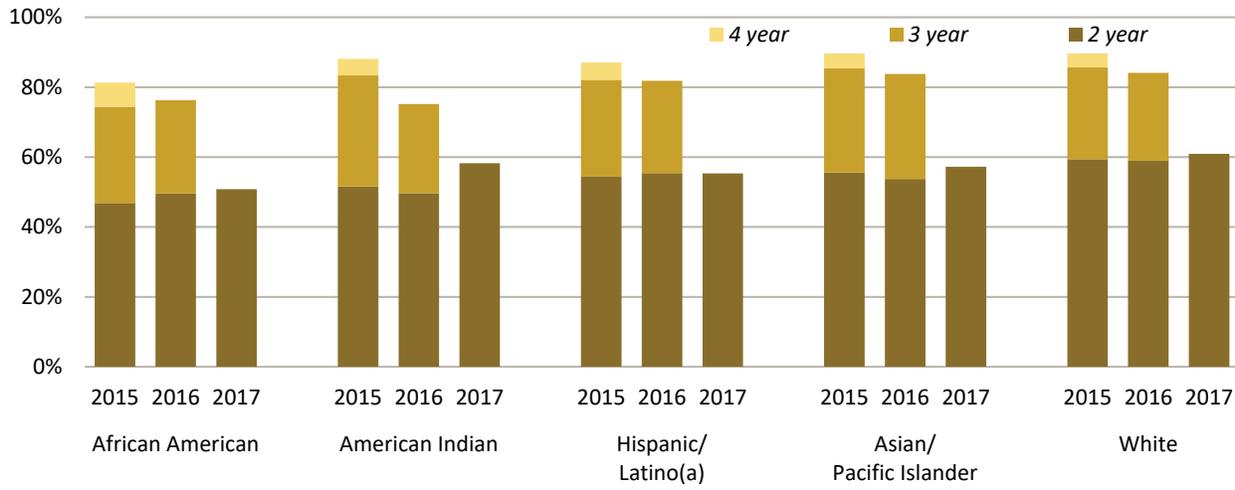


Source: UC Data Warehouse and IPEDS.

3.1 GRADUATION RATES

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

3.1.5 Transfer graduation rates by race/ethnicity Universitywide Cohorts entering fall 2015, 2016, and 2017



Source: UC Data Warehouse.

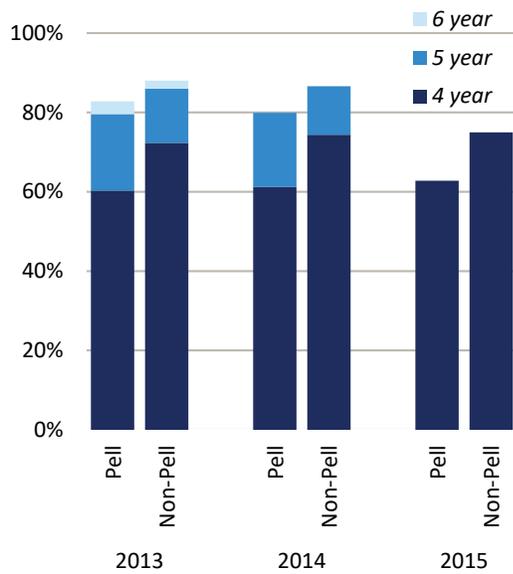
While graduation gaps are smaller for transfer students than for students who enter as freshmen, gaps still remain. By 2030, UC is looking to eliminate graduation gaps for underrepresented groups and raise the overall ontime graduate rate.

More information on trends in UC transfer graduation rates by campus and demographic detail can be found at:
universityofcalifornia.edu/infocenter/ug-outcomes.

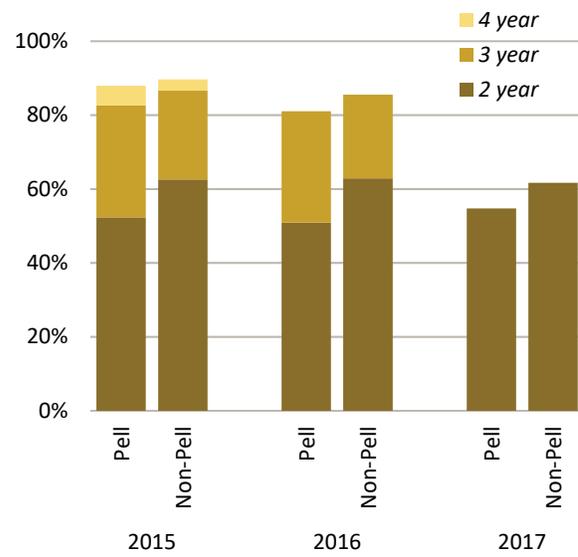
3.1 GRADUATION RATES

Over 82 percent of Pell Grant students graduate within six years.

3.1.6 Freshman graduation rates by Pell Grant recipient status
Universitywide
Cohorts entering fall 2013, 2014, and 2015



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



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: 83 percent and 88 percent, respectively. Although there is a 12-percentage point gap at the four-year mark between freshman Pell recipients (63 percent) and non-Pell recipients (75 percent), this gap is reduced to five percentage points at the six-year mark.

For the transfer 2015 cohort, Pell and non-Pell Grant recipients graduated at comparable rates of 88 percent and 90 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.

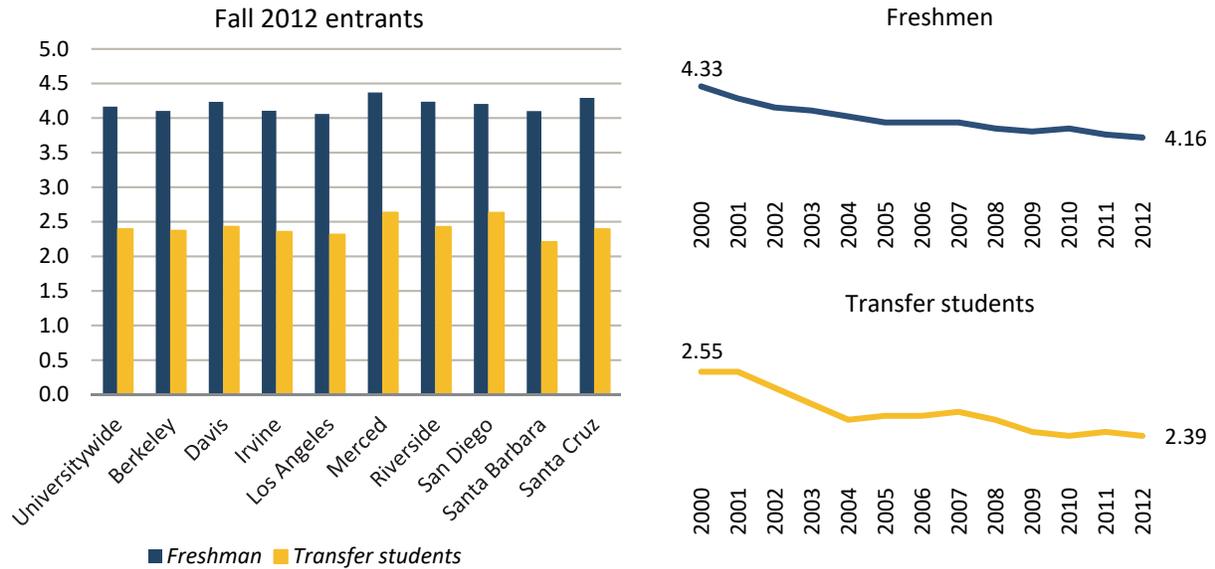
UC has adopted goals to eliminate graduation gaps by 2030 and is seeking funds from the state to support investment in programs and services needed to help achieve these ambitious goals.

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

3.1 GRADUATION RATES

As graduation rates rise, undergraduate students at UC are also graduating more quickly.

3.1.8 Average time to degree Universitywide and UC campuses



Source: UC Corporate Student System.

Average time to graduation only includes students who graduated from UC within seven years.

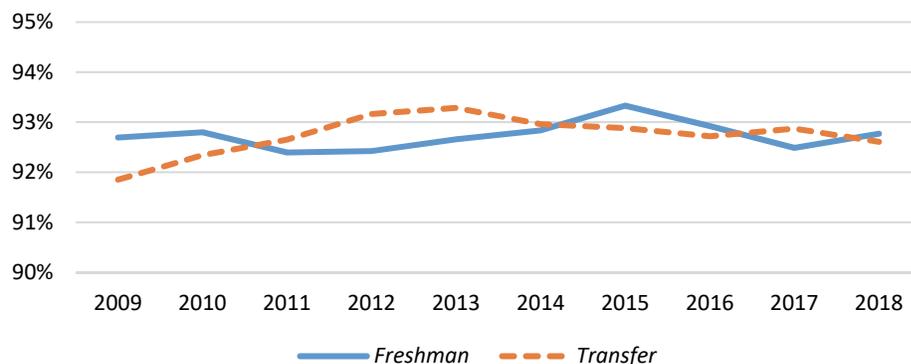
The average time to earn a bachelor’s degree at UC has decreased fairly steadily since 1994. Students entering as freshmen take an average of 4.16 years, down from 4.33 years in 2000.

For students entering as transfers, the average time to degree is 2.4 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.

3.2 RETENTION RATES

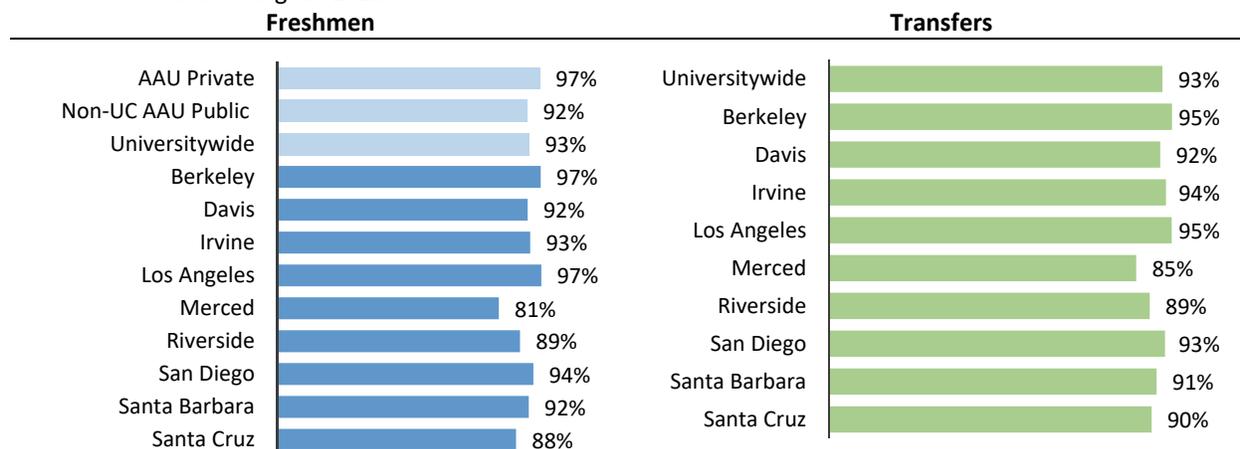
Retention rates are high, but UC is monitoring recent declines.

3.2.1 First-year retention rates UC systemwide Cohorts entering fall 2009 to fall 2018



Source: UC Data Warehouse

3.2.2 First-year retention rates UC and comparison institutions Cohorts entering fall 2018



Source: Freshman data from IPEDS.¹ Transfer data from UC Data Warehouse. Comparison data are not available for transfers.

The current universitywide retention rate is 93 percent. This is higher than non-UC AAU public institutions (92 percent), but lower than AAU private institutions (97 percent).

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.

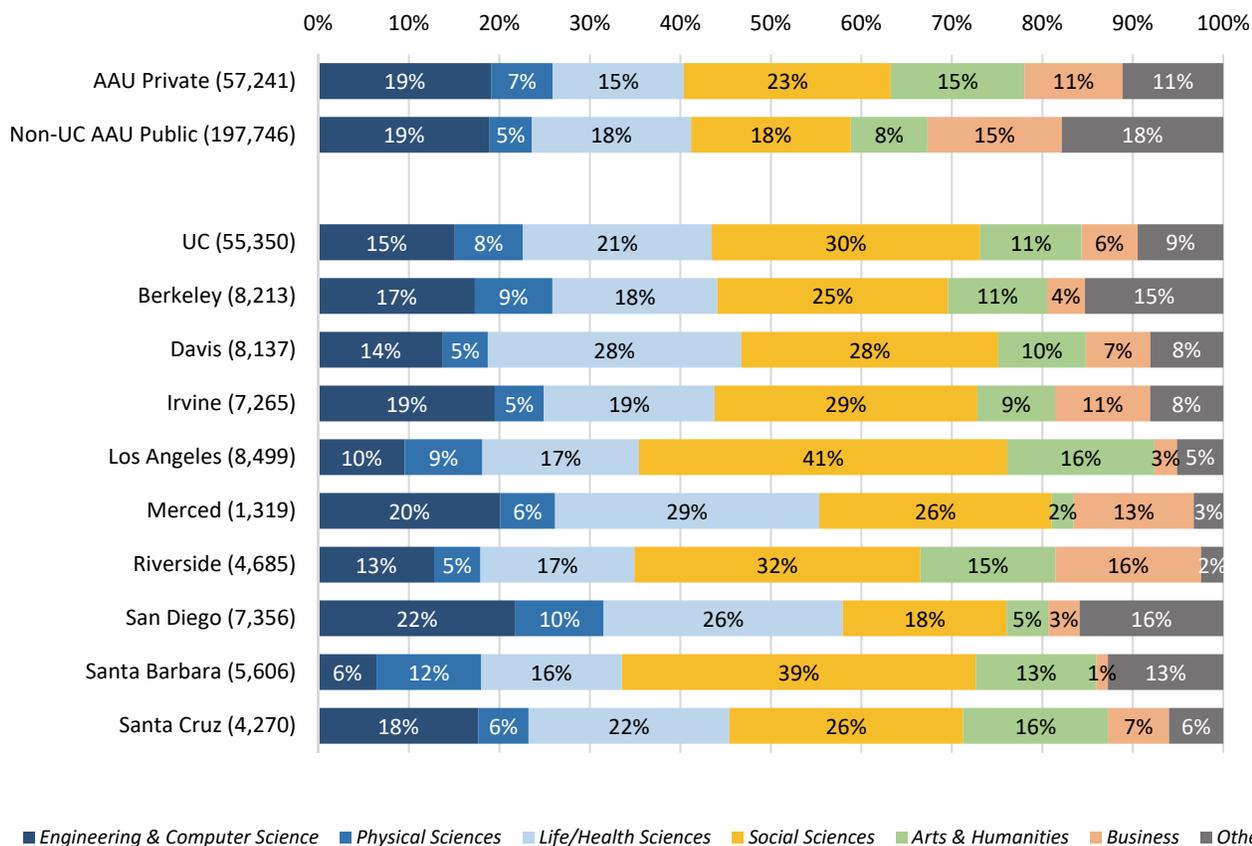
Like entering freshmen, transfer students benefit from a smooth transition to UC. Several UC campuses have summer programs to support transfer students. More information on trends in UC retention rates can be found at: universityofcalifornia.edu/infocenter/ug-outcomes.

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 2016.

3.3 OUTCOMES

Social science, life sciences, and arts and humanities are the largest segments of bachelor’s degree recipients.

3.3.1 Undergraduate degrees awarded by discipline UC and comparison institutions 2017–18



Source: IPEDS

About 43 percent of all undergraduate degrees awarded by UC in 2017–18 were in science, technology, engineering, and mathematics (STEM) fields. This is higher than the proportion at AAU public and private comparison institutions (41 and 40 percent, respectively).

3.3 OUTCOMES

Across disciplines, undergraduate degree recipients tend to 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 2016–17 graduating cohorts, combined, sorted by popularity

	After 2 years		After 5 years		After 10 years	
	Mean	Median	Mean	Median	Mean	Median
Arts & Humanities						
Arts	\$32,948	\$28,841	\$48,414	\$43,179	\$70,558	\$59,008
English/Literature	\$36,672	\$33,341	\$55,154	\$49,961	\$80,069	\$67,891
Foreign Language	\$36,252	\$32,259	\$54,659	\$48,985	\$81,832	\$67,916
History	\$37,184	\$33,077	\$59,285	\$51,551	\$87,409	\$71,961
Other Humanities	\$35,158	\$31,646	\$54,559	\$54,056	\$69,391	\$67,254
Philosophy	\$37,403	\$32,333	\$57,155	\$48,726	\$97,788	\$71,905
Professional						
Nursing	\$82,990	\$83,462	\$106,060	\$103,335	\$135,914	\$132,913
Business	\$55,124	\$51,591	\$80,184	\$70,884	\$121,364	\$97,537
Agriculture	\$53,025	\$51,089	\$75,927	\$69,625	\$112,444	\$96,413
Architecture	\$48,060	\$45,939	\$64,297	\$60,000	\$84,253	\$76,707
STEM						
Computer Science	\$82,762	\$76,764	\$114,468	\$97,957	\$152,266	\$124,093
Engineering	\$71,025	\$68,439	\$97,980	\$89,349	\$138,332	\$117,861
Physics	\$51,673	\$46,957	\$77,496	\$72,000	\$113,989	\$99,383
Biology	\$38,615	\$36,536	\$63,342	\$56,288	\$110,298	\$91,932
Chemistry	\$44,124	\$43,078	\$63,562	\$58,651	\$107,144	\$90,678
Mathematics	\$54,048	\$49,579	\$79,230	\$69,959	\$107,857	\$91,036
Social Sciences						
Economics	\$54,119	\$50,586	\$79,006	\$69,951	\$120,268	\$96,353
Political Science	\$42,379	\$38,719	\$68,869	\$58,177	\$107,082	\$87,946
Geography	\$42,525	\$39,018	\$65,792	\$58,342	\$94,052	\$77,340
Psychology	\$36,793	\$33,304	\$57,517	\$51,508	\$85,842	\$73,365
Anthropology	\$34,891	\$30,570	\$51,277	\$45,284	\$77,475	\$64,283
Sociology	\$39,513	\$36,252	\$59,208	\$53,113	\$83,335	\$71,337
All Disciplines						
All Majors	\$45,726	\$40,666	\$68,550	\$59,812	\$102,190	\$83,920

Source: California Employment Development Department and UC Corporate Student System. Includes alumni employed in the state of California only. Amounts are inflation-adjusted to 2018 dollars.

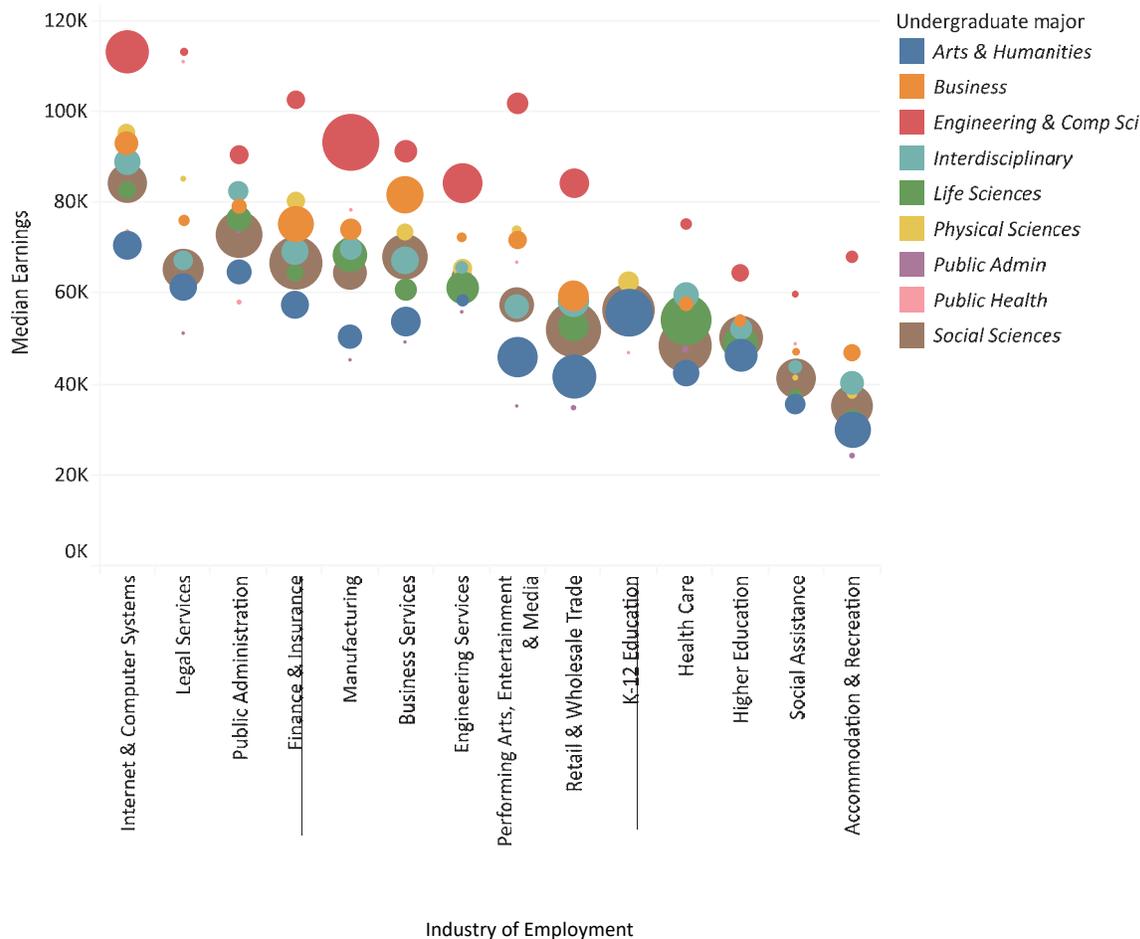
Alumni employment data provide evidence of UC’s contribution to the California economy and its role as an engine of economic mobility. UC enrolls a greater percentage of low-income students (from the bottom 20 percent of the income distribution) than other four-year institutions in California. Recent 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.

3.3 OUTCOMES

Engineering and computer science majors tend to earn more than other UC undergraduate alumni, but how much UC alumni make also depends on the industry.

3.3.3 Median alumni wages by industry of work for selected majors, five years after graduation Universitywide 2000–01 to 2013–14 graduating cohorts, combined



Note: The size of bubble corresponds to percentage of alumni within majors employed in the industry. The largest bubble is 36 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 2018 dollars.

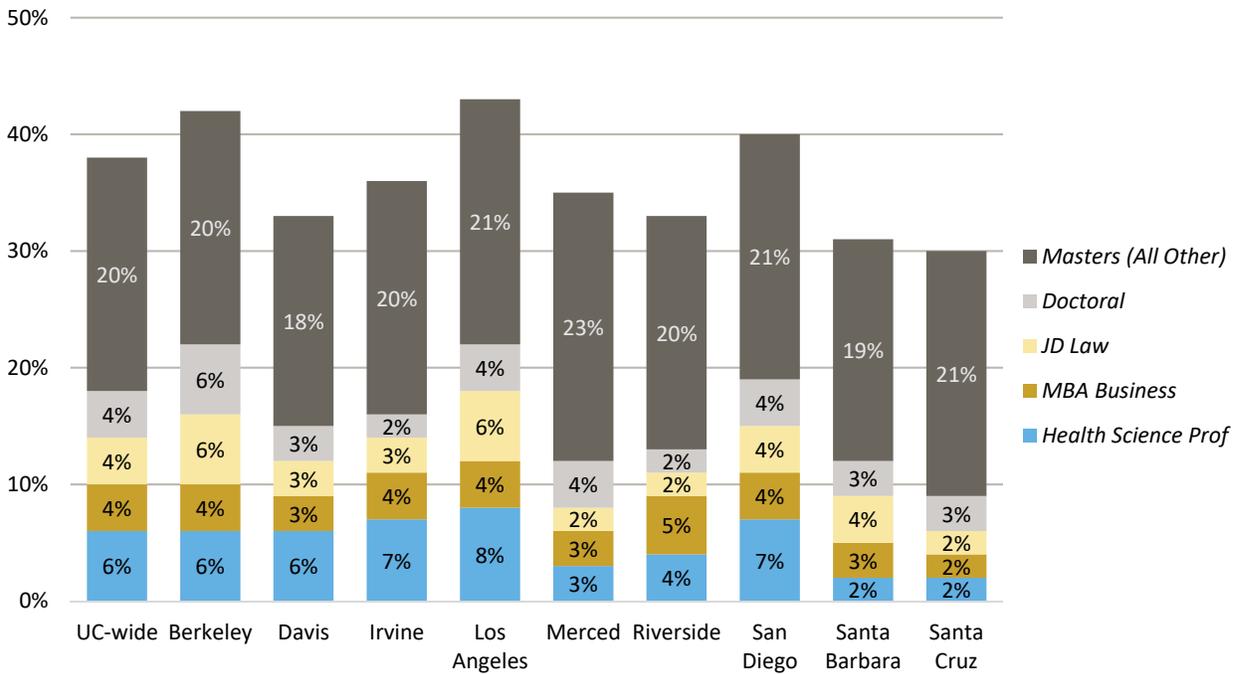
UC graduates go on to work in a wide range of industries in California. A large share of Engineering and Computer Science majors work in the Internet & Computer Systems and Manufacturing industries, with median salaries of about \$100K and \$90K, respectively. Business majors are likely to work in

the business services or finance & insurance industries where median earnings reach \$72K to \$78K. Arts & Humanities graduates are most likely to work in K–12 education, where median salaries are much lower, at about \$54K at five years after graduation.

3.3 OUTCOMES

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

3.3.4 UC undergraduate alumni graduate degree attainment by campus 2000 to 2011 graduating cohorts, combined, as of June 2019



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.



CHAPTER FOUR

GRADUATE ACADEMIC STUDENTS AND GRADUATE PROFESSIONAL STUDENTS

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. 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, and offer its residents the standard of living for which the state is well known.

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, 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 2018–19 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 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.

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 59,000 students, with doctoral students representing the largest number (28,400), and professional (22,000) and master's (8,000) 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 public (27 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.

UC is proposing a multi-year framework that seeks to improve degree attainment and produce 200,000 more degrees through 2030, in addition to the projected one million degrees. About 12 percent of these additional degrees (over 25,000) 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. 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. UC unfortunately had to cancel the 2020 installment of systemwide Grad Slam due to the coronavirus pandemic. Four UC campuses had already held their own Grad Slam contests and nominated finalists in topics including using insects to find a cure for cancer, exploring the dark corners of the universe, and immunity and microbes.

UC graduate students have also applied their research to make important contributions to the fight against COVID-19. One of the primary symptoms of COVID-19 is difficulty breathing, and approximately one percent of people who contract the virus require ventilators to push air in and out of their lungs and support their recovery. As COVID-19 becomes more widespread, many hospitals have experienced acute shortages of ventilators to treat patients. Along with Drs. James Friend and Lonnie Petersen, UC San Diego graduate students are rapidly developing simple, ready-to-use ventilators through 3-D printing technology.

Career Pathways Survey

In 2017, UC launched the Ph.D. Career Pathways Survey, which is a partnership between the University of California and the Council of Graduate Schools. The survey's third phase will be conducted in 2020, and its purpose is to better understand the career preparation and pathways of Ph.D. students and alumni. While the Council of Graduate Schools is specifically focused on humanities and STEM Ph.D.'s, the University of California is collecting data from doctoral students and alumni in all disciplines.

Results showed high levels of employment and satisfaction with UC Ph.D. programs. Ninety-two percent of respondents were working in a job for pay, 69 percent indicated they were working in a field closely related to their degree, and 54 percent were employed at a higher education institution. Eighty-eight percent of respondents stated that their Ph.D. training prepared them well for their current job, 76 percent stated that they would pursue a Ph.D. in the same field, and 80 percent indicated they would choose the same institution for their Ph.D. education if given the opportunity to choose again.

Equity and inclusion: Expanding academic pathways

A more diverse community of scholars at all levels has been a longstanding goal for UC, but progress at the doctoral, postdoctoral, and faculty levels has been slow. 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. Systemwide initiatives aimed at increasing the diversity of UC's academic community include:

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, named UC President's Pre-Professoriate Fellows, 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 encourage and help equip them to consider 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.

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 2000–01 through 2018–19, 1,061 scholars participated in UC LEADS. Of the 932 Scholars who have graduated with their undergraduate degree, 676 (73 percent) are either currently enrolled in graduate school or have already earned degrees in a master's or doctoral program. Given the importance of gender and ethnic equity within STEM-based doctoral programs, it is notable that 50.3 percent are women, 53 percent are first-generation college students, and 52 percent are from underrepresented minority groups. Thirty-five UC LEADS alumni are tenure-track faculty, including eight at UC.

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 and retaining students.

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

The University continues to develop programs to enhance the graduate student experience. UC's overall excellence rests on the strength and scope of its graduate programs. Unlike undergraduate enrollment planning, which is based on California's Master Plan, graduate enrollment planning includes the assessment of state and national needs, faculty expertise, program quality (which includes international competitiveness), and financial support. In early 2018, Provost Michael Brown convened a workgroup on graduate education, which examined the current condition and needs of UC's academic doctoral education enterprise. The workgroup, a subcommittee of the Academic Planning Council, focused on the urgent need for significantly greater investment in academic doctoral education. This need, due to long-term underinvestment, has now reached a critical point; UC's research excellence, impact, and dominance cannot be maintained without improved support. The workgroup examined key areas of importance within graduate education, such as providing multi-year guaranteed funding packages upon admission, improving student stipend amounts, prioritizing mental health and well-being, improving diversity and inclusion, and enhancing professional development support. The workgroup issued its final report in 2019, urgently stressing that without adequate support for doctoral education, UC risks its excellence and continued role as a key contributor to California's economy and as a global leader in research.

As with undergraduate students, UC's graduate students are experiencing challenges with basic needs. In 2015, 25 percent of graduate students reported low food security and four percent reported homelessness. UC is currently collecting information to help assess food insecurity and homelessness, and in a future UC graduate student survey, UC will be institutionalizing these items, including housing insecurity, to help understand how to best meet graduate students basic needs.

The effects of long-term inadequate support for students have recently resulted in systemwide Teaching Assistant wildcat strikes and graduate student cost-of-living protests. These issues continue to be challenging. However, some progress is being made. UC Irvine has guaranteed five years of funding support for doctoral admits since 2016. UC Santa Cruz announced this commitment in 2019, and UC San Diego and UC Berkeley are committed to offering this support in the near future. The remaining campuses continue to examine this matter. These commitments let students know they will have guaranteed funding support (in various forms, including fellowship, graduate student researcher appointment, and/or teaching assistantship) for five years or for the normative time to complete their degree (if less than five years). The assurance that they will be funded each year can help reduce some of the financial stress students face. In an effort to help mitigate financial concerns and better support doctoral students, several campuses are also offering various forms of cost-of-living or housing supplements.

As part of the University of California's multi-year framework, UC's goal is to grow 200,000 more degrees (on top of the one million projected) by 2030. Of those, 40,000 are expected to be graduate degrees, which will help UC meet critical workforce needs, along with helping UC expand the pathway to graduate education for the new generation of students – that is, California's Pell, first-generation and underrepresented students. UC needs to be able to grow graduate enrollment to achieve this goal and UC's success would increase graduate student diversity to better reflect California and expand availability pools for future UC and other university faculty.

For more information

UCOP Graduate Studies: ucop.edu/graduate-studies

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 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.org/

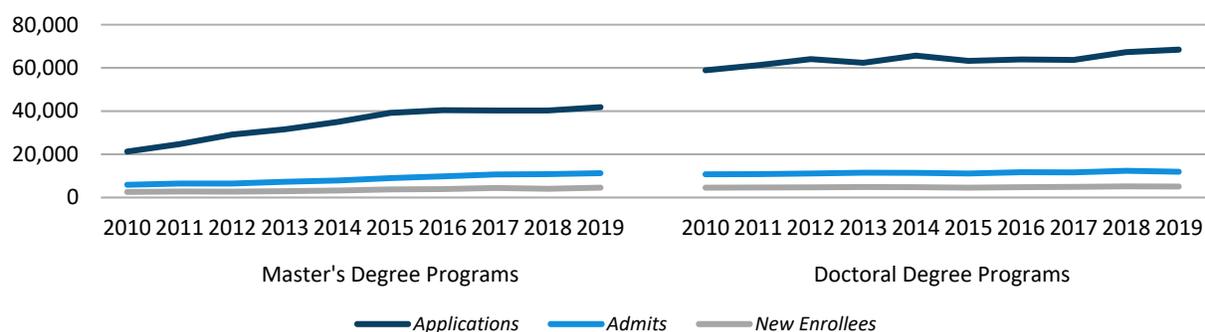
UC-HBCU Initiative: ucop.edu/uc-hbcu-initiative/index.html

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

4.1 GRADUATE ACADEMIC ADMISSIONS

Universitywide graduate academic applications have increased substantially since 2010, while admits and new enrollments have remained relatively flat.

4.1.1 Graduate academic applications, admits, and new enrollees by degree program Universitywide Fall 2010 to Fall 2019



		Master's Degree Programs		Doctoral Degree Programs	
		2010	2019	2010	2019
Physical Sci/ Math	Applications	1,237	2,699	9,802	14,400
	Admits	341	664	2,374	3,204
	New Enrollees	158	208	843	1,138
Engineering/Comp Sci	Applications	11,085	30,399	14,980	18,295
	Admits	3,406	7,744	2,876	2,915
	New Enrollees	1,284	2,846	1,132	1,193
Life Science	Applications	1,961	2,365	9,987	12,932
	Admits	673	941	1,952	2,228
	New Enrollees	384	512	877	1,071
Social Sci/ Psych	Applications	1,018	1,061	10,961	11,075
	Admits	426	630	1,557	1,658
	New Enrollees	182	245	671	720
Arts & Humanities	Applications	4,229	3,700	7,954	6,870
	Admits	493	462	1,181	1,100
	New Enrollees	323	291	568	527
Interdisciplinary/Other	Applications	1,733	1,554	5,176	4,863
	Admits	543	789	775	833
	New Enrollees	232	422	438	433

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 steadily since 2010. Applications for admission grew from 80,000 in 2010 to 107,200 in 2019. Nearly all of this increased demand has come from prospective international students, with international applications growing from 34,400 to 64,400 — a rate of almost ten percent per year. Engineering and computer science programs have significantly 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 in applications from international students, with engineering as the most popular field for international applicants.¹

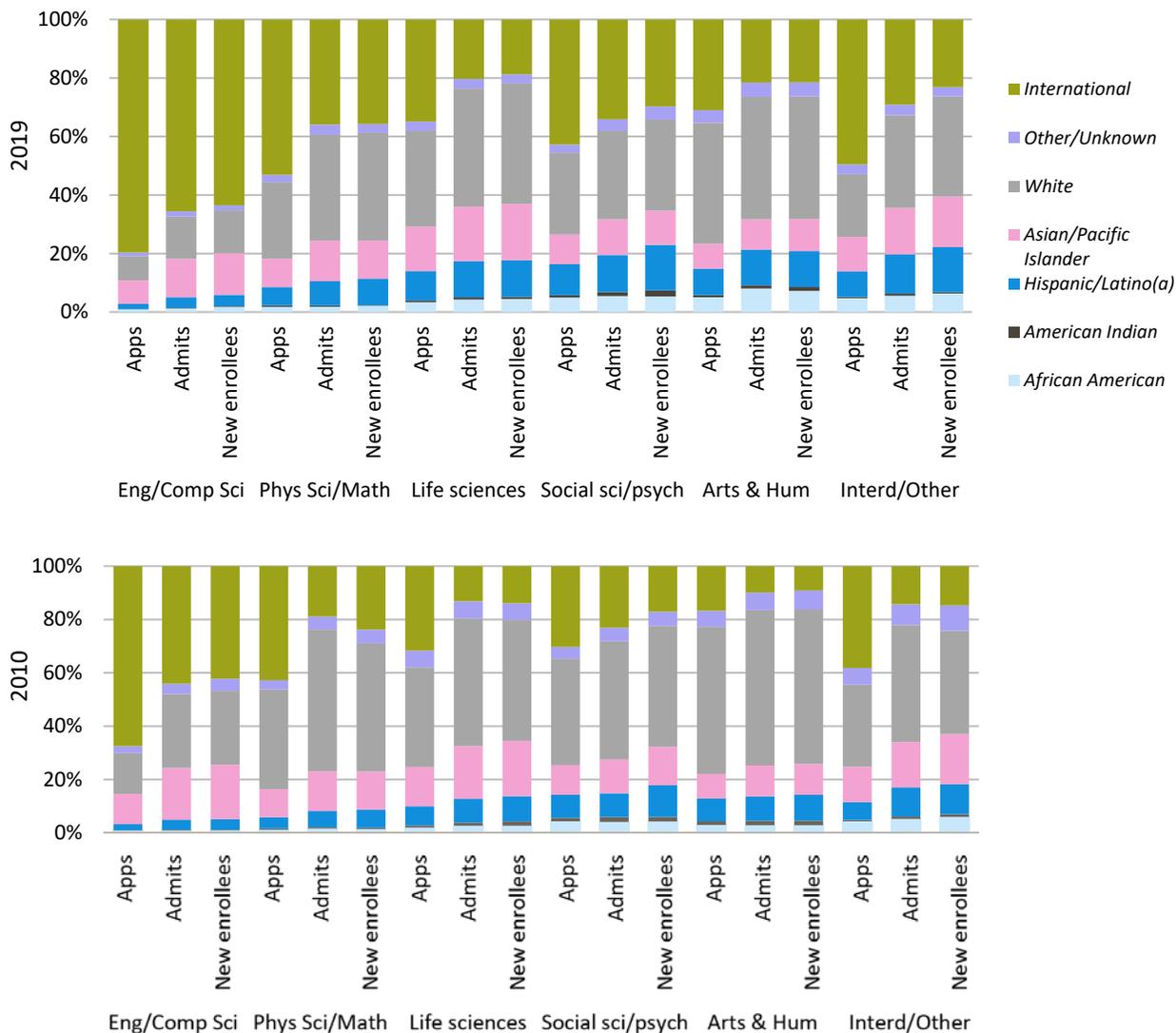
Since 2010, admits increased from 16,500 to 23,168 in 2019, and new enrollments increased from 7,000 to 9,600. Though applications are now predominantly (59 percent) from international students, both admits and new enrollments of domestic students exceed those of international students.

¹ cgsnet.org/ckfinder/userfiles/files/2017_International_Survey_Report_Final.pdf

4.1 GRADUATE ACADEMIC ADMISSIONS

Since 2010, 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 2010 and 2019



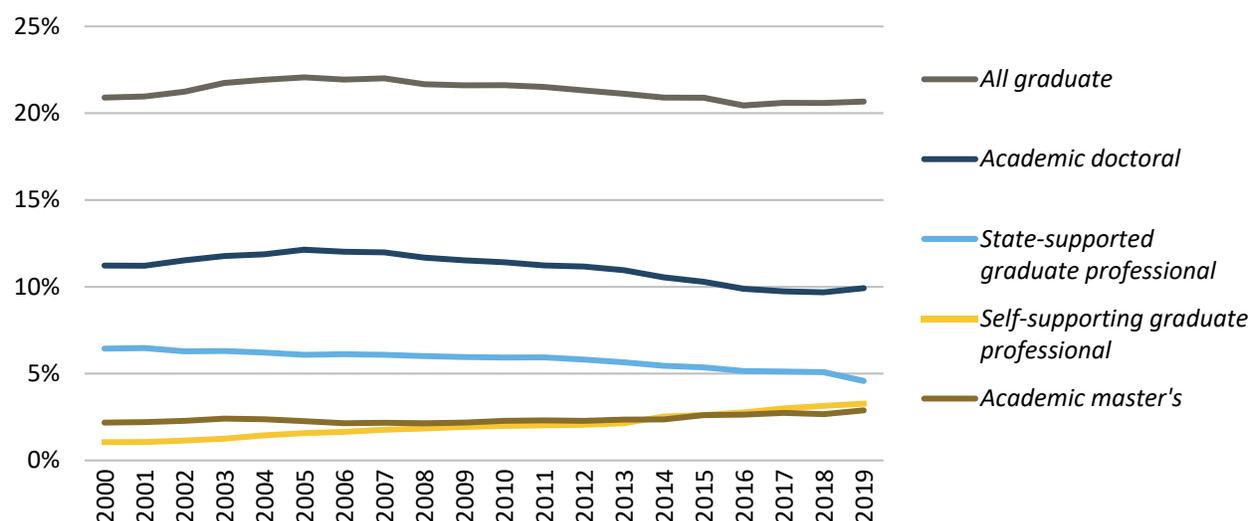
Source: UC Data Warehouse

International students represent the majority of applicants, admits, and new enrollees in engineering and computer science graduate programs. While the share of international students in all other disciplines also increased between 2010 and 2019, the majority of eventual enrollees are not international. Social science and humanities programs have the highest shares of enrollment among underrepresented minority students, and those shares increased between 2010 and 2019.

4.2 GRADUATE ACADEMIC AND PROFESSIONAL ENROLLMENT

Graduate enrollment, as a share of UC’s total undergraduate and graduate enrollment, has declined slightly and remains well below comparable institutions.

4.2.1 Graduate enrollment share of total Universitywide Fall 2000 to Fall 2019



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.

With 21 percent graduate enrollment in 2019, including health science students, UC was lower than the average for non-UC AAU¹ public institutions, at 27 percent, and the average for AAU private institutions, at 56 percent.

UC awards 20 percent of California’s graduate academic master’s degrees, 62 percent of its academic doctoral degrees, and 21 percent of its graduate professional practice degrees.

In fall 2019, the proportion of academic doctoral students varied across UC’s general campuses, from seven percent at Merced to 12 percent at Berkeley. At San Francisco, an exclusively graduate health-sciences campus, academic doctoral students made up 28 percent of fall 2019 enrollments. Since 2009, the share of academic doctoral students has declined at most campuses due to more rapid growth in the undergraduate, master’s, and professional populations.

Percent of students who are academic doctoral		
	Fall 2009	Fall 2019
San Francisco	28%	28%
Berkeley	17%	12%
Los Angeles	12%	11%
Davis	11%	11%
Santa Barbara	11%	9%
San Diego	11%	9%
Riverside	10%	9%
Irvine	10%	9%
Santa Cruz	7%	8%
Merced	7%	7%
Universitywide	12%	10%
	(26,245)	(28,447)

Source: UC Data Warehouse

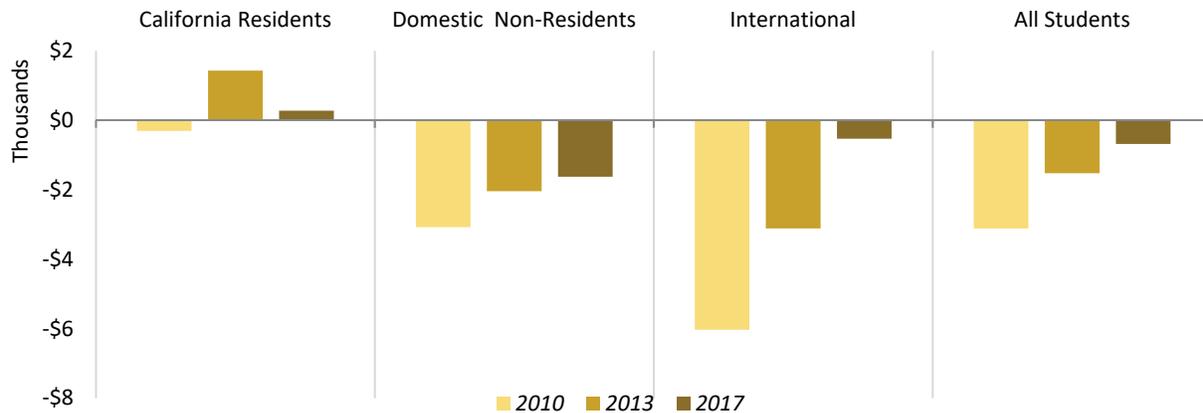
¹ A list of the institutions in the AAU comparison groups can be found in the data glossary.

4.2 GRADUATE ACADEMIC AND PROFESSIONAL ENROLLMENT

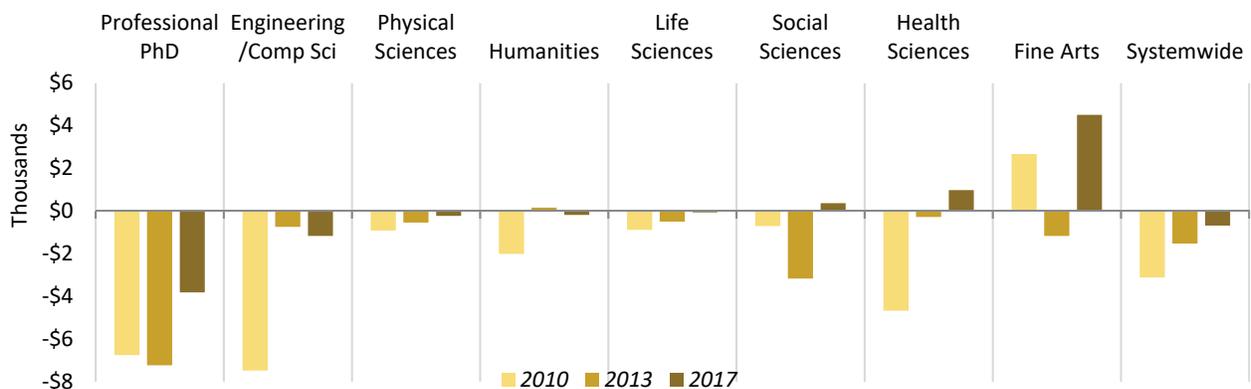
UC net stipends remain below competitive offers, although the gap decreased substantially between 2010 and 2017.

4.2.2 Average net stipend offered to graduate academic doctoral students admitted to UC compared with their first-choice non-UC schools
Universitywide
2010, 2013, and 2017

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.

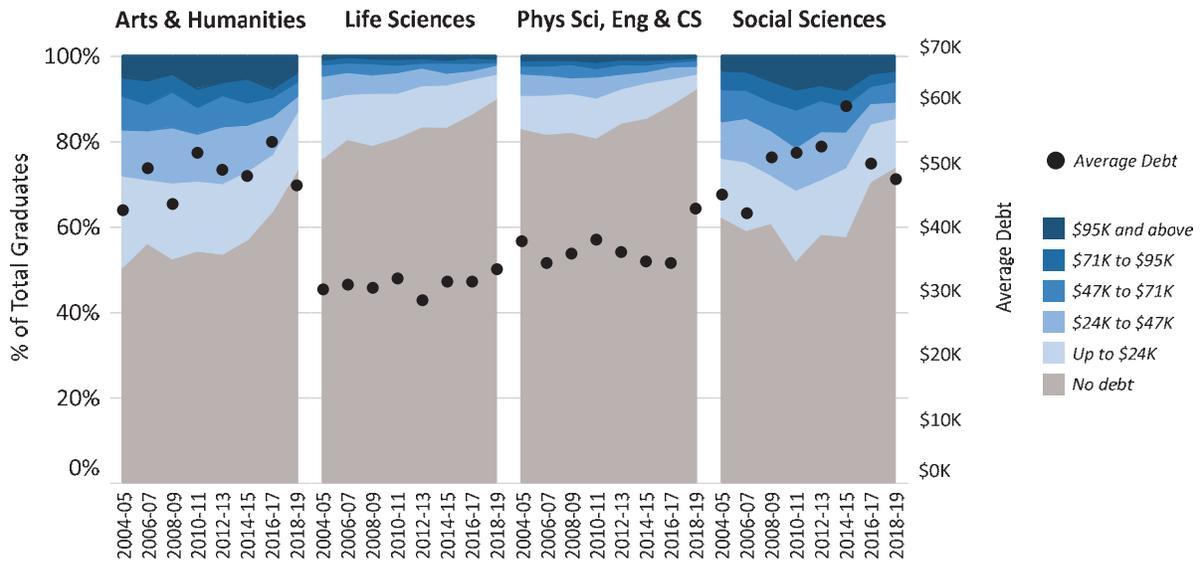
Doctoral students are crucial to a university’s research enterprise and instructional programs. To attract the most highly qualified applicants, universities offer aid packages that include the cost of tuition and stipends. Net stipend is the amount of aid that students have for living expenses after 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 2010, UC has made considerable progress in closing the net stipend gap with competing institutions, reducing it from \$3,000 to about \$700 in 2017. However, a considerable gap remains between UC’s average net stipend and growing living costs in California.

4.2 GRADUATE ACADEMIC AND PROFESSIONAL ENROLLMENT

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 2004–05, and graduate with less average loan debt than those in the social sciences and arts and humanities.

4.2.3 Academic doctoral students' graduate debt at graduation, by discipline, domestic students Universitywide Graduating classes of 2004–05 to 2018–19 (every two years)



Source: Corporate Student System¹

Depending on the field of study, between 70 percent (arts and humanities) and 90 percent (physical and life sciences) of UC doctoral students take on no additional debt during graduate school.

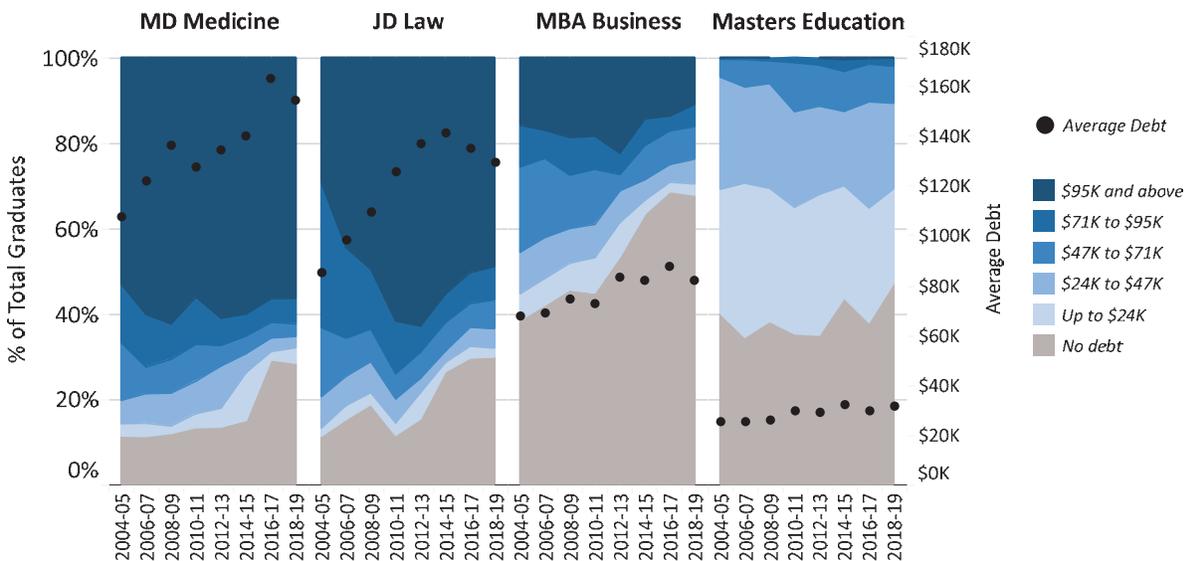
Several factors account for the difference in debt burden between doctoral students in the physical and life sciences and those in other disciplines. Physical and life science students are more likely to be supported by research grants. In addition, their programs take less time on average to complete than do programs in the social sciences or arts and humanities.

¹ Debt categories are inflation-adjusted in 2018 dollars using CA CPI-W. "Other" includes interdisciplinary and professional fields. Life sciences include health sciences.

4.2 GRADUATE ACADEMIC AND PROFESSIONAL ENROLLMENT

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

4.2.4 Graduate professional degree student debt at graduation, by discipline, domestic students Universitywide Graduating classes of 2004–05 to 2018–19 (every two years)



Source: UC Corporate Student System¹

On average, about 55 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 less than five 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 2004–05 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 2018 dollars using CA CPI-W.

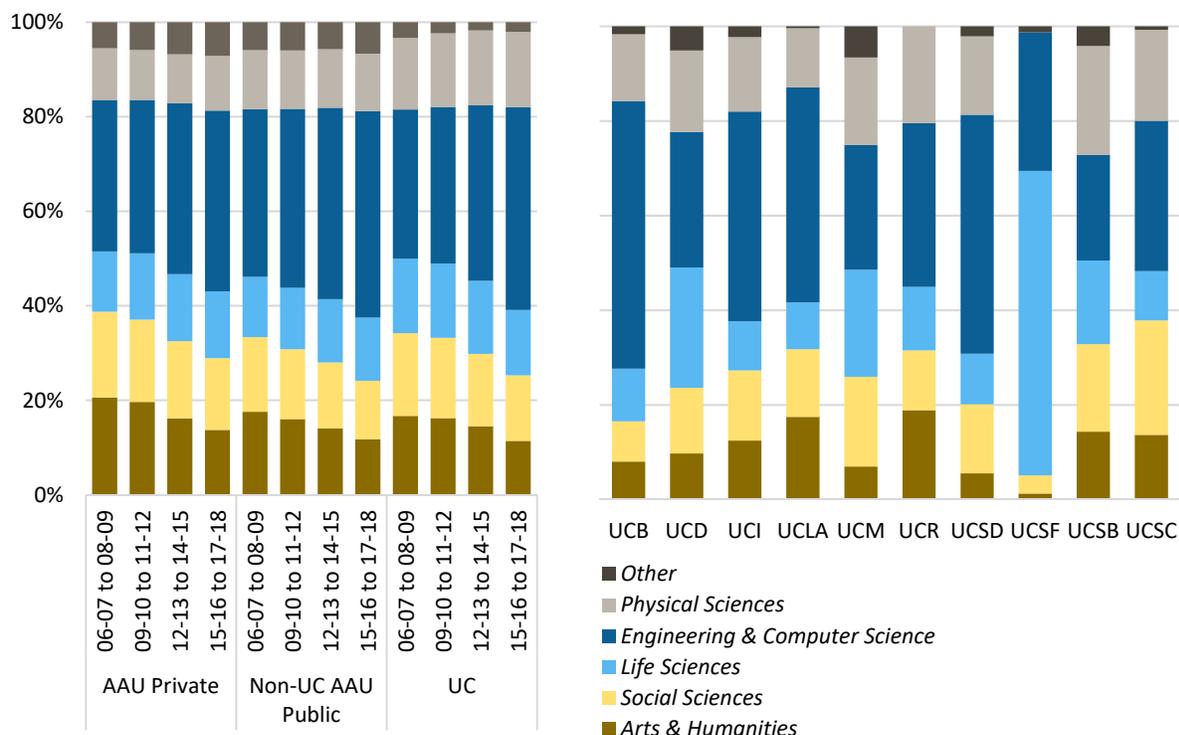
4.3 GRADUATE ACADEMIC STUDENT OUTCOMES

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: 2006–07 to 2008–09, 2009–10 to 2011–12, 2012–13 to 2014–15, 2015–16 to 2017–18; campus-level data for 2015–16 to 2017–18



Source: IPEDS¹

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.

More than 25 UC Ph.D. recipients have been awarded Nobel Prizes.

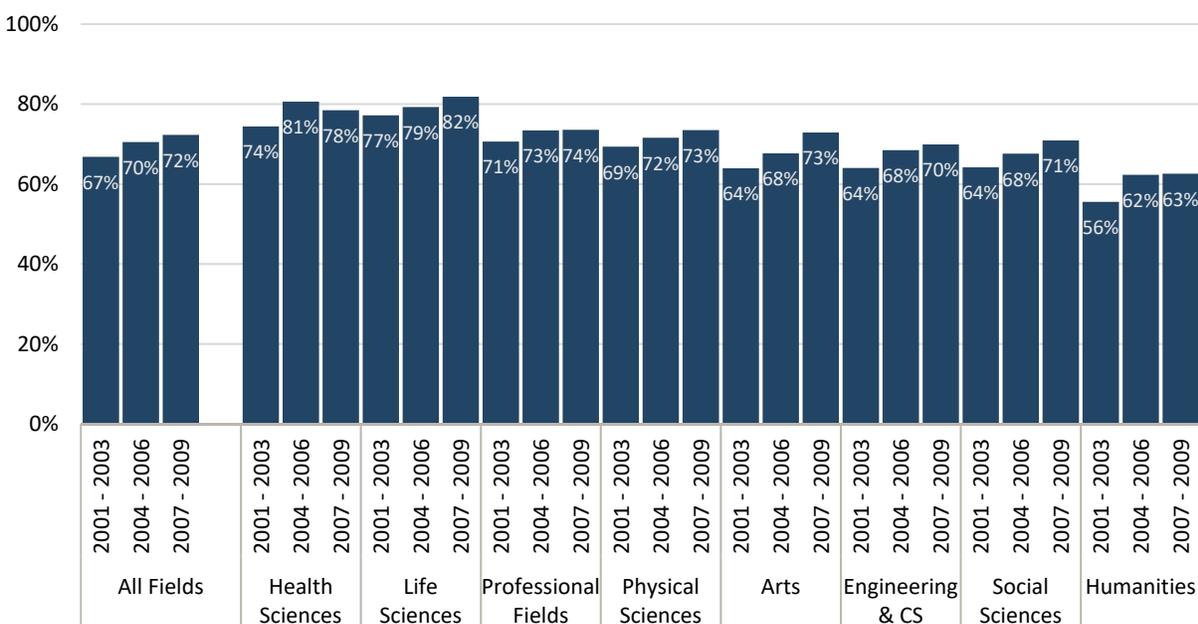
Since 2006–07, the number of graduate academic degrees awarded at UC grew by 44 percent, compared to 61 percent at the group of AAU private institutions and 38 percent for the group of non-UC AAU public institutions.

¹ “Other” includes interdisciplinary and academic degrees in otherwise professional fields, such as architecture, communications, and public administration.

4.3 GRADUATE ACADEMIC STUDENT OUTCOMES

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 2001–2003, 2004–2006, and 2007–2009 entry cohorts



Source: UCOP Corporate Student System

The Universitywide ten-year doctoral completion rate across all fields for the fall 2007–09 entering cohorts was 72 percent. This is an increase from the 70 percent completion rate reported for the 2004–06 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.) Second, shifts over time in enrollment toward disciplines with higher completion rates (STEM fields) affect the overall ten-year completion rate.

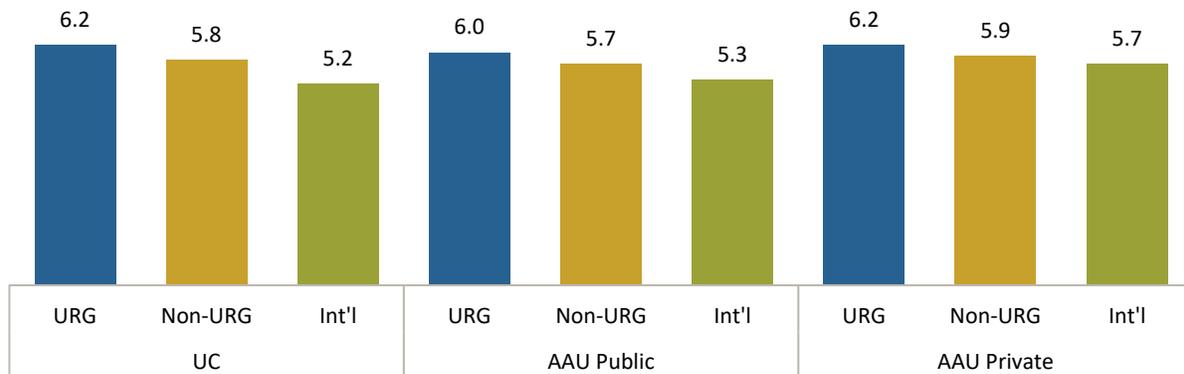
The Doctoral Completion Rates dashboard is available at:
universityofcalifornia.edu/infocenter/doctoral-rates

4.3 GRADUATE ACADEMIC STUDENT OUTCOMES

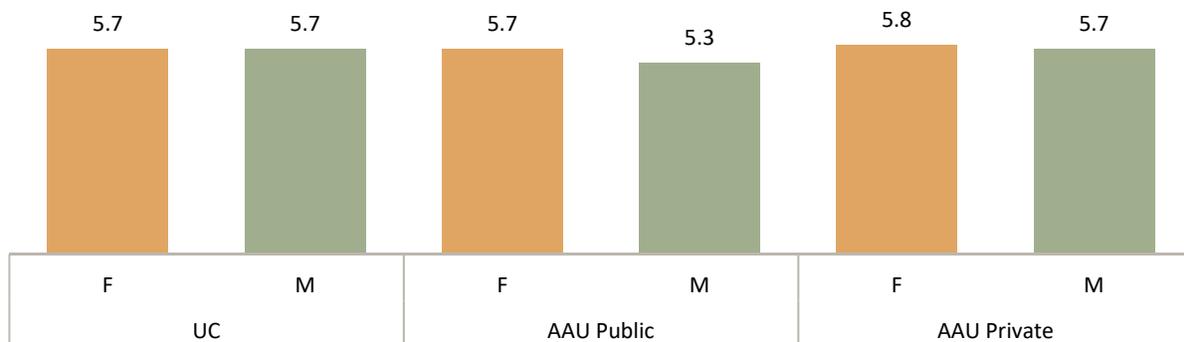
UC's median ten-year time to doctorate by ethnicity and gender compares well with AAU institutions.

4.3.3 Median ten-year time-to-doctorate, by ethnicity and gender Universitywide, AAU public and AAU private comparison institutions 2014 to 2016 exit cohort

By race



By gender



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, compared to AAU public institutions where men's time-to-doctorate is nearly half a year less than women's. Students from underrepresented groups (URG) have slightly longer time-to-doctorate at UC and comparison institutions, whereas international students required substantially less time to complete the doctorate.

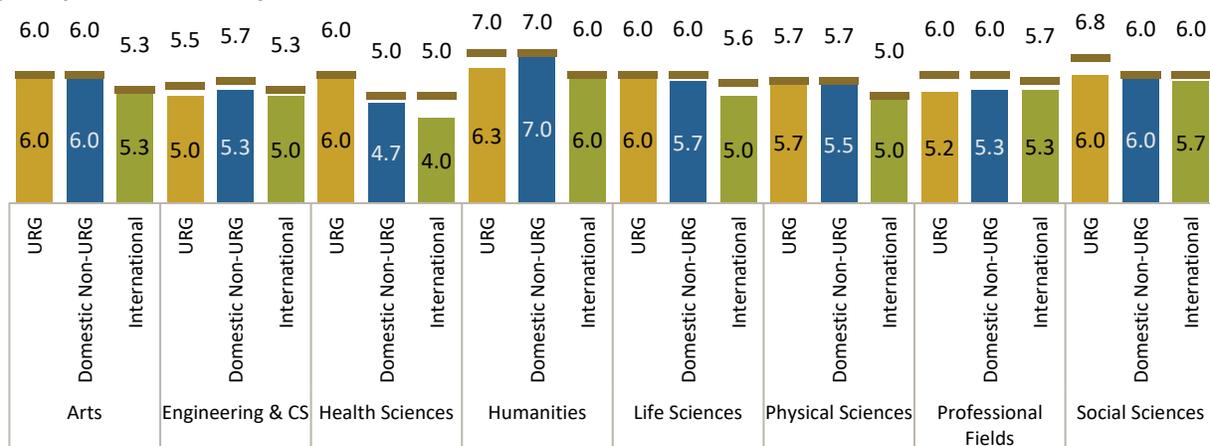
The Time to Doctorate dashboard is available at: universityofcalifornia.edu/infocenter/time-to-doctorate

4.3 GRADUATE ACADEMIC STUDENT OUTCOMES

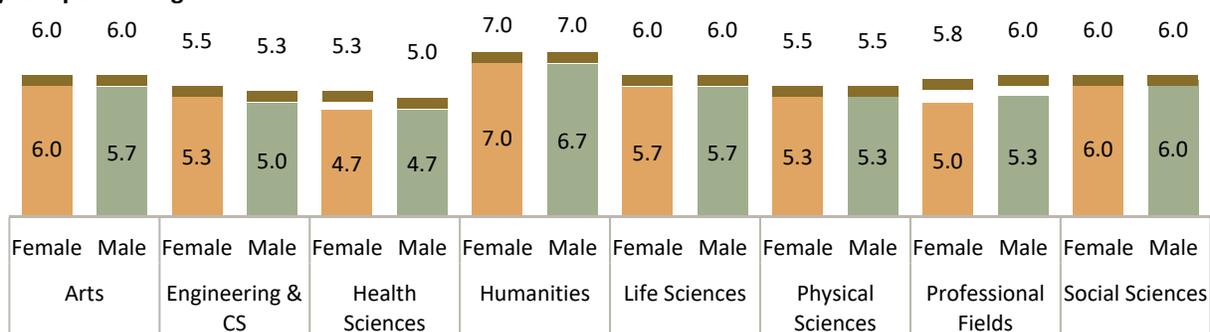
UC's median ten-year time-to-doctorate varies by ethnicity, gender, and discipline.

4.3.4 Median ten-year time-to-doctorate, by ethnicity and gender, by discipline Universitywide 2016 through 2018 exit cohort

By discipline and ethnicity



By discipline and gender



■ Registered — Elapsed

Source: Survey of Earned Doctorates.

In three of eight disciplines, students from underrepresented groups (URG) have higher registered time-to-doctorate (RTD, the amount of time a student is enrolled in coursework or dissertation units) than non-URG and international students. URG students have slightly lower RTD than non-URGs in engineering and computer science, humanities, and professional fields. The elapsed time-to-doctorate (ETD, the amount of time from first enrollment in a doctoral program) for URGs is higher than or equal to non-URGs. International students generally have lower ETD and RTD in all disciplines.

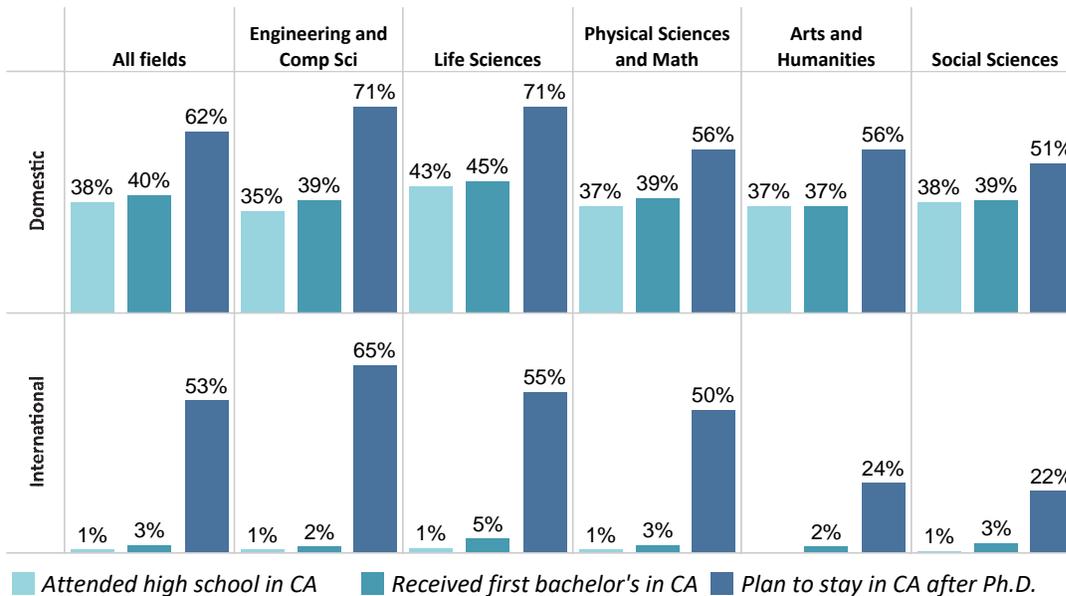
Men and women generally have comparable time-to-doctorate, with exceptions in health sciences, where women have a longer ETD, and the arts, where women have a longer ETD and RTD.

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

4.3 GRADUATE ACADEMIC STUDENT OUTCOMES

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.

4.3.5 Origin and planned destination of UC academic doctoral degree recipients Universitywide 2008–09 to 2017–18



Source: Survey of Earned Doctorates

The most recent data for UC’s doctoral degree recipients, based on those graduating between 2008–09 and 2017–18, show that over half plan to stay in California. Sixty-two percent of domestic doctoral degree recipients intend to stay, though only 40 percent of this cohort received their bachelor’s degrees in California, and only 38 percent attended high school in California. This proportion is higher in engineering, computer science, and life sciences fields, indicating that UC graduates are contributing to California’s robust economy in these areas.

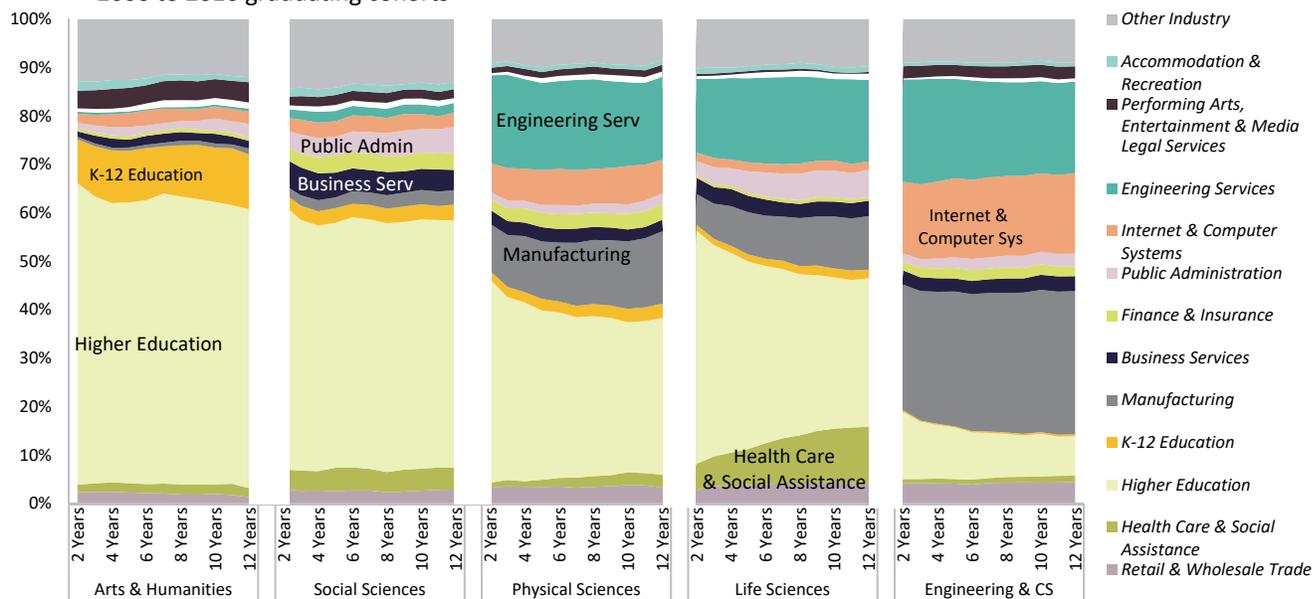
Though a negligible share of UC’s international (not a U.S. citizen nor permanent resident) doctoral recipients attended high school or college in California, half intend to stay after graduation.

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 NASA.

4.3 GRADUATE ACADEMIC STUDENT OUTCOMES

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 2016 graduating cohorts



Source: California Employment Development Department and UC Corporate Student System¹

More than 50,000 graduates of UC academic doctoral and master’s degree programs in fields other than engineering/computer science have entered the California workforce since 2000. Over half of them (50 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 14 percent of the employed graduates of UC physical sciences and life sciences programs work in the state’s manufacturing sector, while another 24 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.

UC graduate academic programs in engineering and computer science supply workers to the state’s high-skilled and high-tech industries. Since 2000, over 23,000 graduates of these programs have entered the California workforce, with 34 percent working in the manufacturing sector and 29 percent working in engineering services. Another 24 percent go on to work in the state’s fast-growing internet and computer services industry. About 16 percent of engineering and computer science graduates go on to teaching and research positions in the state’s college and university systems.

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

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

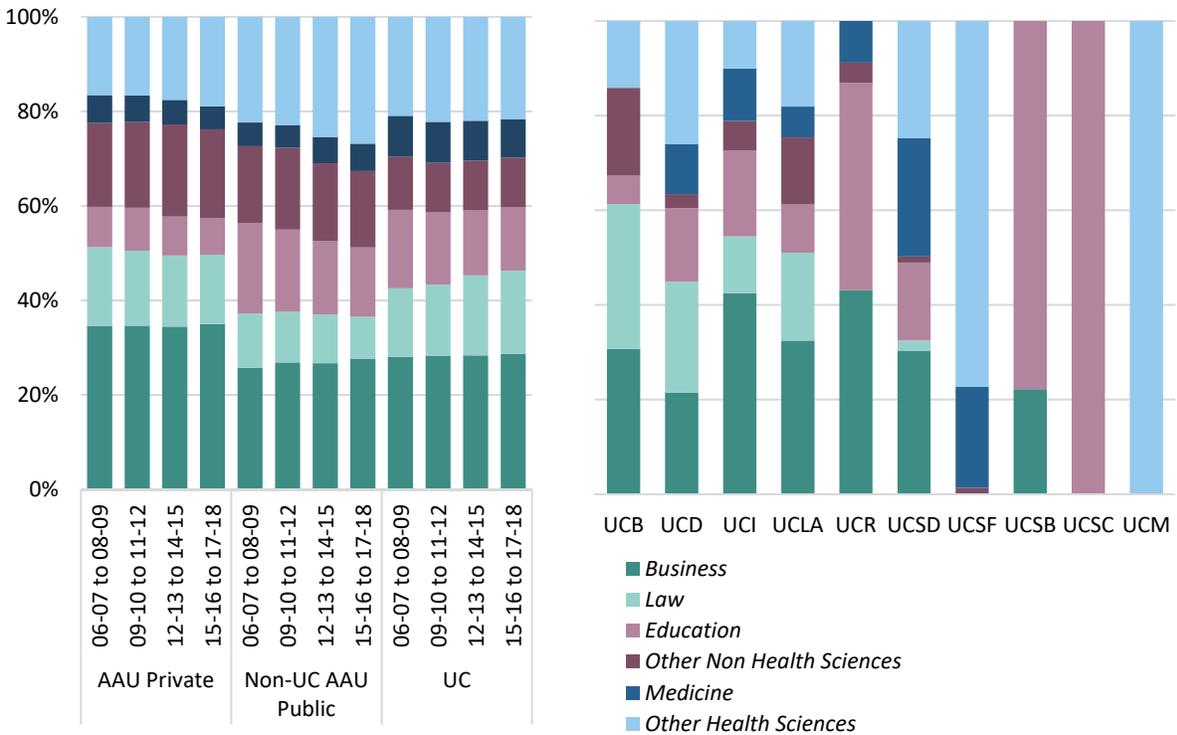
4.4 GRADUATE PROFESSIONAL STUDENT OUTCOMES

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: 2006–07 to 2008–09, 2009–10 to 2011–12, 2012–13 to 2014–15, 2015–16 to 2017–18



Source: IPEDS¹

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 is also showing a growth in the proportion of law degrees, in part due to the School of Law at UC Irvine, which opened in 2009.

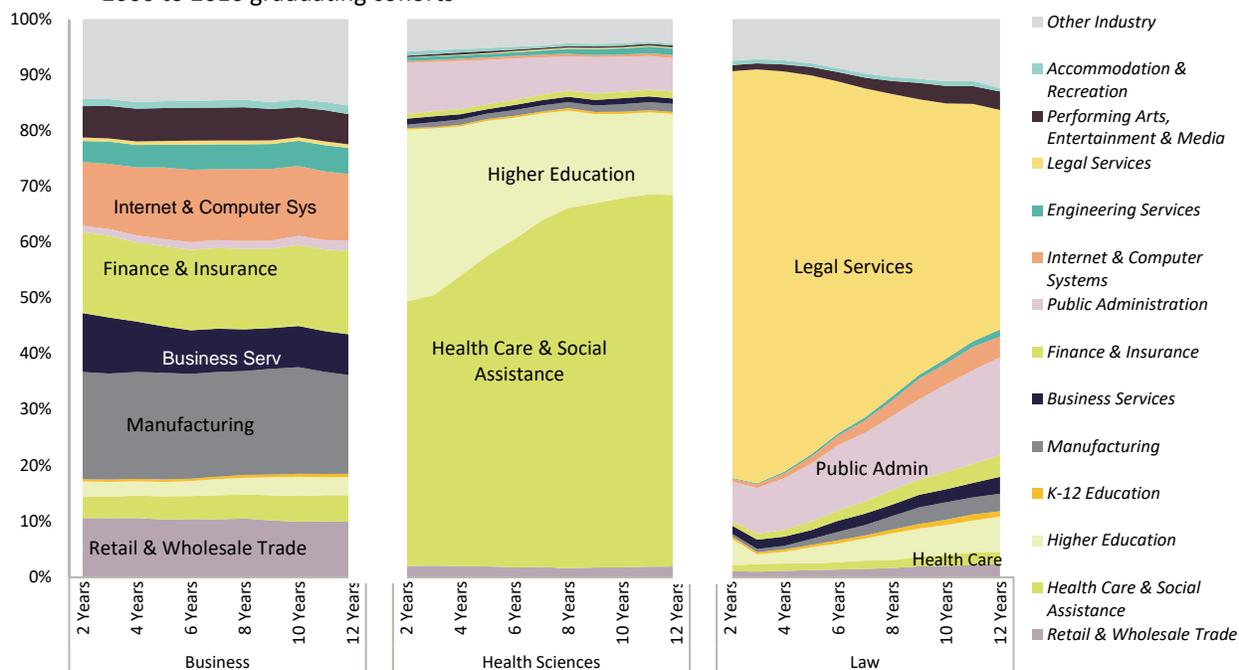
Since 2003, UC has opened new professional schools in several other areas, including the Rady School of Management at UC San Diego in 2003, the School of Medicine at UC Riverside in 2013, the Sue and Bill Gross School of Nursing at UC Irvine in 2017, and the School of Public Health at UC San Diego in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

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.

4.4 GRADUATE PROFESSIONAL STUDENT OUTCOMES

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 2016 graduating cohorts



Source: California Employment Development Department and UC Corporate Student System¹

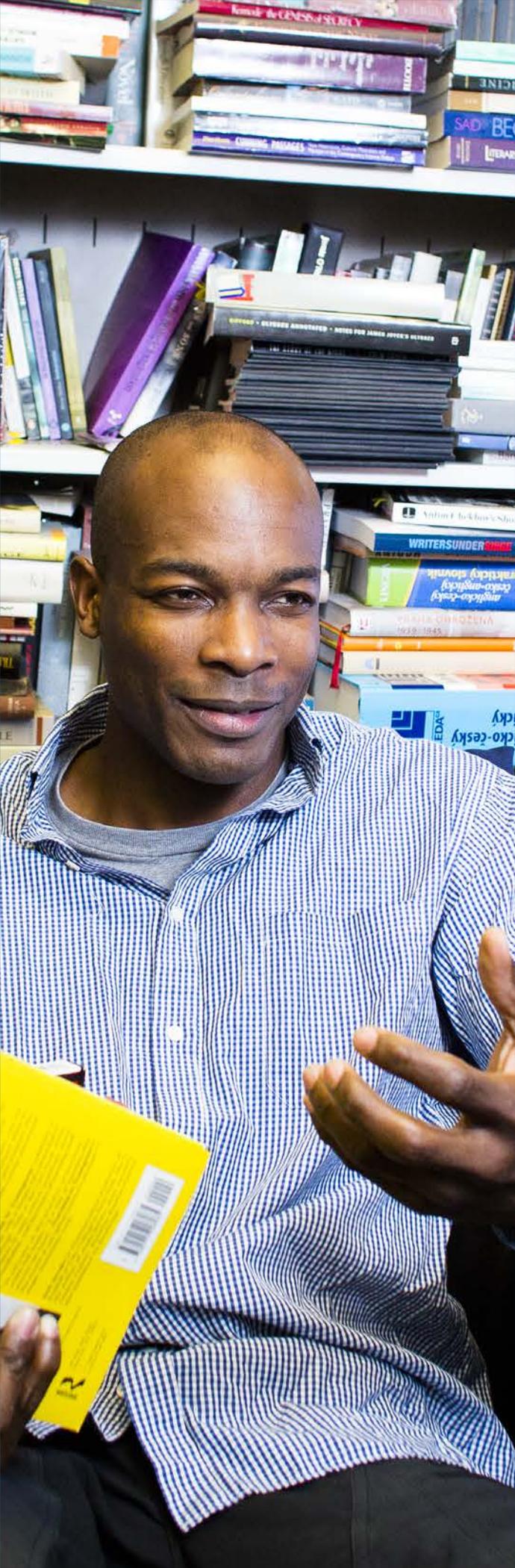
Graduates of UC Master of Business Administration (MBA) programs contribute significantly to the state’s high-skilled and high-tech industries. The 23,000 UC MBA graduates who have entered the California workforce since 2000 have worked in a wide array of industries, including manufacturing (26 percent), finance and insurance (20 percent), retail and wholesale trade (18 percent), and internet and computer systems (22 percent).

Over 15,000 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 (65 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 38 percent who go on to work in the state’s higher education system and ten percent who work in state government.

UC law school graduates go on to work in two main areas — legal services and government. Of the 11,000 UC law school graduates who have worked in California since 2000, about 79 percent eventually find positions in the legal services industry. Another 19 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 46 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.



CHAPTER FIVE

FACULTY AND OTHER ACADEMIC EMPLOYEES

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.

Describing the academic workforce

Faculty are the most prominent face of UC’s academic workforce, but there are many other academic roles as well, totaling nearly 50,000 full-time equivalents (FTE) across over more than 72,000 individuals. About 60 percent of faculty are in general campus schools, while the other 40 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 an equivalent status.¹ Since the year 2000, their numbers have increased by 39 percent.

The In-Residence, Professor of Clinical (e.g., Medicine), Health Sciences Clinical Professor, and Adjunct Professor series faculty are found at all campus locations, but 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. Since 2000, the FTE of lecturers has increased by over 74 percent.

Postdoctoral scholars are sponsored by faculty and 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; specialists and advisors in cooperative extension; librarians; faculty administrators such as Deans; university extension teachers; graduate students appointed as Teaching Assistants and Research Assistants; and interns and residents in medicine and other academic health sciences programs.

Diversity

The University of California is committed to diversity and excellence in its faculty and academic workforce. The proportion of women and underrepresented groups (African American, American Indian, Native Hawaiian/Pacific Islander, and Hispanic/Latinx) in the faculty continues to grow at a modest pace. Newer faculty cohorts are noticeably more diverse than past cohorts.

Academic FTE and Headcount, October 2019

	FTE	Headcount
Faculty - Ladder-rank and Equivalent	10,617.8	11,535
Faculty - Clinical/In-Residence/Adjunct	7,614.1	8,528
Faculty - Lecturers	2,425.4	4,029
Other Academic Employees	6,291.9	8,526
Postdoctoral Scholars	5,454.1	6,433
Student Teaching/Research Assistants	11,108.4	27,223
Medical Interns/Residents	6,086.2	6,258
Grand Total	49,597.9	72,532

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

Among tenured and tenure-track faculty, UC compares favorably in terms of the proportions of women faculty and faculty from underrepresented groups relative to the comparison eight peer research institutions.¹ And, many academic appointee titles at UC that experience more rapid turnover are more ethnically diverse and gender-balanced than UC's ladder-rank faculty. 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.

A variety of programs have been put in place to strengthen faculty diversity:

Advancing Faculty Diversity — The State of California awarded UC \$2 million in one-time funds in fiscal years 2016–17, 2017–18, and 2018–19, and \$2.5 million in fiscal year 2019–20 to develop an innovative and focused program to increase faculty diversity at UC. The Advancing Faculty Diversity program awards these funds on a competitive basis to campus units implementing new measurable interventions in the faculty recruitment process. To date, sixteen pilot projects have been funded by the state, including projects located in colleges, schools, and departments. In addition, since 2018–19, fifteen awards have been funded by the Office of the President to improve academic climate and increase faculty retention. 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; and introducing new voices, including students, in the recruitment and evaluation process. Beginning in 2019–20, President Napolitano committed an additional \$3 million per year in ongoing funds to support additional projects in faculty recruitment and improved climate and retention to pilot innovative recruitment practices and create academic climates to support UC's diverse student body and meaningfully engage faculty throughout their UC careers.

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 2016–17 and 2019–20, 87 fellows were hired as UC ladder-rank faculty at all ten UC campuses. In addition, more than 18 fellows have been successfully recruited for UC faculty positions that will begin in 2020–21, with others still under consideration. Through Presidential support, UC has increased the number of incentives available to departments that hire fellows and 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.

Grant-funded research — Since 2015, UC has administered two National Science Foundation grants to study the faculty hiring process. The study is identifying steps in UC's hiring process susceptible to bias, characteristics that amplify or mitigate disparities, as well as policies to promote faculty equity, inclusion, and diversity. UC was also awarded a five-year grant to establish the Center for Research, Excellence, and Diversity in Team Science (CREDITS), a research and training program to enhance the capacity, effectiveness, and excellence of team science efforts at UC and CSU. CREDITS researches gender and racial/ethnic diversity in team science, particularly barriers to diverse participation and how diversity shapes the formation of science teams and the implications for promotion and tenure.

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. See glossary for additional details.

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 more limited ability to diversify, based on Ph.D. availabilities.

Faculty hires have stabilized after several years of increases as UC recovered from severe budget cuts a decade ago, and as enrollment growth demanded greater teaching capacity. Faculty separations have grown modestly, especially due to increasing retirements. 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 of salaries at the “Comparison 8,” a group of four public and four private institutions.

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 (5.3.5). With growth, UC is hoping to continue to increase the diversity of its ladder-rank faculty, but that also involves retaining faculty who contribute to that diversity. Although faculty from historically underrepresented minority communities made up 15.0 percent of all tenure-track (Assistant Professor and Lecturer with Potential Security of Employment) new hires between 2009–10 and 2018–19, they comprised 17.1 percent of tenure-track resignations. The racial/ethnic retention gap was more pronounced among domestic faculty, where faculty from historically underrepresented minority communities comprised 16.9 percent of new hires, but 20.9 percent of separations.

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

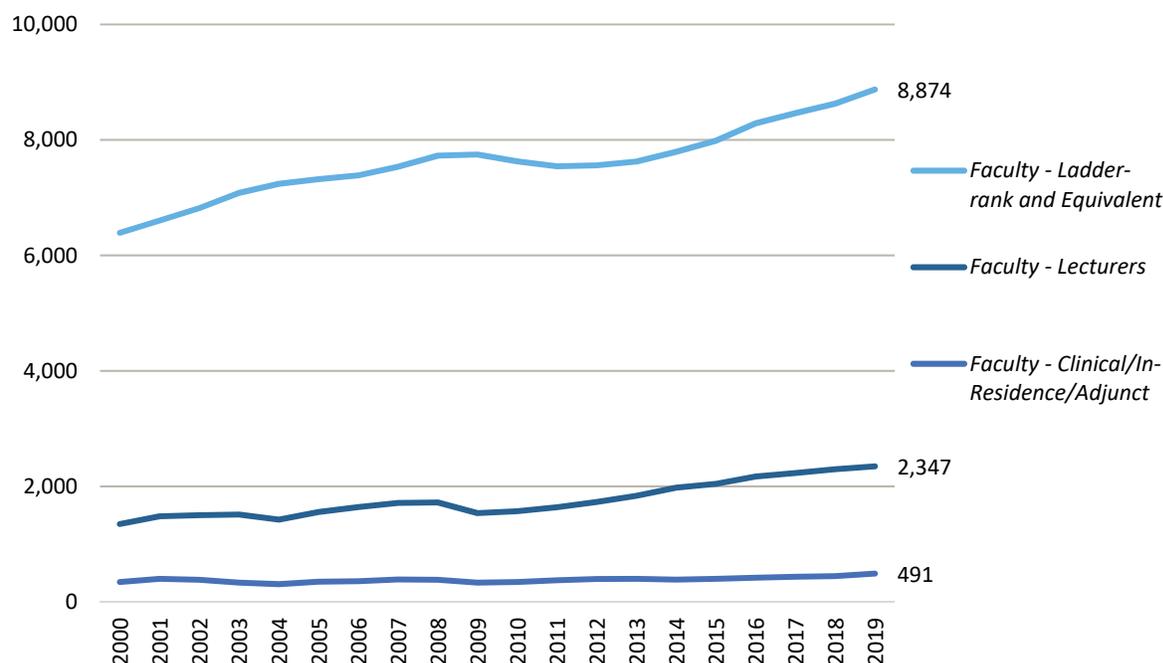
UC employee diversity data: universityofcalifornia.edu/infocenter/uc-workforce-diversity

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

5.1 ACADEMIC WORKFORCE

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

5.1.1 General campus faculty FTE total by type Universitywide October 2000 to 2019



Source: UC Corporate Personnel System

Since 2000, faculty size has increased by 3,600 FTE, or 45 percent. While all faculty types have grown, the most pronounced increase has been among lecturers, who increased over 74 percent during this period. Lecturers made up more than 20 percent of general campus faculty FTE in October 2019, a slight increase from 17 percent in 2000.

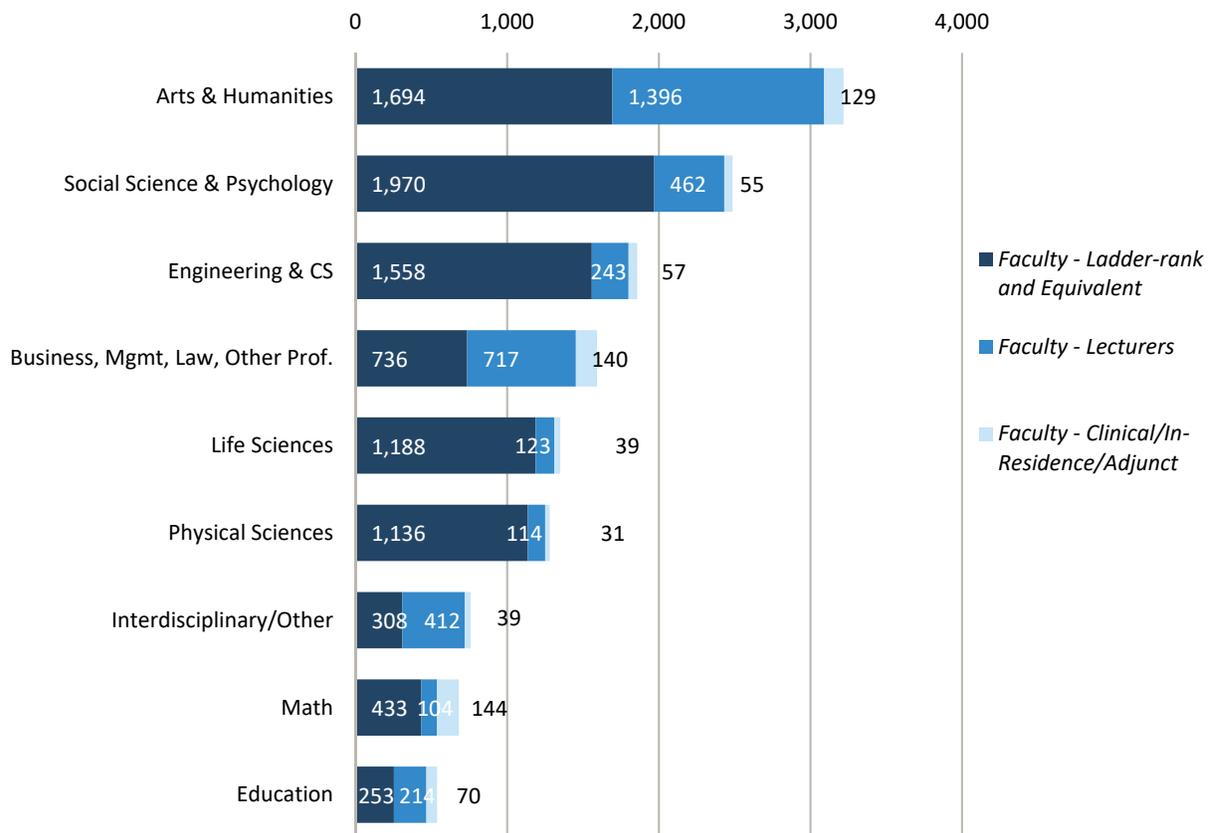
Ladder-rank faculty have grown by a more modest 39 percent, but they still make up 76 percent of faculty FTE.

At UC, lecturers do not have research responsibilities and therefore focus on teaching. These faculty help meet the instructional needs of UC's growing enrollment.

5.1 ACADEMIC WORKFORCE

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

5.1.2 General campus faculty headcount by discipline Universitywide October 2019



Source: UC Corporate Personnel System

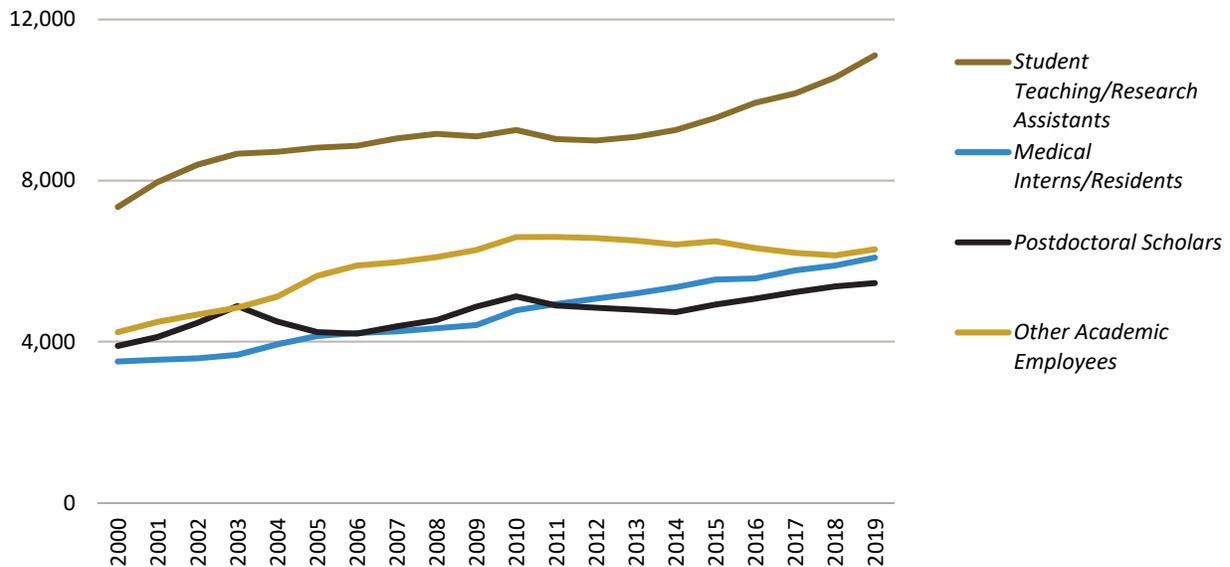
Faculty are employed in hundreds of departments across the ten campuses. Most health sciences faculty serve in the schools of medicine, with smaller numbers in other health sciences disciplines such as dentistry, nursing, pharmacy, veterinary medicine, optometry, and public health. General campus faculty are spread across a spectrum of disciplines. The disciplines with the most undergraduate majors also tend to have the most faculty.

Different disciplines rely on varying types of faculty to fulfill their teaching and research missions. 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 the professional schools.

5.1 ACADEMIC WORKFORCE

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

5.1.3 Non-faculty academic workforce FTE Universitywide October 2000 to 2019



Source: UC Corporate Personnel System

The non-faculty academic workforce has expanded alongside student and faculty growth since 2000, increasing by nearly 10,000 FTE, or 52 percent, over this period.

Student teaching and research assistants as well as health sciences interns/residents 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 period.

Postdoctoral scholars and other academic researchers, two groups heavily concentrated within the research mission, have also grown in line with faculty FTE. 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.

5.1 ACADEMIC 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 2019

	Berkeley	Davis	Irvine	Los Angeles	Merced	Riverside	San Diego	San Francisco	Santa Barbara	Santa Cruz	UCOP/ANR/SWP	
Arts & Humanities	3	3	5	8	3	3	4		9	3		41
Business, Mgmt, Law, Other Prof.	24	2	5	8		3	3					45
Education	6	6	9	12		3	1		1			38
Engineering & CS	241	93	68	113	23	40	172		148	24		922
Interdisciplinary/ Other	199	47	15	52	1	4	8		25	1	4	356
Life Sciences	337	325	123	69	8	106	125		13	26	4	1,136
Math	17	3	5	5	3	2	6		3	2		46
Medicine		182	55	371		20	645	1,028				2,301
Other Health Sciences	17	76	17	83			7	165				365
Physical Sciences	222	56	80	123	21	50	253		94	67	1	967
Social Science & Psychology	55	28	16	49	4	4	43		15	1	1	216
	1,121	821	398	893	63	235	1,267	1,193	308	124	10	6,433

Source: UC Corporate Personnel System

Note: ANR/UCOP/SWP is Agricultural and Natural Resources/UC Office of the President/Systemwide Programs

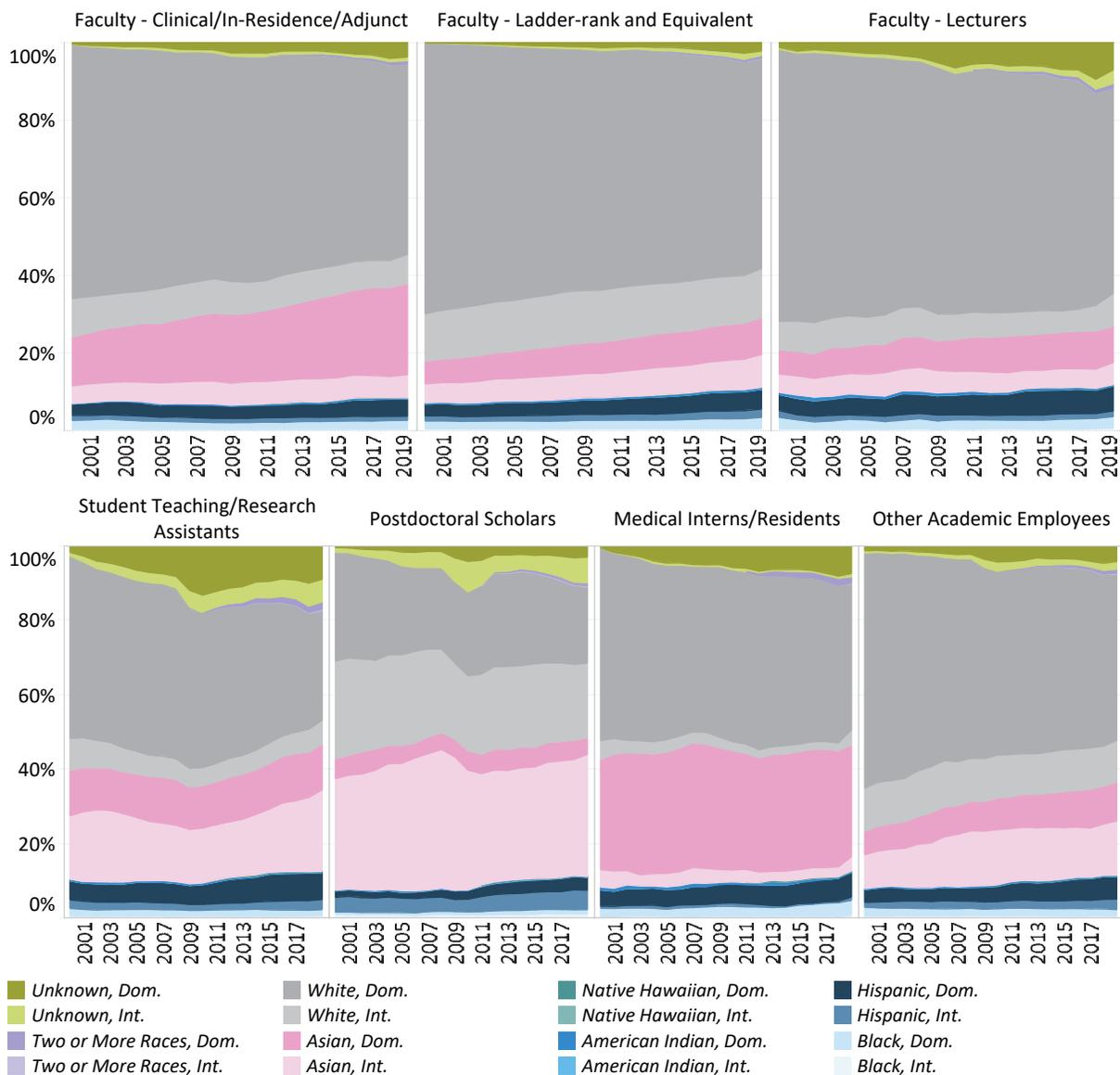
Postdoctoral scholars have completed their doctoral degrees and conduct research with faculty. Because most of their funding comes from contracts and grants, they are particularly prevalent in fields that receive large amounts of grant funding, such as medicine, life sciences, physical sciences, and engineering. Campuses with large research programs in these fields consequently have larger postdoctoral populations.

Postdoctoral scholars train under the direction and supervision of faculty mentors in preparation for academic or research careers.

5.2 ACADEMIC WORKFORCE DIVERSITY

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

5.2.1 Academic workforce race/ethnicity by type Universitywide October 2000 to 2019



Source: UC Corporate Personnel System

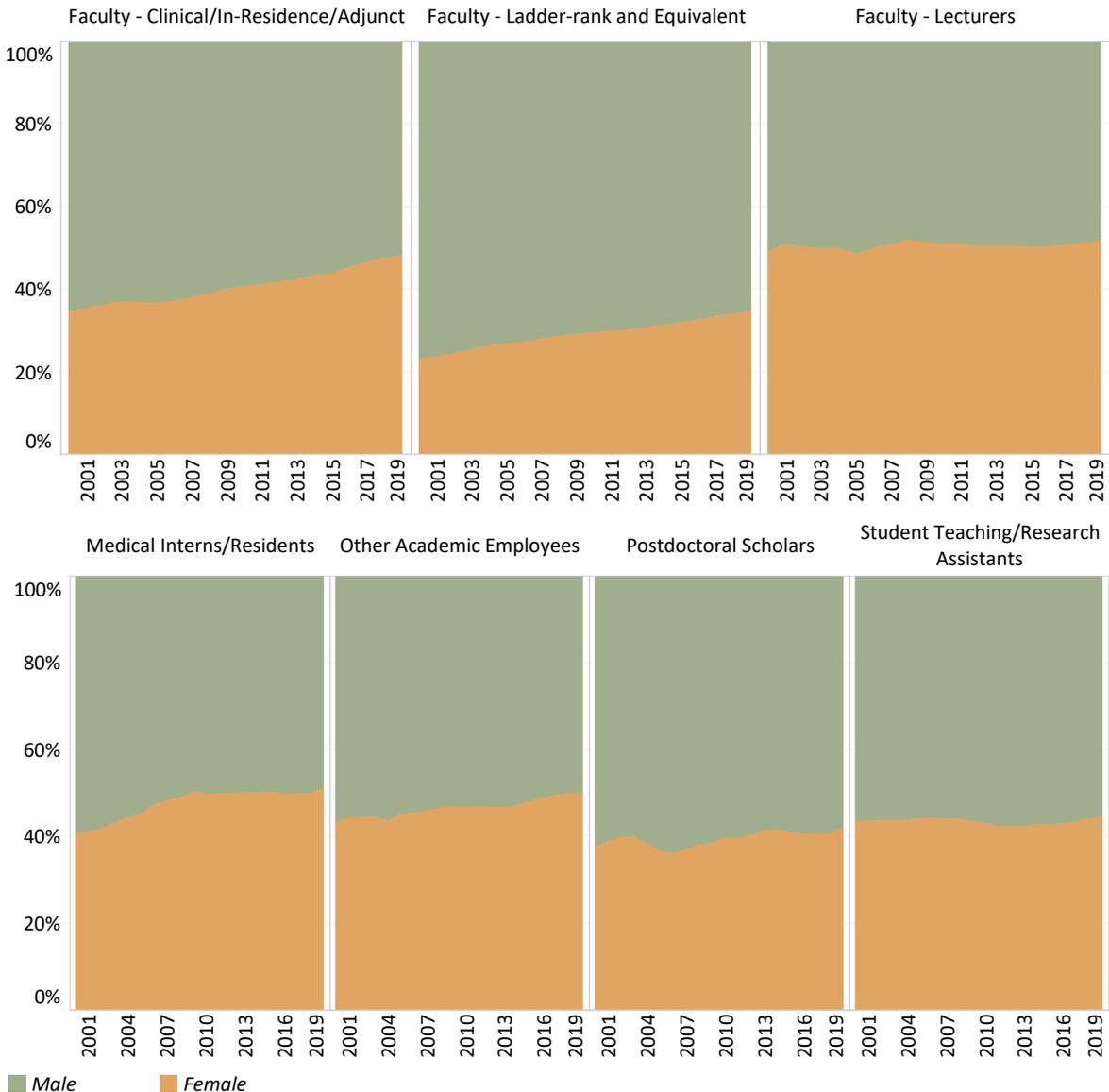
All academic positions have increased in racial/ethnic diversity since 2000. Positions with shorter durations (e.g. Students, Interns/Residents) tend to be more diverse, since turnover allows for increased diversity in hiring. Ladder-rank faculty diversity has been the slowest to change, due to long tenures and limited availability of candidates in

some disciplines. The significant number of international academics reflects a global academic marketplace. Campus, discipline, and age detail is available through the UC Information Center (universityofcalifornia.edu/infocenter/uc-workforce-diversity).

5.2 ACADEMIC 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 2000 to 2019



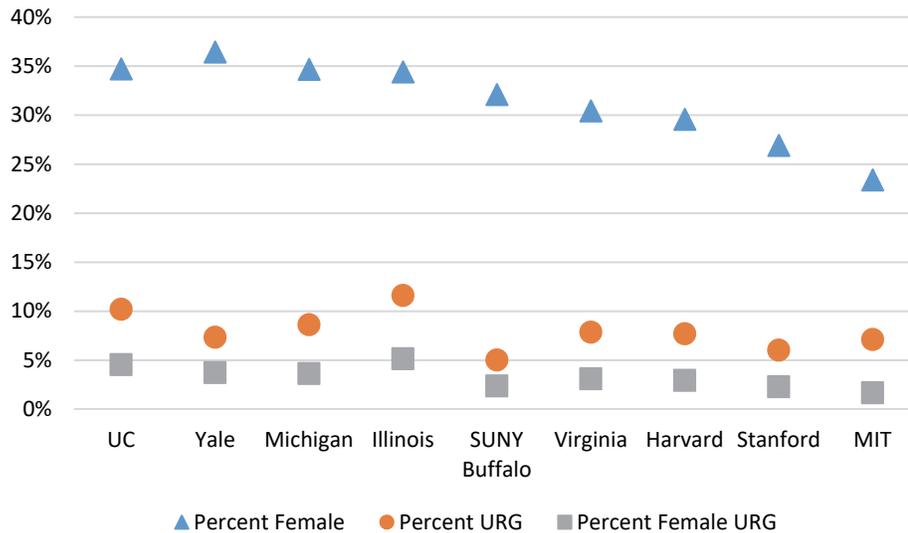
Source: UC Corporate Personnel System

Women make up half of Lecturers, Other Academic Appointees, and medical interns/residents. The ratio of women among Clinical/In-Residence/Adjunct Faculty and Ladder-Rank Faculty has risen steadily since 2001. 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, likely related to the relative proportions of men and women graduate students and recent doctorates in the academic disciplines most represented in those categories.

UC has greater faculty diversity in terms of women and underrepresented minorities than many peers.

5.2.3 Percent of tenure and tenure-track faculty who are women and/or an underrepresented group (URG) UC and comparison institutions Fall 2018



Source: IPEDS

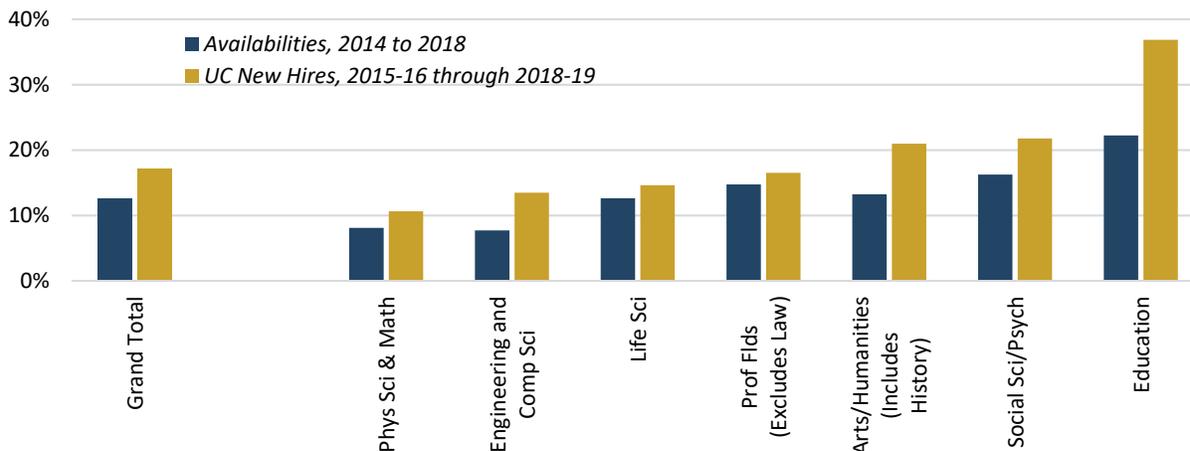
UC’s efforts to recruit women and underrepresented groups (American Indian, African American, Native Hawaiian/Pacific Islander and Hispanic/Latinx) into faculty roles puts it near the top among peer research institutions in faculty diversity.

But 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.

Relative to the “Comparison 8” universities (four public institutions: Illinois, Michigan, University at Buffalo, Virginia; four private institutions: Harvard, MIT, Stanford, Yale), UC is the second highest in terms of its proportion of women faculty (35 percent), its proportion of overall URG faculty (10.2 percent), and its proportion of women URG faculty (4.5 percent).

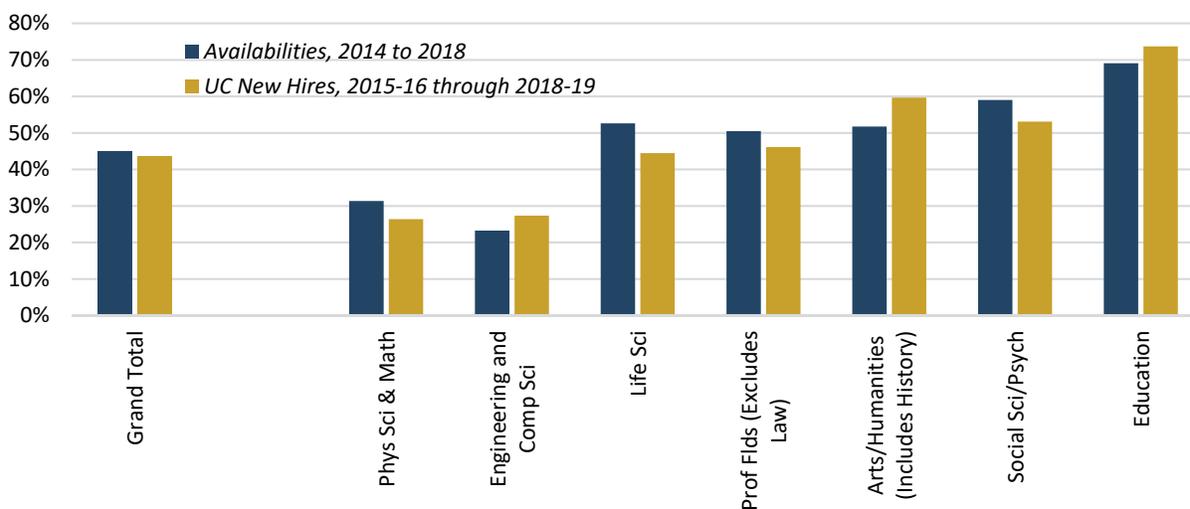
UC’s hiring of underrepresented and women faculty overall exceeds or meets the national availability of doctorates, with variation among discipline groups.

5.3.1 Underrepresented* new assistant professors compared with national availability by discipline group Universitywide 2015–16 to 2018–19



* Underrepresented includes those who identify as Black/African American/African, Hispanic/Latinx, and American Indian/Native American.

5.3.2 Women new assistant professors compared with national availability by discipline group Universitywide 2015–16 to 2018–19



Source: UC Academic Personnel and Program Administration and Survey of Earned Doctorates

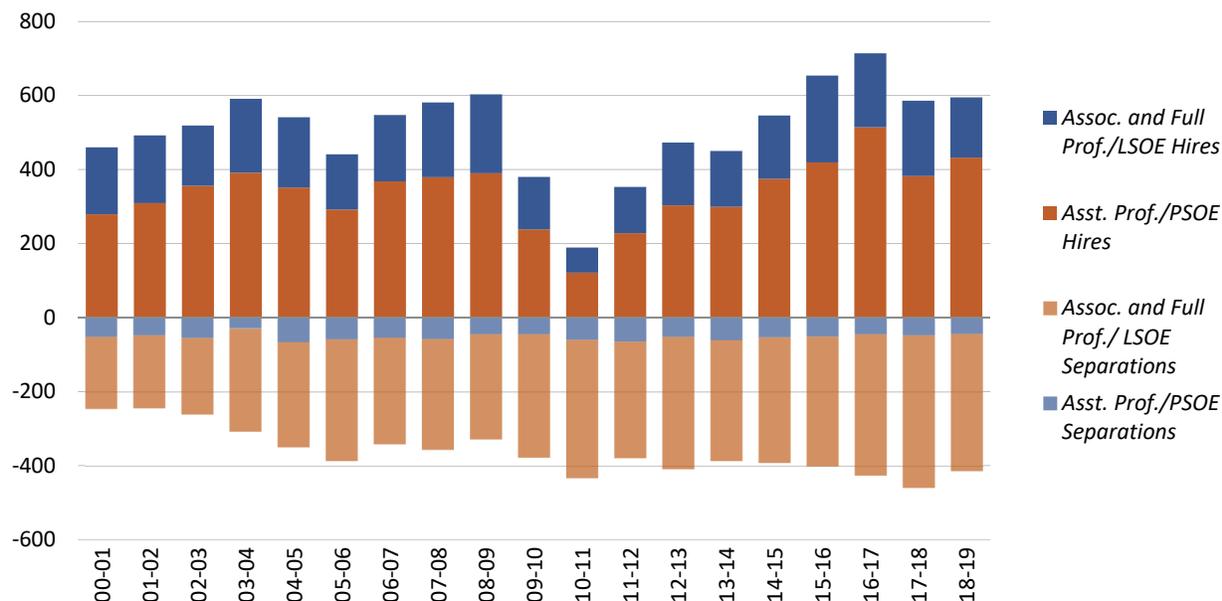
UC remains committed to diversifying its faculty and taking full advantage of the available pools of qualified candidates. Between 2014 and 2018, underrepresented groups accounted for 12.5 percent of nationwide new doctoral degree recipients and 17.2 percent of UC’s new assistant

professor hires. Between 2014 and 2018, women constituted 45.1 percent of nationwide new doctoral degree recipients and 43.6 percent of UC’s new hires. Some disciplines at UC have diversified more than others, relative to the availability pools in their field.

5.3 ACADEMIC HIRING AND RETENTION

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.

5.3.3 New hires and separations of ladder-rank and equivalent faculty Universitywide 2000–01 to 2018–19



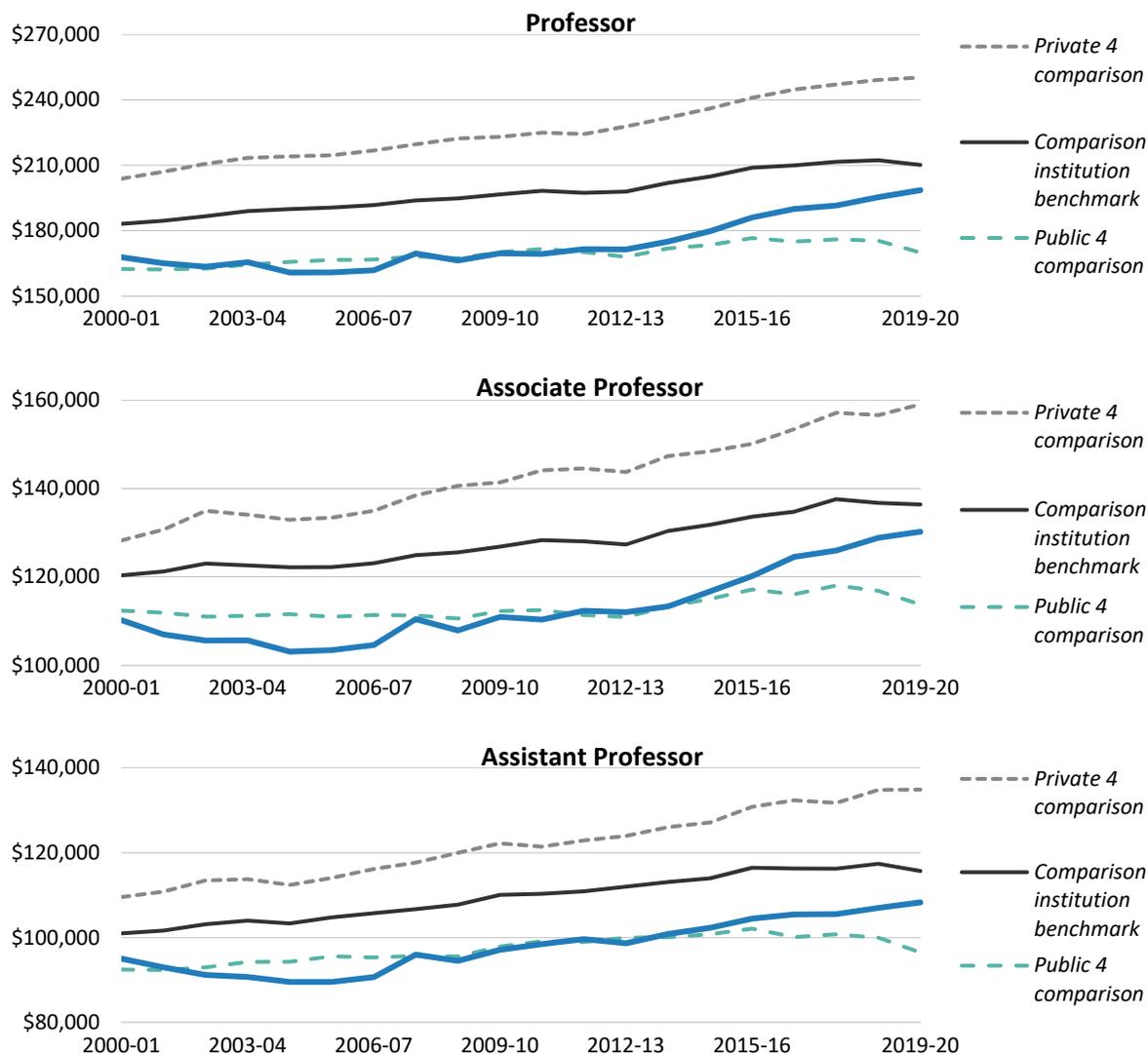
Source: UC Academic Personnel and Program Administration

Over time, faculty numbers have grown, 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.

UC has partnered with Harvard's Collaborative on Academic Careers in Higher Education (coache.gse.harvard.edu) on a research project to survey faculty who leave UC for employment at other universities. This Retention and Exit Study, now in its sixth year, is part of an effort to better understand and improve the experience of UC faculty members, as well as improve recruitment and retention.

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

5.3.4 Average ladder-rank general campus faculty salaries by rank
UC and comparison institutions
2000–01 to 2019–20



Source: UC Corporate Personnel System, AAUP faculty salary survey

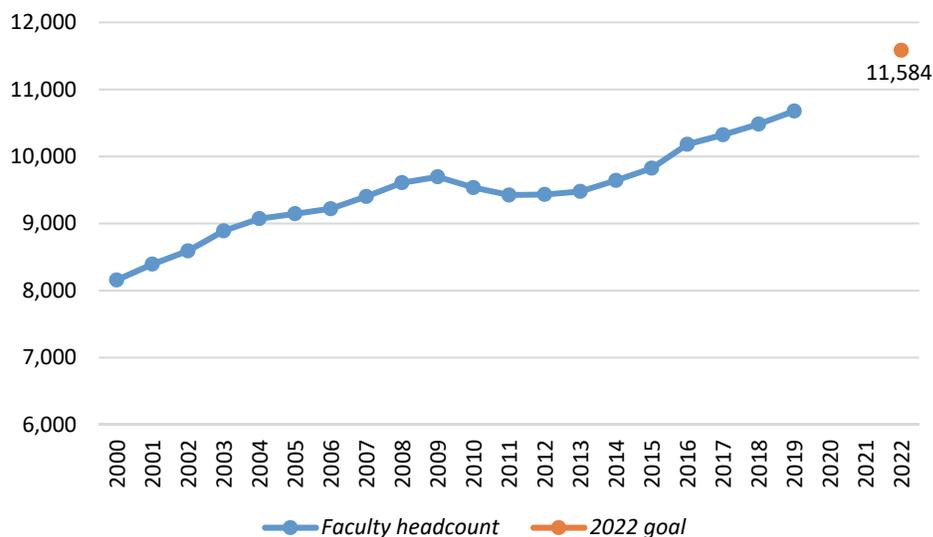
UC faculty salaries have improved in recent years, yet they continue to lag behind the comparison benchmark UC uses to assess the competitiveness of its faculty salaries. UC sets the benchmark using the average salaries of the “Comparison 8” universities (four public: Illinois, Michigan, University at 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 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.

5.3 ACADEMIC HIRING AND RETENTION

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

5.3.5 UC ladder-rank faculty headcount, excluding recall faculty* Universitywide October 2000 to 2019



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 multiyear 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.

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



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.

Non-academic staff employees constitute nearly 71 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 2019, this group included some 163,517 individuals, with about 35 percent of them part-time. Two-thirds of these part-time employees are student workers. Overall, this workforce represented 120,930 full-time equivalent (FTE) employees in that month.

Staff groups and workforce diversity

- UC Health employs over half of staff FTE (62,836) as doctors, nurses, administrators, technicians, and allied health professionals. Ninety-seven percent of these employees are supported by non-core funds, typically the revenues generated by hospital services.
- Student workers for the general campus (non-health) are predominately part-time. While their headcount is 36,173, they comprise only 8,942 FTE. Students often work on campus as part of their financial aid packages or for research experience.
- General campus, non-student employees are the remainder of the University's staff, at 49,152 FTE. This includes student services employees, librarians, IT specialists, research administration, laboratory staff, food and auxiliary service workers, accountants, maintenance and janitorial staff, safety workers, and analysts (6.1.1).

UC is dedicated to building a more diverse workforce, particularly including those from underrepresented groups. Staff at UC are majority female 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 26,340 more staff FTE than ten years ago — largely due to UC Health and student staff growth — nearly 1,000 fewer FTE are paid on core funds (6.2.1). Although tuition fee increases may partially offset the decline in the state funding, just over 18 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 UC 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 and system leader compensation falls on the lower end when compared to the peer institutions (6.2.4).

Staff separations and satisfaction

UC's separation rate among career staff is about nine percent (6.3.1), which has been relatively steady for the past decade. About 21 percent of staff separations are due to retirement and reflect the baby-boomer generation exiting the workforce. Still, a large portion of separations is due to resignation to accept another job, to move out of areas, or for other reasons (6.3.2). The 2019 UC Overall Employee Engagement Survey shows some improvement since 2017 in organizational change, communication, and sustainable engagement, but that UC is still below the national norm in eight out of nine employee satisfaction categories. While voluntary separation is often influenced by a combination of factors, employee satisfaction 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

Workforce profile: ucop.edu/institutional-research-academic-planning/_files/workforce-profile-dashboard.pdf

Employee trends report: ucop.edu/institutional-research-academic-planning/_files/employee-trends-at-uc.pdf

Chancellors: ucop.edu/institutional-research-academic-planning/_files/uc-salary-compare-system-leaders.pdf

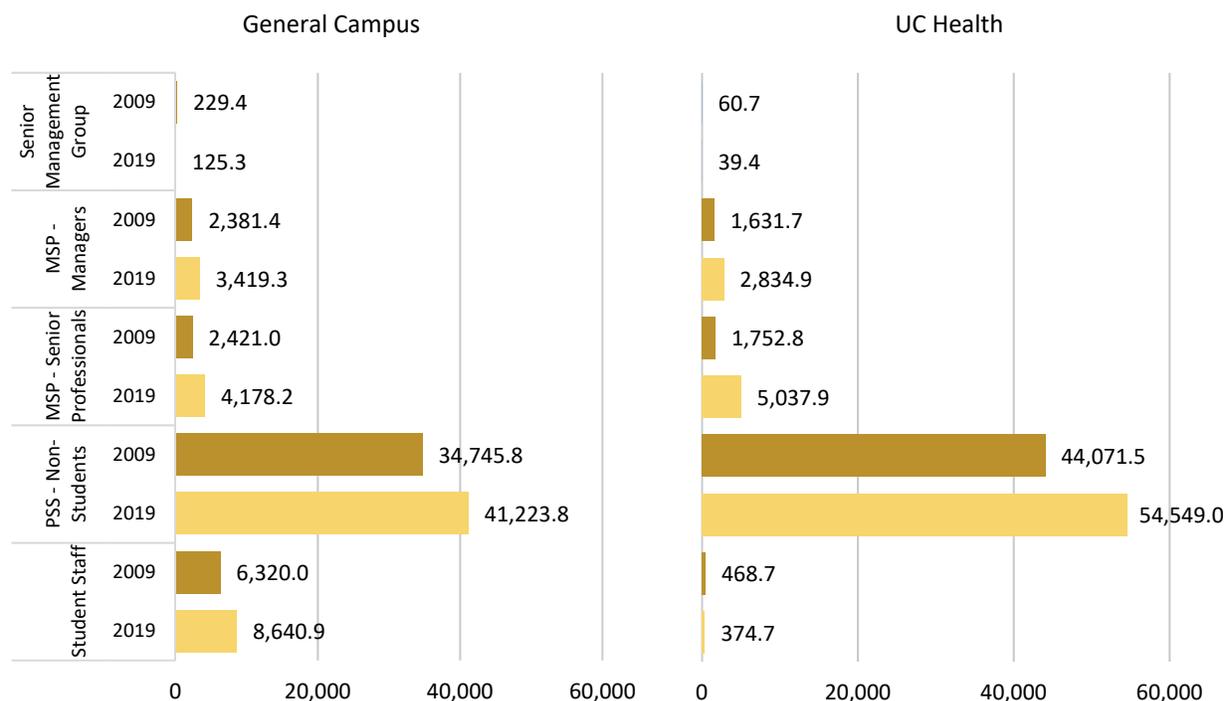
System leaders: ucop.edu/institutional-research-academic-planning/_files/uc-salary-compare-aau-chancellors.pdf

Staff engagement survey: ucop.edu/human-resources/staff/employee-relations-staff/engagement-survey.html

6.1 STAFF WORKFORCE

UC Health staff has grown significantly as health services have expanded, while general campus, non-student support staff growth has lagged behind overall student enrollment over the past decade.

6.1.1 Staff Full-time Equivalent (FTE) Universitywide, October 2009* to 2019



Source: UC Corporate Personnel System

* The Oct 2009 Senior Management FTE includes 93 positions (mostly Deans) that in 2010 were reclassified as academic employees. Excludes Lawrence Berkeley National Laboratory, Hastings School of the Law, and Associated Students UCLA.

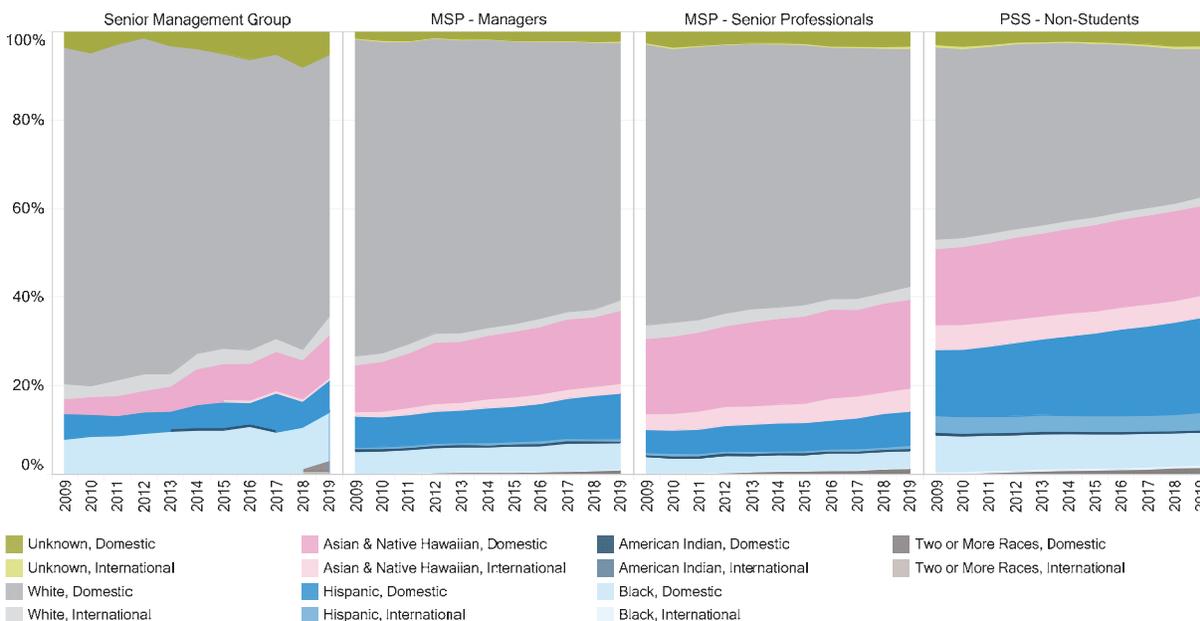
UC operates six health systems with five academic medical centers as well as schools of medicine, dentistry, nursing, and other health sciences education and research programs. Altogether, UC Health accounts for nearly 56 percent of non-academic staff growth over the past ten years. The growth has been driven by service expansions such as increases in inpatient days as well as outpatient/emergency visits. General campus student employees increased by 2,321 FTE, largely related to the additional 59,000 students UC enrolled over this period. Increased enrollment translates to more student employees working on campus as part of their financial aid packages.

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 higher-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 positions and administrative analysis to manage growing campuses and student bodies.

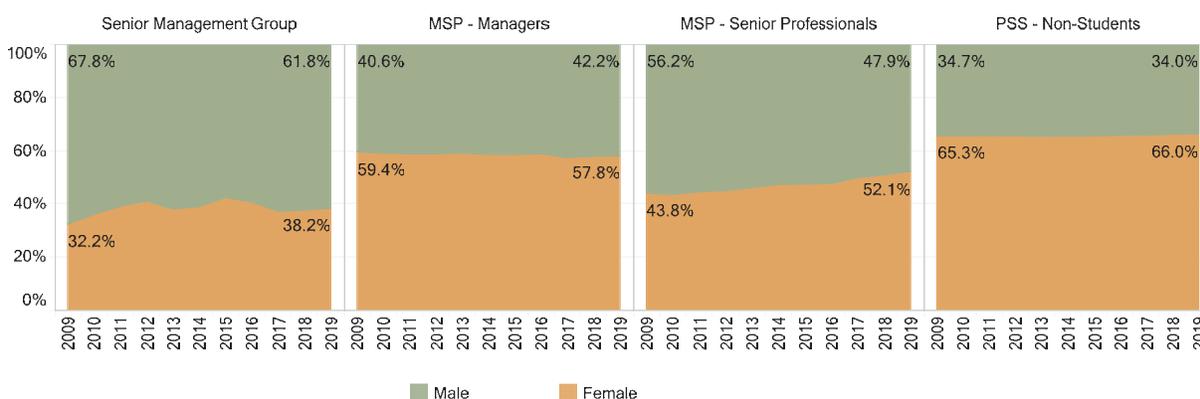
6.1 STAFF WORKFORCE

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 2009 to 2019



6.1.3 Gender diversity of non-student staff by personnel program Universitywide, October 2009 to 2019



Source: UC Corporate Personnel System

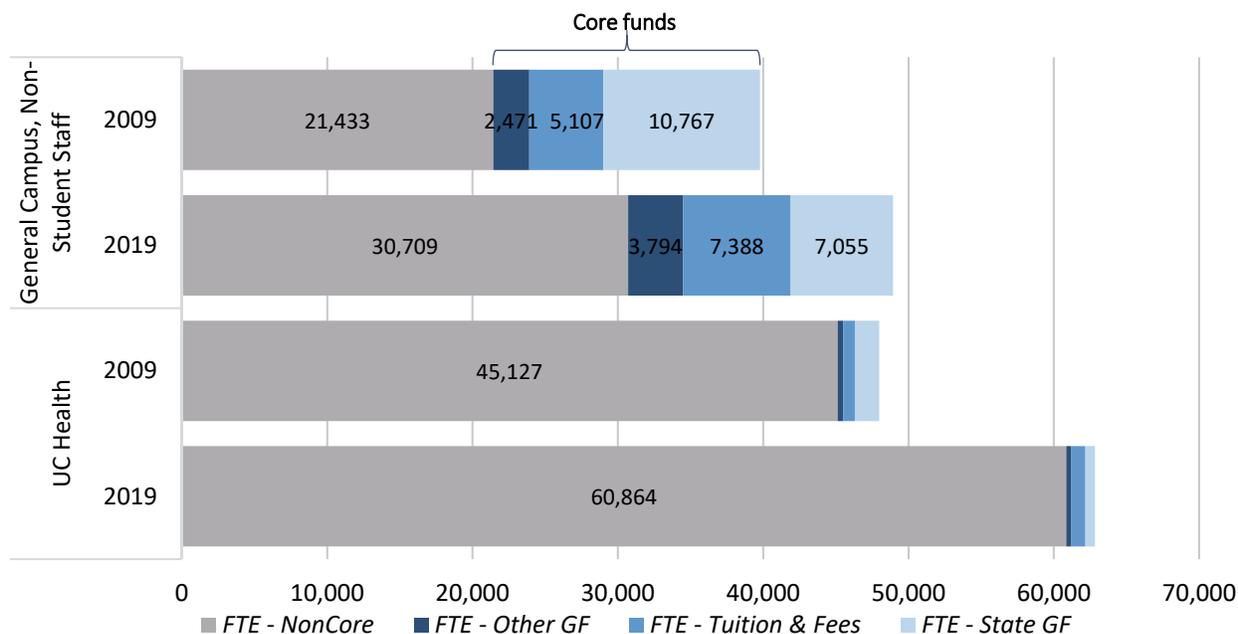
UC has sought to improve representation of historically underrepresented domestic racial/ethnic groups. Diversity has increased steadily at all staffing levels; however, management and more senior positions remain less diverse. More than half of the

managers and professional support staff employees are women. The percentage of women employees has grown steadily within the Senior Management Group (SMG), while Senior Professionals have nearly equal gender representation.

6.2 STAFF COMPENSATION

In last decade, the number of staff supported by core funds has fallen as state funding for the University has decreased. Non-core funds supported all of the UC Health and non-student, general campus staff increases over the same time.

6.2.1 Non-student staff FTE by fund source General campus and UC Health, October 2009 and 2019



Source: UC Corporate Personnel System

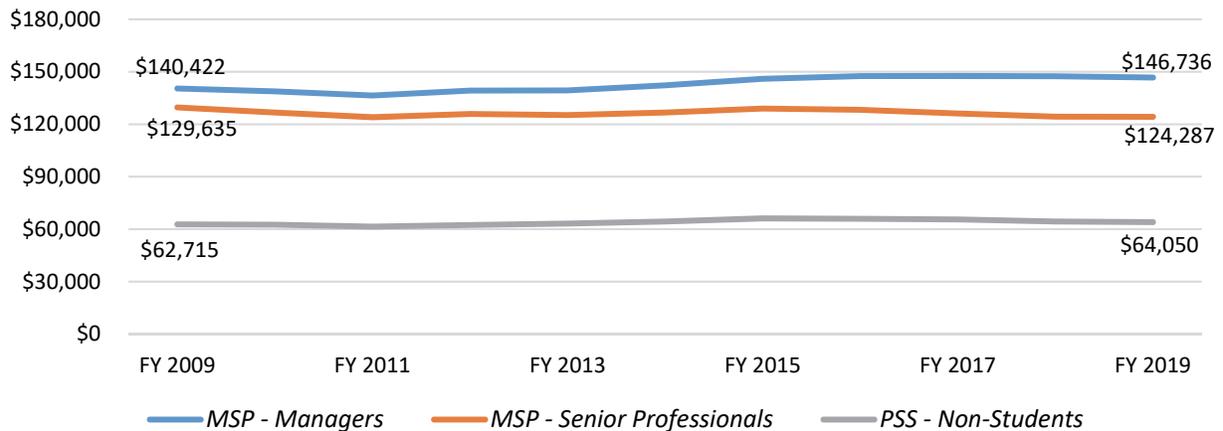
General campus employees are increasingly paid with non-core funds such as research funds, auxiliary revenues, and other sources. Though overall general campus staff increased modestly, overall core-funded staff has decreased. This is due to a drop of over 4,700 FTE in state-funded staff, which more than offsets the increases in staff funded by tuition and fees as well as other general funds.

UC Health almost exclusively relies on non-core funds, particularly from hospital revenues, to support its staff. Despite adding about 15,000 FTE, even fewer FTE today are paid on core funds than ten years ago.

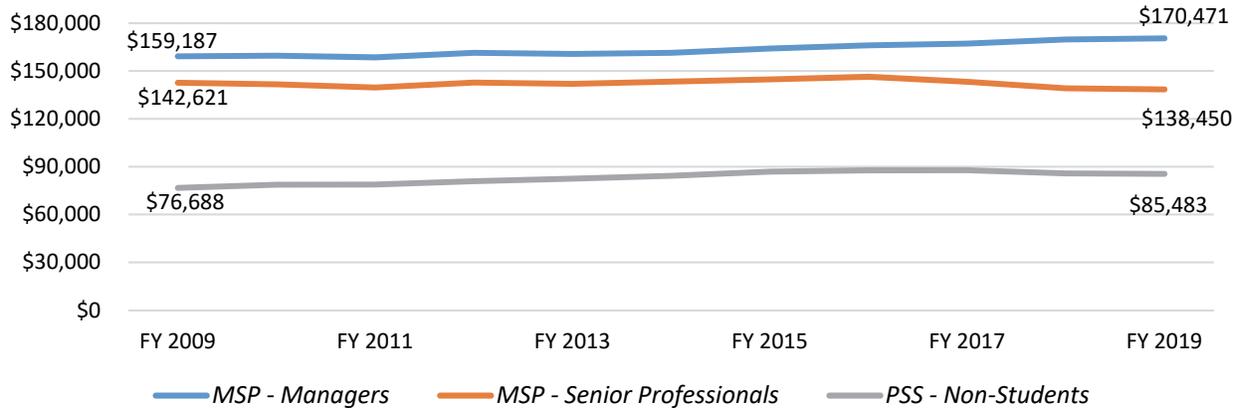
6.2 STAFF COMPENSATION

In the past decade, inflation-adjusted salaries have been relatively flat for general campus staff, with moderate increases for some UC Health staff.

6.2.2 General campus career staff average inflation-adjusted base salaries by personnel program, FY 2009 to 2019



6.2.3 UC Health career staff average inflation-adjusted base salaries by personnel program, FY 2009 to 2019



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

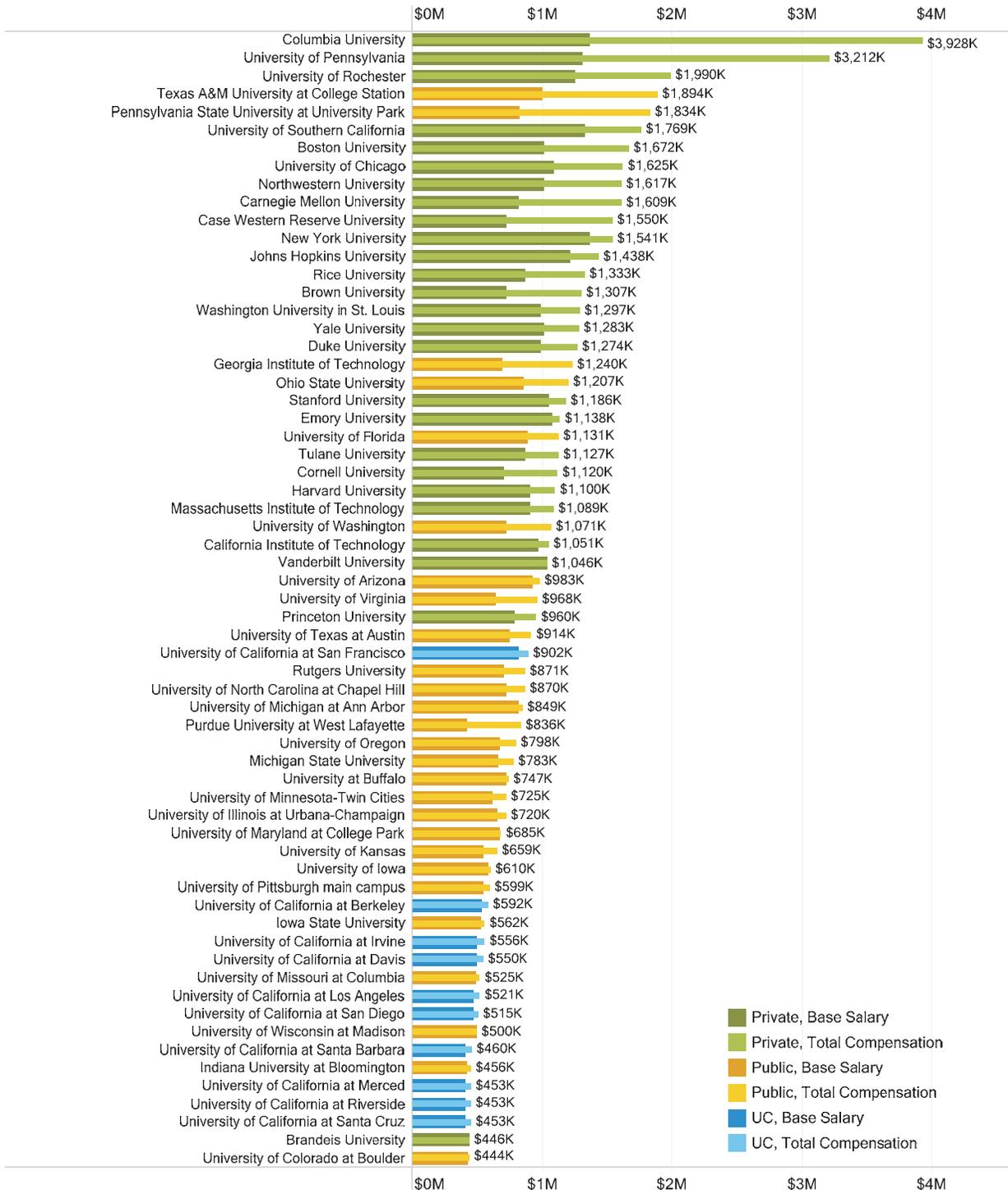
Over the past ten years, salaries in inflation-adjusted dollars have increased modestly for general campus career Managers and Support Staff, and have decreased slightly for Senior Professional staff. At the same time, UC employees are contributing more to their health care costs and to the UC retirement 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 UC Health career staff have been increasing moderately in real dollars for Professional and Support Services (PSS) staff and for Managers. This reflects market trends in wages for hospital staff and growing demand for health care professionals.

6.2 STAFF COMPENSATION

UC chancellors are among the lowest-paid when compared to their Association of American Universities (AAU) peers. The UC president's salary also remains modest compared to public peers.

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



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

6.2 STAFF COMPENSATION

UC chancellors continue to place 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.

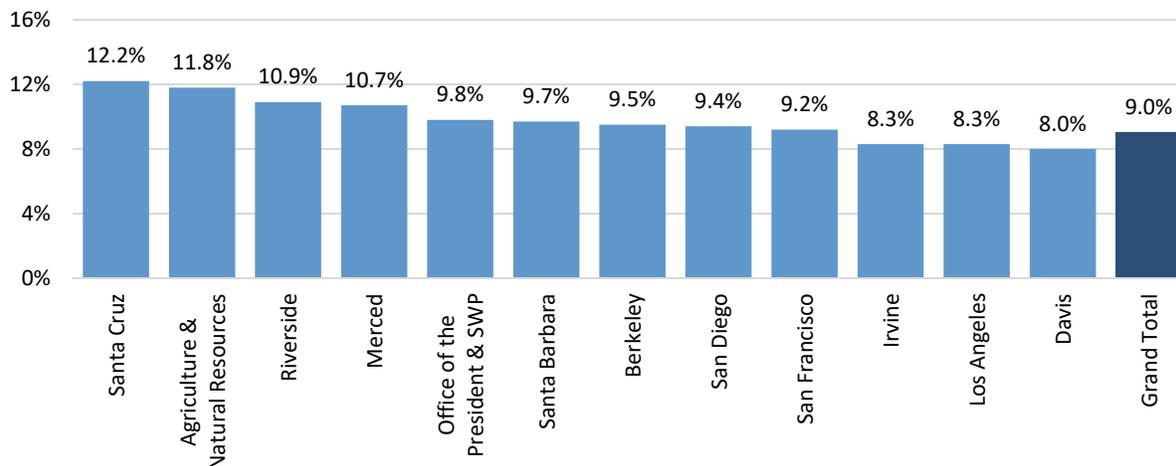
Among public system leaders (a chancellor or president who administers or coordinates multiple campuses), UC President's total compensation ranks twelfth in total compensation among thirty-two peer public university system leaders. President Napolitano is one of only three women on the list of the thirty-two public university system leaders. The UC president's compensation has not increased since September 2013.

In response to the COVID-19 pandemic and reduction in UC revenues, the UC President and UC Chancellors voluntarily agreed to reduce their salary by ten percent.

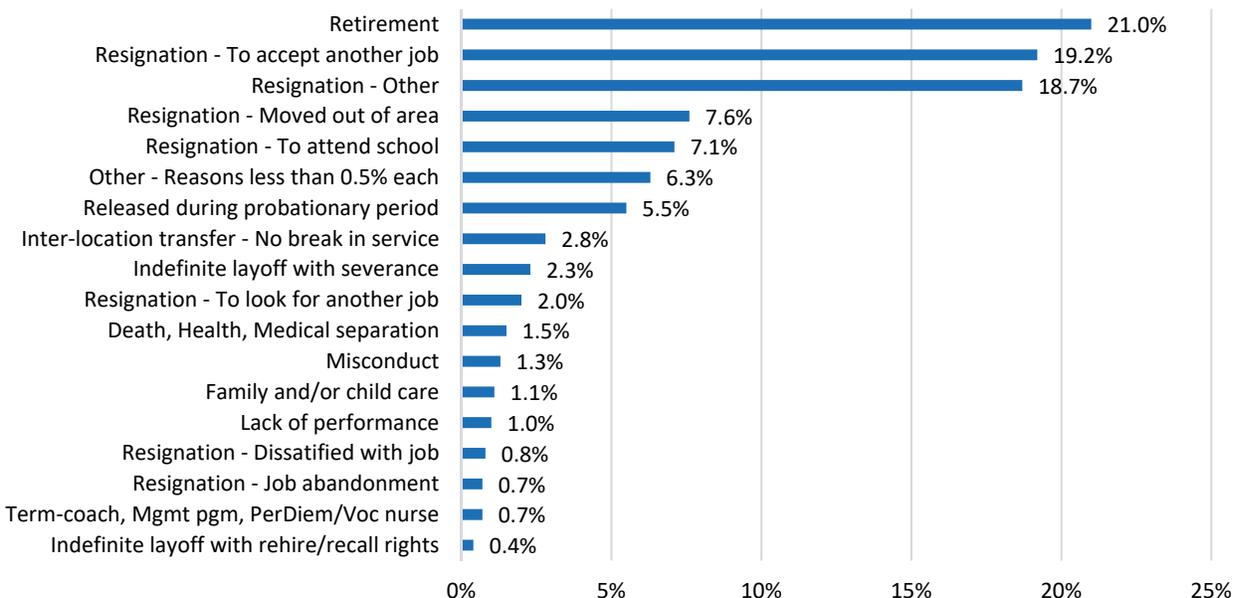
6.3 STAFF SEPARATIONS

Separation among staff is about nine percent, with significant campus variation. Retirement is the leading reason for separation.

6.3.1 Separation rates for career staff by campus and overall, FY 2018–19



6.3.2 Separation reasons for career staff, FY 2018–19



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.

Nearly 21 percent of separations are due to retirement, a result of the aging baby-boomer population. While over half of separations are resignations, 26 percent of those are due to people moving away or choosing to attend school.



DIVERSITY

Goals

The University of California strives to create diverse, equitable, and inclusive communities for students, faculty, and staff. The University aspires to achieve this goal by supporting initiatives that foster an inclusive living, learning, and working environment.

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 University particularly acknowledges the acute need to remove barriers to the recruitment, retention, and advancement of talented students, faculty, and staff from historically excluded populations who are currently underrepresented.

Findings

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

- An increase in the percentage of African American and Hispanic/Latinx undergraduate enrollment.
- An increase in transfer admittance and enrollment for all main domestic racial/ethnic groups.
- Increasing proportions of female ladder-rank faculty across all discipline groups and a slight increase in the percentage of Hispanic/Latinx ladder-rank faculty.
- An increase in people from underrepresented groups (URGs) admitted to doctoral programs, particularly in physical sciences/math and life sciences.
- An increase in the number of Hispanic/Latinx career staff at UC campuses and UC Health, especially among managers and senior professionals (MSP).

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

- Enrollment rates are low for African American and American Indian undergraduates, compared to the actual admission rate.
- Undergraduate African American students are less likely than other ethnic groups to agree that they are respected on campus.
- A graduation gap persists between underrepresented undergraduates and White and Asian undergraduates (presented in Chapter 3 of this report).
- The proportion of women and underrepresented faculty is low, compared to availability pools in most disciplines (presented in Chapter 5).
- 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 and respect.

Chapters 1 through 6 present an overview of trends for undergraduate, graduate academic and graduate professional students, faculty, and staff. This feeds into an overview of the University by race/ethnicity and gender.

As shown in indicator 7.3.1, trend data illustrate growing proportions of underrepresented and international students in the undergraduate population. Over the last 15 years, the proportion of Hispanic/Latinx undergraduates has grown tremendously, reflecting both the growing number of Hispanic/Latinx students in California and improvements in high school graduation rates. Five UC campuses (Irvine, Merced, Riverside, Santa Barbara, and Santa Cruz) are designated by the federal government as Hispanic-Serving Institutions (HSIs). A sixth institution, UC Davis, is very close to meeting the requirements to be eligible for HSI designation status, and UCLA and UC San Diego have seen significant growth in their Hispanic student populations. UC Berkeley seeks to become a HSI by 2027 according to their strategic plan.

Chapter 4 (4.1.2) shows that among graduate academic students, underrepresented populations display steady increases across disciplines, with growth in international students, primarily in physical science and engineering. Women are the majority in all disciplines except for physical science and engineering. Graduate professional degree programs show similar patterns for underrepresented and international students, with variation by discipline. Education programs have a larger proportion of underrepresented students, and business and other professional degree programs have growing international populations. The proportion of women in graduate professional degree programs is around 50 percent or higher for all disciplines except business and engineering.

The proportion of women and underrepresented groups in the faculty continues to grow at a modest pace. Compared with ladder-rank faculty, many other academic positions are more ethnically diverse and gender-balanced because they experience more rapid turnover. Still, comparing UC's faculty diversity with peer research institutions, UC places second in terms of female faculty and in terms of faculty from URGs (5.2.3).

For staff, the proportions of nonwhite and female managers and senior professional (MSP) and senior management group (SMG) positions are smaller than their proportions in professional and support staff (PSS) positions. The proportion of women among ladder-rank faculty is lower than proportions among other academic employees, as shown in Chapter 5.

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 keeping pace with the diversity of California high school graduates.

The University of California's multiyear framework — UC 2030 — focuses on expanding the pipeline to and within the University. For example, one goal of eliminating timely graduation gaps for underrepresented groups is that a greater proportion will choose to go onto graduate school and one of the goals of growing graduate enrollment is to increase spaces for these students. In addition, UC's increasing diversity of doctoral students will help expand the availability pool, supporting the University's efforts to further diversify its faculty.

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, 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 conservative politically.

Looking Forward — Diversity Initiatives

UC has made considerable investments in 2018 and 2019 to diversify the faculty, staff, and senior leadership. It has also created meaningful opportunities for historically underrepresented populations to be fully recognized and build inclusive communities.

In the 2017 Budget Act, the State allocated \$2 million to the University of California in one-time funding to support equal opportunity in faculty employment. UC's budget from the State for 2018–19 included another year of \$2 million in funding, which was matched by an additional commitment of \$454,000 from President Napolitano. Ten campus proposals have been funded. These include four faculty recruitment pilots (Life Sciences at UC Berkeley; campus-level at UC Davis; Schools of Natural Sciences and Engineering at UC Merced; and the Department of Math at UC Riverside) and six retention/climate pilots (School of Public Health at UC Berkeley; STEM schools at UC Irvine; College of Humanities, Arts, and Social Sciences at UC Riverside; Division of Arts and Humanities at UC San Diego; Departments of Engineering and Physics at UC Santa Barbara; and campus-level at UC Santa Cruz). These initiatives will enable campus-level departments and disciplines to continue investing in programs and practices that yield and retain a diverse and talented professoriate.

Two systemwide convenings were held to focus on the infrastructure, capital, and staffing needed as more UC campuses move toward becoming HSIs. The UC Chicano(a)/Latinx Leadership Summit brought together campus teams of faculty, staff, administrators, and graduate students to network, to gain a greater understanding of Chicano(a)/Latinx representation at UC, and to help develop strategies for engaging UC's next generation of leaders. The Summit was followed by the Hispanic-Serving Institution Retreat, where campus teams learned from current HSI campus representatives and national HSI scholars about attributes of model HSIs.

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. Regional trainings took place in Oakland, Sacramento, Northridge, and Irvine from January 2020 to October 2020. The content covered biases at the intersections of race, gender, sexual orientation, and religious affiliation, and introduced evidence-based strategies for disrupting the harmful impacts of implicit bias at the individual, interpersonal, and institutional level.

2018 and 2019 also marked the passage and implementation of the Gender Recognition Act (California Senate Bill 179). The bill streamlines the process for Californians to change their gender designations on state documents and creates a new nonbinary gender code option (the letter "X" or "NB") on California birth certificates, driver licenses, identity cards, and gender-change court orders. This enables gender minority populations (e.g., transgender, intersex, and nonbinary people) to have fuller recognition in California.

To honor the spirit of the Gender Recognition Act, Systemwide Human Resources has updated the University's new systemwide payroll system (UCPath) to provide employees the opportunity to self-identify as a nonbinary gender. Changes to student data systems are also being evaluated for implementation

For More Information

March 2014 UC campus climate regents item: regents.universityofcalifornia.edu/regmeet/mar14/e2.pdf

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

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

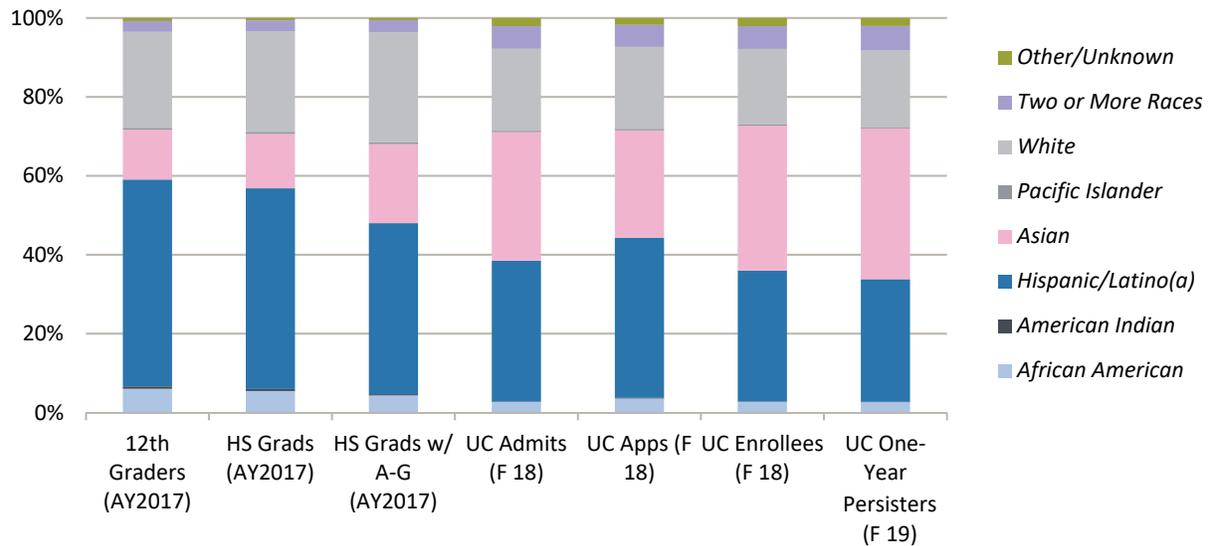
Graduate admissions data: universityofcalifornia.edu/infocenter/graduate-admissions

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

7.1 UNDERGRADUATE PIPELINE

The ethnic diversity of California high school graduates is not reflected in UC enrollment process.

7.1.1 Racial/ethnic distribution of the UC undergraduate pipeline Universitywide Fall 2018 new freshman cohort from California public high schools



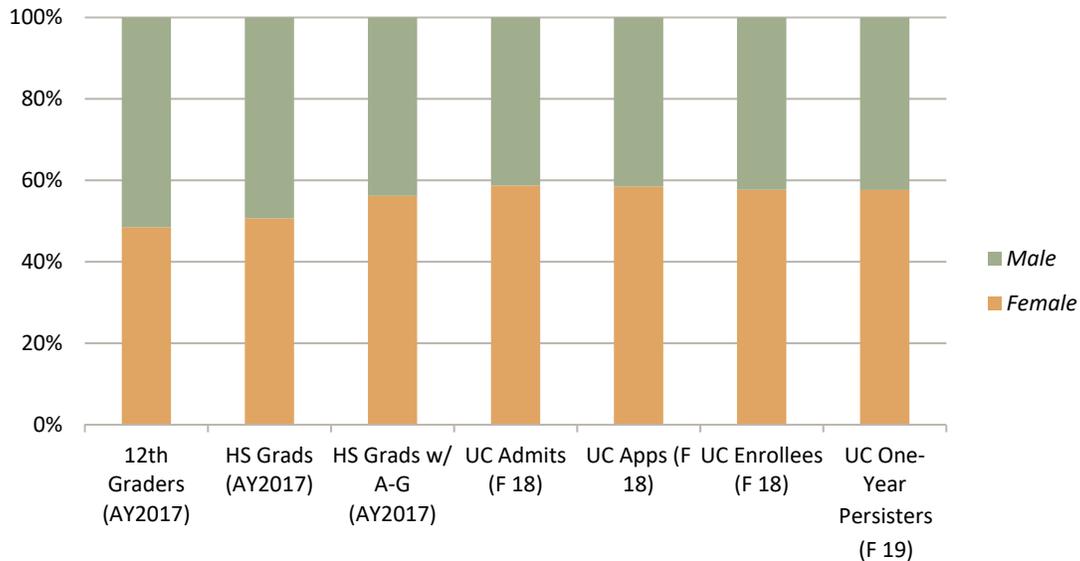
Sources: California Department of Education; College Board; UC Information Center Data Warehouse

In 2017–18, about six in ten California public high school 12th-graders were from historically underrepresented ethnic groups (American Indian, African American, Hispanic/Latinx and Pacific Islanders). 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 relative to all California 12th-graders.

7.1 UNDERGRADUATE PIPELINE

UC enrolls a greater share of women undergraduates, compared to California high school graduates.

7.1.2 Gender distribution of the UC undergraduate pipeline Universitywide Fall 2018 new freshman cohort from California public high schools

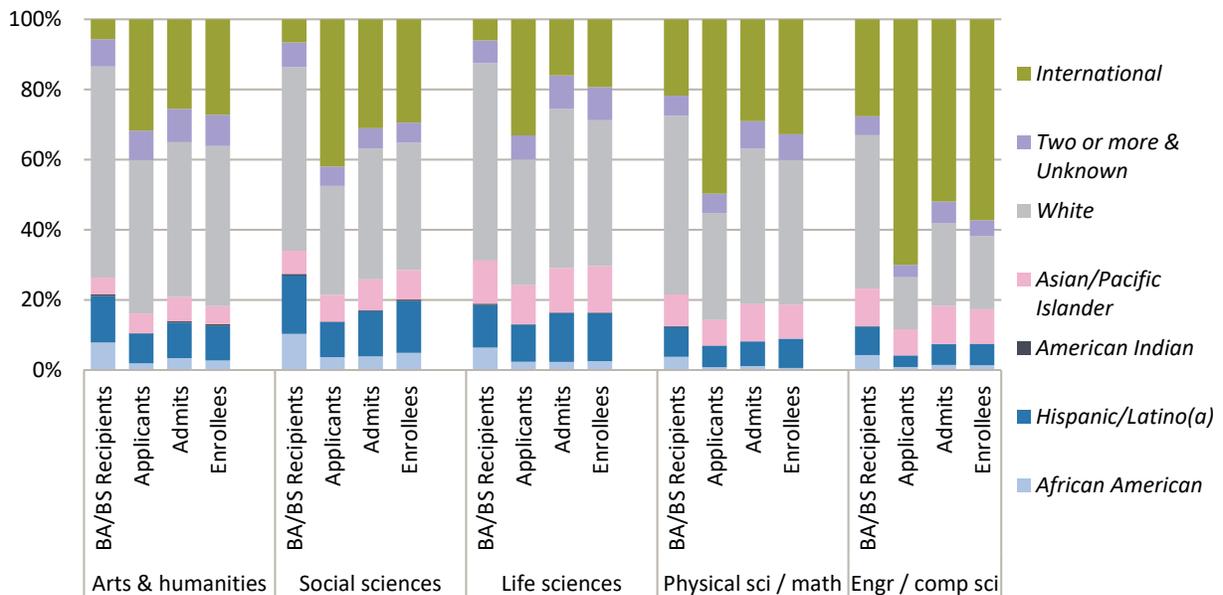


Sources: California Department of Education; College Board; UC Information Center Data Warehouse

In 2017–18, about half of California public high school 12th-graders were female. However, 60 percent of these 12th-graders who enrolled in UC and persisted past their first year were female. Women become more represented than men at almost every point of the eligibility and enrollment process relative to their representation among California 12th-graders.

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 institutions compared to UC doctoral applicants, admits, and enrollees from U.S. institutions Universitywide 2017–18



Sources: Integrated Postsecondary Educational Data System; UC Information Center Data Warehouse

In 2018–19, the proportion of UC doctoral applicants, admits and enrollees from underrepresented ethnic groups (African American, Hispanic/Latinx, American Indian, and Pacific Islander) closely matched the pool of Bachelor’s degree recipients from U.S. colleges/universities, in most fields.

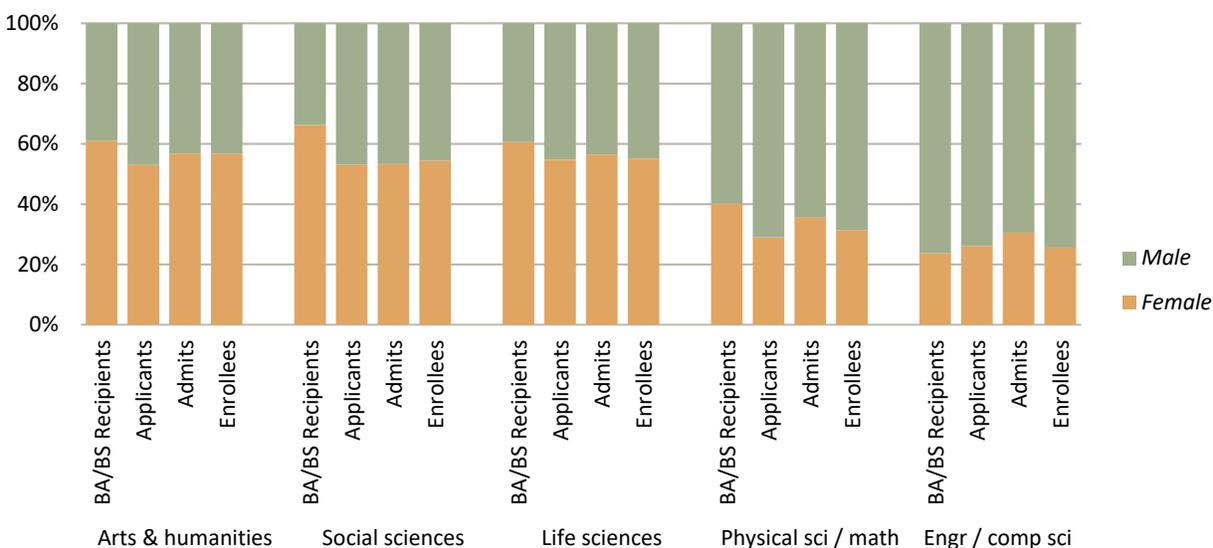
UC’s graduate programs draw students from across the nation and around the world, including its own undergraduate students, who make up about one-tenth of UC’s graduate students. As a result, UC’s efforts to diversify its undergraduate students also help to diversify its graduate academic population.

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.

7.2 GRADUATE STUDENT PIPELINE

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 institutions compared to UC doctoral applicants, admits, and enrollees from US institutions
Universitywide
2017–18



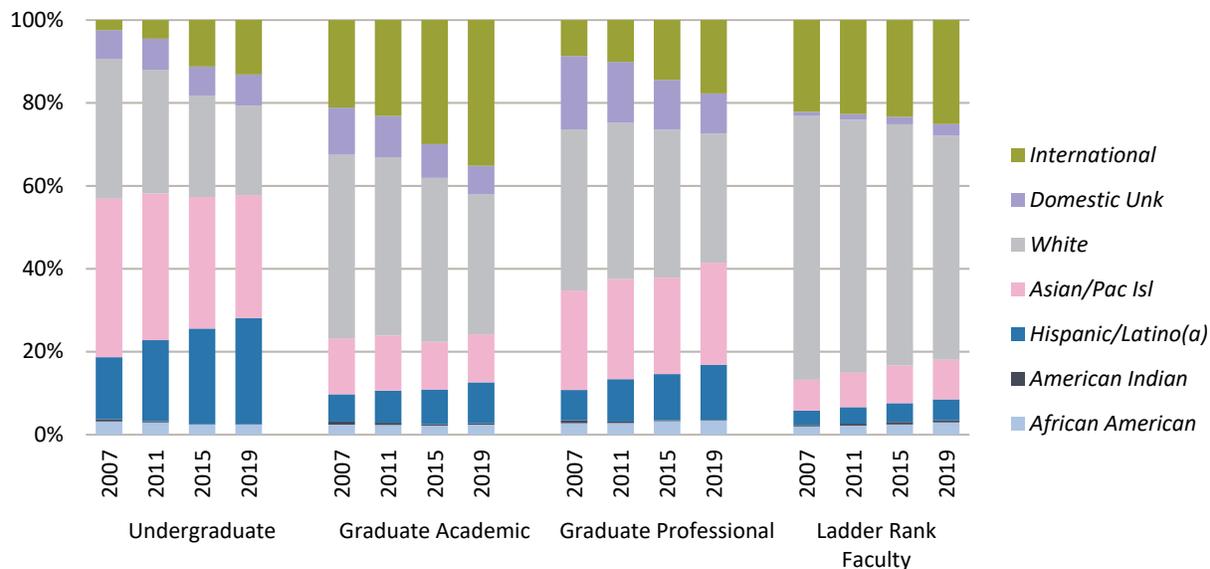
Sources: Integrated Postsecondary Educational Data System; UC Information Center Data Warehouse

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.

7.3 DIVERSITY OF THE UNIVERSITY COMMUNITY

Undergraduates have the highest proportion of underrepresented students. Graduate professional and graduate academic populations vary in their share of international students. Ladder-rank faculty are less diverse overall.

7.3.1 Racial/ethnic distribution of students and ladder-rank faculty Universitywide Selected years, fall 2007 to 2019



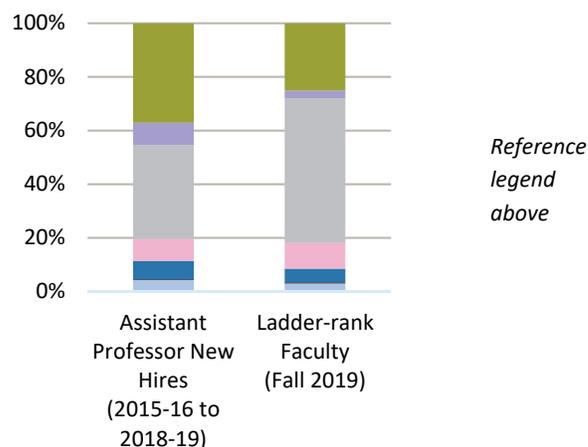
Source: UC Information Center Data Warehouse. Undergraduates include approximately 300 postbaccalaureate teaching credential students. “Two or more” are included in unknown/other.

Twenty-nine percent of undergraduate students are from underrepresented (Hispanic/Latinx, American Indian, Pacific Islander, and African American) groups. About 13 percent of graduate academic and 16 percent of graduate professional students are from underrepresented groups. International students represent 35 percent of graduate academic and 18 percent of graduate professional students.

Compared to the student population, a higher proportion of faculty identify as white or are international citizens. However, the graph shows that recent assistant faculty hires (tenure-track) are more diverse than the ladder-rank faculty. Assistant faculty have the primary responsibility for the delivery of instruction and the supervision of research. They are also responsible for admissions and curriculum. More information on faculty diversity is available in chapter 5.

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

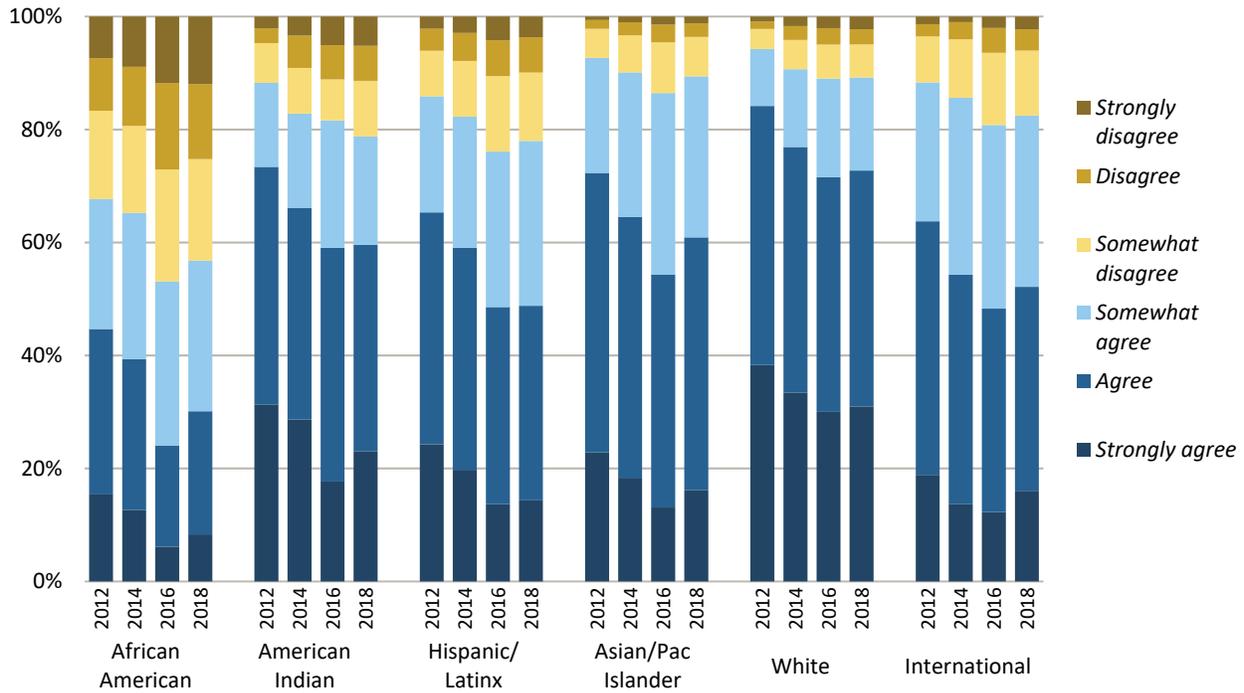
7.3.2 Assistant professor hires compared to ladder-rank faculty 2015–16 to 2018–19 (hires) and fall 2019 (current faculty)



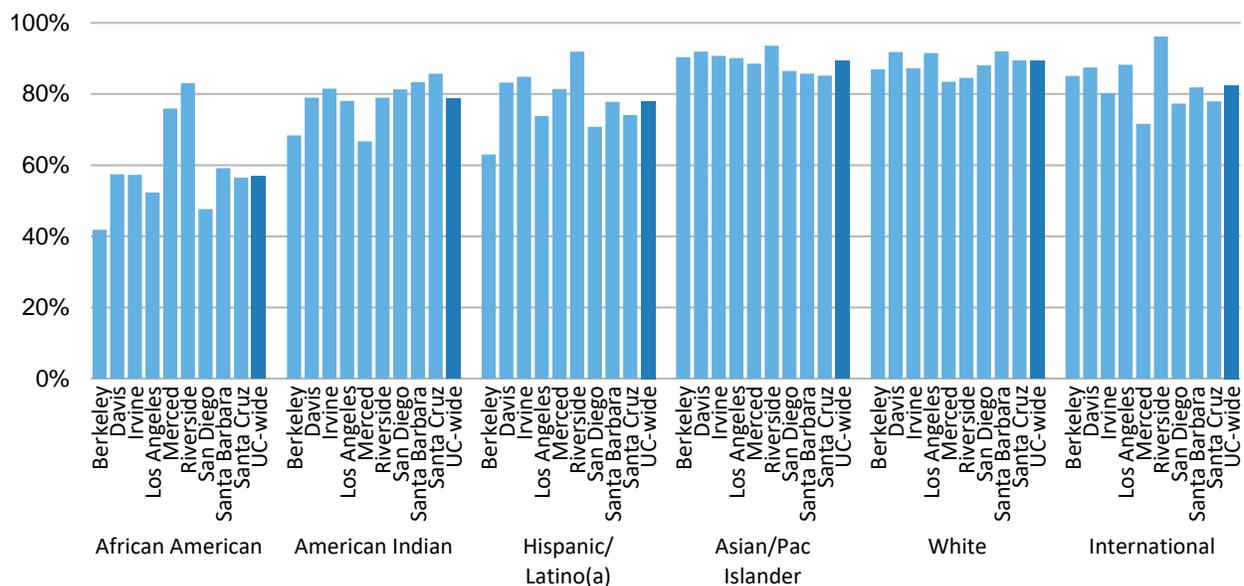
7.4 UNDERGRADUATE CAMPUS CLIMATE

African American 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 2012, 2014, 2016, and 2018



Percent who somewhat agree, agree, or strongly agree, 2018

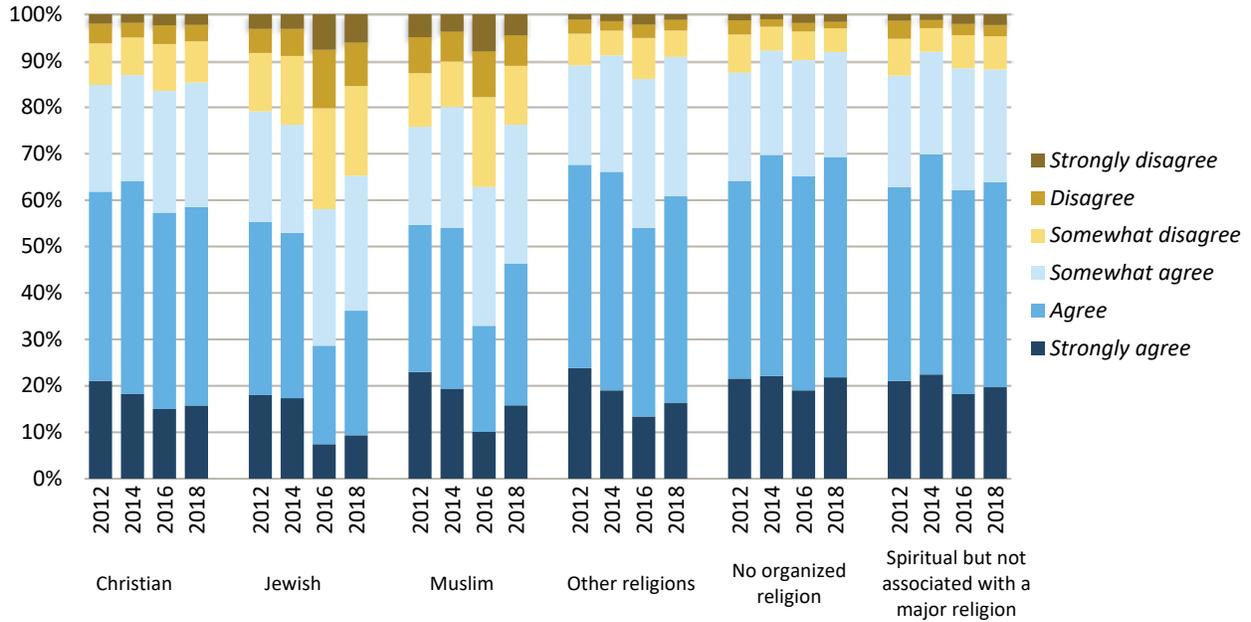


Source: UCUES

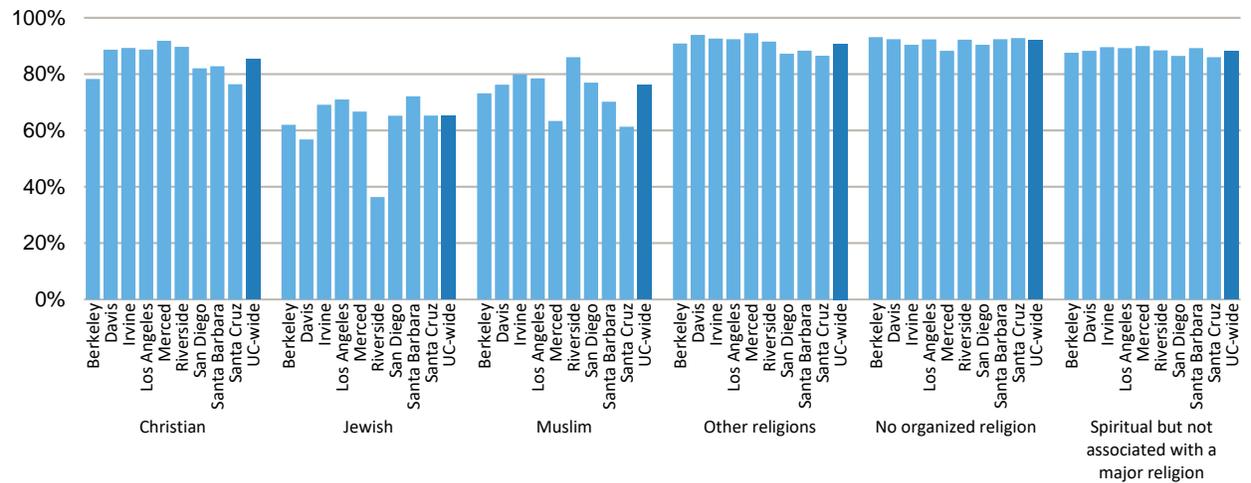
7.4 UNDERGRADUATE CAMPUS CLIMATE

The share of students who felt their religion was respected increased between 2016 and 2018, particularly for Muslim students.

7.4.2 Response to “Students of my religion are respected on this campus”
Universitywide and UC campuses
Spring 2012, 2014, 2016, and 2018



Percent who somewhat agree, agree, or strongly agree, (2016 and 2018 combined)

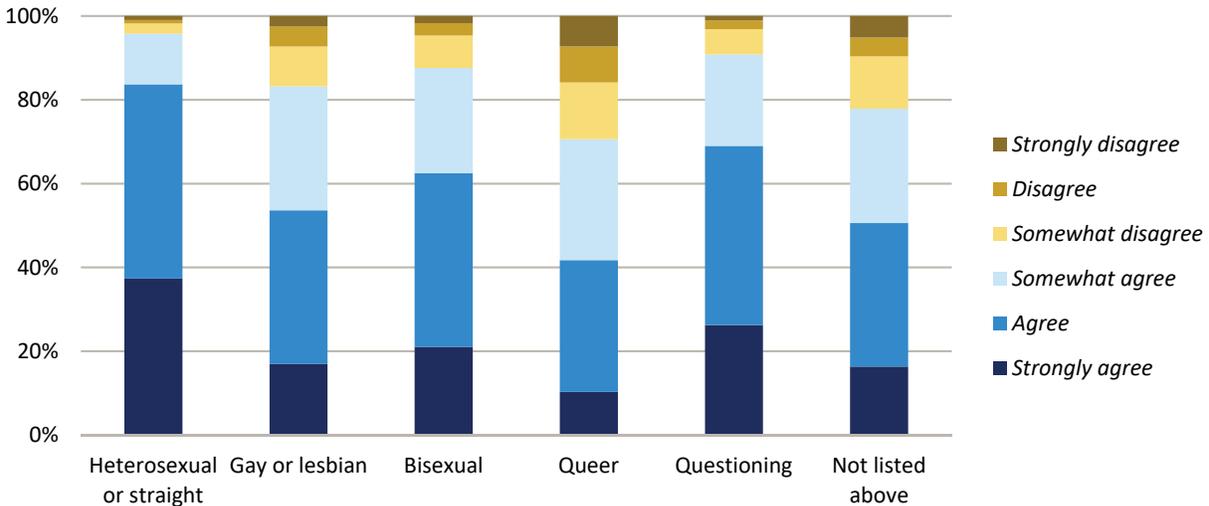


Source: UCUES. 2014 and 2016 are combined due to small cell sizes. The religion grouping definitions are in the appendix.

7.4 UNDERGRADUATE CAMPUS CLIMATE

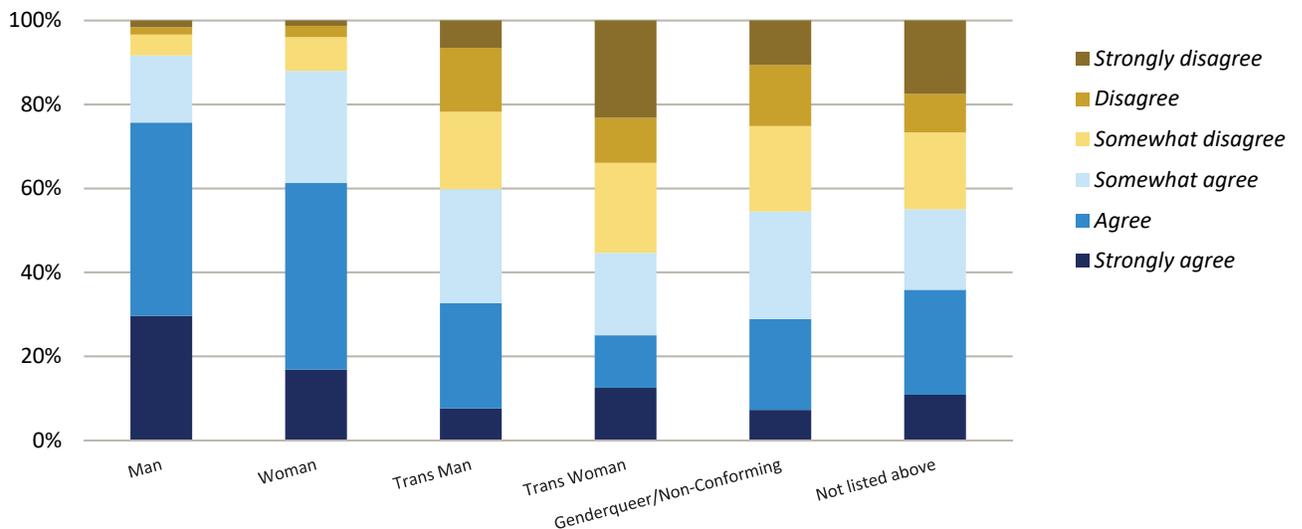
Undergraduates who identify as LGBTQ and those who identify as other than male or female are less likely to feel respected on campus than those who do not.

7.4.3 Response to “Students of my sexual orientation are respected on this campus” Universitywide Spring 2018



Source: UCUES. Only one year is shown because the response options changed in 2016. Campus data not shown due to small group sizes.

7.4.4 Response to “Students of my gender are respected on this campus” Universitywide Spring 2018



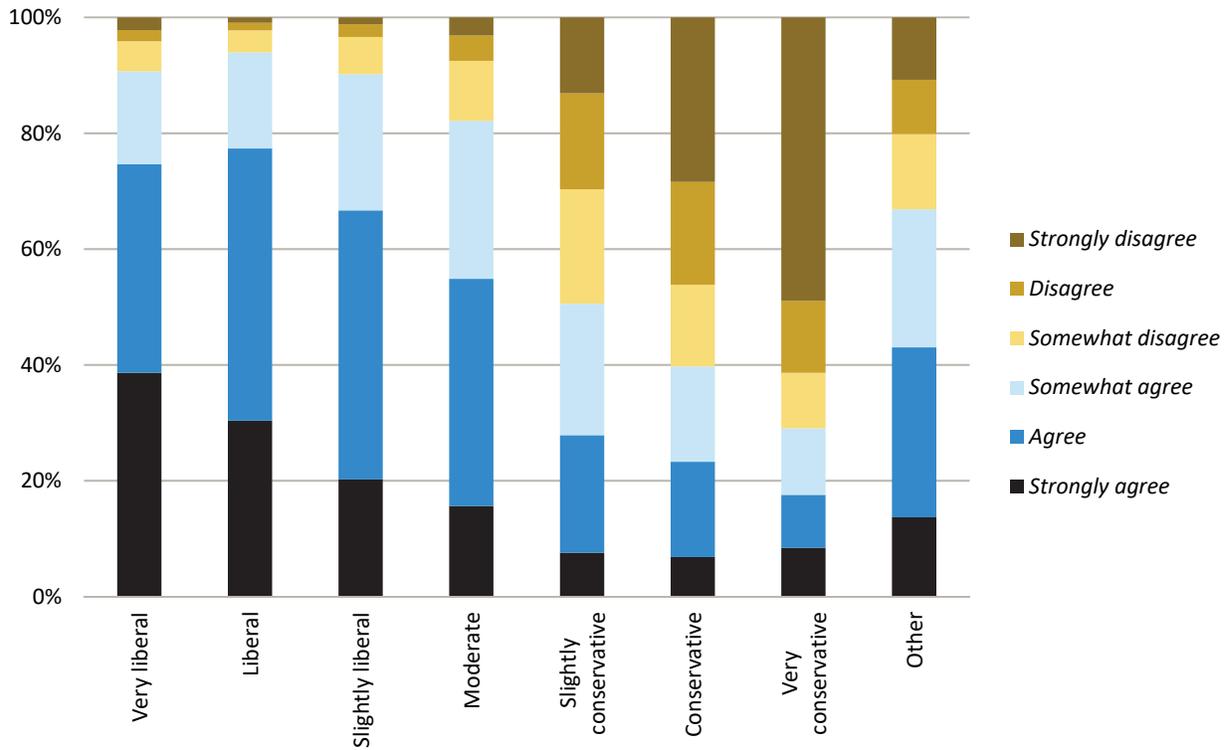
Source: UCUES. Only one year is shown because the response options changed in 2016. Campus data not shown due to small group sizes.

Data of counts and shares by gender and sexual orientation are available on the last tab of universityofcalifornia.edu/infocenter/ucues-data-tables-2018.

7.4 UNDERGRADUATE CAMPUS CLIMATE

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.

7.4.5 Response to “Students of my political beliefs are respected on this campus”
Universitywide
Spring 2018



Source: UCUES

Data of counts and shares by political orientation are available on the last tab of universityofcalifornia.edu/infocenter/ucues-data-tables-2018.



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.

Looking forward

As a result of the COVID-19 pandemic, UC campuses shifted almost all of Spring 2020 courses to remote instruction. Over the next year, UC will be collecting data and research about learning outcomes during this period, along with the variation in curricular offering — including expanded online opportunities — for the upcoming year. Where possible, next year's UC Accountability Report will include relevant findings.

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

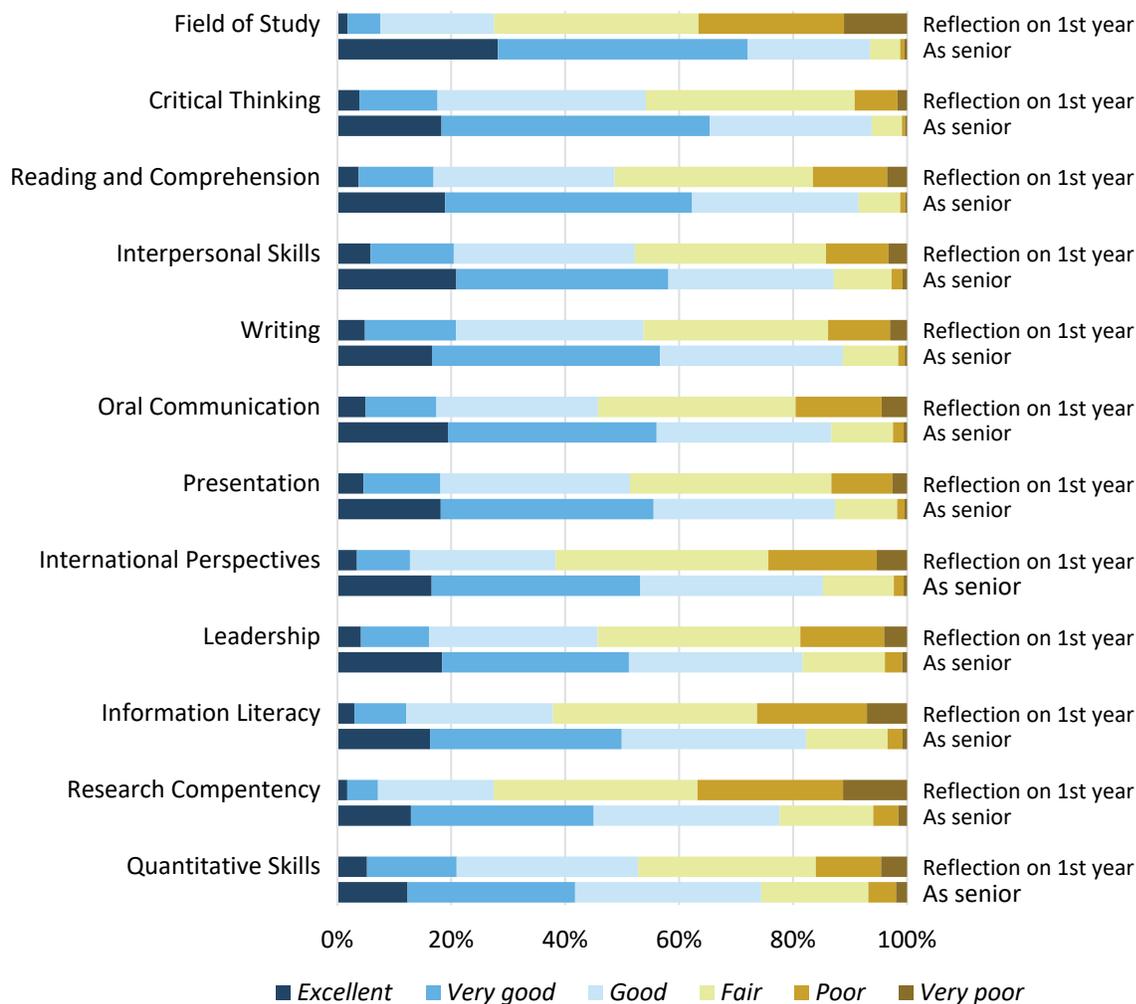
Undergraduate research experiences: universityofcalifornia.edu/infocenter/uc-undergraduate-student-research

Adaptive Learning Technology Pilot Report: ucop.edu/institutional-research-academic-planning/_files/BFI-Adaptive-Learning-Technology-Report.pdf

8.1 UNDERGRADUATE STUDENT LEARNING AND ENGAGEMENT

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 2018



Source: UCUES

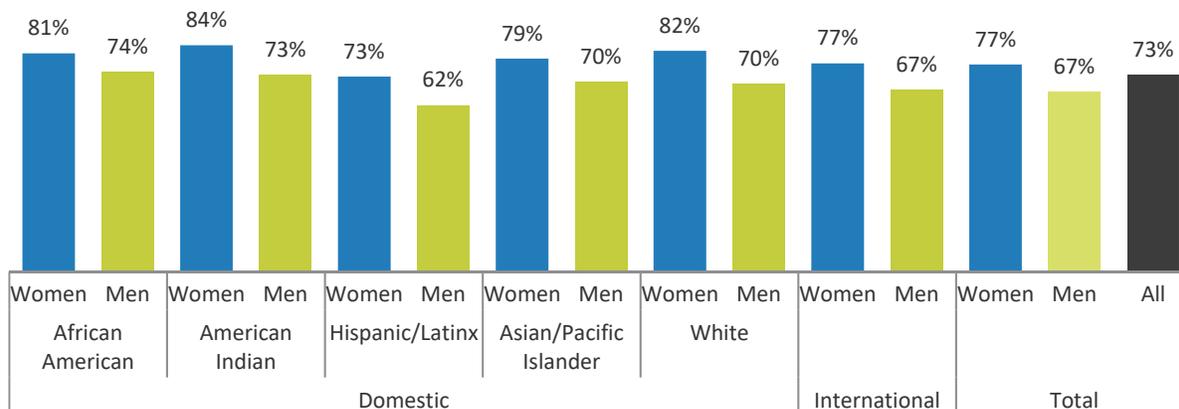
The University of California Undergraduate Experience Survey (UCUES), which is conducted every two years, provides a valuable source of information on how UC undergraduates view their educational experience. These indicators also show students' perception of how much they have developed core competencies 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.

8.1 UNDERGRADUATE STUDENT LEARNING AND ENGAGEMENT

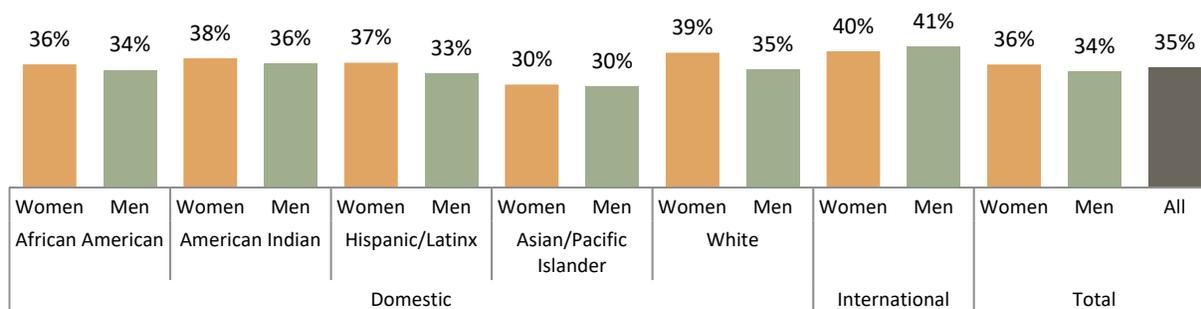
Research participation is high among UC’s seniors across racial/ethnic and gender groups. Approximately three-quarters of all students completed research as part of their coursework and over one-third assisted faculty in research.

8.1.2 Students completing a research project or research paper as part of their coursework Universitywide seniors Spring 2018



Source: UCUES

8.1.3 Students assisting faculty in conducting research Universitywide seniors Spring 2018



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

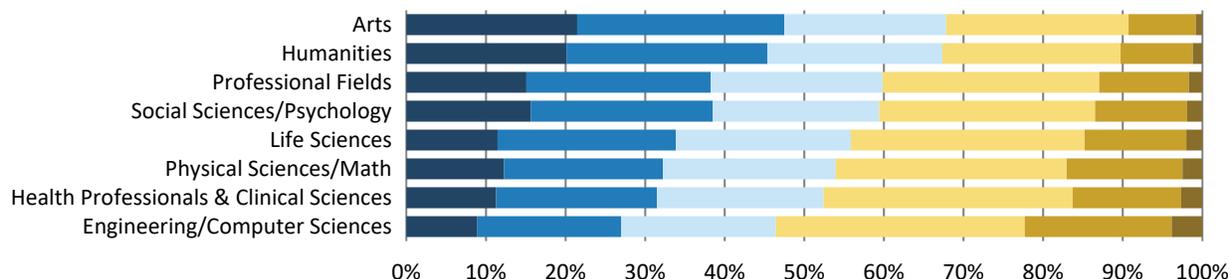
research. Women were more likely than men to indicate completing a research project or paper as part of their coursework. However, there was no difference in the proportion of women and men who reported having assisted faculty with research. Both of these findings held across racial/ethnic groups.

8.1 UNDERGRADUATE STUDENT LEARNING AND ENGAGEMENT

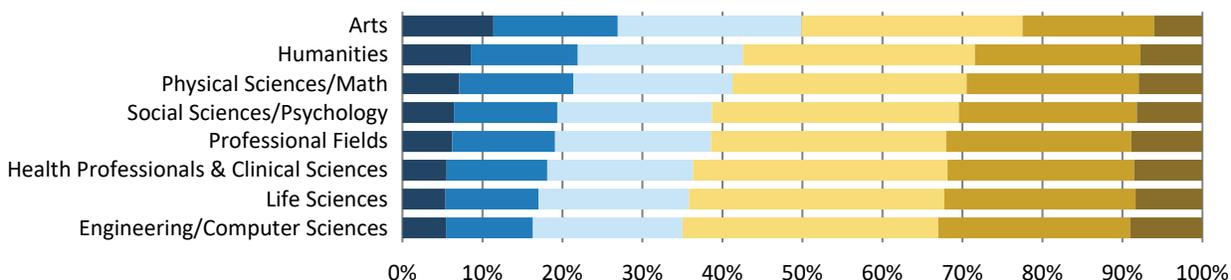
Engagement varies by discipline, with Arts and Humanities showing higher levels of engagement.

8.1.4 Student responses to questions about areas of engagement Universitywide Spring 2018

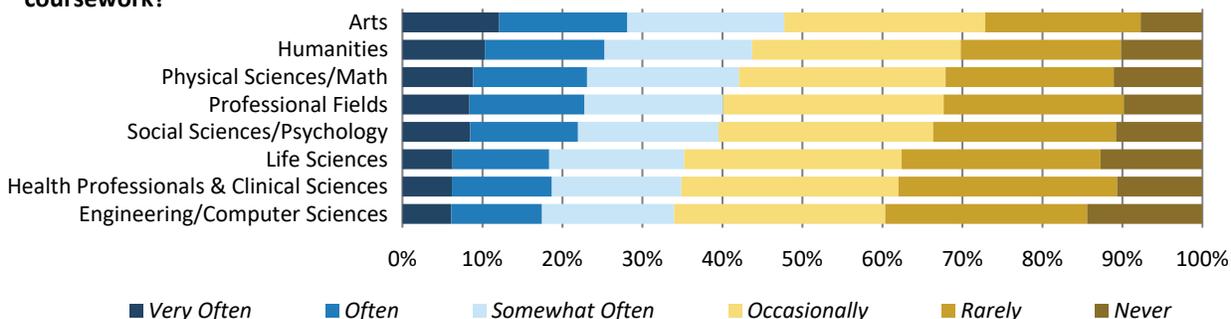
During this academic year, how often have you contributed to a class discussion?



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

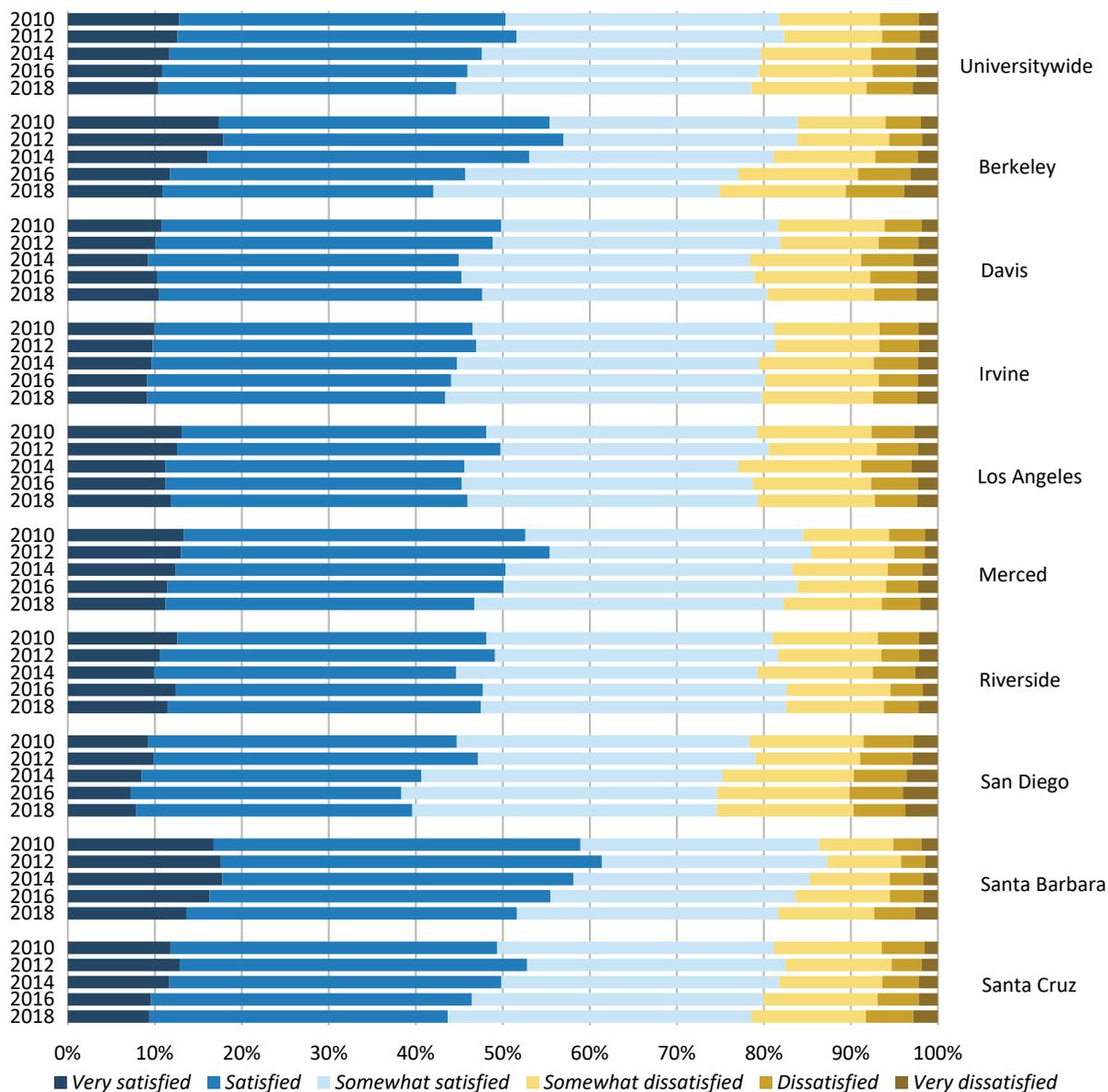
More than half of students reported that they contributed to class discussions at least somewhat often, and more than one-third at least somewhat often went beyond required coursework in a class

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.

8.1 UNDERGRADUATE STUDENT LEARNING AND ENGAGEMENT

Satisfaction, particularly strong satisfaction, is declining Universitywide.

8.1.5 Student satisfaction with overall academic experience Universitywide and UC campuses Spring 2010 to 2018



Source: UCUES. Note that this data includes all UCUES respondents; previous Accountability reports were limited to seniors.

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.

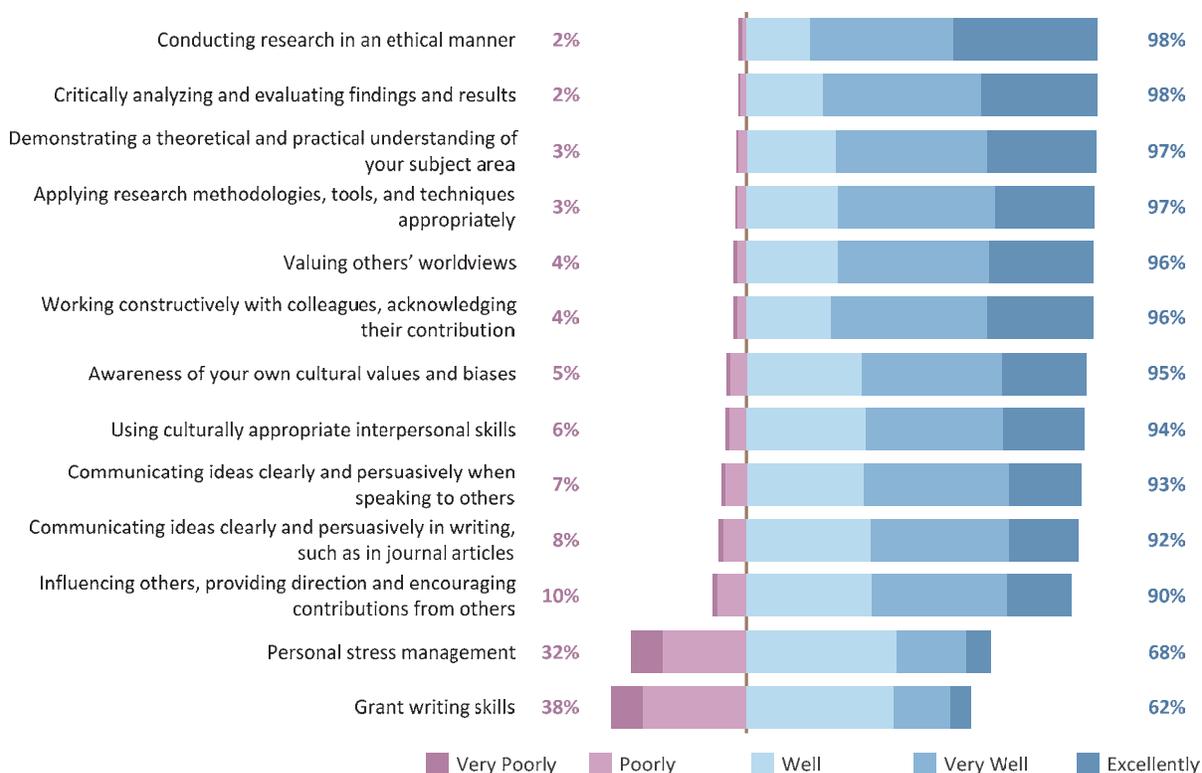
However, student satisfaction dropped slightly since 2012. Specifically, fewer students indicated that they were “satisfied” or “very satisfied” with their overall academic experience.

8.2 DOCTORAL STUDENT LEARNING

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?



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.

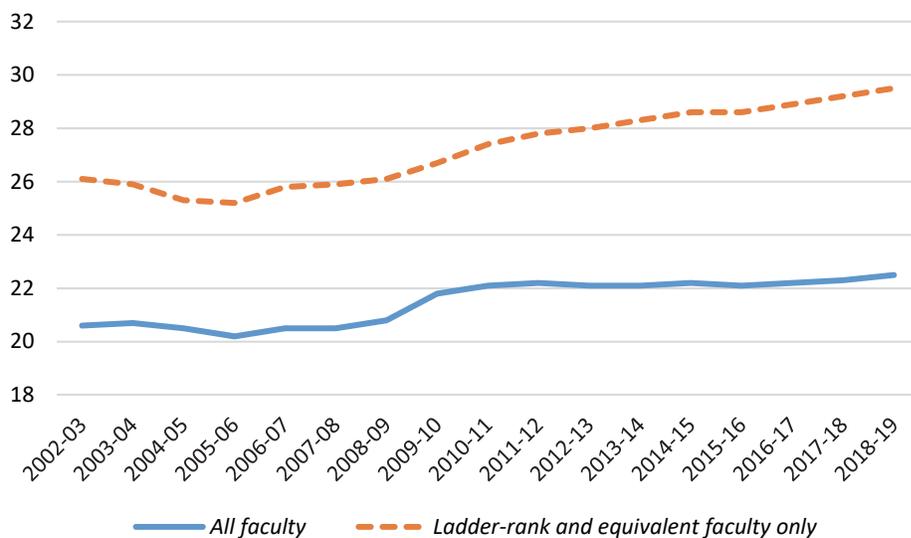
UC doctoral students responded overwhelmingly positively about the preparation received in their programs along the skillsets in the survey, with the exception of stress management and grant writing skills.

Additional data from the survey can be found here: universityofcalifornia.edu/infocenter/doctoral-experience-survey

8.3 THE INSTRUCTIONAL WORKFORCE

The student-faculty ratio has been increasing, especially for ladder-rank and equivalent faculty, as faculty hiring has not kept pace with increasing student enrollment.

8.3.1 General campus student-faculty ratio Universitywide 2002–03 to 2018–19



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 in terms of focused resources for instruction.

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. Indicator 8.3.3 on student credit hours (SCH) provides additional insight into the student experience.

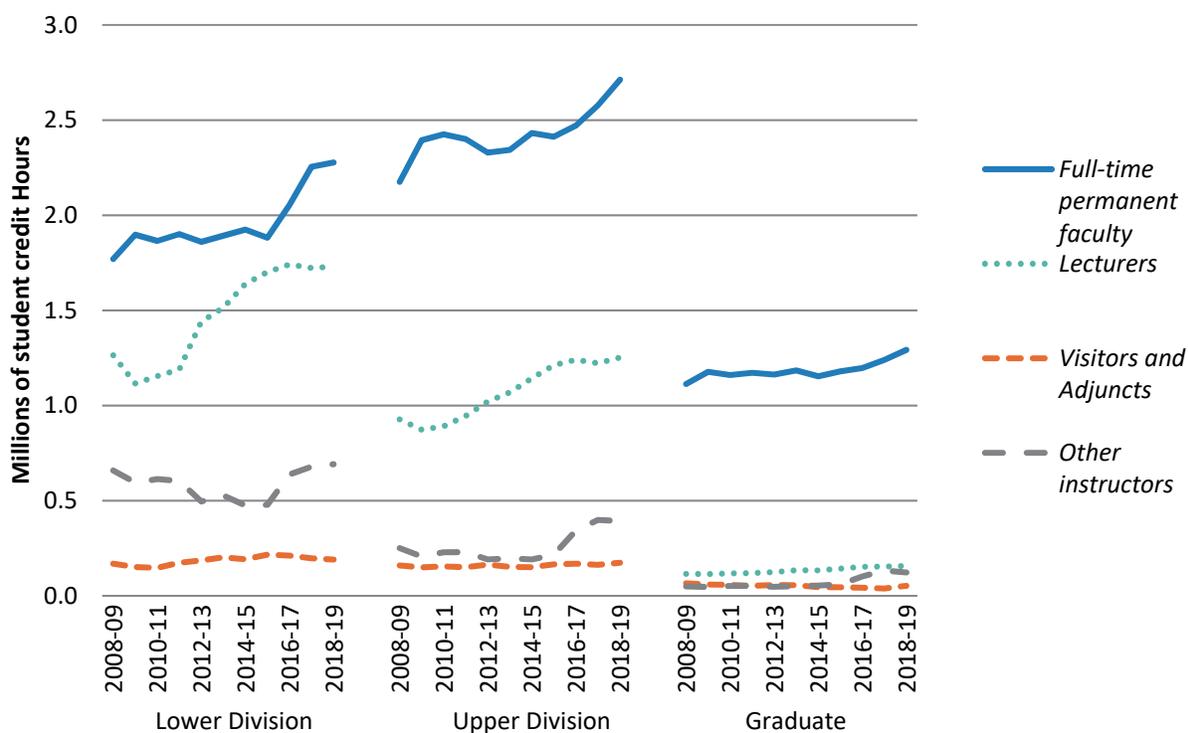
The student-faculty ratio has increased at various times in the University's history and particularly in the last decade. During the most recent recession, campuses responded to uncertainty in state funding by delaying faculty hiring, or deciding not to fill vacant faculty positions on a permanent basis.

As part of its multiyear plan, UC is 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 2008–09 to 2018–19



Source: UC Faculty Instructional Activities dataset¹

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.

Over time, the full-time permanent faculty at UC have increased their teaching load and maintained contact with more undergraduate and graduate students. In 2018–19, full-time permanent faculty taught 220,000 more lower-division SCH than in

2016–17, whereas lecturers taught 12,000 fewer lower-division SCH in 2018–19 compared to 2016–17. Overall, a larger number of student credit hours offered by full-time permanent faculty means students have additional opportunities to be taught by leading scholars.

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.

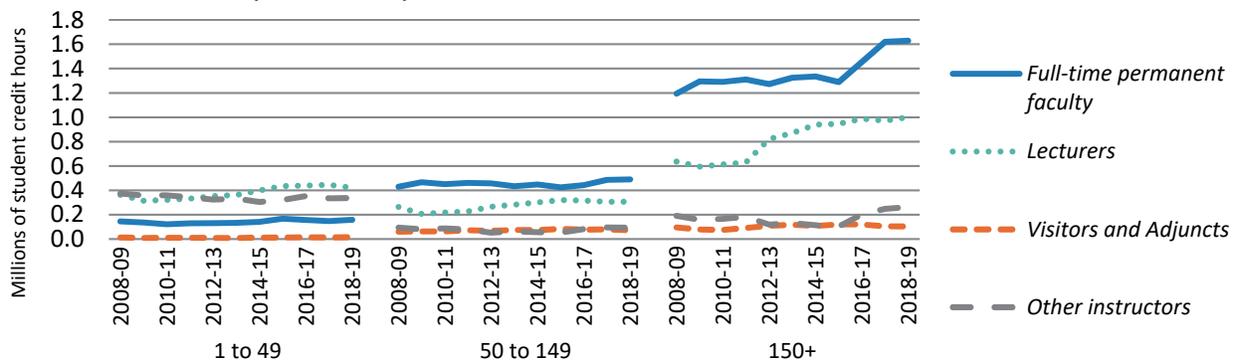
¹ Data are for general campus courses only. These data are submitted annually by UC campuses and contain information on all general campus courses taught in that year.

8.3 THE INSTRUCTIONAL WORKFORCE

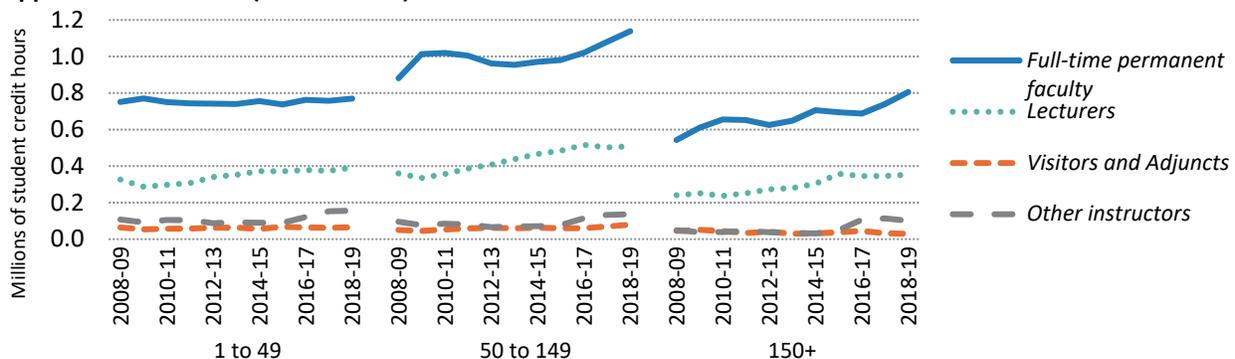
As students enroll in upper-division and graduate classes, they have greater contact with full-time permanent faculty and smaller classes.

8.3.3 Student credit hours, by instructional staff and class type and class size
Universitywide
2008–09 to 2018–19

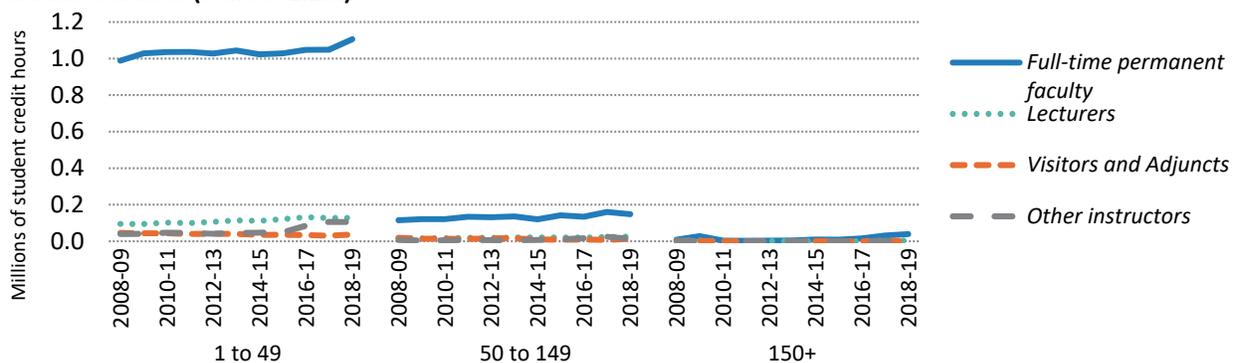
Lower-division classes (scale 0–1.8m)



Upper-division classes (scale 0–1.2m)



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

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 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) oversees a broad grant-making portfolio of approximately \$110 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, and 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. Federal support initiated UC's research mission and provides nearly half of all research funding (9.1.1). Most research funds pay the salaries and benefits of UC's research community, of which faculty are only a small proportion (9.1.2). While UC's 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 nearly one-tenth of the nation's academic research (9.1.4). Compared to other research universities, UC has a higher rate of research expenditures per ladder-rank faculty (9.1.5), especially at UC campuses with medical schools (9.2.4). Three National Energy Laboratories are affiliated with the University of California, conducting research that is vital to the nation's security and energy future.

This chapter considers the impact of this research on society. One of the goals of research is the dissemination of its findings; the global distribution of downloads from UC's 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 technology through licenses and startups resulting from UC's patents (9.2.3, 9.2.4).

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 disseminated in books or performances rather than journal articles.

Quantitative measures cannot capture how UC research contributes indirectly and over time to the state and to the nation through discoveries that improve health, technology, and the quality of life; how involvement in research and hearing about discoveries from the world’s foremost researchers enhances the learning experiences of UC’s graduate and undergraduate students; or how thoughtful work in the arts and humanities furthers our understanding of ourselves as one species among many on this planet.

The size and scope of UC’s research programs

While research expenditures track only some of this activity, they can indicate how research changes in scope and focus over time, and can provide some relative sense of how research institutions compare to one another. During 2018–19, direct expenditures for research at UC totaled over \$4.9 billion, with federal funds providing nearly half. Private sources account for about 21 percent — 14 percent from nonprofit organizations and seven percent from corporate sponsors. About one-quarter represented the University’s own funds derived from gifts, endowments, general funds, and other sources. Over 60 percent of research expenditures in 2018–19 went to salaries and benefits. Of this, about one-quarter went to faculty; the majority supported staff researchers, and about one-quarter went 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 required to support the research project, including debt service, maintenance, and libraries. These facilities and administration costs are called “indirect costs.”

In 2018–19, UC’s indirect cost recovery for research was over \$1.1 billion. The true indirect costs of research, however, are typically higher than the rate research sponsors are willing to pay. Rates negotiated with federal agencies are 18 to 20 percentage points below the true indirect costs. Non-federal research sponsors, including corporations, nonprofits, and the state of California, have policies that limit indirect cost rates to well below 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 163,000 full-time equivalent (FTE) employees at the University, about 26,400, or about 16 percent, were paid with research funds.

UC’s research-funded FTE, 2018–19

Faculty	Postdoctoral Scholars	Students	Other Academic	Other Staff	Research Total
2,597.9	4,769.5	4,600.3	3,954.4	10,491.2	26,413.2
10%	18%	17%	15%	40%	100%

While faculty serve as principal investigators for research projects, submitting proposals and managing the research, they make up only ten 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. The research community includes over 4,700 FTE postdoctoral researchers. 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's research enhances the student 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 2018–19, about 24,500 students were employed as paid research assistants. Though most are graduate students, UC undergraduate students also participate in research; the 2018 UC Undergraduate Experience Survey found over 40 percent of UC students had been involved in faculty-directed activity other than coursework, such as research or creative projects.

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 1976, over 1,000 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 volume and impact of UC research publications to nationwide averages and to the output of 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 2018, UC celebrated the 125th anniversary of the founding of the UC Press. 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 States, and publishes approximately 200 books and 40 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 2018–19, UC received grants funding 1,152 new clinical trial research projects in addition to 3,644 projects already underway. These projects represent a crucial stage in the journey from a scientific discovery to an effective

¹ <https://developer.uspto.gov/visualization/university-patent-count-expenditures>

treatment. Of the research dollars that came to UC from businesses during 2018–19, 13 percent was directed toward clinical trials.

Research results — assessing climate change and charting the energy future

UC is a national and global leader in research on climate science, including monitoring atmospheric changes and global temperature rise, as well as assessing the impacts of climate change on marine and land-based ecosystems and the built environment. UC scholars and students carry out some of these studies at UC’s 41 Natural Reserve System (NRS) sites around California. Most of UC’s climate science work is funded by federal agencies.

UC National Laboratories — science in the national interest

The three University of California-affiliated 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 as a manager of these three Department of Energy (DOE) National Laboratories, with annual budgets of over \$5 billion and a combined workforce of more than 22,000. The Laboratories also support UC’s educational mission. At LBNL, 23 percent of employees are student assistants, graduate research assistants, or postdoctoral scholars. At LLNL, four percent of the workforce are postdocs, and at LANL, 13 percent are postdocs or student assistants.

Looking forward — uncertainties in federal research funding

With federal funding supporting about half of UC’s research, the vitality of UC’s research enterprise is dependent on agencies whose funding is reviewed annually. Long-term prospects for federal research sponsorship, particularly for climate and environmental science, but including fundamental medical research, are uncertain.

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 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

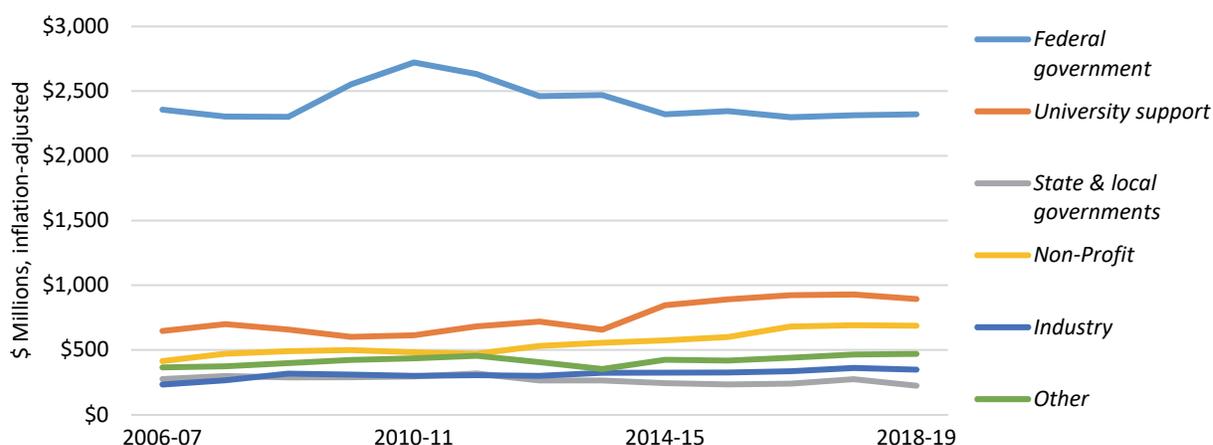
UCOP Research & Innovation: ucop.edu/research-innovation

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

9.1 RESEARCH EXPENDITURES

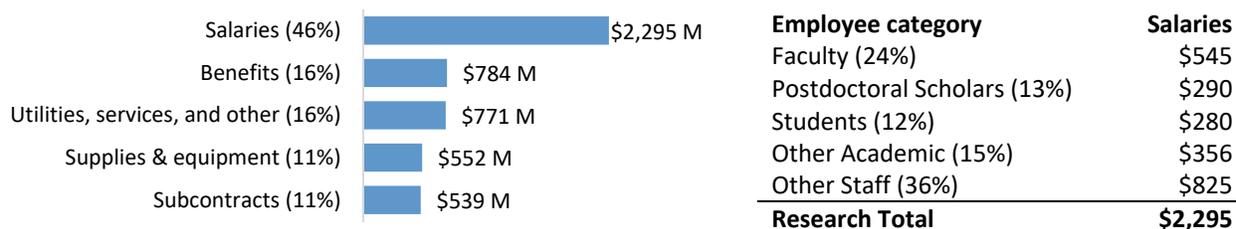
Federal funds support most of the research conducted at UC. Salaries and benefits represent more than half of all research expenditures.

9.1.1 Direct research expenditures by source Universitywide 2006–07 to 2018–19



Source: UC Corporate Financial System. Direct amounts have been adjusted for inflation and do not include accrual funds for postemployment retirement benefits or indirect cost recovery funds.

9.1.2 Direct research expenditures by cost type Universitywide 2018–19



Source: UC Corporate Financial System and Corporate Personnel System. Direct amounts do not include accrual funds for postemployment retirement benefits or indirect cost recovery funds.

UC's direct research expenditures during 2018–19 were about \$4.9 billion. Of this, 47 percent came directly from federal agencies, one of the lowest shares in the last two decades. A further seven percent represents federal flow-through funds that came to UC from the state, corporations, nonprofits, or other universities. About three-quarters of UC's federal research support was provided by the National Institutes of Health and the National Science Foundation. Federal cutbacks starting in 2006 ended a long period of growth. This was temporarily reversed during 2009–10 by the

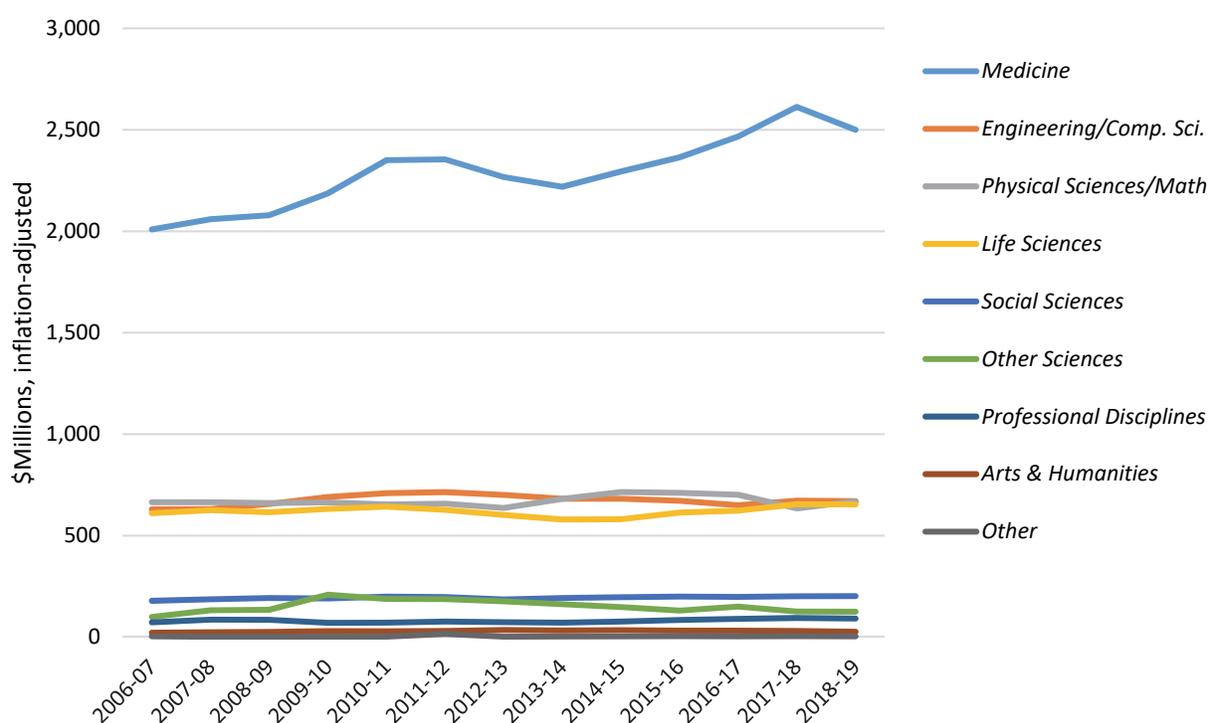
American Recovery and Reinvestment Act, which provided over \$1 billion in research funds to UC. After peaking in 2010–11, federal funds declined until 2014–15 and have remained essentially flat since then. When over \$1 billion in recovered indirect costs are included, UC's 2018–19 research expenditures amounted to nearly \$6 billion, almost one-fifth of UC's total expenditures.

The majority of research expenditures pay the salaries and benefits of UC's research workforce.

9.1 RESEARCH EXPENDITURES

Science, technology, engineering, and mathematics (STEM) and medical fields represent the majority of all research expenditures.

9.1.3 Direct research expenditures by discipline Universitywide 2006–07 to 2018–19



Source: UC Corporate Financial System. Direct amounts have been adjusted for inflation and do not include accrual funds for postemployment retirement benefits or indirect cost recovery funds.

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 reflects the availability of funding and parallels the nationwide pattern.

Measures based on expenditures substantially underrepresent research activity in the arts and humanities, social sciences, and professional disciplines, which make important contributions to scholarship and the quality of life, yet have relatively little access to external funding.

This reflects both UC's continuing competitiveness in securing federal awards and UC's ongoing successful relationships with the private sector. UC is the largest single recipient of funding from the two federal agencies principally responsible for academic research: the National Institutes of Health and the National Science Foundation. UC generally receives five to six percent of NIH's annual appropriations for research and seven to eight percent of NSF's annual research appropriations.

9.1 RESEARCH EXPENDITURES

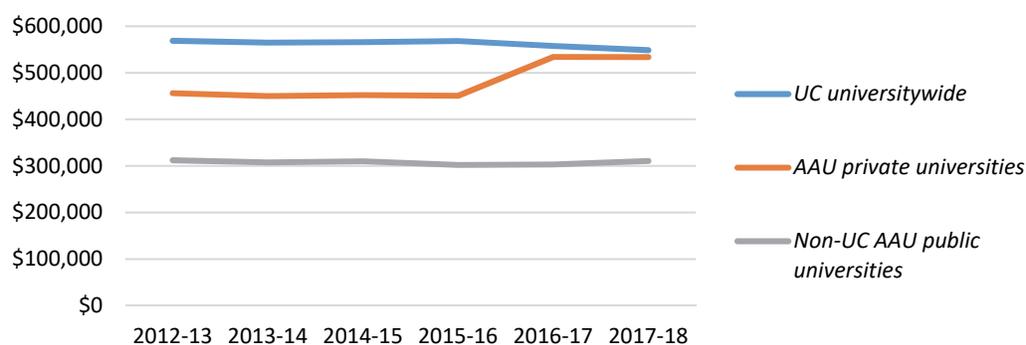
UC accounts for nearly nine percent of all research expenditures at all US universities. Average research expenditures per ladder-rank faculty are higher at UC than its comparison peers.

9.1.4 Research expenditures US 4-year universities 2017–18

	Research expenditures	Percent of US total
UC universitywide	\$5.6 B	9.2%
Other public universities	\$33.2 B	54.5%
Private universities	\$22.1 B	36.4%

Source: IPEDS. Excludes for-profit institutions, which conduct a negligible share of research.

9.1.5 Average inflation-adjusted research expenditures per ladder-rank faculty UC and AAU comparison universities 2012–13 to 2017–18



Source: IPEDS

UC faculty are extremely successful at attracting research support from both government and private sponsors. In the most recent year available, UC on average spent \$549,000 in externally sourced research funding per tenured and tenure-track faculty member, compared to \$311,000 per faculty member for Association of American Universities (AAU) private institutions, and \$311,000 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. UC's 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-

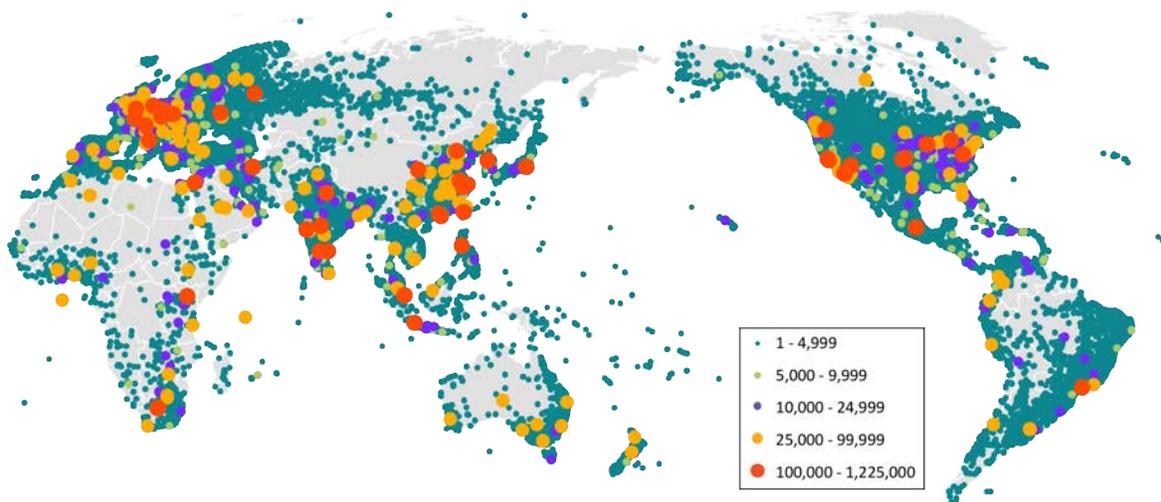
one out of the 27 AAU Private institutions and 22 out of the 36 non-UC AAU Public institutions have an accredited medical school.

UC Location	Research expenditures per ladder-rank faculty
San Francisco*	\$3,968,000
San Diego	\$687,000
UC AVERAGE	\$549,000
Los Angeles	\$535,000
Berkeley	\$479,000
Davis	\$414,000
Irvine	\$283,000
Santa Barbara	\$239,000
Santa Cruz	\$210,000
Riverside	\$182,000
Merced	\$158,000

*UC San Francisco is an exclusively health sciences campus, where many non-ladder rank (clinical) faculty also conduct significant research. The average excluding UCSF is \$431,000.

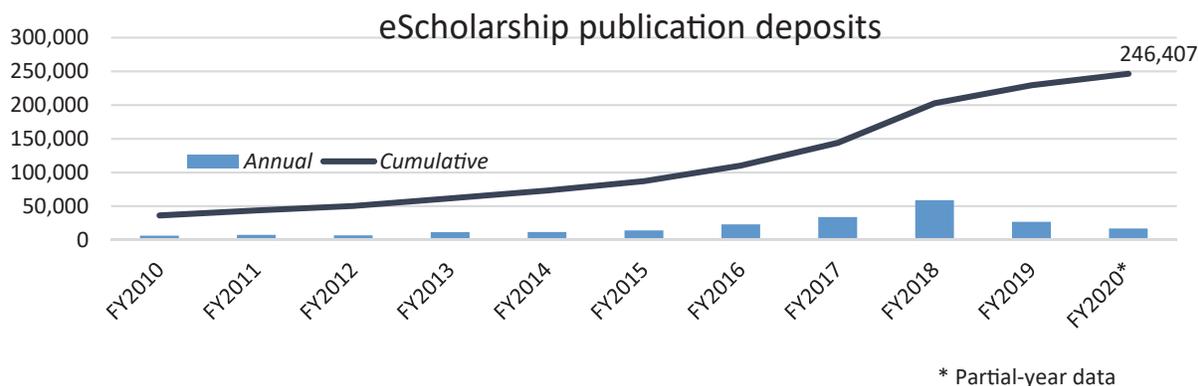
UC’s Open Access policies continue to add to a growing body of freely available research publications in eScholarship, UC’s open-access repository and publishing platform, expanding the global reach of UC’s research findings.

9.2.1 eScholarship downloads of UC scholarly materials
Universitywide
Through March 2020



This map shows the geographic distribution and concentration of views for scholarly materials deposited in eScholarship, UC’s open access (OA) publishing platform and repository managed by the California Digital Library. Since 2002, UC-sponsored research in eScholarship has been viewed and/or downloaded over 66 million times by readers around the world. The repository contains nearly 250,000 individual items, including many articles, research reports, working papers, and the 80-plus OA journals that are published on the platform.

Deposits to eScholarship have increased substantially since the adoption of the UC Academic Senate’s Open Access Policy in 2013, with faculty submitting over 11,000 articles under the policy in 2018–19 alone. The success of this policy has also helped encourage the depositing of almost 12,000 additional scholarly materials (pre-policy publications, electronic theses and dissertations, working papers, etc.) in that same period, making even more UC scholarship publicly accessible to the world.

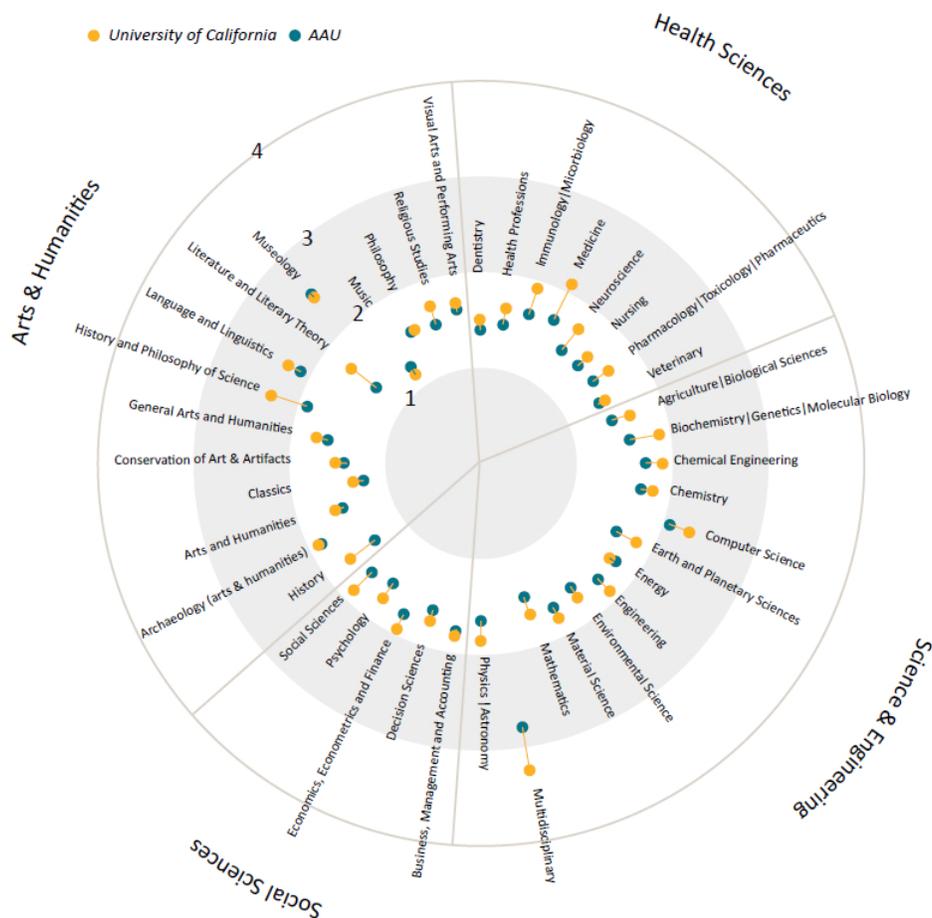


* Partial-year data

9.2 RESEARCH IMPACT

The University of California is a major research presence at both the state and national levels, producing nearly ten percent of the nation’s research publications.

9.2.2 UC research publication performance, by Field-Weighted Citation Impact (FWCI) and discipline group Universitywide 2014 to 2019



Source: SciVal® database, Elsevier B.V., scival.com (downloaded March 18, 2020)

As a premier research university, UC creates and disseminates new knowledge. The publication of UC’s 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 a metric created by Elsevier’s SciVal® tool called the Field-Weighted Citation Impact (FWCI), which takes into account differences in research publication practices across disciplines and normalizes impact against a global baseline. The FWCI can benchmark the impact of publications regardless of differences in publication

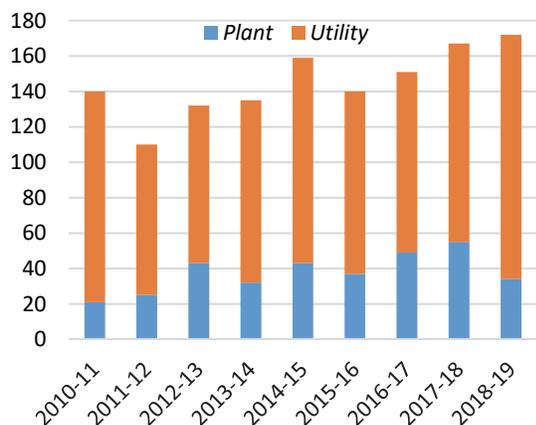
length, discipline, age, and type. In any given disciplinary area, the global average FWCI is arbitrarily taken to be equal to 1.00; publications with FWCI greater than 1.00 have been cited more frequently than would be expected, while publications with FWCI less than 1.00 have been cited less than would be expected. UC’s average FWCI is 1.96, or more than twice the global average.

UC’s publication impact is particularly high in the fields of arts and humanities, economics, computer science, engineering, and medicine.

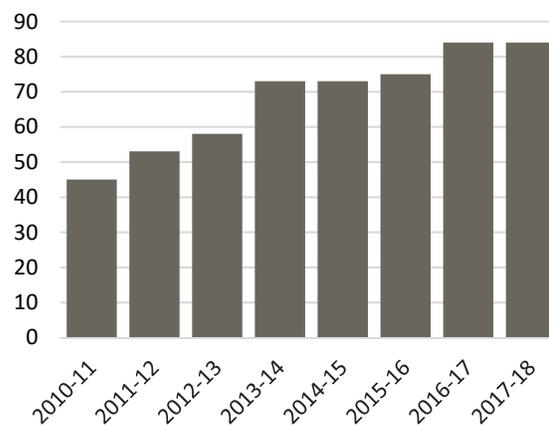
9.2 RESEARCH IMPACT

Licenses issued in California contribute to successful businesses. The number of active plant and utility licenses in California is growing.

9.2.3 New licenses for UC patents issued to California businesses, Universitywide, 2010–11 to 2018–19



9.2.4 Startups based on UC patents formed in California, Universitywide, 2010–11 to 2017–18



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 UC’s public service mission. UC’s 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. 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

nonexclusively 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. As of June 30, 2019, UC’s license portfolio in California included 1,353 active utility and plant licenses to 655 separate companies.

UC patent licenses active in California, June 30th, 2019

	Utility	Plant	Total
Active licenses	801	552	1,353
Number of licensees	493	131	624

UC startups are independently operating companies that were formed to develop and commercialize a UC technology. During fiscal year 2018–19, 84 startups based on UC technology were formed.



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. The Division of Agriculture and Natural Resources (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 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 (CE) 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. CE is also 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 Cooperative Extension (CE) sites and Research and Extension Centers (RECs) is often the face of the University to Californians to those with no other connection to the University. In 2019, 170 Cooperative Extension Advisors were conducting

research, outreach, and education from local CE offices. Nine statewide RECs provide education for the public and places for researchers to conduct field experiments. Approximately 560 affiliated Agricultural Experiment Station (AES) researchers are located at three campuses, and 120 CE Specialists are located at five 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).

In 2019, AES and CE published over 2,100 research-based, clientele-driven educational materials, and developed 24 patents. CE programs, including volunteers, had over 800,000 significant educational exchanges with adults and youth. CE educators and volunteers disseminated science-based information through over 41,000 community-based short courses, classes, workshops, demonstrations, and field days across the state. CE academics conducted over 800 media programs and interviews, further extending science-based information and solutions.

UC ANR also provided science-based information to policy and decision makers through 965 policy engagement activities. For example, three bills were informed by UC ANR academics' work on prescribed fire in the northern part of the state. Signed into law in 2019:

- SB901, which includes \$200 million per year for the next five years to fund forest health and fire prevention work, including prescribed fire;
- SB1260, which is focused primarily on prescribed fire and includes pieces on liability and training; and
- AB2091, which mandates the development of new insurance options for prescribed fire.

UC ANR's statewide California Naturalist Program promotes stewardship of the state's natural resources through education and service. The program develops the curriculum, trains partner organizations, and ensures quality through monitoring and evaluation. Since its inception in 2012, the program has worked with over 55 partner organizations and certified over 3,500 graduates as California Naturalists who volunteer in support of conservation and restoration efforts across the state. In 2019, the first bilingual and bicultural California Naturalist Certification Training course was developed. Twelve members of the Urban Conservation Corps of the Inland Empire members were trained. Their *Los Naturalistas* project has started changing the narrative in environmental education and interpretative services. There are now tours in Spanish with a Latino cultural twist, filling a void in the availability of environmental literacy services for the Spanish-speaking population of San Bernardino and Riverside Counties.

UC ANR's UC Master Gardener Program extends to the public research-based information about food gardening and sustainable landscaping, including green waste reduction, pest management, water conservation, and pollinator-friendly gardens. There are over 5,900 UC Master Gardener volunteers in 50 California counties. In 2019, they donated close to 500,000 public service hours with an estimated value of \$14.8 million. Participants reported adopting and improving gardening practices that protect natural resources and promote healthy people and communities on over 1.3 million square feet of home, school, and community gardens.

UC ANR's statewide 4-H Youth Development Program uses a positive youth development framework and promotes experiential, inquiry-based science learning. In 2019 the program engaged over 155,000 youth aged 5-19 to help them reach their full potential, through working in partnership with over 14,500 caring adult volunteers. The annual statewide evaluation uses common measures; for example, in 2019, 96 percent of 800 4-H youth respondents reported they feel a responsibility to help their community, and 73 percent of 707 youth respondents in grades 8 to 12 reported aspirations such as studying science after high school.

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 (CFHL,UC) Program in 31 counties. EFNEP delivers research-based nutrition education to limited-resource families with young children to improve healthy lifestyle choices. In 2019, EFNEP reached almost 41,000 adult and youth family members.

Evaluations of adult participants indicate 95 percent improved at least one diet quality practice, and 83 percent improved one or more skills for food safety. 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. In 2019, in-person education was provided to over 97,000 participants. Furthermore, CFHL,UC policy, systems, and environmental interventions (e.g., smarter lunchrooms that influence healthy choices, food-based gardening, quality physical activity, wellness policies) were adopted by 397 partner sites, indirectly reaching over 176,000 individuals in early childhood centers, schools, and community environments.

The scope of UC ANR impact

UC ANR continues to focus on making a difference with regard to seven public values, listed below. Participant behavior change outcomes are measured, and research shows how these contribute to longer-term social/health, environmental, and economic benefits. Selected 2019 indicators follow.

Promoting economic prosperity — UC ANR research and extension helps growers change practices that increase their economic return, and individuals and families improve financial management practices. For example, one program focused on small farm business management workshops in the Sierra Foothills. From surveys over the last five years, improved farm business planning has had significant impacts on small farm and ranch profitability. Over 86 percent of business operators who participated reported being profitable and paying themselves a salary. Such outcomes contribute to increased agricultural profitability.

Safeguarding abundant and healthy food for all — UC ANR creates practical solutions and informs policy, leading to changes in practices from food production to food security. For example, UC ANR academics collaborated on evaluating the Mandela Health and Wealth Net project funded by the Centers for Disease Control and Prevention. The project seeks to increase access to affordable fresh fruits and vegetables and economic resilience in low-income communities in Alameda County by establishing a network of locally-owned food retailers, farms, and distributors. Residents increased pounds of fruits and vegetables per transaction by 122 percent (from 0.9 to 2.1 pounds) at corner stores and 250 percent (from 2.8 to 9.9 pounds) at produce stands, demonstrating how the project increased access and improved fruit and vegetable purchasing in low-income communities.

Protecting California's natural resources — Through UC ANR research, outreach, and education, participants learn about and adopt recommended practices that improve ecological sustainability. For example, UC ANR best management practices for spraying broad-spectrum pesticides is becoming more commonplace in almond orchards around California. As a result, growers can avoid almost 500 pounds of formulated pesticide loss into the atmosphere per spray application, contributing to improved air quality.

Building climate-resilient communities and ecosystems — UC ANR conducts research and delivers programs to assist farmers and ranchers in implementing climate-smart management practices, to reduce greenhouse gas emissions in working landscapes, and to expand public awareness of effective adaptation strategies. For example, a UC ANR scientist engaged with 200 community members and policy-makers in the North Coast region, with the result that participants reported they had a better understanding of regional vulnerabilities to climate change (90 percent) and strategies for local climate action (77 percent). Through education, communities become more climate-resilient.

Promoting healthy people and communities — UC ANR produces tools, programs, and policy-relevant research that result in healthy living for individuals and communities. For example, the Nutrition Policy Institute conducted a longitudinal study that was the first to present findings to policymakers about the potential benefits of extending the age of eligibility for benefits under the Special Supplemental Nutrition Program for Women, Infants, and

Children (WIC) until children are eligible for school meals. In this way, UC ANR contributes to improving individual health for all.

Developing a qualified workforce for California — UC ANR’s youth and community development programs equip the next generation for college, for successful careers, and to be active participants in their communities. For example, 88 percent of 508 4-H youth respondents reported social and leadership skills, including the ability to communicate through multiple methods and value and respect for other cultures. This demonstrates skills learned related to college and careers, which are the pathway to entering the workforce.

Developing an inclusive and equitable society — UC ANR engages people across communities to build skills and develop proactive policies to increase cultural competency and diversity in California’s workplaces. For example, one program focuses on culturally responsive research and extension to limited-resource Asian farmers in the San Francisco Bay Area. As a result, the State Water Resources Control Board adopted language in the revisions to the Eastern San Joaquin River Watershed Agricultural Order to allow alternate reporting requirements for diversified, small-scale, and socially disadvantaged farmers. These changes are precedential for the state and can benefit similar farmers in other counties.

UC Natural Reserve System

The UC Natural Reserve System (NRS) is a network of protected natural areas throughout California. These lands are managed for research, teaching, and public service, and are a major component of UC’s environmental stewardship. Its 41 reserves, covering more than 756,000 acres, make it the largest university-administered reserve system in the world (10.2.1).

As one of four trustee agencies recognized under the California Environmental Quality Act, the University of California holds reserve natural resources in trust for the people of the State of California. Reserve managers protect endangered plants and animals, restore native habitats, and control invasive species. Reserves also serve the public by holding lecture series, guided hikes, and other community events; by lending scientific expertise to conservation initiatives; and by hosting tens of thousands of California schoolchildren on field trips.

Most major state ecosystems are represented in the NRS, from coastal tidepools to inland deserts, oak savannas to offshore islands, and wetlands to Sierra Nevada forests. Reserves also serve as gateways to more than one million acres of public lands. NRS reserves include lands purchased by the University, donated by private landowners, and made available to the reserve system via partnerships with state and national parks, land trusts, and government agencies. Reserve amenities such as classrooms, lodging, laboratories, and internet access attract tens of thousands of users each year. These include researchers, students taking university courses, schoolchildren, and the general public. Those who seek to understand the workings of natural California come to the NRS to take classes, develop field skills, and conduct research.

More than 150 undergraduate courses across the UC system include visits to NRS reserves each year. Topics of study range from botany to zoology, archaeology to environmental planning, public health to the performing and visual arts. Scientists flock to reserves because reserve lands are protected in perpetuity. They feel comfortable launching long-term studies within reserve boundaries. Work at reserves produced more than 2,900 peer-reviewed papers, book chapters, and books between 2010 and 2018.

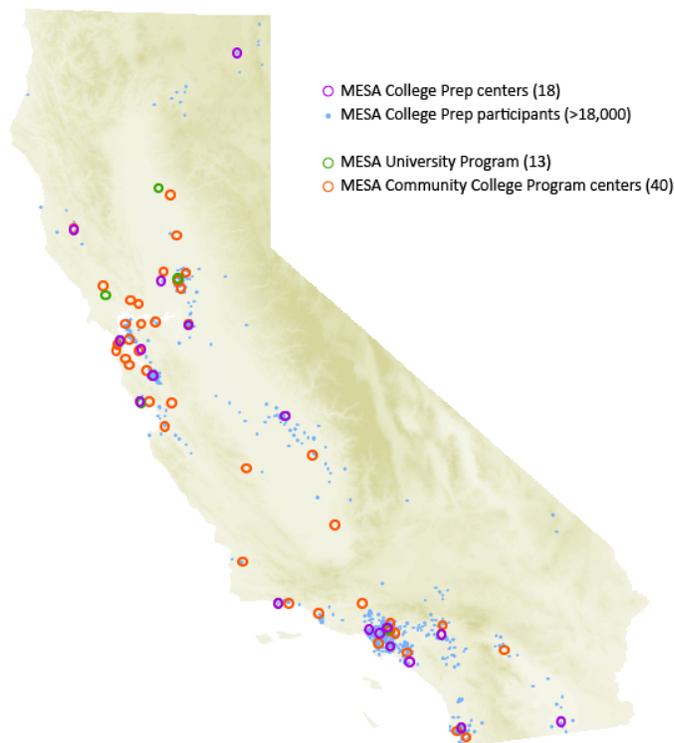
In 2019, Point Reyes Field Station and Lassen Field Station joined the NRS as partnership reserves, which are jointly managed with the National Park Service at Point Reyes National Seashore and Lassen Volcanic National Park, respectively.

More than fifty years after its inception, the need for the NRS has never been greater. Climate change, pollution, extinctions, and invasive species are fraying the fabric upon which life on Earth depends. By supporting university-level teaching, research and public service, the NRS contributes to the understanding and wise stewardship of the Earth.

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 more than 210,000 K–12 students at more than 1,400 public schools and more than 28,000 students at all 114 California community colleges in 2018–19.

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.



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 21,000 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 4,000 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 about 3,000 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 2,000 professional development events for educators at more than 10,000 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.

For more information

UC in California interactive map, includes California counties, regions, campuses, UC system, and California elected representative districts: ucal.us/maps

Division of Agriculture and Natural Resources: ucanr.edu

Natural Reserve System: ucnrs.org

MESA Programs: mesa.ucop.edu

CalTeach: calteach.universityofcalifornia.edu

Early Academic Outreach Program (EAOP): eaop.org

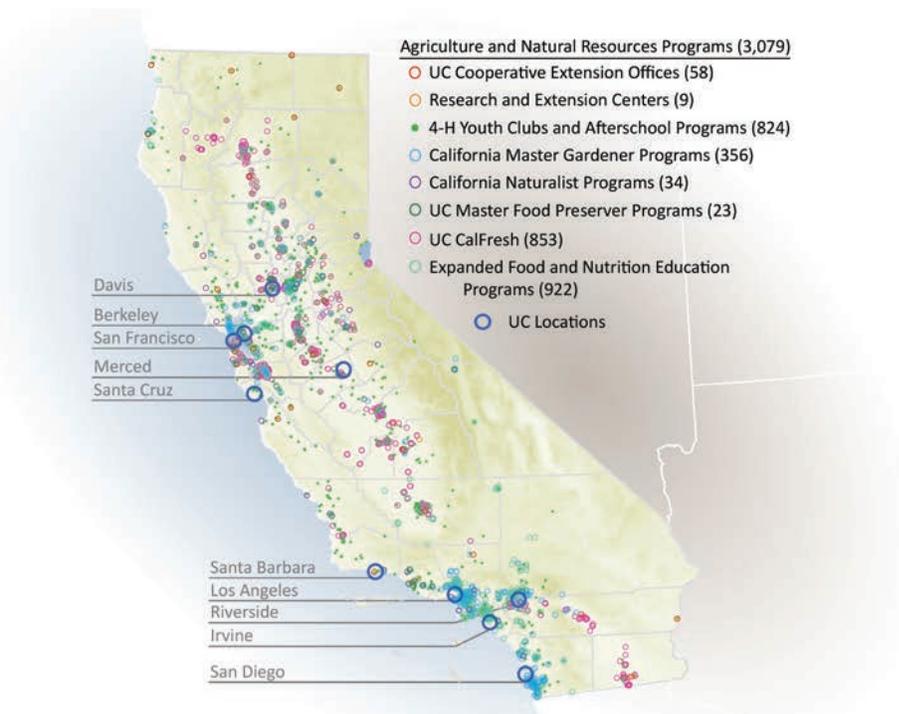
The Puente Project: puente.berkeley.edu

California Subject Matter Project: csmf.ucop.edu

10.1 AGRICULTURE AND NATURAL RESOURCES

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



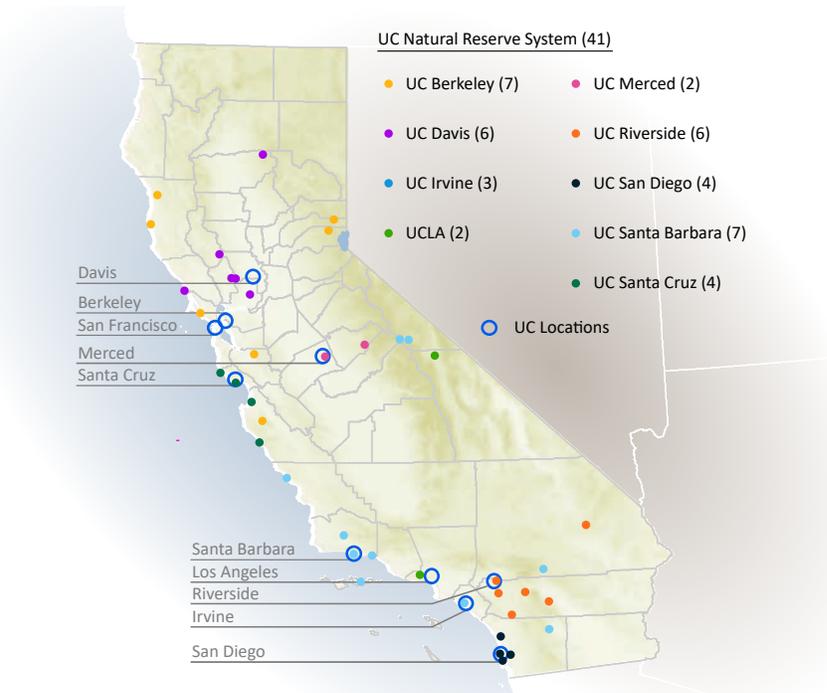
Source: UC campuses, most recent data from 2018

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.

10.2 NATURAL RESERVE SYSTEM

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



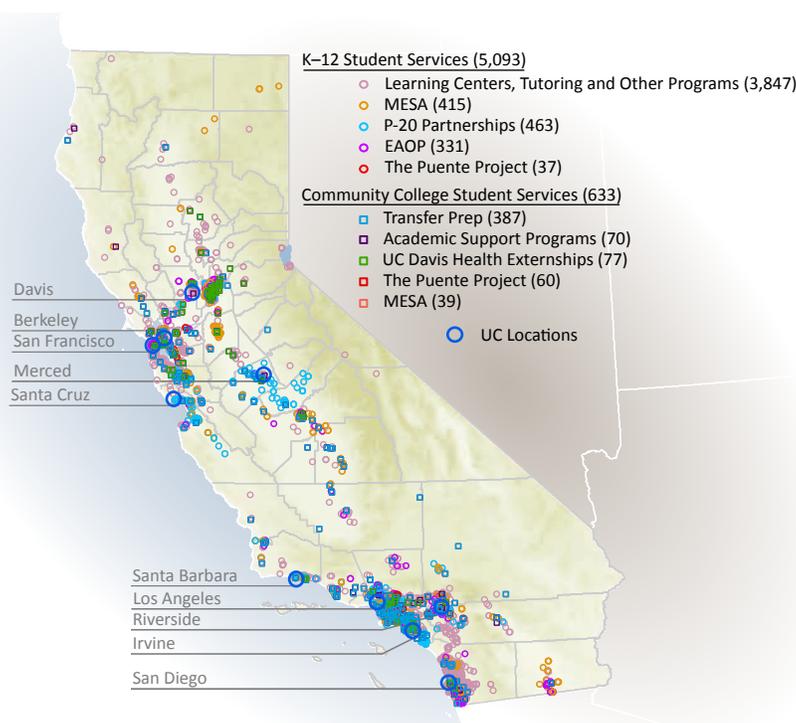
Source: UC campuses

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.

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



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 (81 percent of SAPEP participants in AY2018–19 vs. 49 percent of

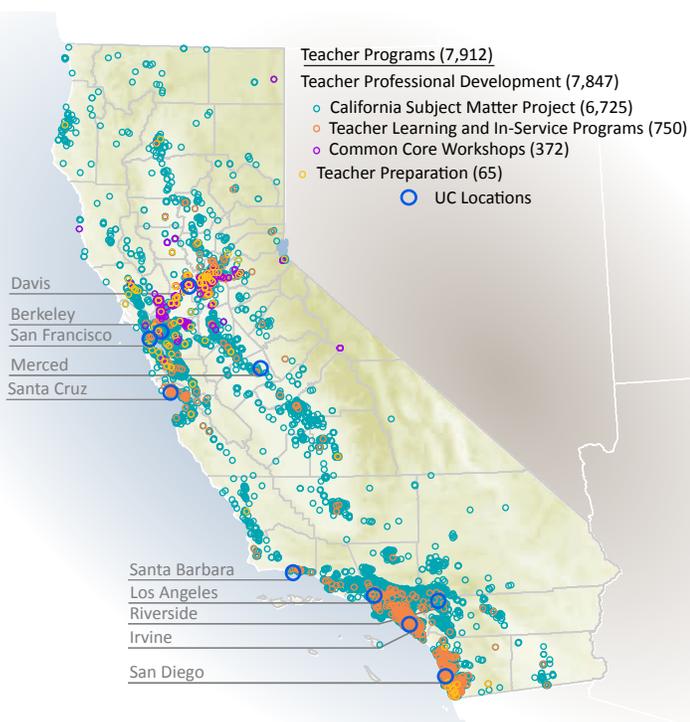
California public high school graduates) and attend California public two- and four-year universities (65 percent of SAPEP participants in AY2018–19 vs. 55 percent of California public high school graduates)¹.

In 2018–19, SAPEP programs served nearly 210,000 K–12 students at more than 1,400 public schools, and over 28,000 community college students at all 114 community colleges. In addition, over 42,000 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.

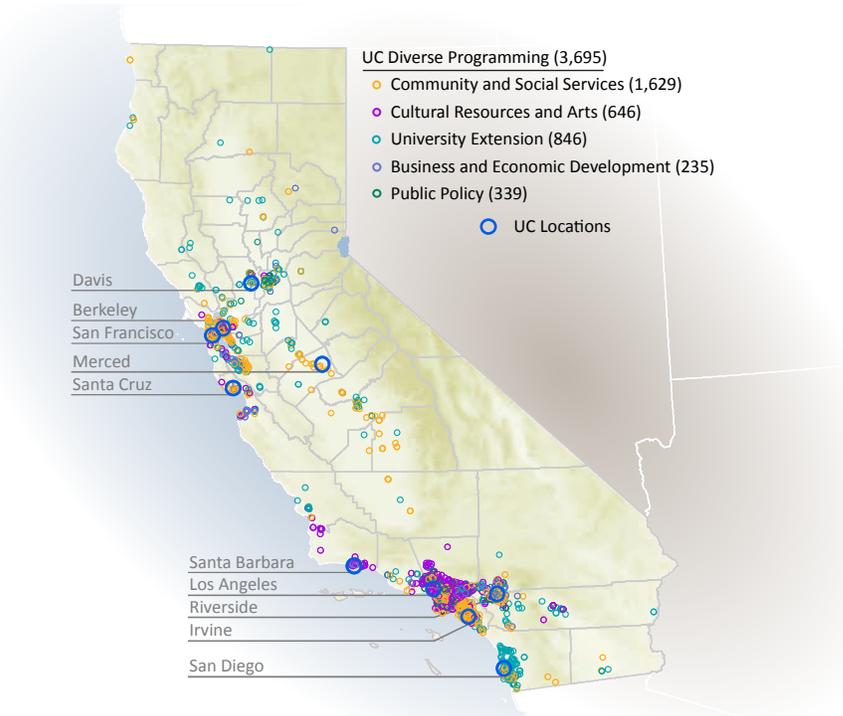
Teacher professional development activities include teacher workshops related to Common Core State Standards, writing, mathematics, and in-service teacher training.

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.

10.4 SOCIAL AND ECONOMIC IMPACT

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



Source: UC campuses, most recent data from 2018

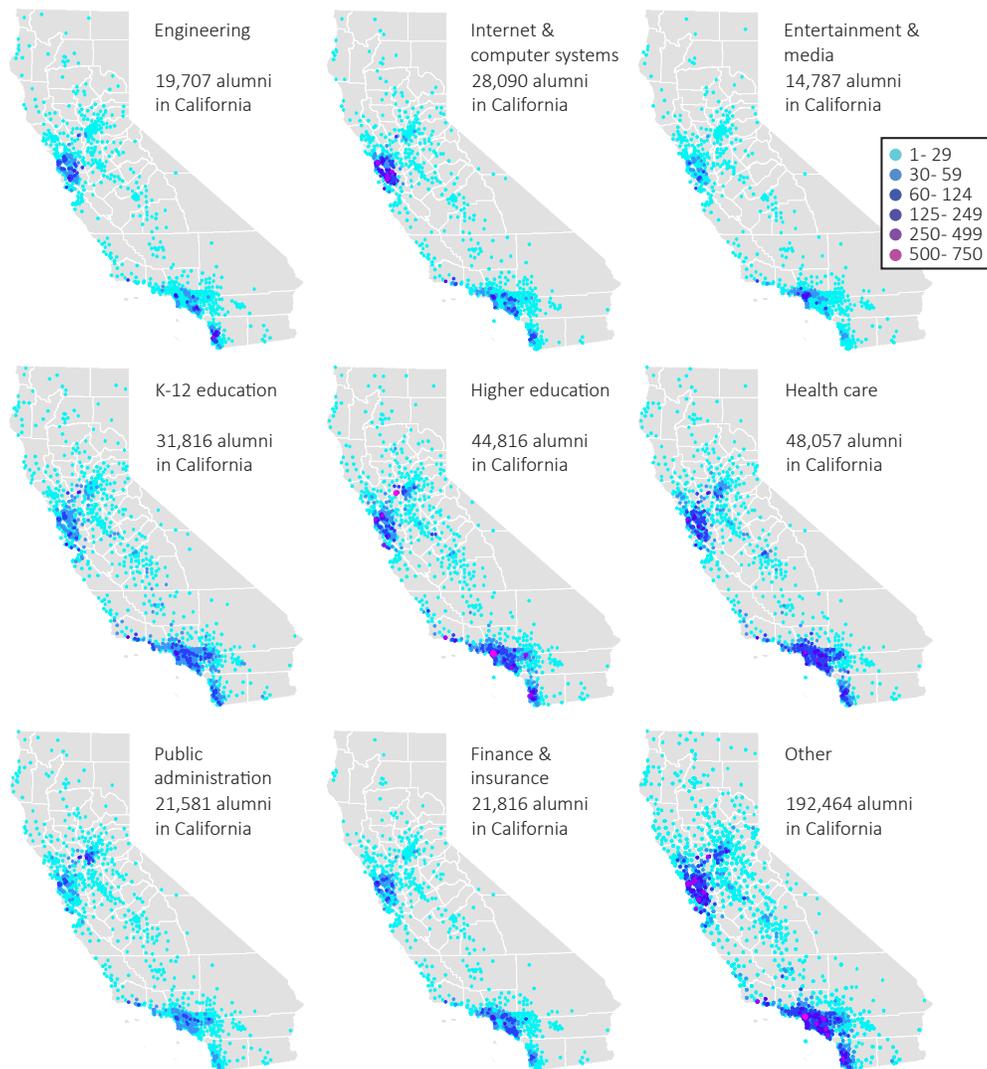
UC administers around 1,630 programs providing community and social services throughout the state, and about 650 arts education and outreach programs that expose students and community members to art and culture through performing arts, theater, cultural events, and other activities. The University operates 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.

10.4 SOCIAL AND ECONOMIC IMPACT

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.

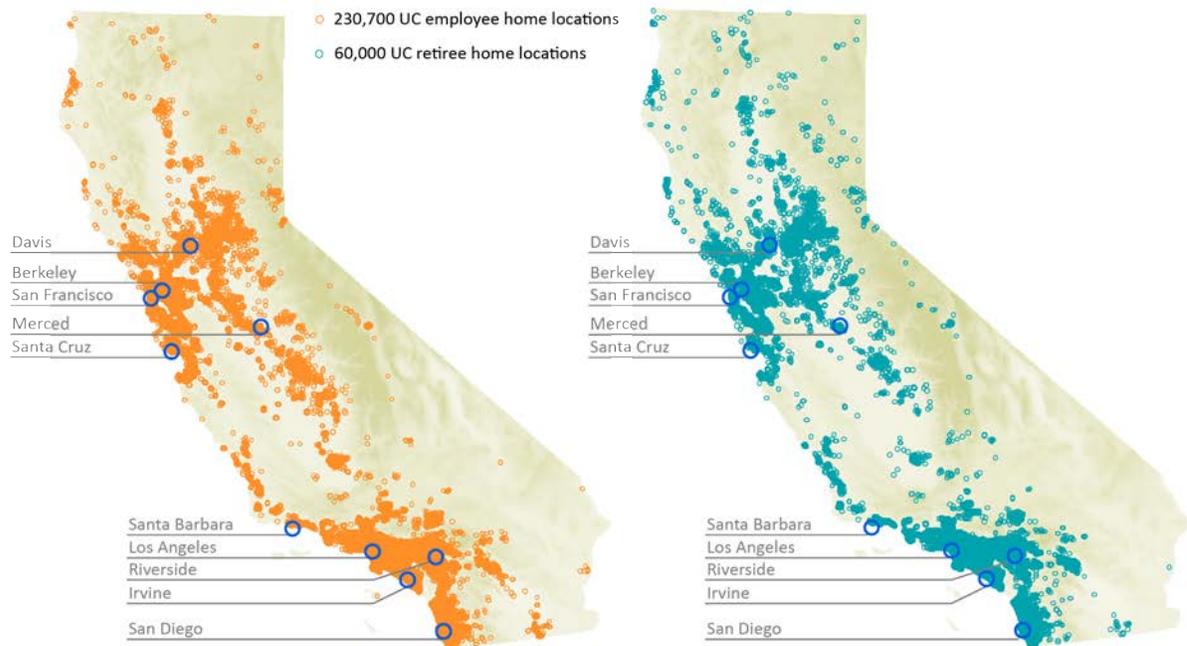
Campus alumni offices maintain recent residential address information for more than 85 percent of those alumni. These maps display the distribution across California of UC graduates in each of eight different industries, as reported by California Employment Development Department (EDD).

The industry with the largest employment of young UC graduates is health care, employing about 12 percent of these alumni, followed by higher education.

10.4 SOCIAL AND ECONOMIC IMPACT

UC is one of California's largest employers, with close to 230,000 employees.

10.4.3 Faculty, academics, and staff employees; retirees, in California, 2020



Source: UC Information Center Data Warehouse

The University of California employs approximately 230,000 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 60,000 of UC's more than 77,000 retirees reside in California, and their UC pension benefits also contribute to the communities in which they reside.



UC Health

Health expertise in service of three missions

The University's 19 health sciences schools, six health systems, student health centers, and self-funded health plans are connected by UC Health, the division office within the Office of the President. The activities of the division, and the broader health enterprise, are aligned to support the University's tripartite mission of teaching, research, and public service.

A refreshed strategic framework and new leadership

The strategic plan for the division office of UC Health was developed in December, 2017 and is refined annually based on feedback from stakeholders, including chancellors, medical center CEOs, deans of the health professional schools, UCOP leadership, and UC Health department heads. UC Health's strategic plan also aligns with the strategic framework of UCOP.

An update completed in January, 2020 also reflects the new leadership of UC Health. On October 31, 2019, Dr. Carrie L. Byington, a physician-scientist, pediatrician, and internationally recognized infectious disease expert, became executive vice president of UC Health, succeeding Dr. John D. Stobo, who led the division since 2008.

The UC Health division office functions as a catalyst for change, coordinating various systemwide activities and providing a strategic framework while respecting the need for local leadership in responding to the needs of their communities, employees, faculty, and students.

The 2020 strategic plan outlines 13 goals to set the direction through 2022. This multi-year framework also sets in motion collaborative efforts that draw upon academic, research, and clinical capabilities across the University's enterprise. As a "living document," the strategic plan anticipates and provides flexibility within broad market forces that include changes in reimbursement from governmental and commercial payers, evolving demographics of the state, changes in drug prices, the impact of climate change on health, and expectations for improved management of chronic conditions, including the opioid epidemic.

At the time of the plan's development, the outbreak of novel coronavirus (SARS-CoV-2) was in its earliest stages, and its spread within the U.S., and its impact on all health systems, not yet realized. Given the unprecedented scale of the COVID-19 pandemic, UC Health and the University of California are responding with the full scope of their patient care, education and training, and research capabilities. The division will continue to drive progress towards its strategic goals within the context of the broader public health threat of COVID-19.

Mission, vision, and values

UC Health's mission is to improve the health of all people living in California now and in the future, promote health equity through the elimination of health disparities, and reduce barriers to access to clinical, educational, and research programs by creating more inclusive opportunities for employees, students, and trainees.

The vision is expansive; UC Health's collaborative approach will be recognized as the foundation for building the pre-eminent data-driven learning healthcare system that improves the human condition. Its actions are rooted in core values of accountability, collaboration, diversity and inclusion, excellence, integrity, innovation and being mission-driven. UC Health's mission, vision, and values are appropriately ambitious for an academic health system committed to the health of California and reflect the spirit of being 'Boldly Californian.'

Preparing the next generation of health care professionals

California’s 40 million people need access to care, now and in the future. The state’s growing population is increasingly diverse, growing older, and faces myriad health needs. While some geographic areas have a sufficient supply of health providers, other parts of the state, such as the San Joaquin Valley and Inland Empire, 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 nearly 15,000 students. Based on historical averages, more than 70 percent of graduates from these programs will remain in California after graduation or residency.

UC Health’s 19 health sciences schools are:

Dentistry (UCSF, UCLA)

Medicine (UCD, UCSF, UCLA, UCR, UCI, UCSD)

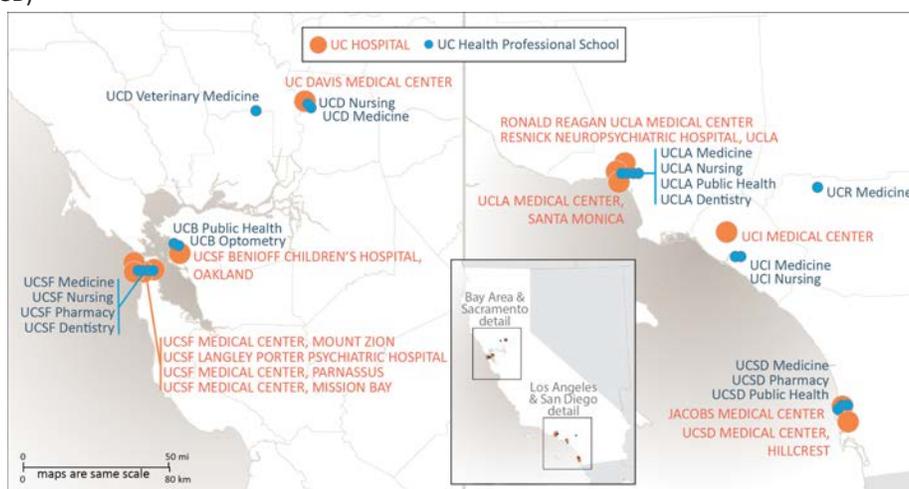
Nursing (UCD, UCSF, UCLA, UCI)

Optometry (UCB)

Pharmacy (UCSF, UCSD)

Public Health (UCB, UCLA, UCSD)

Veterinary Medicine (UCD)



Integral to UC Health’s training of physicians is UC Programs in Medical Education (UC PRIME), which is at five health campuses and an extension at UCSF-Fresno. These programs supplement the standard medical school curriculum with additional courses and field experience designed to meet the unique needs of medically underserved populations and areas. Students who join UC PRIME are mission-driven and often come from the regions and groups that have lacked access. Thus, UC PRIME provides a ladder of academic achievement and economic mobility as well as a source of health care access for their communities. Similarly, the UC Riverside School of Medicine trains students and places residents at area hospitals to encourage physicians to remain in the region.

The caliber of UC health professional programs is demonstrated in the rankings produced by U.S. News & World Report, shown below as of 2019-2020:

Category	UC Berkeley	UC Davis	UC Irvine	UCLA	UC San Diego	UC Riverside	UCSF
Best Medical Schools – Research*	--	40	44	6 (tie)	21	91	6 (tie)
Best Medical Schools – Primary Care*	--	7	81	11	26	92	2

Category	UC Berkeley	UC Davis	UC Irvine	UCLA	UC San Diego	UC Riverside	UCSF
Best Nursing Schools – Masters*	--	40	51	20	36	--	11
Best Graduate Schools Public Health	9	--	--	11	--	--	--
Best Pharmacy Schools*	--	--	--	--	18	--	2
Best Veterinary Medicine Schools	--	1	--	--	--	--	--

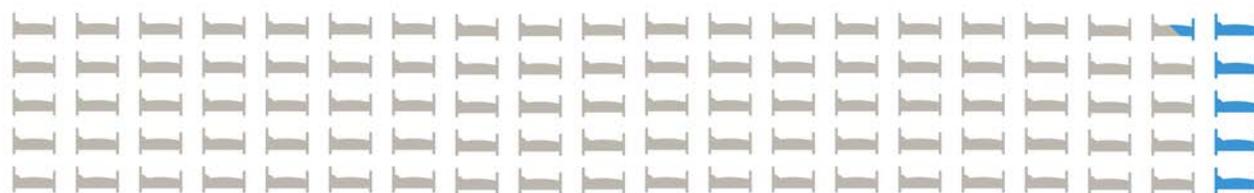
* Indicates 2020–2021 update by U.S. News & World Report. All others based on 2019–2020 rankings. USN&WR does not rank dental or optometry programs.

Academic Health Systems

UC Health includes six academic health centers (AHCs), five of which own or operate their 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 172,991 patients in FY18/19 for a total of 1,092,522 inpatient days. The hospitals also provided 4,876,439 hospital-based outpatient clinic visits. When combined with outpatient services of the health professional schools, UC Health provided more than 7.6 million outpatient visits and cared for 1.8 million unique patients in the most recent fiscal year.

UC health systems are part of the backbone of California's safety net for health care. Care is provided regardless of whether the person has health insurance. The medical centers are supported almost entirely by reimbursement for clinical services paid by Medi-Cal (Medicaid), Medicare, and commercial payers. Systemwide, in FY18/19, 35 percent of inpatient days were associated with Medi-Cal, 34 percent with Medicare, and 30 percent with private market payers. The remaining 1 percent lacked any form of insurance or were self-paid. Almost one in three Californians — 13.5 million people — have health insurance coverage through Medi-Cal.¹

Although UC hospitals represent less than six percent of the acute care beds in the state,² they are the third-largest provider of inpatient services and the fourth-largest provider of hospital-based outpatient services. The number of people eligible for Medi-Cal may expand as the economic fallout from the pandemic continues.



UC has **less than 6%** of the acute care beds in California but is the **second largest provider** of Medi-Cal inpatient care.

 Non-UC bed
 UC bed

¹ Source: chcf.org/publication/2019-medi-cal-facts-figures-crucial-coverage/

² Source: ahd.com/states/hospital_CA.html

All five UC medical centers are ranked among California’s top ten 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. The 2019–2020 Best Hospital rankings for UC hospitals are:

Best Hospitals - Nationally	#6 UCSF	#7 UCLA			
Best Hospitals - California	#1 UCLA	#2 UCSF	#6 UC Davis	#8 UC San Diego	#10 (tie) UCI

Leveraging Scale for Value (LSfV)

One of the earliest systemwide collaborations is the Leveraging Scale for Value initiative (LSfV), which works on supply chain, revenue cycle, and information technology improvements. The cumulative financial benefit for this project is more than \$950 million as of FY18/19.

The impact of Covid-19 on the health enterprise

In late 2019, China experienced an outbreak of a new virus, initially referred to as ‘2019-nCoV,’ or ‘novel coronavirus’ and ultimately designated ‘SARS-CoV-2.’ The illness it produces is called COVID-19. The World Health Organization (WHO) declared a Public Health Emergency of International Concern on January 30, 2020, and subsequently a pandemic on March 11, 2020. Within months, the world witnessed one competent health system after another become overwhelmed with patients in acute respiratory distress and a high mortality rate.

To support the University’s response, the health division established the UC Health Coordinating Committee and formed working groups of subject matter experts. Among the immediate challenges was a disruption to the global supply chain for Personal Protective Equipment (PPE), which is disproportionately made in China, where manufacturing operations had been suspended.

By late February, UC medical centers had cared for six patients confirmed to have COVID-19, and another 31 whose tests results were pending. Two months later, more than 600 inpatients with COVID-19 had been cared for at UC hospitals. In January and February 2020, there was a national shortage of reliable, mass-produced tests capable of rapidly detecting the virus. Widespread testing is a cornerstone of calibrating infectious disease response based on an understanding of how far the virus has spread, its rate of transmission, and the percent of infected persons who will require hospitalization and ventilation support.

In late February, the Food and Drug Administration permitted sophisticated non-federal labs to independently develop and use tests. By March 10, several UC medical centers had begun in-house testing, and by mid-March, all UC medical centers had the capacity to test with a faster turn-around time than was possible through tests shipped to the CDC. A little more than a month later, more than 35,000 tests had been performed for UC Health patients, and an equivalent number conducted for other hospitals and public health departments.

On March 4, Governor Newsom declared a state of emergency to strengthen the state’s response to the pandemic. UC hospitals had already begun implementing emergency operations plans, ultimately adding 1,481 surge beds to the existing 3,911 beds, an increase of nearly 40 percent.

UC and its health enterprise also responded with accelerated research initiatives. By early April, more than 300 research projects, proposals and clinical trials for COVID-19 were active, and the University had begun distributing initial grants to jump-start efforts.

The pandemic's threat to health and safety continues, as does its mounting financial toll. UC Health's medical centers are incurring substantial costs for surge expansion, surge staffing, development of testing capabilities, and other expenses. At the same time, revenues are down due to the cancellation of thousands of non-emergency procedures to prepare for a potential COVID-19 patient surge.¹

Although the federal government has implemented a series of stimulus bills that will provide some relief, the extent of available funds and how it compares to the expenses and lost revenue will not be known for some time. This is significant as the revenue generated by UC's clinical activities also support the health professional schools. In FY 18/19, the health services support totaled \$606 million.²

The economic disruption caused by COVID-19 is enormous. As people lose employer-sponsored health insurance, the people transitioning to Medi-Cal or becoming uninsured will have a direct impact on the payer mix and total revenue received by the medical centers.

Progress on Systemness

The first move toward 'systemness' began five years ago, through the Leveraging Scale for Value (LSfV) initiative. By 2019, there were more than a dozen collaborations across the system sharing best practices and coordinating activities. Today, as a result of COVID-19, that number has grown significantly.

One sign of this effort is a COVID-19 dashboard that leverages all five instances of UC's electronic health record platform. The dashboard shows the SARS-CoV-2 tests performed each day for UC Health patients, the positive tests by gender, age and geography, the inpatients with a COVID-19 diagnosis with details on ICU and ventilator use, and the disposition of patients at the end of treatment. These metrics are reported via UC Health's Twitter account (@UofCAHealth). As noted in the vision statement, UC Health intends to be the 'pre-eminent data-driven learning healthcare system,' and its ability to rapidly leverage information from the UC Health Data Warehouse is a sample of what can be accomplished.

In April, the Robert Wood Johnson Foundation, the country's largest philanthropic foundation focused solely on health, awarded UC Health a \$100,000 grant to work with other health systems to increase the availability of standardized, actionable information on COVID-19 impact and progression.

For more information

UC Medical Centers 2018-19 Annual Financial Report: finreports.universityofcalifornia.edu/index.php?file=med_ctr/18-19/Med-Centers-18-19-report.pdf

UC Budget for Current Operations, 2020-21: ucop.edu/operating-budget/_files/rbudget/2020-21-budget-detail.pdf

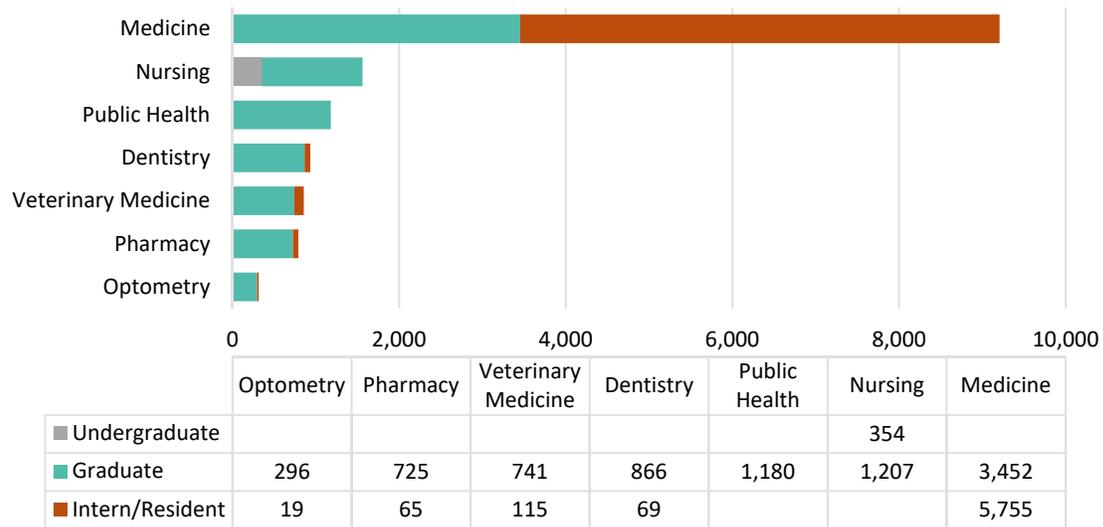
¹ universityofcalifornia.edu/sites/default/files/UC-COVID-19-budget-letter-to-state-leadership-041520.pdf

² Page 56: finreports.universityofcalifornia.edu/index.php?file=med_ctr/18-19/Med-Centers-18-19-report.pdf

11.1 HEALTH SCIENCES STUDENTS

UC is currently training nearly 15,000 health care professionals.

11.1.1 Health sciences students by discipline, fall 2019



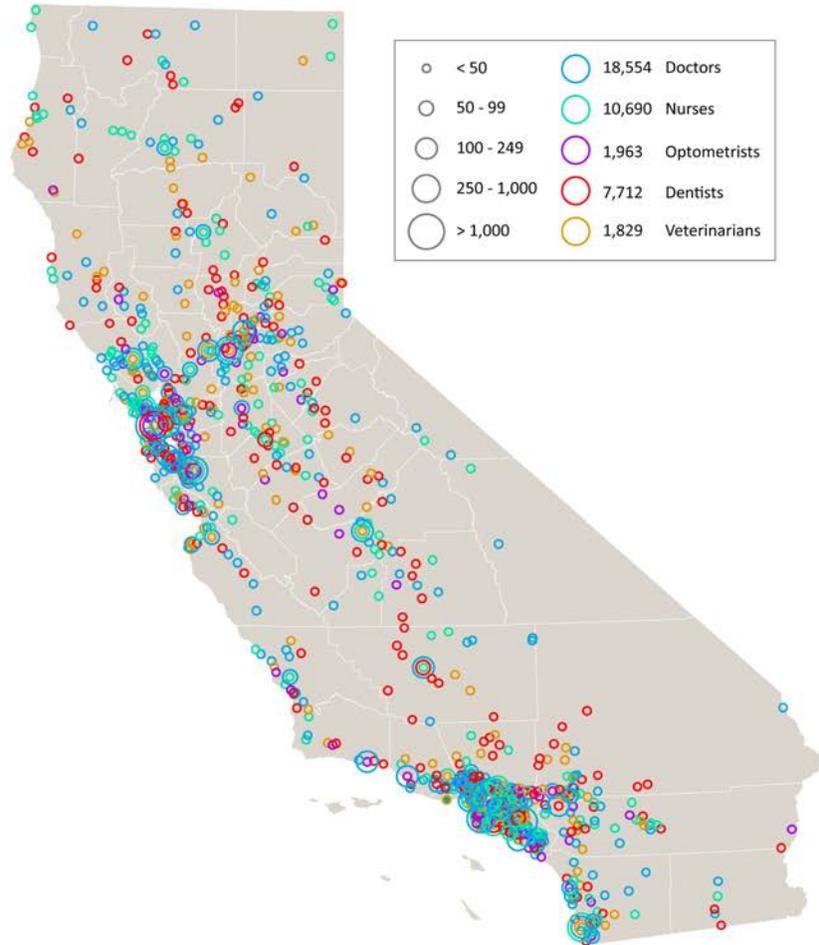
Source: UC Information Center Data Warehouse

Nearly 15,000 students are enrolled in UC Health’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.

11.1 HEALTH SCIENCES STUDENTS

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: CA Department of Consumer Affairs

Based on the 2017 locations of practice of 2005–2010 graduates of UC health sciences’ schools and residency programs, approximately 72 percent of UC health science students and 61 percent of medical 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.

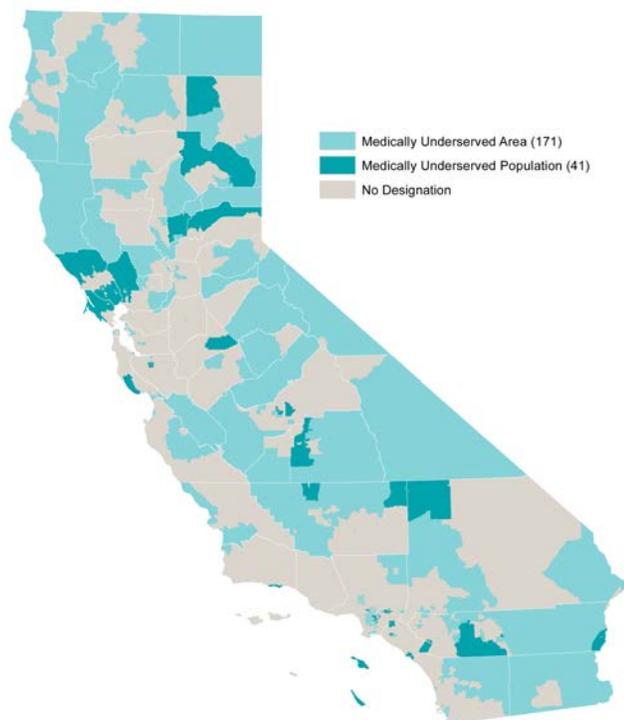
2005–2010 students and residents retained in California, combined:

Doctors	66%
Dentists	65%
Veterinarians	60%
Nurses	71%
Optometrists	72%

11.2 MEDICALLY UNDERSERVED AREAS

UC is addressing medical needs in California’s underserved communities.

11.2.1 Medically underserved areas and populations



Source: OSHPD, Workforce Development Division, 2018

All of UC Health’s 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). PRIME (Programs in Medical Education) is a unique program at UC’s six medical schools that supplements 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, PRIME has produced 470 medical school graduates. In 2018–2019, UC Health had 354 medical students enrolled in PRIME,

with 64 percent coming from underrepresented groups in medicine.

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 training for family medicine, obstetrics and gynecology, psychiatry, pediatrics, general surgery, and internal medicine — medical specialties with significant shortages.

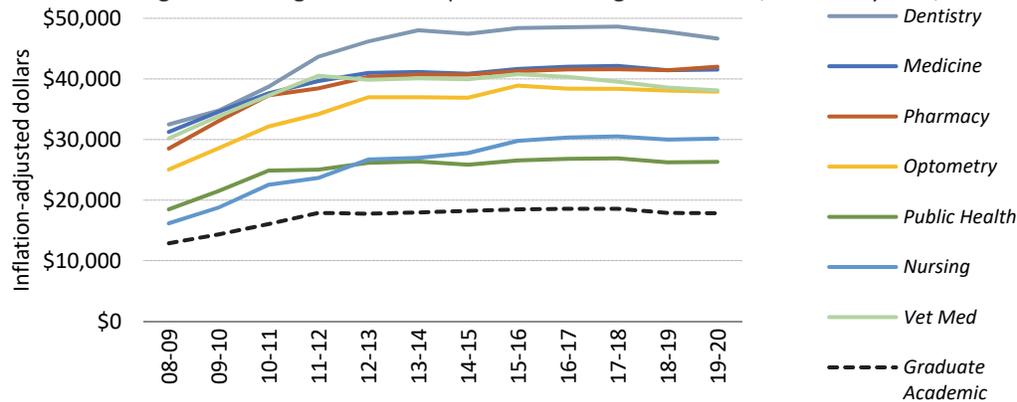
Rather than open an academic medical center to enhance physician training, UC Riverside embeds its students and residents in community-based health organizations, many of which serve indigent populations. Additionally, the school uses funds from foundations and individual donors to waive tuition and fees for graduates who agree to practice medicine in underserved areas for five years.

UCLA International Medical Graduate (IMG) program: In 2018, the Governor signed AB 2311, a bill that extended UCLA’s unique IMG program. The UCLA IMG program is a University-based pre-residency training program for U.S. citizens and permanent residents who received medical educations from schools throughout Latin America, and who are fully fluent in both Spanish and English. These international graduates undergo an intensive, standardized course of professional instruction and clinical clerkships so they can pass the U.S. Medical Licensing Examinations (USMLE) and compete successfully for Family Medicine residency programs in California. In return, UCLA IMG scholars agree to serve for 24 to 36 months in medically underserved communities in California after completing their residencies.

11.3 HEALTH SCIENCES STUDENT DEBT

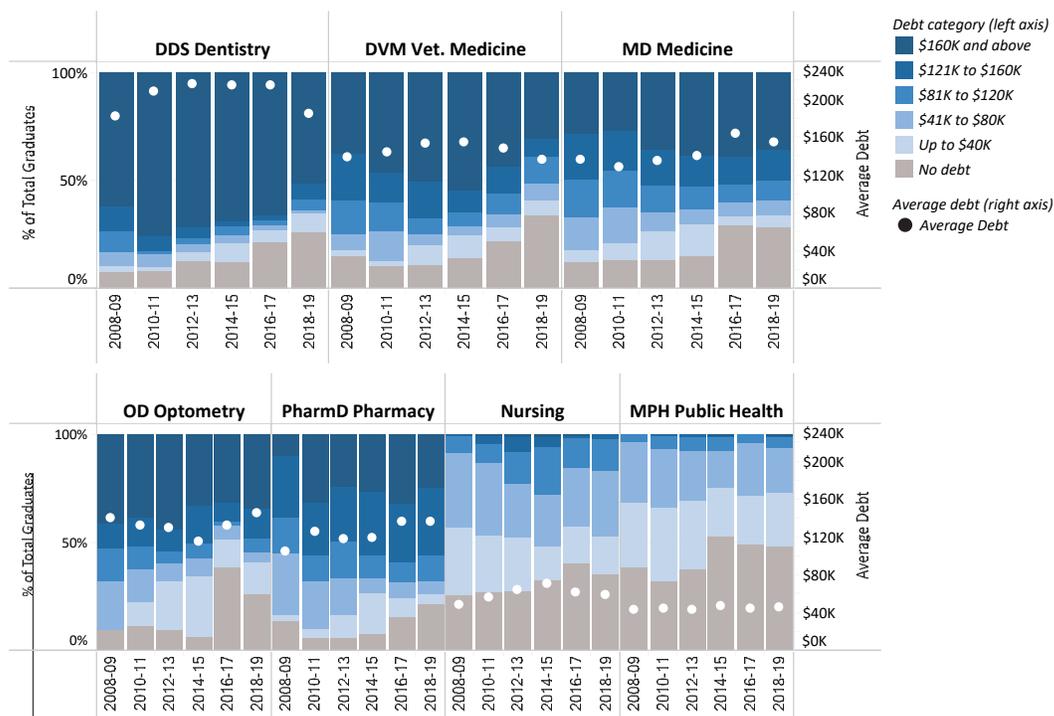
Health science professional degree fees have leveled off after incurring sharp increases during years of declining state support. Average debt levels are increasing.

11.3.1 Average total charges for health professional degree students, Universitywide, 2008–09 to 2019–20



Source: UC Information Center Data Warehouse

11.3.2 Health sciences professional degree student debt at graduation, Universitywide, 2008–09 to 2018–19



Source: UC Information Center Data Warehouse

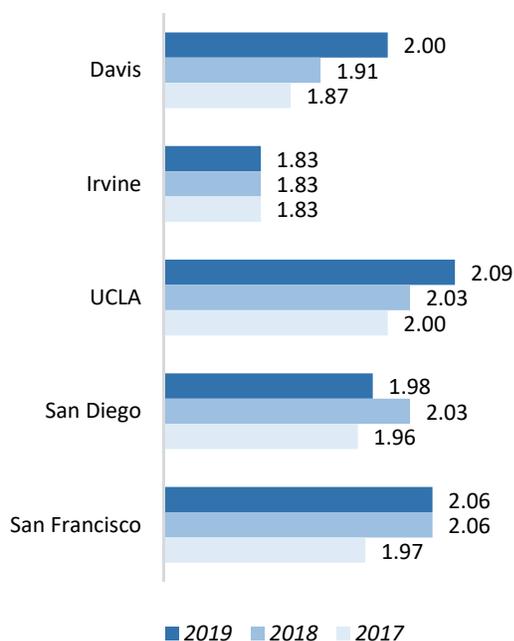
The rising cost of graduate education has not been matched by increases in state support. In fact, state support declined significantly during recurring state fiscal crises, which caused the University to increase tuition, campus-based fees, and professional degree

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.

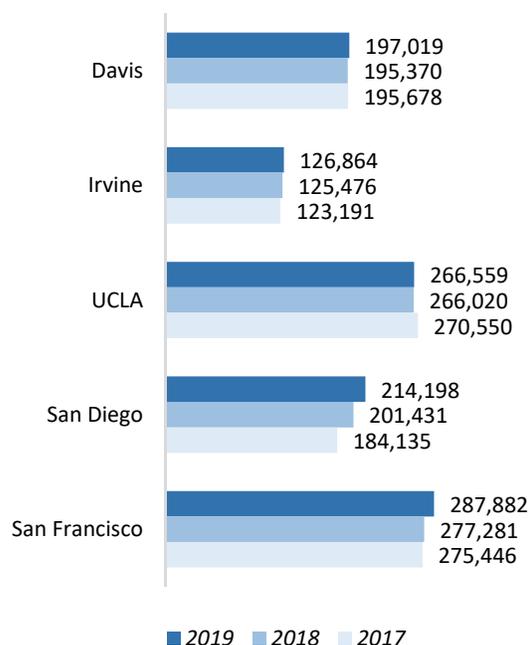
11.4 PATIENT CARE

As academic medical centers and safety-net hospitals, UC Health hospitals are destinations for some of the most critically ill patients in the state.

11.4.1 Patient complexity (Case Mix Index)
UC medical centers
2019, 2018, and 2017 fiscal years



11.4.2 Hospital inpatient days
UC medical centers
2019, 2018, and 2017 fiscal years



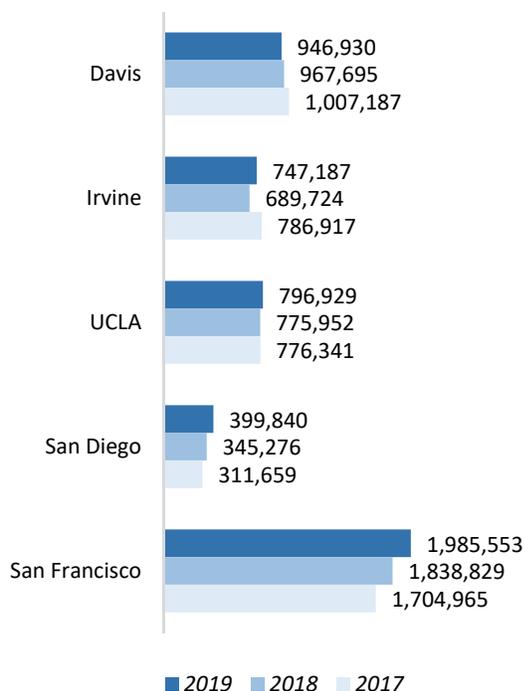
Source: UC Medical Center Audited Financial Statements

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. The CMI at UC Health hospitals ranged from 1.83 to 2.09 in fiscal year 2018–19.

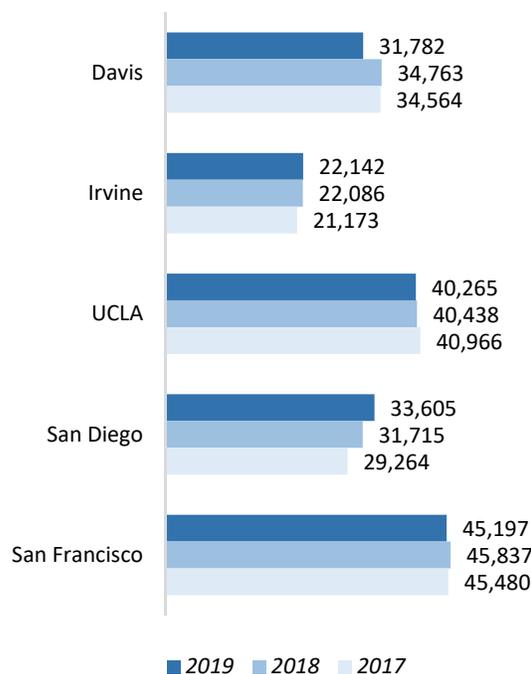
11.4 PATIENT CARE

UC medical centers and UC schools of medicine accommodate millions of outpatient visits every year.

11.4.3 Outpatient visits
UC medical centers
2019, 2018, and 2017 fiscal years



11.4.4 Hospital admissions
UC medical centers
2019, 2018, and 2017 fiscal years



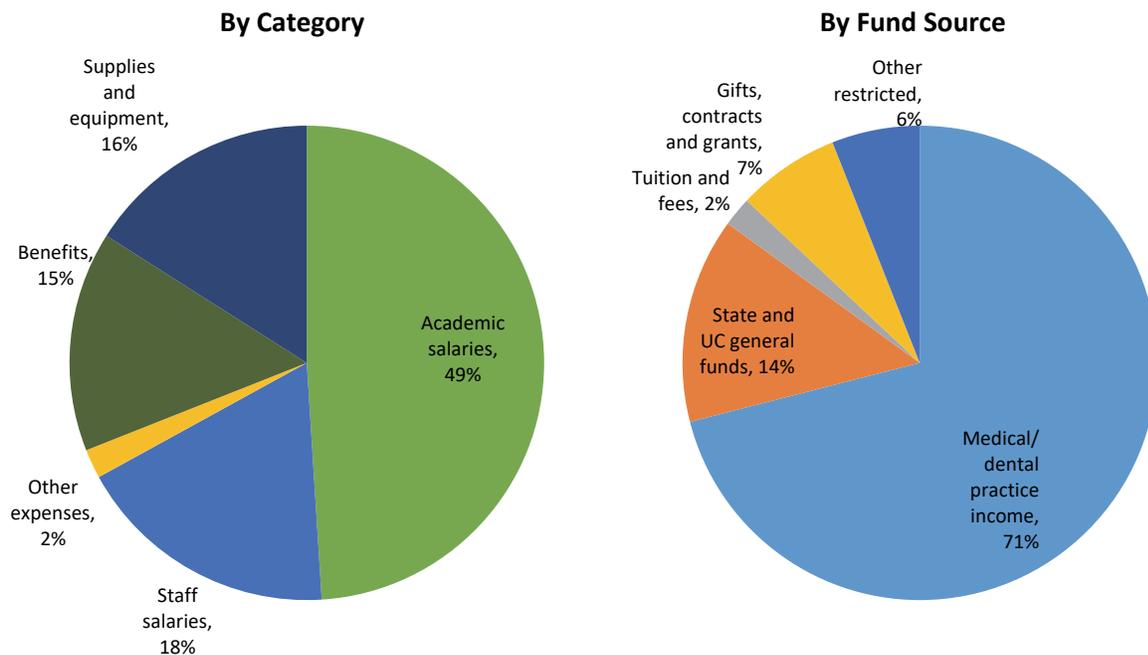
Source: UC Medical Center Audited Financial Statements

Supplementing its inpatient capacity, UC Health provides robust outpatient services. Outpatient services provided by the Medical Centers include clinic visits, primary care network, home health and hospice, and emergency visits. In fiscal year 2018–19, the medical centers provided nearly 4.9 million hospital outpatient visits. The schools of medicine and other non-hospital clinic visits accounted for another 2.5 million outpatient visits.

11.5 EXPENDITURES

Medical and dental practice income supports over half of the instructional expenditures in the health sciences.

11.5.1 Health sciences instructional expenditures by fund source, 2018–19



Source: UC Budget for Current Operations

Although part of the University of California, only a small portion of UC Health’s funding comes from the state’s General Fund. The overwhelming majority comes from reimbursements and payments for clinical services.

More than half 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 14 percent of revenue.



INSTITUTIONAL PERFORMANCE

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.

Financial trends

The University's revenues, totaling over \$36.9 billion in 2018–19 (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 are the next largest source of funds and help sustain UC's research mission.

State General Funds, tuition and fees, and UC General Funds make up the core revenues for the University's instructional mission. State funds used to be the largest single source of support for instruction; however, cuts in state funding over the past decade 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 significant enrollment growth. The decline in state support has been partly offset by tuition and fees from both enrollment growth and increased rates charged to students, though financial aid increases made up for the tuition and fee increases for many UC students. Improvements in the California economy since 2012, combined with the passage of Proposition 30, have brought some stability to the state budget and thus to the University's core budget. Modest increases in state funds have allowed for greater stability in tuition and fees and better planning for enrollment growth.

As core revenues per student have declined, 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 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.

Salaries and benefits for academic and support staff are the largest areas of expenditures, which is typical for universities. Although the inflation-adjusted expenditures for educating a student at UC have dropped by 21 percent since 1990, 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 148 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, the majority 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 fiscal year 2017–18, UC approved capital project budgets totaling \$2.7 billion. Approximately 87 percent of the cost was met through debt financing that includes external financing supported by state General Funds. The remaining capital projects were funded by non-state sources, including public-private partnerships, which have become a growing part of UC's capital projects strategy, particularly for student housing.

In 2015–16 and before, the majority of capital projects were aimed at growing core academic programs and replacing aging facilities. In the past three years (2016–17 through 2018–19), there has been an increase in projects that address enrollment growth and program improvements. UC must maintain and upgrade its facilities, of which close to half are more than 35 years old, with many in need of seismic upgrades.

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 Operations, Zero Waste, Sustainable Procurement, Sustainable Food Service, Water, and Sustainability in UC Health. The University's Sustainable Practices Policy was updated again in 2019.

The University first established a systemwide commitment to climate action leadership in 2007, when all ten Chancellors signed the American College & University Presidents' Climate Commitment. 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, all ten UC Chancellors and President Napolitano signed a climate emergency declaration letter in September 2019 that recognizes "the need for a drastic societal shift to combat the growing threat of climate change."

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 Wholesale Power Program is providing 100 percent clean electricity to seven campuses and three medical centers that are eligible to select an alternative energy provider. The Wholesale Power Program supplies approximately 25 percent of the University's electricity use. 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 34 students with Carbon Neutrality Initiative Fellowships during the 2019–20 school year to work on projects supporting UC's climate neutrality goal.

Upfront investments in energy efficiency are often costly, but energy efficiency projects across the system have so far netted over \$285 million in cumulative avoided energy 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 2019, UC has 321 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 are now 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. At least 50 percent of all new fleet vehicles purchased in fiscal year 2018–19 at six campuses were all-electric or hybrids.

Looking forward

The COVID-19 pandemic and its associated shelter-in-place requirements have resulted in significant financial losses across the state, both to general campus and auxiliary operations and UC Health operations. It is unclear how significant and lasting this financial loss will be and how campuses will need to adjust during this period. Next year's UC Accountability Report will begin to report on those losses.

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

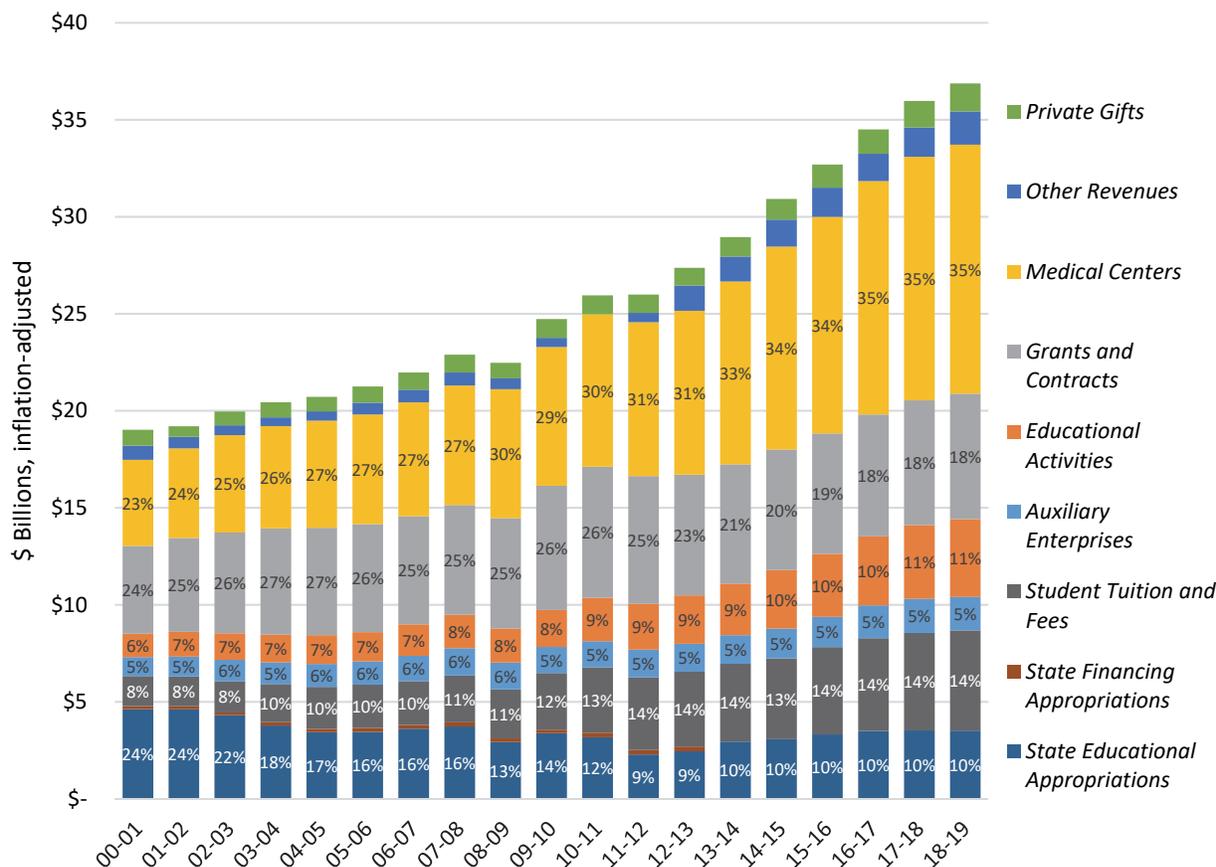
Information on UC's sustainability: ucop.edu/sustainability/

Annual Sustainability Report: ucop.edu/sustainability/policy-areas/annual-reports.html

12.1 FINANCES

Over time, UC's varied sources of revenue have grown at different rates.

12.1.1 Revenues by source Universitywide 2000–01 to 2018–19



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 35 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.

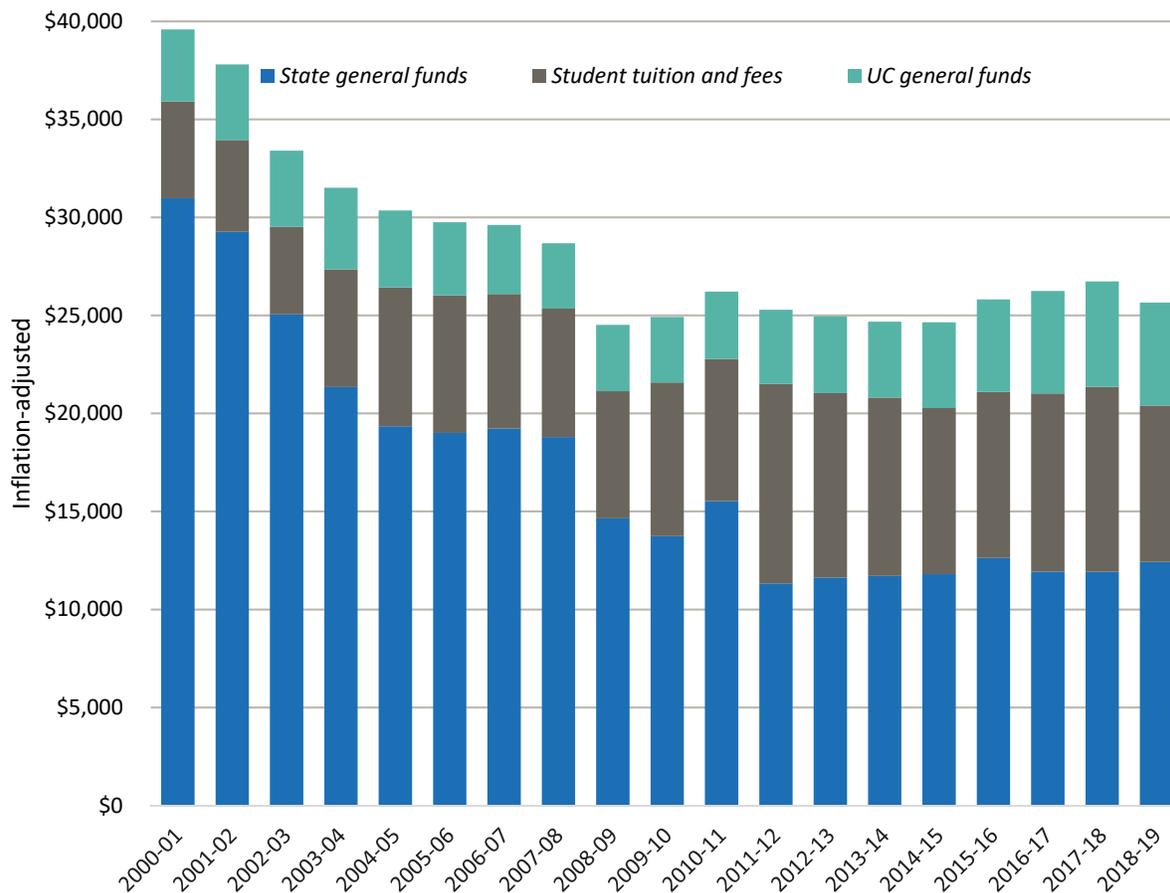
Second, among the University's core fund revenues, state appropriations now contribute less to the University's operating budget than student tuition and fees. In 2018–19, State General Funds comprised 40% of UC's core fund budget, while student tuition and fees comprised 42%.

Historically, state funding had been the largest single source of support for the University's core budget. UC used to receive 8.1 percent of all state General Funds in 1966–67, while today it receives only 2.7 percent of those funds.

State educational appropriations are for educational and other specific operating purposes, whereas state financing appropriations provide principal and interest payments for lease-purchase agreements.

Since 2000–01, available core revenues per student have declined by 35 percent.

12.1.2 Per-student average inflation-adjusted core revenues
Universitywide
2000–01 to 2018–19



Source: UC Budget Office

Since 2000–01, average inflation-adjusted revenues per student have declined 35 percent. During the same period, the State General Fund portion has fallen even more steeply, by 60 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.

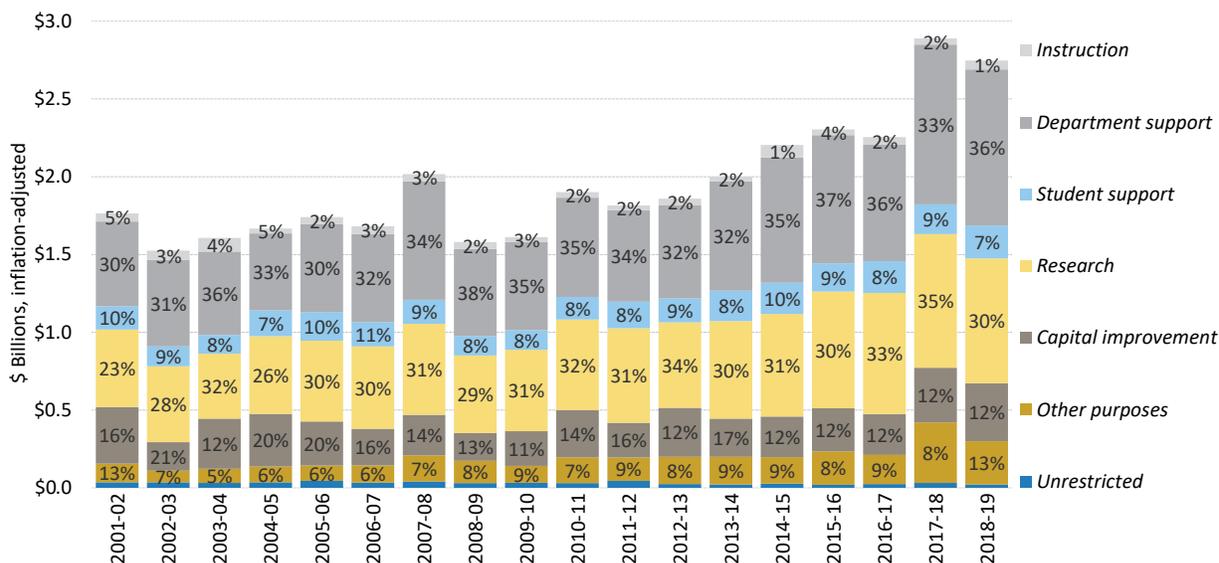
UC General Funds are composed mostly of Nonresident Supplemental Tuition Revenue and indirect cost recovery from research contracts and grants.

Less core revenue per student has put downward pressure on general campus instructional spending per student in particular, as seen in indicator 12.1.5. Ultimately, this pullback may affect the quality of instruction and the student experience.

12.1 FINANCES

Virtually all gift funds (99 percent) are restricted by donors in how they may be used.

12.1.3 Current giving by purpose Universitywide 2000–01 to 2018–19



Source: UC Institutional Advancement

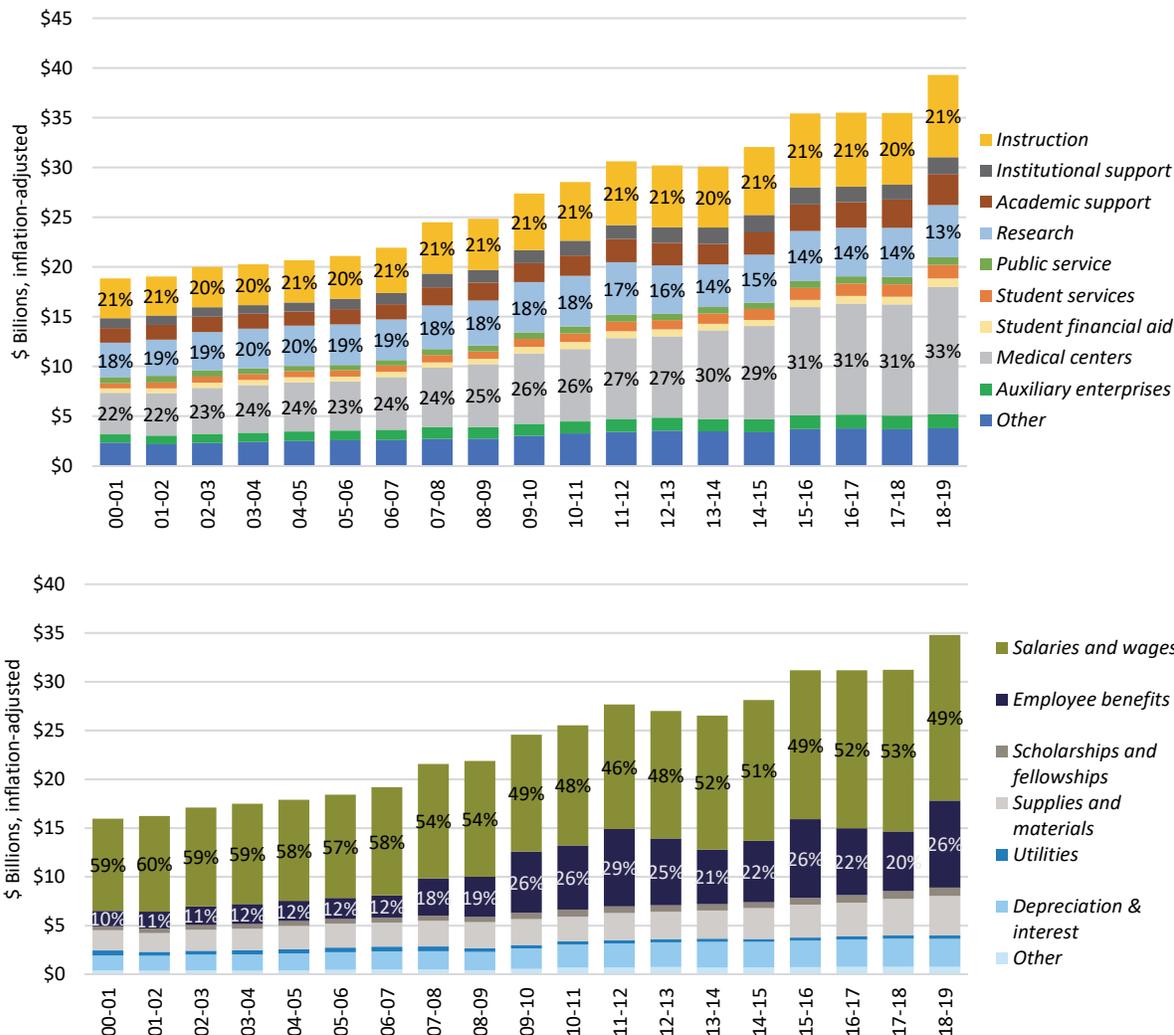
The University is energetically pursuing increased philanthropic giving as a means to help address budget shortfalls and expand student financial aid.

In 2018–19, new gifts to the University totaled about \$2.75 billion. Virtually all of these funds are restricted for specific purposes and are not available to support general operating costs. In addition, approximately \$678 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.

The University’s remarkable achievement in obtaining private funding in recent years — even during state and national 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 2018–19



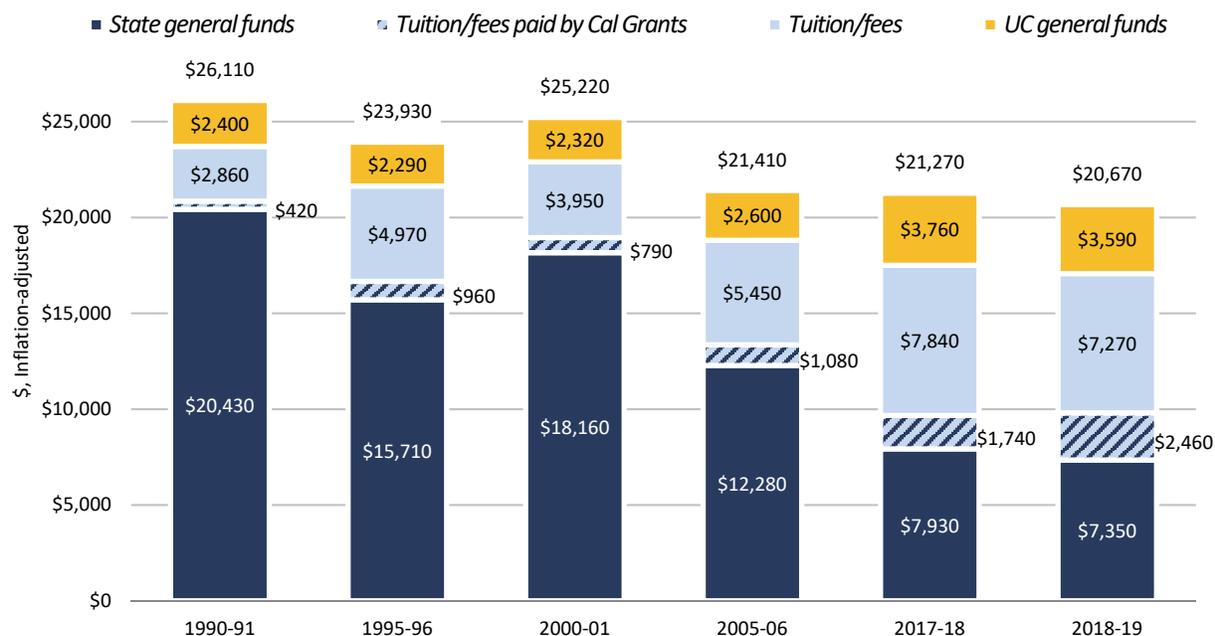
Source: UC Revenue and Expense Trends Report. Dollars are inflation-adjusted dollars using CCPI-W. Amounts do not include Department of Energy Laboratories.

When viewed by function, the combination of instruction, research, and public service accounted for 36 percent of total expenditures during 2018–19, while medical centers (UC’s teaching hospitals) accounted for 33 percent. Other expenses by function include interest, depreciation, and miscellaneous expenditures.

Looking at expenditures by type, nearly 65 percent are dedicated to personnel costs since higher education, health care delivery, and research are inherently labor-intensive enterprises. Salary costs have 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; however, benefit costs also fluctuate due to variations in investment returns on the pension and the discount rate for retiree health.

Since 1990–91, total instructional expenditures per UC student have declined by 21 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 1990–91 to 2018–19



Source: UC Budget Office, inflation-adjusted amounts.

Since 1990–91, average expenditures for instruction per student from core funds have declined by 21 percent in inflation-adjusted dollars. Of this amount, the share provided by state support for the University’s budget declined from 78 percent in 1990–91 to only 36 percent of the total in 2018–19. In contrast, the contribution from tuition and fees has increased from 13 percent to 47 percent during the same period.

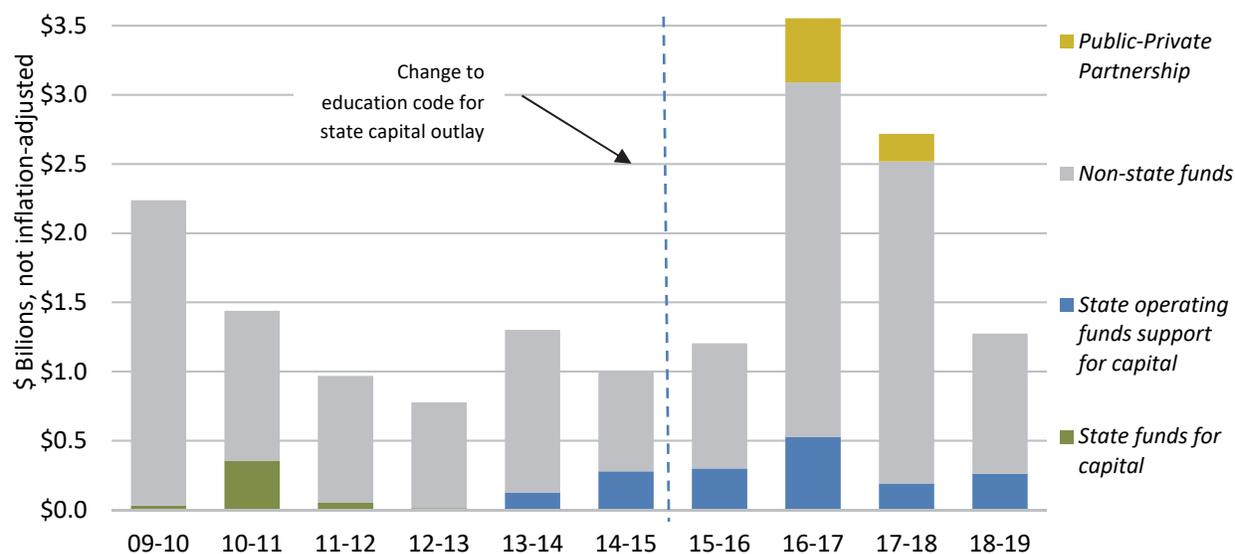
The state’s Cal Grant program has covered tuition and fee increases for many California resident undergraduate students. However, even after taking Cal Grants into account, state funding covered only 47 percent of instructional expenditures from core funds in 2018–19 compared to 80 percent in 1990–91.

Although the figures in 12.1.2 and 12.1.5 are related, they technically depict different information. Indicator 12.1.2 shows the total amount of core funds at the University’s disposal, relative to the total number of students enrolled, for efforts including instruction, student services, academic support, research, and administration. By contrast, 12.1.5 spotlights UC’s expenditures on general campus instruction alone, relative to the total number of students enrolled. Put another way, 12.1.2 and 12.1.5 feature how the following metrics have changed over time: UC’s core fund source-mix and total, and UC’s expenditures on general campus instruction, respectively.

12.2 CAPITAL PROJECTS

The majority of UC’s capital project funding over the last ten years continues to be derived from non-state fund sources. Starting 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 2007–08 to 2018–19



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 for capital is non-state resources. Public-Private Partnerships are not included in the 2018–19 totals. A General Obligation (GO) bond was placed on the March 2020 ballot but it was not passed by the voters.

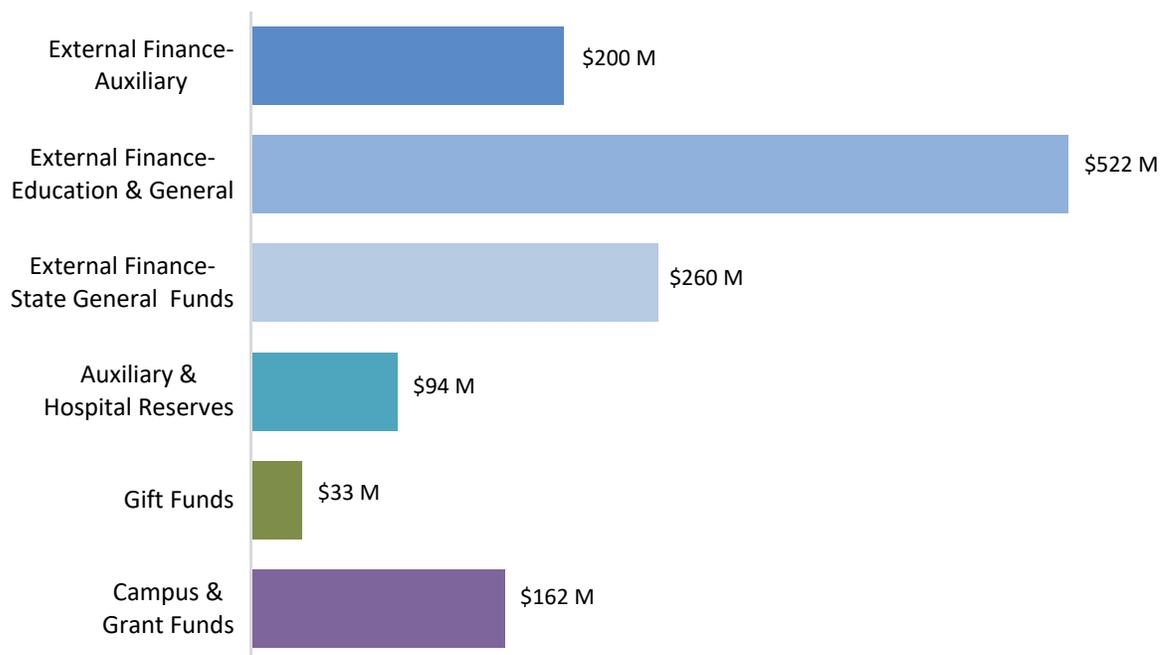
Legislation in 2013–14 and 2018–19 enacted a change in how UC could fund its debt service, availability payments and expenditures for capital outlay. Instead of receiving dedicated capital funding from the state, UC can direct a portion of its State General Fund appropriations to fund debt service for

state-eligible capital projects. The portion of State General Funds that is directed to capital does not represent new state funding and is made up of funds that are redirected from operations to support capital.

State funds were historically the primary source of funding for core academic facilities and seismic compliance for acute care hospitals, however, due to the elimination of specific state appropriations, some needs have been financed by the University. Non-state sources fund most of UC’s state-eligible capital needs as well as 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 2018–19 capital project program is heavily supported by external financing.

12.2.2 Sources of capital project spending detail, Universitywide
Project budgets approved in 2018–19



Source: UC Capital Asset Strategies

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.

With state funding playing a declining role in the University’s capital program over the past decade, the University has relied on other means to fund capital projects. As noted in indicator 12.2.2, approximately 21 percent of capital funding for the 2018–19 capital program utilized external financing supported by state General Funds that could have been used to support operations.

In addition, campuses redirect non-state funds to projects that otherwise would have been funded with state resources.

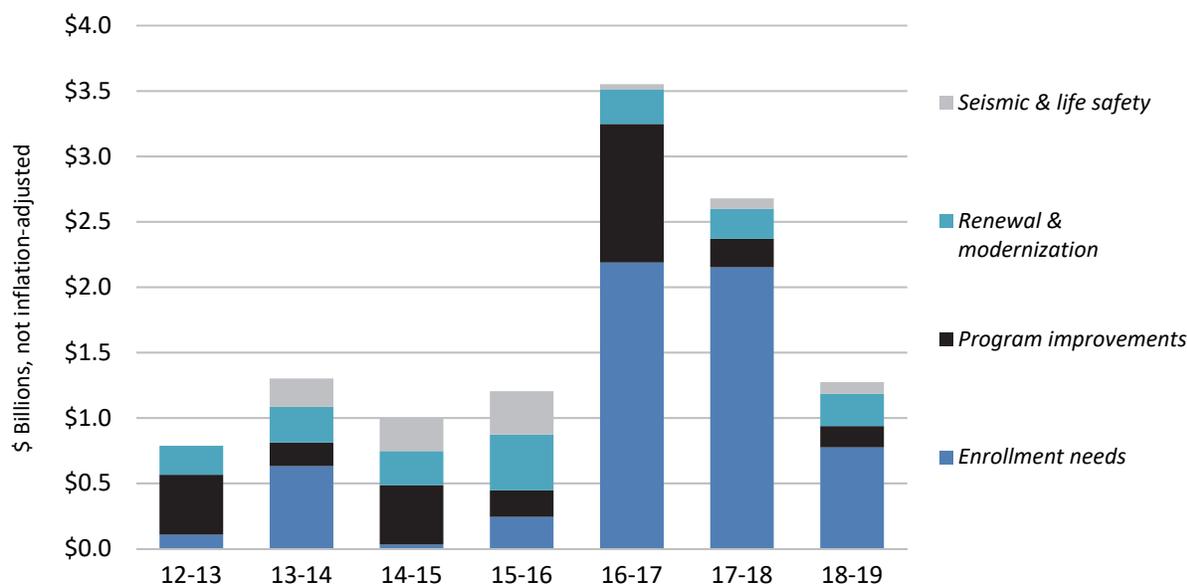
External financing continues to play an important role in funding capital needs. About 57 percent of capital project funding in 2018–19 came from non-state supported external financing. The non-state financing supports student housing projects as well as research projects related to program improvements in the sciences.

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 a variety of sources, including indirect cost recovery and investment earnings.

12.2 CAPITAL PROJECTS

The majority of capital funds approved for expenditure in 2018–19 supported projects addressing growth in enrollment and renovation or replacement of aging facilities.

12.2.3 Types of capital projects, based on budgets approved by year Universitywide 2012–13 to 2018–19



Source: UC Capital Asset Strategies

Capital projects may address several objectives. Continuing enrollment growth has largely driven the University's requirement for new teaching laboratories, classrooms, and student housing and services. In 2018–19 alone, UC approved \$775 million for projects that address enrollment needs. The campuses must expand teaching laboratories and classrooms to meet the increases in enrollment.

Program improvements and modern program initiatives require state-of-the-art space, often necessitating the repurposing of existing facilities or new construction. In 2018–19, UC devoted approximately \$163 million for program improvements to address academic, research, and clinical priorities.

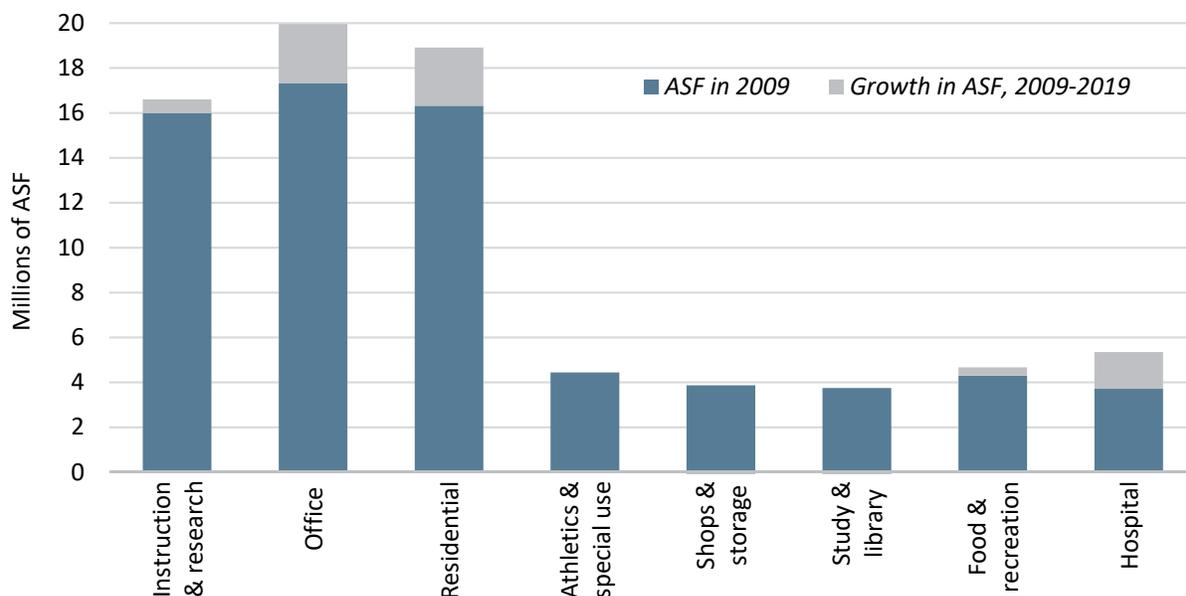
Campus facilities age and must be renewed and modernized to ensure safety, extend the useful life of the buildings, and improve energy efficiency. Building systems, elevators, and roofs need periodic replacement and renewal during the lifespan of a building. In 2018–19, UC approved \$246 million for these types of projects.

In addition to general renewal, the University continues to review the seismic safety of its facilities. UC devoted \$90 million to seismic and life-safety improvements to buildings in 2018–19.

12.2 CAPITAL PROJECTS

In the past decade, UC space has increased by approximately 11 percent, with most of the growth targeted for instruction and research, and residential uses.

12.2.4 Assignable square footage (ASF) Universitywide 2009–2019



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 2009, space has increased by 7.3 million ASF for a total of 77 million ASF.

In the past decade, instructional and research space increased by about 600,000 ASF, office space by 2.6 million ASF, and residential space by 2.6 million ASF. The space increase for these areas (12 percent) is has not kept pace to the to the increase in fall enrollment (26 percent) for the same period.

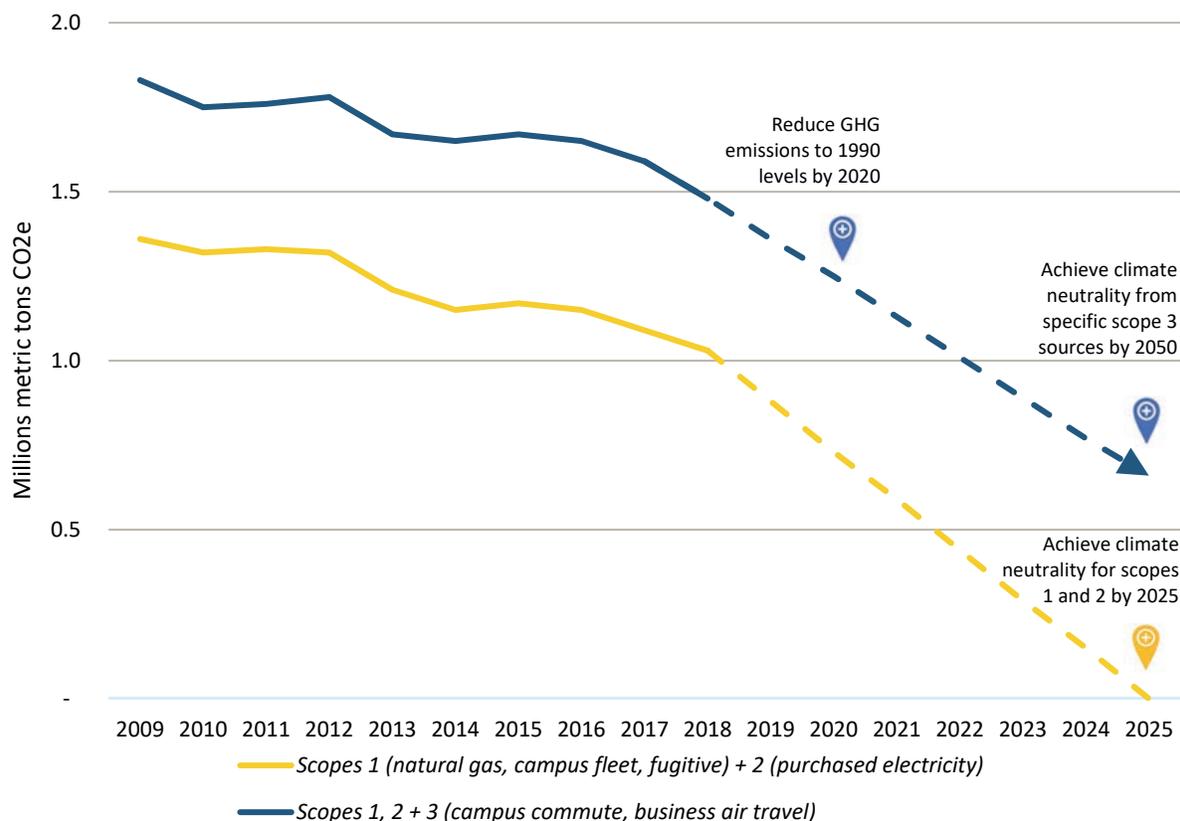
Residential space has grown as campuses strive for more on-campus student housing to improve student life in living/learning communities and to reduce environmental impacts from commuting. Increases in the student population have also required additions to athletic, recreational, and food service space.

Hospital space significantly grew 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 and Ron Conway Family Gateway Medical Building (2015), and the Jacobs Medical Center at UC San Diego Health (2016).

12.3 SUSTAINABILITY

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

The University’s scope 1 and scope 2 greenhouse gas (GHG) emissions decreased by 15 percent since the Carbon Neutrality Initiative was announced in 2013, committing the University to carbon neutrality by 2025. This includes a three percent reduction in scope 1 emissions and a 14 percent reduction in scope 2 emissions in 2018 compared to 2017. Emissions in 2019 are expected to show a further

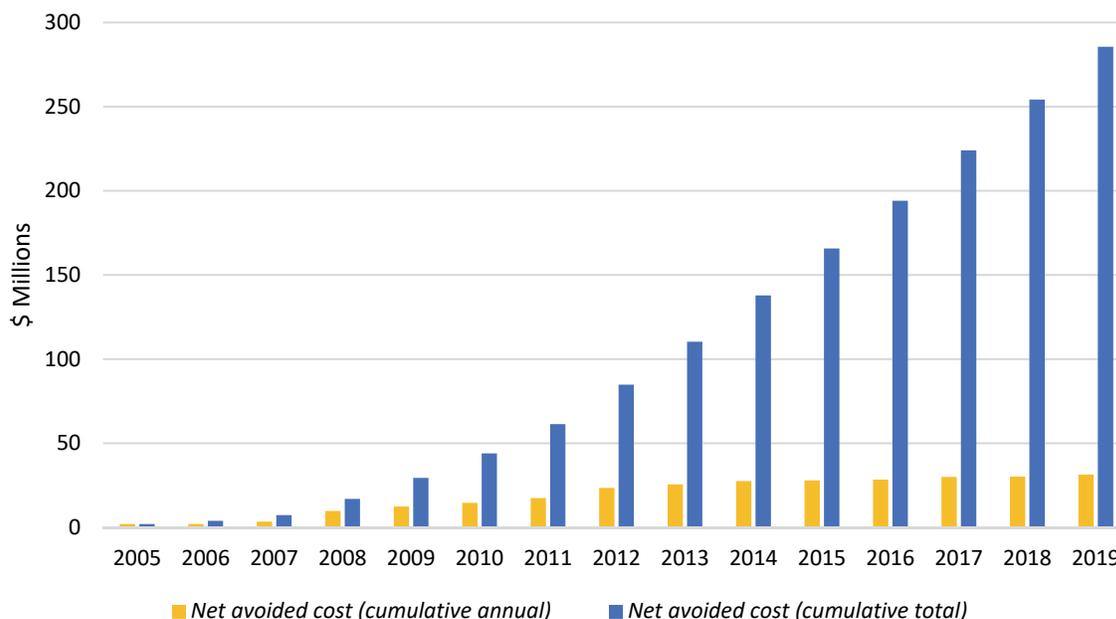
decrease as UC’s Wholesale Power Program procured more clean electricity.

The University also generates more on-site renewable energy than any other university in the country, approaching 50 megawatts. UC’s inventory of renewable energy supplies includes generation from over 100 on-site and off-site sources.

12.3 SUSTAINABILITY

Energy efficiency upgrades resulted in cumulative net avoided costs for the University of \$285 million by the end of 2019.

12.3.2 Cost avoidance from energy efficiency projects Universitywide 2005–2019



Source: UCOP Energy and Sustainability Office

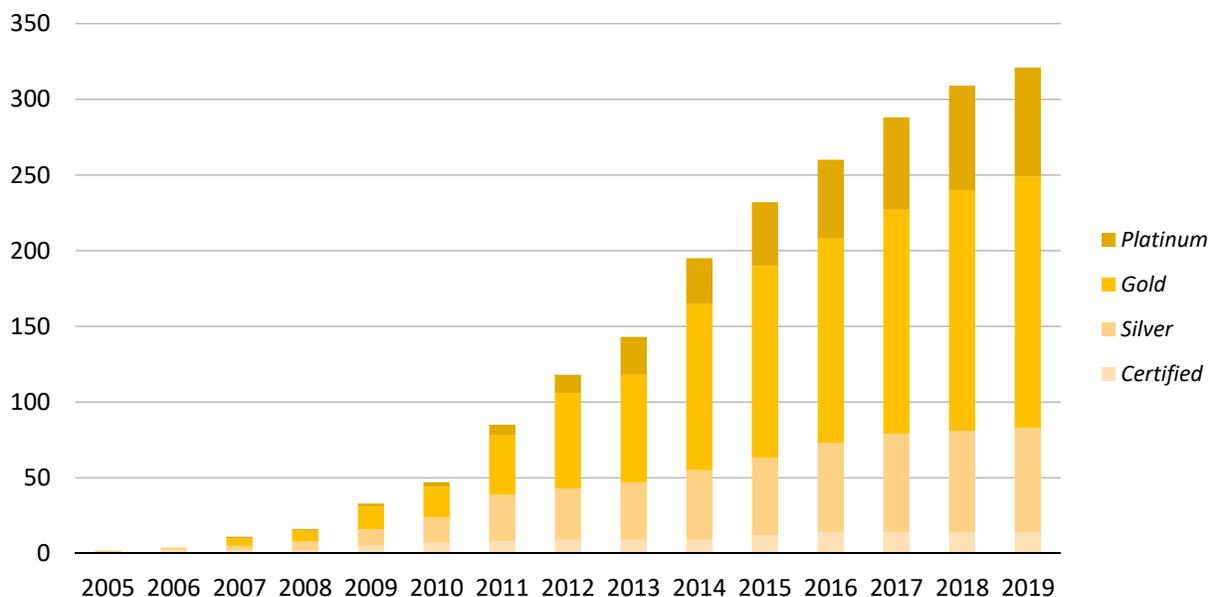
In 2004, the University formed a statewide energy efficiency partnership program with California State University and the state's four investor-owned utilities to improve the energy performance of higher education facilities. The partnership has provided funding for equipment retrofits, monitoring-based commissioning, and training and education.

Since its inception, over 1,000 energy efficiency and new construction projects have registered with the Energy Efficiency Partnership Program, which has allowed UC campuses to avoid over \$285 million in utility costs while reducing greenhouse gas emissions. Fifty-four UC projects participated in the program in 2019.

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 2019, UC had achieved 321 LEED® certifications, more than any other university in the country.

12.3.3 LEED® certifications
Universitywide
2005–2019 (cumulative)



Source: UCOP Capital Resources Management

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. The policy also states that each campus shall seek to certify as many buildings as possible through the LEED – Existing Buildings, Operations and Maintenance (EBOM) rating system to “green” the day-to-day, ongoing environmental performance of its existing facilities.

UC has 321 LEED certifications systemwide, with 43 projects certifying under the LEED – EBOM system. In 2019, UC added two new LEED Silver, seven LEED Gold, and three LEED Platinum certifications. UC’s total of 321 LEED certifications is the most of any university.

UC LEED® certifications are listed at:
ucop.edu/sustainability/policy-areas/green-building/index.html



CHAPTER THIRTEEN

AWARDS AND DISTINCTIONS

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.

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.

For more information

Rankings topic brief with additional rankings: ucop.edu/institutional-research-academic-planning/_files/rankings-brief-2019.pdf

13.1 FACULTY AWARDS

UC faculty receive many prestigious awards because they are thought leaders in their fields.

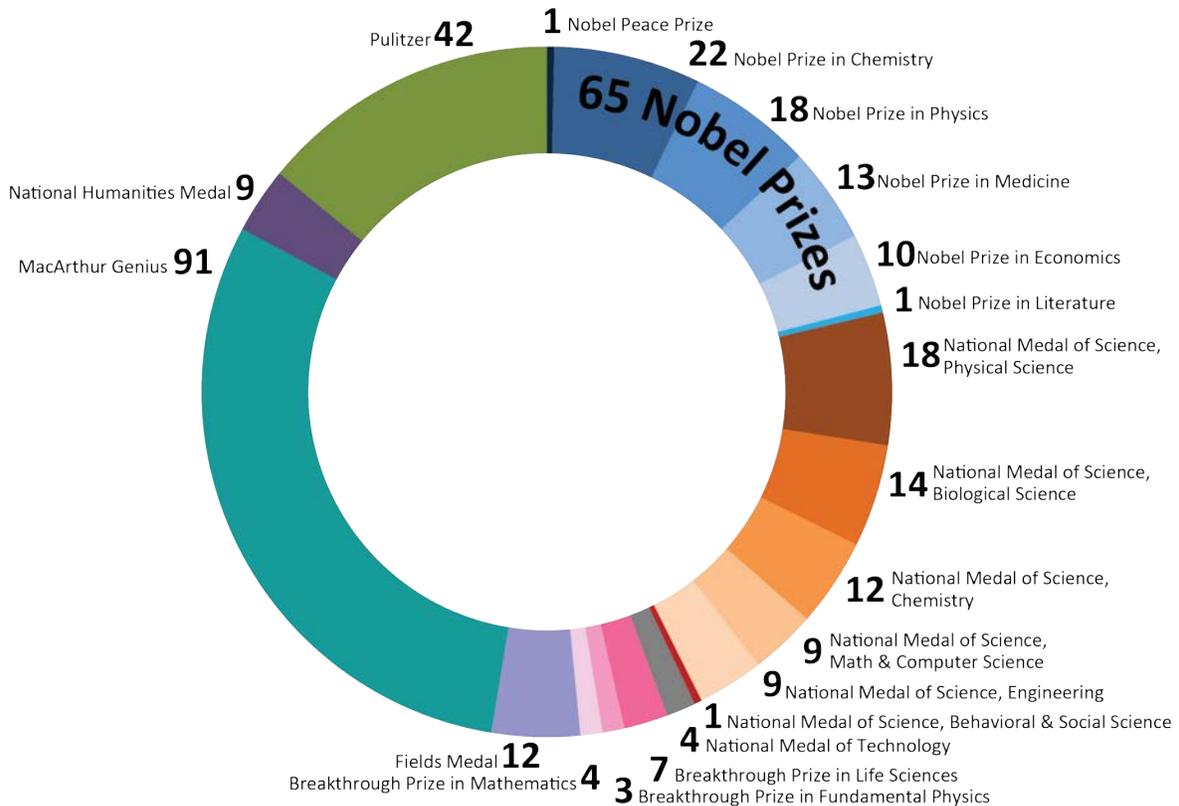
13.1.1 Nobel Prizes by campus affiliation

Sixty-four faculty and researchers affiliated with the University of California have won 65 Nobel Prizes, representing nearly seven percent of the 935 laureates.

A list of UC's laureates can be found at nobel.universityofcalifornia.edu.

	Chemistry	Economics	Literature	Medicine	Physics	Peace
Berkeley/ Berkeley Lab	9	5	1	1	8	
Irvine	2				1	
Livermore Lab					1	
UCLA	3	1		1	1	
Riverside	1				1	
San Diego	5	3		6	2	1
San Francisco				5		
Santa Barbara	2	1			4	

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	634
National Academy of Engineering	265
National Academy of Medicine	231
National Academy of Inventors	85

13.2 RANKINGS

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 2020

	Public	National
UCLA	1	20
Berkeley	2	22
Santa Barbara	7	34
Irvine	9	36
San Diego	10	37
Davis	11	39
Santa Cruz	34	84
Riverside	39	91
Merced	44	104

The U.S. News and World Report, in its 2020 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
- Five 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.

13.2 RANKINGS

Four UC campuses appear in the top 20 of the Academic Rankings of World Universities.

13.2.2 Shanghai Ranking Consultancy: Academic Rankings of World Universities 2019

Berkeley	5
UCLA	11
San Diego	18
UCSF	20
Santa Barbara	48
Irvine	80
Davis	90
Santa Cruz	101-150
Riverside	151-200
Merced	401-500

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.

13.2 RANKINGS

Washington Monthly ranked five UC campuses in the top 20 and all in the top 100 out of 395 institutions.

13.2.3 Washington Monthly Research University Ranking 2019

San Diego	7
Davis	11
UCLA	12
Irvine	18
Berkeley	20
Santa Barbara	21
Riverside	27
Merced	53
Santa Cruz	86

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

GLOSSARY AND DATA SOURCES

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, six are AAU members: Berkeley, Davis, Irvine, Los Angeles, San Diego, and Santa Barbara.

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.

ARRA — American Recovery and Reinvestment Act, passed in 2009, was an economic stimulus package intended to ameliorate the effects of the 2007–09 recession.

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.

Climate — Climate is a term employed to measure diversity at UC campuses and the degree to which the campuses are welcoming and inclusive of different groups and affiliations.

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.

Shared governance — At the University of California, faculty, operating through the Academic Senate, have a voice in the operation of the University and a measure of responsibility for the manner in which the University operates. This system is known as shared governance.

STEM — Science, technology, engineering, and mathematics. In this report, includes physical sciences and mathematics, life sciences, engineering, computer science, and health sciences.

TICAS — The Institute for College Access and Success. TICAS is an independent, nonprofit organization that conducts and supports nonpartisan research, analysis and advocacy with regard to access and affordability of higher education.

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.

UC Extension — UC Extension is a program of courses offered by UC campuses to working professionals to meet their continuing-education needs through both credit and non-credit programs. UC Extension does not award degrees; it offers only certificates and continuing education credit.

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.*

WSCUC — Western Association of Schools and Colleges Senior College and University Commission. WSCUC is UC's regional accrediting agency. It is recognized by the U.S. Department of Education as the accrediting agency for colleges and universities in the western United States and the Pacific Basin.

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.

Council for Aid to Education (CAE)

The Council for Aid to Education (CAE) is a national nonprofit organization based in New York City. Initially established in 1952 to advance corporate support of education and to conduct policy research on higher education, CAE today is also focused on improving quality and access in higher education. CAE’s Voluntary Support of Education (VSE) survey is the authoritative national source of information on private giving to higher education and private K–12 classrooms, consistently capturing about 85 percent of the total voluntary support to colleges and universities in the United States. CAE has managed the survey as a public service for over 50 years. For more information, visit cae.org.

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 Postsecondary Student Aid Study (NPSAS)

The National Postsecondary Student Aid Study is the most comprehensive, nationally representative survey of student financing of postsecondary education in the United States. Since 1987, NPSAS has been conducted every three to four years by the National Center for Education Statistics (NCES) of the Institute of Education Sciences, U.S. Department of Education. Undergraduate and graduate students enrolled at all types of postsecondary institutions are represented. For more information, visit nces.ed.gov/surveys/npsas.

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	Medicine	Medicine
Arts & Humanities	Foreign Languages	Other General Campus Professional	Architecture & Environmental Design
Arts & Humanities	Letters	Other General Campus Professional	Criminology
Arts & Humanities	Theology	Other General Campus Professional	Social Welfare
Business/Management Education	Business & Management Education	Other General Campus Professional	Communications
Engineering & Computer Science	Computer & Information Sciences	Other General Campus Professional	Library Science
Engineering & Computer Science	Engineering	Other Health Science	Veterinary Medicine
Interdisciplinary/Other	Interdisciplinary Studies	Other Health Science	Dentistry
Interdisciplinary/Other	Physical Education	Other Health Science	Nursing
Interdisciplinary/Other	Military Sciences	Other Health Science	Pharmacy
Interdisciplinary/Other	Home Economics	Other Health Science	Public Health
Law	Law	Other Health Science	Optometry
Life Sciences	Biological Sciences	Other Health Science	Other Health Professions
Life Sciences	Agriculture & Natural Resources	Physical Science	Physical Sciences
Math	Mathematics	Social Science & Psychology	Psychology
		Social Science & Psychology	Social Sciences
		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)	<ul style="list-style-type: none"> • Professorial – Tenure, Non-Tenure and Recall² • 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 Recall³ • Astronomer – Tenure, Non-Tenure and Recall • Agronomist – Tenure, Non-Tenure and Recall 	<ul style="list-style-type: none"> • 010, 011, 012 • 030, 031 • 040, 041, 042 • 114, 124 • 210, 211, 212 • 520, 521, 522 • 530, 531, 532
Faculty – Clinical/In-Residence/Adjunct	<ul style="list-style-type: none"> • Professor in Residence • Professor of Clinical ____ (e.g., Medicine) • Health Sciences Clinical Professor • Adjunct Professor • Visiting Professor 	<ul style="list-style-type: none"> • 311 • 317 • 341 • 335 • 323
Faculty – Lecturers	<ul style="list-style-type: none"> • Lecturer • Lecturer with Potential Security of Employment – Part Time • Instructional Assistant (non-student) 	<ul style="list-style-type: none"> • 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.

Table 5. AAU Member Universities, as of July 2020 (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. Utah and Dartmouth not included in AAU comparison group for this year's report

Table 6. Inflation Adjustments

Unless otherwise noted, all inflation adjustments are to 2018 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	2004	2004–05	188.9	2012	2012–13	231.6
1997	1997–98	155.0	2005	2005–06	195.9	2013	2013–14	234.9
1998	1998–99	157.6	2006	2006–07	203.3	2014	2014–15	239.0
1999	1999–00	162.2	2007	2007–08	209.9	2015	2015–16	241.6
2000	2000–01	168.1	2008	2008–09	217.6	2016	2016–17	246.2
2001	2001–02	174.7	2009	2009–10	216.3	2017	2017–18	253.2
2002	2002–03	179.0	2010	2010–11	219.7	2018	2018–19	263.0
2003	2003–04	183.8	2011	2011–12	226.4			

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.