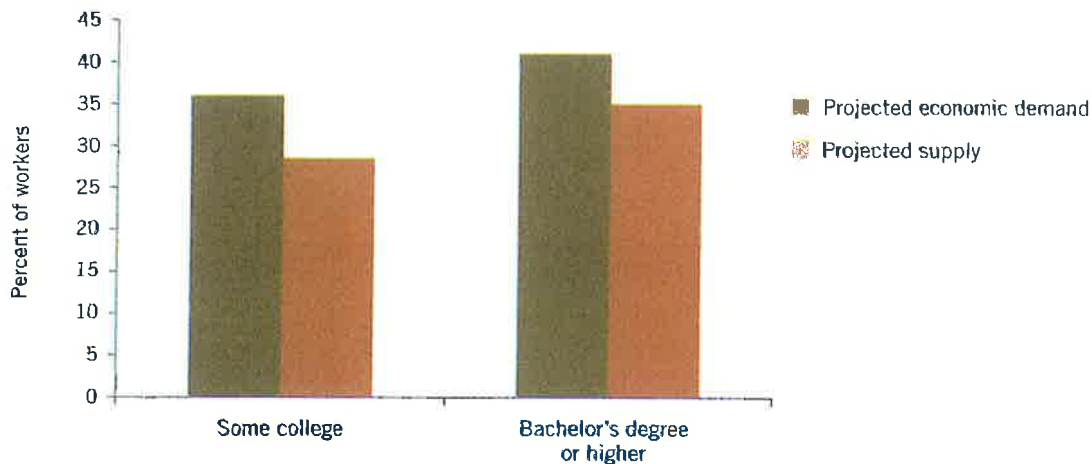


CALIFORNIA FACES A SKILLS GAP

California's higher education system is not keeping up with the changing economy. Projections suggest that the state's economy will continue to need more highly educated workers. In 2025, if current trends persist, 41 percent of jobs will require at least a bachelor's degree and 36 percent will require some college education short of a bachelor's degree. However, given current trends, the supply of highly educated workers is not on pace to meet that demand. Population and education trends suggest that by 2025 only 35 percent of working-age adults in California will have bachelor's degrees and 28 percent will have some postsecondary training. This equates to a shortfall of one million college graduates with a bachelor's degree. When we add in the projected supply and demand for workers with postsecondary education short of a bachelor's degree, the total shortfall exceeds two million.

BY 2025, CALIFORNIA MAY FACE A SHORTAGE OF HIGHLY EDUCATED WORKERS



SOURCE: PPIC projections.

The state needs to act now to close the skills gap and meet future demand. Without a substantial improvement in educational outcomes, California's economy will be less productive, incomes and tax revenue will be lower, and more Californians will depend on the social safety net. To close the gap, the state should set new statewide goals for higher education that are consistent with the demands of the 21st century. New investments in higher education will be necessary to meet those goals. Measuring progress and identifying programs and policies that improve student success should be a key component of those investments.

CALIFORNIA NEEDS MORE COLLEGE GRADUATES

- California's economy increasingly demands highly educated workers. For decades, employment growth has been strongest for workers with college degrees. This shift toward highly educated workers has occurred as a result of changes across and within industries. Relatively fast growth in the health care and information technology sectors are driving up demand for these workers, and within those and other sectors there has been a shift toward jobs requiring higher levels of education.

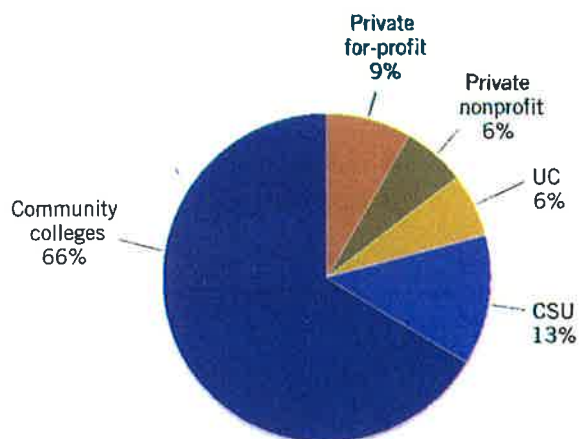
- **The supply of college graduates will not keep up with demand.**

Two demographic trends will undercut future increases in the number of college graduates. First, the baby boomers—a large and well-educated group—are reaching retirement age, meaning that for the first time ever a large number of workers with college degrees will be leaving the workforce. Second, groups with lower levels of education are a growing share of the state's population. In particular, Latinos—who now make up California's largest group of young adults—have historically had low rates of college completion. Those college completion rates have been improving, but not fast enough. And there will not be enough highly educated newcomers to California—from abroad or from other states—to close the skills gap.

- **Higher education is largely a public endeavor in California.**

As in most states, the vast majority of California's college students attend public colleges and universities. More than four of every five undergraduate students in California are enrolled in one of the state's three public education systems: the community colleges, the California State University (CSU), and the University of California (UC). Three of every four bachelor's degrees awarded annually in the state come from either CSU or UC.

THE VAST MAJORITY OF CALIFORNIA'S COLLEGE STUDENTS ATTEND PUBLIC INSTITUTIONS



SOURCE: PPIC estimates of 2012–13 undergraduate enrollment based on Integrated Postsecondary Education Data System data for degree-granting Title IV institutions.

- **Large numbers of California's high school graduates attend college ...**

More than 60 percent of California's high school graduates enroll in college within a year of completing high school. More go to community colleges (35%) than to four-year institutions. Open access, wide geographic distribution, and relatively low fees make California's community colleges especially popular. Compared to students in other states, California's college-bound high school graduates are more likely to enroll in community colleges than in four-year colleges or universities.

- **... but many never earn a degree.**

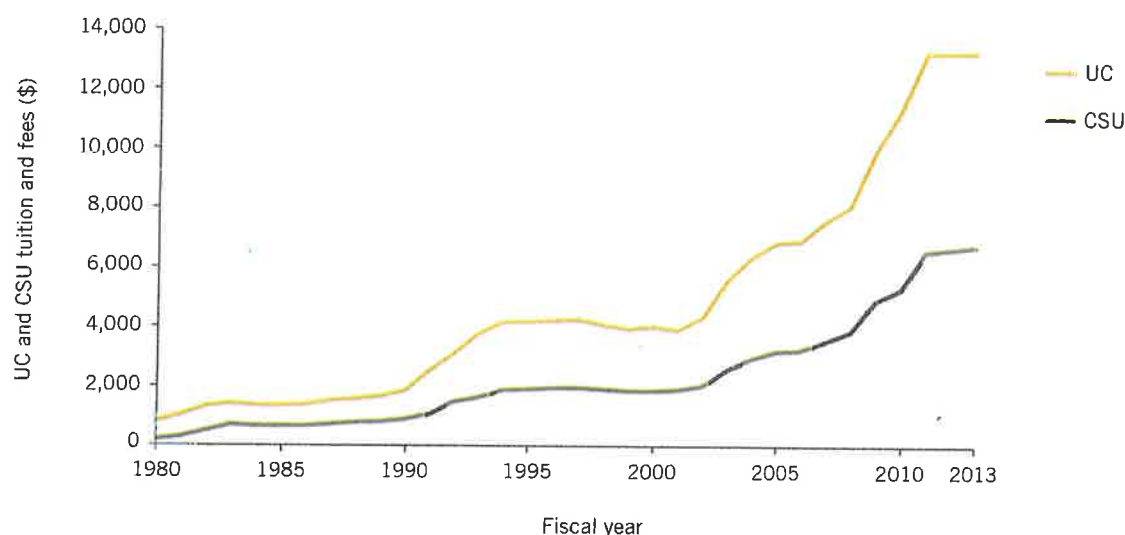
Lack of preparation for college-level work and lack of financial resources keep many students from moving ahead in the higher education system. Approximately one in ten community college students transfer to a four-year university. Even among those who earn at least 12 credit units and take transfer-eligible courses, only about 40 percent eventually succeed in transferring. Roughly half of CSU students graduate within six years of entering as freshmen. Graduation rates are much higher in the UC system: four of every five students earn a degree within six years.

AS THE STATE HAS WITHDRAWN COLLEGE FUNDING, STUDENT COSTS HAVE RISEN

- **Funding for higher education has declined dramatically as a share of state General Fund expenditures.**

Over the past few decades, public higher education institutions have faced disproportionate cuts in state funding. In 2001–02, for every General Fund dollar for corrections, the state spent \$1.89 for UC, CSU, and the community colleges; in 2011–12, the state spent only 82 cents on UC, CSU, and the community colleges for every dollar it spent on corrections. Over the past ten years, per student General Fund allocations have fallen by more than 40 percent at CSU and by more than 50 percent at UC. These cuts have not been the result of a deliberative process that reprioritized the state's goals. Rather, state policymakers have had to put out budget fires, and the General Fund's higher education component is relatively unprotected by statutory, judicial, or federal requirements. Recent increases in General Fund allocations have been relatively small compared to the size of the previous cuts.

TUITION AND FEES HAVE INCREASED DRAMATICALLY



SOURCES: University of California Office of the President and California State University Chancellor's Office.

NOTES: Includes mandatory campus-based fees. Annual tuition and fees are in nominal dollars.

- **Cost-cutting and increases in tuition and fees have not fully made up for General Fund cuts.**

California's colleges have responded to funding cuts by reducing expenses, including administrative and faculty costs, and increasing tuition and fees. The revenue generated by tuition and fee increases has not fully compensated for General Fund cuts. Hence, enrollment has been restricted even in the face of strong and growing demand. Those who do enroll are facing higher costs. Indeed, more students than ever are taking out loans. In 2010, almost half of California freshmen took out student loans—in 2000, only a third did so.

- **Student loan amounts have risen at both public and private colleges.**

Among freshmen in California, the average loan amount rose 36 percent between 2005 and 2010 (adjusted for inflation), reaching almost \$8,000 for the first year alone. Students at private colleges are much more likely than students at the state's public colleges to take out loans, and the amounts of those loans are substantially higher. Of particular concern are students at private for-profit colleges. Almost all students attending those institutions take out loans, and amounts are higher than at any other type of institution.

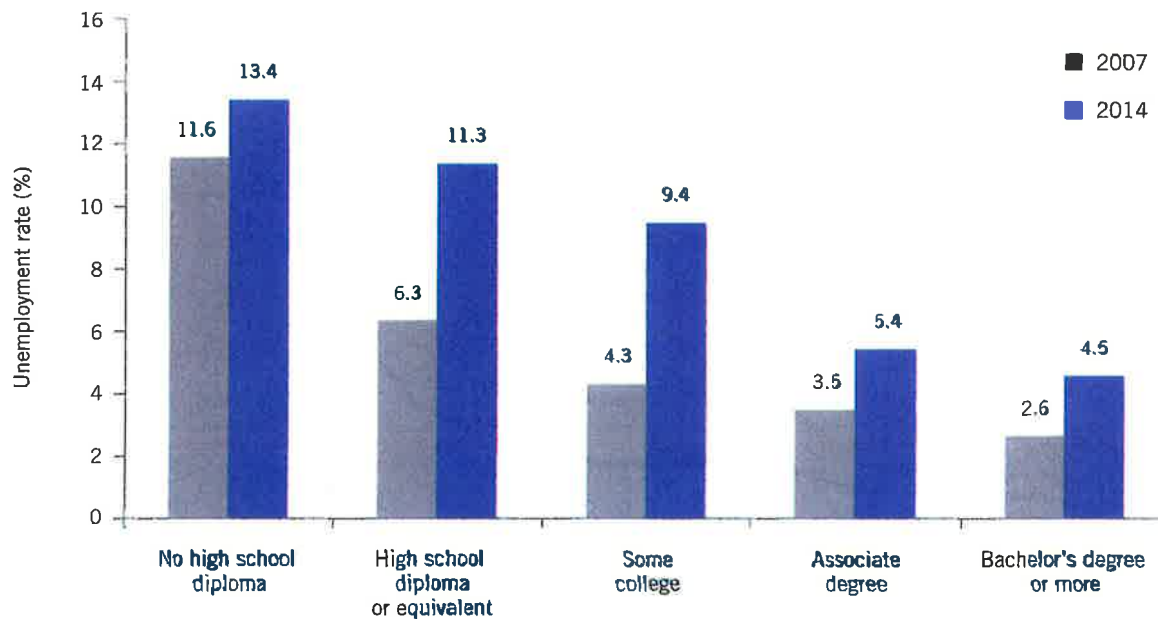
COLLEGE REMAINS A GOOD INVESTMENT

Despite the increase in debt, college is a good investment for the vast majority of students who attend public colleges and private nonprofit colleges. Labor market outcomes, including employment and wages, remain far better for college graduates than for less educated workers, and all but the lowest-paid college graduates earn enough to pay off their debts. Students who attend private for-profit colleges are much less likely to earn a degree, more likely to incur large debts, and more likely to default on their loans.

- **Most Californians believe that a college degree is critical for success ...**

Almost 60 percent of adults believe that a college education is necessary for success in today's work world. Latinos are especially likely to hold this view, with 73 percent believing in the value of a college education (PPIC Statewide Survey, November 2011).

UNEMPLOYMENT RATES ARE MUCH LOWER FOR COLLEGE GRADUATES



SOURCE: March 2007 and 2014 U.S. Census Current Population Survey, all civilians in the labor force, restricted to California residents.

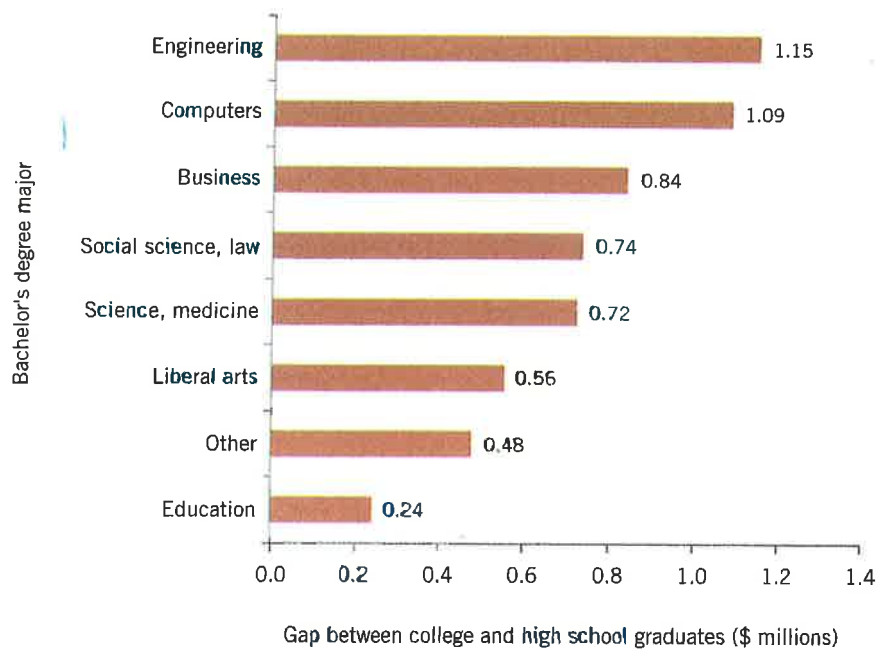
- **... and they are right.**

Census Bureau data show that the wages of college graduates are more than 50 percent higher than the wages of workers with only a high school education. The value of a college degree grew rapidly from 1990 to 2010 and remains near record levels. Even given persistently high unemployment, jobless rates are far lower for college graduates than for adults with less education.

- **The economic benefits of college persist across majors and across workers' lifetimes.**

Even when the costs of attending college are factored in, graduates earn hundreds of thousands of dollars more than high school graduates over the course of their lives. There are pronounced differences in earning power across majors: graduates with engineering and computer science degrees enjoy lifetime gains of more than \$1 million. But even college graduates from less remunerative majors earn hundreds of thousands more than high school graduates.

LIFETIME EARNINGS ARE MUCH HIGHER FOR COLLEGE GRADUATES



SOURCE: Hans Johnson et al., *Student Debt and the Value of a College Degree* (PPIC, 2013).

NOTE: Net lifetime earnings by field of study, with costs of attending college for graduates accounted for.

LOOKING AHEAD

California is facing a serious shortfall in its supply of college-educated workers. Improving the educational attainment of the state's young adults will foster greater individual success and increase economic growth throughout the state. Without concerted efforts to improve college attendance and graduation rates, California's economic future will be much less bright. The state needs to take several steps.

Update higher education goals. California has not substantively updated its Master Plan for Higher Education, which was developed more than 50 years ago. The state and its higher education institutions should increase the share of high school graduates eligible for UC and CSU, establish new goals for transfer from community colleges to four-year schools, and identify completion and time-to-degree objectives.

Increase alternatives to traditional degrees. Because it is unlikely that the state will be able to completely close the skills gap by increasing the number of graduates with bachelor's degrees, other forms of postsecondary training and workforce skills development are essential to the state's future. New pilot programs that allow some community colleges to offer applied bachelor's degrees in vocational fields are a step in the right direction.

Decide how to provide adequate funding to achieve state goals. California's higher education institutions have borne a disproportionate share of the state's budget cuts. Shortchanging education for quick budget fixes could seriously shortchange California's economic future. Reinvesting in higher education will require a concerted and persistent effort in the face of competing budget priorities. Efficiency in the delivery of higher education should be a part of the state's fiscal goals: online learning is a possibility, as yet unproven, as is performance-based evaluation and funding.

Ensure access for low-income students. As the costs of attending college have increased, the importance of grant and scholarship aid has grown. California should ensure that its aid programs keep up with growing college costs and are targeted to institutions with good track records in graduating low-income students without saddling them with large amounts of debt.

Collect information to ensure that progress is being made. California currently lacks a comprehensive longitudinal student data system that could evaluate whether the state and its colleges are meeting higher education goals. Linking K-12 data with college data would allow policy experts to determine what policies and programs produce the best and most efficient outcomes for students, colleges, and the state as a whole.

Establish a new higher education coordinating body. With the demise of the California Postsecondary Education Commission, the state lacks a higher education coordinating body. Such a body could provide leadership in setting policy priorities and coordinating efforts between the state's higher education and K-12 systems to improve student transitions and outcomes.

Ultimately, the significance of a college education is larger than the gains enjoyed by individual graduates. California's future prosperity depends on public policies that promote college enrollment and completion for increasing numbers of Californians. Throughout California's history, educational and economic progress have gone hand in hand. With the right information and the right policies, the state can continue on that path.

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