

UC BERKELEY STRATEGIC PLANNING

ENROLLMENT WORKING GROUP FINAL REPORT

DECEMBER 2018

EXECUTIVE SUMMARY

The Enrollment Working Group's recommendations cover four central topics, described below.

DIVERSITY

Consistent with regental policy which states that the University's freshman class should "encompass the...broad diversity of cultural, racial, geographic, and socioeconomic backgrounds characteristic of California" and with the campus's values of access and opportunity, Berkeley should commit to increasing its proportions of African Americans, Latinos, Native Americans, low-income students, rural Californians, and students in the first generation of their families to graduate from college. With respect to Latinx students, the Working Group noted that 51% of California high school graduates are Latinx and that five UC campuses currently qualify for designation by the federal government as "Hispanic-Serving Institutions (HSIs)"—which means at least 25% of their undergraduates are Latinx. (Berkeley and three other UC campuses already qualify as "Asian American and Pacific Islander Serving Institutions.") The Working Group recommends that Berkeley establish as a goal to meet the requirements for qualification as an HSI within 10 years.

Similarly, as one of the largest producers of PhDs in the nation, Berkeley has a major opportunity—and obligation—to increase diversity among its doctoral students; this obligation extends to all of its graduate and professional degree programs. While faculty and staff diversity are out of the purview of this working group, we note that both are key to the quality of our students' academic experience and to an improved campus climate, which in turn will make Berkeley more attractive to diverse students. (Issues related to campus climate for students, staff, and faculty are discussed in the Student Experience Working Group report.)

Diversity goals should be met by instituting changes to admissions procedures, devoting resources to expanded and sustained recruiting and outreach, expansion of academic support programs such as Summer Bridge and Berkeley Connect, and developing stronger partnerships with community colleges as well as four-year institutions with large enrollments of diverse undergraduates who can be recruited to graduate programs. These efforts are essential to expanding the diversity which is central to Berkeley's quality and its mission.

ENROLLMENT OF TRADITIONAL UNDERGRADUATES

Growth in the undergraduate population is consistent with Berkeley's values of access and opportunity and its mission as a state institution and is an important tool in our efforts to continue to increase diversity. However, undergraduate growth must be accompanied by appropriate growth in resources, such that the quality of the educational experience can be enhanced. Resources to support growth include added faculty and staff, housing, and additional classrooms and other student support space. Of particular importance is avoiding further erosion in the faculty-student ratio. Undergraduate growth should be gradual and should be consistent with University policies requiring that at least one-third of entering students be community college transfers and that the proportion of California undergraduates remain at or above current levels.

- The campus should make greater use of technology as a tool for expanding access, as well as for improving the quality and relevance of instruction. This includes increasing online courses and expanding access to these courses to new audiences—e.g., alumni and community members—as well as digital pedagogy and technological innovations such as electronic grading that can free up faculty time and increase students' knowledge of their academic progress.
- To take advantage of the broad diversity that exists in many community colleges (including geographic and socio-economic, as well as racial/ethnic diversity), Berkeley should explore strategies to create closer working relationships with a subset of community colleges that have not traditionally sent large numbers of students to Berkeley.
- The campus should continue to build on programs that provide a high-quality educational experience and enable students to spend a portion of their enrolled time beyond the borders of the campus—including, but not limited, to Education Abroad, internships and public service, and programs like the Fall Program for Freshmen that provide a more intimate, cohort-based experience. Such programs can play a role in expanding access and helping to mitigate strain on campus resources imposed by continued growth.
- To create more room for growth as well as help students succeed, Berkeley should expand programs that improve time-to-degree, with a goal of increasing the already-high proportion of freshmen that graduate in 4.5 years (currently 82%) and transfers that graduate in 2.5 years (currently 77%).

GRADUATE STUDENT ENROLLMENT

Graduate education is specifically called out in the California Master Plan for Higher Education as part of UC's mission. In particular, doctoral student education is fundamental to Berkeley's research and teaching missions and its academic quality. We are committed to maintaining the excellence of our doctoral programs by aligning scale with resources for competitive packages that enable our doctoral students to thrive at Berkeley. This means that growth across all doctoral programs is not a given; some programs may need to adjust their sizes based on discipline-specific evolution, employment opportunities for graduates, and availability of student support.

At the same time, Berkeley should continue to thoughtfully develop self-supporting professional graduate degree programs; incentivize expansion of selected existing PDST programs; and introduce carefully curated 4+1, 3+2, and terminal masters programs when appropriate. We believe the ability

for undergraduates to complete both a Bachelor's and a Master's degree (either a discipline-specific masters or a professional degree) within five years could become a hallmark of Berkeley and help us compete well for students with high aspirations.

NONTRADITIONAL STUDENTS

California's dynamic economy creates new employment opportunities that require advanced knowledge and skills. Berkeley should develop more opportunities for mid-career students who meet Berkeley's high academic standards but are unable to complete a campus-based program. Expanding offerings of online certificate courses and post-baccalaureate programs could serve the state's economy and its students by providing valuable experiences that fall just short of a degree. A robust degree completion program could include a curated set of undergraduate degrees for UC students who have left and wish to return to finish with a bachelor's degree.

ENROLLMENT WORKING GROUP REPORT

I. INTRODUCTION

UC Berkeley's Strategic Planning process began in the fall of 2017. On November 21, 2017, Chancellor Christ and EVCP Alivisatos hosted a retreat attended by members of the Chancellor's Cabinet, the Council of Deans, and the leadership of the Academic Senate and the undergraduate and graduate student governments. At the conclusion of that meeting, the group recommended charging four small working groups to conduct the initial phase of the planning process; the Enrollment working group was charged with addressing the following question:

“Accepting that enrollment growth is not entirely within the campus's control, what do we see as the preferred enrollment level for Berkeley and how should this enrollment be distributed?” Topics potentially to be addressed: ideal size and rate of growth; student mix by level; diversity; infrastructure needed to support higher levels of enrollment; faculty needs to support enrollment, including mix of ladder and non-ladder faculty; and the role of technology and alternative education delivery models in accommodating increased demand and reaching out to new populations.

In December 2017, the Chancellor appointed College of Environmental Design Dean Jennifer Wolch and Professor of Spanish and Portuguese Ignacio Navarrete, Chair of the Academic Senate Committee on Admissions, Enrollment, and Preparatory Education (AEPE), to co-chair the working group (a full membership list is included on the [Strategic Planning website](#)). The Enrollment Working Group held its first meeting on January 19, 2018 and met six additional times from February through April.

As part of its deliberations, the group reviewed previous enrollment plans and studies prepared both by the campus and the Office of the President and consulted with a wide range of campus constituencies. Its members attended two campus-wide town halls; meetings of the Academic

Senate, the Divisional Council, the Committee on Academic Planning and Resource Allocation, and the AEPE Committee; meetings of both the ASUC Senate and the Graduate Assembly; various staff groups; the Department Chairs Forum; and the Berkeley Board of Visitors and the Executive Committee of the Berkeley Foundation. Following completion of the draft report in May 2018, working group members attended two additional town halls and an Academic Senate comment session and reviewed comments that were submitted by members of the campus community, including lengthy comments from the Academic Senate.

The Enrollment Working Group focused its findings and recommendations in four key areas: student diversity and access; traditional undergraduate enrollment; graduate enrollment; and nontraditional enrollment. Each of these is discussed below.

II. DIVERSITY AND ACCESS

A key goal and concern that underlies all of our work is the need to increase diversity and to ensure that qualified students from all backgrounds have access to a Berkeley education. All students at Berkeley benefit from living and learning among students with different backgrounds and experiences. All enrollment planning should be informed by the essential goal of enrolling a student body that better encompasses the diversity of the state of California. While this report addresses racial and ethnic diversity in depth, we strongly support and recommend efforts to increase representation of all underrepresented groups—including those who identify as LGBTQ students, those with disabilities, those who are undocumented, and those from socio-economically and educationally disadvantaged families and communities.

UNDERGRADUATE DIVERSITY

Part of Berkeley's legacy is its early leadership among research universities in the racial and ethnic diversity of its undergraduate student body. In the early 1990s, underrepresented minorities comprised more than 20% of the student body—at a time when numbers for most research universities were in the single digits and Latinos represented less than half of the share of California high school graduates that they comprise today. As rapid growth in applications in the early 1990s created greater competition for admission, maintaining this level of diversity became a challenge, despite multiple revisions to selection processes that were designed to reduce discrimination, broaden the criteria by which students were admitted, and maintain access for underrepresented students.

Berkeley's ability to maintain its leadership position in terms of the inclusion of underrepresented minorities received an existential blow when Californians in 1996 adopted a constitutional ban on affirmative action in college admissions as well as other governmental operations. Following implementation of Proposition 209 in 1998, minority representation fell sharply among new students. In the years following, Berkeley engaged in aggressive outreach to high schools with large proportions of underrepresented, low-income, and first-generation-college students and adopted new admissions procedures that evaluated students on the full range of their accomplishments and potential, evaluated numerical factors such as grades and test scores in a more nuanced fashion

designed to lessen their discriminatory effects, and included greater preferences for permissible factors such as income, high school attended, and family educational background. These efforts have helped: as of Fall 2017, 19% of Berkeley's entering freshmen were from underrepresented groups. While an improvement, this percentage still falls below the levels of the 1990s, when California was still predominantly white.

Moreover, today's numbers need to be disaggregated and understood in context. Berkeley's increases in underrepresented students have been entirely among Latino students—a population that grew among California high school graduates from roughly 30% to 51% between 1997 and 2017. African Americans at Berkeley have declined from 7% of new freshmen in 1990 to 3% in 2017 (African Americans comprise less than 6% of California high school graduates, a proportion that has declined over the past 20 years.) In other words: Latino representation at Berkeley has grown at a rate far lower than Latino high school graduate growth overall and African American representation has declined and is now *lower* than in the first year *after* the passage of Proposition 209. Numbers for Native Americans—a very small percentage of the state's population as well as of Berkeley's students—remain very low. Trends for socio-economically disadvantaged students are better, but not what they could be (nor what they've been in the past). For example, though Berkeley remains a national leader among highly-ranked research universities in its proportions of low-income and first-generation college students—a record of which we are justly proud—our population of first-generation-college students is currently at 21% among new freshmen, compared to 29% in 2001. Access for other groups, including students with disabilities, undocumented students, and LGBTQ students has increased as the visibility and size of these populations has grown, but many of them still face substantial barriers to access.

The challenges that Berkeley faces in its efforts to increase diversity in the undergraduate population are significant and include:

- Large increases in applications, which have grown much faster than admission spaces, meaning the campus's admit rate has fallen precipitously. Increased competition for spaces frequently favors students from higher income, more educated families with greater access to resources of all kinds and disadvantages those from less resourced schools and socioeconomically disadvantaged communities, where information about higher education and the college application process is often less accessible.
- Strong competition from high-quality private and public institutions both within California and across the country. Because diversity of backgrounds among the undergraduate student body is recognized as a key factor in the quality of an institution and its students' educational and co-curricular experiences, well-qualified minority students, in particular, are in great demand. The great majority of highly selective institutions across the country pursue diversity using both admissions and financial aid practices (including race-attentive selection policies and targeted financial aid) designed to attract high-achieving minority students—many of whom come from California. While these practices create greater opportunity for many underrepresented students, they make it very difficult for UC campuses to compete.
- Within California, Berkeley is disadvantaged by its location in the high-cost Bay Area, remote from many of the communities in Southern California and the Central Valley where larger populations of underrepresented (particularly Latinx) students are located.

- Berkeley's reputation in terms of creating a welcoming environment for minority students is mixed and its high academic expectations can be intimidating. These issues, combined with our relatively low numbers of underrepresented students (compared to other UC campuses) can create a self-fulfilling prophecy in which the campus is viewed less positively in part because it does not have robust numbers of diverse students, so additional diverse students are less likely to want to come here. Critical mass for small populations like African Americans and Native Americans is a very real issue.

However, other institutions facing many of the same obstacles have been more successful in enrolling a diverse student body. For example, four UC campuses (Merced, Riverside, Santa Barbara, and Santa Cruz) currently qualify as Hispanic-Serving Institutions (HSIs)¹ and Davis, Irvine, Los Angeles, and San Diego are on a trajectory to reach HSI status within the next few years. Berkeley is rightfully proud that it has for many years qualified as an Asian American/Native American/Pacific Islander-Serving Institution. But in a state in which Latinx students are already the plurality among high school students, our Latinx population is woefully low. (In fact, relative to their numbers among high school graduates in California, Latinx students are more underrepresented than African Americans.)

The Enrollment Working Group recommends that Berkeley establish as goals (1) to increase its enrollment of African Americans, Latinos, and Native Americans, as well as low-income and first-generation college students and (2) to qualify as an HSI—that is to enroll at least 25% Latinos among the undergraduate student body— within ten years. We recommend that the campus convene a planning group to investigate tools for achieving this goal, including but not limited to:

- In-depth study of admission practices at Berkeley and other UC campuses (in particular UCLA, which has a similar level of competition for spaces, and UC San Diego, which has made significant improvements in recent years).
- Additional, sustained outreach to high schools and community colleges, including high-touch, intentional programs that increase the pipeline and direct it towards Berkeley. Students from underserved communities should be welcomed here from the start of high school and receive support at every step from pre-application through graduation.
- Enhanced recruiting in key selected markets.
- Involving students and alumni more heavily in recruiting and yield activities (Berkeley already has several very successful student recruitment and retention groups for specific populations; we recommend building on these).
- Expansion of innovative approaches like those employed by the African American Initiative which, among other strategies, leverages the work of outside groups that offer services and resources that Berkeley cannot.
- Exploration of novel approaches such as possible limited reinstatement of Transfer Admission Guarantees (TAGs) for students from targeted community colleges. Berkeley was an early

¹Hispanic Serving Institutions (HSIs) are defined by Title III of the Higher Education Act of 1965 as two- or four-year nonprofit or public accredited degree-granting colleges or universities whose undergraduate population includes at least 25% Hispanic students. Designation as an HSI qualifies an institution to compete for federal funds set aside specifically for these institutions. Funds can be used for a wide variety of academic purposes for the benefit of all enrolled students.

leader among the UC campuses in guaranteeing admission to transfer students and reluctantly ended its transfer guarantee (TAG) program only because of insufficient capacity to handle even those TAG applicants with very high GPAs. However, a carefully constructed and limited TAG program—for example, targeting transfer applicants from a limited number of regions or community colleges that have not traditionally sent large numbers of transfer applicants to Berkeley and/or focusing on specific majors—might increase Berkeley’s reach and attract underrepresented and educationally disadvantaged students. (We recommend consideration of such a program on a pilot basis to ensure that the challenges experienced under the previous TAG program do not recur.)

- Ensuring campus climate at Berkeley is seen as welcoming to students from diverse backgrounds (this affects efforts to diversify graduate students and faculty as well, progress in which is critical to continued improvement at the undergraduate level). We note that climate is an area where perception is reality: even if data indicate that we are making substantial progress, we will not see the benefits until we are *perceived* as a campus that is fully welcoming to diverse populations.
- Providing additional academic and other support for students from under-resourced high schools or community colleges, both as they prepare to apply to and enter Berkeley and once they arrive.

While the above recommendations (and those below, for graduate students) focus on access for underrepresented minority students, we note that many of the strategies suggested can also increase access and representation for students from other underserved populations that Berkeley values—e.g., students with disabilities, students from underserved geographic regions, LGBTQ students.

GRADUATE DIVERSITY

At the graduate level, UC Berkeley has a major opportunity—and obligation—to increase diversity. Berkeley is one of the largest producer of PhDs in the nation, and thus we have the opportunity to be the most important producer of diverse PhDs who then enter the academy, government, and business. As the institution of choice for many of the world’s top graduate students, we have generally enjoyed a strong pipeline of qualified applicants, allowing many graduate programs to avoid active recruiting. But, absent active and thoughtful recruiting, diverse prospective applicants might not know they are sufficiently well qualified to gain entrance and thus might not apply.

At the masters degree level, some professional schools are already quite diverse, while others compete with well-funded private peers for a small pipeline of diverse undergraduates and struggle to offer competitive financial packages. In some fields (both academic and professional), graduate programs may have the potential to become more attractive to minority candidates by reviewing curricular offerings and considering new emphases on issues of race/ethnicity or other forms of intersectionality and on future career paths that involve leadership and service in diverse communities. Faculty diversity is also key to attracting a diverse student body.

The Working Group strongly recommends that UC Berkeley improve the competitiveness of its financial support packages for both masters and doctoral students to increase the diversity of the

graduate student population. This may be the single greatest factor in our ability to improve the diversity of our graduate enrollment. Our existing graduate programs should recruit aggressively from our own undergraduate pool of underrepresented minority students, intensify outreach and marketing to Historically Black Colleges and Universities and Hispanic-Serving Institutions (including other UC and CSU campuses), and develop more programs to involve our own graduate students and alumni in recruiting. Educating our own undergraduates about professional graduate programs and PhD programs is also important. New 3+2 and 4+1 programs, which later in this report we recommend creating, could serve as a welcoming pathway to graduate study for diverse Berkeley undergraduates.

We also recommend, where appropriate, that graduate programs consider expanding or making more explicit course offerings that address intersectionality across the graduate curriculum and explore creating emphases or specialized one-year academic programs that could attract students who are interested in adding expertise in diversity issues to their resume and/or who plan to serve diverse communities. We should also educate faculty in best practices of holistic review of applications, to emphasize academic achievement in the context of opportunity. Lastly, and importantly, UC Berkeley needs to continue to address campus climate issues to make Berkeley more welcoming and supportive to diverse graduate students.

III. UNDERGRADUATE ENROLLMENT GROWTH

Undergraduate enrollment at UC exists in a complex ecology of state, University, and campus policies over which the campus has only limited control. At the state level, the California Master Plan for Higher Education's admission provisions include a covenant that UC should select freshmen from the top 12.5% of California high school graduates—implying that UC's undergraduate population should grow as the state grows. Enrollment of transfer students and nonresident and international students is in turn linked numerically to freshman growth: by UC Presidential policy, campuses are expected to enroll at least one third of their new California undergraduates as community college transfers and campuses seeking to alleviate the impacts of underfunding from the state by increasing the enrollment of out-of-state students can do so only if they also increase California enrollment.

Historically, UC accommodated rising numbers of California high school graduates by adding campuses. But the capital costs of building new campuses have become unmanageable and it is unlikely a new campus will be added anytime soon. As a result, growth at UC must now be accommodated on existing campuses—all of which are straining under increased enrollment. Strong pressure exists to continue growth and to spread this growth across all campuses. For example, goals to substantially increase the number of degrees granted in California to meet labor market demands are now a formal part of state budget language. (Note that the state goals include graduate degrees, discussed below—a critical part of UC's mission under the Master Plan.)

In recent years, Berkeley has done its part to address the need for enrollment growth, growing 16% since 2010-11 and approaching 41,000 students in 2017-18. Most of that growth has been in the undergraduate student body, which grew from 25,255 in 2010-11 to 29,783 in 2017-18, a 17.9% increase; this included a 6.5% increase in a single year, when the 2016-17 undergraduate population

grew by nearly 2,000 students over 2015-16. The impact of this rapid growth—which has not been accompanied by sufficient funding to provide the academic and other resources our students need—is deeply felt across the campus. Without increased resources, the quality of our academic programs and our students’ experiences will deteriorate; many would argue this has already begun. We also note that the campus may need to do more work to understand the true financial effects of enrolling additional students.

Despite these challenges, the Enrollment Working Group believes the campus will—and should—continue to grow, albeit at a much slower pace than in recent years. Growth can bring important benefits. First, expanding opportunity to more people is an essential part of our identity and our mission. Second, absent growth, it will be difficult to increase diversity; in fact, diversity could decline with flat or declining enrollment levels.

Therefore, the Working Group acknowledges that the campus needs to develop plans for growth in undergraduate enrollment. To the extent possible (acknowledging that political forces may obligate us to substantial one-year increases or periods of flat enrollment), this growth should be predictable and spread out over multiple academic years. Consistent with University policy (including President Napolitano’s recently announced Transfer Initiative) and the campus’s own goals, transfer enrollment should increase at at least the same rate as freshman growth and the campus should make every effort to ease the transfer process, to draw its transfer students from a broader range of community colleges (as discussed above), and to ensure the success of transfer students once they arrive (see below).

The campus’s enrollment growth plans must address the substantial additional resources needed to support more students (as well as the negative impacts of current crowding). These resources include, but are not limited to:

- additional affordable student housing (a plan for which has already been developed and is being implemented)
- new instructional space (including a new classroom building, the completion of the renovation of Moffitt Library, and new and/or renovated space for student academic services like those currently housed in the Cesar Chavez Center)
- support for additional faculty and staff to teach and provide services to larger numbers of undergraduates. In particular, it is critical that the faculty-student ratio not be allowed to further deteriorate.

The Working Group did not analyze how additional undergraduates should be distributed across colleges; development of specific targets and timetables should be addressed as part of the implementation of this plan. We do not assume that growth will be evenly distributed—rather, higher student demand in some areas, coupled with very strong applicant pools and positive job prospects for graduates, would suggest that growth will **not** be proportional. However, as the campus considers differential growth at the undergraduate level, diversity must be a prime consideration. Redirection of enrollment spaces to programs that have historically not attracted or admitted sufficient pools of qualified minority applicants will not serve our diversity or excellence goals. Programs seeking larger increases in undergraduate enrollment should be expected to

demonstrate how those increases are consistent with the essential goal of increasing racial/ethnic and socioeconomic diversity.

Additionally, Berkeley should view undergraduate enrollment growth through the lens of increasing *degrees* as well as increasing *numbers*. Improving academic outcomes for enrolled students will help more students to get degrees despite constrained resources. Historically, Berkeley has enjoyed relatively high graduation rates and low time-to-degree. But there is still room for improvement, and improvement in either or both of these measures could make space for more new students. Similarly, increasing the *proportion* of transfer students would allow us to increase the flow of students through the campus and produce more degrees.

Finally, we need to continue to create online and off-site programs that have the potential to increase educational opportunities and reduce crowding. While it may not make a major difference in enrollment capacity at the outset, online education is critical to our long-term ability to continue to expand access. Faculty and departments should be strongly encouraged to continue to develop high-quality, pedagogically effective online courses that can help alleviate classroom crowding, offer asynchronous instructional opportunities to students with scheduling or other challenges, improve the student experience and faculty-student contact, and potentially reach nontraditional students and prospective transfer students who could access courses not available at community colleges. Similarly, off-site programs offer important academic benefits for students who wish to participate. Berkeley should continue to build high-quality programs that enable students to spend a portion of their enrolled time beyond campus borders, including, but not limited to, Education Abroad, internships and public service opportunities, and programs like the Fall Program for Freshmen that provide a more intimate, cohort-based experience for first-year students.

IV. GRADUATE ENROLLMENT

High proportions of graduate enrollment and robust and varied graduate degree programs are key to Berkeley's quality and identity and part of our mission under the Master Plan. (In fact, one could argue that growth at the graduate level is more consistent with the Master Plan than undergraduate growth, since many other colleges and universities offer undergraduate education while PhD and certain professional degree programs are exclusively assigned to UC.) At the same time, both nationally and in California, demand for and types of graduate education have changed. Many of our peer institutions have reduced the relative size of their doctoral programs while at the same time increasing enrollment in Masters' and professional degree programs. Berkeley needs to assess its place in this landscape.

DOCTORAL EDUCATION

High quality doctoral degree programs in a breadth of disciplines are a hallmark of Berkeley and essential to our academic excellence. Historically, we have educated and graduated very high numbers of PhD students who go into academic, governmental, and private-sector employment. A large cadre of very well qualified graduate students is central to our overall quality and our ability to recruit the best faculty and conduct cutting-edge research. Doctoral students also make essential

contributions to undergraduate education as teaching assistants and by training and mentoring students in our laboratories, studios, research centers, and institutes.

The Enrollment Working Group heard concerns from many sectors of campus that although the quality of our programs remains high, they are under stress—largely because of challenges involved in providing competitive financial packages given rapidly escalating costs of housing and other living expenses in the Bay Area (as well as tuition increases that drive up the cost of graduate packages and are not fully supported by research grants). This is increasingly a problem, not only for departments that have never been able to rely on large amounts of extramural funding, but also for those that have federal research funding. Funding is not growing in many fields and some federally funded graduate stipends must be supplemented with departmental funds to cover Bay Area living costs.

In addition, the job market for PhDs has flattened in many fields. Tightened financial straits for many colleges and universities, combined with lack of population growth in many parts of the country, mean the professoriate is not growing rapidly. In some fields, ample non-academic job opportunities exist. But, in many, lack of expansion in the higher education market has made it more challenging for our doctoral students to find employment. This can exacerbate the effects of inadequate fellowship packages: students live in financial hardship for several years while they are here, many take on debt, and then they may find it very difficult to find a job—particularly a full-time position with reasonable benefits and job security. In response, some may stay longer than they need to, hoping the job market will improve or they will have better opportunities after additional scholarly work and research and teaching experience. Longer time-to-degree adds to financial challenges for students and expends campus resources that could be devoted to additional new students or enhancing the funding of our current students.

What constitutes the “right” doctoral enrollment in the context of expanding undergraduate enrollment and faculty is contested ground. Many departments have slowed growth and, in some cases, reduced doctoral enrollment. Others view the possibility of flat or decreased graduate enrollment as an existential threat to their research, their departments, and their disciplines.

The Enrollment Working Group recommends that, in general, growth in doctoral enrollment be conditioned on (1) adequate resources—both financial and mentoring—with which to support students while they are here; (2) reasonable job opportunities for students when they leave; and (3) an adequate pool of high-quality applicants to doctoral programs. This implies that growth will be differential across fields and that in many (if not most) departments, doctoral enrollment will not grow at the same rate as either undergraduate enrollment or faculty size. It also implies that additional sources of teaching assistance may need to be found in some fields to supplement a department’s own doctoral students. We believe this can be done through a combination of graduate students from outside the department (e.g., professional schools), masters degree students (see subsequent recommendations), and, in certain cases, advanced undergraduate students and lecturers. We recognize that the receptivity to these options varies across departments. But they are strategies that have been successfully adopted by departments here at Berkeley, as well as by many of our peer institutions.

PROFESSIONAL PROGRAMS

Training professionals in traditional state- and PDST-supported professional school degree programs (with or without PDSTs) is an essential part of the mission of UC overall and of UC Berkeley. Berkeley's professional schools ranked among the top in their fields (for example, in the most recent *U.S. News and World Report* rankings, Berkeley ranked among the top 10 for professional degrees or Schools in Business, Chemistry, Computer Science, Engineering, Law, Public Policy, Public Health, and Social Work). Berkeley-trained students go on to make major contributions to the state—serving as Supreme Court justices and other judges, elected officials, business executives, and as leaders in other professions as well.

Yet the State of California no longer provides support for professional education, reasoning that students who complete these degrees will earn high salaries upon graduation. We dispute this premise. Berkeley has always prided itself on training students for public service occupations—in fields like Public Health, Education, Social Welfare, City and Regional Planning, and Public Policy, as well as in the nonprofit sectors of fields like Business and Law. Other professional fields, such as Journalism, Architecture, and Landscape Architecture, provide relatively modest compensation. In the current high-tuition environment, students in these fields may need to take on large loans that cannot easily be paid back—creating financial challenges that take years to recover from and increasing the likelihood they will feel compelled to pursue private sector jobs or leave their fields entirely, when neither of those is their first choice. However, prospects for reversing this trend are dim, so students will face very high tuition and some students will not be able to afford these programs—even as the professional schools struggle with the costs of mounting their programs. We note that these burdens are more likely to fall on students whom it is part of our mission to educate—including those from low-income families and from families with little prior experience with higher education.

The Working Group recommends that leaders at the campus and UC system levels continue to advocate for state support for growth in traditional professional schools where labor-market demand, applicant quality, and adequate student support exist. Financial disincentives that discourage growth in such programs should be investigated and, if appropriate and possible, eliminated. The campus and the state should also investigate expanding loan forgiveness programs for professional degree recipients who choose public service employment.

SELF-SUPPORTING PROGRAMS

The above recommendations notwithstanding, we expect that financial pressures on professional schools will mean that most growth in professional programs will occur in self-supporting degree programs. Some professional schools have created successful programs that enjoy high demand from excellent students, provide well trained professionals in growing fields with strong employment markets, and help to financially sustain the school or college that offers them (current examples include the Evening and Weekend MBA program in Haas, the Master of Information and Data Science in the Information School, and the Masters in Public Affairs program at the Goldman School, among others). In addition to being self-sustaining financially and generating resources that help their school's state-supported professional degree programs, self-supporting programs may

offer increased flexibility (e.g., in the hours/schedule over which they are taught), which makes them more appealing and available to older students and working/returning professionals.

At the same time, some worry that rapid growth in self-supporting programs creates pernicious incentives and undermines the traditional mission of Berkeley's professional schools. In particular, schools may struggle to avoid creating a two-tier system, whereby state-supported professional students receive one level of service and infrastructure while students in self-supporting programs are provided another, higher level. There is also concern that new programs will target only those professional fields that offer generous remuneration for their graduates, changing the culture of commitment to public service that undergirds Berkeley's professional school landscape. Finally there is concern that the demographics of our self-supported students do not reflect those of the state or even our undergraduate student body.

The Working Group recommends that the campus work with the professional schools (and relevant departments and programs) to continue to develop high-quality self-supporting programs and PDST programs that serve key labor market needs and expand the opportunity for a Berkeley degree to larger numbers of students. It is incumbent upon each campus unit planning to launch such degree programs, as well as the relevant Academic Senate oversight committees, to rigorously assess the market for students, given the substantial investment required to launch and maintain new programs; develop strategies for integrating students from state-supported and self-supporting programs; and focus on using discretionary resources generated by self-supporting programs to enhance services and facilities for all students. In fact, in some professional schools, revenue generated from self-supporting degrees is subsidizing facilities and services for students in state-supported programs that are not adequately funded.

TERMINAL MASTERS DEGREES AND HYBRID PROGRAMS

Higher education is changing, as a result of the increasingly interdisciplinary nature of knowledge and work, the competitiveness of the job market for recent college graduates (leading many graduates to seek additional credentials that will distinguish them from other job seekers), and the rapidly evolving market for college-educated workers (which increasingly requires retraining to move ahead in a highly specialized field or to change fields as opportunities emerge in new fields).

Many students want to earn a master's degree along with their undergraduate degree. Combined BA/MA and BS/MS programs have existed for many years at other high-quality research universities. Berkeley is well situated to offer such programs because of the strength and breadth of its graduate programs and professional schools. What are termed "3+2" and "4+1" programs are especially attractive—as are "2+1" programs for transfer students, which also satisfy the desire that many of them feel to spend more than just two years at Berkeley.

Such programs would provide the opportunity for Berkeley students to complete a BA and a traditional professional or 2-year academic master's degree in five years. For example, students who complete their undergraduate degree in three years could go directly into a standard two-year master's program or a two-year professional program. Students completing their undergraduate degrees in four years could also take graduate courses while still enrolled as undergraduates; these courses, when combined with a year of graduate study, would allow them to receive a master's

degree at the end of year five—in their undergraduate field or a different but related discipline that, when combined with their undergraduate major, could dramatically enhance their career trajectories. An example might be an undergraduate major in Media Studies and the Masters in Data Science offered by the Information School.

We believe expanding such programs is highly consistent with—and could enhance—our reputation for high-quality academic programs. Such programs enable more degrees to be granted in less time—advancing state policy goals—and attract highly motivated students who know they want to pursue a two-year professional or academic degree (3+2) or a one-year masters (4+1 and 2+1 for transfer students) degree and are attracted by the quality and prestige of a Berkeley graduate degree. In addition, the ability to earn two degrees in separate fields of a student’s interest would synchronize well with the campus’s development of interdisciplinary Signature Initiatives, a component of this strategic plan. As part of the development of these initiatives, participating departments could link up to offer combined degrees for students pursuing research or service projects related to those initiatives.

Another advantage is that academic and even professional master’s programs (either 4+1/3+2 for Berkeley students or 1-year masters for graduates of other institutions) have the potential to be a tool in increasing diversity in doctoral programs. They could allow students to explore graduate school without committing up-front to a doctoral program—which may be attractive to underrepresented minority students deciding on their career path. For Berkeley students, they can substantially reduce the “friction” of applying to a graduate program. They can also expand the pool of graduates from which Berkeley draws graduate students, tapping our relatively diverse and highly talented undergraduates. Departments could choose intentionally to develop such programs as a training ground for potential doctoral students whose undergraduate careers did not fit the typical profile of a Berkeley doctoral student.

Another advantage is that 3+2 and 4+1/2+1 students could serve as teaching assistants during their graduate phase. They can also be very effective mentors for undergraduates. Both roles would help to address the additional instructional load associated with larger undergraduate enrollment and provide valuable experience and employment opportunities and are consistent with Berkeley’s identity as a place where undergraduates have the opportunity to mix with and be mentored by large numbers of graduate students.

We recognize, however, that in some cases important obstacles will need to be addressed in order to create new combined undergraduate/graduate pathways. Chief among these is resources for student support: since federal and state financial aid programs do not cover graduate study, students would need to find their own support for a fifth year or funding would have to be found to assist them. (For this reason, 4+1 programs that allow students to begin their graduate course work while still undergraduates might be more attractive than 3+2 programs that assume they complete their undergraduate work in three years and then pursue two years of graduate enrollment.) If programs such as these are to provide a pathway to graduate education for low-income and URM students, the cost challenge must be addressed.

The Working Group recommends that Berkeley identify and reduce financial and other obstacles to the creation of new masters programs and encourage academic units to develop programs to create opportunity for Berkeley to better serve its own graduates and to attract highly qualified students interested in new kinds of programs. The campus could consider creating at least one such program to be associated with each of its Signature Initiatives, if there were sufficient departmental and student interest (that is, departments would participate entirely on an opt-in basis).

IV. ENROLLMENT OF NONTRADITIONAL STUDENTS

California's dynamic economy continues to create new employment opportunities that require advanced skills and knowledge. Training of part-time, non-degree-seeking, and mid-career students to meet this demand is provided by many public and private institutions in California. Both the California Community Colleges and the California State University system are strong providers of education for part-time and non-degree-seeking students, as well as online programs that allow students to live in the far reaches of the state and still complete an undergraduate or (in the case of CSU) graduate education. Private institutions have a more mixed record; some are top-tier research universities that allow part-time status and offer a range of attractive and valuable certificate programs, while others are for-profit institutions that suffer from low quality, high dropout rates, and high tuition costs. The combination of low program completion rates and high tuition costs at for-profit private institutions leaves students with heavy debt burdens that can be devastating for their financial futures. Research shows that students enrolled in such high-tuition programs are more likely to be students of color.

In general, UC Berkeley has avoided non-degree programs. Non-matriculated students are primarily served by the courses and certificates offered by University Extension. But the campus is well positioned to anticipate labor market needs and contribute to the state by creating high-quality part-time and certificate programs and providing access to these programs to diverse and non-traditional students. Such students include mid-career workers with undergraduate or graduate degrees seeking advancement in their current field or training in a new area, as well as individuals who did not complete their undergraduate programs. The best course for students without degrees may be community college programs that allow them to transfer to a CSU or UC. However, for others, UC Berkeley may be able to offer valuable, academically rigorous certificate programs, including online programs; post-baccalaureate programs in specific fields such as health sciences; and a small number of undergraduate major and graduate programs for a special group of students (e.g., those who entered UC Berkeley or another UC campus but left in good standing without completing their degree).

This landscape is complex and rapidly evolving, but we believe there is a place in it for UC Berkeley. The Working Group recommends that Berkeley identify those fields and employment markets where it can be most helpful and effective in providing certificate programs through UNEX or by colleges and schools—either independently or in conjunction with UNEX. These might include post-baccalaureate programs for students seeking to enter into health professions, where there is strong demand and some students may need additional course work in the sciences, where we excel.

The Group further recommends exploring degree-completion programs for former Berkeley students who were unable to finish their undergraduate degree but withdrew in good standing. These could include online or hybrid programs for students who cannot physically relocate to Berkeley but would benefit from specific programs we offer. In addition, we believe that UC Berkeley could successfully launch both Bachelors' or Masters degrees in "Liberal Studies" and "Science Studies," developed by faculty. (A Liberal Studies degree has been proposed and studied before, but bears reconsideration for its value in extending the benefits of a Berkeley education to a broader set of students.)

APPENDICES

- [List of members](#)
- [Meetings and consultations](#) with campus community
- List of key resources
 - [Master plan for Higher Education in California](#)
 - [2017 draft enrollment plan](#)