From Master Plan to Mediocrity: Higher Education Performance & Policy in California

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Preface

From Master Plan to Mediocrity: Higher Education Performance and Policy in California is the result of the hard work and persistence of nine graduate students enrolled in my Advanced Public Policy Seminar at the University of Pennsylvania in the spring semester of 2013. The goal of the seminar was to understand the relationship between California's performance in higher education (defined as preparation for postsecondary education, participation in postsecondary education, persistence and completion, and affordability), and to determine the public policies that influenced this performance from the early 1990s to the present. Three of the students—Christina Riso, Kata Orosz, and William Casey Boland—continued their research through the summer and fall of 2014, long after the seminar had ended. Thanks to their commitment to understanding higher education in California over a period spanning more than 20 years, with its complex political, demographic, and economic contexts, this report provides one of the more comprehensive examinations of the topic.

We found that three broad policy areas interact to prevent California from keeping many of the commitments enshrined in the 1960 Master Plan for Higher Education, which became a precedent for long-term state planning for and organization of public higher education nationwide. Policies that account for performance and changes in performance over time relate to:

- The complex political environment and increasing political indifference toward higher education since the 1990s;
- The absence of any long-term strategic finance policies to address the higher educational needs for California in the 21st century; and
- The lack of effective educational transitions for students from high school to postsecondary education and from two-year to four-year institutions.

These conclusions illustrate the persistent absence of long-term state policy leadership and a persistent reliance on short-term political fixes to address higher education—a stark contrast to state leadership from the 1960s through the 1980s.

As we completed our work, three important reports were released. The first, from the Committee for Economic Development in California, provides a sobering view of the state's needs and the importance of developing the collective capacity of California's institutions of higher education, not just the institutional capacity, which was largely the focus of the 1960 Master Plan. This report was joined by one from California Competes calling for renewed attention to statewide leadership through the development of a Higher Education Investment Board that would be independent from but cooperate with higher education. Finally, the most recent report comes from the Institute for Higher Education Leadership and Policy and proposes a regionally organized system of higher education to meet California's changing needs.

What these reports have in common is the growing recognition that the 1960 Master Plan for Higher Education falls short in serving California's future. Our case study provides additional evidence that the public policies that guided California are no longer serving the state. It highlights evidence of ongoing political indifference, particularly since the early 1990s, toward

higher education that must be remedied to seriously consider *any* recommendations from the earlier reports. The urgency for this public agenda appears to be growing, thanks to the various business and policy groups at work in California. Ultimately, however, the responsibility for leadership rests squarely with the governor and legislature. The stakes are high, but continued indifference will come at a great cost to the state.

The results of this case study are consistent with themes emerging from The State Review Project, a national study by the Institute for Research on Higher Education at the University of Pennsylvania's Graduate School of Education. I co-led the study with Laura W. Perna. Themes from The State Review Project are summarized in *Renewing the Promise: State Policies to Improve Higher Education Performance*, and are expanded upon in *The Attainment Agenda: State Policy Leadership in Higher Education* (Johns Hopkins University Press, 2014).

The authors thank the people we interviewed as well as Patrick M. Callan, president of the Higher Education Policy Institute, who reviewed an early draft of this manuscript to provide insight and feedback. The responsibility for the accuracy of data, however, rests solely with us.

We welcome any reactions to or comments on this report.

Joni E. Finney Director, Institute for Research on Higher Education Practice Professor, Graduate School of Education University of Pennsylvania

Introduction

As pioneered by the 1960 Master Plan, California's public system of higher education was the envy of the nation for over 30 years. Its three-part system, consisting of community colleges, state universities, and the prestigious University of California campuses, was designed to ensure college access for all Californians as well as to promote excellence in research. It was also intended to ensure an important role for private colleges and universities in educating California residents. The success of this system not only produced high levels of college graduates but also sustained economic growth that propelled the state's economy into one of the strongest in the world.¹

But the performance of California's public education system has not kept pace with economic changes in recent decades. The estimated share of adults over 25 years of age who had an associate's degree or higher was 38.8% in 2012, placing California 23rd among all states in degree attainment.² Deep cuts in state funding and the lack of a long-term, viable finance policy for higher education, as well as political indifference about higher education policy, have forced California's public colleges and universities to reduce enrollment, staff, faculty, and student services while increasing tuition and fees.

If current trends continue, the state will experience severe shortfalls in the number of people with workforce certificates and degrees needed to ensure prosperity and social mobility for the majority of Californians.³ To meet California's projected workforce demands and so sustain economic productivity and global competitiveness, at least 55% of the state's workforce will need some type of postsecondary education by 2025. This need is particularly strong in service industries (business, health, legal, education, technology), where most of the state's job growth will occur. To achieve the 2025 target, the state must produce an additional 2.3 million postsecondary credentials from its native population. This represents about a 4% annual increase over current levels of degree production.⁴ Since most Californians enroll in the state's public colleges and universities, and 75% of bachelor's degrees are conferred there, this system must play a critical role in improving the number of postsecondary credentials (migration from other states or countries is unlikely to fill this gap).⁵

This study describes the political and economic context of California and provides an overview of higher education performance during the last two decades. Our aim is to explore the policies in place within the state and the relationship between these policies and California's declining higher education performance, and to call for a reexamination of these policies by stakeholders in order to help California meet its current and future economic needs.

The Golden State: Its People, Economy, & Politics

The People of California

California is the nation's most populous and diverse state, with approximately 38.3 million residents in 2013, an increase of roughly 9 million from the state's 1990 population. In 2025, the state is projected to be the home of 15% of the U.S. population. California also has one of the youngest populations, with 24.3% of its residents under 18 years old, although some areas are experiencing a rapidly aging population. Some regions are growing faster than others. The six-county Greater Los Angeles Metropolitan Region (including Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial counties) is projected to account for almost half of California's population growth from 1997 to 2020.

High immigration, primarily from Mexico and Asia, has driven the increase in ethnic diversity in California. In 1990, 57% of California residents were White (non-Hispanic), 25% were Hispanic or Latino, 9% were Asian, and 7% were Black. According to the 2012 census, 39.4% of California residents are White (non-Hispanic, compared with 63.0% nationally), 38.2% are Hispanic (compared with 16.9% nationally), 13.9% are Asian (excluding Hawaiian and other Pacific Islanders, compared with 5.1% nationally), 6.6% are Black (compared with 13.1% nationally). Hispanics are the fastest-growing segment of the population, accounting for 64.5% of the state's population growth, and are projected to become the state's majority ethnic group by 2020. It is projected that approximately 40% of California residents will be of Hispanic origin in 2020, up from 25% in 1990.

California's population is also getting poorer. In 2000, the median household income was \$61,420, compared with \$56,222 in 2011. The poverty rate has increased from 13.7% in 2000 to 17.0% in 2012. Nearly 60% of the K-12 population is lower-income as defined by the National School Lunch Program. Of this population, 51% of students are Hispanic and 25% are English language learners. From 2006 to 2010, among California's working adults (age 25-64), Hispanics also had the lowest median income (\$25,191) of all racial and ethnic groups in the state, with one in four earning \$14,000 or less per year.

The California Economy

Despite its income disparities, California's economy is the ninth largest in the world, with a gross domestic product (GDP) of just under \$2 trillion in 2011, which is nearly 13% of the national GDP. ¹⁹ Its major industries mirror those of the U.S. as a whole: trade, transportation, and utilities; government; professional and business services; and educational and health services. The sectors predicted to continue growing are educational and health services, professional and business services, and leisure and hospitality. The industries that require postsecondary credentials mostly rebounded after the 2008 recession, while construction and manufacturing, both growth industries in the 20th century, have not. ²⁰ The state's primary export is computers and electronics, followed closely by machinery and building materials (mostly to Asia). ²¹

The recession affected regions of the state differently. Coastal regions (including the Bay Area counties), which have largely recovered, had a 2012 unemployment rate of 8.8%, compared with 12.2% in inland counties.²²

The Political Environment of California

California's political environment differs from most other states in that it is characterized by an active initiative system. The initiative process, adopted constitutionally in 1911, provides citizens, business leaders, current and former legislators, and special interest groups with a legal mechanism for creating and adopting state laws or constitutional amendments.²³ Once a limited democratic tool of the people, the initiative process has transformed into the state's "fourth branch of government" since the passage of Proposition 13 in 1978.²⁴ Proposition 13, the People's Initiative to Limit Property Taxation, which was sponsored by businessman and anti-tax activist Howard Jarvis, was adopted in response to skyrocketing property taxes that were forcing many Californians out of their homes in the early 1970s.²⁵ The initiative capped property tax revenues at 1% of the real cash value of the property, with assessment required only upon change in ownership or new construction.²⁶ Proposition 13 also required that any proposed tax increase be approved by at least two-thirds of the state legislature in order to be implemented (changes to this requirement, which were adopted in Proposition 25, are discussed later in this report). This supermajority mandate severely limited the legislature's ability to pass revenue-generating measures and ignited the use of the initiative system as a way to circumvent the requirement.²⁷

Proposition 13 also had a lasting impact on the state's financial climate, particularly on education funding. In the fiscal year following the passage of the proposition, local property tax revenues plummeted, dropping from \$10.3 billion in 1977-78 to \$5.04 billion in 1978-79. The stringent caps on property tax revenues forced the state to rely on sales taxes, income taxes, and user taxes to fund public services, which led to California becoming home to the nation's highest personal income tax and highest state sales tax. Docalities and counties became increasingly reliant on state funds for all public services, including education.

Regarding the governance, policy development, and funding of California higher education, California's governor also has a great deal of influence. The governor possesses veto power over legislation; proposes the state budget, including allocations from the General Fund to each segment; and has line-item veto power over budgetary items.³¹

The State's Higher Education Structure

California has the largest—and one of the most diverse—systems of higher education in the nation.³² It is comprised of three public segments of higher education created by the 1960 Master Plan: the University of California (UC) system spread across 10 campuses, the California State University (CSU) system across 23 campuses, and the California Community Colleges (CCC), which is spread across 112 campuses. California is also home to 138 private not-for-profit four-year institutions and 166 for-profit institutions.³³

About 2.7 million students were enrolled in degree-granting institutions in California in the fall of 2011, an increase of 16% from the fall of 2000.³⁴ In fall 2011, the vast majority (81%) of these students attended public colleges and universities, compared with private not-for-profit (11%) and for-profit (8%) institutions.³⁵ California alone has one-quarter of the nation's community college students.³⁶

The Master Plan's three-part system was designed to meet the growing demand for higher education in the state, which was due to the GI Bill and the subsequent population explosion of the baby boom generation. The plan also helped to integrate a disparate group of colleges and universities into a coherent system, with each segment focusing on a different mission to serve California's diverse research and teaching needs.

University of California

The UC system became the state's primary academic research institution, providing undergraduate, graduate, and professional education. Historically, UC maintained its exclusivity by accepting only the top 12.5% of the state's annual graduating high school class. Over time, the percent of students offered admission at UC shrank to the top 9% of the graduating class.³⁷

The UC system consists of a 26-member board of regents established under the California Constitution in 1879 and thus free from legislative control. Regents of UC retain control over its mission, management, and programs "subject only to such legislative control as may be necessary to insure compliance with the terms of its endowments, and the proper investment and security of its funds." The governor appoints 18 members of the board, who serve 12-year terms and must be approved by the state senate. The board also includes one UC student, who serves for a year and is appointed by the regents, and seven ex officio members: the governor, lieutenant governor, speaker of the assembly, superintendent of public instruction, president and vice president of the alumni association of the UC, and the UC president. In addition, the board includes the chair and vice chair of the UC academic council as non-voting members. The regents appoint the UC president and the chancellors of the ten universities based on the president's recommendation. The regents appoint the UC president and the chancellors of the ten universities based on the president's recommendation.

California State University

CSU's primary mission is undergraduate education and graduate education through the master's level, including professional and teacher education. CSU accepts students from the top third (33.3%) of graduating high school seniors in the state. Faculty research is permitted, but the primary focus is instruction. The only doctoral-level degree that CSU, on its own, is able to award is the doctor of education (Ed.D.) degree in educational leadership; the state legislature authorized CSU to award this degree in 2005.

The CSU system is governed by a 25-member board of trustees, 16 of which are appointed by the governor for eight-year terms, subject to senate approval. The board also includes the following two-year members: a faculty trustee appointed by the governor from nominees recommended by the CSU Statewide Academic Senate; two student trustees appointed by the governor from nominees recommended by the California State Student Association; and one trustee selected by the CSU Statewide Alumni Council. In addition, five members serve ex officio: the governor, lieutenant governor, speaker of the assembly, state superintendent of public instruction, and the CSU chancellor. The chancellor is appointed by the trustees and serves as the system's head. The trustees also appoint the 23 campus presidents.⁴⁰

California Community Colleges

CCC's main focus is to provide academic and vocational instruction for any California resident wishing to pursue postsecondary education. In addition to certificates and associate's degrees, CCC also provides remedial instruction, noncredit offerings for adults, workforce training and community service, and English as a second language (ESL) courses. The transfer function,

which enables students to transfer CCC credits to the UC and CSU system, is an essential component of its commitment to access, and these community colleges supply a portion of undergraduates to the CSU and UC systems.

The CCC board of governors, whose 17 members are drawn from the system's faculty, students, employees, and the public, are appointed by the governor with the senate's approval. Twelve members are appointed to six-year terms, and two student members, two faculty members, and one classified employee member are appointed to two-year terms. The board of governors sets statewide policy, guides the districts, and chooses the chancellor, who serves as the chief executive of the system. The chancellor is responsible for overall leadership, policy direction, financial and administrative management, statewide community relations, and legislative advocacy. The chancellor brings recommendations to the board through the consultation council, made up of 18 representatives from all levels of the system. In addition, each of the 72 community college districts is governed by a locally elected board of trustees, which oversees the operations and budgets of the colleges within the district and appoints the campus presidents.

Gubernatorial and Legislative Powers over California's Higher Education System

The governor's powers extend into the governance structure of each segment of California's public higher education system. In accordance with the Master Plan, the governor appoints the majority of the UC board of regents and CSU board of trustees as well as all members of the CCC board of governors. He way of appointments, the governor can strongly influence the administration and day-to-day operations of each segment, including setting tuition. The appointment power encourages leaders of each segment to concentrate on building strong relationships with the governor.

The powers of the California State Legislature extend into both the fiscal and administrative policies of state higher education. The legislature sets community college fees in statute and proposes laws regarding higher education through California's education code. The legislature can adopt or revise funding provisions in the governor's proposed budget, therefore forcing negotiations in June and injecting itself into segment-governor compacts, which are agreements that have been reached between the governor and segments since Governor Pete Wilson's administration in the early 1990s. Despite segmental governing boards possessing wide latitude over administrative and academic policies, the legislature has the statutory authority to change the powers of the CSU board of trustees and monitor performance measures of both CSU and UC to ensure that policies are being administered in accordance with legislative intent. 46

California provided a mechanism for state policy leadership and coordination of higher education by creating the California Postsecondary Education Commission (CPEC). The legislature created CPEC in 1973 as the successor to the Coordinating Council for Higher Education, which was an integral part of the 1960 Master Plan. CPEC was composed of 16 members, including three members appointed by the governor, three members by the Senate Rules Committee, and three members by the speaker of the assembly, as well as five representatives from each postsecondary education governing body and two student members appointed by the governor. TepeC's role was to coordinate and develop plans for public higher education as well as to integrate private colleges and universities into the planning process. CPEC was closed in November 2011 as a result of perceived ineffectiveness and state budget

cuts in the aftermath of the recession. The primary data repository housed at CPEC has been transferred to the Chancellor's Office of the California Community Colleges.⁴⁸

The state's primary office for the administration of state financial aid (Cal Grant) is the California Student Aid Commission, created by the legislature in 1955. The commission consists of 15 appointed members. Eleven are appointed by the governor, and four are appointed by the legislature. 49

California Higher Education Performance

The first nationwide higher education report card, *Measuring Up 2000*, gave California middling or slightly above-average grades on higher education performance. The grades were based on performance at the end of the 1990s using indicators such as college preparation, participation, and completion. Since then, the state has improved slightly on these measures. The state ranks among the top states in research performance, an area that was not assessed by *Measuring Up*.

While California boasts the lowest priced public higher education system in the nation, the decrease in affordability since the onset of the economic crisis is worrisome. Furthermore, a marked decline in affordability and persistent disparities in college preparation, participation, and completion by race, ethnicity, and income characterize the state's higher education system.

Preparation

California has shown signs of improvement in college preparation in the past two decades. In 2000, only 18% of 8th graders in California scored at or above a level deemed proficient on the national assessment in mathematics; by 2013, 27% of 8th graders performed at this level. Student achievement in reading also increased over this period: 29% of 8th graders in California scored at or above proficient on the national assessment in 2013, up from 22% in 1998. Similarly, the share of students scoring 3 or higher on an AP exam in high school increased, from 16.5% of AP exam takers in 2002 to 26.9% in 2013. Education Week estimated that while 64.3% of California students graduated on time with a high school diploma in 1993, this share increased to 73.7% by 2010, raising California's nationwide ranking from 37th to 33rd (the average national statewide graduation rate was 74.7% in 2010). States of the past two decades. In 2000 the past two decades. In 2001 the past two decades. In 2002 th

Participation

The overall college-going rate (the number of high school graduates enrolling in college the following fall) and the chance for college (the number of first-time college students as a share of the number of 9th graders four years earlier) both grew in California since the early 1990s, although overall college-going rate appears to have been negatively impacted by the Great Recession.

The overall college-going rate for all sectors of higher education in California grew from 51.4% in 1992 to 61.7% in 2010, but was below the national average of 62.5% and decreased from 65.4% in 2008. State College-going rates to publicly funded higher education institutions were negatively impacted by the economic recession in 2008. Chance for college by age 19 was 35.2% in California in 1992 (national average: 38.7%), which grew to 44.2% in 2008 and 45.8% by 2010 (national average in 2010: 45.6%). The slightly different direction of the overall college-going trend and the chance for college trend since the onset of the recession might be an indication that some California high school graduates were shut out due to enrollment cuts or

increasing prices after 2008, while "on time, on track" students may have gone to college outside of California. It is important to note that the college-going indicator does not account for interstate migration, while the chance for college indicator does.

Affordability

Budget cuts in higher education pre-dated the Great Recession and continued in the aftermath of the economic crisis. ⁵⁷ The combination of falling median family income, decreased state funding, and increasing tuition has resulted in declining affordability. Median family income in California dropped to \$56,222 in 2011 from a peak of \$61,420 in 2000. ⁵⁸ Most recent estimates suggest that California families started to recover from the recession, although median household income in California (\$57,000 in 2012) has not reached its pre-recession level. ⁵⁹

While family income shrank, the sticker price for college has risen since 2007-2008. At UC, tuition and fees increased from \$6,576 in 2007-2008 to \$12,132 in 2013-2014 for in-state undergraduates. CSU tuition and fees rose from \$3,521 in 2007-2008 to \$6,519 in 2011-2012. Fees in two-year institutions doubled, from \$600 in 2008-09 to \$1,424 in 2013-2014. However, the cost of attending a two-year public college in California is still the lowest in the nation.

Non-tuition costs of higher education have also risen rapidly in the state, including a 25% rise in the cost of rental housing and a 31% markup in the cost of textbooks and supplies from 2000 to 2005.⁶³ The costs of room and board increase the financial burden on students and their families, especially since California has a higher cost of living than much of the nation.

The total cost of college attendance (fees, room and board, books, etc.) varies greatly by institution type in California. The estimated total costs for 2013-2014 were as follows: \$13,929 for CCC, \$22,488 for CSU, \$32,400 for UC, and approximately \$50,000 for private non-profit colleges.⁶⁴

In 2007, families in the lowest income quintile had to devote an average 56% of their income to cover costs at a public four-year college in the state. This share jumped to 63.4% in only two years, the most recent data for this measure. To cover the cost of education at a public two-year college, families in the lowest income quintile had to devote 52.5% of their income in 2009.⁶⁵

Completion

College completion rates in California vary greatly across the three segments: degree completion is above the national average in the UC system, completion rates in community colleges declined over time and are well below the national average, and CSU institutions are characterized by completion rates well below the national average.

The most recent data from CPEC (2001 college cohort) reveal differences among public four-year institutions; the data are limited in that they include only first-time, full-time students. The national average for students graduating with a bachelor's degree within six years was 57.3% in the 2001 cohort. In the same cohort, 80.5% of students enrolled at the UC system graduated within six years, compared with only 47.4% of students enrolled at CSU.⁶⁶ One reason for this difference is the different profiles of students admitted to the four-year institutions. In 2011, the share of students enrolled in four-year colleges who required remediation was substantially higher in California's CSU system (59.6%) than the national average in the same year (19.9%).⁶⁷ Approximately 77% of low-income college students enrolled in CSU required remediation in 2011.⁶⁸

Using more recent data from the National Student Clearinghouse examining students from the fall cohort of 2007, but not disaggregated between UC and CSU, shows overall improvement in student completion in public four-year institutions, despite differences between the segments of higher education as shown through CPEC data. In 2013, 68.6% of all students from California who enrolled at a four-year public higher education institution completed within six years, above the national average of 63.4%. This rate has also increased from 1990, when 57.5% of students completed within six years. Completion rates were even higher for exclusively full-time students who started at four-year public institutions, with a completion rate of 87.7% compared with a national average of 82.3%. However, six-year outcome at public four-year institutions for students who started at two-year institutions was only 30.1% compared with the national average of 39.9%.

Among those first-time, degree-seeking students who started their postsecondary education at a two-year public institution in California in the fall of 2006 (those most likely to transfer), only 27.7% completed an associate's degree within six years; only 4.3% of those who started their postsecondary education in a public two-year institution in California subsequently completed a bachelor's degree at a four-year institution.⁷³

The disparity of completion rates between the different types of institutions is striking considering that approximately 1,221,595 Californian students begin their collegiate career in public two-year institutions compared with 614,681 students beginning at public four-year institutions. Additionally, the increase in four-year degree completion rates (from the National Clearinghouse) needs to be interpreted with caution, since it could be the result of CSU and UC admitting fewer transfer students or the result of students enrolling out-of-state due to recent enrollment caps or concerns about affordability.

Despite the transfer mission of California community colleges set out by the Master Plan, completion and transfer rates at two-year institutions are below the national average. A more recent report by the National Student Clearinghouse paints a similar picture of low completion and transfer rates in California.

High attrition can be attributed to several factors. First, 70% of California community college students work full- or part-time, comprising the largest percentage of part-time students in the U.S. Another factor is the sheer number of students enrolled in community colleges within the state—70% of California postsecondary students attend community colleges. A CPEC report from 2011 shows that the number of students transferring from CCC to CSU has dropped substantially in the aftermath of the economic downturn. In 2007-2008 almost 55,000 CCC students transferred to CSU, but this number dropped to 49,000 the following academic year. The sudden drop in transfer students was a result of CSU's elimination of spring admissions, a measure taken as a response to drastic budget cuts in 2009.

Research

California is characterized by high research intensity. It has nine research universities in the Association of American Universities (AAU), more than any other state. The state ranked first in the nation in total research and development (R&D) expenditures, business R&D expenditures, and academic R&D expenditures in 2010, and it ranked fifth nationwide in research intensity, defined as total R&D expenditures divided by gross domestic product of the state in the same year. In terms of research productivity, defined as total R&D expenditure per capita, California ranked 16th in the nation in 2009. R&D expenditures per capita have grown at a higher rate in California than in the nation overall since 1995. Most of the funding for

research and development at higher education institutions comes from federal sources and from business, but substantial university sources, including but not limited to state appropriations and tuition, are devoted to research, too. 82 In 2011-2012, more than one-fifth (22%) of the UC system's total research budget came from university sources. 83

UC institutions consistently rank among top research institutions. In 2011, six UC campuses—UC Irvine, UC Santa Barbara, UC Davis, UC San Diego, UC Berkeley, and UC Los Angeles—ranked among the top 10 research universities in the nation based on measures of research expenditures, faculty honors and awards, endowment assets, annual giving, doctorates awarded, number of post-docs, and SAT scores; the other four institutions in the top 10 were Harvard, MIT, Stanford, and Yale. In 2011, five UC institutions—UC San Diego, UC San Francisco, UC Los Angeles, UC Berkeley, and UC Davis—were ranked among the top 30 universities with the largest R&D expenditures in the nation.

According to the Delta Cost Project, the level of research spending as a share of total operating expenses had not changed in the period from 2005 to 2010 in the UC system, with "research and related" expenses making up, on average, roughly 26% of the total operating budget of UC institutions both at the beginning and the end of the period. Over the same period, the average share of UC operating budget spent on "education and related" expenses per FTE decreased from 38.4% to 35.8%, and the average share spent on "public service" decreased from 2.5% to 2.2%. This suggests that UC campuses protected research at the expense of instruction and public service during the economic recession.

Maintaining high research performance at UC campuses does not come cheap for the state. Compared with public research universities nationally, UC spends 36% more per degree. Despite the potential trade-off between college affordability and excellence in research, California appears to be committed to maintaining, and even expanding, its higher education research enterprise. In 2005, the UC system added a new campus in Merced, with a starting budget of \$33.8 million, 87% of which came from state appropriations. 88

Gaps in Performance

Substantial performance differences by racial and ethnic background persist in California higher education in virtually all performance areas, including high school graduation, chance for college, and on-time college graduation rates. Gains in college preparation, as measured by the California High School Exit Exam (CHSEE) are not evenly distributed across racial and ethnic groups. CHSEE is administered to California 10th graders every year. Recent results from this exam show that the percentages of Asian and White students passing the exam are significantly higher than students of other races. While over 90% of Asian and White students pass both the English and Math sections on their first attempt, about only 69% of Black students pass Math and 73% pass English. Hispanic students have seen slight performance increases in this exam, but their overall passing rate also remained below 80% in 2013.

Gaps in college preparation, as measured by scores on the National Assessment of Educational Progress (NAEP) reading exam in 8th grade, persisted for Black students and showed slight improvement for Hispanic students in the period from 1998 to 2013. 90 Achievement gaps on the NAEP mathematics assessment in 8th grade did not significantly change over time for either Black or Hispanic students, who scored lower than White students in both 1990 and 2013. 91

Chance for college also varies greatly by racial and ethnic background. In 2009, 58% of Asian / Pacific Islander 9th graders were enrolled in college by age 19, compared with 35% of

White students, 25% of Hispanic students, and 22% of Black students. ⁹² College-going rates (high school graduates enrolling in college immediately after graduation) of underrepresented minorities were negatively impacted by the economic recession. For example, the share of Hispanic students who enrolled in a California public higher education institution after high school was 41.5% in 1990, grew to 45.7% by 2008, but fell to 38.5% in 2009. ⁹³

College students are unevenly distributed across different types of institutions based on their racial and ethnic background. Hispanic students are clustered at community colleges and for-profit institutions: 36% of community college students were Hispanic in 2011, and 66% of all for-profit enrollment was also Hispanic in the same year. Black students are also overrepresented among students attending for-profit institutions: 20% of all for-profit enrollment was from this group. And Black and Hispanic students are more likely to be assigned to remedial classes in college: in 2011, 83.1% of Black students and 75% of Hispanic students enrolled at CSU required remediation, compared with 41% of White students.

Hispanic and Black students graduate at much lower rates than their White peers at both UC and CSU. In UC's 2001 cohort, 80.5% of White students graduated within six years, compared with 73.1% of Hispanics and 70.2% of Blacks. The gaps were substantial also for the CSU 2001 cohort graduating in six years: 52% of White college students were graduating in six years, compared with only 43.9% of Hispanics and 35.7% of Blacks. Working-age college students were also less likely to graduate within six years: in the 2002 cohort of CSU, only 35.2% of students aged 20-24 and 32.4% of students older than 25 graduated within six years.

Substantial gaps in higher education performance persist across geographic regions of the state. For example, while 53% of 8th grade students from the Inyo-Mono Region (eastern California, south of Yosemite), 50% from Orange County, and 49% from the Central Coast area tested at or above "proficient" in mathematics on NAEP in 2010, only 35% of North San Joaquin Valley, 34% of South San Joaquin Valley, and 32% of Inland Empire 8th graders did so. ¹⁰⁰ Similarly, while about 55% of students from the Central Coast region who were 9th graders in 2005 enrolled in college four years later, only 28% of Inland Empire 9th graders did so. ¹⁰¹

What Policies Explain Higher Education Performance Over Time?

Given California's comprehensive system of higher education—and the legacy of the Master Plan that provided a pioneering framework for public higher education in the nation—why have certain aspects of the system's performance—including participation, affordability, completion rates at community colleges, and transfer rates to four-year public institutions—declined over time? Why do achievement gaps by race, ethnicity, and geographic region persist in the state? In our case study, we found that changes in higher education performance in California are the result of several demographic, political, and economic policies over the last two decades

These forces provide the context for the following three overarching themes driving the mediocre, and in some cases declining, higher education performance in California:

• A complex political environment and political indifference, which has led to a lack of statewide higher education policy leadership.

- The absence of a coordinated statewide finance policy, which undermines chances of improving degree attainment rates and threatens affordability.
- Inadequate attention to educational transition points between high school and postsecondary education and between two-year and four-year institutions, which is an obstacle to increasing higher education attainment in the state.

We examine these themes in the sections that follow.

The Complex Political Environment and Political Indifference

In 1960, Clark Kerr, the late president of the University of California, inspired a statewide collaborative effort of long-term strategic planning and coordination of California higher education with the implementation of the Master Plan. It was a political compromise between lawmakers and institutional leaders but, more importantly, it was also a promise to the people of California that educational opportunities beyond high school would be available regardless of financial means. Lawmakers played their role by codifying the Master Plan into law with the adoption of the Donohoe Act of 1960. Strong leadership by Governor Pat Brown solidified a common vision and goal for higher education within the state, exalting California as a worldwide model for postsecondary education. 103

The same vision for collaboration and long-term planning does not exist in California today. As one higher education policymaker we interviewed stated, "California is allergic to leadership." California's complex political climate—especially the ballot initiative system—increasingly hinders the ability of state leaders to engage in long-term policies decoupled from a particular initiative, political campaign, or gubernatorial administration. Political indifference had led to what one higher education policymaker observes is "three trains on their own tracks," where each segment is left to create its individualized policies rather than those that will support increasing educational attainment to meet overall current and future state economic needs. Finally, the elimination of the state's coordinating and policymaking agency for higher education, the California Postsecondary Education Commission (CPEC), further suggests that state political leaders are unwilling to define a unified public agenda and develop long-term statewide policies for higher education.

The Indirect Costs of a "Direct Democracy"

Perhaps most unique to the state is the strong influence that "direct democracy" has had on policymaking. Proposition 13's required two-thirds supermajority vote to pass tax increases has led to repeated stalemates over state spending for the past 30 years, and consistent budget shortfalls have hampered the state's ability to increase tax revenue to support funding for higher education, especially in times of recession. ¹⁰⁴ Unlike K-12 education, funding for higher education is largely discretionary, absent of any legislative or constitutional mandates. ¹⁰⁵

One policy expert we interviewed explained that the legislature faces competing forces through initiatives, either placed on the ballot through special interest groups or from the governor himself, as a mechanism to circumvent the supermajority requirement. Without

cooperation between the governor's office and state representatives, statewide policymaking and long-term agenda setting by the legislature will likely fail. As journalist Peter Schrag observed:

Each ballot measure either mandates some policy, some budget expenditure, or some new set of laws, or prohibits something. Thus each [ballot measure] restricts the powers and choices of elected government, state and local, to respond to future (and often unexpected) situations, which in turn makes elected leaders less able...to respond. 106

Three recent initiatives show promise for increasing efficiency in state budgeting: In 2010 Californians approved Proposition 25, the Majority Vote for the Legislature to Pass the Budget Act, which permits a majority, rather than the previously required supermajority, vote of the legislature to pass a state budget. Proposition 25 holds lawmakers accountable for failing to pass a budget on time by mandating they forfeit their pay. 108

Also passed in 2010, Proposition 26, the Supermajority Vote to Pass New Taxes and Fees Act, imposed a supermajority vote of the Legislature in order to new pass taxes and fees. So while Propositions 25 undoes the two-thirds requirement on passing state budgets, the requirement remains in place on taxes, and now also on fees. As a result, California can now adopt a budget by majority vote as long as there are no new increases in taxes and fees. ¹⁰⁹

Proposition 30, officially known as Temporary Taxes to Fund Education, passed in 2012. It is projected to provide additional state tax revenues for both K-12 and higher education using temporary income and sales tax increases. The initiative is, as one policymaker noted in an interview, "just money for more of the same with no major policy changes or goals set." Nonetheless, the passage of Proposition 30 signifies some public interest in higher education.

The Limitations of Term Limits

In addition to limitations imposed by the initiative system, term limits hamper the state legislature's ability to set policy for higher education. Specifically, term limits make it difficult for legislators to gain enough knowledge to create and implement long-term agendas. ¹¹¹ As one former California assemblywoman commented to *The Economist*, "the first two years you're trying to figure out where the bathroom is, the last two years you're running for something else. That leaves two years in the middle." ¹¹² Term limits expose an already weakened relationship between the people and the legislature. The disparity between the number of represented officials (120) and California's population (38 million) contributes to an environment where representatives may have little knowledge of their voters. As a consequence, legislators turn their focus to campaigning, fundraising, and issues that are politically popular and that support their re-election. ¹¹³

The Cost of Political Indifference and Short-Term Fixes

Political indifference has allowed each public higher education segment and the state government to act within siloes and pursue the best interests of their segment irrespective of statewide goals. One example of this tendency is the development of gubernatorial funding "compacts" between the segments and the governor, beginning when Pete Wilson took office in 1991 and continuing through each new administration. These short-term agreements have failed to account for external market forces such as economic recessions, increased enrollment demands, and the failure of family income to keep pace with tuition increases. For example,

funding promised by the Davis administration (1999-2003) to UC and CSU was reduced due to the dot.com bust. Compacts during the late 1990s and early 2000s promising funding in exchange for tuition freezes have only increased tuition unpredictability for future students; after the freeze expires, tuition disproportionately increased for incoming classes. 114

Compacts have also done little to provide performance incentives in higher education. Conditions, such as enrollment growth, imposed by governors have been vague and have not been enforced. As one higher education policymaker we interviewed commented, such conditions are essentially "thrown out there with no meat on the bones." Since performance measures tied to compacts have changed with each new administration, no long-term agenda has been established. 115 One legislative staff member observed:

In short, the coordinated approach to expanding capacity and building academic programs envisioned by the 1960 Master Plan has devolved into each of the segments attempting to simply cope with dramatic funding shortfalls.

Any performance expectations are tied to administrations; compacts do not promote long-term statewide leadership or monitoring goals based on statewide data.

Absence of Statewide Higher Education Goals

California has consistently been criticized for thinking about accountability and performance in terms of each higher education segment individually, as opposed to the entire state. There is currently no guarantee that even if the segments reach their own goals, the state will meet the educational needs of its citizens. A policymaker expressed the following views on the devolution of public policy to the segments:

Public policy in California for the last fifteen years or so has been, when the state has money, give higher education funding and pretty much let them decide what they want to use it for, and when it doesn't have money, cut the budgets as much as you have to and decide how much tuition you are willing to let them raise to take its place. That's pretty much been the essence of public policy for the last two decades, or so. Part of that reflects the absence of effective policy leadership at the state level. 117

There is some recognition of the importance of statewide goals for postsecondary education. In September of 2013, California Senate Bill 195 (SB 195) was introduced by Assemblywoman Liu and was signed by the governor in September 2013. The three goals of SB 195 include: (a) improving student access and success, which shall include, but not necessarily be limited to, all of the following goals: greater participation by demographic groups—including low-income students—that have historically participated at lower rates, greater completion rates by all students, and improved outcomes for graduates; (b) better alignment of degrees and credentials with the state's economic, workforce, and civic needs; and (c) ensuring the effective and efficient use of resources in order to increase high-quality postsecondary educational outcomes and maintain affordability. 118

Remarkably, the bill did not include any requirement that metric development to monitor the goals be assigned to a group convened by the Governor's Office of Planning and Research, as an earlier bill that the Governor vetoed did. Whether this legislation is successful in

developing a broader political consensus that will result in public policies for improved performance remains to be seen.

The elimination of CPEC, the state's planning, coordination, and policy analysis agency for postsecondary education, has left California with no "steering" or statewide structure that would advocate for political consensus and the measurement of progress for state goals. Due to political indifference by the governor and legislature, the organization's policymaking responsibilities were phased out, to the point where CPEC served only as a data repository. ¹²⁰ As one prominent policymaker we interviewed noted:

The problem is that if you don't use data for policy leadership and try and do something with it—if you are just a repository, no matter how confident you are—it's going to become very difficult to justify why you should have a state agency just devoted to that if it doesn't have the ability to bring that data to the decision-making processes that are made in the state. They had fallen short of that for a long time.

As a consequence of Governor Brown's 2011 decision to eliminate funding for CPEC, the state lacks a central agency to coordinate data collection and sharing across the state's system of public higher education, a condition necessary for effective state policy leadership. Data collection issues and a lack of a data-using culture characterize all levels of the education sector in the state, not just the higher education sector. According to the Data Quality Campaign, California implemented only four out of the 10 action steps that are considered good practice for using data in improving P-20 education outcomes. ¹²¹

Before its elimination, CPEC collected both individual student records from each segment and was able to link data across the three segments using unique student identifiers. This data is currently housed in the CCC Chancellor's Office. ¹²² According to several higher educational leaders and policy analysts we interviewed, the information is no longer easily accessible and requires the permission of each segment to use the data. The four-year public segments do not provide single, web-based points of entry to their student performance data or other educational outcomes.

When Governor Brown eliminated funding for CPEC, he challenged policymakers and lawmakers to develop a new higher education coordinating body. Since then, alternatives have been presented by state policy experts—one example is the Higher Education Investment Board, proposed by California Competes, a nonprofit organization to promote the public interest in higher education—as well as by policymakers in the legislature, such as Senator Liu. ¹²³ Although stakeholders have not yet agreed on what agency should be installed, state officials and policymakers have emphasized the importance of having an agency that informs policy decisions while remaining independent from the segments. As one policy expert stated in a personal communication:

It is going to be really important to create a leadership agency that can play a leadership role in credibly articulating what the policy goals are: What is the state all about? What are we in this business for? How would we know whether we are doing well or whether we weren't? How would we spend money intelligently if we wanted to improve the system? And what kind of legislation and accountability is needed? It has to be an agency that can raise those sorts of questions. We don't just need more administrative authority without addressing these other questions.

Whether the governor's challenge will result in a replacement agency is yet to be determined.

California's lack of state leadership has left the nation's largest public higher education system with no goals, no agenda, and no systematic strategy for improving educational attainment. Political indifference has resulted in continued deference to the segments, where each

segment is left to create its own policies rather than those that will support increasing educational attainment to meet overall current and future state educational and economic needs.

Absence of Statewide Finance Strategy for Higher Education

Some policy experts argue that higher education finance policy in California is on "autopilot." State appropriations, tuition setting, and financial aid are established separately and with no consideration as to how they align with statewide priorities. State budgets are left undecided late into the fiscal year, and the fiscal year is unaligned with the academic year, leaving little time for fiscal planning. For the past two decades, finance policy has been developed on a short-term or year-to-year basis with little policy discussion of long-term goals and consequences. In this environment, policymakers have failed to use powerful incentives built into the budgeting process to realize any strategic goals. The lack of leadership on higher education at the statewide level creates a finance policy void that has contributed to the decline in California college access and affordability. In particular, the fiscal policy disorganization threatens the state's commitment to affordability and access.

California has seen a long trend of state government disinvestment in higher education. John Aubrey Douglass, a senior research fellow at the Center for Studies in Higher Education on the UC Berkeley campus, contends that the Great Recession and prior economic downturns were not the sole culprits for the decline in state funding. Seismic demographic changes and a growing income chasm siphoned ever-larger slices of discretionary tax dollars. Postsecondary education traditionally competes with elementary and secondary education as well as healthcare. Douglass sees this struggle for resources becoming intense as state appropriations dwindle. Despite slight state funding increases in the past two fiscal years, it is unlikely that higher education funding will enjoy a return to prior high water marks. ¹²⁶

State Appropriations Are Not Targeted to Performance

State appropriations to higher education diminished substantially in California in the aftermath of the economic recession. As a recent report from the Public Policy Institute of California indicated, the decrease in state funding has been the most substantial change to higher education in the past five decades. ¹²⁷ UC and CSU have responded with tuition increases. ¹²⁸ The total higher education portion of the general fund in 2011-2012 was \$1.6 billion lower than in 2001-2002. ¹²⁹ Nevertheless, compared with other states, California was slightly above average in funding per FTE student. In 2011, the national average for public universities was \$6,290 compared with \$6,596 in California. In 2001, the national average was \$8,316 compared with \$8,443 in California.

State funding of the public higher education segments was traditionally based on an enrollment-driven formula. Allocations to UC and CSU were calculated by multiplying enrollment by an estimated marginal cost per student—a practice criticized because of the

inflexibility of this funding method due to its sole focus on enrollment.¹³¹ Performance-based funding of higher education is frequently touted as an alternative that gives more flexibility for states to pursue specific higher education policy goals.¹³² Governor Brown has vowed to set performance targets for the segments but has yet to initiate any concrete policies. The governor's recent effort to introduce performance-based funding was met with resounding opposition from UC and CSU, and the current funding formula does not provide incentives for enrollment or performance.

As noted previously, in the UC and CSU segments the appropriations process is largely determined through compacts with the governor. Both segments create budget requests and negotiate them separately with the governor. The legislature reviews the resulting proposals and sends them back to the governor for a signature or veto. This ad hoc process precludes long-term planning or coordination. As a legislative staff member commented in an interview, "[The segments are] basically told 'here's your cut, you guys figure out how many students you can enroll. You know better than we do."

The first of such compacts was a four-year agreement between UC, CSU, and Governor Pete Wilson in the early 1990s. It was originally intended to provide stability in higher education funding during times of economic uncertainty. The Wilson compact provided the model for several such segment-governor agreements to follow: the governor agreed to request a certain amount of General Fund revenue to support base budget increases, enrollment growth, and other priorities. UC and CSU in turn pledged to achieve specific program targets. Another "partnership" would follow during the Gray Davis administration from 1999-2003. Davis agreed to a 5% annual base increase for both UC and CSU. However, a recession in the early 2000s caused the governor to decrease the appropriation level to 2% in 2001 and then 1.5% the following year. This was gradually increased back to an annual base increase of 4%. 134

The Davis compact illustrates the unreliability of compact-based funding to provide fiscal stability or build broad political consensus for higher education outcomes. Despite the gubernatorial pledge to request a set share of the General Fund for UC and CSU, the appropriation level was instead driven by fluctuations in the economic health of the state. The continued ad hoc approach to state appropriations for UC and CSU (including the recent break of linking allocations from even enrollment) is particularly troubling, since it reveals a lack of commitment to achieving statewide goals. ¹³⁵ It also demonstrates the continued resistance to any identified shared goals or accountability measures. One analyst we interviewed observed:

Governor Brown, for whatever reason, has moved to this place that the universities really wanted. And that is, give them their funding with no strings attached or very few strings attached. There's no floor to the number of students they need to serve. It allows the universities to decide what they want to spend per student. That to me seems like a prescription for inefficiency.

The majority of CCC state funding is appropriated through Proposition 98. Passed in 1988, Proposition 98 provides a minimum funding guarantee to CCC and the K-12 public school system. This amount is seldom exceeded, though the state has failed to meet it on some occasions (CCC's guarantee is 10.9% of Proposition 98 funding). The state appropriates funding to the CCC Chancellor's Office, which then disperses funding to the 72 CCC districts with a consideration of enrollment. CCC also obtains funding through fees and local property tax revenue, although individual campuses have no control over these funding sources. ¹³⁶

The CCC funding mechanism is flawed. Proposition 98 creates competition between the public schools and higher education, since funding public education is compulsory while higher education funding is seen as "discretionary." Furthermore, Proposition 98 ends up being a "ceiling" rather than a "floor" for education funding.

Declining funding per FTE student has resulted in diminished capacity, in which eligible students for UC and CSU were actually being denied admission. These capacity roadblocks trickled down to the community colleges that, due to their own budget cuts, could not accommodate additional students and, as a result, cut courses and reduced enrollment. A 2010 CPEC study projected that approximately 200,000 prospective community college students were being denied access. ¹³⁸

Tuition Setting Is Not Tied to Finance Policy

One of the most important achievements of the 1960 Master Plan was that higher education in California expanded in a coordinated manner. The Master Plan efficiently managed growth, with a 300% increase in enrollment during the 1960s. The Master Plan succeeded in fulfilling its mission to provide open access to Californians, and it did so with the careful planning and construction of colleges and universities throughout the state.

The following decades of economic peaks and valleys tested the Master Plan. Despite the plan's ethos of no or low tuition to promote universal access, four-year colleges in California gradually instituted and raised tuition (historically referred to as "fees") to levels that are currently on par with or above most other states, although community colleges still have the lowest tuition in the nation. State fiscal support began to falter after passage of Proposition 13 in 1978. In addition to capping property tax increases, the passage of Proposition 13 unleashed a rash of ensuing propositions that limited spending. UC and CSU responded by raising tuition. 140

The evolution of tuition in the state took place absent broad policy debate and with no coordinated planning among the segments. In 1970-1971, UC instituted an educational fee. This came during Ronald Reagan's tenure as governor, when the state began to chip away at funding to higher education. Each recession brought a fresh round of tuition increases: California's broad access institutions—CSU and CCC—began charging tuition in 1979-1980 and 1984-1985, respectively. Tuition remained low and higher education enjoyed substantial state funding until 1985. Since the 1980s, a commitment to open access has eroded, with the segments increasing tuition to compensate for dwindling state allocations.

Since the 1990s, tuition has increased more rapidly amid a series of economic downturns. By 2010, tuition was nearly twice the 2000 level at UC and CSU and more than double at CCC. In 2000-2001, UC fees stood at \$4,914 per year; by 2009-2010, they were \$9,311 per year. Fees at CSU increased from \$2,280 in 2000-2001 to \$4,893 in 2009-2010. CCC fees began the decade at \$409 and by decade's end had reached \$780 (all fees adjusted for inflation in 2009 dollars). 144

Beyond ensuring that need-based institutional aid be tied to tuition levels, no statewide policy exists for establishing tuition. When it comes to tuition, UC and CSU are in the driver's seat; the governor and legislature are merely passengers, offering their opinions during the appropriations process. ¹⁴⁵ Much of the tuition setting for the past two decades in UC and CSU occurred during compacts between institution leaders and the governor. According to a higher education policy analyst, these were negotiations with both parties deciding the fate of tuition increases based on what either could receive or provide in return for hedging their position. The result of this arbitrary process for tuition setting is that UC is currently among the most expensive public research universities in the nation, while CSU ranks slightly above the national

average. 146 The ad hoc way that UC and CSU increase tuition and fees to cover state funding shortfalls creates an environment of unpredictable tuition hikes for students and their families.

Governor Brown recently offered two bargaining chips to encourage UC and CSU to rein in tuition. In the 2012-2013 budget, UC and CSU capped tuition at the 2011-2012 level to be eligible for \$125 million in additional funding. This was contingent on the passage of Proposition 30. Both segments accepted the offer, though a legislative staff member commented that this deal was not necessarily in CSU's best fiscal interest: "Financially it didn't make any sense. But because public and policymaker sentiment is so strongly against tuition increases, they realized it was in their best interest to roll back the tuition. So sometimes the legislature steps in and sets some pretty strong incentives."

The governor also established a tuition freeze until 2016-2017.¹⁴⁸ Tuition freezes have been used during prior recessions. While many welcome tuition freezes, such a policy poses some problems.¹⁴⁹ First, if the past is a good prediction of the future, the freeze will likely lead to a drastic increase when the freeze is thawed. Past tuition freezes most hurt those students who enrolled at the end of a tuition freeze or immediately after a tuition freeze, because tuition spiked following the freeze. Second, the practice of freezing tuition deflects attention from the state's responsibility to develop a long-term finance strategy.

While UC and CSU have more flexibility in determining tuition levels, the legislature sets tuition for CCC. ¹⁵⁰ The power of the CCC Board of Governors and the CCC Chancellor's Office is constricted constitutionally. Thus, while the local CCC districts are accountable for the performance of their campuses, they are not empowered to set tuition and, in fact, do not keep any tuition revenue.

Student fees in the CCCs comprised 6% per-FTE funding in 2012; the remaining funds come from the state. Many policy experts favor increasing CCC fees to a level comparable with other states. They argue that disadvantaged students have other aid options available to cover the cost of a CCC education and will not be deleteriously affected by an increase in fees. The current finance policy leads to cuts in classes, faculty, and other programs given the decline in state and local funding and the lack of fee revenue. According to a recent report from the Public Policy Institute of California, "the most dramatic consequence of funding cuts occurring over the past several years has been the reduction in the number of students served." Many of those students were community college students who could not enroll in classes due to cuts in course sections.

Financial Aid Is Increasingly Not Meeting Student Needs

Students attending postsecondary institutions in California have numerous options for financial assistance. State financial support consists of the Cal Grant program, the state's financial aid system that is available in all three segments, as well as targeted grant, scholarship, and loan programs. Institutional aid awards in UC and CSU continue to be tied to tuition levels. CCC students enjoy a generous fee waiver program. California students also receive federal Pell grants. All told, nearly half of all students in public institutions in the state receive need-based financial assistance to help pay for tuition. ¹⁵⁴

The California Student Aid Commission (CSAC) is responsible for dispersing financial aid, including grants and loans. Roughly half of this aid comes from the General Fund. The Commission's primary role is to coordinate the Cal Grant program, which combines elements of need-based and merit-based scholarships. ¹⁵⁵ Cal Grants A, B, and C are entitlements; there are also competitive Cal Grants for those who do not pursue postsecondary education immediately

after high school. Cal Grant A is used for tuition and fees, Cal Grant B covers related education costs (books, supplies, housing, transportation), and Cal Grant C applies to occupational or career colleges. ¹⁵⁶ Eligibility criteria for Cal Grants (GPA, family income, institution type) vary across grant types. ¹⁵⁷ CSAC disperses Cal Grants directly to the institutions. In 2011-2012, CSU received 31% of total Cal Grants awarded, CCC 30%, and UC 23%. ¹⁵⁸

Over the past decade, California has increased its effort to provide state financial aid to college students. The share of state appropriations for need-based financial aid has increased over time. However, in 2000-2001, 6% of state fiscal support for higher education was spent on state grants (24th highest in the nation). This share has increased to 15.9% by 2011-2012, which is the 13th highest in the nation. The number of Cal Grant recipients grew from 301,973 in 2008-2009 to 394,249 in 2012-2013. The amount of Cal Grants awarded in the UC and CSU segments gradually increased after 2001 and spiked after the 2008 recession. Cal Grants to CSU jumped from roughly \$200 million in 2007-2008 to approximately \$450 million in 2012-2013. At UC, the change was more dramatic. In 2007-2008, Cal Grants in UC were about \$300 million. By 2012-2013, they skyrocketed to roughly \$750 million. Cal Grants to CCC also increased, slowly climbing from \$50 million in 2001-2002 to about \$100 million 2012-2013. While CSU and CCC have more Cal Grant Awards, more total dollars, reflecting higher levels of tuition, go to UC.

A relatively large share of college students in California benefit from federal Pell grants, reflecting both an increase in tuition and mandatory fees and the lower incomes of many California families, as well as an increase in the federal Pell grant dollars. In the fall of 2010, 42% of CSU undergraduates and 42% of UC undergraduates received a Pell grant, compared with 36% of students enrolled at public four-year colleges nationwide. The share of Pell grant recipients at California community colleges has doubled over the past decade; in 2002-2003, less than 10% of students received a Pell grant, compared with 19.3% of students in 2010-2011.

The introduction of the Middle Class Scholarship Program in 2013 is a signal that middle-income families are finding it more difficult to pay the increasing costs of higher education in the state. Governor Brown approved the program, which is targeted to UC and CSU students (and is unavailable to CCC students). For students who do not qualify for Cal Grants and with an annual family income below \$100,000, tuition will be cut by 40%. Students with a family income between \$100,000 and \$150,000 will have their tuition reduced by 10%. The new program will be phased in over the next four years, beginning with a budget of \$107 million in 2014-2015 to \$305 million in 2017-2018.

The Campaign for College Opportunity, an advocacy group that encourages college participation of low-income students, criticized the new program, stating that "while the Middle Class Scholarship Program will indeed make it more comfortable for some families to send their students to college, we are concerned that California's leaders are not taking care of students with the most financial need. The fact that community college students are ineligible for the scholarship program means our largest group of college students in the state will continue to have unmet financial need." 166

Another financial aid policy that has drawn criticism in UC and CSU is the lack of cohesion between state aid policy (Cal Grants) and institutional aid. Education researchers Richardson, Martinez, and Shulock noted that "there is ongoing tension between state-level actors and segment leaders about the relationship between the state Cal Grant program and campus-based aid program." State agencies, including the LAO, argue that consolidating

institutional aid with Cal Grants would create a more unified finance policy and more efficient targeting of aid. ¹⁶⁸

Arguably one of the more pressing and controversial financial aid issues in CCC is the Board of Governors Fee Waiver program. Like students in UC and CSU, CCC students receive Cal Grants, Pell grants, and other scholarships, grants, and loans. Yet the most popular form of financial assistance in CCC is the fee waiver program. Approximately 30% to 40% of CCC students receive fee waivers. The number of students receiving fee waivers increased from 171,317 in 1992-1993 to 884,077 in 2011-2012. ¹⁶⁹ There are two significant problems with fee waivers. First, there are little criteria guiding the distribution of fee waivers, which are administered at the institutional level. Because CCCs do not keep their tuition revenue, they have no incentive to lower the number of fee waivers they offer. Secondly, fee waivers are disconnected from other statewide financial aid policies. Shulock and Moore state that compared with community college students in other states, CCC students receive fewer Pell grants. The students receiving Pell grants in CCC increased at half the rate of those receiving the fee waiver between 1992-1993 and 2012-2013 (111,726 to 437,549). ¹⁷⁰

The CCC Board of Governors recently took measures to limit the fee waiver, attempting to exclude those students enrolled in personal enrichment courses.¹⁷¹ Many higher education analysts we interviewed were highly critical of the fee waiver program. One analyst said, "Because we have a fee waiver instead of having a high enough tuition for students to get tuition tax credit, we leave a ton of federal money on the table. And the state makes up the tuition waiver difference. The colleges don't even have any incentives to cap their award of waiver because it's just going to be made up by the state. So this whole thing is pretty senseless."

The lack of strategic finance policy coordination compromises California's commitment to affordability and access. There is no postsecondary finance coordination among the segments or at the statewide level. Despite decades of declining appropriations and tuition spikes, there is no indication that the executive and legislative branches or the segments are prepared to begin a dialogue about statewide higher education goals and how to finance them.

Easing Student Transitions

We identified three areas of concern about how educational transitions occur in California: 1) the lack of alignment between the high school curriculum and training and education programs beyond high school; 2) legislative and administrative efforts to streamline transfer between two-year and four-year colleges; and 3) insufficient incentives for providing career-technical educational pathways.

Alignment Concerns between K-12 and Higher Education

The number of students who acquire a high school credential has been on the rise in California, even though the college-going rates (high school graduates going directly on to college) have declined. Unfortunately, many of these students are entering college underprepared and need to take courses in remedial education. The lack of consistent metrics in each sector to determine college readiness has hindered the transition of students from high school to postsecondary education.

Participation in the Advanced Placement (AP) program is often interpreted as a measure of college readiness because AP courses offer college-level curriculum for high school students.

However, participation in the AP program varies by student background in California, and AP exams do not capture the college readiness of many high school students from traditionally underserved groups. ¹⁷²

In California, another initiative for college readiness is the Early Assessment Program (EAP), which was developed by the California State University system in collaboration with the State Board of Education and the California Department of Education. The goal of the program is to determine whether an 11th grade student is ready for college-level work at a CSU institution. Since 2004, the EAP has tested the math and English skills of California high school students; at this time, this is the only statewide effort to assess college readiness. The program is intended to send students a signal about their college readiness before their senior year of high school; students who score "Ready for College – Conditional" or "Not Ready for College" on the EAP can use their final year of high school to improve their skills. Students who pass the exam are given "EAP status," which signals to the CSU institutions that these students are adequately prepared academically and exempted from taking academic placement courses if they enroll at a CSU institution. Most recent results show that approximately 82% of public high school juniors in California voluntarily take the EAP exam, totaling about 386,000 students.

Although EAP is a useful opportunity for 11th grade students to assess their readiness for college, it is not clear to what extent this program actually promotes college readiness. One research study found that taking the EAP exam was associated with decreased likelihood of needing remediation at one CSU campus. The However, since the results from the EAP exam do not come out until late summer before students' final year of high school, students who test "Conditionally Ready" or "Not Ready" for college-level work have just one year to improve their academic and other skills needed to succeed in college. Some analysts have argued that without adequate classroom- and school-level infrastructure that can support conditionally ready and not ready students in their senior year, the signal that EAP sends is not sufficient for improving the college readiness of high school students. The Furthermore, EAP results only provide a good indication of college readiness for those who plan to enroll in one of the CSU campuses. While CSU provides an important service to some of the students who take this exam, we must keep in mind that with its strict admissions standards, many Californians will not be admitted into a CSU, and will enroll in a community college. As such, the EAP represents a clear example of a segment trying to address a statewide problem from within its own silo.

A major obstacle in effective transition from high school to college in California is that "coursework between high school and college is not connected; students graduate from high school under one set of standards and, three months later, are required to meet a whole new set of standards in college." The disconnect between high school standards and college expectations is clear from the discrepancies between the results from CSU's Early Assessment Program (EAP) and the statewide California High School Exit Examination (CAHSEE) exam. While CAHSEE results show that a majority of students are academically prepared to graduate high school, ¹⁷⁹ the results from the EAP suggest that being prepared for high school graduation is not the same as being prepared for college-level work, since a substantial share of the students who perform well according to CAHSEE standards are not considered prepared for college-level work at four-year colleges in California.

The alignment of high school exit requirements and community college placement tests is also problematic. A study of alignment between high school assessment and community college placement exams in California found that high school assessment and college placement tests

were reasonably well aligned in English language arts (ELA), although not well aligned in mathematics. ¹⁸⁰ Furthermore, despite sufficient alignment in ELA, the study found that "the preparation of high school students in terms of mastering that content [was] seriously lacking," with about two-thirds of students measuring below proficient. ¹⁸¹

One initiative that may improve the transition between K-12 and higher education in California is the adoption of the Common Core State Standards (CCSS). In June of 2010, the National Governors Association and the Council of Chief State School Officers issued the Common Core State Standards for English Language Arts and Mathematics, which was adopted by the California Department of Education just a few months later. These standards are designed to provide a clear understanding of what K-12 students should be learning in order to prepare them for college-level work or workforce training programs after high school. California is currently piloting the assessment to determine if it adequately measures the Common Core standards.

Additionally, the California legislature has taken steps to update the accountability system in place in K-12. Currently, the primary accountability system for schools is the Academic Performance Index (API), in which performance is based on the results of standardized tests, including the CAHSEE. Senate Bill 1458 revises API, expanding it to include "college and career readiness indices, middle and high school promotion rates, and middle school matriculation rates, along with high school graduation and dropout rates." 184

Although the adoption of the Common Core State Standards is an important step to improve the quality of K-12 education in California, this initiative illuminates the current lack of accountability and the divide between K-12 and higher education in the state. Preparing California for the implementation of the Common Core State Standards "will require coordinated action by key policy actors." To start, California teachers must now be prepared to teach to the new Common Core standards, which will mean an overhaul of teacher preparation and professional development programs, as well as changes to the teacher evaluation systems. Without building capacity at the school level, it is doubtful that the standards will help improve college readiness in the state. ¹⁸⁶

Additionally, career and technical education (CTE) standards in the state must now be revised to align with the Common Core State Standards. 187

College Transfer: The Unfulfilled Mission of the Master Plan

A streamlined process for the transfer of students from CCCs to four-year colleges was a central component of the 1960 Master Plan, but recent decades were characterized by low transfer rates in California. Historically, low transfer rates in the state have been attributed to inconsistent statewide leadership and articulation. CCC previously had different transfer articulation agreements for all of its 122 colleges and 72 districts. In the absence of statewide coordination, a chronic obstacle for CCC students is the varying transfer course requirements among CSU institutions. To rectify this problem, the Student Transfer Achievement Reform Act, or Senate Bill 1440, was signed into law in 2010. SB 1440 calls for California Community Colleges to develop two-year, 60-unit degree programs—associate's degrees for transfer—for students interested in continuing postsecondary instruction at CSU for a baccalaureate degree. A student's satisfactory completion of the degree requirements for an associate's degree to transfer would entitle her to guaranteed admission into the CSU system with junior status. However, the CCC student would not be guaranteed admission to a particular CSU institution. The aim of SB 1440

was to not only create a less complex process for the transfer of CCC students to CSU but also to encourage students to complete an associate's degree.

Although SB 1440 was introduced by Senator Padilla, one higher education expert we interviewed expressed the view that leadership for this legislation was collectively provided by Charlie Reed and Jack Scott, former chancelors of CSU and CCC, respectively. Improving trransfer policy is critically important to improved educational success for underprepresented students. Forty percent of Hispanic students enrolled in California's community colleges plan to transfer to a four-year institution, but less than 10% do so. The mismatch has significant implications for Hispanic-student achievement given that 75% of the state's Hispanic college students start at two-year institutions. ¹⁹¹

After SB 1440 became law, the CCC and CSU systems formed the SB 1440 Implementation and Oversight Committee. ¹⁹² The committee, comprised of members of the chancellor's offices and academic senates of the two segments, is charged with coordinating SB 1440 implementation. The first step in the process has been to develop Transfer Model Curricula (TMC) for some of the more popular majors at CSU, such as psychology, and eliminating the confusion caused by varying major requirements at the schools within the CSU system. TMCs include a list of faculty-approved lower-division courses from CCC that prepare students for upper-division major courses at CSU (no more than an additional 60 units). In its 2012 progress report, the LAO found improvement in segmental relationships between CSU and CCC, in which faculty have approved TMC for 18 majors as of February 2012. ¹⁹³

The LAO provided a progress report to the legislature last year as required by the SB 1440 legislation. This report noted the creation and approval of a number of TCMs as well as the subsequent enrollment of students at select CSU institutions. However, the LAO also noted that considerable work was necessary to significantly increase access for CCC students, considering the limited number of associate's degrees for transfer that have been approved and the inconsistency of CSU institutions' acceptance of the new associate's degrees. While some colleges have made progress in creating clearer transfer pathways, there has been frustration over the slow and uneven implementation of these pathways. According to a local higher education policy expert, this legislation was "not transformational" but could be an example of voluntary requirements eventually leading to permanent expectations of the cooperation between California's two-year and four-year institutions. Deficits in data reporting add to the complexity of understanding how implementation varies from institution to institution since no database describing each TMC major is available at each individual CCC campus.

In order to increase the effectiveness of recent initiatives aimed at improving transfer between California's two-year and four-year colleges, the LAO recommended that the legislature provide more guidance regarding the expected role of each segment. The LAO is scheduled to provide the legislature with a more in depth progress report by 2015. Additionally, the Campaign for College Opportunity recommended that the legislature statutorily endorse the SB 1440 Implementation and Oversight Committee, since its formation and continued activity is voluntary on behalf of CSU and CCC. They have also suggested clarifying the responsibilities for each system office to encourage data sharing, as well as appointing a campus officer or office to be tasked with implementation.

In October 2013, follow-up legislation was introduced by Senator Padilla and signed by Governor Brown in response to the LAO's assessment that the implementation of SB 1440 of 2010 was uneven across campuses. ¹⁹⁹ The new bill, SB 440 of 2013, expands the majors listed under the previous transfer legislation with additional "areas of emphasis," which are degree

programs in broadly defined sciences areas (e.g., general sciences and social and behavioral sciences). The new law was met with opposition from some CCC and CSU representatives, who perceived the mandate to offer more general associate's degree programs as an encroachment on their academic autonomy. Proponents of the change, including the Campaign for College Opportunity, a nonprofit that supported SB 440, believed that the inclusion of more general programs was necessary to create more effective and flexible pathways from community colleges to the CSU system. Overall, while important steps have recently been taken to address the problem of low transfer rates in California, the structures that are aimed at facilitating statewide coordination of two-year to four-year transfer are in need of improvement. The transfer legislation's slow rate of implementation is a continuing source of frustration in the state.

Inadequate Incentives for Improving the Career-Technical Education Pathway

In California, career-technical education (CTE) is carried out jointly by high schools and community colleges, and there have been attempts to increase cooperation between the two sectors over the past decade. In 2005, the Career Technical Education Pathways Initiative was launched as a collaborative effort among community colleges, K-12 school districts, employers, and labor organizations, with the goal of "[increasing] the number and quality of career pathways and CTE courses, as well as student enrollments in CTE."²⁰² A senior system-level administrator at CCC described a recent initiative, whereby high school students can access community college facilities while still attending high school; the initiative is aimed at sustaining students' interest in career-technical education beyond high school.

While such initiatives are not uncommon, the state did not provide adequate financial incentives to bring CTE cooperation to scale. In recent years, initiatives to improve K-14 career pathways have been funded by competitive state grants; colleges that did not succeed in attracting grants had little incentive to work with high schools on developing CTE pathways. ²⁰³ In addition, the legislation that backed this initiative (SB 1070) is scheduled to sunset in 2015; this lack of long-term financial support for institutional initiatives might have discouraged colleges from investing in more effective CTE pathways. ²⁰⁴ Furthermore, policy experts argue that the funding mechanism for CCC contributes to the marginalization of the CTE mission at CCC. ²⁰⁵ Although CTE programs tend to cost more than non-CTE programs, this is not reflected in the CCC allocation formula, which funds all community college enrollment at the same rate, regardless of the type of program. ²⁰⁶

Lack of predictable, long-term financial support for CTE in California presents a challenge for building effective pathways from high school to college for students interested in career-technical education.

Conclusion

Our research suggests that the 1960 Master Plan of California was initially effective in managing enrollment growth, preventing mission creep, and promoting access for most Californians interested in pursuing postsecondary education. We found that higher education leaders in the state continue to express appreciation for the Master Plan's clear delineation of responsibilities but also raise concerns about the appropriateness of the plan for developing a highly educated

21st-century workforce. It appears that the only core tenet of the California Master Plan that is largely intact is the mission differentiation of the three public segments of higher education, and this has begun to erode with the CSU receiving approval for offering an Ed.D. degree in education. This tenet of the Master Plan is important, to be sure. Lost, however, are many of the core policies related to access, transfer, and affordability of higher education. There is little evidence that the continuation of the Master Plan can change the level of political indifference or help California navigate a new, 21st-century economy. There is also little evidence that the solutions developed by each higher education segment since 1990 to address California's changed environment will be sufficient for the challenges ahead.

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