



INSTITUTE FOR HIGHER EDUCATION
LEADERSHIP & POLICY

A NEW VISION FOR
CALIFORNIA HIGHER EDUCATION:
A Model Public Agenda

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Executive Summary – A New Vision for California Higher Education

An Emerging Consensus for Transformative Changes

California's approach to structuring and financing higher education is out of sync with the needs of students and the state. The world has changed dramatically since the 1960 Master Plan thrust California into a position of international leadership in public higher education. Today, despite having colleges and universities that are the envy of the world, California is not educating its people to levels demanded by the global and regional economies.

The Master Plan, innovative for its time, has proven insufficient to guide California's higher education system through the changes of the last few decades. It is not just that the Plan is under-funded for the size and scope of the mission; it is outmoded. It imposes an unagile, state-centered structure on a dynamic, multi-region state. Needs that fall outside of, or between, or outgrow the capacities of the three public higher education systems cannot be well addressed by continuing the traditional approach to governance.

Numerous reports spanning the last few decades have called for fundamental changes in the organization and delivery of higher education in California. This report draws on these and other sources of information to construct a *model public agenda* for California higher education. A public agenda starts with the needs of Californians and imagines how those needs can best be met in ways that may stretch beyond the historically-defined missions of the three public segments. A public agenda can point to opportunities for new roles, new collaborations, and new policies that are better attuned to today's needs. This model public agenda is intended to inspire broad discussion about the future of California higher education, potentially leading to an *official* public agenda for California higher education that can guide and support the changes that are so urgently needed.

The Scope of the Challenge and the Segments' Roles

In a companion report to this one, called *Average Won't Do: Performance Trends in California Higher Education as a Foundation for Action*, we documented that California's higher education performance is lagging other states and falling short of California's needs. Other research and advocacy organizations have concluded that California

needs to produce one million more bachelor's degrees and 2.5 to 3.5 million more total degrees and certificates (depending on what kinds of credentials are counted) *beyond* what current trends are expected to yield. These targets are good reminders of the enormous scope of the challenge, but meeting these goals would require an aggressive rate of change that the current system is virtually incapable of producing.

We present an alternative scenario that is still ambitious but reflects realistic opportunities for the three public segments to enroll and graduate more students. The scenario reflects substantial annual increases in the number of students earning degrees and certificates from the California Community Colleges (CCC), with the largest increase to come from career-oriented credentials. The scenario also projects major growth in students earning bachelor's degrees from the California State University (CSU) and moderate contributions from the University of California (UC) where undergraduate enrollments are low, relative to the other segments. This alternative nevertheless falls well short of reaching the familiar targets, suggesting that the gap would have to be filled by private providers or from more striking changes in the structure and operation of the public sector. Whatever the combination of providers, efforts to increase the number of Californians with college credentials cannot be just a numbers game, but must be undertaken with steadfast attention to academic quality.

Current Structures Make Change Difficult

All three segments have worked hard to increase readiness, access, student success, and equity, but none has been able to achieve a pace or scope of transformation to match California's challenges. Certainly, the lack of resources in recent years created a harsh fiscal environment where improvement was all but impossible. But financial resources are not the only problem. Numerous structural barriers make it extremely difficult for the three public segments to achieve the progress being called for today.

Calls to revise or fund the Master Plan miss the mark because they fail to address the underlying constraints that complicate segment efforts to serve more students effectively and efficiently. The structural constraints detailed in this report include:

- A lack of capacity in baccalaureate programs;
- An under-resourced community college system serving 70% of public enrollments;
- A poorly structured approach to financial aid for community college students;
- An incomplete and disjointed finance policy structure;
- Structurally inseparable research and baccalaureate missions at UC;
- Lack of state policy leadership for a system built on interdependence; and
- Insufficient differentiation of mission and program.

A new public agenda must identify the means to overcome these structural barriers.

A New Approach to Meet California’s Higher Education Needs

Drawing from the emerging consensus about the kinds of transformations that are needed, this model public agenda envisions a three-part strategy of **regionalism, specialization, and technology** that requires leadership and collaborative mechanisms that do not exist.

- *Regional consortia* comprising all higher education providers (public and private) and K-12 representatives in each defined region of the state would set targets for enrollments and completions and determine appropriate roles and contributions of providers.
- The regional consortia would guide greater program *specialization* to take best advantage of the distinctive capabilities of each institution to address unique needs of students and regions and to finance a more inclusive and cost-effective system of higher education.
- Each consortium would identify how *technology* would be used purposefully and effectively to ensure that students maintain access to a broad complement of academic pathways regardless of what may be offered at their home institutions.

Plans and targets developed by the regional consortia would roll up to state-level plans, targets, budgets, and policies. Accountability would be a shared responsibility

of institutions, regional consortia, and state lawmakers. With resource allocations based on regional plans and targets, and developed with better knowledge of costs, segments and regional consortia would be better able to explain their budget requests to lawmakers, to account for the use of resources, and to report on outcomes. Institutions, families, and all Californians would be better able to hold lawmakers accountable for providing needed resources.

The strategy is designed to achieve four overriding goals:

Goal 1: Increase access to higher education institutions and attainment of high-quality degrees and certificates, with an emphasis on access and attainment among younger adults

Goal 2: Reduce performance gaps in higher education access and attainment

Goal 3: Improve the stability and adequacy of public and private investments in higher education

Goal 4: Provide state policy leadership that enables an effective regional approach to meeting California’s higher education needs, connected to an overall state-level vision

Effective State Policy Leadership for a Regional Model

Strong, capable, and informed policy leadership at the state level is essential for this new vision to take hold. This function would best be filled by an office of higher education that is part of the administration and reports to the governor. The governor enacts budgets, signs legislation, and fulfills other critical responsibilities that require high-level staff support similar to what exists for K-12 education. Under this model, segment leaders would have a clear point of access in working with the administration to develop well-informed fiscal and other policies.

This vision, or something equally transformative, cannot be implemented overnight. But there is great danger in letting pressing annual budgets and bill deadlines delay these conversations. Short-term concerns can push longer-term concerns off the agenda over and over until the realization that, had we done something *then*, we would have something *now*.

Introduction

A World of Changes

In 1960 California leapt to the front of the pack by laying out a vision for public higher education predicated on the values of access, affordability, and quality, delivered through three distinct segments – the University of California (UC), the California State University (CSU), and the California Community Colleges (CCC). The Master Plan’s differentiation of mission across the three segments, the guarantee of broad access, the low cost to students, and the high quality of education have been widely credited with powering California’s dynamic economy and sustaining the California dream for much of the second half of the twentieth century.

It seems as though our state, once the innovator, has become a reluctant follower.

(Little Hoover Commission, 2013)

Many of these qualities still exist today, but California’s higher education system has grown increasingly out of sync with the needs of students and the state as a whole. The world has changed fundamentally since the inception of the Master Plan. For example, in 1960:

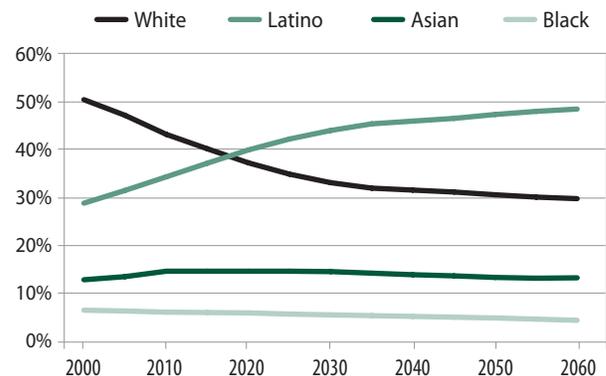
- Ninety-two percent of the California population was White, compared to 40% today;
- Only a small share of high school graduates went on to college, most of whom entered colleges and universities well prepared to succeed;
- “Instructional technology” consisted of lectures, books, and chalkboards; and
- Only a small fraction of jobs required education or training beyond high school.

Today, in contrast, the need for some education or training beyond high school is almost universal. Understanding this, today’s students arrive at college from diverse backgrounds with high aspirations. But many of them lack the academic preparation, self-confidence, and variety of skills needed to successfully navigate the college environment. At the same time, innovations in educational technology are changing

how people of all ages acquire knowledge, including college-level learning. Education and training have become lifelong endeavors with people returning to college to retrain, update skills, or change careers. These developments have fundamentally changed the context of higher education. California, and all states, are finding it challenging to adapt to the new and dynamic world of higher education.

Looking forward, there are more demographic changes to come. Latinos now account for over half of the total K-12 public school enrollment. Accordingly, the non-White, working-age population in California, which was 29% of the total in 1980, is expected to reach 70% in 2060, with an especially large increase among Latino populations (Figure 1).

Figure 1
Growing Racial/Ethnic Diversity of California Population (Ages 25-64)



Source: State of California, Department of Finance, 2000-2060 Projections

California’s K-12 and higher education systems have taken myriad actions to respond to these many changes, but to date, have been unable to achieve the pace or scope of transformation that is needed. In higher education specifically, a host of budgetary, governance, and other structural factors have constrained the ability of all three segments to adapt to new conditions. As a result, as documented in a January 2014 report, *Average Won’t Do: Performance Trends in California Higher Education as a Foundation for Action*, and in other reports, California’s higher education performance is lagging other states and falling short of California’s needs:

- Too many school children don't get the necessary help to prepare for the academic and non-academic dimensions of college readiness;
- Too many students enter college without the financial resources to allow them to devote sufficient and consistent time to their education;
- Too many students take too long to graduate from college, costing them time and wages and often costing the state extra money per student;
- Too many students drop out of college altogether before earning any credential or degree; and
- Too many students are without the skills and knowledge they need to thrive in the workplace, even after completing college programs.

The Master Plan, while innovative for its time, has proven insufficient to guide California's higher education system through the changes of the last few decades. It is not just that the Plan is under-funded; it is outmoded. It imposes an unagile, state-centered structure on a dynamic, multi-region state. The dimensions of the state's people, challenges, and opportunities have outgrown the vision from a different era.

All of the problems that have led to the current crises can be solved, but doing so will require new vision and strong leadership both by policymakers in Sacramento and by higher education officials.

(Public Policy Institute of California, 2010)

A Public Agenda to Reflect Emerging Consensus

Calls for a fundamentally new governance approach began in the 1990s, when alarm about the inability of the state to steer its higher education system through the economic recession found expression in four major reports. The National Center for Public Policy and Higher Education drew on these reports to craft "A Memorandum to the Next Governor of California" in 1998 called *The Challenges Facing California Higher Education*. Continuing largely unheeded, such calls accelerated, with several major reports issued in just the last two years to update the prescription for fundamental reform to conform to the realities of higher education today. In quick succession, the Public Policy Institute of California (*Higher Education in California: New Goals for the Master Plan*), California Competes (*The Road Ahead: Higher Education, California's Promise, and our Future Economy*), the Little Hoover Commission (*A New Plan for a New Economy: Reimagining Higher Education*), and the Committee for Economic Development (*Boosting California's Postsecondary Education Performance: A Policy Statement and Call to Action*) offered analyses of the problem and prescriptions for the solution.

Two messages are loud and clear in all of these studies: (1) the needs – state, regional, system, institutional, and individual – are urgent and (2) the solutions require comprehensive policy changes. Efforts abound across California's colleges and universities to increase student success, but the sum of these individual efforts stands little chance of propelling California back to its more familiar position of leadership unless accompanied by major state policy innovations aimed at meeting the needs of all Californians in all regions of the state.

The time appears to be ripe for a new Master Plan, one that would: (1) replace emphasis on the distinguishing characteristics of the three public segments with concern for regional cooperation and organization, and (2) include K-12 education within its scope as a full partner.

(National Center for Public Policy and Higher Education, 1998)

Introduction

In this report, we present a model public agenda for higher education in California. We call it a model because it is intended to provoke new conversations about what California higher education might look like. We call it a public agenda to distinguish it clearly from the Master Plan. A public agenda, which many states have already adopted, starts with the public and then imagines how best to meet public needs through current, new, and/or modified institutions, collaborations, and instructional approaches. It encourages innovative thinking about how best to serve Californians, and it works across systems, focusing on ways to best support students as they move across the public education pipelines. By contrast, the Master Plan has always been about the state maintaining three differentiated public higher education segments. Needs that fall outside of, or between, or outgrow the capacities of the three segments cannot be well addressed by continuing the traditional approach to governance.

In Part I of this report, we discuss the performance of California higher education, focusing on troublesome trends and describing the structural problems that are barriers to improvement. We draw on existing analyses and our own calculations to demonstrate the magnitude of improvements that are needed. We show that ambitious projections of growth in degrees and certificates – projections that reflect the segments’ different roles and opportunities – will fall well short of the goals for increased degree attainment that we have become accustomed to hearing.

The Governor and Legislature should encourage the drafters to think responsibly about how higher education is structured and...re-examine the rationale for how the three-tier system is currently organized and to explore greater campus-level specialization in all segments.

(Little Hoover Commission, 2013)

“Needs that fall outside of, or between, or outgrow the capacities of the three segments cannot be well addressed by continuing the traditional approach to governance.”

In Part II of this report, we make the case that California can restore higher education to greatness by shifting from a statewide, segmental approach to a region-driven, collaborative approach that promotes greater program specialization at individual institutions and enables widespread student access through the purposeful and effective use of technology.

We begin Part II by outlining the goals of such a transformation and the commitments that California would need to make to achieve it. We describe

how the new regional model might work, including discussions of how to finance it to the necessary level and ensure accountability for meeting the higher education needs of Californians. We additionally argue for a state policy approach that enables and supports good decision-making at the regional level while guiding the state to overall success. To that end, we call for an office of higher education that reports directly to the governor and provides a clear point of access for the segments to engage with the administration in the development of fiscal and other policies.

This can be achieved only by integrated and collaborative approaches to development, delivery, evaluation and credentialing of higher education across the public institutions and systems and between public, private, non-profit and for-profit sectors.

(Committee for Economic Development, 2013)

California can revamp its higher education system to meet the challenges of the 21st century, but doing so will require a clear understanding of the system’s current performance and an honest assessment of where the best opportunities for improvement lie. We turn to these issues next.

PART I: Where We Are and Where We Need to Be

A Stagnating System

Educational attainment. Educational attainment levels are stagnant in California, endangering the state’s social structures, economic mobility, and workforce competitiveness in the years ahead. Many other nations and U.S. states are moving aggressively to increase levels of higher educational attainment among younger adults and gain an advantage in the increasingly global economy. While attainment levels among older adults in California compare well with leading states and countries, the state is falling behind in educating younger adults. A breakdown by age of California’s rank in the share of adults with a college degree reflects both the past strength of California’s higher education system and its current mediocrity: while the state ranks near the top in the percentage of older adults with a college degree, it ranks in the bottom half of states in the share of adults ages 25-34 holding degrees (Figure 2).

The magnitude of this underperformance is such that it will not be successfully addressed by modest injections of funding or by tweaks in current educational policy and practice.

(Committee for Economic Development, 2013)

California’s declining position in educational attainment is a reflection of its comparatively low rate of awarding college degrees to its population, ranking especially low (45th) among states in the number of bachelor’s degrees awarded per 1,000 residents ages 18 to 24 (Figure 3).

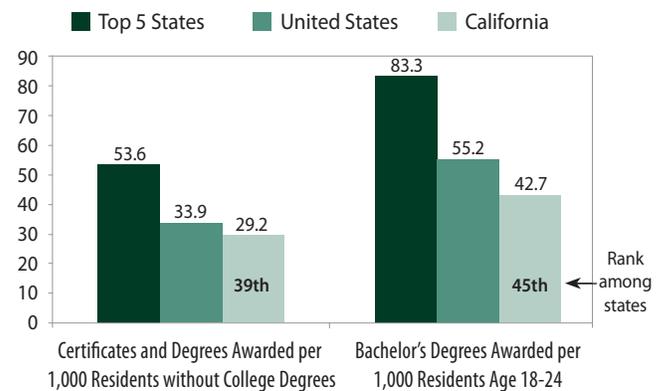
Completion rates. Completion rates in California’s two public university systems compare favorably to other states, but there is substantial room for improvement given that average completion rates at public universities in the United States are considered unacceptably low for a leading nation. Of particular concern are the completion numbers in the community colleges (Figure 4). The state ranks 48th in the number of certificates and degrees awarded as a share of students enrolled in community colleges. Low completion rates in the two-year sector have an especially large impact because

Figure 2
California is Not Keeping Up with Educating Young Adults

Age Group	Rank in Percent of Adults with Associate Degree or Higher	Rank in Percent of Adults with Bachelor’s Degree or Higher
65+	4th	6th
45-64	17th	16th
35-44	30th	18th
25-34	29th	25th

Source: National Center for Higher Education Management Systems (NCHEMS) Information Center for Higher Education Policymaking and Analysis, 2011

Figure 3
California Ranks Low among States in Degrees Awarded per Capita



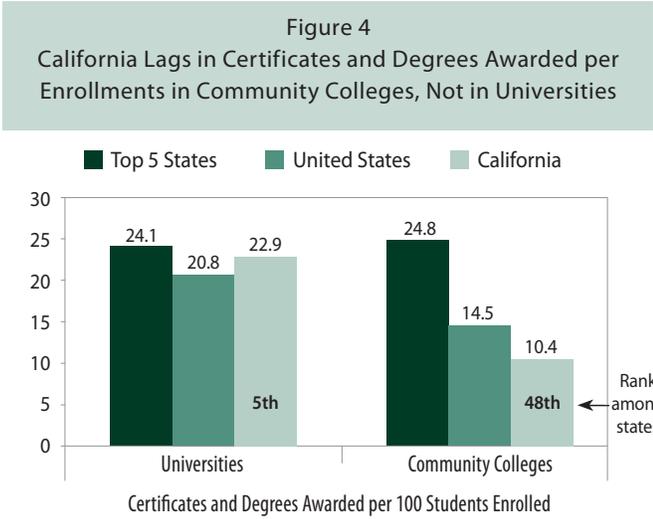
Source: NCHEMS Information Center for Higher Education Policymaking and Analysis, 2009 (certificates/degrees) and National Science Foundation Science and Engineering Indicators 2014 (bachelor’s degrees)

California sends more of its students to community colleges than *any other state*, with 73% of public undergraduate enrollment in the two-year sector compared to a national average of 52%. Many students achieve successful outcomes in the CCC without earning a credential, but the same is true for community colleges in other states, so the low relative ranking warrants attention.

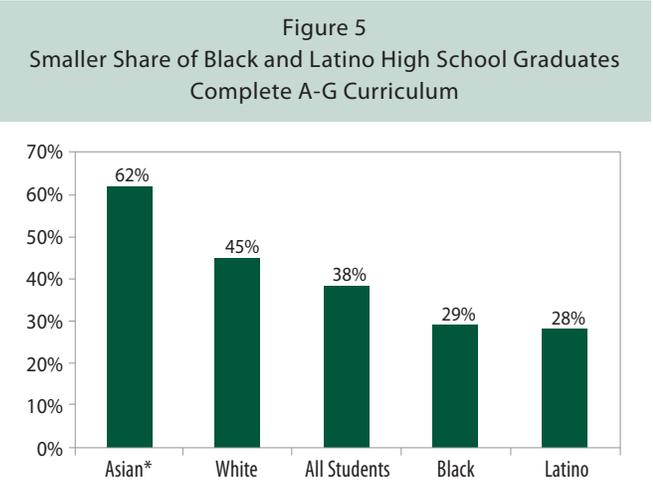
PART I: Where We Are and Where We Need to Be

Performance gaps across student populations and regions. California is faring worse than most states in preparing students for college, and differences are magnified by region and across racial/ethnic groups. California's Black and Latino students are much less likely than White and Asian students to demonstrate proficiency on standardized tests (e.g., California Standards Tests, CSU's Early Assessment Program exams) and are less likely to take college entrance exams (ACT, SAT) or to score well

if they do. Black and Latino students are also less likely to enroll in and complete the full set of courses required to be eligible for admission into California's public universities (Figure 5). Gaps across groups in preparation, enrollment and completion are problematic because they play out in uneven levels of educational attainment and personal income. Far smaller proportions of Black and Latino students have earned college degrees than Asian and White students (Figure 6). Reducing performance gaps is a national imperative, underscored by the Obama administration's recent convening of a higher education summit of over 100 colleges and universities to make commitments to increase college opportunity and success for underserved students. But California has a particularly heavy lift, as the state has among the largest gaps, nationally, between Whites and underrepresented minorities in educational attainment. Vast differences exist across regions as well. Discrepancies prevail at all points of the pipeline. Students in certain regions have greater access to and success in the university preparatory a-g curriculum and advanced math and science courses, enroll in college directly out of high school at greater rates, and complete college at higher rates. These discrepancies across regions lead ultimately to stark differences in education levels and personal income across regions (Figure 7).

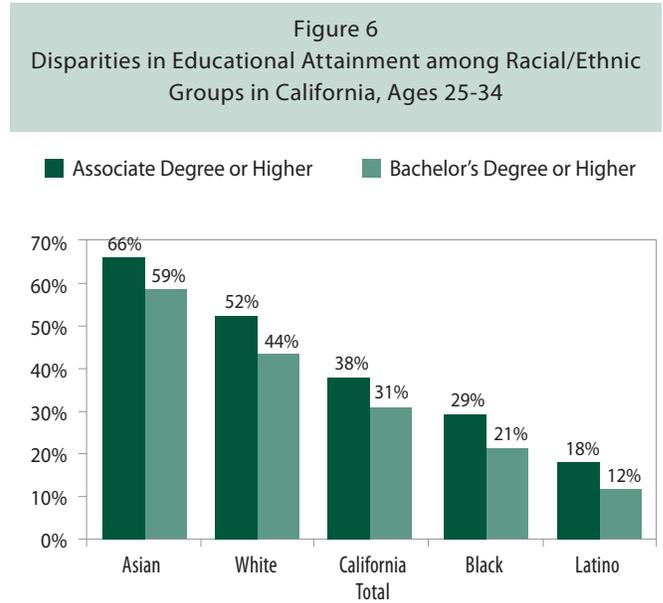


Source: NCHEMS Information Center for Higher Education Policymaking and Analysis, 2009



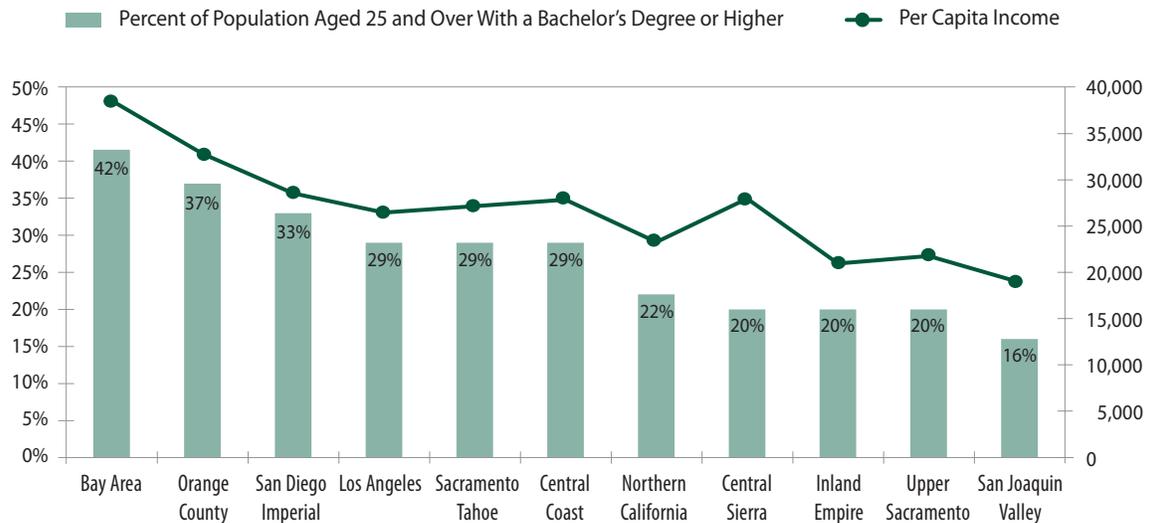
* Important differences among sub-groups of the Asian population are masked by data limitations.

Source: California Department of Education, Dataquest, 2012 (<http://dq.cde.ca.gov/dataquest/>)



Source: NCHEMS calculations of US Census Bureau's 2009-2011 American Community Survey

Figure 7
Major Gaps in Educational Attainment and Per Capita Income by Region



Source: Authors' calculations based on US Census Bureau's American Community Survey, 2008-2012 estimates for attainment data and 2012 estimate for income data

Current Structures Make Change Difficult

Efforts to address stagnant levels of educational attainment and to close performance gaps across student populations and regions are constrained by institutional and policymaking structures. Repeated critiques of the 1960 Master Plan hint at some structural constraints but calls to revise or fund the Master Plan miss the target because they fail to address these underlying constraints that make it hard for the segments to make sufficient gains in serving more students effectively and efficiently. This section describes some of these constraints to set the stage for a new vision that seeks to overcome them.

Lack of capacity in baccalaureate programs. California is 45th among states in bachelor's degrees awarded as a share of the young adult population, yet completion at the universities is above the national average (Figures 3 and 4). Increasing capacity can be addressed in three structural ways: (1) increasing the number of freshmen who enroll in a university, (2) increasing the number of transfer students from community college, and

(3) increasing the number of students who receive credentials from other providers – either private institutions or new kinds of public institutions. Any of these approaches would benefit from more state resources, but none can be achieved without significant changes to the structure of the system.

(1) The first route is constrained officially by the Master Plan, which limits enrollment of freshmen at CSU and UC and relies on the community college transfer function to supply juniors and seniors to the public universities. When more than one-third or one-eighth of high school graduates meet CSU and UC eligibility criteria, respectively, the presumption has been that eligibility standards should be raised to prevent “too many” students from enrolling directly in the state's public universities. Even now, many eligible students are denied admission to campuses that are at capacity (i.e., “impacted”). Other states do not limit freshman access to public universities to such an extent.

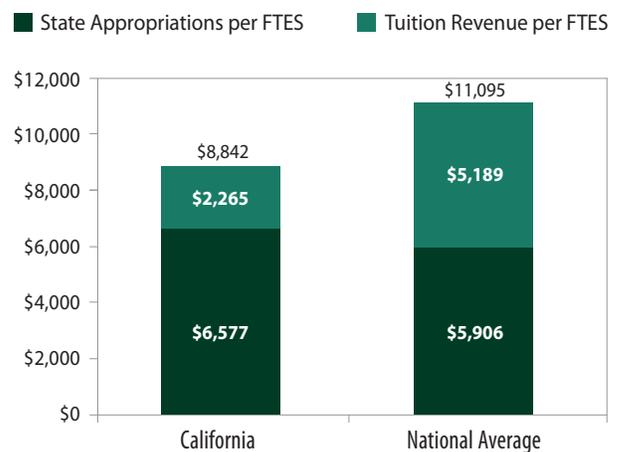
PART I: Where We Are and Where We Need to Be

- (2) The second route is constrained by inherent limitations on the community college system to support students who intend to transfer. The CCC has multiple missions competing for resources with the transfer mission. Because state law severely restricts its tuition revenue (discussed more below), it receives far fewer dollars per student than either university system yet serves a more educationally diverse student population, many of whom require substantial support services. A complex set of transfer policies causes students to earn many course credits that do not count toward specific university transfer requirements, depressing transfer rates. The new associate degrees for transfer promise to increase numbers of transfers, but it is unlikely that this reform, alone, can increase the number of graduates to desirable levels.

- (3) The third route for increasing bachelor's degrees – greater reliance on other public or private providers – is constrained by existing state policy as well. Enrollment targets for existing public institutions are based on their historical missions and enrollments, an approach that precludes setting degree attainment targets based on an assessment of public need and *then* considering how public investments may best be used to achieve those targets. The baccalaureate shortage might require a new kind of public institution that doesn't fit neatly into any one segment and was never envisioned by the Master Plan, such as an online university to serve working adults, a new polytechnic campus merging assets of a community college and a CSU campus, or an undergraduate university with UC admission requirements but without a premier research mission. Alternatively or additionally, it may be that increasing state financial aid to students in private institutions is a more cost-effective strategy for increasing attainment of bachelor's degrees. But because financial aid and higher education appropriations are treated separately, there is no direct way for the state to arrive at this conclusion or enact policy to address it.

An under-resourced segment serving a majority of students. As a whole, California is not shirking its duty to fund higher education, at least as compared to other states: per-student support from state appropriations is 11% above the national average. At the same time, California public higher education operates with considerably less revenue per student than the national average (Figure 8), ranking 47th among states in total revenues (state and tuition) per full-time equivalent student. The reason for the poor standing in total revenues for higher education is the lowest-in-the-nation tuition rate in the largest-in-the-nation community college system. For decades California policymakers have tried to uphold the Master Plan's principle of access by keeping tuition extremely low in the community colleges. However, this commitment to keeping tuition low has not been matched by a proportionate increase in state appropriations. Additionally, under the fee waiver policy, over half of community college students pay no fees at all. Under these policies, the state forgoes most potential revenue from the 70% of the state's students who attend community colleges. The ongoing lack of revenue in the colleges is a major structural problem with no easy solution: lawmakers want to uphold the affordability principle of the Master Plan and will raise fees only as a last resort, leaving the state's largest higher education system chronically underfunded.

Figure 8
Lower Tuition Collections Account for Lower Total Revenues for California



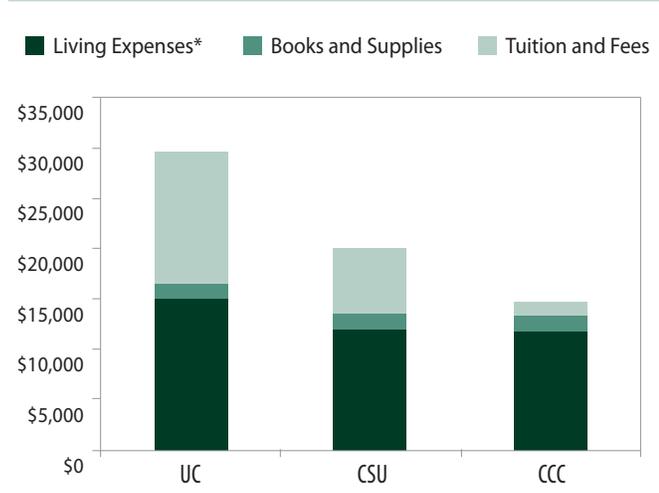
Source: State Higher Education Executive Officers, *State Higher Education Finance FY 2012*

Poorly structured approach to financial aid for community colleges.

The assumption has been that the colleges are affordable because fees are kept low and waived altogether for many students. Low fees and fee waivers constitute the prevailing financial aid strategy for the CCC. In reality, there is a serious affordability problem in the community colleges. California performs poorly relative to other states in the share of family income required to pay for public two-year colleges, even though all other states charge more in tuition. That is because, as shown in Figure 9, tuition accounts for a very small share of total costs. Students pay far more for living expenses, books, and supplies. In fact, those non-tuition costs for CCC students are about as much as they are for students in UC and CSU. The state’s CalGrant program is not well designed for CCC students, because the state’s primary strategy for keeping community colleges affordable has historically been low fees and fee waivers, not direct aid to students. This poorly structured approach to affordability for the CCC is not cost-effective for taxpayers. Compelled by financial barriers to take on heavy work schedules, CCC students tend to enroll too part-time and too sporadically to be successful. This contributes to the low success rates that, in turn, raise the cost per completion in the system.

Incomplete and disjointed finance policy structure. The 1960 Master Plan offered guidance on dividing students across the three segments but not on dividing resources among them. It contains no provision for understanding or determining what is an adequate level of support for each segment, whether per-student expenditures should be higher in one segment than another for similar programs, what constitutes affordability in each segment, or how the costs of public higher education should be shared between students and taxpayers. Policymaking for the three main components of finance policy – appropriations, tuition, and financial aid – are addressed through separate mechanisms. Coherent fiscal planning is also inhibited by a state budget process by which allocations to higher education are finalized only after lawmakers have satisfied statutory obligations in other sectors of government. Lawmakers have viewed tuition as a safety valve that can be turned up or down to compensate for changes in state funding. With funding mostly down in recent years, tuition has risen steeply (Figure 10) resulting in students bearing a larger share of total costs. Although total revenue for higher education in 2012 is nearly identical to that in 2003 (in constant dollars), the share of the revenue contributed by tuition has doubled in the last ten years. The share varies greatly across segments, according to the California Legislative

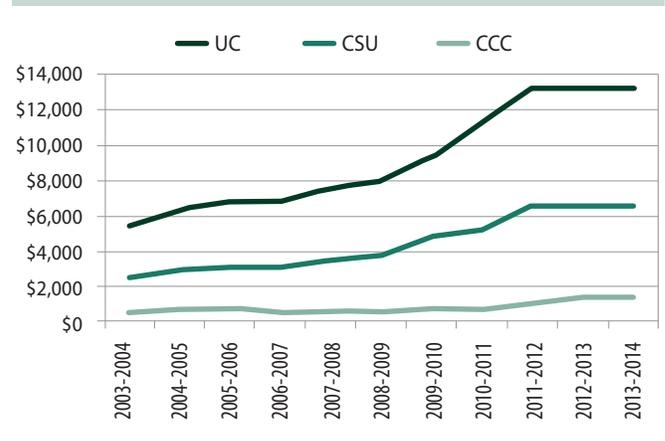
Figure 9
Living Expenses Make Up Biggest Share of Students’ Budgets



* Includes housing, food, transportation, and personal expenses

Source: California Legislative Analyst’s Office, *Analysis of Higher Education Budget, 2014-2015*

Figure 10
Steep Increases in Annual Tuition/Fees for Resident Undergraduates



Source: California Postsecondary Education Commission, *Resident Undergraduate Fees in Actual Dollars for 2001-02 through 2010-11*; subsequent years from the California Legislative Analyst’s 2013-14 *Analysis of the Higher Education Budget*

PART I:

Where We Are and Where We Need to Be

Analyst, with the share of “core funding” coming from student tuition at 45% for UC, 41% for CSU, and 6% for CCC. Absent integrated and coherent policymaking structures, policy has unfolded through incremental and disconnected adjustments that have affected affordable access for students and financial sustainability for colleges and universities in ways never intended.

Structurally inseparable research and baccalaureate missions at UC. As the state moves to increase the number of Californians with bachelor’s degrees, it is important to know how each segment can contribute to the effort and how the state could best devote resources to this high-priority goal. That requires an understanding of the costs to enroll and graduate undergraduates. But appropriations for instruction at UC, the state’s premier research university, include significant support for faculty research through teaching loads that are much lower than at CSU or CCC. The UC faculty role entails a major research component, in every UC campus and every discipline. Given current accounting and reporting practices, the state cannot track the cost of UC’s research mission independent of its undergraduate mission, making it impossible to evaluate the relative cost-effectiveness of providing baccalaureate instruction in each of the three segments. In order to determine whether more of UC’s teaching resources should be targeted toward educating undergraduates, it would be necessary as well to develop some means of assessing how the current UC research effort meets the public’s needs.

System interdependence, yet no state policy leadership. The Master Plan created a system that is fundamentally interdependent, beginning with its reliance on community colleges to provide the majority of undergraduate education. Students must experience coordinated systems if they are to succeed. The student populations that are most vulnerable to the state’s disjointed approach to governance are those students the state most needs to support if California is going to move the needle on postsecondary success. Yet California is one of only two states (the other is Michigan) that do not have an entity assigned to provide policy leadership and support for the higher education enterprise. Instead, the culture of higher education in the state is that of voluntary cooperation. This is particularly challenging when natural

issues of territoriality arise between systems that compete for funding. Lawmakers expect the institutions to work together on high-priority initiatives and there is a strong history of such cooperation, formalized through the Intersegmental Coordinating Committee and the California Education Round Table. The heads of the three public segments have recently pledged cooperation to increase attainment of college degrees and certificates. As valuable as this is, cooperation across three massive state systems at top levels cannot translate easily or quickly enough to the unique kinds of collaboration needed in each region. In addition, institutional leaders may not be in the best position to identify major unmet needs or shortcomings of the state’s higher education system and to propose new models of institutional delivery or credentialing. With no regional structure to drive change and limited state-level guidance, the segments are unlikely to steer themselves to the kind of transformational change that is needed.

Master Plan-specified missions impede differentiation. The Master Plan assigned each segment a distinct mission, which provided great order and clarity in the high-growth decades following its adoption. There has been little explicit variation among the campuses within a system. For the most part, policies and programs enacted for a segment take similar form across 9 UC campuses, 23 CSU campuses, and 112 community colleges. The lack of differentiation, or program specialization, is particularly notable in technical education. Many technical careers today require college credentials that did not require them in decades past. Many technical careers today did not exist in decades past. Yet California is the rare state that does not emphasize technical colleges or programs. It is one of only two states that do not confer associates of *applied science*. Only one of California’s 112 community colleges and two of its 23 CSUs are identified as technical institutions of higher education. Nor do California’s public universities award applied baccalaureate degrees to articulate with applied two-year programs. Another form of differentiation that might have evolved but for Master Plan structures is a selective (i.e., UC-type) college, without a premier research mission, to focus on the highest quality undergraduate education. There are postsecondary needs today that might best be addressed by institutions other than the three types defined under the Master Plan.

The Scope of the Challenge: Where Do We Need to Go?

The beginning of this section established some troubling trends in higher education performance and described some of the structural problems that have been a barrier to improvement. Here we raise the difficult question of *Where do we need to go?* How many Californians should be going to college and completing degrees and certificates?

This is a complex question to answer. In 2009, the Public Policy Institute of California reported that the state’s future workforce needs would require one million more bachelor’s degrees, by 2025, than what present trends would yield. Shortly thereafter, the Obama administration set as a national goal that 60% of the U.S. population will hold a college degree or a certificate of at least one year in length by the year 2020. That goal is based on matching the educational attainment rates of leading nations and meeting workforce projections. The current national attainment level, which includes only a rough estimate of certificate holders, is about 44%.

The National Center for Higher Education Management Systems (NCHEMS) has built computational models to show how states compare on college attainment and other measures of higher education performance. Many states have used these data to set their own attainment goals. A nonprofit, California Competes, has adapted the national model to California, using some different assumptions. For example, its model includes only those associate degrees awarded in vocational fields, in an attempt not to double count associate degrees earned in fields designed for transfer in pursuit of a bachelor’s degree. Additionally, it counts certificates of one year or more toward the attainment target of degree holders. From its model, California Competes estimates that, in order to reach a degree-attainment goal of 55%, the state’s colleges and universities would need to produce about 2.3 million degrees and certificates *above what current trends would yield*.

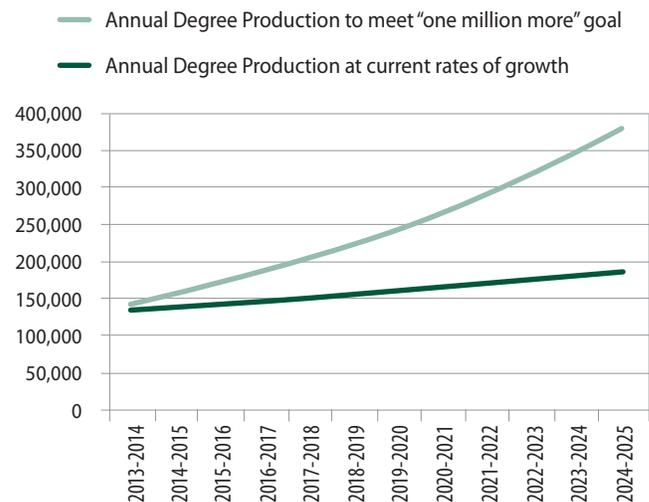
For purposes of this public agenda, these attainment numbers and goals are good reminders of the scope of the challenge. However, meeting either of these goals would require an aggressive rate of change that the current system is virtually incapable of producing. Figure 11 shows the system’s current performance trends projected to 2025 compared against the growth trend that would be needed to reach the additional one million bachelor’s degrees. Over the past ten years, UC and CSU

have been increasing degree production at an average annual rate of about 3%. The baseline portion of the graph shows those trends continuing. But the rate of growth needed to yield the additional one million is far higher – about 9.2% per year.

Educational Attainment Defined

The standard for measuring a state’s higher education performance is college attainment, that is, the percent of a state’s population that holds a college degree. There are different ways to approach even this single standard. Different age groupings can be used as can different types of college credentials. Two common age groups are the working-age population (ages 25-64) and the young adult population (ages 25-34). The educational attainment of these groups can be measured at the level of bachelor’s degree or higher, or associate degree or higher. There are no reliable data on the proportion of the population that holds a college certificate. That is unfortunate since labor economists have documented good returns in wages to students who complete workforce-oriented certificates, especially in health and technical fields.

Figure 11
Projected Annual Bachelor’s Degree Production Needed to Reach “One Million More” Goal



Source: Authors’ projections based on data on past degree production from the CCC Datamart, CSU Analytic Studies, and UC Accountability Report and InfoCenter.

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Figure 12 looks at the total picture of degrees and certificates (not just bachelor's degrees), constructing a scenario using the model adapted by California Competes. Under this scenario, the state would have to take huge strides on several dimensions of performance just to reach three-fifths of the way to the 55% attainment goal – chosen to make California more competitive with the top states. And presumably, while California is making these strides, the states we are watching are improving as well, in effect moving the goalpost.

What the projection models make clear, as do data presented earlier in this report and in the companion report, *Average Won't Do*, is that the current system is not structured to meet such aggressive goals. Still, California can significantly increase educational attainment levels if each segment takes advantage of its own unique roles and opportunities to help educate many more Californians. We turn next to describing high-leverage priority areas for improvement across the three segments and illustrate it with an ambitious but realistic growth scenario.

Figure 12
A Daunting Task to Reach 55% Degree Attainment

California Competes has adapted a national model to demonstrate how various changes in college-going patterns and college completion could increase the numbers of Californians with degrees and certificates. As with all models, this one confronts data limitations and contains myriad assumptions that affect how the scenarios influence the numbers of degrees and certificates that result. It also becomes dated as the number of years until the 2025 target shrink. Without delving into details or assumptions, one may use the model to suggest the magnitude of the challenges and the relative contributions of some possible actions. One sample scenario is provided here to illustrate that a set of very significant improvements would take us **only three-fifths** of the way to the stated goal:

Attainment goal for 2025: 55%* (currently 39%)

Additional degrees need: 2,271,611**

Additional degrees **and certificates** from following scenario: 1,370,536

1. Close half of the gap with the average of the three top-performing states in three aspects of college readiness and participation: high school graduation rates (California ranks 37th), rate of college going directly from high school (California ranks 29th), and college participation rates of 20-39 year olds (California ranks 6th).
2. Close half the gap in annual completions per enrollment (California ranks 45th) with the average of the three top-performing states.
3. Change distribution of enrollment of new high school graduates (2% more enrolling at UC; 3% more at CSU; 1% more at privates; 6% fewer at CCC)

* 25-64 year olds with associate degree or higher

** Above what present trends would yield in bachelor's and associate degrees

Source: http://californiacompetes.org/wp-content/uploads/ca_studentflowmodel.swf

Segment Roles and Opportunities

California Community Colleges. As the largest segment, the CCC has the largest role, as well as the greatest opportunity, to increase annual numbers of Californians earning degrees and certificates. Students who enter community college well prepared graduate at high rates. Successful implementation of the Common Core State Standards could increase the readiness of incoming CCC students, in turn increasing numbers of graduates. The new associate degrees for transfer provide another opportunity to increase graduates. There is an even greater opportunity for growth in career-oriented associate degrees and certificates because these have not, until recently, been a major priority of the system.

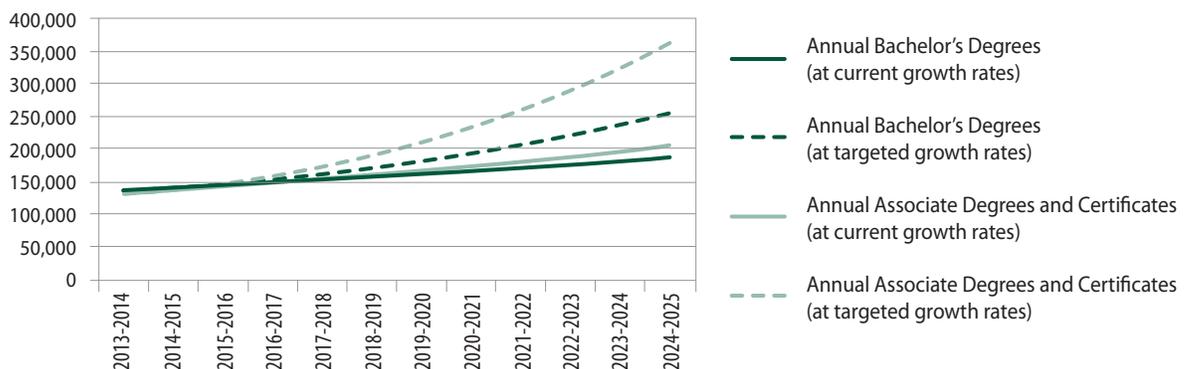
California State University. As the provider of approximately one-half of the bachelor’s degrees in the state, the CSU also can be expected to make a major contribution to increasing the number of graduates. Graduation rates for regional universities are low, nationally, and CSU is not alone in making it a priority to increase those rates and to reduce time-to-degree, making room for additional students. Major gains in graduation numbers at CSU can also be expected to come from improvements in college readiness as a result of school standards reform and from easing capacity constraints to allow more high school graduates to enroll directly in the CSU, with appropriate supports to address readiness issues. As the new associate degrees

for transfer take hold, increasing numbers of transfer students should move expeditiously to completion.

University of California. UC cannot be expected to contribute as much to the growth in numbers of Californians with bachelor’s degrees. Its graduation rates are high and its undergraduate enrollments are low, relative to the other two segments. UC’s contributions to overall state needs could be expected to come from moderate increases in undergraduate enrollment and therefore in bachelor’s degree recipients, from addressing the structural cost issues noted above to help set appropriate priorities for undergraduate education and research, and in reducing the gaps between racial/ethnic populations in college going and college completion.

Figure 13 reflects these different opportunities and expectations for the segments to contribute to the growth in degrees and certificates. It shows how bachelor’s degrees could increase over present trends if UC’s annual average growth in degrees increased from 3% to 5% and if CSU’s annual average growth in degrees increased from 2.9% to 8% between now and 2025. The graph also displays a similar set of projections for the CCC, contrasting annual rates of growth in associate degrees and certificates of 10% and 15%, respectively, to their current average growth rates of 2.8% and 7.7%. This scenario is ambitious but potentially achievable because it is based on an assessment and application of the best opportunities for gains.

Figure 13
Projected Growth in Degrees and Certificates, Current and Targeted Rates of Growth



Source: Authors’ projections based on data on past degree production from the CCC Datamart, CSU Analytic Studies, and UC Accountability Report and InfoCenter

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According to our calculations (see Appendix), this growth scenario would yield about 280,000 additional bachelor's degrees and about 640,000 additional associate degrees and certificates compared to what could be expected with a continuation of present trends. This scenario, while ambitious, still falls short of the PPIC and California Competes degree targets, implying that the gap would have to be filled by other providers or by more striking changes in the structure and operation of the public sector. The Appendix displays a third scenario under which each public segment increases its annual growth in degrees by an additional 5%, and shows the remaining, although smaller, gap to be filled by other providers to reach the 55% attainment numbers.

The private sector. All of these scenarios suggest that the independent sector (private, nonprofit) in California should also be considered as a potential contributor of additional bachelor's degrees. That sector already provides a significant share of bachelor's degrees which the state helps subsidize by providing CalGrants to students attending private colleges and universities. The for-profit sector has become a very significant player in offering vocational degrees and certificates. That sector could become part of the overall solution for addressing vocational credentials, provided that concerns about quality are addressed through better regulation. In addition to the potential capacity provided by current private institutions, it may be necessary to consider new approaches to credentialing altogether, such as some have suggested, drawing on new forms of collaboration and new understandings of determining and validating competency.

Whatever the combination of public and private providers, of existing and new models, efforts to increase the number of Californians with college credentials cannot be just a numbers game. California's higher education institutions must continuously affirm the academic quality and relevance of all certificate and degree programs, and must ensure that the programs are meeting the needs of the state and its varied regions for skilled and educated citizens and workers. Assessing program quality and relevance is a complex undertaking with few easy answers, but institutions must work to define desired student learning outcomes and find common ways to understand whether students are achieving them.

PART II: A New Approach to Meet California's Higher Education Needs

A Model Public Agenda

This section presents a new approach to determining California's higher education needs and responding effectively to them. The approach attempts to strike a balance between the fiscal realities of today and the possibilities of a tomorrow that will support more substantial investment in the education of Californians based on sound planning and the cost-effective use of resources. The typical process of developing a public agenda is for a state's official higher education entity, be it a board, commission, or department, to lead a process of stakeholder engagement. But California is one of only two states that lack such an entity. As an alternative, we have drawn upon expert opinion and analysis, including a rich set of reports that collectively reflect broad stakeholder input (see methods box).

We intend for this model public agenda to inspire broad stakeholder discussion about the future of California higher education – a discussion that moves us beyond debates about whether and how to restore an older vision. Instead, we have constructed a new vision on the foundations of a developing consensus (see *Resources* at the end of this report). We hope that discussions about the vision will lead to an *official* public agenda for California higher education that can begin, as soon as possible, to guide and support the changes that are so urgently needed.

The model public agenda is centered on four simple but critically important goals, addressing access and attainment, equity, affordability and efficiency, and state policy leadership. Each goal can be realized by a set of commitments from lawmakers, educators, and others dedicated to a healthy and competitive state. Together these goals and commitments can be the basis for a revitalized system of higher education in California.

Methods and Sources for this Model Public Agenda

1. Reviewed performance data for California and other states
2. Conducted interviews with experts on state policy leadership and planning
3. Studied other states' public agendas
4. Reviewed published reports on California postsecondary education (see *Resources* at end of document)
5. Analyzed selected scenarios for setting sample goals and targets.

Goal 1: Increase access to higher education institutions and attainment of high-quality degrees and certificates, with an emphasis on access and attainment among younger adults.

Commitments needed to reach this goal:

- Increase college and career readiness of entering students;
- Improve outcomes of entering students who are not yet ready for college-level learning;
- Increase completion of certificates and degrees and achievement of other meaningful skill improvements valued in the workplace;
- Better align degree and credential programs with the state's economic, workforce, and civic needs; and
- Ensure high quality student learning.

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Goal 2: Reduce performance gaps in higher education access and attainment.

Commitments needed to reach this goal:

- Reduce disparities in college and career readiness, college participation, college completion, and educational attainment across racial/ethnic populations, income groups, and regions; and
- Use advancements in educational technology to ensure that students have access to higher education options not available in their region.

Goal 3: Improve the stability and adequacy of public and private investments in higher education.

Commitments needed to meet this goal:

- Ensure that students have affordable access to higher education with predictable tuition levels; and
- Ensure that taxpayers' investment in higher education is rewarded with efficient, effective, and equitable outcomes that meet individual, social, and economic needs.

Goal 4: Provide state policy leadership that enables an effective regional approach to meeting California's higher education needs, connected to an overall state-level vision.

Commitments needed to meet this goal:

- Ensure that appropriate parties are accountable for setting reasonable and equitable targets that can collectively meet regional and state needs and close performance gaps;
- Ensure that regions and constituent institutions have the financial and human resources they need to make reasonable progress toward their targets and goals; and
- Align policies with identified needs and desired outcomes to promote effective and efficient use of California's investments in higher education.

A Regional Approach to Higher Education

It would be difficult, if not impossible, for the three public segments to achieve the above goals and commitments absent significant changes in state policy and planning. All three segments and the K-12 public school system have worked hard to increase readiness, access, student success, and equity, but none has been successful enough given the scope of California's challenges. Certainly, the lack of resources during the state's recent economic recession created a harsh fiscal environment where improvement was all but impossible. But as we discussed earlier, financial resources are not the only problem. Numerous structural problems prevent California's higher education system from assessing public needs and executing a coordinated, strategic plan for meeting them.

We suggest that California instead needs a **three-part strategy of regionalism, specialization, and technology** in order to meet these commitments and achieve these goals. Such a strategy requires leadership and collaborative mechanisms that currently do not exist.

Regionalism. A regional consortium would be established for each region of the state to devise cross-sector strategies to increase college and career readiness, college access, and college completion. (Various definitions of "region" exist, so a first step would be to determine an appropriate set of regions.) The consortium would comprise all public and private postsecondary education institutions within the region, representatives of K-12, perhaps through the county offices of education, and major regional employers. A primary provider of labor market information would be designated by the state for each region. Each regional consortium would be required to develop a plan that:

- Sets forth the higher education needs of the region, with targets for college and career readiness, targets for numbers of degrees and certificates, generally, and in key fields, and targets to close performance gaps across racial/ethnic groups;

- Identifies the roles of the institutions within the region for meeting the regional targets, including the number and types of programs each institution would offer and estimates of degrees and certificates they would award annually;
- Reflects a common understanding of college and career readiness, and alignment of strategies and policies for meeting readiness goals;
- Demonstrates that each institution has developed pathways within each program for students to follow that would facilitate timely completion; and
- Provides a spectrum of work-based learning opportunities from high school through university, as a key contribution of employer participation in the consortium.

Specialization. The plan would designate areas of program specialization for each higher education institution to eliminate unnecessary duplication across the region, build on institutional strengths to deliver the most cost-effective instructional approaches, and meet unmet needs. By drawing on the distinctive capabilities of each college and university to address the unique needs of each region, each regional consortium can serve students effectively and use resources strategically. Effective specialization would entail setting priorities within and across segments and might lead to some new institutional models such as:

- Technical colleges that award associate of applied science degrees and well-structured career pathways of industry-recognized certificates, developed in cooperation with regional employers;
- Universities that prioritize applied technical and other STEM disciplines and align pathways with technical and applied associate degree programs;
- Institutions or programs within institutions modeled on the Accelerated Studies in Associate Programs (ASAP) in the City University of New York that offer highly structured programs for low-income students; and
- Institutions designed expressly to serve working adults.

Technology. A key component of each consortium's plan would be to identify how technology would be used purposefully and effectively to ensure that students maintain access to a broad complement of academic pathways regardless of what may be offered at their home institutions. As examples, a small rural community college might not have a range of general education offerings or some courses required for students to transfer in particular majors. Students in that college could access those needed courses through online instruction. These same online courses could be accessed by a CSU or UC student whose home campus had been designated to focus on other programmatic priorities. A region could decide to offer high-volume general education courses online to ensure sufficient capacity across institutions in the region. Institutions would be expected to use online education strategically; not all students and courses are equally well-suited to online platforms. And when less academically prepared students participate in online education, institutions would clearly identify the supports that faculty and students would receive.

These three elements would be mutually reinforcing. Regional analysis and planning would illuminate the role of each institution in a particular regional economy and would provide focus and direction to guide institutional growth and areas for specialization. Innovations in technology, primarily online instruction, have a clear purpose in this model, as they would permit institutions to specialize, while maintaining broad access to comprehensive educational pathways for students in the region.

In contrast to this new vision, our current state-centric model has proven overwhelmed by the vast differences across regions and the tension between constrained resources and growing expectations. Some region-based planning has emerged out of necessity, but it is sporadic and has no formal place in state policy or planning. Some differentiation across campuses within each segment has occurred, but the "cookie cutter" approach still prevails, with each campus or college competing for enrollment and funding and aspiring to fulfill the comprehensive expression of its system's mission as best as it can, given its resources. This state-centric model is neither financially sustainable nor best for students.

PART II: A New Approach to Meet California's Higher Education Needs

Finance Policy in the Regional Model

The state and the segments all have critical roles to play in developing the finance policy to support the translation of regional needs into state-level policies and budget allocations.

The public colleges and universities would collaborate within each regional consortium to identify their roles in providing cost-effective education to meet regional needs. Judging cost-effectiveness would require the segments to modify their fiscal accounting and reporting practices, in accordance with definitions adopted by the state. Segment leaders would then “roll up” the regional plans into their systemwide budget requests and align their subsequent campus allocations with the regional plans.

The state would be responsible for translating between regional needs and state allocations and for developing coherent fiscal policies to advance the goals of the public agenda. The major state functions are described briefly here.

Establish funding stream for regional consortia. The state would need to establish a funding stream for the formation and operation of the regional consortia, including for the provider of regional labor market information for each region.

Adopt and require common, recognized definitions and accounting procedures. A new approach to budget planning would be needed, one that shifts from a focus on cost per enrollment in each segment to the cost of producing the desired outcomes in the regions. This would require information, not currently collected or reported, on the cost to educate undergraduate students in each segment, as well as to subsidize their education in private institutions. For example, it has always been assumed that it is least expensive to educate undergraduates in the CCC because the state provides so much less per student to the CCC than to either university system. But the costs per completion are not compared, in part because CSU and UC have not reported undergraduate costs separately. The common definitions developed by the Delta Cost Project and incorporated into the regular reporting of the National Center for Education Statistics could facilitate this approach to fiscal planning.

Collect and analyze finance data to translate regional needs to state-level budgets. The state would draw on the work of the regional consortia to determine cost-effective enrollment and allocation strategies to meet the state's overall attainment goals. The regional plans and their costs would be translated to budgets for the segments. Additionally, regional planning may identify the need for private institutions or other providers to accommodate additional students, serve populations not being well served by public institutions, or fulfill intermediary functions to connect with employers and workforce entities. If these activities and organizations are part of an overall plan to meet state goals through regional collaboration, they may warrant state subsidies as part of the higher education budget.

Develop a coherent policy framework. The state would have ultimate responsibility for developing a coherent state policy framework for ensuring financial stability for institutions and families across the regions. A coordinated approach to appropriations, tuition, and financial aid policies, based on sound regional planning, would allow for better alignment of resources with desired outcomes. For example, the state could incorporate incentives into the appropriations to regional consortia to increase the participation and success of low-income and other at-risk populations. To complement the appropriations strategy, the state could provide at-risk students with incentives for making timely progression toward graduation through tuition pricing and financial aid policies. Appropriations and tuition would be set in the context of reasonable sharing of costs between students and the state. State financial aid would take into account the total cost of attendance (not just tuition) and would be provided on an equitable basis to allow students with financial need to afford their desired educational programs. This would require a simplification of today's maze of CalGrant options that treat students differently in each segment and are ill-suited to supporting shorter-term but costly technical programs. It would also require revisiting the assumption that low fees ensure an affordable community college education. Finally, it would require consolidating or integrating the new middle class scholarship program with other state and institutional aid.

Monitor the impact of fiscal incentives. In developing state finance policy the state would be cognizant of the incentives embedded in the policies, with the goal of aligning incentives with the goals of the plan for access, attainment, equity, affordability, and stability. An important role of the state would be to monitor the impact of the fiscal policies to ensure they are providing

appropriate incentives and to guard against unintended consequences such as curtailing access by disadvantaged populations or discouraging the offering of higher-cost but valuable programs.

Monitor indicators of financial health. The state would be responsible for defining, collecting, and monitoring the set of indicators listed in Figure 14.

Figure 14
Indicators of Progress for Achieving Financial Health in Higher Education

At different levels of the system, different indicators of progress are needed to analyze performance and trends. The following metrics would be used at the state, segment, and regional level to track the effectiveness of the new regional approach in achieving financial health.

State level: At this level, an executive branch office would monitor the following indicators of progress and report annually on them to the governor and legislature.

State Effort

- Percent of state general fund budget devoted to higher education
- State appropriations for higher education per FTE
- State appropriations for higher education per capita
- Student share and state share of Education and Related (E&R) spending in each segment

Affordability

- Share of family income required to pay for college (tuition, room, board, less financial aid), by income quintile, by sector (two-year, four-year)
- Net price of college (total costs minus grant aid) for grant recipients
- Average level of student debt upon graduation

Regional level: Each regional consortium would monitor the following indicators of progress and report annually on them to the state.

- Spending per student: total E&R expenditures in all public regional institutions per FTE in the region
- Cost per degree: total E&R expenditures in all public regional institutions per degree/certificate awarded in the region

Segment level: Each public higher education segment would monitor the following indicators of progress and report annually on them to the state.

- E&R spending per FTE student, broken out by undergraduate and graduate, and by discipline
- Portion of budget devoted to E&R
- E&R spending per degree/certificate
- Total credit hours in a year divided by total completions in the year (efficiency metric)

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Accountability in the Regional Model

In the new model, accountability would be a shared responsibility of institutions, regional consortia, and state lawmakers. With resource allocations more clearly based on regional plans and targets, and developed with better knowledge of costs, the segments and the regional consortia would be better able to explain their budget requests to lawmakers, to account for the use of resources, and to report on outcomes. Equally important, institutions, families, and all Californians would be better able to hold lawmakers accountable for providing needed resources.

Each consortium would be accountable to the state for setting and meeting regional targets with respect to readiness, enrollment, and attainment and for implementing the key tenets of increased specialization and the technology to support it. Regional consortia would be accountable as well for ensuring the quality of learning across the region. Accordingly, each consortium would designate a team of faculty and staff from within the consortium whose mission it is to identify or respond to problem areas and provide appropriate assistance to member institutions. The team would draw on available information such as accreditation reports and program reviews to stay abreast of any developing quality concerns.

The state would be responsible for setting overall expectations for the performance of the segments and for guiding and monitoring regional and state targets for performance. The major state accountability functions are described briefly here.

Setting expectations for growth in degrees and certificates from each segment.

The ambitious but achievable scenario for annual growth in degrees and certificates, displayed in Figure 13, is an example of how the state would set expectations for the segments that reflect needs and opportunities for improvement. The state would look to the community colleges for major increases in certificates and degrees, with a heightened priority on career credentials to serve the needs of regions. Following the lead of 48 states whose two-year colleges offer applied associate degrees, the state may determine that such degrees are a necessary part of the CCC repertoire to meet regional needs. The state would look to the CSU to enroll and graduate significantly more students, continuing its successful efforts to help under-prepared students become quickly ready for college-level learning. Following the finding of the Public Policy Institute of California that allowing more high school graduates to go directly to a university would increase numbers of bachelor's degree recipients while increasing under-represented minorities at UC and CSU, the state might modify current policy accordingly and monitor the impact on regional targets and enrollments. The state would expect major improvements in four-year graduation rates and in units-to-degree at the CSU to open up capacity for serving additional students. Expectations for UC would be for moderate enrollment increases and major gains in access and success by under-represented minorities.

Setting benchmarks for state-level performance on key indicators.

The state would set targets for key areas of improvement as a benchmark for both guiding regional targets and assessing their viability. Figure 15 shows one possible set of targets for five key measures of performance where California performs poorly. The targets shown are computed to close one-half of the gap with the top-performing states. This is ambitious but potentially achievable for reasons detailed in the Appendix.

Figure 15
Sample Targets for Priority Performance Areas, to Close Gaps with Leading States

	Current Performance	2020 Sample Target	2025 Sample Target
A–G Completion*			
White	45%	51%	55%
Black	29%	38%	44%
Latino	28%	38%	44%
Direct College Entry	62%	68%	72%
Undergraduate Awards Per 100 FTE Undergraduate Students Enrolled			
University of California	24.1	24.5	24.8
California State University	22.1	23.5	24.5
California Community Colleges	10.4	14.7	17.8
Bachelor’s Degrees Awarded per 1,000 Population Ages 18-24	42.7	56.1	65.6
Attainment (associate degree or higher) for Ages 25-34	38%	42%	45%
*Not comparable with other states; target would close half of gap with White students.			

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Monitoring regional target-setting and annual outcomes to ensure that, collectively, regional targets would meet state goals. Targets such as those shown in Figure 15 and other metrics shown below would be set at the state level as a basis for assessing the viability and ambition of regional plans and targets. If the regional plans would collectively fall short of state-level targets, the regions would be expected to make adjustments. The state would also review and assess all of the regional readiness, enrollment, and completion targets to see if they are on track to closing the gaps across subpopulations within each region and across regions of the state.

Adjusting state policies as needed to support regional plans for increased specialization and use of technology to ensure broad access to instructional offerings. If the regions were to encounter regulatory barriers to making some of the required shifts toward increased specialization of mission and program, and toward increased use of technology to deliver instruction, the state would take the lead in revising state policies to better support the work of the regions.

Monitoring indicators of progress for meeting public agenda goals. The state would be responsible for defining, collecting, and monitoring the set of indicators shown in Figure 16.

Figure 16
Indicators of Progress for Increasing Higher Education Access, Attainment, and for Closing Gaps

In order to track the effectiveness of individual regions and hold the regional consortia and constituent institutions accountable, the state would monitor the following metrics and report annually on them to the Governor and Legislature.

- Preparation: share of 11th graders meeting college readiness standards in English/math, high school graduation rates, share of high school graduates completing a – g
- Participation: share of high school graduates going directly to college
- Student progress: persistence rates, share of entering undergraduates who complete college-level English/math course within one year, share of entering students completing 24 semester credits within one year, annual number and percent change in CCC transfers to UC/CSU/private universities, CCC transfer rates
- Completion: annual number and percent change in awards (certificates [by length] and associate for CCC, bachelor's for UC/CSU), bachelor's degrees awarded per 1,000 residents ages 18-24, graduation rates
- Attainment: share of population age 25-34 and 25-64 with associate degree or higher and with bachelor's degree or higher
- Quality/Learning: licensure/certification rates, job placement/retention
- All of the above indicators disaggregated by key racial/ethnic groups and income groups and reported by regions of the state

Effective State Policy Leadership for a Regional Model

Strong, capable, and informed policy leadership at the state level is essential for this new vision to take hold. The regional consortia would set goals and targets and assign regional institutional responsibilities for meeting targets, but a state entity would need to fulfill the critical and supportive ongoing state role described above with respect to finance and accountability. This function would best be filled by an executive branch entity, such as a California Office of Higher Education, that is part of the administration and reports to the governor. Higher education is a large and vital part of state government. The governor proposes and enacts budgets, considers and signs higher education legislation, and sits on the governing boards of each university system. These are major responsibilities that require high-level staff support similar to what the governor has in K-12: a senior advisor and policy staff at the State Board of Education who steer policy, advise on legislation, and work collaboratively with the Department of Finance on fiscal policy. Under this model, higher education leaders would have a clear point of access in working with the administration to develop well-informed policy. Although there are other models of policy leadership, at least thirteen states have an executive branch office to provide leadership for higher education.

To be effective, this office would provide at least the following services:

Policy Leadership

- Pursue policy changes needed to increase access to baccalaureate programs by (1) incrementally expanding capacity at UC and CSU to accept high school students, (2) increasing numbers of students pursuing and earning associate degrees for transfer, and (3) expanding bachelor's degree capacity in private institutions and through other providers that meet regional consortia standards for quality;
- Pursue policy changes needed to increase the award of industry-recognized credentials in career and technical fields, including through associate of applied science and applied baccalaureate degrees, in accordance with the needs and providers identified by regional consortia;
- Pursue policy changes needed to support regional plans for greater specialization of mission and academic programs;
- Develop and implement technology policy as necessary to provide equitable and effective access to higher education pathways through online courses;
- Adopt common, recognized definitions and cost accounting procedures for use across the segments and regions;
- Develop funding formulas that incorporate incentives for institutions to enroll and graduate low-income, underrepresented, and other at-risk students consistent with regional targets;
- Develop policies to create incentives for students to make timely progress in their educational programs; and
- Develop and sponsor policy changes to implement an affordability policy, integrating policies for appropriations, tuition, and financial aid.

Administrative

- Provide a funding stream for the operation of the regional consortia and the entity that provides each consortium with labor market information;
- Assume responsibility to administer financial aid programs to ensure coherence of financial aid policy with policy on appropriations and tuition;
- Coordinate with workforce and economic development entities of state government to devise incentives for effective employer participation in regional consortia; and
- Manage a coordinated higher education data system that allows for analysis of student enrollments, progression, and completion across all public segments.

PART II: A New Approach to Meet California's Higher Education Needs

Advisory

- Advise the Governor on higher education budget and policy development, including budgets and policies for the three public segments, for financial aid, and for other providers of higher education included in plans for achieving targets.

Technical Assistance

- Provide, or provide for, technical assistance to regional consortia for the adoption and implementation of high-impact strategies; and
- Assist the segments in translating regional needs into segmental budget requests.

Accountability

- Adopt common, recognized budget definitions and accounting practices to support the analysis of costs per completion by segment and by region and to analyze the costs and benefits of alternative pathways to completion, and require the segments to comply with regular financial reporting;
- Manage a higher education accountability process that (1) holds regional consortia and the constituent institutions accountable for meeting targets, (2) tracks the metrics adopted in the public agenda, (3) includes annual reporting to the legislature on progress toward regional goals and public agenda metrics; and
- Analyze regional goals and targets to see how well they address the gaps across subpopulations in each region and how well they aggregate to meet statewide goals.

If Not Now, When?

The time for fundamentally new ways of thinking is upon us, and this moment offers an opportunity that was missing when previous reports made similar calls for bold action. In the last three years, California has made sweeping changes to bring the state back from the brink of financial disaster, at the same time shifting significant decision-making power to the local level. These changes, led by a governor with widespread public support and success in implementing large-scale reforms for K-12 education, have set the stage for transformational change in higher education to meet the needs of diverse student populations through applying the principles of regionalism, specialization, and the purposeful and effective use of technology. New leadership in all three public higher education segments suggests the possibility of greater openness and collaboration, while key legislative leaders have also signaled a desire to think “outside the box.”

The model public agenda presented here, or something equally visionary and game-changing, cannot be implemented overnight. But there is great danger in putting off conversations about these kinds of changes because of more pressing annual budgets or bill deadlines. Short-term concerns can push longer-term concerns off the agenda over and over until the realization that, had we done something *then*, we would have something *now*. It is questionable whether these ideas can even be considered “long-term” when too many students today are falling short of their dreams and too many communities are suffering the effects of inadequate levels of education.

Appendix

Three Scenarios for Examining Annual Degree Targets

The numbers of degrees and certificates produced annually provide the most straightforward way to consider progress toward degree totals and attainment levels in the year 2025. Figure A-1 displays three scenarios to show that the magnitude of the changes being called for by many are highly unlikely to occur under current structures. Scenario A shows the baseline against which two growth scenarios are compared. The baseline projection carries forward to 2025 the average annual growth in degrees and certificates accomplished by each segment over the last ten years. Under Scenario A, where present trends are projected to continue through 2025, the total collective yield of degrees and certificates would be about 3.9 million between 2013-14 and 2024-25. This is the baseline number – projections are calling for degrees and certificates totaling 2.3 million *more than* this “present trends” number.

Scenario B shows the ambitious, but justifiable, set of increases discussed in the text and portrayed in Figure 13. It is based on what might be expected from each segment, given its unique regional role, changes already underway, and additional opportunities for improvements. Under Scenario B, the additional numbers of degrees awarded above the baseline would be about 279,000 bachelor’s degrees and about 636,000 associate degrees and certificates. Large numbers of degrees and certificates would have to come from other providers to approach the one million bachelor’s degree and 2.3 million total degrees and certificates numbers. Scenario C shows that even more ambitious growth targets would still leave gaps that would have to be filled by other providers.

Figure A-1
Scenarios for Obtaining Additional Degrees and Certificates by 2025

	Bachelor's Degrees		Subtotal	CCC		Total
	UC	CSU	Bachelor's	Associate Degrees	Certificates	
Total Awards between 2013-14 and 2024-25:						
Scenario A: Present growth rate trends continue						
Average annual growth rate	3.0%	2.9%		2.8%	7.7%	
12-year total of awards	727,864	1,187,854	1,915,718	1,397,224	577,374	3,890,316
Scenario B: Targeted improvements in growth rates						
Average annual growth rate	5.0%	8.0%		10.0%	15.0%	
12-year total of awards	785,329	1,409,681	2,195,010	1,846,295	764,104	4,805,408
<i>Increase from present trends (publics)</i>	57,465	221,827	279,292	449,071	186,730	915,092
<i>Needed from other providers</i>			720,708	460,929	203,270	1,384,908
<i>Total increase from present trends, all providers</i>			1,000,000*	910,000	390,000	2,300,000**
Scenario C: Larger targeted improvements						
Average annual growth rate	10.0%	13.0%		15.0%	20.0%	
12-year total of awards	929,070	1,784,427	2,713,497	2,228,782	962,906	5,905,185
<i>Increase from present trends (publics)</i>	201,206	596,573	797,779	831,558	385,532	2,014,869
<i>Needed from other providers</i>			202,221	78,442	4,468	285,131
<i>Total increase from present trends, all providers</i>			1,000,000*	910,000	390,000	2,300,000**

* Refers to Public Policy Institute of California projection that one million additional bachelor’s degrees will be needed by 2025 to meet workforce demands.

** Refers to estimate by California Competes that about 2.3 million more degrees and certificates will be needed by 2025 to reach attainment goal of 55 percent.

Appendix

Calculations for Targets to Close Gaps on Key Measures

There is no best way to compute a target. Conventional wisdom holds that targets must be ambitious enough to matter and to motivate action, but not so ambitious as to be dismissed as unfeasible. Below we explain the basis for setting the targets that appeared in Figure 15 of the narrative. We put forth some sample targets that we think would be achievable

Completion of a-g curriculum

While the share of high school graduates completing the series of courses required for admission to the state's public universities has increased from 33% to 38% over approximately the last decade, the state needs more improvement if it is to increase the share of students going directly to a university and enroll community college students better prepared to successfully transfer. Additional improvements in college readiness should be forthcoming with successful implementation of the Common Core State Standards. Increasing the rates of a-g completion is particularly important among under-represented minority students, as currently just under 30% of Black and Latino high school graduates complete the curriculum compared to 45% of White graduates. While the rate of completing a-g has increased for all racial/ethnic groups, the size of the gap for under-represented students has only decreased by a small amount, and their rate of completing the curriculum is just over three-fifths of the rate for White graduates. If the average annual rate of increase for White students over the past decade were maintained, the share of white high school graduates completing a-g would reach 55% by 2025. A target to close half of the gap in a-g completion, as preparation levels of White students continue to rise, would peg a-g completion for Black and Latino students at 38% in 2020 and 44% in 2025. This would require a faster rate of growth for these populations than we have seen in recent years.

Direct college entry

College completion is higher among students who enroll soon after graduating from high school than among those who delay college entry, making it a reasonable policy goal to increase direct college-going for high school graduates. California currently ranks 29th among the states, with 62% of high school graduates going directly to college. While that is only slightly below the national average (63%), it is about 10 percentage points lower than the rate in top-performing states (72%). An annual increase of approximately one percentage point per year would put California's performance at the current level of top states by 2025.

Undergraduate awards per enrollment

The number of students graduating relative to the number of students enrolled is a measure of how efficient a higher education system is in producing educated workers and citizens. The UC and CSU systems are already above the national average on this measure, but the CCC system currently ranks 48th. Several factors help explain this low ranking: the lack of emphasis on occupational credentials, the lack of alignment between requirements for earning an associate degree and those to prepare for transfer to a university, and the enrollment of "casual" students who take advantage of low fees to sign up for courses of personal interest. Slight annual increases for UC and CSU would place their performance at the current level of top states by 2025 - about 25 bachelor's degrees awarded per 100 undergraduates enrolled. Large improvements should be targeted for the CCC due to the significant opportunity to increase the award of occupational certificates and degrees, the recent transfer reform legislation that should increase the award of associate degrees prior to transfer, and continuing efforts to set a priority on degree-seeking students. An annual increase of about 0.6 awards per enrollment would place the CCC's performance at about 18 certificates and degrees awarded per 100 students enrolled, or about mid-way between the current national average (14.5) for the public two-year sector and the current level in top-performing states (21).

Undergraduate awards per capita

California ranks poorly among states in degrees awarded per capita, ranking 45th in the number of bachelor's degrees awarded per 1,000 residents ages 18-24. An annual increase of approximately 2% would place the state's performance at about 66 bachelor's degrees awarded per 1000 residents ages 18-24, or about mid-way between the current national average (55) and the current level in top-performing states (76).

Attainment of younger populations

The greatest need is to increase education levels among the youngest working-age cohort, ages 25-34. California ranks 29th among states, with 38% of this age group holding an associate degree or higher. California is falling behind other states in educating its younger

populations. Setting goals with respect to this younger population is sensible, as that is the age group most immediately affected by improvements in student success in public colleges and universities. California should strive to increase the share of the population, ages 25-34, with an associate degree or higher, to 45% by 2025. An annual increase of 0.6 percentage points would get the state to this level, which represents mid-way between the current national average (40%) and the current level in top-performing states (49%). In the prior six-year period California's rate has increased only two percentage points from 36% to 38%, or about 0.3 points per year. So meeting even this more modest attainment goal would require significant changes.

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