



# Credential Crunch

## California needs five million college graduates by 2025

California is renowned for the richness and diversity of its robust regional economies focused on agriculture, natural resources, shipping and logistics, and the entertainment and computer industries. Combined with other components of a service-based economy and newly emerging industries, the state's gross domestic product (GDP) totals \$1.9 trillion, representing 13 percent of the nation's GDP and placing California 8th in the world if it were ranked as a separate country.

How did California come to occupy such an important place in the world's economy? In the 1960s and 1970s, California proved with the implementation of its Master Plan for Higher Education that expanding access to higher education and focusing its colleges on distinct roles could contribute to unprecedented economic strength and vibrant communities. It was not simply that California had an educated population; a critical mass of well-educated people was a magnet for investment and created a culture of innovation and entrepreneurship.

Following California's lead, other states and major competitor nations have also expanded higher education, contributing to dramatic increases in the levels of education of their adult populations. These investments have made it possible for their citizens to engage in a world economy requiring increasingly higher levels of knowledge and skill for the most cutting-edge industries and jobs.

Unfortunately, California is not well positioned to continue as an economic leader because our colleges, universities and trade schools are not producing enough highly skilled graduates. Among the states, California ranks 23rd in terms of the proportion of adults ages 25 to 64 with an associate's degree or above.

The most secure route to a strong economy is to provide the state with a rich and diverse pool of talented, well-educated citizens who will bring creativity, innovation, entrepreneurship, industriousness and high levels of productivity to our businesses and our communities. California is fortunate to have an infrastructure of research universities, comprehensive universities, private institutions and community colleges that are poised to serve the needs of the state's regional economies, but the number of Californians emerging with credentials is falling short of what California needs.

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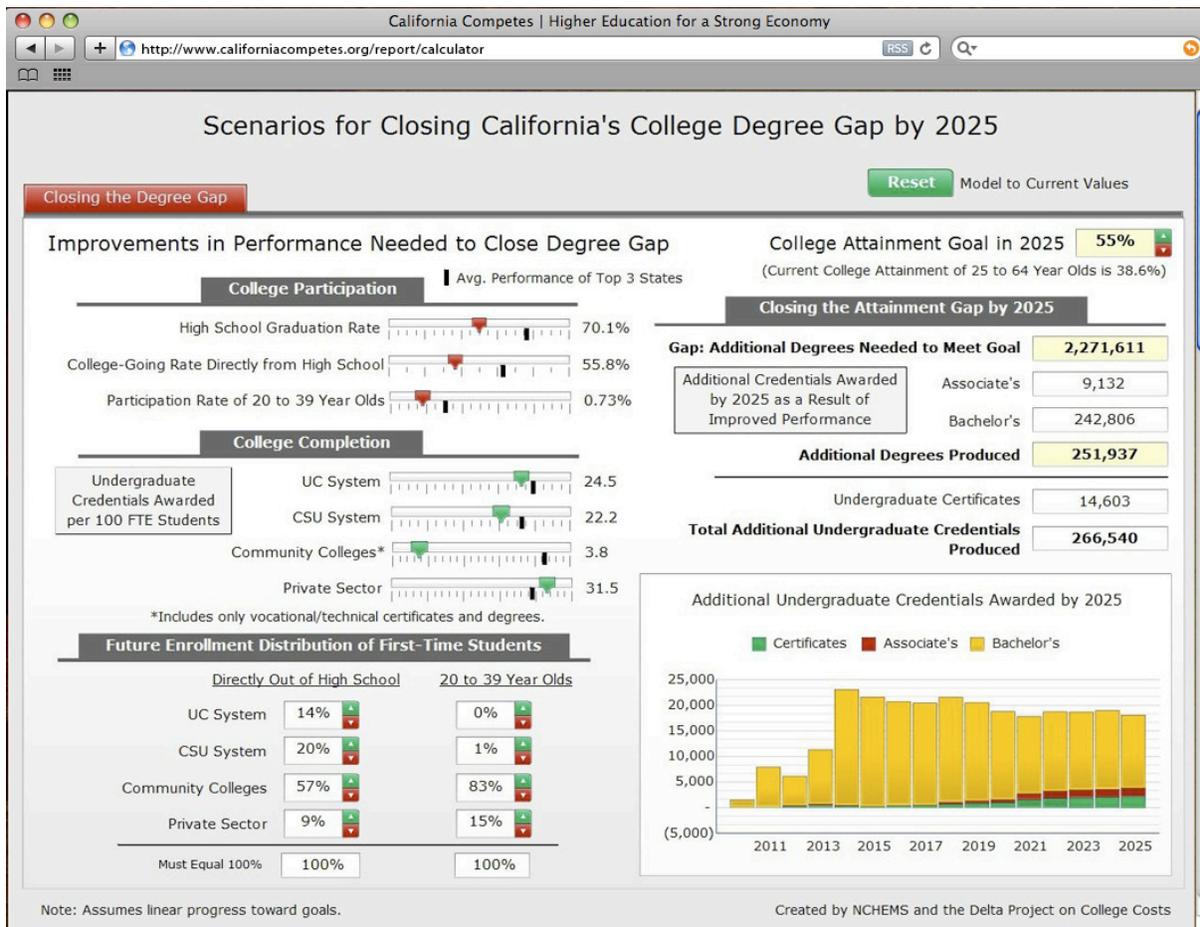


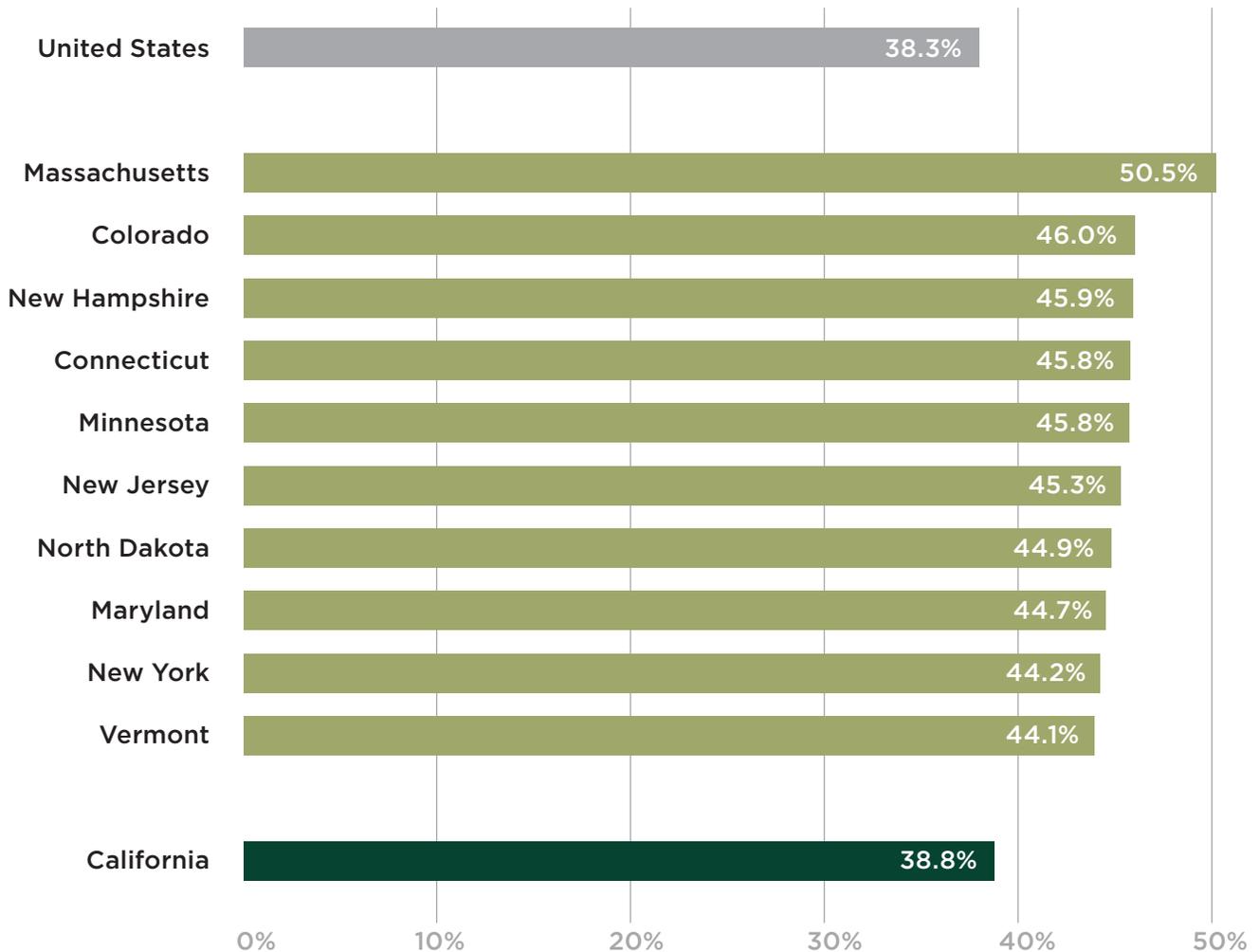
Figure 1: How would you add two million college graduates?  
Try the online calculator at [www.californiacompetes.org/report/calculator](http://www.californiacompetes.org/report/calculator)

## California needs 5.5 million more degrees and certificates, but is on track to produce only 3.2 million

To maintain California's strong economic position, the state needs the innovation and high productivity that comes from a well-educated workforce. For California to remain competitive and become a leading degree-producing state by 2025, it will need to produce an additional 2.3 million postsecondary credentials on top of the 3.2 million already projected to be produced under current policies. Reaching that goal would require an estimated increase in degrees of more than four percent each year.

In 2010, only 38.8 percent of adult Californians (ages 25–64) had at least an associate's degree, placing California 23rd among the states (Exhibit 1). And for young adults the attainment level is even lower, only 35.9 percent, making us 30th among the states. In projections of degree attainment for all 50 states, researchers estimate that in 2025, the top-ten U.S. states will reach an average of 55 percent adult degree attainment (associate's degrees and above) assuming no change in performance above current levels.

# Postsecondary Attainment of the Adult Population: Percentage of Adults 25 to 64 with an Associate's Degree or Higher in California, versus U.S. Average and Top-Ten Performing States, 2010



**Exhibit 1: Degree attainment in California compared with top performing states**

Source: U.S. Census Bureau, 2010 American Community Survey

Projections based on the demands of employers are consistent with the need for significant growth in postsecondary credentials. The California Workforce Investment Board has found that nine of the top-ten skilled job openings in the coming decade require significant postsecondary training. Focusing on

bachelor's degrees, the Public Policy Institute of California's analysis of workforce needs led to its call for increased production (beyond current projections) of one million degrees by 2025. Together these and other state and national estimates confirm our analysis calling for an additional 2.3 million degrees by 2025.



## Technical background: Setting postsecondary goals for California

There are many different ways to develop higher education goals that would fuel the state's economy. In setting a direction for California we have considered a number based on input from independent experts as well as from analysts working for higher education systems in the state. Articulating a set of goals requires paying attention to the types of degrees that have real value for graduates and for society, the timeline for achieving those goals, and the populations that need to attain those goals.

**The types of credentials.** While California's knowledge-based industries such as technology require college graduates with bachelor's degrees or higher, there are increasing numbers of good jobs across a range of industries that demand skills gained in credential programs of less than four years. Our numeric targets for California include bachelor's degrees, career and technical associate's degrees (excluding transfer degrees<sup>†</sup>), and certificates from programs of at least one year in length (which research suggests have real value in the job market).

**The timeline.** Most recent national conversations about goals have focused on either 2020 or 2025 as the end point for the planning horizon. Imprecision in the data grows with longer time spans, yet shorter time spans do not allow educational interventions to be implemented, making it harder to use targets as the basis for near-term accountability indicators. We use 2025 because it allows time for policy changes to have a significant effect on progress toward the goal.

<sup>†</sup> Transfer degrees are not included in the goal because they are transitional; furthermore, counting transfer degrees and advanced degrees would lead to double-counting. Because of data limitations (certificate attainment data are not available from the U.S. Census), for the purposes of state-to-state comparisons associate's and bachelor's degrees of all types are included.

# Increasing numbers of good jobs demand skills gained in credential programs of less than four years.

## **The target population and other assumptions.**

While some analyses focus on younger adults aged 25 to 34, our goal is based on the full adult working population aged 25 to 64. The analysis also includes assumptions about changes in degree production that will occur over time, based on high school graduation rates, college-going rates, and progression and completion rates for different populations.

If current trends continue, California will produce roughly 3.2 million certificates (in programs at least a year in length), career and technical associate's degrees and bachelor's degrees between 2014 and 2025. To reach the top ten (translated into degrees and certificates), colleges would need to produce 5.5 million over that 12-year span, or an additional 2.3 million degrees and certificates. Historically, the proportion of the adult population with degrees has increased by about a third of a percent per year, which is largely a result of slight increases in the number of new degrees conferred by colleges each year. The goals would require an estimated increase in the targeted postsecondary awards of more than four percent each year.

Several studies have called for an increase in the growth of postsecondary credentials (Exhibit 2), most of which are relatively consistent with our estimates of an additional 2.3 million degrees as a goal for 2025. For example, the PPIC bachelor's degree goal of one million combined with the Community College League's goal of one million associate's degrees is roughly the same as our 2.3 million, especially after adjusting for the League's target date of 2020 instead of our 2025. The differences observed among the various goals are largely the result of the year used, the target population, or other assumptions.

## Exhibit 2: Comparison of Attainment Goals

SOURCE	OUT-YEAR	BASIS FOR THE GOAL	TYPES OF CREDENTIALS THAT COUNT	AGE GROUP	NUMERIC GAP IN CALIFORNIA ABOVE CURRENT PRODUCTION LEVELS
California Competes	2025	Aim to be a top-ten state in educational attainment (55% associate's or bachelor's degree)	Technical certificates and associate's degrees of one year or more, and bachelor's degrees	25-64	2.3 million
Commission on the Future of the Community College League of California	2020	Goals established by Lumina Foundation and the Obama Administration	Associate's degrees (including transfer) and technical certificates	25-64	1 million
Public Policy Institute of California	2025	California workforce needs (41% with at least a bachelor's degree)	Bachelor's degrees	25-64	1 million
Georgetown Center for Education and the Workforce	2018	National workforce needs (61% with at least some postsecondary)	Some postsecondary (with or without a credential)	25-64	1.3 million
Lumina Foundation "Big Goal"	2025	International competitiveness (60% with at least an associate's degree)	Associate's and bachelor's degrees	25-64	3.7 million (assumes lower "current production" baseline than other studies)
Obama Administration	2020	International competitiveness (60% with at least some postsecondary)	Some postsecondary (with or without a credential)	25-34	1.13 million

# Future growth in degrees and certificates will depend on public policy decisions at the state and federal level as well as on market factors.

Nearly three-fourths of all bachelor's degrees are awarded by public institutions in California (Exhibit 3), with more than one-fourth of UC graduates and more than half of CSU graduates having taken at least

one class at a community college. The targeted career and technical certificates and degrees are currently conferred by community colleges and private sector (for-profit) colleges in roughly equal numbers (Exhibit 4).

159,000 Bachelor's Degrees awarded in 2007-2008

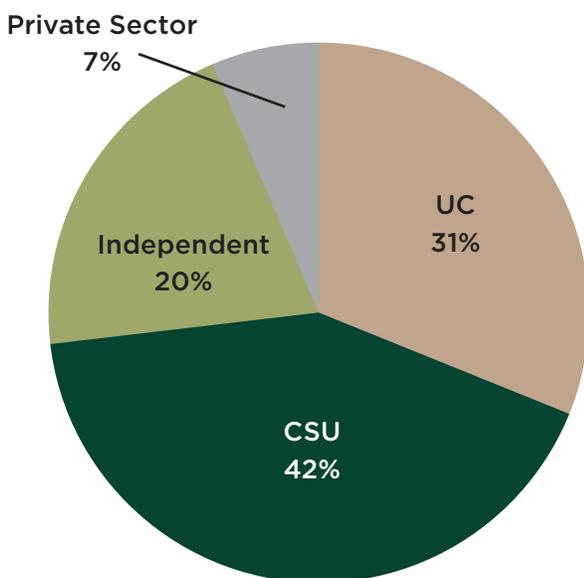


Exhibit 3: Producers of bachelor's degrees in California

78,000 Vocational AAs and sub-baccalaureate certificates of one year or more

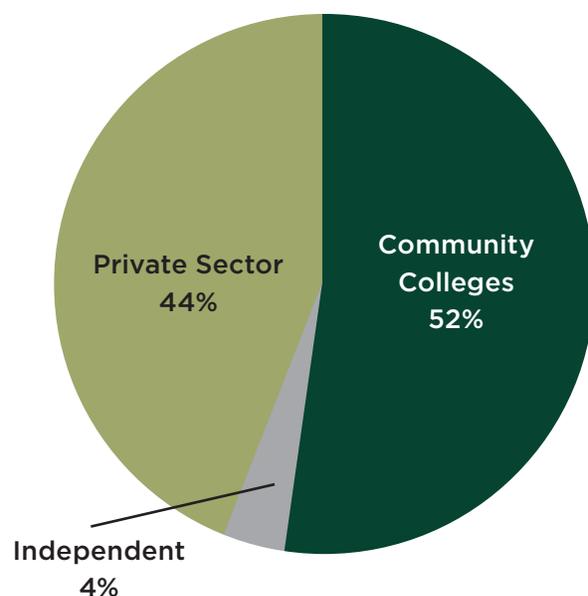


Exhibit 4: Producers of career and technical credentials in California

# California Competes

Higher Education for a Strong Economy

In the second half of the twentieth century, California emerged as an economic powerhouse, the envy not just of other states but of nations. The future of every Californian is dependent

on maintaining that leadership by developing the talent and productivity of Californians through higher education, the keystone of California's diverse economy.

Our colleges, universities and professional training programs have provided the intellectual and technical know-how to make California a hub of innovation and job creation. To remain competitive, we must create better pipelines from the opportunity of college and professional training to advancement in good-paying jobs. We can secure a stronger economy by building a talent pool whose creativity, innovation, entrepreneurship and industriousness match the needs of the 21st century.

Opportunity, creativity, enterprise, efficiency and growth are the hallmarks of economic development and the lens through which California Competes develops non-partisan and financially pragmatic recommendations to improve postsecondary education.

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## STAFF

Robert Shireman  
*Director*

50 California Street, Suite 3165  
San Francisco, CA 94111  
Phone: (415) 343-0830  
Fax: (415) 543-0735  
info@californiacompetes.org  
www.californiacompetes.org

Lande Ajose  
*Deputy Director*

Remmert Dekker  
*Program Associate*

This report is available on our website.

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