

The Impact of Budget Cuts on California's Community Colleges

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Summary

In the aftermath of the Great Recession, which officially began in December 2007, funding for higher education in California has been severely curtailed, causing a great deal of fiscal pain for the state's community colleges. As set out in the Master Plan for Higher Education, the colleges serve many missions—providing coursework leading to an associate's degree or enabling students to transfer to a four-year college or university; offering vocational and career technical education; supporting basic skills development (such as pre-college level math and English courses); and extending a variety of self-enrichment courses to the general adult community.

However, budget constraints have made it increasingly difficult for the colleges to meet their missions and, consequently, for many Californians to obtain the education and skills they need to succeed in the current economic environment. While Proposition 30 and the 2013–14 state budget are likely to relieve some of the fiscal pain, recent experience has highlighted the need for the state's community college system to prioritize its spending and activities across its wide range of missions. In this study, we document how California's community colleges have adapted to the fluctuations in their funding and how their adaptations have affected students, from access to coursework to completion.

We find that the size of the recent budget cuts has been unprecedented, totaling more than \$1.5 billion (in constant 2011 dollars) over the past several years (from 2007–08 to 2011–12). These cuts are substantially larger than those that have occurred during past economic downturns in California. Proposition 30 (passed by voters in November 2012) partially reversed the trend, leading to \$210 million in additional funding for 2012–13. Still, the size of the increase pales in comparison to the size of the cuts in recent budgets. The most common feature in the long-term budget picture for the community college system has been the year to year volatility in the level of funding.

The California Legislature, which has the sole authority to set student fees at the colleges, has nearly doubled the fees over the past decade. But the increase in revenue from the fees has not compensated for the decline in state funding. The end result has been a reduction in total funding on a per-student basis throughout the community college system. Faced with this shortfall, the colleges have responded by cutting both staff and courses. They have reduced the number of full-time equivalent instructors and as a result increased class size to new highs. Since 2008, course offerings have declined by as much as 21 percent over the course of the academic year, and over 60 percent in the Summer term alone.

These staff and course limitations have led, in turn, to a dramatic reduction in access to the community colleges. Participation rates have reached a twenty-year low in California, with especially sharp declines over the past several years. Had participation rates remained at 2008–09 levels, the community college system would today be serving an additional 600,000 students. Enrollment declined across many groups, but the decline was particularly large among first-time students. This is troubling given California's long-standing need to increase college participation rates among its recent high school graduates.

The evidence suggests that not only are the colleges serving fewer students, but also providing fewer services to students who are enrolled. In our survey of over 100 community college officials, 77 percent said that cuts in state funding had a strong impact on students' academic experience.

California's community college system is likely to experience some restoration of state funding in the near term. However, the likelihood of full restoration is slim, and fluctuations in funding are certain to

continue, highlighting the need to weigh the system's diverse missions against its ability to accomplish any of them in light of the colleges' severely constrained budgets. Our study finds that under the current levels of funding, access (especially for first-time students) has become more difficult, thus raising concern about the ability of our public higher education system to produce the number of skilled workers demanded by California's economy.

A number of recent policy efforts have sought to improve student outcomes (for example, through priority enrollment and increased counseling and guidance). However, few of these efforts are cost-neutral; and given the evidence of declining enrollment, the state should consider not only how many students are being served but also which students are being served.

While additional revenue is needed, further increases in student fees cannot fully compensate for the unprecedented decline in state support without seriously hurting access. California voters have passed state and local propositions to increase support for education, and the governor's budget restores some of the cuts of recent years. State policymakers should identify ways to fund the state's community colleges in order to achieve the goals of the state's higher education system. Establishing clear goals and setting funding priorities that align with those goals would be a step in the right direction.

Understanding funding, resource allocation, and student outcomes

In this report, we examine the CCC funding environment, the services offered, and student access and outcomes in recent years, as well as in historical context. We acquired the data for our analysis from official CCC reports and through a survey of senior administrators throughout the CCC system, which we conducted during the fall of 2012 (see Technical Appendix A for details of the survey).

Contents

Summary	2
Contents	4
Figures	5
Tables	6
Introduction	7
How Does Current Funding Look in Historical Context?	9
How Have Community Colleges Dealt with Volatile and Shrinking Budgets?	13
Course Offerings	14
Faculty and Staff	17
Student Services	21
How Do These Changes Affect Student Access and Outcomes?	23
Access	23
Student Success	29
Policy Implications	32
References	35

Technical appendices to this paper are available on the PPIC website: www.ppic.org/content/pubs/other/313SBR_appendix.pdf

Figures

1	California Community College revenues, 1990–91 to 2011–12	S
2	California community college revenues per student, 1990-91 to 2011-12	10
3	Student fees at California community colleges, 1981-2012	11
4	Number of fee waivers by Board of Governors, 1992-2011	12
5	Number of course sections offered	14
6	Course Offerings in Summer Terms	16
7	Median section size	17
8	Number of full-time equivalent CCC employees by work assignment, 2000-2011	18
9	Employees per 100 FTE students at CCCs by work assignment, 2000-2011	19
10	Number of FTE credit-course Instructors by type, 2000-2011	20
11	FTE employees in guidance and counseling activities per 100 FTE students	22
12	Number of students enrolled in California community colleges, 1992-2011	24
13	Participation rates in community colleges per 1,000 adults in California	24
14	Community college enrollment of first-time students age 19 and younger compared to number of new high school graduates	26
15	Enrollment by number of units	27
16	Retention rates by course type, Fall 1992-2011	29
17	Success rates by course type, 1992-2012	30
18	Transfer rates of successive cohorts 1995–2005	31

Tables

1	Largest changes in course sections offered from Fall 2008 to Fall 2011	15
2	Changes in the number of FTE employees in classified support roles, 2008-2011	21
3	Enrollment by category of student, 2008-2012	25
4	Enrollment (FTES) by type of course, 2008–2012	27
5	Enrollment by Age, 2008–2012	28
6	Enrollment by Ethnicity, 2008–2012	28

Introduction

The California Community College system is the largest system of public higher education in the nation, serving a total of 2.4 million students in 2011–12.¹ With 112 colleges located throughout the state, the community colleges serve a diverse population across many geographies. While traditional college students (young, recent high school graduates) are well-represented in these colleges, large numbers of non-traditional students are also enrolled. The multiple missions of the community colleges—offering academic coursework, vocational and career technical education, basic skills development, and a variety of self-enrichment courses for the general adult community—predicate a diverse set of courses and students.

The diversity of missions and students, as well as the sheer size of California's community college system, presents unique challenges in terms of managing priorities in a world of volatile funding. In recent years, all of the systems of higher education in California have faced disproportionately large reductions in state general fund support. Reductions in funding for the California Community College (CCC) system have been less severe (in percentage terms) than those experienced by the California State University (CSU) and the University of California (UC), but because community colleges are much more dependent on state general fund support, any reduction in funding is arguably more strongly felt at the community colleges. The recent budget cuts should also be considered in light of the fact that the CCC system already spends less per student than community colleges in other states.²

Over the past six months, the funding prospects for the colleges has improved somewhat, given the passage of Proposition 30 in November 2012 and Governor Brown's January budget proposal. Nonetheless, current general fund support for the colleges remains remarkably low by historical standards; and the drastic cuts imposed during the Great Recession have raised latent questions about how to allocate scarce resources across the diverse set of priorities inherent in the CCC system. Even if the level of state funding is partially restored, many questions surrounding resource allocation and mission prioritization are likely to—and should—persist. The CCCs have been criticized for having relatively low rates of student success, as measured by completion and transfer rates; and concerns about access have been raised as well. At the same time, the need for the colleges is great, given the state's ever-increasing demand for highly skilled and educated workers. Whether the CCC will face further cuts or a restoration of funding, it is important to understand the relationships between funding, resource allocation, and student access and success. A better understanding of these relationships will hopefully lead to policies that provide both critical and efficient investments in the state's community colleges.

In this report, we document the fundamental components of this relationship. We examine the CCC funding environment, the services offered, and student access and outcomes in recent years, as well as in a historical context. We acquired the data for our analysis from official CCC reports and through a survey of senior administrators throughout the CCC system, which we conducted during the fall of 2012 (see Technical Appendix A for details of the survey).

We find that the CCCs have faced unprecedented budget cuts in the recent recessionary period, and we find evidence that colleges have responded by targeting their spending toward higher-priority missions. Mission prioritization appears to have been at work even before recent regulations by the Chancellor's Office called for such a strategy, and it may have been initiated due to long-term volatile budgets as well as goals to improve

¹ This enrollment number, which includes part-time students, is based on information from Data Mart, the California Community Colleges Chancellor's Office (CCCCO) management information system.

² Shulock, Offenstein, and Esch (2011).

student success.³ Regardless of the original intent, our analysis suggests that because lower-priority missions already represent only a small fraction of CCC budgets, the severe cuts of recent years, as well as any further budget cuts, are most likely to affect the high-priority missions of the colleges. The highest priority missions of the CCCs have experienced reductions in course offerings, increases in class size, and consistent declines in enrollment among first-time students.

All of this reflects a sea change in the goals of the California community college system. As stated in the Master Plan for Higher Education, the CCCs were to serve *all* Californians who could "benefit from instruction." Quite the contrary, and in spite of a growing population of potential students, funding shortfalls throughout the CCC system have led to significant reductions in staff, considerably fewer course offerings, and severely restricted enrollment. California's four-year public colleges and universities can increase tuition to mitigate budget cuts. However, CCCs have a limited ability to raise revenue by increasing fees. Thus, they face the dilemma of trying to meet their mission of ensuring access to students regardless of ability to pay, while facing funding limitations that have led them to restrict general access to an important segment of higher education in California. The optimal levels of state funding and student fees, as well as the ability of CCCs to serve their various missions, are issues the general public and policymakers need to discuss and reconcile. This report seeks to shed light on these issues, providing information about California's community colleges today and in the context of recent history.

Survey of senior administrators

To obtain additional information on how budget cuts have affected community colleges, we surveyed senior administrators in community colleges throughout the state. In the survey, we ask about the size of recent budget cuts and how they have been implemented internally, about the tradeoffs campuses are facing and the choices they are making, and about the opinions of senior management with regard to how these choices are affecting their students and their college.

Our survey included senior administrators in all of the community colleges in California. We targeted the three groups of administrators who would have been involved recently in the budget process and program implementation—the CFO/Vice-President of Business or Administrative Services, the Vice President of Student Services, and the Vice President of Instruction or Academic Affairs. We obtained names and contact information for each participant from professional affiliations and websites and from the Chancellors Office.

The total sample included 309 individuals in all 112 community colleges in California between October and December 2012. We received a total of 104 responses representing most of the community college districts in the state (55 of 72), with 90 of the surveys fully completed and the remaining 14 partially completed. Roughly half of the responses were obtained before the passage of Proposition 30 and roughly half after, allowing us to examine changes in attitudes due to the passage of the proposition. Unless otherwise noted, our analysis of results includes only those who completed the full survey. We include the survey instrument in Technical Appendix A.

The Impact of Budget Cuts on California's Community Colleges

8

³ The Community Colleges Board of Governors approved regulations in September 2012 "that will establish system-wide enrollment priorities designed to ensure classes are available for students seeking job training, degree attainment or transfer, and to reward students who make progress toward their educational goals" (CCCCO 2012b).

How Does Current Funding Look in Historical Context?

Over the past few decades, state funding support for the community colleges has been volatile, with sharp declines during recessionary periods and sharp increases during economic recoveries. This pattern reflects the volatility of the state's overall revenue, which is strongly affected by changes in capital gains and wages among high-income families and individuals. Reductions in state support for community colleges have been especially pronounced in the most recent downturn. Figure 1 shows revenues received by California's community colleges over the past two decades, providing breakdowns by the source of funds. By some measures, the size of the most recent cuts is unprecedented. Between 2007–08 and 2011–12, the community colleges faced cuts totaling almost \$1.5 billion, far larger than in any other period. For example, during the recession of the early 2000s, total revenues declined by about \$400 million from 2002–03 to 2003–04. Since the majority of community college revenue comes from the state's general fund, it's not surprising that this source is also responsible for the majority of declining revenue.

The CCC revenue reductions are unprecedented in both the steepness of their decline and in the number of consecutive years in which they have been sustained. Both trends contribute to the extraordinary overall decline in funding between 2006 and 2012. Previous declines in total funding were either shorter in duration or less severe in depth, allowing colleges to make temporary cuts or cuts around the margins of core mission activities. However, the current scenario, because it is both severe and sustained, is more likely to affect core mission activities and long-term decisions of the college system.

9,000 otal funds in 2012 dollars (millions) 8,000 7,000 Total 6,000 State General Fund 5,000 Local 4,000 Student Fees 3,000 Lottery Funds 2,000 State School Fund 1,000 0 2008-09 2006.07 School year

FIGURE 1
California community college revenues, 1990–91 to 2011–12

SOURCES: California Postsecondary Education Commission (CPEC) Fiscal Profiles, 2010; Legislative Analyst's Office (LAO) Budget Summary, 2012.

NOTES: 2009–10 to 2011–12 numbers are revised estimates from LAO. Revenues after 2008–09 exclude state school fund. Numbers are in 2011 dollars, adjusted using the Bureau of Labor Statistics (BLS) consumer price index (CPI-U series). General Funds for school years 2009–10 and 2010–11 include funds from the American Recovery and Reinvestment Act (ARRA).

The responses in our survey of senior administrators reflect these dire financial straits. The most common answer to a question regarding the financial health of their institution was "fair" (40% of respondents)

9

with an additional 20 percent indicating that their institution was in poor or failing financial health (with a small but statistically indistinguishable improvement following the passage of Proposition 30). Looking ahead, these administrators ranked budget constraints and declining state support as the most important challenges they face over the next two years. Even after the passage of Proposition 30, 90 percent of administrators indicated that potential cuts in state funding and continued budget shortfalls are an important or very important concern for them. It is apparent that CCC administrators believe that the system will continue to face important tradeoffs even in a post-Proposition 30 funding world.

We should also keep in mind that the state's population and the number of community college students has grown substantially over the past couple of decades. When we measure the state reduction in support on a per student basis, the magnitude of the current budget cuts stands out even more starkly (Figure 2). For example, between 2006–07 and 2011–12, total funds per student (in full-time equivalents) fell by about \$1,600 dollars, declining from almost \$6,700 to \$5,100 (in 2011 dollars). By comparison, during the almost equally severe recession of the early 1990s, support per student declined by less than \$700 per student. Total revenues per student have declined to the lowest levels in two decades, matching the previous low established during the severe recession of the early 1990s (Figure 2).

7,000 Funding per FTES in 2012 dollars 6,000 Total per FTES 5,000 State Gen Fund Per FTES 4.000 Local Per FTES 3,000 Student Fees per FTES 2,000 Lottery Funds per FTES 1.000 State School Fund Per FTES 0 2006-07 2008.09

FIGURE 2
California community college revenues per student, 1990–91 to 2011–12

SOURCES: CPEC Fiscal Profiles 2010; LAO Budget Summary 2012.

NOTES: 2009–10 to 2011–12 numbers are revised estimates from LAO. Revenues after 2008–09 exclude state school fund. Numbers are in 2011 dollars, adjusted using the Bureau of Labor Statistics (BLS) consumer price index (CPI-U series). General Funds for school years 2009–10 and 2010–11 include funds from the ARRA. LAO Estimates of FTES for CCC are not final.

School year

With relatively few resources to begin with, California's community colleges are not well-positioned to weather such cuts. Thanks in part to Proposition 98 guarantees, community colleges have experienced lower proportional reductions in funding than UC and CSU. However, even in good times, California's community colleges receive far less per student than UC, CSU, or even K–12. In 2010–11, for example, revenue per community college student was just over \$5,000 per year, compared to about \$7,500 per K–12 student and more than twice that amount for UC and CSU students.⁴ Moreover, community colleges are highly dependent on state funds. Unlike the state's other public sectors of higher education, community colleges have no significant sources of external revenue. At CSU and especially at UC, private giving, grants, and contracts provide substantial sources of revenue (although most of that revenue is dedicated to specific purposes that do not

 $^{^4}$ CCCCO (2012a), in full-time equivalents.

include undergraduate instruction). The most important additional source of funding for undergraduate instruction at UC and CSU is student tuition, which accounts for about half of the operating funds used to provide undergraduate instruction. In contrast, student fees at community colleges are relatively low; and many students, because of their low income, receive waivers that allow them to attend without paying any fees. Thus, fee revenues at the community colleges are quite modest.

CCC fees are set system-wide annually in the state's budget, and they have varied widely over time. Out-of-state and international students are subject to higher fees, but these students account for only a small fraction of total enrollment in the system. Student fees were raised to \$46 per unit in the 2012–2013 school year—representing a 28 percent increase over the previous year and more than tripling the fee over the decade (Figure 3). Despite these increases, the level of fees remains quite low compared to other states. The average annual cost of attending a California community college in the 2010–11 academic year was about one-quarter of the average cost in the rest of the nation (LAO, 2011).

FIGURE 3 Student fees at California community colleges, 1981–2012

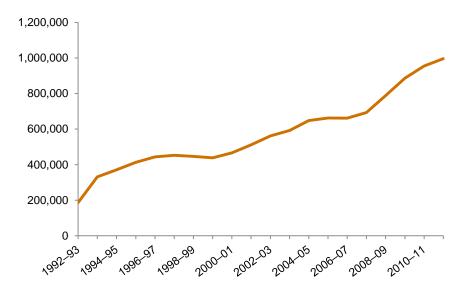


SOURCE: CCCCO (2012).

NOTE: Prior to 1984-85, there were no fees.

Generating revenue though student fees is also limited by the fact that a large proportion of students receive fee waivers and aid in various forms. In particular, the system's Board of Governors waives fees for a large fraction of students, granting such waivers to all students who meet financial need requirements. The number of such awards has been increasing for at least two decades (Figure 4). However, the rate of increase has increased sharply since the onset of the Great Recession. Between 2006–07 and 2010–11, the number of Board waivers increased more than 50 percent. In recent years, as many as one-third of CCC students have received such waivers (LAO 2011).

FIGURE 4 Number of fee waivers by Board of Governors, 1992–2011



SOURCE: CCCCO Data Mart (2012).

Even if the Board granted fewer waivers, student fee increases—even at the high rate experienced recently—would not compensate for the sharp decline in CCC revenues. This is due to the fact that student fees make up only a small share of per-FTE funding, on the order of about 6 percent of per-FTE funding in 2012. In light of these limits on revenue generation, the community college system must deal with budget cuts and uncertainty by altering its spending patterns. In the following section, we examine how these spending patterns are reflected in the courses and services offered to students.

How Have Community Colleges Dealt with Volatile and Shrinking Budgets?

California's community colleges fulfill a wide variety of missions, employ tens of thousands of faculty and staff, and serve a wide variety of students. So where and how might such a large and diverse organization restrict activities in response to budget cuts and volatility? In this section, we examine the primary ways in which the CCC system can manage its costs: reductions in course offerings, reductions in faculty and staff, and reductions in student services.⁵ Where possible, we relate the trends in cost-cutting activities to the various CCC missions, so that we might better understand the hierarchy of CCC's priorities.

California Community Colleges: Missions

California's community colleges serve a wide variety of student needs and academic goals under the umbrella of four principal missions.

- Degree and transfer: Courses leading to an associate's degree and/or transfer to a fouryear university.
- Career technical education: Career technical courses typically leading to a certificate (also referred to as vocational).
- Basic skills development: Remedial courses both credit and non-credit; instruction in English language; citizenship courses.
- Self-enrichment: Programs or courses available to the community for enrichment in a broad range of areas.

These missions are accomplished through two types of courses.

- Credit: Courses taken for credit toward a degree, certificate, or transfer.
- Non-credit: Remediation or self-enrichment courses that do not count toward a degree, certificate, or transfer.

Students are not limited to participation within a single program or intention (which can complicate one's understanding of the official data). For example, a student seeking an associate's degree may initially take non-credit basic skills courses. For this reason, students are not classified in official data in accordance with the missions described above, but according to the following classifications.

- First time: Enrolled in college for the first time after high school.
- Continuing: Enrolled in the current session and also enrolled in the previous regular session.
- Returning: Enrolled at the reporting college after an absence of one or more primary terms
- Transfer: Enrolled at the reporting college after transferring directly from another institution of higher education.

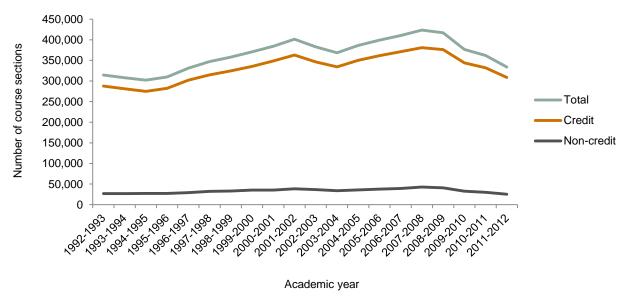
⁵ We focus on costs related most closely to instructional academic services offered. Colleges can also manage costs by reducing non-instructional operating expenses where possible, for example by minimizing utilities, maintenance, and repairs, etc.

Course Offerings

California's community colleges offer numerous types of courses day and night, throughout the year, serving the various missions of the CCCs. Changes in the total number of course sections offered may reflect colleges dropping entire courses or simply reducing the number of sections of a given course.

As can be seen in Figure 5, the total number of sections offered has plunged to its lowest level in the past fifteen years. The number of sections available mirrors the economic business cycle, declining during recessions and growing during recoveries. Consistent with the severity of the Great Recession, the reduction in section offerings over the past few years has been the most precipitous in the entire period. Between its peak in the 2007–08 academic year and its recent low in the 2011–12 academic year, the number of sections offered fell from about 420,000 to 334,000, or 21 percent.

FIGURE 5 Number of course sections offered



SOURCE: CCCCO Data Mart (2013).

NOTE: Academic year includes course sections between Fall-Summer terms.

A recent survey of CCC presidents conducted by the Chancellor's Office suggests that course offerings continued to decline through Fall 2012 in 71 percent of the colleges; only one-quarter of colleges surveyed expected to increase the number of sections they offered. Similarly, our survey of senior administrators indicates that funding reductions have been "extremely harmful" (61 percent) or "harmful" (27 percent) to the ability of institutions to maintain course offerings.

The decline in overall number of sections for an academic year is composed of changes across terms and changes across course types. In the case of course types, note that the decline necessarily resulted almost entirely from reductions in credit-course sections, because credit courses make up over 90 percent of all course offerings. Table 1 shows the credit-course programs where the largest number of sections were cut between Fall 2008 and Fall 2011. The course sections in these programs account for over half of all sections at CCCs but account for over 70 percent of the cuts experienced over this period. The largest cuts occurred in the fine arts and education programs (courses such as physical education, music, and dance). These were followed closely by cuts to business and management programs (section cuts in office technology courses accounted for half of the overall decline in these programs).

While credit-course sections account for the bulk of cuts, non-credit course sections were cut more precipitously. The number of non-credit sections declined at a faster rate than the number of credit sections (35 percent decline compared to 14 percent, respectively, between Fall 2008 and Fall 2011). The second half of Table 1 lists noncredit course categories where the largest cuts in number of sections occurred between 2008 and 2011.6 Over half of the non-credit sections that were cut were those serving older adults. This was affirmed in the responses to our survey, with one administrator noting, "we are taking the community out of the community college." The depth of cuts to non-credit courses for older individuals is not surprising, given the prioritization of CCC missions reflected in our survey of senior administrators. Although more than 30 percent of respondents believe that providing continuing education for adults of all ages is a very important role of their institution, there is much greater support for the core academic and career technical education missions. Preparing students for transfer to a four-year college receives the most support as a very important role for CCCs (94%), followed closely by preparing students for the workforce (89%). However, the statistics on non-credit course sections indicate that these missions, too, may be suffering due to budget cuts. The second largest decline occurred within short-term vocational or career technical non-credit courses between 2008 and 2011. While colleges appear to cut more courses outside of core academic missions, they are constrained in their efforts to address budget shortfalls by cutting courses because core academic courses make up the bulk of the colleges' activities.

TABLE 1
Largest changes in course sections offered from Fall 2008 to Fall 2011

Credit course program	Change (#)	Change (%)	Share of all credit course sections (%)	Share of section decline (%)
Total	-22,886	-14.0	100.0	100
Fine and applied arts	-3,617	-18.2	12.2	15.8
Education	-3,568	-24.2	9.0	15.6
Business and management	-2,265	-21.5	6.4	9.9
Interdisciplinary studies	-2,045	-21.9	5.7	8.9
Engineering and industrial technologies	-1,802	-20.3	5.4	7.9
Humanities (letters)	-1,479	-6.4	14.1	6.5
Public and protective services	-1,363	-21.7	3.8	6.0
Non-credit course category	Change (#)	Change (%)	Share of all non- credit course sections (%)	Share of section decline (%)
Total	-5,058	-34.5	100.0	100.0
Courses for older adults	-2,646	-57.6	31.3	52.3
Short-term vocational program/career technical	-957	-30.7	21.2	18.9
English as a second language (ESL)	-436	-15.2	19.5	8.6

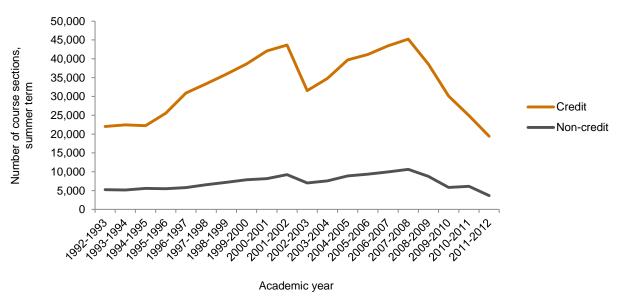
SOURCE: CCCCO Data Mart (2013).

NOTE: The credit programs and non-credit categories listed here make us over 50 percent of all course sections within the respective category. Most courses in the "Interdisciplinary studies" program include those related to guidance and counseling, as well as English as a Second Language.

Looking more closely at changes in course sections offered by term, we find further evidence that colleges attempt to protect core academic missions. While section offerings declined by a similar rate in the fall and spring sessions during the downdraft of the recession (about 14 percent each), summer course offerings fell even more sharply, declining by about 60 percent between 2008 and 2012 (Figure 6).

⁶ Note that non-credit courses—like credit courses—are also registered by "program." However, we choose to examine non-credit course categories to better understand the students being served by non-credit courses at CCCs. When we list non-credit courses by program, we find that the largest decline in number of sections occurred in education (about 1500 fewer sections), fine and applied arts (950 fewer), interdisciplinary studies (800 fewer), and family and consumer sciences (700 fewer).

FIGURE 6 Course offerings in summer terms



SOURCE: CCCCO Data Mart (2013).

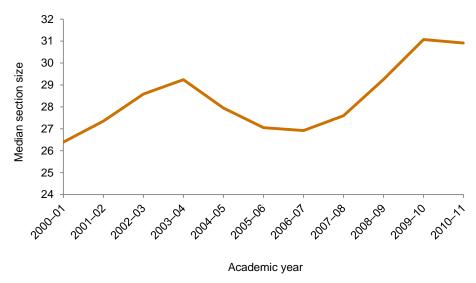
Although fewer courses are offered in summer to begin with—at most one-third as many as in the fall or spring term—a higher proportion of summer course sections were cut than in either the fall or spring terms. These cuts were even more prevalent among non-credit-course offerings, which plunged 65 percent between 2008 and 2012. The reduction in summer course offerings suggests that community colleges are tackling budget cuts by prioritizing offerings in the primary fall and spring academic terms. However, reductions in summer offerings may slow the completion rates for some students, as well as reduce the earnings for some faculty and staff who previously relied on summer income.

Course reductions are not only likely to create difficulties for students seeking a degree or intending to transfer, but also to create disincentives for students seeking to enroll in courses fulfilling the wide variety of other CCC missions, such as English language instruction or career-technical certification.

Of course, one way to alleviate the negative effects of course reductions would be to allow increasing enrollment in the sections that *are* offered. And in fact, average class size has increased in recent years, because as the number of sections has declined, enrollment has continued to increase. In Figure 7, we show the median section size as measured by the ratio of student enrollment in a term to number of sections.⁷

⁷ Specifically, the denominator includes total course sections active as of the first census of enrollment during the term. These statistics were obtained from Perry (2012).

FIGURE 7 Median section size



SOURCE: Perry (2012).

The median number of students per section has been higher in the past two academic years than in any previous year over the past decade. The senior administrators responding to our survey of community colleges indicated that they expect class size to continue to increase through the current academic year. The increase in section size, coupled with the decline in the number of courses or sections offered, suggests that colleges are using multiple methods to try to handle budget cuts, while still serving as many students as possible.

There is also evidence that many students have trouble obtaining the courses they need. This problem is difficult to measure, since we only observe students who are able to register for a course, not those who are not. However, there is evidence that an increasing number of students have been placed on waiting lists for fully enrolled course sections. In our survey of administrators, 79 percent of respondents indicated that the number of students on waiting lists has grown over the past two years. Similarly, a survey by the California Community College Chancellor's Office found that 80 percent of community colleges had waiting lists for Fall 2012 courses, and 85 percent had waiting lists for course sections. Almost 500,000 students were included on these waiting lists (CCCCO 2012a).8

Faculty and Staff

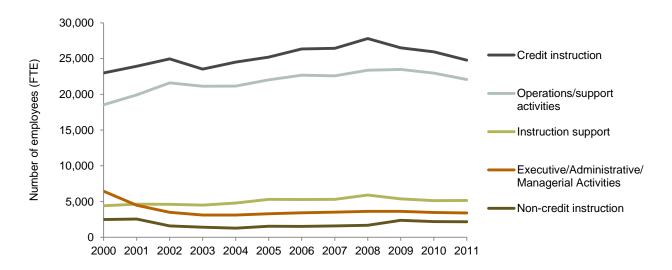
As discussed in the preceding section, the community colleges have cut the number of classes they offer across the board in all of the subject areas serving their wide variety of missions. Class sizes have increased as well. Not only have sections been dropped and class sizes increased, but faculty and staff have been cut as well. Containing employee costs are generally accomplished by reducing the number of employees and/or by reducing salary and benefits. Regarding the latter, our survey of administrators suggests that a large share of the community colleges have already implemented salary and benefit freezes or reductions (45% and 32%, respectively). Among the colleges that have not yet implemented such measures, the vast majority (more than 70%) are considering them in their efforts to address their budget shortfalls.

17

⁸ This count of wait-listed students likely includes duplicates (i.e., individual course wait-lists rather than unique students wait-listed).

The number of employees at the community colleges has been reduced in recent years. Figure 8 shows changes in the number of employees (on a full-time equivalent basis) in major employment categories over the past 11 years.

FIGURE 8
Number of full-time equivalent CCC employees by work assignment, 2000–2011



SOURCE: CCCCO Data Mart (2012), derived from the Report on Staffing.

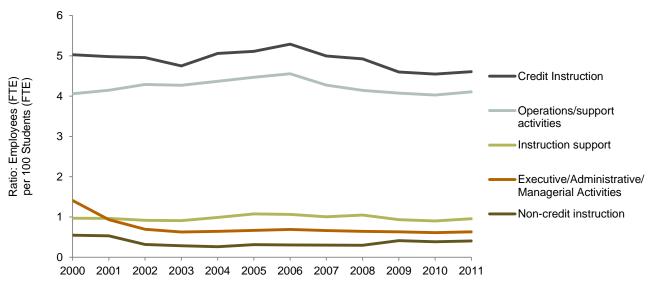
NOTE: Reporting period includes Fall term of each year.

Over the past decade, employment in the system increased to a high in 2008 of just over 67,000 FTE employees. Since then, employment levels have steadily declined, falling nearly 8 percent by 2011. Sixty percent of the decline involved credit-course instructors. By 2011, the number of FTE employees involved in credit-course instruction numbered about 25,000, not much higher than the number of such employees in 2004–05. However, it should be mentioned that the system served more students in 2011 than in the earlier period—at least 100,000 more.

As shown in Figure 8, more than two-thirds of CCC employees are involved in credit-course instruction and operations/support activities. Thus, cutting the ranks of employees involved in administration and non-credit instruction roles will not move the system-wide total much, at least on a count basis. The responses from the senior administrators in our survey indicate that indeed at most institutions, streamlining administrative positions and reorganizing administrative units has already been implemented to address their budget constraints (55% and 48%, respectively). These were the most commonly used measures among a long list of alternatives.

As shown in Figure 9, the number of employees has declined on a per-student basis as well, suggesting that each employee is serving more students. The figure also shows that the per-student reduction of employees involved in credit-course instruction and operations/support activities began in 2006, a year before the recession.

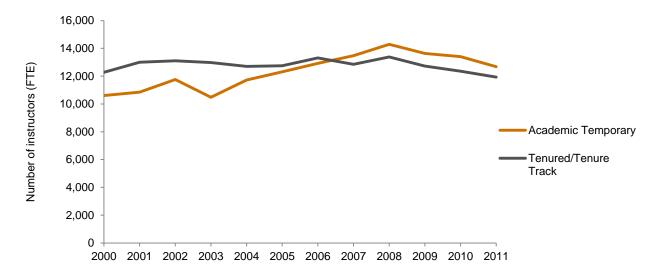
FIGURE 9 Employees per 100 FTE students at CCCs by work assignment, 2000–2011



NOTE: Reporting period includes Fall term of each year.

We also examined changes in employment among credit-course instructors by tenured, tenure-track, and temporary status. (The first two categories are counted together in official statistics on system employees.) Colleges strive to maintain a sufficiently high ratio of students taught by tenure and tenure-track instructors relative to temporary instructors. The specific guideline is for 75 percent of students (on a full-time equivalent basis) to be taught by full time faculty and 25 percent by adjunct faculty. On average, temporary instructors earn only \$1.45 less per hour than tenured and tenure-track instructors (\$68.20 and \$69.65, respectively, in 2011), a rather small difference. However, these hourly salary figures do not incorporate the full cost of hiring tenured versus temporary instructors, which is higher in the case of tenured instructors. We found that the decline in credit-course instructors since 2008 was the result of declining numbers of both tenured and temporary instructors, and at a similar rate (Figure 10).

FIGURE 10 Number of FTE credit-course instructors by type, 2000–2011



NOTE: Reporting period includes Fall term of each year.

These statistics do not incorporate differences in workload or hours worked for these instructors. If colleges meet the 75/25 guideline for students taught, there is likely to be a difference in workload across tenured and non-tenured faculty. The decline in tenured faculty despite increasing number of students may signal that tenured faculty are teaching more students relative to temporary faculty.

The figure also reveals that before the recession, a longer-term trend was under way in which the employment of temporary instructors was growing while the employment of tenured and tenure-track instructors remained basically flat. This growth in employment of temporary instructors may allow college administrators to adjust employment levels in a more expeditious and cost-efficient manner, should the need arise. One mechanism for enabling this transition would be to replace retiring tenured instructors with temporary instructors; and our survey of college administrators reveals that, in fact, a notable share of institutions—31 percent—have promoted early retirement programs as a way to address budget concerns. An additional 18 percent indicate that such a consideration is under discussion.

The second largest category of CCC employees consists of operations and support personnel. Table 2 presents the specific work activities of classified support employees.⁹ As reflected in the table, the largest numerical cuts between 2008 and 2011 occurred in instructional support services, followed by other student services.

⁹ Classified support employees are not one and the same as operations and support employees, a broader category. However, the vast majority of operations and support employees are categorized as classified support for purposes of tracking their administrative and support activities.

TABLE 2
Changes in the number of FTE employees in classified support roles, 2008–2011

	2008	2011	Change (#)	Change (%)
Admissions and records	1277	1222	- 56	- 4
Ancillary services	2128	1890	-238	-11
Auxiliary operations	314	260	- 54	-17
Community services & economic development	366	304	- 62	-17
General institutional support services	4554	4409	-145	- 3
Instructional administration & governance	2156	2075	- 81	- 4
Instructional support services	2358	2010	-348	-15
Plant operation and maintenance	4134	4013	-122	- 3
Other student services	2751	2495	-256	- 9
Physical property and related acquisitions	59	42	- 17	-29
Planning, policymaking, and coordination	464	487	+ 23	+ 5
Student counseling and guidance	846	733	-114	-13

NOTE: Reporting period includes Fall term of each year.

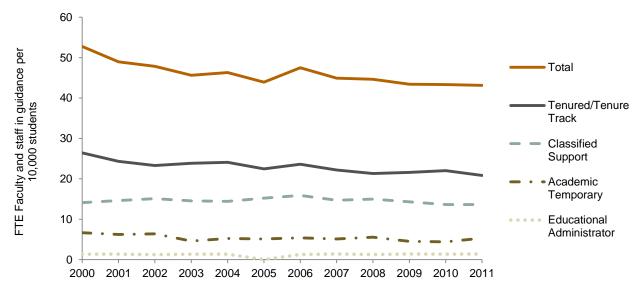
The considerable reduction in the ranks of support staff could raise concerns about the upkeep of the infrastructure across the large CCC system, as well as the quality of its operations. The responses in our survey suggests that budget cuts have, indeed, diminished the quality of campus operations and support. Over three-quarters of the administrators responding to the survey agree or strongly agree with the statement that "Budget cuts initiated by my institution in the past three years have done major damage to the quality of campus operations and support services." And almost all respondents (84%) believe that any further cuts in operations and support will cause additional harm.

While reductions in some types of support services may affect the quality of education in terms of the tangible functioning of operations and infrastructure, reductions in others are related more directly to student academic achievement through the counseling and guidance functions of faculty and staff. We discuss this area of operations in the following section.

Student Services

Academic services, such as guidance in a student's academic plan and progress, have been identified as key components in improving outcomes for students in California's community colleges (Student Success Task Force, 2012). However, resources in this area are likely to be limited, given the budget constraints discussed above, as well as the increasing demands on a smaller and smaller number of faculty and staff, who also counsel students. As shown in Table 2, student counseling and guidance staff represent only a small share of all support (i.e., non-instructor) staff. However, not only support staff but also, importantly, faculty provide counseling and guidance to students. Figure 11 shows changes in the number of employees of all types—support staff as well as faculty—assigned to guidance and counseling activities. These statistics reveal a decline in the faculty and staff in guidance roles that has been under way since 2000 with few exceptions. Underlying this per-student decline is an overall 9 percent decline in FTE faculty and staff working on guidance and counseling activities between 2007 and 2011, with just over 2,300 faculty and staff as of 2011.

FIGURE 11 FTE employees in guidance and counseling activities per 100 FTE students



NOTE: Reporting period includes Fall term of each year. FTE employees are scaled by 10,000 FTES in the Fall term. Full time equivalent employees listed by code 63, "Student Counseling and Guidance" are shown here.

It is difficult to obtain information on how many students used counseling and guidance services and how intensively. However, course-section data suggest that fewer students are accessing guidance and counseling. The credit course on career guidance and orientation was among those experiencing the largest loss in number of sections between 2008 and 2011—a decline of about 350 sections or 22 percent (this course is counted under "interdisciplinary studies"). Correspondingly, about 24 percent fewer students enrolled.

A majority of senior administrators who responded to our survey agreed with the statement that budget cuts have done "major damage" to student academic support services (47% agree, 18% strongly agree). In fact, more respondents believed that budget cuts had done major damage to support services than believed that cuts had damaged the quality of academic programs in general. Such responses may reflect the trade-offs required by budget constraints, with priority given to protecting core academic programs relative to support services, despite the understanding that all such services may affect student success.

How Do These Changes Affect Student Access and Outcomes?

It is primarily through the community college system that the state's goal of ensuring affordable (or free) higher education opportunities for all Californians, as expressed in the Master Plan more than 50 years ago, has been realized. However, the continuing cuts in state funding and resulting reductions in services have raised growing concerns about the ability of the colleges to maintain their broad access to education. And the budget cuts might also affect student progress and completion. On the one hand, fewer resources could mean that students have a more difficult time enrolling in courses necessary for their degree or certificate and have fewer support services, including counseling, to help them reach their goals. On the other hand, students who remain in the system might be those most likely to succeed, with less able students shut out of the system entirely. In this section, we examine changes in student access and success in light of the funding shortfalls within the CCC system.

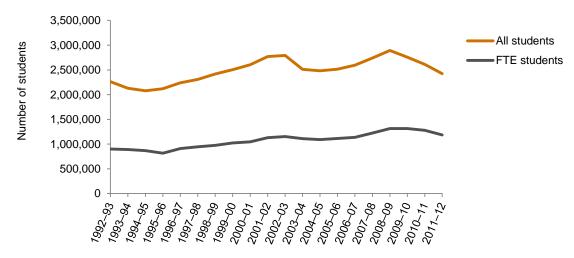
Access

Community colleges cannot restrict enrollment by denying admission to eligible students; and because eligibility requires only a high school diploma (or the equivalent) or the ability to benefit from instruction, almost all adults in California are eligible. Rather than deny students admission, community colleges restrict access by eliminating course and section offerings. In many cases, students are unable to attend community colleges simply because they cannot get the classes they need to arrive at their goals.

Administrative data confirm that California's community colleges have experienced an unprecedented falloff in enrollment. Over the past few years (from 2008–09 to 2011–12), total enrollment at California's community colleges has declined by almost a half-million students (Figure 12), substantially more than the decline in the recession of the early 2000s. This decline has occurred even as the age-15-and-older population has increased in the state, meaning that participation rates (students per 1,000 state residents age 15 and older) have declined at an even faster rate. By 2010–11 participation rates had reached a twenty-year low in California, declining especially sharply over the past few years (Figure 13). In fact, if participation rates had remained at 2008–09 levels, California's community colleges would have served an additional 600,000 students. The decline in the number of FTE students has been less severe, an indication that part-time students have been those most affected by the budget cuts. Between 2008–09 and 2011–12, overall participation rates declined by 21 percent, whereas the FTES rate declined by 15 percent.

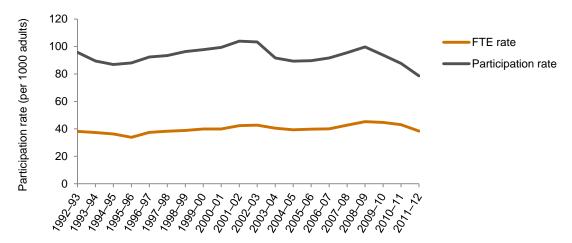
 $^{^{10}}$ The same pattern in participation rates is observed if different base populations (e.g., adults ages 18 to 64) are used.

FIGURE 12 Number of students enrolled in California community colleges, 1992–2011



SOURCE: CCCCO Data Mart (2012).

FIGURE 13
Participation rates in community colleges per 1,000 adults in California



SOURCE: Authors' calculations based on enrollment data from CCCCO Data Mart (2012). Population estimates from California Department of Finance (1992–2010) and U.S. Census Bureau 2011 Population estimates are for residents age 15 and older.

The largest enrollment declines have occurred in the summer term. Between 2009 and 2012, summer enrollment declined by 57 percent or almost 500,000 students. Similar declines in summer enrollment were recorded during the budget crises in the early 2000s.¹¹

Decisions about which courses and sections, and even faculty, to cut have important implications for student access. Many colleges have based their decisions upon a desire to protect their core functions and students. For example, the evidence suggests that most have decided to prioritize enrollment of students already in the system. Almost all of the respondents (94%) in our survey of college administrators indicated that certain students have priority in course enrollment, with continuing students most commonly given the highest priority. Recent high school graduates and basic skills students were the least likely to be favored in such a way.

¹¹ Summer enrollment of continuing students declined less sharply than that of other types of students. Thus, continuing students now account for over 60 percent of summer enrollment, compared to just 50 percent a few years ago. Special-admit students have almost been eliminated from summer sessions, now accounting for only 4 percent of students.

Giving enrollment priority to continuing students (students enrolled in the previous semester) should improve student outcomes, including acquisition of an associate's degree or vocational certificate and success in transferring to a four-year college or university. Setting enrollment priorities makes sense, especially because community colleges have been criticized for the low completion rates of their students.

Given this policy preference, it is not surprising that the number of continuing students has increased over the past few years, even as total enrollment has declined (Table 3). The largest rates of decline have occurred among special-admit students (K–12 students who also enroll in a community college course), but this is a relatively small category of students to begin with. Numerically, the sharpest declines have occurred among returning students (those returning after an absence of one or more primary terms) and first-time students. The largest declines for returning students occur in the fall (perhaps because continuing and first-time students are given priority in the fall). The largest declines for first-time students occur in the spring.

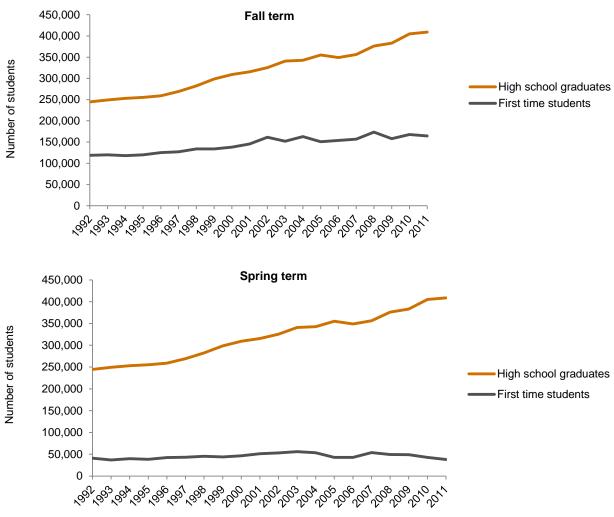
TABLE 3
Enrollment by category of student, 2008–2012

	Fall 2008	Fall 2011	Spring 2009	Spring 2012	Fall change (%)	Spring change (%)
State total	1,793,508	1,654,187	1,813,104	1,635,320	-7.8	-9.8
Continuing student	833,972	972,277	1,077,511	1,128,638	16.6	4.7
Returning student	310,930	197,456	238,464	178,873	-36.5	-25.0
First-time student	308,203	262,440	159,290	118,474	-14.8	-25.6
First-time transfer student	162,408	124,511	149,038	106,259	-23.3	-28.7
Special-admit student	65,239	37,086	71,894	40,332	-43.2	-43.9
Uncollected/Unreported	112,756	60,417	116,907	62,744	-46.4	-46.3

SOURCE: CCCCO Data Mart (2012).

The declining enrollment of first-time students at the community colleges is troubling, given California's long-standing need to increase college participation rates among its recent high school graduates. As shown in Figure 14, the gap between the number of new high school graduates and the number of young students enrolling in the community colleges has been widening. Between 2008 and 2011, the number of high school graduates increased by 9 percent, while enrollment of young, first-time students at the community colleges dropped by 5 percent. An even wider gap is evident in the spring term: Between 2009 and 2012, the gap between high school graduates and college enrollment grew by 29 percent. Coupled with the declining enrollment rates of recent high school graduates at UC and CSU, these trends do not bode well for one of California's most critical needs—a well-educated workforce.

FIGURE 14 Community college enrollment of first-time students age 19 and younger compared to number of new high school graduates



SOURCE: CCCCO Data Mart (2012).

Community colleges have tried to protect enrollment of students pursuing academic and vocational goals. As shown in Table 4, enrollment declines were lowest among students pursuing academic courses transferable to four-year colleges and universities. Declines were greatest among non-credit and basic skills students. However, it should be noted that non-credit and basic skills students have always constituted only a small share of enrollment, even before the recent declines. By 2011–12, as measured in full-time equivalents, non-credit and basic skills students accounted for about 5 percent and 11 percent of enrollment, respectively. Thus, large shortfalls in state funding that lead to budget cuts in the colleges affect more than just non-credit and basic skills students.

¹² The reduction in non-credit enrollment is part of a long-standing trend. Between Fall 1993 and Fall 2011, non-credit enrollment (FTES) declined by 13 percent, even as credit enrollment increased by 37 percent.

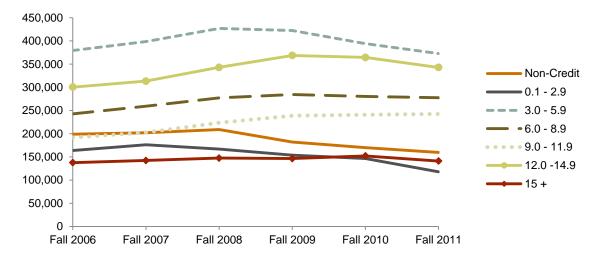
TABLE 4 Enrollment (FTES) by type of course, 2008–2012

	Fall 2008	Fall 2011	Spring 2009	Spring 2012	Fall change (%)	Spring Change (%)
Credit Status	526944	511812	526034	498201	-3	-5
Non-Credit	37548	26754	38390	29245	-29	-24
Transferable Credit	400258	394473	406119	391666	-1	-4
Basic Skills Total	65968	57776	61319	55570	-12	-9
Basic Skills Credit	42500	38986	37810	35076	-8	-7
Basic Skills Non Credit	23467	18790	23509	20494	-20	-13
Vocational Education Total	169650	159647	173182	157295	-6	-9
Vocational Education Credit	163018	154828	165848	151911	-5	-8
Vocational Education Non Credit	6632	4819	7334	5384	-27	-27

SOURCE: CCCCO Data Mart (2012). NOTE: Figures are in FTE students.

The vast majority of community college students are part-time students. Over the past few years, the largest percentage declines in enrollment have been among students who take only one course for credit and among those who take only non-credit courses (Figure 15). This trend is consistent with enrollment priorities that favor continuing students with academic and vocational goals.

FIGURE 15 Enrollment by number of units



SOURCE: CCCCO Data Mart (2012).

The priorities established by community colleges have meant that enrollments among the oldest and youngest age groups have declined especially sharply (Table 5). Between 2008–09 and 2011–12, enrollment declined by about 25 percent among those older than age 34, and by about 50 percent among those younger than age 18 (mostly high school students who take community college courses). Participation rates among older students have reached their lowest level in at least two decades. In contrast, students most likely to be continuing students, those 20 to 24 years old, have experienced relatively small changes in participation rates.

TABLE 5 Enrollment by age, 2008–2012

Age	2008–09	2011–12	Change (%)
<18	225,041	115,098	-49
18 and 19	524,582	471,566	-10
20 to 24	761,043	739,866	-3
25 to 29	370,797	324,334	-13
30 to 34	223,679	194,160	-13
35 to 39	177,843	134,383	-24
40 to 49	274,023	211,088	-23
50 +	321,191	232,762	-28

SOURCE: CCCCO Data Mart (2012).

Declining enrollment has not led to substantial changes in ethnic diversity in community colleges. Ethnic groups that are underrepresented at UC and CSU, notably Latinos and African Americans, are well represented in community colleges. Declines in enrollment have been sharpest among white students, with Latino student enrollment actually increasing between 2008–09 and 2010–11 (Table 6). These changes, to some degree, reflect California's changing demography, with rapidly growing Latino populations and declining white populations. Participation rates (enrollment per 1,000 adults of the same ethnic group) declined between 2008–09 and 2010–11 for every group, although the decline for Latinos was much lower than for other ethnicities. That there was not a great falloff in Latino representation is good news, given that Latinos are underrepresented at UC and CSU. However, the declining rates among African Americans, one of the most educationally disadvantaged groups in California, are troubling.

TABLE 6 Enrollment by ethnicity, 2008–2012

Total Enrollment	2008-09	2011–12	Change (%)
Total	2,894,133	2,424,073	-16
African American	217,709	180,969	-17
Asian	431,150	351,310	-19
Latino	858,119	870,597	+ 1
White non-Hispanic	972,247	756,709	-22
Other, unknown	414,908	264,488	-36
Participation rates	2008-09	2011–12	Change (%)
Total	99.7	80.6	-19
African American	123.7	101.6	-22
Asian	114.0	85.4	-29
Latino	90.5	83.9	-7
White non-Hispanic	73.5	58.5	-15

SOURCE: CCCCO Data Mart (2012) and authors' calculations.

Given these data, it is clear that the most dramatic changes in the student body of the community colleges in recent years have been in age composition (fewer very young and older students) and in status (fewer first-time students). What cannot be discerned from the data is whether additional selection effects are present with regard to student enrollment. Specifically, prospective students who are not well-prepared for college might now be less likely to seek enrollment in the CCC system. And given the rising cost of attending CSU and UC, students who would otherwise seek enrollment in those universities might be increasingly likely to attend a community college, leading to positive selection effects.

Student Success

Given an environment of fiscal austerity and declining enrollment, attention has focused on the need to ensure that those students who *are* enrolled succeed in accomplishing their goals. Certainly, being unable to enroll in needed courses and dealing with declining support services are likely to frustrate students and impede their progress. However, it is possible that broad measures of student progress might trend in the other direction as well. Since it is difficult to obtain high-demand courses, students who are able to enroll may have greater incentives to stay enrolled and to successfully complete a course on their first try. Moreover, student progress and completion rates might increase if the students who are still in the system are the students who are most able and most motivated. At the same time, other determinants of student success, including the quality of teaching and institutional policies and practices, might be changing in ways that could help or hinder student progress, irrespective of cutbacks in funding. And finally, shifting job opportunities may affect measures and rates of student success. Clearly, there are any number of potential explanations for changes in student outcomes. However, the data available at the time of this writing did not enable us to determine which factors may be affecting these outcomes, and our goal here is simply to document the changes in outcomes, a necessary first step.

In this section, we examine changes in student progress and completion rates, focusing on data over the past several years. We find that student success has increased along many dimensions. We examine three measures of success in particular: course completion, course success, and transfer rates.¹³ The course completion rate is the share of students who complete a course; the course success rate is the share of students who complete a course with a passing grade; and the transfer rate is the share of students (from a particular cohort) who successfully transfer to a four-year college or university. By all three measures and across all major demographic groups that we can identify, we find that student outcomes have improved over the past few years. However, as noted above, we cannot discern whether these improvements stemmed from responses to budget cuts, underlying student characteristics, CCC policies, or broad economic conditions.

Course completion rates—otherwise known as retention rates—have improved over the past twenty years, with the sharpest increases occurring during the budget crises of the past few years (Figure 16). Retention rates have increased for all types of courses, with students in basic skills courses posting the most impressive long-term gains.

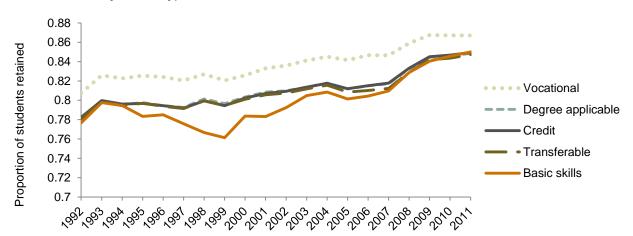


FIGURE 16 Retention rates by course type, Fall 1992–2011

SOURCE: Authors' calculations based on CCCCO Data Mart (2012).

NOTE: Retention rates are the share of students completing a course.

¹³ We use CCC administrative data to measure these outcomes. See Bahr, Hom, and Perry (2005) for a thorough analysis of measuring transfer rates.

After many years with little movement, course success rates—the share of students who receive a passing grade in a course—have increased notably over the past few years (Figure 17). Success rates have increased for all types of courses, with the largest gains occurring in basic skills and credit courses (including both degree-applicable and transferable credit courses).

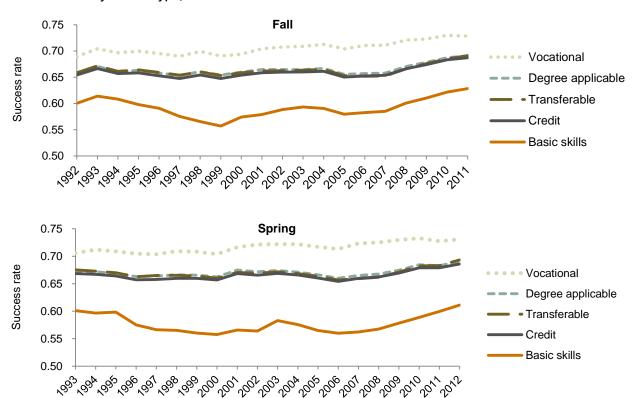


Figure 17 Success rates by course type, 1992–2012

SOURCE: Authors' calculations based on CCCO Data Mart (2012).

NOTE: Success rates are the share of students completing a course with a passing grade.

Course success rates have improved for most age groups, but especially for the youngest community college students (18 and 19 years old). ¹⁴ This is as we might expect if potential UC and CSU students were increasingly choosing to attend community colleges rather than the four-year universities. And in fact, over the past few years, participation rates of recent California high school graduates at UC and CSU have declined as these institutions have limited their enrollment of eligible students in the face of their own budget cuts (Johnson, 2011).

The sharp increase in course success rates for young students has occurred across all course types. Moreover, in spite of a decline in absolute numbers, the *share* of young students taking more rigorous courses rose between 2008 and 2011. Specifically, basic skills enrollment of 18 and 19 year olds fell 16 percent between Fall 2008 and Fall 2011, compared to a 9 percent decline in credit-course enrollment and a 6 percent decline in transferable course enrollment. These changes in enrollment and success rates support the possibility that young community college students are more prepared for college than those of just a few years ago, and that those least prepared are not enrolling at the same rates as in the past. Finally, it is worth noting that success rates have been increasing for every ethnic group.¹⁵

¹⁴ See Technical Appendix B for additional detail.

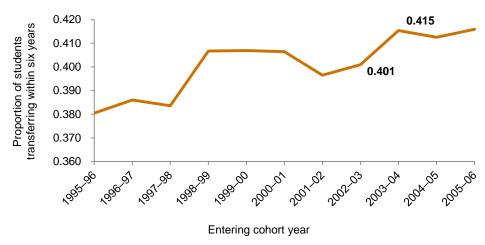
¹⁵ Gains have been more modest for African American students.

Transfer rates provide a more comprehensive longer-term picture of student success. Because students need to earn a certain number of units to be accepted by most four-year colleges and universities, transfer rates are a function of course completion and success over many terms. For data collection and tracking purposes, the CCCCO looks at all incoming students and defines an initial cohort as transfer-intending students, based on their course-taking patterns in their first year at a community college. (Although most students entering a community college in any given term are *not* transfer-intending students, transfer is perhaps the most important function of community colleges and is relatively well measured.)

Over the past ten years, transfer rates have increased, with two notable jumps (Figure 18). The first occurred with the 1998–99 entering cohort (transferring by 2004–05) and the second with the 2003–04 entering cohort (transferring by 2009–10). The increases are modest (only a percentage point or two), but they suggest that budget cuts have not hurt student transfer rates. If budget cuts were reducing students' ability to transfer, we would expect lower transfer rates for the most recent cohorts, yet the evidence shows that rates are relatively high for these cohorts. Moreover, transfer rates appear to be improving for every ethnic group (see Technical Appendix B).

One notable finding is that the size of the transfer-intending cohort has declined with the most recent cohorts. This, too, is consistent with the selection effect we discussed above. The sharp decline in the size of the transfer-intending cohort coincides with the most recent increase in the transfer rate, suggesting that fewer but more prepared students are pursuing transfer.

FIGURE 18
Transfer rates of successive cohorts, 1995–2005



SOURCE: CCCCO Data Mart (2012)

In sum, community college students appear to be completing courses and transferring at rates at least as high as those of a few years ago. These results are consistent with community college's prioritizing the enrollment of continuing students, as discussed earlier in this report. Because continuing students are more likely than other students to gain access to classes they need to transfer or complete their degree, they are less affected by budget cuts than are other students. Strong declines in enrollment mean that students who remain in the system might be more motivated and prepared for college, leading to improvements in completion and success rates even in the face of budget cuts.¹⁷

¹⁶ Bahr, Hom and Perry (2005), CCCCO (2012a), Bahr and Booth (2012).

 $^{^{17}}$ For example, a shift in priority away from basic skills students—a group with low success rates—should translate into higher completion and transfer rates among remaining students. See Hill (2008) for a discussion of the persistence rates of basic skills students.

Policy Implications

California's community colleges have enjoyed a well-deserved reputation for ensuring access to higher education for a wide range of students. Research and official reports have shown that community colleges are very good at getting students in the door, but not as successful at ensuring that students achieve formal outcomes (such as earning an associate's degree or a career technical certificate or transferring to a four-year institution). Over the past decade, the emphasis on improving student outcomes has increased. For example, the California Community College Student Success Task Force focused most of its recommendations on improving formal outcomes for students, rather than on access (CCCCO 2011). The resultant legislation, SB 1456, signed into law by the governor in September 2012, has established policies that should improve student outcomes, including providing orientation and developing education plans for new students as well as requiring continuing students to make satisfactory academic progress to remain eligible for BOG fee waivers. This focus on improving student outcomes makes sense in an era of limited resources (less formal outcomes, such as taking a course or two to build skills, should also be recognized). Access without completion is an empty promise.

Improving student outcomes is essential if we are to help students and the state meet the increasing demand for highly skilled workers, yet the most significant policy decision the state has engaged in with respect to community colleges over the past few years has been to *reduce* funding for the community colleges. Additional funding from Proposition 30 and potential increases in the 2013–2014 budget will at least partially restore the cuts. The governor's budget proposal also suggests changes that may reduce the uncertainty of CCC budgets over time.

The most dramatic consequence of the funding cuts occurring over the past several years has been the reduction in the number of students served. In other words, access to higher education, a hallmark of the community colleges, is declining. Our analysis suggests that declining access has occurred across almost all student groups—not just those seeking educational services at the "low" end of the mission priority spectrum. However, our analysis of student success suggests that it may be lower-ability students who are not entering CCCs in recent years.

Given the falloff in their funding, many community colleges are making hard choices. Reductions in course offerings are one such choice. Although the colleges have rigorously cut many of the courses considered less central to their academic and vocational missions, such courses constitute only a very small share of CCC course offerings. Given the size of the recent reductions in state support, it is clear that colleges do not have the luxury of cutting only peripheral programs (i.e., those that have no apparent connection to earning a degree or certificate or transferring to a four-year institution); and thus they've had to reduce the number of sections and courses available in core-mission subject areas. Although increasing class size may mitigate some of the effects of the declining number of these courses, there are fewer faculty and staff, on average, to serve students (not to mention an increasing burden on the remaining staff). It is unclear how much further these cuts can be pushed before the colleges can no longer even appear to satisfy the missions set out for them in the state's Master Plan for Education—class sizes are at 20-year highs and instructor-to-student ratios are at 11 year highs. CCCs already serve more students at a much lower cost than any higher education system in the state. With new funding from the governor's budget and proposition 30 comes the opportunity to target the additional funds in accordance with the priorities of policymakers and the community colleges.

¹⁸ Sengupta and Jepsen (2006), Shulock and Moore (2007), Hill (2006).

¹⁹ Some research suggests that substantial shares of students who do not complete a formal outcome still experience wage gains from attending community colleges. These students, known as "skill builders," attend colleges for specific career-oriented goals (Bahr and Booth 2012).

Recent policy attention has also focused on improving student success at the community colleges. Many of the discussions and actions seek to "incentivize" student success by giving enrollment priority to students making good progress—those who set academic plans and are receptive to guidance and counseling. In an attempt to encourage course completion, the governor's budget proposal would base funding on enrollment at the end of the term, rather than on the beginning of the term. The proposal would also restrict state funding for students with excessive credits (above 90 units). These efforts may, to some extent, mitigate the problem of declining access (especially for first-time students)—for example, by reducing the number of students with excessive credits would free up space for new students.

And so we now turn to a fundamental consideration of the tradeoff between funding and the ability of the CCCs to achieve their wide-ranging missions. It is worth noting that all of the missions provide value for the students accessing them, so prioritizing some missions over others already rations services. However, even taking the mission prioritization as given, current funding levels are unlikely to allow the community colleges to achieve their goals without further changes. The state has opted to provide additional funding to the CCC system through Proposition 30; but clearly, even that funding is perceived as insufficient, given Governor Brown's January 2013 budget proposal that includes an additional restoration of funds. Even if the budget proposal is adopted for 2013–14, CCC funding is not likely to reach pre-recession levels. And on a per student basis, that level would be low by historic standards.

In order to bridge the gap between the demand for community college courses and the limits in supply, community colleges will need to develop additional revenues and will have to find more cost-effective ways of delivering higher education. The ability of CCCs to lower the costs of delivering courses and programs is difficult to assess. Perhaps efficiencies might be gained by limiting some course or section offerings. Consolidation of community college districts could save on administrative costs. However, instruction represents the largest category of expenditures within the system, and colleges have been moving for a long time toward an arguably more cost-effective ratio of tenured to non-tenured faculty. It's possible that larger class sizes or online courses that can serve more students per instructor might generate some efficiency gains, but this must be weighed against concerns about maintaining quality and instructor support and morale. Online courses may also create some savings in physical infrastructure, but it is likely that such courses would also generate other costs in technological infrastructure or support. While many forms of education are moving toward new online environments, the ultimate results for students are still unknown.

Finding additional sources of funding will probably be difficult to accomplish. From the perspective that California is best served by encouraging all individuals to obtain at least some post-secondary education—while at the same time state funding is unlikely to keep pace with the demands on the community college system—it would seem that finding additional funding must be, at the very least, included among other possibilities. One source of additional funding might be local parcel taxes. Prior to November 2012, only one district had ever considered a parcel tax (San Mateo Community College District passed a parcel tax in June 2010). However, in November 2012, four districts placed parcel taxes on local ballots, and two passed (San Francisco and Peralta).²⁰ It might behoove other districts to consider this approach and make the case to local voters that passing a parcel tax might be in their own best interests, ensuring greater accessibility to postsecondary education in their community.

Absent increases in state or local funding, the most likely source of additional money would be students and their families. Fees only account for 6 percent of all CCC funds. The state legislature could increase student fees substantially, recognizing that California's community college students pay a far lower share of their education

The Impact of Budget Cuts on California's Community Colleges

²⁰ Sacramento State University Institute for Social Research and Center for California Studies (1995–2011), California Elections Data Archive prepared for the California Secretary of State, accessed January 2013 at www.csus.edu/isr/reports/california_elections/index.html.

costs through tuition or fees than students in other states, while also acknowledging, of course, that this approach may compromise the ideal of free tuition for all residents, a cornerstone in California's Master Plan for education. Increasing student fees, however, may curb access for some students. Of course, the Board of Governors could waive the fees for needy students, as it currently does, ensuring that affordability and access goals are maintained. Still, the "sticker shock" of higher fees may deter some students from attempting college.

Alternatively, it may be worth re-evaluating the need-based criterion of the BOG fee-waiver system. BOG waivers currently limit the CCC's ability to generate revenue from about one-third of their students. Income thresholds are relatively high, suggesting that marginal BOG-qualifying students may be able to pay CCC fees at the current level. The LAO's 2011–12 budget analysis cites the example of an independent student living alone qualifying for a BOG waiver with an income of up to \$45,000, or \$80,000 with one child (LAO 2012). Reducing such thresholds may not necessarily discourage access, given that lower income students are likely to be eligible for federal grants. In fact, it's possible that BOG waivers crowd out funding that might come from the federal government. One option for addressing this situation would be to require students to apply for federal financial aid in order to receive a BOG waiver. High schools, colleges, and the state should strive to ensure that students are made aware of the availability of federal aid, and should make every effort to help students complete the necessary forms. In fact, Governor Brown's 2013–14 budget proposal would require all students seeking a BOG fee waiver to submit a Free Application for Federal Student Aid (FAFSA).

Alternative fee scenarios are possible, and at least one college in the CCC system has experimented with this possibility. Santa Monica City College, understanding the tradeoff between funding and enrollment, sought to charge students who could not get into certain classes higher tuitions, so that the college could add additional classes for them.²¹ This pay to play (or pay to learn) approach was sharply criticized and ultimately abandoned in the face of opposition and questions about legality. But Santa Monica City College was not wrong about the tradeoff. UC and CSU have also recognized the tradeoff between funding and enrollment, and tuition now accounts for about half of the funding required for undergraduate instruction.²² One approach to this problem would be to charge more for those who can pay more. A sliding scale or increase in fees that accompanies increases in grants could increase total revenues, hold low-income students harmless, and allow colleges to enroll more students. Again, students must be made aware of the availability of federal aid and provided with help in completing and submitting the required forms.

In our survey of college administrators, the vast majority of respondents identified the lack of state support as the most important challenge facing their institutions over the next two years. The administrators also believed that less than half (44%) of elected public officials and only one-quarter of civic leaders were well aware of the financial problems in community colleges. Proposition 30 and the governor's 2013–14 budget may provide additional support, but this potential new funding does not fully restore funding to levels seen before the budget cuts. Two facts are certain: the CCC continues to face a financial crunch, and California's public higher education system needs to produce the educated labor force increasingly demanded by the California economy. It is incumbent upon both the community colleges and the state to find creative ways to generate revenue and create the efficiencies that will enable the colleges to meet their most basic mission—providing skilled workers who can effectively participate in California's vibrant and dynamic economy.

²¹ Exceptions were made for students in financial need.

²² Both of these institutions reserve a large share of tuition revenue to provide grants for low-income and even middle-income students.

References

- Bahr, Peter Riley, Willard Hom, and Patrick Perry. 2005. "College Transfer Performance: A Methodology for Equitable Measurement and Comparison." *Journal of Applied Research in the Community College* 13 (1): 73–87.
- Bahr, Peter Riley, and Kathy Booth. 2012. "What's Completion Got to Do with It? Using Course-Taking Behavior to Understand Community College Success." The RP Group and Learning Works Inquire Guide. Available at www.rpgroup.org/sites/default/files/What's%20Completion%20Got%20to%20Do%20with%20It-Inquiry%20Guide_1.pdf.
- California Community Colleges Chancellor's Office. 2011. "Refocusing California Community Colleges Toward Student Success." Available at http://californiacommunitycolleges.cccco.edu/portals/0/docdownloads/pressreleases/sep2011 /pdf_%20student_success_task_force_draft_recommendations_sept_2011.pdf.
- California Community Colleges Chancellor's Office. 2012a. "Focus on Results. Accountability Reporting for the California Community Colleges." Available at http://californiacommunitycolleges.cccco.edu/Portals/0/reportsTB/March ARCC 2011.pdf.
- California Community Colleges Chancellor's Office. 2012b. "California Community Colleges Board of Governors Approves System-wide Enrollment Priorities to Increase Student Success." Available at www.californiacommunitycolleges .cccco.edu/Portals/0/DocDownloads/PressReleases/SEP2012/PRESS_RELEASE_BOGPRIORITY_091012x_FINAL.pdf.
- California Community Colleges Chancellor's Office Data Mart. 2012, 2013. Management Information Systems database, Available at http://datamart.ccco.edu/.
- Hill, Elizabeth G. 2006. *Promoting Access to Higher Education: A Review of the State's Transfer Process.* Legislative Analyst's Office. Available at www.lao.ca.gov/2006/CCC_transfer/CCC_transfer_011706.pdf.
- Hill, Elizabeth G. 2008. *Back to Basics: Improving College Readiness of Community College Students*. Legislative Analyst's Office. Available at www.lao.ca.gov/laoapp/pubdetails.aspx?id=1847.
- Johnson, Hans. 2012. *Defunding Higher Education: What Are the Effects on College Enrollment?* Public Policy Institute of California. Available at www.ppic.org/main/publication.asp?i=988.
- Legislative Analyst's Office. 2011. "The 2011–12 Budget: California Community College Fees." Available at www.lao.ca.gov/analysis/2011/highered/ccc_fees_012711.aspx.
- Perry, Patrick. 2012. "The CCC's in the 2000's: Examining the Effect of Volatile Budgets on Enrollment." Report to the Board of Governors, mimeo, California Community Colleges Chancellor's Office.
- Sengupta, Ria, and Christopher Jepsen. 2006. "California's Community College Students." Public Policy Institute of California, California Counts 8, no. 2.
- Shulock, Nancy, and Colleen Moore. 2007. "Rules of the Game: How State Policy Creates Barriers to Degree Completion and Impedes Student Success in the California Community Colleges." Institute for Higher Education Leadership and Policy. Available at www.csus.edu/ihelp/PDFs/R_Rules_of_the_Game_02-07.pdf.
- Shulock, Nancy, Jeremy Offenstein, and Camille Esch. 2011. "Dollars and Sense: Analysis of Spending and Revenue Patterns to Inform Fiscal Planning for California Higher Education." Institute for Higher Education Leadership and Policy. Available at www.csus.edu/ihelp/PDFs/R_Dollars_and_Sense.pdf.
- Student Success Task Force. 2012. Advancing Student Success in California Community Colleges: The Recommendations of the California Community Colleges Student Success Task Force. Available at www.californiacommunitycolleges.cccco.edu/Portals/0/StudentSuccessTaskForce/SSTF_FinalReport_Web_010312.pdf.

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