

Office of the President

TO THE REGENTS OF THE UNIVERSITY OF CALIFORNIA:

DISCUSSION ITEM

For Meeting of September 30, 2021

CREATING A COMPREHENSIVE PLAN ON UC CAPACITY

EXECUTIVE SUMMARY

The COVID-19 pandemic highlighted the importance of increasing educational attainment and the essential role that research universities, like the University of California, play. Advancing educational equity and inclusive excellence includes the cultivation of a student body that better reflects the population of California and strengthening the University to better serve these students and the state. UC can play a critical role in generating the new intellectual capacity California needs to address current and future problems, like climate change and environmental justice. The UC President will describe his work with the chancellors to develop a comprehensive plan for strategic organic growth that will help the State recover with equity and achieve greater prosperity.

BACKGROUND

At the September 9 Regents meeting, President Drake described the University of California's compelling need to expand capacity through strategic organic growth.

Strategic growth focuses on where and how the University of California (UC) should grow over the next decade. For example, how can UC's growth support California's needs? Which UC campuses and programs can grow right now and still provide UC excellence? Which campuses need investment to expand capacity and ensure UC quality? How can UC campuses achieve enrollment growth – which campuses have traditional opportunities to expand capacity (e.g., growth on campus) and how can all UC campuses increase enrollment through other means (e.g., shorter time-to-degree, more technology-enhanced education, increased opportunities for summer programs, internship programs, and partnerships with underutilized institutions)?

Organic growth comes from each campus. It leverages opportunities to advance campus strategic planning and priorities. For example, UC Merced's strategic plan includes goals to engage its world and its region through discovery and advancement of knowledge and to develop future scholars and leaders. Through its efforts to move from a R2 (high research activity) to R1 (very high research activity) institution, UC Merced must grow its faculty and graduate and undergraduate students, with overall enrollment growth plans to grow from 9,000 to 15,000

students. This kind of organic growth raises the profile of this campus, increases research activity and economic opportunity in the Central Valley, and expands access to Californians.

Through strategic organic growth and with adequate investment, UC can grow the equivalent of a new campus that would accommodate roughly 20,000 undergraduate and graduate students by the end of this decade. To maintain the excellence of existing UC campuses, the University would expand its faculty and staff in tandem.

The President has established a working group of chancellors, along with UC Office of the President and other campus leaders who are actively engaged in developing a strategy and plan of action to achieve this proposed enrollment growth.

Excellence

California established the University of California to create and share knowledge through its teaching, research, and public service mission. UC faculty are recognized and emerging leaders in their field. They produce creative works and research, frequently cited by peers, which increase knowledge, advance innovation, and create jobs that can benefit industry, government, and society. They establish academic programs – many nationally ranked – and attract talented graduate students who gain knowledge within the field, experience supporting faculty research and teaching, and skills to become future researchers and/or professors. In addition, UC graduate professional programs produce alumni who become leaders in fields ranging from business and law to medicine and public policy.

The act of discovery infuses everything UC does and within this unique environment, attracting the top high school and California Community College (CCC) transfer students to learn a field of study while being exposed to cutting-edge research and gaining relevant skills to analyze information, discern facts, and examine unanswered questions. UC bachelor degree recipients enter the workforce with expertise in a major, preparation for graduate school, and knowledge and skills to continuously learn throughout careers. To maintain UC's excellence, numerous others support UC campuses and the system, including but not limited to postdoctoral scholars, lecturers, and other staff.

More than 150 years ago, the State built UC to strengthen and create California industries, produce a highly skilled workforce, and address challenges like COVID-19. Protecting this ecosystem is important so the University can continue to contribute knowledge, strengthen economic opportunity, and expand industry impact that benefits the state. UC must maintain its excellence in teaching and learning, research and innovation, and public service.

To support California's recovery from the pandemic and to promote future prosperity for the state, UC needs a comprehensive plan that incorporates campus input on the following items:

Appropriate size and mix of undergraduate and graduate students: Undergraduate demand for UC continues to grow, particularly with freshman entrants. As UC cultivates a student body that better reflects the population of California, the State will want more of these students to continue to graduate school. California needs more graduate students who become future researchers finding solutions to climate change and other problems; more culturally competent doctors and other medical professionals; and more women and minority business owners, and policy and legal experts. For UC Merced, UC Riverside, and UC Santa Cruz – with greater

diversity but the lowest proportion of doctoral students (i.e., eight percent compared to ten percent systemwide¹) – growth in academic doctoral students is critical to expanding research capacity and greatly diversifying the availability pool for future faculty at UC, the California State University (CSU) and CCC institutions. UC campus size and mix may be a factor to consider in growth, including if it helps advance competitiveness with other Association of American Universities (AAU) public and private peers.

¹ 2021 UC Accountability Report ([indicator 4.2](#))

Table 1: Fall 2019 enrollment with percent graduate students

	UC 20.7% of 285.1K	AAU Public 27.2% of 1,215.6K	AAU Private Non-Profit 55.9% of 521.6K
60k		Pennsylvania State University-Main Campus: 17.0% of 90.0K Texas A & M University-College Station: 21.9% of 68.1K Ohio State University-Main Campus: 24.2% of 60.2K	New York University: 49.3% of 52.5K
50k		University of Florida: 33.0% of 51.5K The University of Texas at Austin: 21.5% of 50.7K University of Illinois at Urbana-Champaign: 34.6% of 50.6K Rutgers University-New Brunswick: 28.2% of 49.8K Michigan State University: 21.4% of 49.6K	University of Southern California: 58.4% of 47.9K
	University of California-Los Angeles: 28.9% of 44.4K University of California-Berkeley: 27.4% of 43.2K	University of Michigan-Ann Arbor: 35.1% of 47.9K University of Minnesota-Twin Cities: 34.0% of 47.5K University of Washington-Seattle Campus: 33.5% of 46.4K Purdue University-Main Campus: 24.1% of 45.3K University of Arizona: 23.0% of 43.8K	
40k	University of California-San Diego: 20.5% of 38.7K University of California-Davis: 19.8% of 38.6K University of California-Irvine: 17.7% of 36.9K	University of Wisconsin-Madison: 27.5% of 43.0K Indiana University-Bloomington: 23.7% of 43.0K University of Maryland-College Park: 25.5% of 40.1K University of Colorado Boulder: 18.1% of 37.4K	
		Georgia Institute of Technology-Main Campus: 57.3% of 35.5K Iowa State University: 15.4% of 33.0K	Boston University: 48.2% of 32.6K
30k		University of Utah: 26.3% of 31.8K University at Buffalo: 31.5% of 31.8K University of Iowa: 25.3% of 30.7K University of North Carolina at Chapel Hill: 36.1% of 29.7K University of Missouri-Columbia: 25.3% of 29.4K	Columbia University in the City of New York: 73.9% of 31.5K Harvard University: 74.1% of 29.1K
	University of California-Santa Barbara: 11.3% of 26.3K University of California-Riverside: 13.7% of 25.5K	University of Pittsburgh-Pittsburgh Campus: 32.8% of 28.3K University of Kansas: 29.3% of 26.9K Stony Brook University: 33.4% of 26.7K University of Virginia-Main Campus: 32.4% of 24.7K University of Oregon: 16.2% of 22.4K	Johns Hopkins University: 78.4% of 26.6K University of Pennsylvania: 57.9% of 25.6K Cornell University: 37.5% of 24.0K
20k	University of California-Santa Cruz: 10.1% of 19.5K		Northwestern University: 61.7% of 22.3K
			Georgetown University: 62.8% of 19.2K University of Chicago: 60.8% of 17.4K Stanford University: 59.4% of 17.2K Duke University: 60.5% of 16.6K Washington University in St. Louis: 53.1% of 15.8K Emory University: 51.0% of 14.3K Carnegie Mellon University: 53.6% of 14.1K Yale University: 55.2% of 13.6K Vanderbilt University: 47.6% of 13.1K Tulane University of Louisiana: 38.2% of 12.9K University of Rochester: 45.5% of 12.0K Case Western Reserve University: 55.2% of 11.8K Massachusetts Institute of Technology: 60.8% of 11.5K Brown University: 31.7% of 10.0K
10k	University of California-Merced: 7.9% of 8.8K University of California-San Francisco: 100.0% of 3.2K		Princeton University: 36.1% of 8.3K Rice University: 45.3% of 7.3K Dartmouth College: 33.0% of 6.5K Brandeis University: 36.7% of 5.8K California Institute of Technology: 58.1% of 2.2K

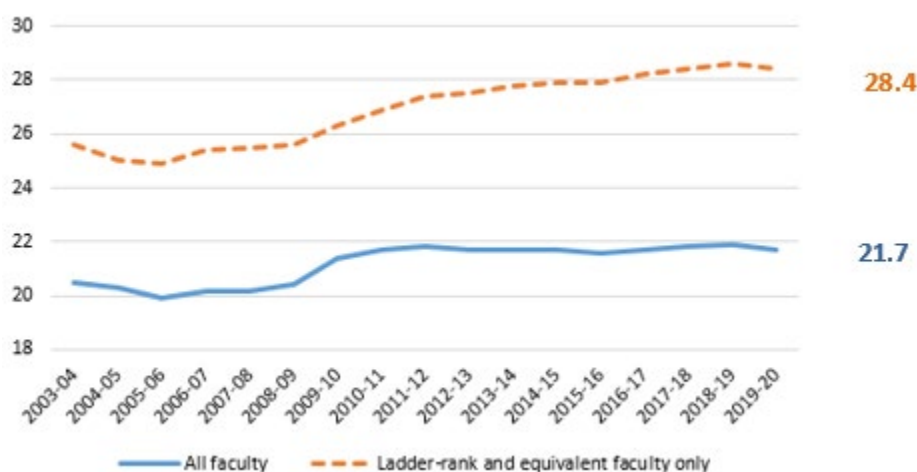
Source: Integrated Post-Secondary Education Data System (IPEDS) data

Additional faculty and staff: UC has a generational opportunity to diversify the faculty. Faculty growth is critical to achieving that goal as newer UC faculty are more diverse than existing faculty.² In addition, the student-faculty ratio is near an all-time high and four of ten UC

² 2021 UC Accountability Report ([indicator 5.3.7](#))

undergraduates report that they do not know a faculty member well enough to ask for a letter of recommendation.³ UC set a goal to add 1,100 faculty between 2018 and 2022, but has only hired 375 to date.⁴ UC is not on pace to meet that goal in part due to financial uncertainty and stalled hiring efforts resulting from the COVID-19 pandemic.

Figure 1: General campus student-faculty ratio, 2003-04 to 2019-20

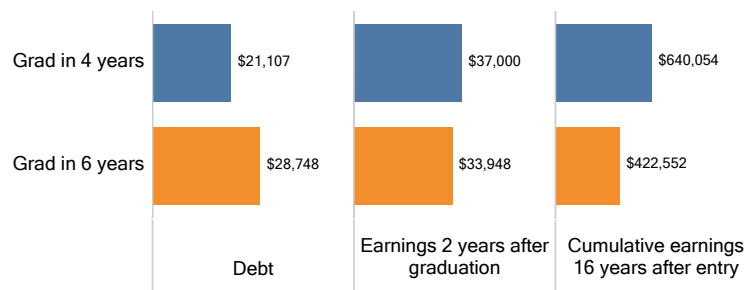


Source: 2021 UC Accountability Report ([indicator 8.3.1](#))

Additional students and faculty will require increasing staff in critical areas, such as curricular and co-curricular advising and mental health services.

Student outcomes: Increasing timely graduation reduces student debt and increases alumni earnings. UC's new generation students – Pell, first generation, and underrepresented – leave with \$7,500 more in debt when graduating in six instead of four years and they lose \$215,000 in cumulative earnings over the decade. Supporting efforts to advance timely graduation will also expand capacity, by freeing up spots for new students as more students graduate sooner.

Figure 2: Student loan debt and earnings for 4- and 6-year UC new generation graduates



Campus strategic plans and priorities: UC can support strategic organic growth by building on campus strategic plans and priorities, emphasizing ways to advance educational equity, support underserved regions, and advance critical priorities for California.

³ [Spring 2020 UC Undergraduate Experience Survey](#)

⁴ 2021 UC Accountability Report ([indicator 5.3.6](#))

Table 2: UC campus strategic plans

UC Berkeley – Charting a Path Forward

- Empowering engaged thinkers and global citizens to change our world
- Focusing on the good: innovative solutions for society's great challenges
- Embracing the California spirit: diverse, inclusive, entrepreneurial

UC Davis – To Boldly Go

- Provide an educational experience that prepares all of our students to address the needs and challenges of a diverse and changing world
- Enable and support research that matters at the frontiers of knowledge, across and between the disciplines, in support of a healthy planet and the physical and societal well-being of its inhabitants
- Embrace diversity, practice inclusive excellence and strive for equity
- Support our community, region, state, nation and world through mutually beneficial and impactful partnerships that reflect a firm commitment to our mission and increase the visibility and reputation of the university
- Create an intellectual and physical environment that supports the development of an innovative and entrepreneurial culture that extends the benefits of our research activities beyond the boundaries of the university

UC Irvine – Bright Past. Brilliant Future

- Growth that makes a difference – expanding our capacity to improve lives
- First in class – elevating the student experience to prepare future leaders
- Great partners – making regional and global connections that enhance our mission and serve the people
- New paths for our brilliant future – forging best practice to power the coming century

UCLA – Chancellor's Priorities

- Academic excellence
- Civic engagement
- Diversity
- Financial security

UC Merced – Strategic Plan

- Engage our world and our region through discovery and the advancement of knowledge
- Develop future scholars and leaders
- Cultivate a culture of dignity and respect for all

UC Riverside – Future Fluent

- Distinctive, transformative research and scholarship
- A rigorous, engaging and empowering learning environment
- A welcoming, inclusive, and collaborative community
- Advancing the public good

UC San Diego – Defining the Future of a Public Research University

- Delivering an educational and overall experience that develops students who are capable of solving problems, leading, and innovating in a diverse and interconnected world
- Cultivating a diverse and inclusive university community that encourages respectful open dialogue, and challenges itself to take bold actions that will ensure learning is accessible and affordable for all
- Nurturing and supporting a collaborative and interdisciplinary research culture that advances the frontiers of knowledge, shapes new fields, and disseminates discoveries that transform lives
- Supporting and promoting just and sustainable forms of economic development, shared prosperity, and social and cultural enrichment regionally and globally
- Creating an agile, sustainable, and supportive infrastructure by ensuring a dedication to service, people, and financial stewardship

UC San Francisco – Chancellor's Priorities

- Continuous learning
- Equity and inclusion
- Precision medicine
- Transformative partnerships

UC Santa Barbara – Strategic Academic Plan

- Framework for resource allocation to balance commitments and make selective investments, build outstanding departments and professional schools, promote diversity and interdisciplinary themes
- Managed growth to support state and community, academic context, and address challenges

UC Santa Cruz – Strategic Academic Plan

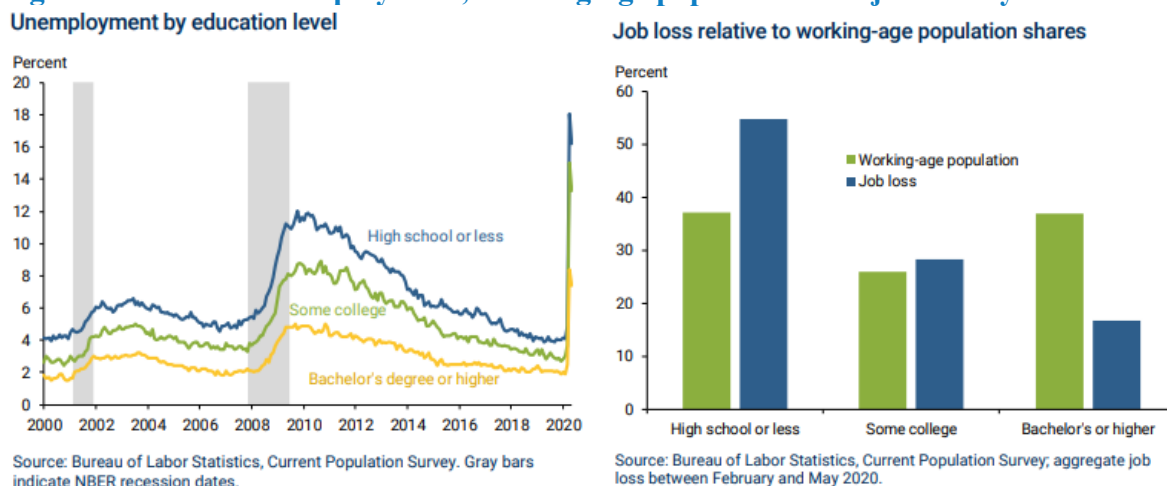
- Drive research & creative work that transform our world
- Create enriching experiential learning and research opportunities for students
- Engage, support, and attract a diverse faculty, staff, and student body
- Support inventive interdisciplinary connections in research and teaching

Equity

While everyone has been affected by COVID-19, the pandemic also exposed inequities. American workers without a college degree experienced the greatest impact, with greater

unemployment rates and job loss (Figure 2a and 2b). In addition, a greater proportion of those with a bachelor's degree or higher were able to transition to telework to stay employed, thereby being less affected by shelter-in-place rules and more able to take greater health precautions than workers who provided in-person services to others. A Federal Reserve Bank report⁵ found "COVID-19 widened existing inequalities in the economy" and was a "stark reminder that addressing gaps in educational attainment will be essential to improving economic resiliency against future shocks."

Figure 2a and 2b: Unemployment, working-age population and job loss by education level



A Legislative Analyst's Office report⁶ finding mirrored those in the Federal Reserve report, showing greater job loss for those without a college degree, along with Latino workers and women with less than a bachelor's degree experiencing a disproportionate share of job loss.

Recovery with equity requires increasing capacity so more Californians can attend and receive a college degree. In addition, a discussion item at the March 2021 Regents meeting, *Beyond Economic Impact: Understanding Societal Impacts and Public Value of a UC Degree*,⁷ presented evidence that emphasized the importance of growing UC undergraduate and graduate degrees.

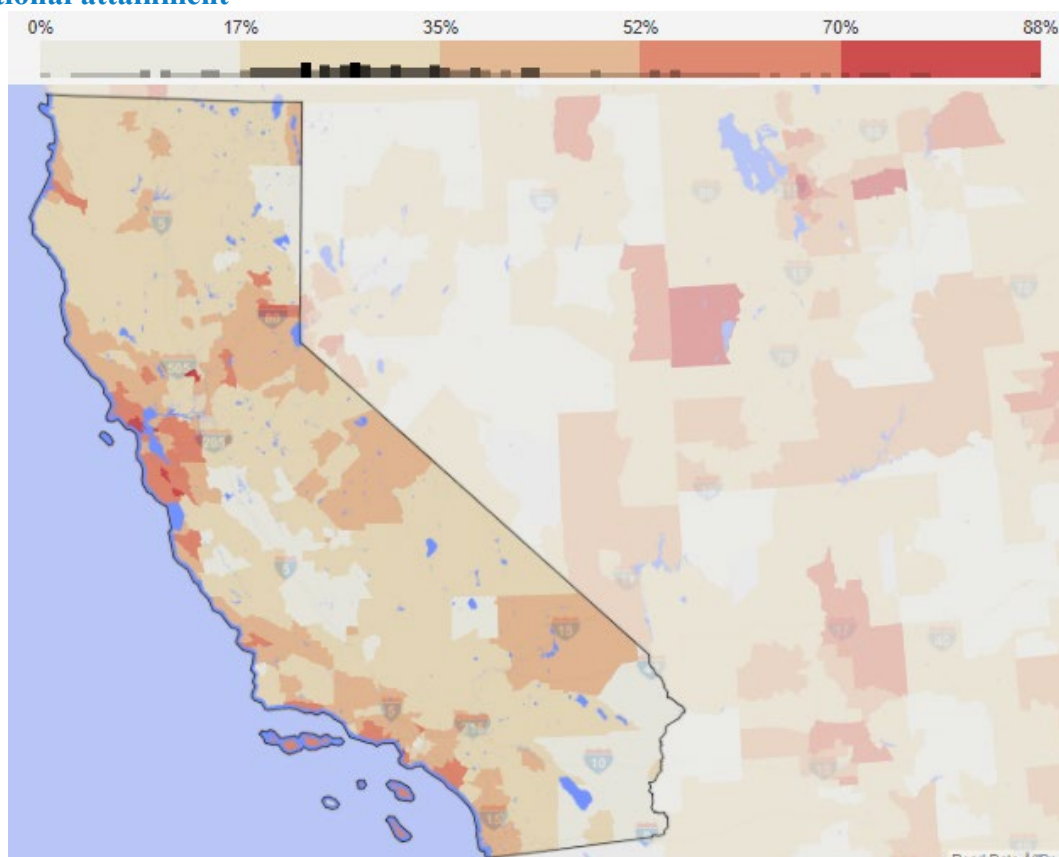
Enrollment growth must ensure that these students better reflect California and Californians to increase educational equity and inclusive excellence. As an illustration of this point, Figure 3 shows the Central Valley and Inland Empire with lower educational attainment levels. The 2021 class of incoming undergraduates is UC's most diverse and Figure 4 shows greater opportunities for UC freshmen to better reflect California's diversity. Furthermore, initiatives to grow transfers must be intentional to advance regional and racial/ethnic diversity to avoid simply increasing enrollment from the top-sending and less diverse CCCs.

⁵ <https://www.frbsf.org/economic-research/publications/economic-letter/2020/june/unequal-impact-covid-19-why-education-matters/>

⁶ <https://lao.ca.gov/LAOEconTax/article/Detail/531>

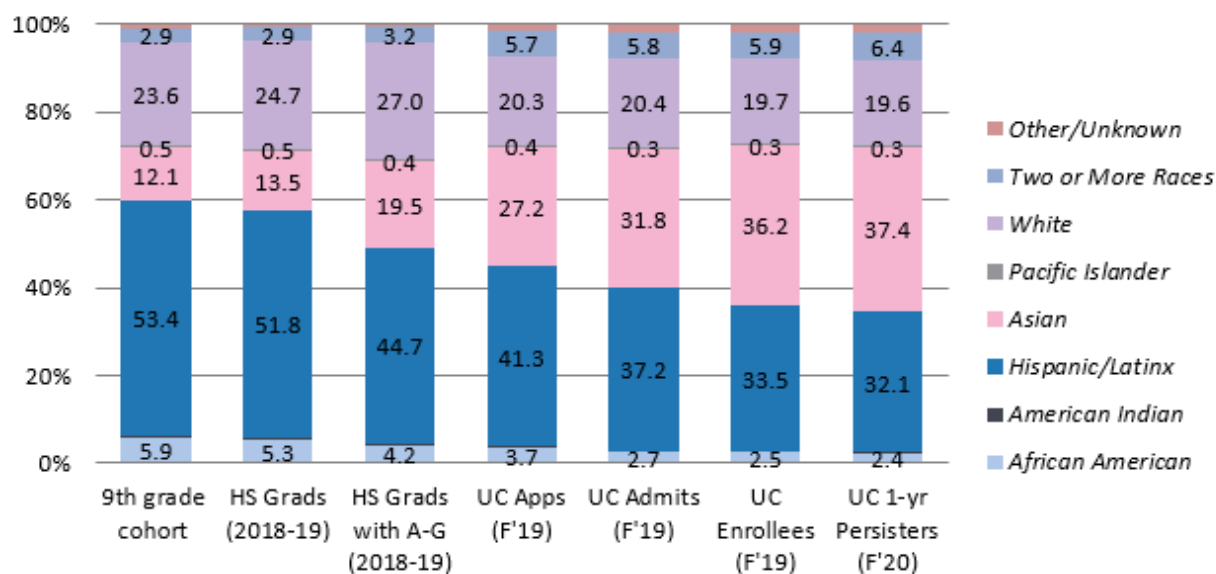
⁷ <https://regents.universityofcalifornia.edu/regmeet/mar21/b2.pdf>

Figure 3: Percentage of the population 25 years and older with given highest level of educational attainment



Source: [Demographic Statistical Abstract](#)

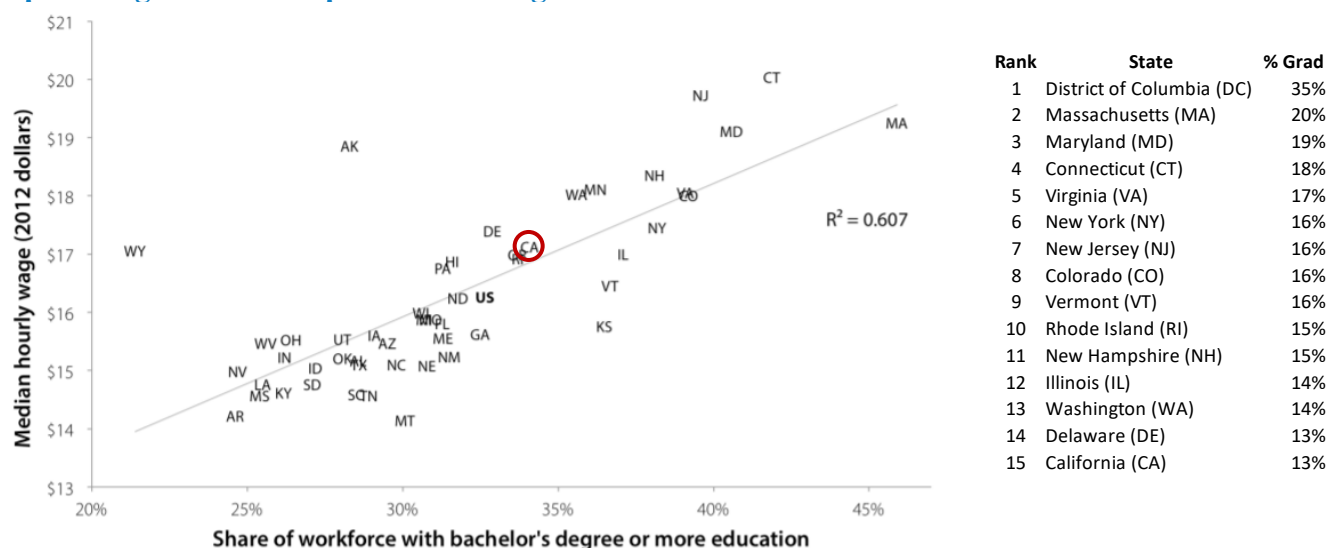
Figure 4: Racial/ethnic distribution of UC undergraduate pipeline for public high schools



Source: 2021 UC Accountability Report ([indicator 7.1.1](#))

Enrollment growth must not be limited to undergraduates; it needs to include graduate enrollment growth to expand opportunity and prosperity in California. Median wages are substantially higher in states with better-educated workers. Figure 5a compares state median hourly wages with the percentage who have a bachelor's degree or higher and Figure 5b shows that states with a higher percentage of graduate and professional degree recipients are also states with higher median wages (i.e., those in the upper right hand corner of Figure 5a). States that promote graduate education benefit from a highly skilled workforce that also generates higher wages, increasing contributions to federal, State, and local taxes that benefit all citizens.

Figure 5a and 5b: Relationship between state median hourly wage and share of state's workforce with a bachelor's degree or more education, 2012 and top 15 states with largest percent graduate and professional degrees



Source: [Current Population Survey \(CPS\) basic monthly and CPS Outgoing Rotation Group microdata](#) and [American Community Survey](#)

Urgency

The pandemic demonstrated the importance of research universities and those they train. The University of California made significant contributions to the State through expanding care in UC hospitals, developing life-saving COVID treatments, testing and distributing vaccines, and piloting a California-wide app to reduce the spread of COVID-19.

Across the nation, UC and other research universities were partnering with the Centers for Disease Control and Prevention and other critical entities to find a way to combat this pandemic. Many of these individuals were once graduate students trained at research universities.

COVID-19 will not be the last pandemic and there are numerous other challenges facing California, the nation, and the world – climate change is one example. UC faculty are conducting research to battle wildfires and drought; examining the impact of climate change on public health, local communities, and California industries; and training graduate and undergraduate students to support current research and become future researchers and faculty who will eventually solve this and other societal problems.

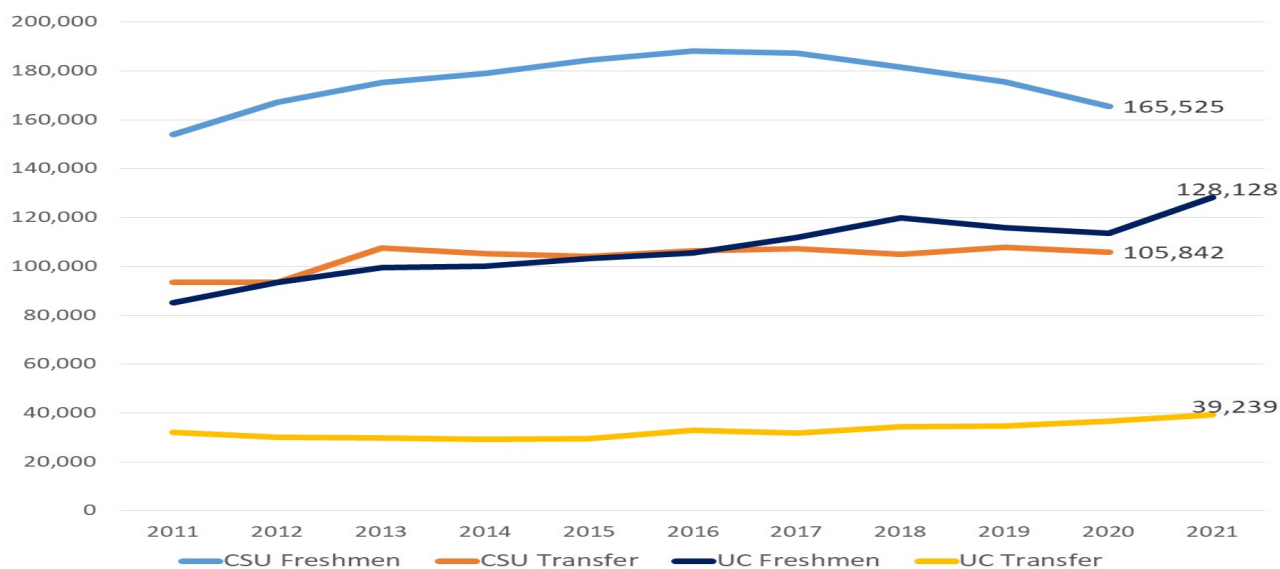
The University of California plays a critical role in generating the intellectual capacity the State needs to address its future problems – and that role can be enhanced and expanded. As California recovers from the pandemic, the University of California can advance greater prosperity for the state through advancing educational equity and promoting inclusive access to excellence.

ADDITIONAL CONSIDERATIONS

A growing number of California high school students are graduating with foundational preparation for college. Bucking national trends and repeated projections that the number of high school graduates would be flat or decline, the number of California public high school graduates continues to grow. In addition, a greater proportion of these graduates are completing A-G courses,⁸ a requirement for admission to UC and CSU. The largest increases in A-G completion rates have been for African American and Hispanic/Latino(a) students.

The demand for California residents aspiring to enter UC as freshmen continues to grow at a much greater rate than for CCC transfer applicants. For CSU, California residents applying as freshmen has recently declined, and while the number of CCC transfer applicants to CSU is much greater than to UC, this demand has remained flat since 2013. UC's ratio of California resident freshman applicants to CCC transfers is 3.3:1 compared to CSU's 1.5:1.

Figure 6: UC and CSU applicant demand for freshmen and transfer entrants



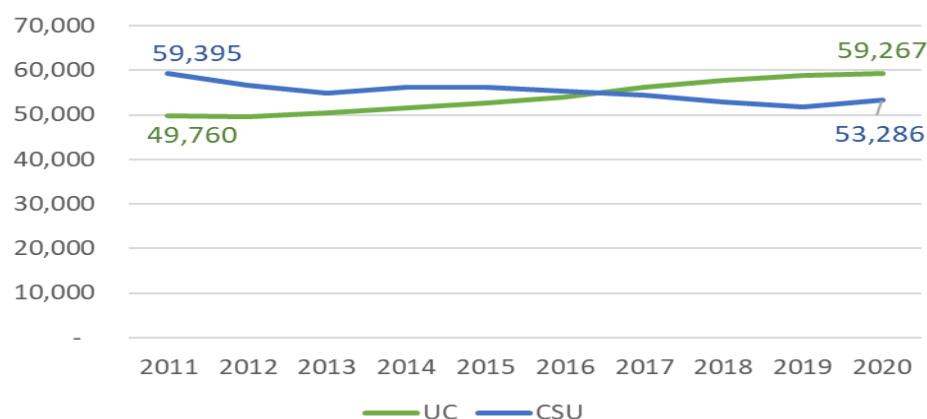
Source: UC Information Center [UG application summary dashboard](#) and CSU [admissions dashboard](#)

UC has continued to meet the systemwide goal of a 2:1 ratio of California resident freshmen to transfer students and largely meets that goal at all campuses. For CSU, the ratio is closer to 1:1.

Over the last decade, UC graduate enrollment has grown by 9,500 graduate students. CSU graduate enrollment has declined by 6,100 graduate students.

⁸ <https://www.universityofcalifornia.edu/infocenter/ca-demographics>

Figure 7: UC and CSU graduate enrollment, Fall 2011 to 2020



Source: UC Information Center [fall enrollment at a glance dashboard](#) and
CSU Chancellor's Office of Analytic Studies [enrollment dashboard](#)

SUMMARY

President Drake and the chancellors are engaged in a plan to expand capacity through strategic organic enrollment growth. Building on existing campus strategic plans, UC will develop a comprehensive plan to grow undergraduate and graduate enrollment and identify other critical areas of investment, including faculty and staff. This comprehensive plan to expand capacity will ensure that UC maintains its excellence, advances educational equity, and recognizes the urgency to increase educational attainment, boost California's intellectual capacity, and prepare for future challenges facing the state.

Key to Acronyms

AAU	American Association of Universities
CCC	California Community College
CSU	California State University
HSI	Hispanic Serving Institution
STEMM	Science, technology, engineering, mathematics, and medicine
UC	University of California