Higher Education

California is facing a shortfall of college-educated workers

Higher education benefits individuals and the state: college graduates are more likely to be employed and earn higher wages than nongraduates, boosting state tax revenues and reducing pressure on the social safety net. However, California’s higher education system is not keeping up with the changing economy. Projections suggest that the state will continue to need greater numbers of highly educated workers. In 2030, if current trends persist, 38 percent of jobs will require at least a bachelor’s degree. But population and education trends suggest that only 33 percent of working-age adults in California will have bachelor’s degrees by 2030—a shortfall of 1.1 million college graduates.

BY 2030, CALIFORNIA MAY HAVE A SHORTAGE OF HIGHLY EDUCATED WORKERS

Governor Newsom has proposed investing more in higher education to avoid tuition increases, as well as creating an entity to help coordinate California educational institutions. Future challenges, including closing the skills gap, require setting new goals for higher education and making investments to improve educational outcomes and increase the number of college-educated workers. Improving access and completion rates for underrepresented groups, including Latinos, African Americans, and students from low-income families, will also be essential for increasing economic mobility. To ensure that its investments pay off, the state will need to measure progress toward its goals and identify programs and policies that improve student success.

California needs more college graduates

Given economic demand for skilled workers, the state needs to respond to two demographic trends that will undercut increases in the number of college graduates. First, the baby boomers—a large and well-educated group—are reaching retirement age; for the first time ever, a large number of workers with college degrees are leaving the workforce. Second, college completion has been improving, but young adults are not graduating at sufficiently high rates to close the gap.

- California’s economy increasingly demands highly educated workers.
  For decades, employment growth has been strongest for workers with college degrees, as a result of changes across and within industries. For example, rapid growth in health care and information technology is boosting demand for workers with college degrees. Also, within most sectors, more jobs are requiring degrees than ever before.

- More students than ever are eligible for college ...
  The good news is that the proportion of California high school graduates completing a college preparatory curriculum has grown. A recent state study found that about 14 percent of graduates are eligible for the University of California (UC), and about 41 percent are eligible for California State University (CSU). These shares are larger than the 12.5 percent and 33 percent eligibility levels recommended by the state’s Master Plan for Higher Education.
... but they are competing for limited slots at UC and CSU. Eligible applicants are being turned away from their colleges of choice due to capacity constraints. UC redirected more than 10,000 eligible students to UC Merced as a part of their referral pool process, but few of these students enrolled there. In 2017, CSU denied admission to more than 30,000 eligible students. This year, CSU is implementing a referral process that can redirect students to campuses with open slots. Some denied or redirected students enroll elsewhere in the state, but growing numbers are leaving California to attend college—40,000 first-time students enrolled in other states in 2016.

Obtaining a degree is challenging for many

- Many take longer than expected to graduate or transfer.
  About three in five first-time freshmen at CSU and about four in five at UC earn a bachelor’s degree within six years. However, only one in five CSU students and three in five UC students graduate “on time,” in four years. UC is working to improve on-time graduation, and CSU has adopted ambitious new goals for four-year and six-year graduation rates as a part of its Graduation Initiative 2025 program. At the community colleges, fewer than half (47%) of students either transfer, obtain a degree or certificate, or complete 60 units within six years. Importantly, the vast majority of students who do transfer to UC and CSU earn bachelor’s degrees.

- Remediation can be an obstacle, but institutions are reforming remediation practices.
  A lack of academic preparation or improper placement into remediation can delay or prevent students from earning associate degrees or transferring to four-year colleges. Historically, about 80 percent of community college students and a third of CSU entering freshmen required remediation before taking college-level courses. Community colleges are implementing shorter course sequences designed to improve the remediation process and are revising placement policies per AB 705; these reforms could allow most students to enroll in college-level courses sooner. CSU discontinued remediation as of 2018, putting all entering students in college-credit-bearing courses and providing support for underprepared students in hopes of increasing persistence and graduation rates.

Costs have risen, but college remains a good investment for most graduates

- Students have seen only small increases recently, but college costs remain high.
  During the Great Recession, per-student General Fund allocations fell by about 20 percent at CSU and UC, prompting the systems to more than double tuition between 2006 and 2011. State financial aid grants for students rose along with tuition and continue to cover tuition at public institutions for the lowest-income students. After the recession ended, state support increased moderately and tuition remained flat or increased slightly. But Californians are still concerned about costs. The November 2018 PPIC Statewide Survey showed that 58 percent of adults think affordability is a big problem at California’s public universities. The total cost of college—including room and board, books, and transportation—is much higher than the cost of tuition.

- Higher costs have increased reliance on loans.
  The share of students taking out loans grew during the recession. Once tuition flattened in 2012, borrowing returned to pre-recession levels at UC (40% of first-time freshmen) but remained above pre-recession levels at CSU (38%). Larger shares of students borrow at private nonprofit universities (53%), and more than two-thirds borrow at private for-profit institutions. Only 3 percent of first-year community college students borrow. Default rates are less than 6 percent for students from public and private four-year universities but more than 50 percent for students from for-profit institutions.
TUITION IS ONLY ONE PART OF THE COST OF COLLEGE

![Graph showing cost breakdown by type and institution.]

SOURCE: Integrated Postsecondary Education Data System.
NOTES: Data are from 2017. Costs are calculated as one year of education. Community college (CCC) tuition is calculated as taking a full-time load of 12 units per quarter. Average room and board and other costs are the average cost of living for first-time, full-time freshmen weighted by the proportion of students living on campus, off campus, or with family. Other costs include books, transportation, and other associated costs.

- **Labor market outcomes are strong for college graduates.**
  Labor force participation rates are high and unemployment rates are low for college graduates. In 2018, unemployment rates for college graduates (those with at least a bachelor’s degree) were about half those of workers with only a high school diploma (3.0% versus 5.7%, according to Current Population Survey data). Among full-time, year-round workers, the annual earnings of those with a college degree ($95,400) were, on average, more than twice those of high school graduates ($44,800). This wage differential is near an all-time high.

- **Career education can bring substantial returns.**
  One-third of future jobs require some postsecondary education but less than a bachelor’s degree. Career education programs often focus on skilled trades, applied sciences and technologies, and career preparation. Community colleges offer a lot of this training at a lower cost than private for-profit two-year colleges. Many career education fields show substantial returns for students—in particular, health credentials net students a 50 percent boost in earnings, on average. However, short-term certificates (earned in less than a year) generally have much smaller payoffs and may be most valuable as steps on longer career pathways.

- **Some colleges increase economic mobility more than others.**
  A college education offers most people a pathway to upward economic mobility. College attendance differs greatly across levels of parental income and educational attainment, so the big challenge is to ensure that the benefits of college reach first-generation, low-income, and underrepresented students. Recent research has found that the upward mobility of graduates differs greatly across institutions; UC and CSU fare well compared to their peers in other states.

**Looking ahead**

California is facing a serious shortfall in its supply of college-educated workers. Growing demand for higher education is putting pressure on public colleges, and there is widespread concern about college affordability and economic mobility. If the state can respond effectively to these challenges, it will have a profound impact on California’s future well-being.

**Update higher education goals.** The legislature has shown renewed interest in updating California’s Master Plan for Higher Education, which was released in 1960. The state should consider increasing the share of high school graduates eligible for UC and CSU and set new goals for transfer, completion, and time to degree. Creating a new coordinating body to set priorities and align the efforts of K–12 and higher education systems could further improve student outcomes.

**Plan for funding challenges in the next recession.** California tends to disproportionately cut higher education spending during economic downturns, which can affect access, affordability, and quality. Developing policies for managing higher education finances and college tuition in tough economic times can help stabilize student costs and keep California on track to achieve its goals. Evaluation of recent changes to the funding structure for the community college system can shed light on the impact of performance-based funding.
**Ensure access for low-income students and promote their success.** Although state financial aid continues to cover tuition for most low-income students at public colleges, the high cost of housing and other college costs have heightened concerns about housing and food insecurity. The California Student Aid Commission’s upcoming Student Expenses and Resources Survey should provide fine-grained data on the costs of college and help the state explore ways of using financial aid to make college an option for its lowest-income residents. Also, learning from colleges with policies and practices that help students of different backgrounds succeed is key to increasing upward mobility in our state.

**Collect, link, and use data to improve higher education.** California is one of only a handful of states without a comprehensive, longitudinal data system that can follow students from K–12 through college and beyond. Linking educational and workforce data can help California answer important questions about the impact of its investments in higher education. Connecting data will also help California’s higher education systems work together to achieve state goals.