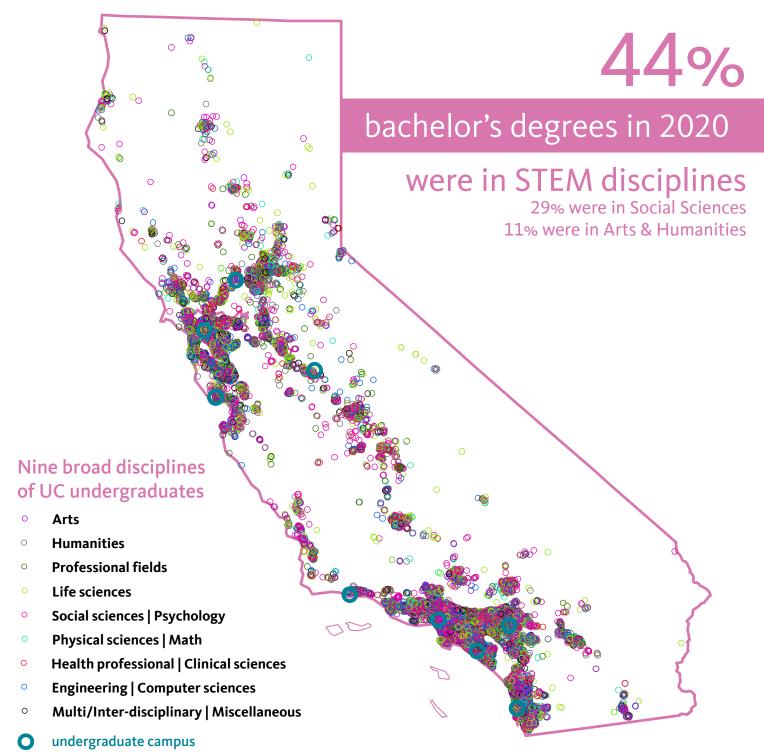
# UNDERGRADUATE STUDENT SUCCESS



#### UNDERGRADUATE STUDENT SUCCESS

#### Filling California's gap in degree recipients

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

UC's four-year graduation rates for freshmen have risen significantly over the past 18 years — from 46 percent for the 1997 entering cohort to 71 percent for the 2016 cohort. The most recent six-year graduation rate, for the 2014 entering cohort, is 86 percent (3.1.1), which has increased by seven 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 4.15 years (3.1.8) 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 61 percent for the 2018 cohort (3.1.3). The most recent four-year graduation rate for transfers (2016 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 2013 cohort, an improvement from 2.6 years for the 1996 cohort (3.1.8).

Although the overall freshman and transfer graduation rates have increased and are showing good progress toward UC 2030 goals, there are still gaps in rates between subgroups (3.1.4, 3.1.5, 3.1.6, and 3.1.7). Low-income students, first-generation students, and URG students have lower average graduation rates, especially four-year graduation rates for freshmen, and two-year graduation rates for transfers.

#### Improving graduation rates and eliminating gaps

The UC Office of the President and campuses have employed predictive analytics to obtain a better understanding of factors that influence graduation rates. Findings indicate that pre-college factors such as academic preparedness measured by high school GPA, the rigor of students' high school or transfer courses, 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. Increased State support would help campuses scale up these programs, particularly those that seek to eliminate equity gaps.

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

#### **Undergraduate outcomes**

The number of undergraduate degrees awarded by UC grew from about 32,900 degrees in 2000–01 to about 49,400 degrees in 2014–15, and 57,000 degrees in 2019–20 (3.3.1). Increases in the size of the entering freshman class and improving graduation rates contributed to this growth. As mentioned earlier, UC has proposed to improve degree attainment and produce 200,000 more degrees in addition to the projected baseline of one million degrees over the next 15 years, between 2015–16 and 2029–30. About 80 percent of these additional degrees (160,000) would be at the undergraduate level. UC is making progress to achieve that goal.

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

UC alumni working in California surpass the typical earnings of other California bachelor's degree recipients (aged 25 and over) by six years after graduation. 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. While the current data available have not shown a significant immediate effect from the shift to remote instruction on student success and retention, the long-term impact of the COVID-19 pandemic on student success and retention is unclear. UC will continue to track these measures, including for UC's future freshman and transfer entrants coming from California high schools and community colleges, who may have widely varying experiences during this period of remote instruction.

#### For more information

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

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

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

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

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

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

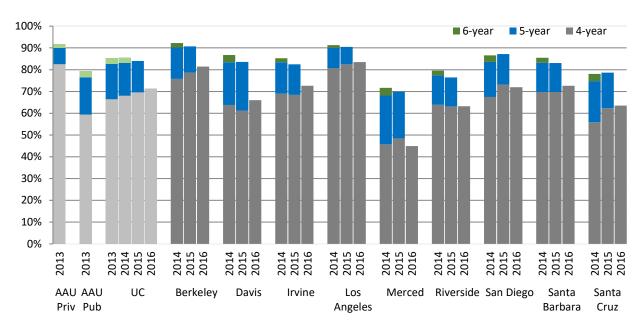
Total degrees awarded by degree type, campus, gender, and race/ethnicity: universityofcalifornia.edu/infocenter/degrees-awarded-data

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

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

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

**3.1.1** Freshman graduation rates UC and comparison institutions Cohorts entering fall 2014, 2015, and 2016; fall 2013 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 71 percent for the 2016 cohort. Since 2010, UC has improved four-year graduation rates by about nine percentage points; UC Riverside and UC San Diego have improved four-year graduation rates by about 15 and 12 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 86 percent, which is a five-percentage point increase over the past twenty years.

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

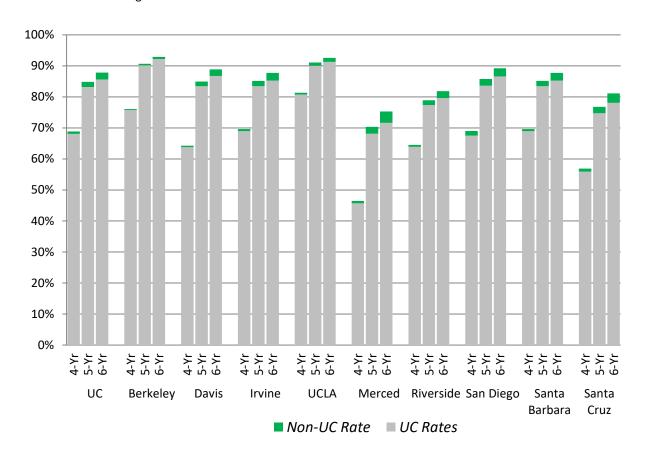
More information on trends in UC freshman graduation rates can be found at:

universityofcalifornia.edu/infocenter/ug-outcomes and progress in achieving UC 2030 goals can be found at: universityofcalifornia.edu/infocenter/uc-2030-dashboard

<sup>&</sup>lt;sup>1</sup> Comparison IPEDS data are available for more limited years. The AAU comparison institutions are in the data glossary. AAU comparison is for the 2013 cohort, the most recent data available. Graduation rates are weighted by total cohort size. Institutions with missing data are excluded for that year. Freshmen are those students who entered a university directly from high school and who have not matriculated at another postsecondary institution prior to enrollment. UC statistics give credit to the originating campus for inter-UC campus transfers.

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

**3.1.2** Freshman graduation rates, including those who graduated from a non-UC institution Universitywide and UC campuses Cohort entering fall 2014



Source: UC Data Warehouse and the National Student Clearinghouse<sup>1</sup>

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

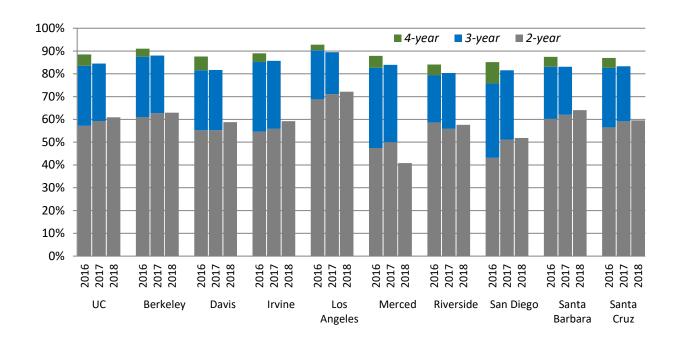
graduation rate varies by UC campus, with Berkeley having fewer students who earn a degree outside of the UC system, while the six-year rates at Merced, Riverside, Santa Barbara, and Santa Cruz improve by as much as three percentage points when students who complete their degree at a non-UC school are included.

<sup>&</sup>lt;sup>1</sup> 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**

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

3.1.3 Transfer graduation rates
Universitywide and UC campuses
Cohorts entering fall 2016, 2017, and 2018



Source: UC Data Warehouse<sup>1</sup>

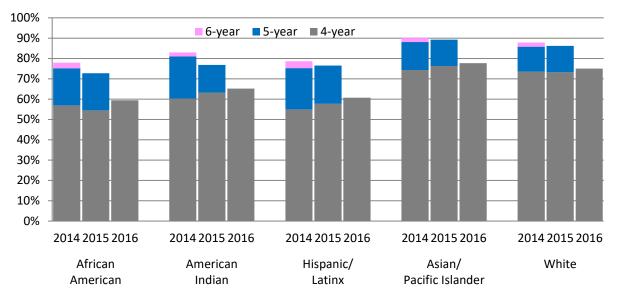
The two-year graduation rate for transfers is currently at 61 percent, the highest since 1995. The four-year rate is 88 percent. More information on trends in UC transfer graduation rates can be found at: universityofcalifornia.edu/infocenter/ug-outcomes.

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. Progress in achieving UC 2030 goals can be found at: universityofcalifornia.edu/infocenter/uc-2030-dashboard

<sup>&</sup>lt;sup>1</sup> Comparison data on graduation rates for transfer students are not available. UC statistics give credit to the originating campus for inter-UC campus transfers.

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

3.1.4 Freshman graduation rates by race/ethnicity Universitywide, AAU public, and AAU private Cohorts entering fall 2014, 2015, and 2016



Source: UC Data Warehouse and IPEDS.

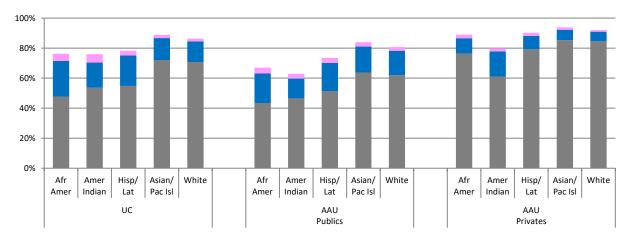
By 2030, UC is looking to eliminate graduation gaps for underrepresented groups. All racial/ethnical groups have improved their four-year graduation rates from that of the previous cohort. Compared to the overall four-year rate of 70 percent, however, African American students have a 59 percent rate,

Hispanic/Latinx a 61 percent rate, and American Indian a 65 percent rate.

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

universityofcalifornia.edu/infocenter/ug-outcomes.

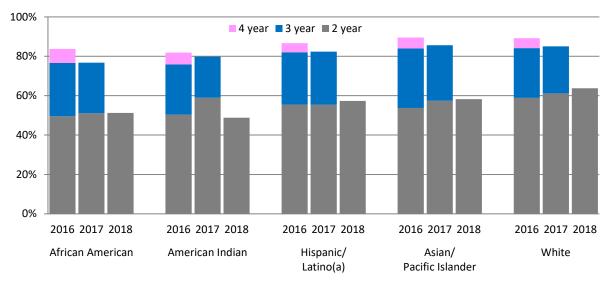
#### UC and comparison institutions, cohort entering fall 2013



Source: UC Data Warehouse and IPEDS.

Regardless of race/ethnicity, transfer students graduate at a high rate, and the rate for twoyear graduates of most racial/ethnic groups is rising.

3.1.5 Transfer graduation rates by race/ethnicity Universitywide Cohorts entering fall 2016, 2017, and 2018



Source: UC Data Warehouse

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

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

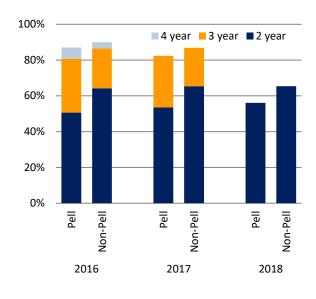
universityofcalifornia.edu/infocenter/ug-outcomes.

# Over 83 percent of freshman Pell Grant students graduate within six years, and 87 percent of transfer Pell Grant students graduate within four years.

3.1.6 Freshman graduation rates by Pell Grant recipient status
Universitywide
Cohorts entering fall 2014, 2015, and 2016



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



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 an 11-percentage point gap at the four-year mark between freshman Pell recipients (63 percent) and non-Pell recipients (74 percent), this gap is reduced to five percentage points at the six-year mark.

For the transfer 2016 cohort, Pell and non-Pell Grant recipients graduated at comparable rates of 87 percent and 90 percent, respectively, within four years. However, the two-year graduation rate gap between Pell and non-Pell Grant recipient transfer

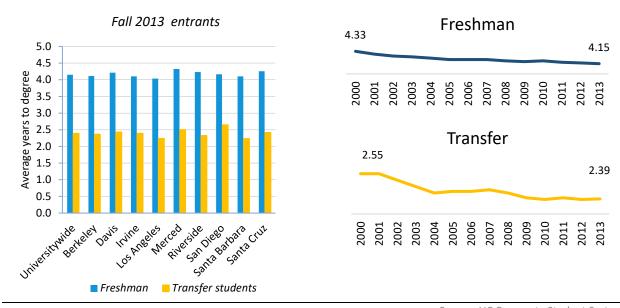
students is nine percentage points, down by five percentage points from the 2016 cohort.

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 university of california. edu/infocenter/ugoutcomes.

#### Undergraduate students at UC are graduating more quickly.

### **3.1.8** Average time to degree Universitywide and UC campuses



Source: UC Corporate Student System.

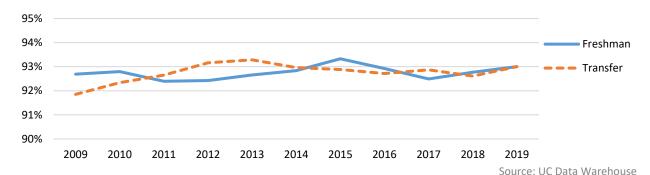
Average time to graduation only includes students who graduated from UC within seven years.

The average time to earn a bachelor's degree at UC has decreased fairly steadily since 1994. Students entering as freshmen in 2013 took an average of 4.15 years, down from 4.33 years in 2000.

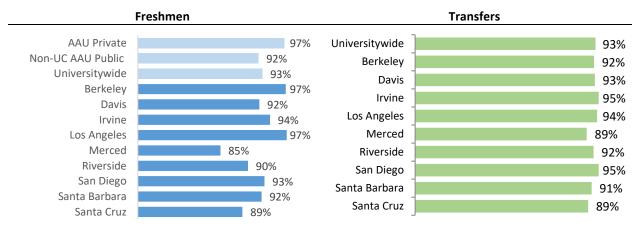
For students entering as transfers, the average time to degree is 2.39 years, down from 2.55 years in 2000. More information on trends in UC time to degree can be found at universityofcalifornia.edu/infocenter/ug-outcomes.

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

# 3.2.1 First-year retention rates UC systemwide Cohorts entering fall 2009 to fall 2019



**3.2.2** First-year retention rates
UC and comparison institutions
Cohorts entering fall 2019



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

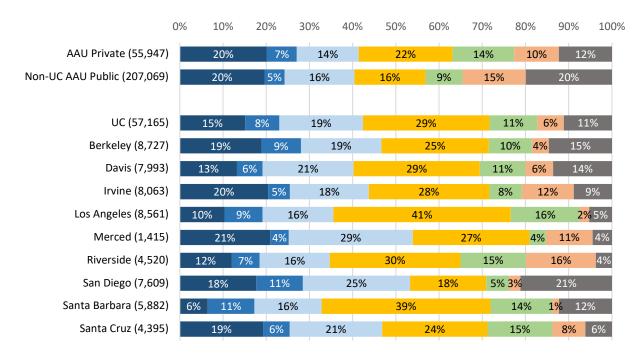
Bridge or early orientation. Campuses are also looking into housing and residential programs and cohort programs to integrate undergraduates.

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.

<sup>&</sup>lt;sup>1</sup> 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 2019.

# 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 2018–19



■ Engineering & Computer Science ■ Physical Sciences ■ Life/Health Sciences ■ Social Sciences ■ Arts & Humanities ■ Business ■ Other

Source: IPEDS

About 42 percent of all undergraduate degrees awarded by UC in 2018–19 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).

# 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 2017–18 graduating cohorts, combined, sorted by popularity

	After 2 years		After 5 years		After 10 years	
	Mean	Median	Mean	Median	Mean	Median
Arts & Humanities						
Arts	\$34,135	\$29,790	\$50,179	\$44,661	\$73,117	\$61,222
English/Literature	\$37,950	\$34,480	\$57,042	\$51,697	\$83,325	\$70,386
Foreign Language	\$37,760	\$33,449	\$56,374	\$50,556	\$84,578	\$70,326
History	\$38,552	\$34,192	\$61,284	\$53,027	\$90,975	\$74,682
Other Humanities	\$36,162	\$32,215	\$56,525	\$56,092	\$71,603	\$69,488
Philosophy	\$38,995	\$33,731	\$58,883	\$50,369	\$100,944	\$74,810
Professional						
Nursing	\$85,967	\$86,668	\$109,296	\$106,519	\$133,689	\$129,353
Business	\$57,020	\$53,283	\$83,014	\$73,372	\$125,821	\$101,253
Agriculture	\$54,580	\$52,496	\$78,079	\$71,660	\$116,573	\$100,358
Architecture	\$50,103	\$47,747	\$66,971	\$62,038	\$87,923	\$79,817
STEM						
Computer Science	\$89,780	\$81,343	\$122,577	\$103,449	\$159,721	\$128,912
Engineering	\$73,928	\$70,570	\$102,051	\$92,379	\$143,197	\$121,815
Physics	\$53,881	\$48,042	\$81,020	\$74,744	\$118,570	\$102,823
Biology	\$39,749	\$37,414	\$65,626	\$58,213	\$114,107	\$95,373
Chemistry	\$45,629	\$44,248	\$65,809	\$60,578	\$110,877	\$94,592
Mathematics	\$57,003	\$51,960	\$83,298	\$72,934	\$112,254	\$94,724
Social Sciences						
Economics	\$56,354	\$52,782	\$82,431	\$72,911	\$124,907	\$100,362
Political Science	\$44,196	\$40,279	\$71,245	\$60,177	\$110,781	\$90,973
Geography	\$44,219	\$40,809	\$68,993	\$60,946	\$96,383	\$80,939
Psychology	\$38,002	\$34,264	\$59,707	\$53,400	\$88,980	\$76,056
Anthropology	\$36,163	\$31,741	\$53,177	\$47,040	\$80,290	\$66,707
Sociology	\$40,820	\$37,345	\$61,221	\$54,784	\$86,834	\$74,142
All Disciplines						
All Majors	\$47,943	\$42,298	\$71,428	\$62,084	\$106,047	\$87,094

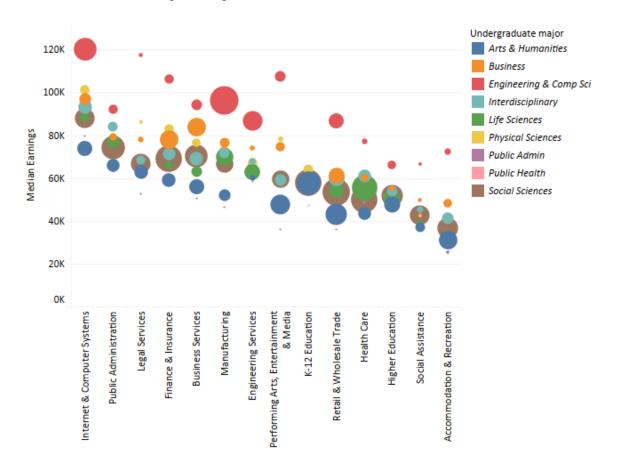
Source: California Employment Development Department and UC Corporate Student System. Includes alumni employed in the state of California only. Amounts are inflation-adjusted to 2019 dollars.

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.

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 2014–15 graduating cohorts, combined



**Industry of Employment** 

Note: Bubble size corresponds to percentage of alumni within majors employed in the industry. The largest bubble is 36 percent and the smallest is <1 percent.

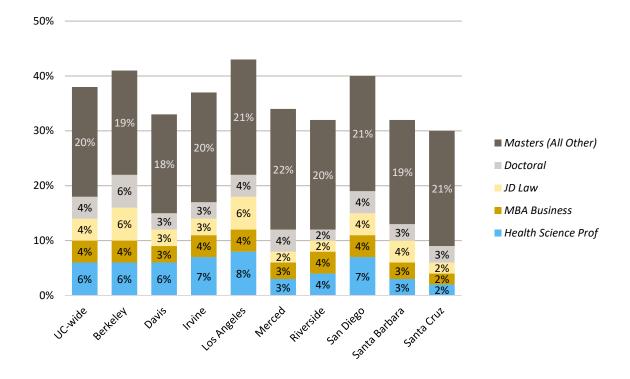
Source: California Employment Development Department and UC Corporate Student System. Includes alumni employed in the state of California only. Amounts are inflation-adjusted to 2019 dollars.

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.

# 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 2012 graduating cohorts, combined, as of June, 2020



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 (university of california.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.