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Analysis of Spending and Revenue Patterns to Inform Fiscal Planning for California Higher Education

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Executive Summary

The Need for Better Fiscal Planning

After decades of focusing on expansion and access, California's institutions of higher education are now being handed a more difficult charge: to dramatically increase the number of college graduates with diminishing state funding. There is a growing consensus that the United States needs to ratchet up its production of college graduates to turn around the economy and remain competitive. California's performance is vital to this national agenda. Experts warn that California needs to start on a steep upward climb—each year issuing about 16,000 college degrees *more* than the year before—until one million additional Californians have postsecondary degrees.

The standard approach that California's policymakers take toward financing higher education is not up to this challenge. For decades, state leaders have been relatively content to leave the higher education system on autopilot, guided by a 1960 Master Plan that offers no guidance for dividing resources among the three systems to produce desired levels of education, for defining affordability, for determining whether students in different segments should pay different amounts or shares of cost, or for determining what quality education should cost in each segment. Fiscal planning is not well-informed by systematic analysis of spending and revenue patterns and is not guided by a vision of what outcomes are sought from postsecondary education and how resources can best be allocated to achieve them.

This project uses data from a national initiative to illustrate the kinds of analysis that could better inform fiscal planning. The Delta Project on Postsecondary Education Costs, Productivity, and Accountability is a national initiative designed to help decision makers adopt more rational funding approaches for higher education. We use their data to draw comparisons across California's three public systems of higher education, explain noteworthy changes over time, and discuss how California compares to the rest of the nation. As data extend only to 2009, we cannot document the most recent trends, but the seven-year trends we document provide a useful context for future planning.

Key Findings

The report presents data about five fundamental questions: who attends? what do we spend? how do we spend it? who pays? what do we get? Some highlights are provided here.

- California relies more than most states on its public postsecondary sector, with 85% of postsecondary enrollments served by the University of California (UC), the California State University (CSU), or the California Community Colleges (CCC). Of the three, CCC and, to a lesser extent, CSU will need to contribute most of the needed growth in college degrees, as they serve broad sectors of the population (Figures 3, 4, 5).
- The sector that serves the most disadvantaged students (CCC) spends the least, by far, on education and related (E&R) costs (see p. 7 definitions); UC spends over two-and-a-half times more than CCC on E&R per student—the largest such disparity in the nation (Figures 6, 9).
- There has been a sharp decline in state subsidies for UC and CSU (much steeper than for universities across the country) but a slight increase at CCC (Figure 14).
- UC spending has risen by 4% despite shrinking revenues, while CSU and CCC spending has more closely tracked revenue trends (Figures 8, 24, 25).
- Compared to national counterparts, UC and CSU spend more per student while CCC spends less, but the lower spending at CCC is due to collecting far less tuition revenue; state and local support for CCC is higher than the national average (Figures 9, 15, 19).
- Among the three categories of E&R spending (instruction, student services, other general support) the higher expenditures at UC are due mostly to spending on instruction (Figures 10, 11, 12).
- Students at UC and CSU are paying a much higher share of their educational costs due to steep tuition increases, but the higher tuition revenue has only partially offset the loss of state funds (Figures 16, 17, 22, 23).
- All three segments are increasing the numbers of degrees produced annually and are reducing the cost per degree, but the improvements are far less than the magnitude of increase needed (Figures 26, 27, 28).
- All three segments, but particularly CCC, spend more per degree than their national counterparts; CCC spends 30% more than the national average per degree and 40% per completion (degrees plus certificates) (Figure 29).

Three Crucial Questions for Policymakers

Our findings yielded three critical policy questions that California's leaders must address if they are to develop more purposeful and rational finance policies for higher education.

1. Who should pay for higher education and how much should they pay?

Sharp state budget cuts and steep tuition increases have left students paying a much greater share of their education at UC and CSU (with little change to the small share of costs paid by CCC students). This has occurred without the benefit of explicit policy deliberations about the appropriate share of cost that students in each segment should bear. The prevailing distribution of costs and benefits across students, segments, and taxpayers is the result of policy drift rather than of purposeful policymaking.

2. What does quality education cost?

Without more detailed information brought into the fiscal planning process, policymakers cannot determine whether the significant expenditure differences across segments are justified and, in particular, whether the community colleges, which serve the hardest-to-serve students, should spend the least. Differences might appropriately reflect the differences in mission but they might instead reflect a mismatch between mission and resources. More transparency in accounting for expenditures would help leaders understand the complex relationships between spending and quality and the extent to which cost reductions risk eroding quality.

3. Can education levels increase sufficiently with the existing set of institutions, missions, and eligibility standards?

The massive increase in degree production that experts warn is needed would have to come primarily from CCC and CSU because they provide access for broad sectors of the state population. Although spending per student is lowest at CCC, the cost to produce a degree is high—exceeding the cost of producing a bachelor's degree at either university system. Even including certificate production, per-unit costs exceed those at CSU. These high costs stem from expectations the state has placed on CCC to serve students who are seriously under-prepared for college as well as students who attend with no intention of earning a degree. While some additional productivity gain can surely be accomplished at each segment, larger gains may involve some fundamental institutional changes to the state's postsecondary system. Possibilities include admitting a greater proportion of degree-seeking freshmen directly into CSU and UC and creating different kinds of institutions that could serve students less expensively, such as selective undergraduate institutions without a graduate/professional and research component, specialized technical institutes, and online institutions for working adults.

From Policy Drift to Thoughtful Fiscal Planning?

Today's challenges call for a drastic change from the customary pattern of fiscal policymaking. Policymakers make incremental adjustments (mostly downward in recent years) without the benefit of state-level discussions about how revenues and expenditures for each segment will contribute to producing college graduates for the state. There are few, if any, policy discussions about shifting resources among institutions, shifting institutional missions, or creating new institutions.

In response to this laissez faire approach to finance policy, the segments generally try to maintain historical cost structures, keep enrollment in line with revenues as best they can, make changes at the margin such as eliminating low-enrolled courses and programs, and raise revenues from other sources (mostly tuition) to maintain expenditure levels. There have been few actions commensurate with the rhetoric that this may indeed be "the new normal," perhaps in the hope of a resumption of past public priorities for taxation and support of public education at all levels.

Working together, state and system leaders should forge a deliberate guiding strategy for funding higher education to meet the needs of Californians. Public higher education figured prominently in California's rise as an economic power in the last half of the twentieth century. Now, California's future depends more than ever on its ability to educate its people. The present state of policy drift is unlikely to get the job done.

Acknowledgements

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Higher Education in California:
What We Spend, Who Pays, and What the Money Buys

Tough Times and Higher Expectations

The past several years have been brutal ones for virtually every institution in California's public sector. Higher education is no exception. State funding for the three segments—the University of California (UC), the California State University (CSU), and the California Community Colleges (CCC)—has been cut by well over $2 billion in the last three budgets combined and more cuts are likely. All three are struggling to make ends meet by furloughing employees, implementing hiring freezes, curtailing salary increases, raising tuition, and cutting back classes and services for students. In times like these, it's tough enough just to hold steady, much less educate greater numbers.

California's budget woes could not come at a worse time for higher education. After decades of focusing on expansion and access, California's institutions of higher education are now being handed a more difficult charge: to dramatically increase the number of college graduates. There is a growing consensus—spanning the realms of business, academia, and government—that the United States needs to ratchet up its production of college graduates to turn around our economy and remain competitive. President Obama's goal is for the U.S. to have the highest proportion of college graduates in the world by 2020 (we're now about tenth).[1] Experts calculate that California, to meet its share of the goal, would have to increase degree production over current levels by five percent *each year*.[2]

Aside from the national goal, California needs more college graduates for its own sake. As educated baby boomers retire, there won't be enough younger Californians to fill their jobs—a problem that is projected to lead to the most severe drop in per-capita income of any state by the year 2020.[3] Changes in California's labor market are compounding the problem as the proportion of jobs requiring a college education continues to rise. Without a course correction, California will be short about a million bachelor's degree graduates by 2025 and will be unable to fill countless middle skill jobs that require postsecondary education and training short of a four-year degree.[4]

The New Normal

California cannot expect to bounce back to prosperity as it has following previous economic dips. State coffers are depleted, and higher education is especially vulnerable when considered alongside other critical services like health care, K-12 education, and prisons. For the foreseeable future, higher education in California will have to do things differently in order to produce more college graduates without proportionate increases in revenue. System leaders, campus heads, faculty and staff, and state lawmakers will all need to engage in difficult discussions about how to use available resources to best serve students and meet the state's need for educated Californians.

Policymakers' standard approach to financing higher education will have to change as well. For decades, state leaders have been relatively content to leave the higher education system on autopilot, guided by the mission differentiation and eligibility guidelines outlined in the 1960 Master Plan. As long as state budgets could reasonably accommodate growing enrollments in each segment it has been presumed that the higher education enterprise is healthy. Little time is spent articulating what outcomes the state needs to achieve and how it can best use available funds to accomplish those ends. Probing questions about how higher education is funded, how the money is spent, what outcomes are achieved, and at what cost are not pursued. Detailed data analysis of spending patterns and trends in relation to needs and outcomes is not part of the fiscal planning process.

With higher education opening up to much broader segments of the population and more jobs requiring college degrees, this passive approach to funding higher education has led us way off track for meeting our workforce needs. In California, no entity is responsible for setting (let alone meeting) statewide goals for higher education. With the Governor having eliminated the Postsecondary Education Commission in the 2011-12 Budget, there is not even an obvious place within state government where such important work would take place. Today, California needs a statewide approach to resource allocation in higher education, and this approach must center on good information and analysis.

This Project

The Delta Project on Postsecondary Education Costs, Productivity, and Accountability, also known as the Delta Cost Project, is a national initiative designed to help decision makers adopt more rational funding approaches for higher education. Its metrics, database, and reports give states better tools for understanding revenues and spending and especially the decisions they make, purposefully or otherwise, about levels of

subsidy for various institutions. Decades of academic research have yielded no good lessons about what higher education *should* cost, that is, what level of resources institutions should have in order to deliver the desired results. But we can examine what institutions *spend*, and their spending patterns over time, and use that information to improve fiscal planning.

For this report, we have used Delta Cost Project data and definitions to analyze trends in California and to compare California with national averages (see text box).[5] As the data extend only to 2009, we cannot document more recent trends which would certainly show that economic conditions have worsened for the state's colleges and universities. Nevertheless, the seven-year trends we document provide a useful context for future planning.

As our interest is in seeing the state educate broad segments of the state and meet its future workforce needs, we do not specifically address research and graduate/professional education although we point out the need for better data that would allow such a focus. Certainly any fully effective state financing plan for higher education must also address state investments in graduate and professional education and research, but that is beyond the scope of this study.

Also beyond the scope of this study is a review of private postsecondary education. Both the nonprofit and for-profit sectors serve important functions in educating Californians, together accounting for over a quarter of enrollments and of degrees/certificates awarded.[6] Both should be incorporated into state-level fiscal planning, especially as the public sector struggles to accommodate student demand. The state supports private education by subsidizing student tuition at private institutions through the Cal Grant financial aid program. Enrollment in the nonprofit sector has been relatively stable, but the students in the rapidly growing for-profit sector are claiming a rising share of Cal Grant funds. Comprehensive fiscal planning would take into account the capacities of all sectors to help meet educational attainment goals and the role of state investments in each.

This report is structured around five fundamental questions about financing public higher education in California:

- Who attends?
- What do we spend?
- How do we spend it?
- Who pays?
- What do we get?

For each question we present key points using data drawn from the Delta Cost Project dataset and other sources where noted. We make comparisons across California's three public systems of higher education, explain noteworthy changes over time, and discuss how California compares to the rest of the nation. At the end of each section we state the key policy issue raised by the data. We conclude the report with a discussion of three key policy questions that state leaders must confront in order to invest wisely in a higher education system that secures California's future.

Data, Methods, Caveats

Most data in this report are drawn from Trends in College Spending (TCS) Online, a dataset compiled by the Delta Cost Project. This dataset uses information reported to the Integrated Postsecondary Education Data System (IPEDS) by colleges and universities from the academic years 2002 to 2009. Data from other sources are marked as such.

Unless noted otherwise, financial data from TCS Online are presented in dollars per full-time equivalent student (FTES) to allow for comparisons across institutions of varying sizes. Trend data are adjusted for inflation using the Consumer Price Index and expressed in 2009 dollars. California segment-level and national sector-level data reflect the average across institutions because IPEDS contains institution-level data. Although the average masks the size variation across colleges, it provides a reasonable basis for making system-level comparisons.

FTES figures reflect the formula used by the U.S. Department of Education for its annual Digest of Education Statistics. Other methods result in very different values for FTES and, expenditures per FTES. The numbers in this report should not be compared with those based on other sources of FTES reporting.

We follow Delta's lead in making comparisons across national sector averages. Sectors are broad and include institutions that may be unlike California institutions on some dimensions. Despite this limitation, these comparisons shed light on the choices that California and other states have made and raise important questions.

Who Attends?

Overview of Public Higher Education in California

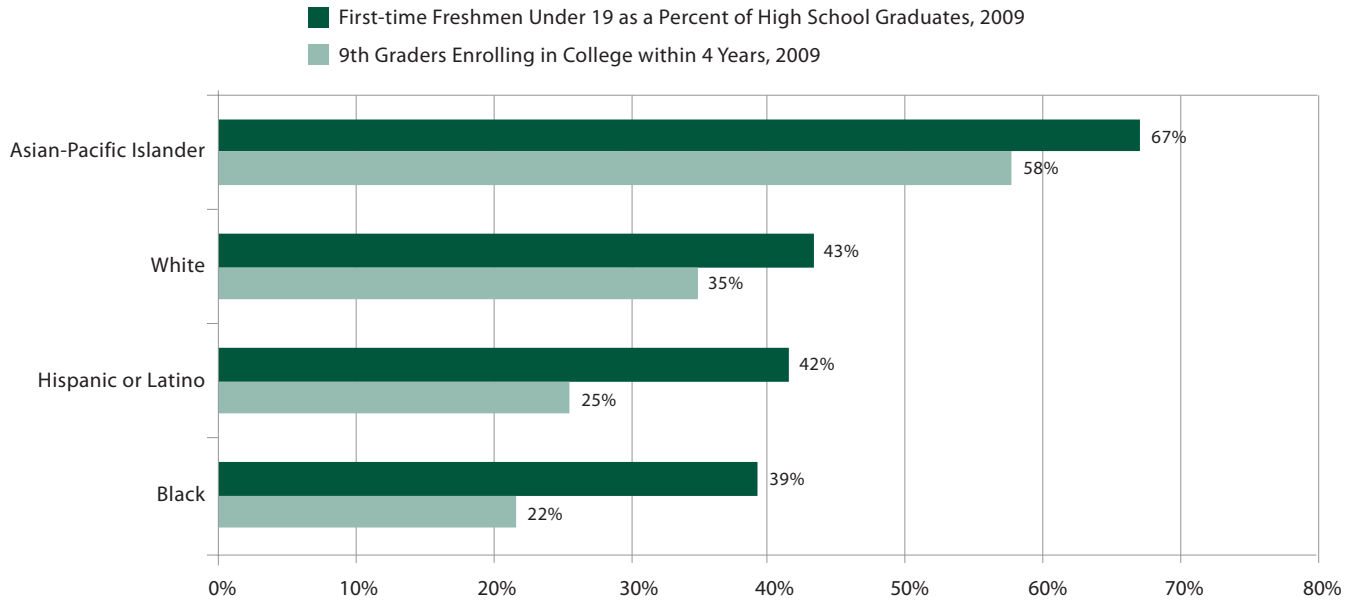
California has three public segments of higher education, each with a different mission and different activities to fulfill its mission. California's Master Plan for Higher Education defines these missions and establishes the size of the eligibility pools for each system. The University of California is the state's public research university, providing undergraduate, graduate, and professional education on 10 campuses. The top one-eighth of high school graduates is eligible for UC as undergraduates.[10] At the graduate level UC has sole authority to offer professional programs in law and medicine as well as most doctoral level programs. The California State University primarily serves undergraduates on 23 campuses, with a limited number of graduate-level programs and independent doctoral programs in three professional fields. The top one-third of high school graduates is eligible for CSU. The California Community Colleges is a two-year college system that provides lower division transfer preparation education at 112 colleges, as well as basic skills (remedial) education, career and workforce education, and courses taken for personal enrichment. The CCC is open to all students who can benefit from the wide range of programs and courses offered. Unlike at UC and CSU, many students attend CCC for reasons other than to earn a college credential, but there are no firm data on what proportion of students this includes.

Key Points:

California relies on public higher education much more than other states, but this doesn't translate to broad access for all groups.

- In California 85% of postsecondary enrollments are in the public sector compared to an average of 72% in the other 49 states.[11]
- College participation rates are high in California—both for traditionally college-age students and adults; the state ranks 6th among states in both the percent of 18-24 year olds and 25-49 year olds enrolled in college.[12]
- Latinos and African Americans are much less likely to enroll in college. Latino and African American high school graduates enroll in college at rates comparable to whites (far below Asians) but much lower high school graduation rates result in far fewer Latino and African American 9th graders enrolled in college four years later **(Figure 1)**.

Figure 1
Direct College-Going Rates by Race/Ethnicity



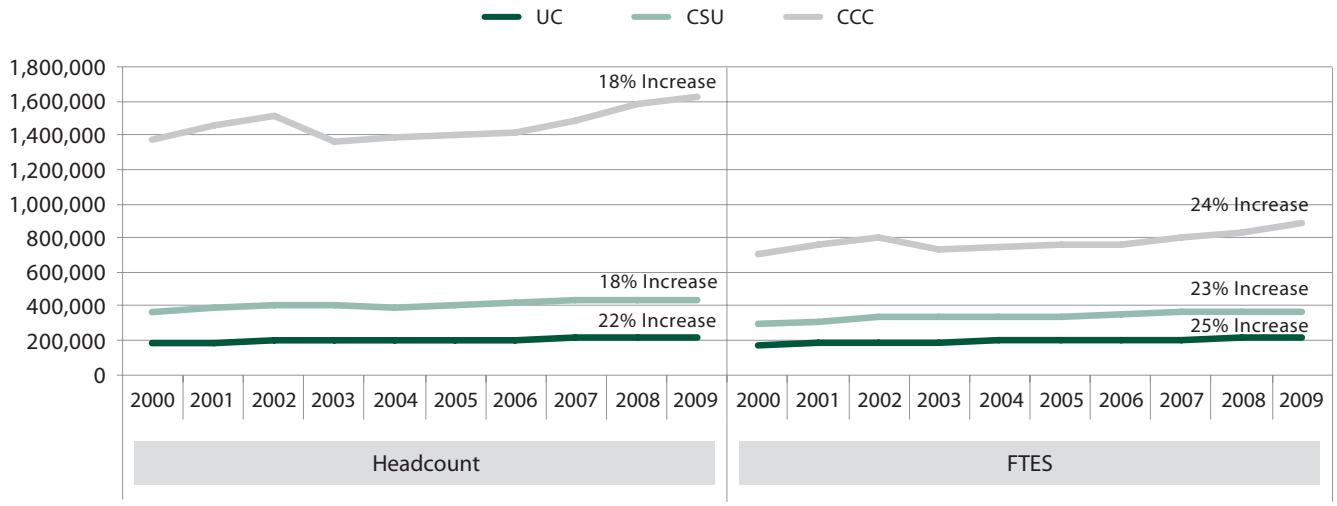
Source: California Postsecondary Education Commission college enrollment data and California Department of Education high school graduates data

- There is a large gender imbalance with men significantly under-represented in CSU (42%) and CCC (44%) but less so in UC (48%).

Over the last 10 years, both enrollment (headcount) and full-time equivalent students (FTES) have been rising in all three segments at about the same rates, with FTES growing a little faster, indicating that a greater portion of students attend on, or closer to, a full-time basis (Figure 2).

- UC had the largest *percentage* growth in enrollment and FTES but serves far fewer students.
- There is little difference between headcount and FTES in UC since most students attend full time; there is a large difference between the two measures for CCC since most students attend part-time. CSU is in between but has not nearly as many part-time students as CCC.

Figure 2
Growth in Fall Enrollment



Source: Integrated Postsecondary Education Data System

Who Attends?

Overview of Public Higher Education in California

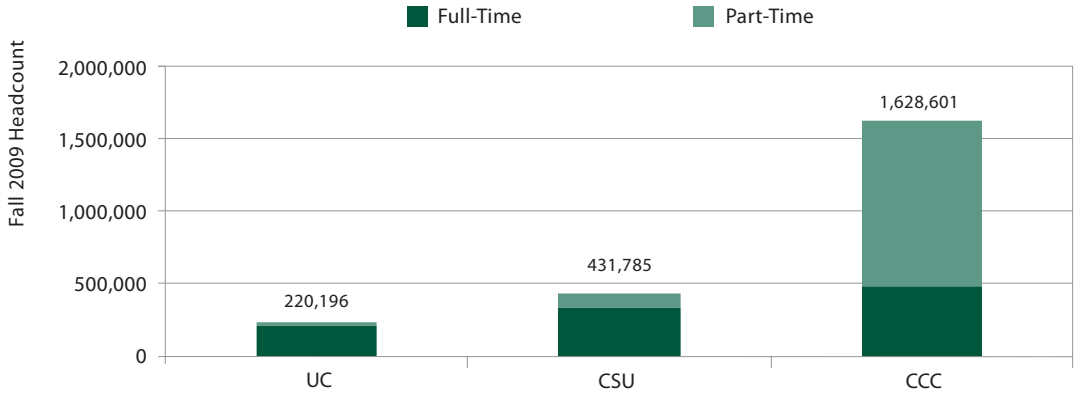
CCC enrolls far more students than the other two segments combined (Figure 3) and a much larger percentage of total enrollment than most states' community colleges.

- CCC serves 71% of students enrolled in California's public institutions. Nationally, by contrast, about 53% of students attending public institutions attend community colleges.[13]
- CSU serves 19% of students and UC serves 10%.
- Graduate enrollment as a percent of total headcount is just over 20% at UC and just under 16% at CSU.

CCC serves a greater number and proportion of underrepresented and nontraditional students (Figures 4 and 5).

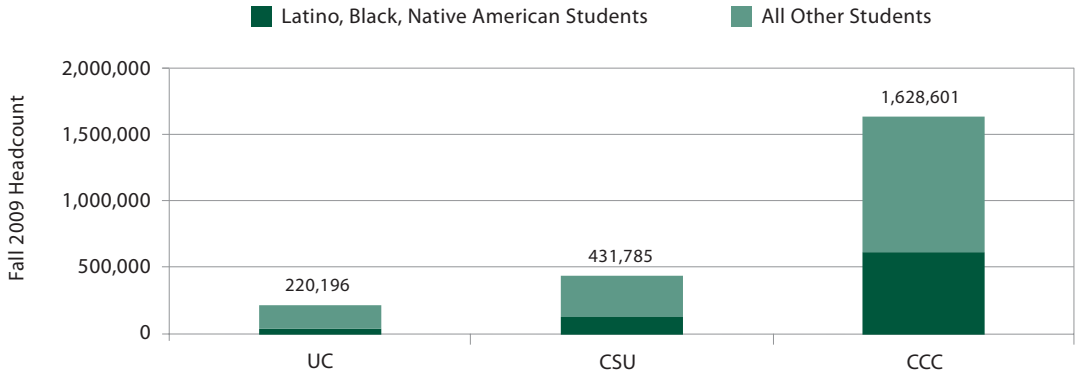
- Black, Latino, and Native American students make up:
  - 38% of headcount enrollment at CCC
  - 31% of undergraduate headcount enrollment at CSU
  - 18% of undergraduate headcount enrollment at UC.

Figure 3
Full-Time and Part-Time Enrollments in UC, CSU, CCC



Source: Integrated Postsecondary Education Data System, Fall 2009 Data

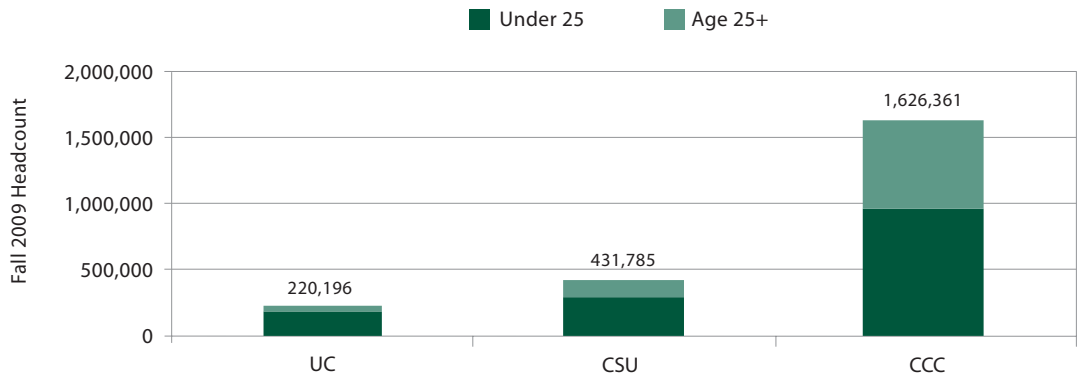
Figure 4
Distribution of Minority Students in UC, CSU, CCC



Source: Integrated Postsecondary Education Data System, Fall 2009 Data

- Among Latinos who attend one of the public segments:
  - 77% attend CCC
  - 17% attend CSU
  - 5% attend UC.
- Among African Americans who attend one of the public segments:
  - 79% attend CCC
  - 16% attend CSU
  - 5% attend UC.
- Community colleges enroll a much larger share of students older than the traditional college age (18-24).

Figure 5
Distribution of Traditional Age Students in UC, CSU, CCC



Source: Integrated Postsecondary Education Data System, Fall 2009 Data

Key Policy Consideration

As California higher education is currently structured, the California Community Colleges and the California State University are the segments that will need to contribute most of the huge growth in college degrees (16,000 more *each year* than the year before) to get anywhere near what experts contend is a competitive level in the coming decades.

What Do We Spend?

Patterns and trends in "education & related" spending

In this section we present data on what California's three public segments spend. We focus on "education & related spending" (see sidebar for definition). Education & related (E&R) spending is supported by two major revenue streams: student tuition and the state & local appropriations that subsidize public postsecondary education. Here we look at spending, independent of where the money comes from. The section on "Who Pays" addresses trends in revenues and documents the changing portions paid by students and government.

As noted earlier, there is no consensus on what education *should* cost—a particular concern given that higher education costs are rising rapidly, perhaps disproportionately to the value derived by students and their families. E&R spending measures what institutions *spend* on education, that is, what it *does* cost given the availability of resources to spend. Such measures are useful for making comparisons of spending across the three segments, within each segment over time, across expenditure categories, and against national averages. These types of analyses provide a perspective that can help policymakers ask better questions about higher education spending and cost-effectiveness, even in the absence of consensus about what education should cost.

In the absence of good data, a certain stalemate has taken over cost discussions. Lawmakers ask why institutions can't better limit costs to live within constrained budgets. Institutions respond that rising costs are essential to maintain quality. But these conversations don't typically involve an analysis of spending data. A better understanding of spending patterns is a necessary first step to get beyond this stalemate. Policymakers should seek to better understand how much institutions spend and what they spend it on, why spending levels are so different across the three public segments, how spending patterns have been affected by budget cuts, and how trends in spending have affected the ability of our colleges and universities to educate students.

Finance Data Definitions

Education and Related (E&R) Spending: Total spending on direct educational costs; includes spending on instruction, student services, and the education share of spending on academic support, other general support, and operations and maintenance (i.e., "overhead"). There are three subcategories of E&R spending:

- ***Instruction:*** activities directly related to instruction, including faculty salaries and benefits, office supplies, and administration of academic departments.
- ***Student services:*** non-instructional, student-related activities such as admissions, registrar, counseling, financial aid administration, student organizations, and intramural athletics.
- ***Academic support, institutional support, operations, and maintenance:*** the portion of support activities (e.g., libraries, general administrative services, executive management, plant operations) that is associated with providing instruction and student services. We refer to this inclusive category as "other general support" in this report.

State & Local Appropriations: Revenues received by the institution through acts of a state or local legislative body (except grants and contracts and capital appropriations) for meeting current operating expenses. Includes revenues from education district taxes, where taxes are assessed directly by an institution or on behalf of an institution and the institution receives the exact amount collected; revenues from sales taxes, gambling taxes, etc.; and/or other revenues from other sources approved by referendum.

Net Tuition Revenues: The amount of money the institution takes in from students (including fees) net of all institutional grant aid provided.

Student Share of E&R Spending: The share of E&R expenditures that is covered by net tuition revenue.

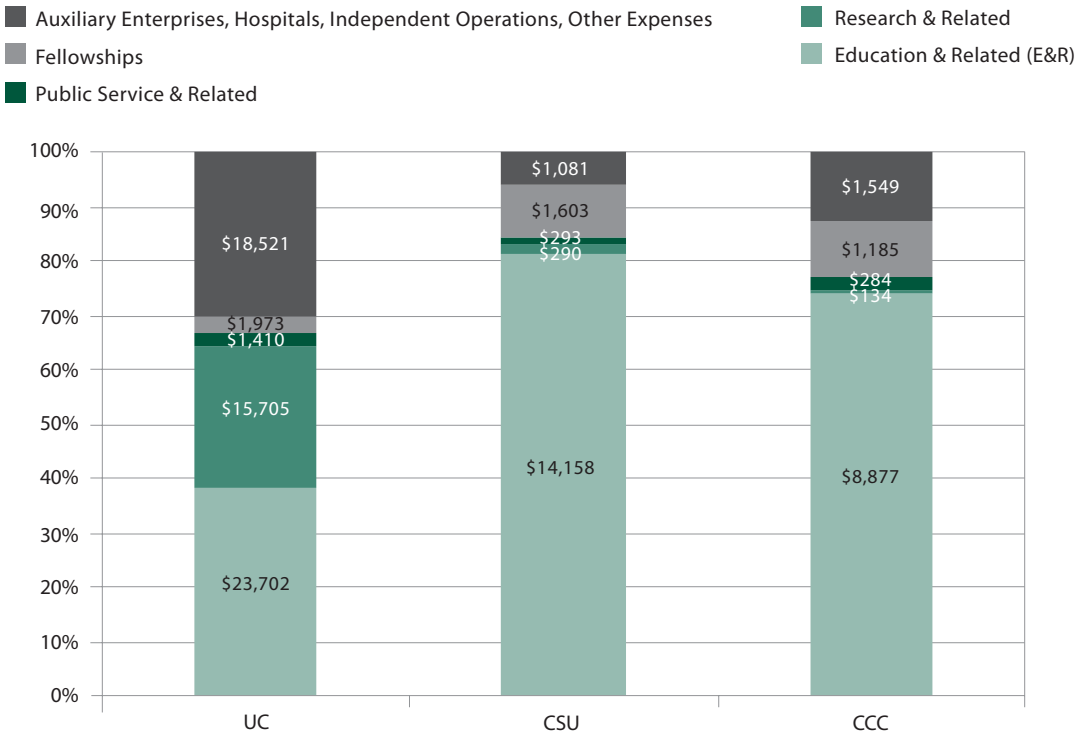
Subsidy Share of E&R Spending: The share of E&R expenditures that is covered by institutional resources (primarily state funding at public institutions); it is the difference between E&R expenditures and net tuition revenue.

Key Points:

Compared to CSU and CCC, UC spends a much smaller proportion of its total funds on E&R costs but far more in terms of dollars per FTES (Figure 6).

- UC has significant expenditures for research and auxiliary enterprises, categories that are minimal for the other two segments.
- In 2009, UC spent almost 70% more per FTES than CSU on E&R costs, and over two-and-a-half times more than the community colleges.

Figure 6
Distribution of Spending by Category in UC, CSU, CCC (in Dollars per FTES)—2009 Data



What Do We Spend?

Patterns and trends in "education & related" spending

E&R expenditures, as a share of total expenditures, have mostly been maintained, even though E&R is heavily dependent on state funding (Figure 7).

- Between 2002 and 2009, the E&R share of total expenditures fell just slightly at UC and CSU (about one percentage point at UC and one-half point at CSU) but fell more at CCC (from 81% to 77%).
- The maintenance of E&R expenditures as a *share* of total expenditures at UC and CSU in part reflects their use of increased tuition revenue to help backfill reductions in state and local revenues (discussed later on p.19).

Between 2002 and 2009, E&R spending per FTES fluctuated and ultimately increased in UC and CSU but fell in CCC (Figure 8).

- E&R spending increased by 4% at UC and by 1% at CSU over the seven-year period during which state appropriations declined by over 40%.
- This mirrors a national trend: on average, public research institutions are increasing E&R spending at a faster clip than public masters or associate institutions; UC's 4% rate of increase in spending between 2002 and 2009 was less than the national average among public research universities, which was 8%.
- In contrast to UC and CSU, E&R spending at CCC declined by 3% over the seven-year period during which state & local appropriations increased by 8%.

Figure 7
2002 and 2009 Education & Related Spending as a Percent of Total Spending in UC, CSU, CCC

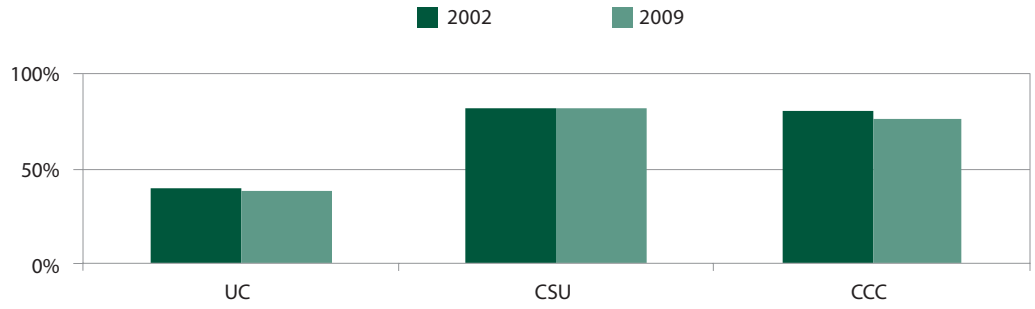
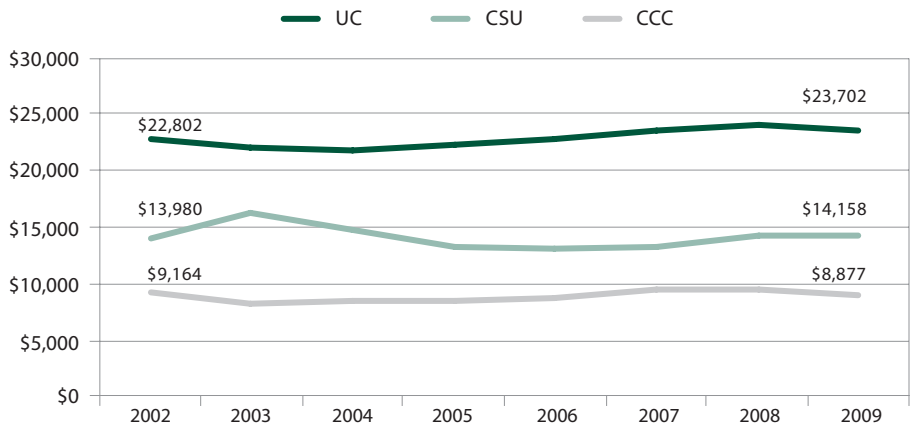


Figure 8
Trends in Education & Related Spending in CCC, CSU, UC (in Dollars per FTES)



Compared to the rest of the nation, California's E&R spending is much higher in its public research university system (UC), somewhat higher in its masters institutions (CSU), and somewhat lower in its community colleges (Figure 9).

- E&R spending in the UC is almost 50% more per student than the national average for public research institutions. California's E&R spending per FTES is fourth-highest in the nation's public research sector (following Vermont, Washington, and Minnesota).[14]
- Comparatively, California has far greater differentials in E&R spending across its three systems of higher education. CCC's E&R spending per FTES is about one-third of that at UC; nationally, public associate colleges spend about two-thirds what public research institutions spend. CSU spending is about three-fifths that of UC whereas nationally, masters institutions spend about four-fifths what research universities spend.

Figure 9
Education & Related Spending, California and National Average (in Dollars per FTES)—2009 Data

	Public Research Institutions	Public Masters Institutions	Public Associates Institutions
National Average	$15,919	$12,363	$10,242
California	$23,702	$14,158	$8,877
California as % of National Average	149%	115%	87%

Key Policy Consideration

The sector that serves the most—and the most disadvantaged—students, spends the least, by far, on education and related costs.

How Do We Spend It?

Breaking down education and related spending

This section describes how, within the broad category of education and related (E&R) spending, funds are spent across three subcategories: instruction, student services, and other general support (see definitions on p. 7).

Obviously these spending categories don't capture fine-grain detail on how resources are used. Still, they are useful metrics for policymakers, particularly to track changes over time and make comparisons with other states. Big changes or departures from national averages can give policymakers a sense of where to look for gains in cost effectiveness. Without the benefit of data, many stakeholders look first to cut administrative costs within the category of "other general support" and look next at student services in order to protect instruction. This section provides a baseline of understanding for these kinds of discussions.

Key Points:

UC spends more per FTES than CSU and CCC, not just on instruction but also on student services, despite enrolling the most well-prepared students in the state (Figure 10).

- UC spends over twice as much on instruction as CSU, and over three times as much as CCC. The relatively high cost of faculty salaries in UC and lower teaching loads to support the graduate education and research missions likely account for this difference.
- UC spends over a third more than CSU, and almost twice as much as CCC on student services.
- The disparity in funding for CCC student services is far greater when measured per student (arguably a more meaningful measure for CCC where so many part-time students require services), with CCC spending only $693.

Compared to CSU and CCC, UC spends proportionately more on instruction and proportionately less on other general support (Figure 10).

- In UC, two-thirds of all E&R spending is for instruction, compared to just under half in the CSU and CCC.
- The distribution of expenditures, by category, is very similar for CSU and CCC despite having very different missions.
- Other general support expenditures are similar in dollars for CSU and UC.

Patterns of spending across the three components of E&R between 2002 and 2009 varied across the three segments, but no one area has been especially protected or harmed (Figure 11).

- UC spending on instruction and student services increased by about 5% but spending on other general support decreased slightly.
- CSU spending on other general support declined rapidly after 2003 and since then stabilized. Spending on instruction increased by about 3% while student services spending was flat.
- CCC spending was relatively steady over time in all areas, but there has been a 10% decrease in spending on student services over the seven-year period.

Figure 10
Components of Education & Related Spending in UC, CSU, CCC (in Dollars per FTES)—2009 Data

	UC		CSU		CCC	
	$	%	$	%	$	%
Instruction	$15,713	66%	$6,767	48%	$4,348	49%
Student Services	$2,581	11%	$1,919	14%	$1,313	15%
Other General Support	$5,407	23%	$5,472	39%	$3,216	36%
Total	**$23,701**	**100%**	**$14,158**	**100%**	**$8,877**	**100%**

California's high cost of living might explain some of the expenditure differences with other states—but not all (Figure 12).

- UC and CSU spend more than their national peers in every category, while CCC spends less than its peers except for in student services.
- The distribution of expenditures across the three categories at each California segment is quite similar to its national sector counterpart with the exception of other general support, for which UC spends a considerably smaller share of its budget owing to far higher instructional costs.

Figure 11
Trends in Spending on Education & Related Components in UC, CCC, CSU (in Dollars per FTES)

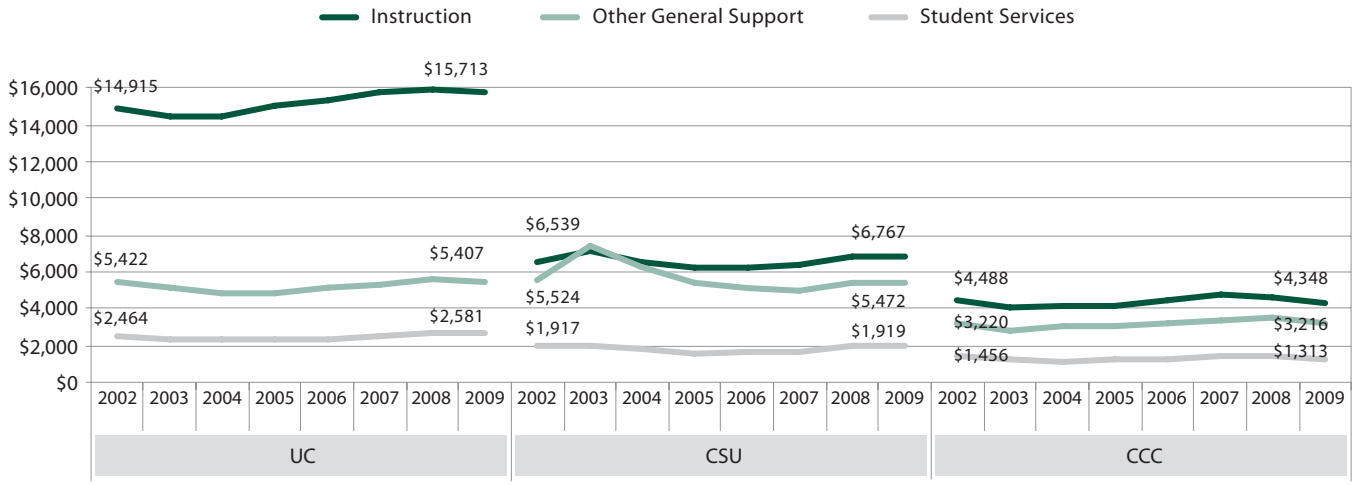


Figure 12
Components of Education & Related Spending, National Averages by Sector (in Dollars per FTES)—2009 Data

	Public Research Institutions		Public Masters Institutions		Public Associates Institutions	
	$	%	$	%	$	%
Instruction	$9,986	63%	$6,291	51%	$5,103	50%
Student Services	$1,365	9%	$1,410	11%	$1,258	12%
Other General Support	$4,567	29%	$4,663	38%	$3,881	38%
Total	**$15,918**	**100%**	**$12,364**	**100%**	**$10,242**	**100%**

Key Policy Consideration

Far more transparency in budgeting is needed. The huge differences across segments in spending on instruction cannot be understood until spending on graduate education and research is separated out from spending on undergraduate education. Identifying opportunities for more efficient operations requires knowing what components of other general support and student services are essential to sustain core operations.

Who Pays?

Student and government roles in supporting education spending

The question of who pays for education should be a core concern of finance policy. The bulk of E&R costs are borne by the state, through annual appropriations, and students, through tuition. The mix of public and private support reflects the mix of public and private benefits that derive from higher education. Society benefits from a higher and stronger tax base and the social amenities that accompany a more highly educated populace, like lower unemployment and crime rates, better public health, and higher civic engagement. Individuals benefit from higher lifetime earning potential and associated quality of life amenities that correlate with income.

California lacks a coherent set of policies on tuition, financial aid, and appropriations across the public segments that reflect judgments about the appropriate mix of public and private benefit, whether that mix should vary by type of institution and level of instruction, and what constitutes affordable education—both to the student and to the state.

This section addresses the respective roles of government and students in paying for education. We examine patterns and trends in (1) government support, (2) student support (tuition), and (3) the changing relationship between state and student support, including apparent institutional responses to the changing mix of revenues.

There is an important anomaly with 2009 data on state & local appropriations. Federal stimulus funds under the American Recovery and Reinvestment Act (ARRA) provided $716.5 million each to UC and CSU, allowing state lawmakers to reduce state funding by a like amount. That accounts for a large portion of the steep drop between 2008 and 2009 in Figure 14 (and shown later in Figures 22-25) but UC and CSU did not experience as steep a decline in revenues. Stimulus funds were provided to all states, by formula; Figure 14 shows a drop between 2008 and 2009 in the national average as well, albeit less steep. The following year (for which Delta Cost Project data are not yet available), there were no ARRA funds yet state appropriations restored only about 25% of the lost revenue, so the decline shown in Figure 14 for 2009 is a premature indicator, more or less, of 2010 revenues.[15]

(1) What Government Pays—State & Local Appropriations

State & local appropriations contribute widely different proportions of *total* revenues for the three segments, reflecting the different missions. For example, UC has an extensive non-teaching mission (e.g., research, hospitals) that is supported by non-state funds. But when it comes to supporting the core educational mission, state & local appropriations are vital to all three segments as such funds, along with tuition revenue, are the principal sources of support.

Key Points about State & Local Appropriations

The portion of *total revenues* coming from state and local funds has dropped sharply at UC and CSU (Figure 13).

- Even after accounting for the ARRA funding shift, there has been a large increase for UC and CSU in the share of revenue from tuition and auxiliaries and a drop in the state's share.
- The percent of total CCC revenues accounted for by state & local appropriations rose slightly from 62% to 63% between 2002 and 2009.
- Budget cuts since 2009 have likely further lowered the state & local appropriations portion of total UC and CSU budgets.

State & local appropriations have declined steeply in UC and CSU narrowing the discrepancy across the segments and with national counterparts (Figure 14).

- For UC, state & local appropriations decreased by 43% between 2002 and 2009. If ARRA funds are included, the per-student amount is about $13,500 in 2009 but has fallen significantly since then, likely below the level shown in Figure 14, due to the loss of ARRA and additional state budget cuts.
- For CSU, state & local appropriations decreased by 41% between 2002 and 2009. If ARRA funds are included, the per-student amount is about $8,500 in 2009 but since then has likely fallen below the CCC due to the loss of ARRA and additional state budget cuts.
- For CCC, which received just a small share of ARRA funding, state & local appropriations *increased* by 8% between 2002 and 2009. Since then, however, CCC has faced cuts in state appropriations, including a $400 million cut in the 2011-12 budget (so far).
- Patterns nationally have been more stable than in California.

Figure 13
Distribution of Revenues for UC, CSU, CCC (in Dollars per FTES)

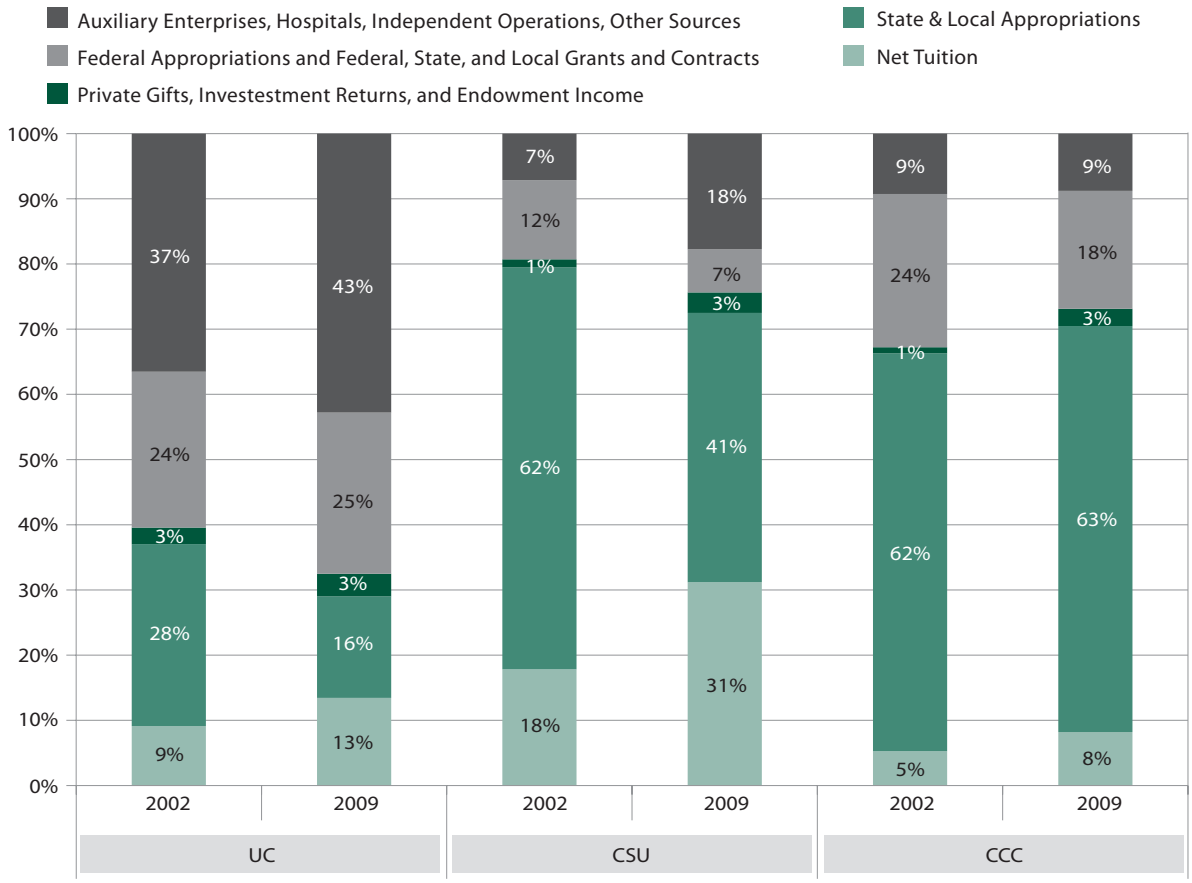
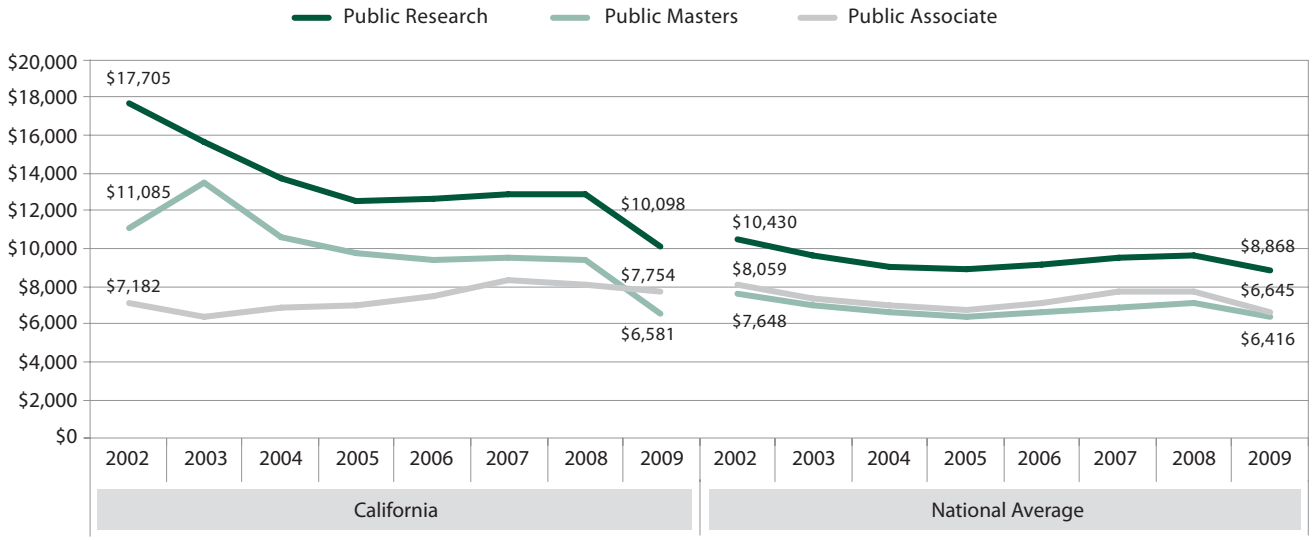


Figure 14*
Trends in State & Local Appropriations in UC, CSU, CCC (in Dollars per FTES)



* If ARRA funds are included, UC and CSU revenues for 2009 would be about $13,500 and $8,500 respectively

Who Pays?
Student and government roles in supporting education spending

State & local appropriations per FTES at all three California segments were higher than the national averages for the respective sectors—although least so for CSU (Figure 15).

- In 2009, state & local appropriations to UC were about 14% higher than the national average for public research institutions.
- State & local appropriations to CSU were 3% higher than the national average for masters institutions.
- State & local appropriations for CCC were 17% higher than the national average for associate institutions.
- In California (since 2009) and nationally, state & local appropriations per FTES for the two-year sector are higher than for the public masters sector.

(2) What Students Pay—Tuition Revenues

Both the share of educational costs that students pay and the absolute dollar amounts are important policy issues. Ideally, the sharing of educational costs between students and government should reflect some reasoned judgments about the mix of private and public benefits from higher education. This thinking should include a consideration of whether some students' share should be lower than others, i.e., is there a greater public benefit, and hence a rationale for higher public subsidy, for students in community college as compared to CSU? For students in CSU as compared to UC? For undergraduate students as compared to graduate students? For students in certain academic programs? Now, in the absence of an explicit tuition policy, it is not evident what public/private balance California is trying to achieve. Students are shouldering an increasing share of the cost of their education (to different degrees in each segment) —a significant shift in policy that deserves more scrutiny and public debate.

Equally important as the share of educational expenditures borne by students is the absolute dollar costs incurred. Irrespective of share, it is the dollar cost that affects the affordability of higher education for California's families. As tuition rises for students in all segments and the state seemingly shifts its priorities away from higher education, it is incumbent upon policymakers to avoid a policy drift that threatens its values about affordability and the benefits of investing in public higher education.

Key Points about Tuition Revenues

The *share* of E&R spending supported by revenue from student tuition has increased in all three segments, although it still accounts for a very small share of revenue at CCC (Figures 16,17,18).

- Net tuition revenue at UC covered 40% of E&R spending in 2009, up from 25% in 2002.
- Net tuition revenue at CSU covered 38% of E&R spending in 2009, up from 23% in 2002.
- With lower costs and far lower tuitions, net tuition covered 12% of E&R spending at CCC, up from 7% in 2002.

Figure 15
State & Local Appropriations and Net Tuition Revenue (in Dollars per FTES)—2009 Data

	Public Research Institutions	Public Masters Institutions	Public Associates Institutions
California			
State & Local Appropriations	$10,098	$6,581	$7,754
Net Tuition Revenue	$8,710	$4,974	$1,023
Total	$18,808	$11,555	$8,777
National Average			
State & Local Appropriations	$8,868	$6,416	$6,645
Net Tuition Revenue	$8,030	$5,923	$3,118
Total	$16,898	$12,339	$9,763

*2009 revenues do not reflect federal stimulus (ARRA) funding that was used to backfill most of the drop in state appropriations.

Figure 16
Trend in Student Share and Subsidy Share of Education & Related Spending in UC

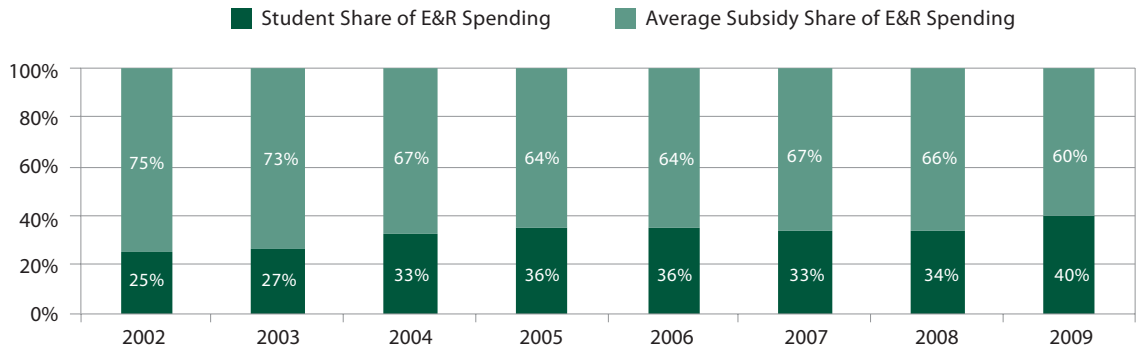


Figure 17
Trend in Student Share and Subsidy Share of Education & Related Spending in CSU

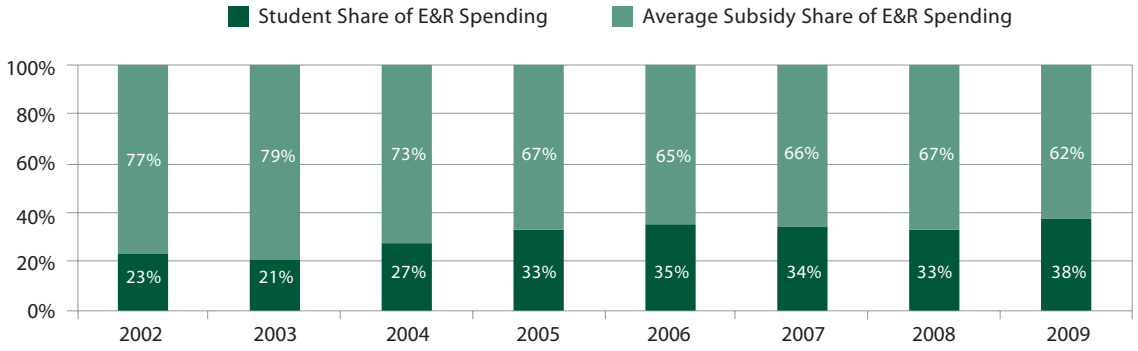
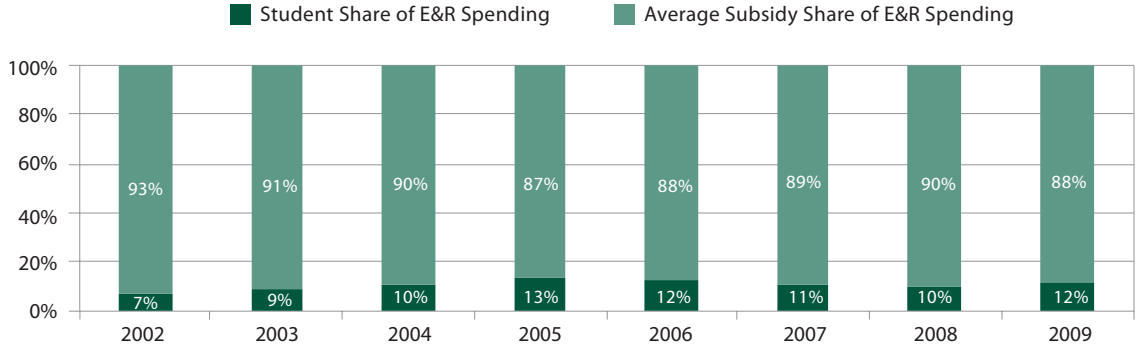


Figure 18
Trend in Student Share and Subsidy Share of Education & Related Spending in CCC



Who Pays?

Student and government roles in supporting education spending

California students in all three systems still pay a substantially smaller *share* of their education costs than the national average—though at UC that reflects higher spending rather than lower tuition (Figure 19).

- In UC, E&R costs are comparatively high. This has the effect of driving the student share down, despite UC students paying about the same tuition as the average for similar institutions nationally.[16]
- The greatest disparity with national averages is in CCC where the student share of educational costs is just over one-third of the national average, due to tuition being the lowest in the nation.

Tuition levels have increased significantly for all segments. Further budget cuts in the 2011-12 may lead to additional tuition increases (Figure 20).

- Annual systemwide student fees for UC are $12,192 in 2011-12, up 256% from the 2001-02 level of $3,429.
- In CSU, annual student fees are $5,472 in 2011-12, up 284% from the 2001-02 level of $1,428.
- CCC annual student fees are $1,080 in 2011-12, up 227% from the 2001-02 level of $330.

Figure 19
Share of Education & Related Spending Covered by Net Tuition Revenue, California Compared to National Average—2009 Data

	Public Research Institutions	Public Masters Institutions	Public Associates Institutions
California	40%	38%	12%
National Average	52%	49%	32%

Figure 20
Undergraduate Fees in the Three Segments (In Actual Dollars)

Academic Year	UC	CSU	CCC
2001-02	$3,429	$1,428	$330
2002-03	$3,564	$1,507	$330
2003-04	$4,984	$2,046	$540
2004-05	$5,684	$2,334	$780
2005-06	$6,141	$2,520	$780
2006-07	$6,141	$2,520	$690
2007-08	$6,636	$2,772	$600
2008-09	$7,126	$3,048	$600
2009-10	$8,373	$4,026	$780
2010-11	$10,302	$4,440	$780
2011-12	$12,192	$5,472	$1,080

Source: California Postsecondary Education Commission

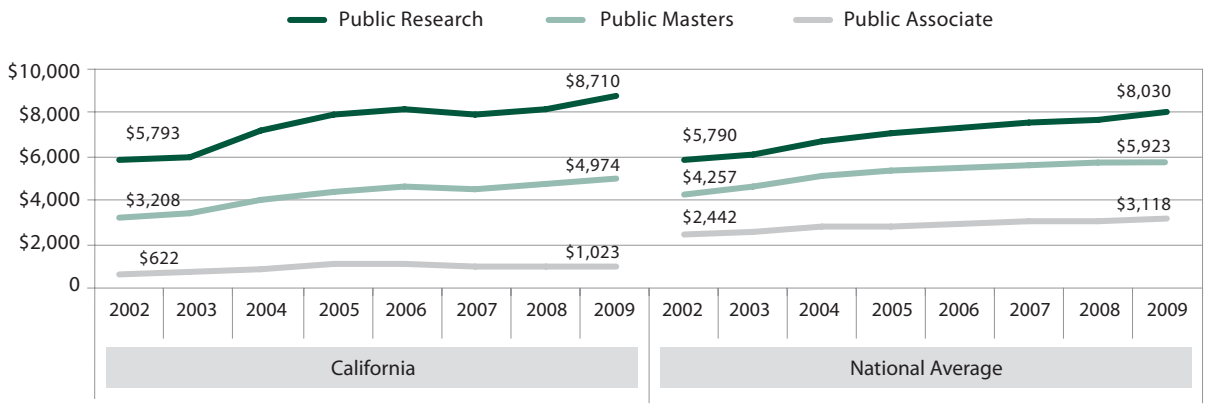
Measured in terms of net tuition revenue per FTES, California's rate of increase has exceeded the national average, but net tuition revenue per FTES is still below national averages for CSU and CCC (Figure 21).

- UC tuition revenue per FTES rose from the national average for research universities in 2002 to well above the average by 2009.
- CSU tuition revenue per FTES is still below the national average for masters universities.
- CCC tuition revenue per FTES is very low—less than one-third of the national average for community colleges and the lowest in the nation.

(3) Relationship between Government and Student Support

As state & local appropriations decline—here and across the nation—the ability of institutions to respond becomes paramount. Institutions have two basic responses: reduce expenditures and/or increase revenues from other sources (typically, tuition) to backfill lost government support. This dynamic provides the crux of policy conflicts over annual budgeting. Neither policymakers nor institutional leaders like to raise tuition but the latter have been more likely to take that approach while policymakers are more likely to call for expenditure reductions. Institutions resist expenditure reductions on the grounds that they reduce quality. In an ideal world, policymakers would have information to help them understand the relationship of spending to quality. Absent that, it is helpful to document a few basic trends in the revenue mix and apparent institutional responses.

Figure 21
Trends in Tuition Revenues California Compared to National Average (in Dollars per FTES)



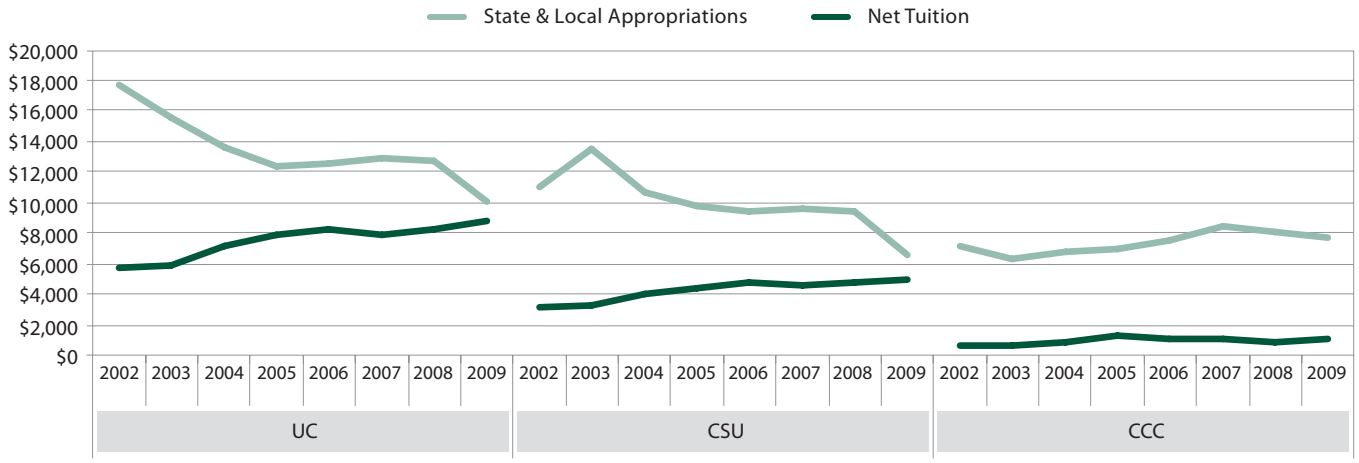
Who Pays?

Student and government roles in supporting education spending

For UC and CSU, state & local appropriations have declined dramatically while net tuition revenue has increased, offsetting some of the revenue loss (Figures 22 and 23).

- At UC and CSU there has been a clear and constant trend of increasing tuition as state and local support fell; at both segments, tuition revenue gains were enough to backfill just under 40% of lost government revenues.
- A very different pattern emerges for CCC, where both state & local appropriations and student tuition revenue have been far steadier—both growing slightly over the seven-year period.

Figure 22
Trends in State & Local Appropriations and Net Tuition Revenue in UC, CSU, CCC (in Dollars per FTES)



*2009 revenues do not reflect federal stimulus (ARRA) funding that was used to backfill most of the drop in state appropriations.

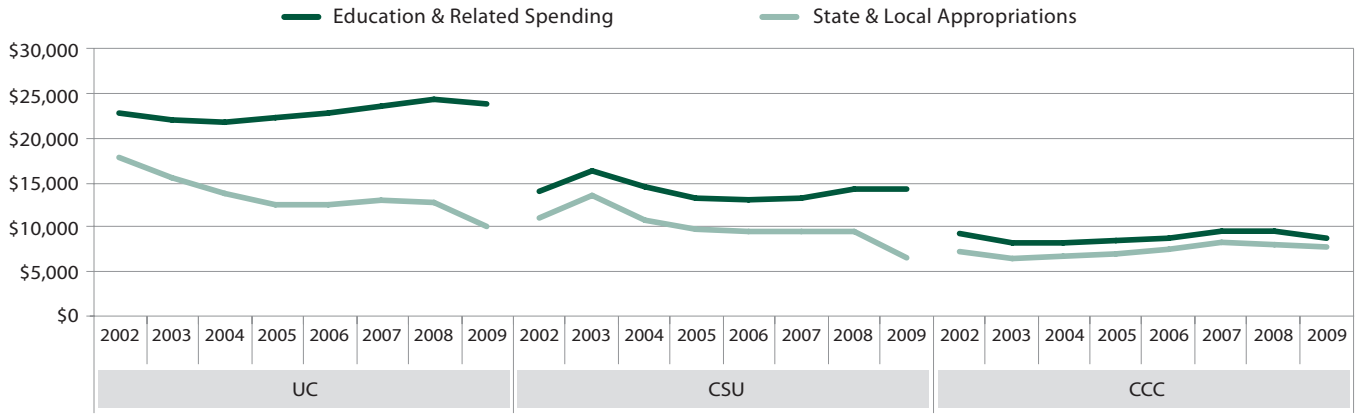
Figure 23
Tuition Revenue as Backfill to State & Local Appropriations (dollar per FTES)

	2002	2009	Change: 2002 to 2009
UC			
State & Local Appropriations	$17,705	$10,098	-$7,607
Net Tuition	$5,793	$8,710	$2,917
% Tuition Backfill			38%
CSU			
State & Local Appropriations	$11,085	$6,581	-$4,504
Net Tuition	$3,208	$4,974	$1,766
% Tuition Backfill			39%
CCC			
State & Local Appropriations	$7,182	$7,754	$572
Net Tuition	$622	$1,023	$401
% Tuition Backfill			N/A

CSU has kept spending aligned with reduced revenues; UC has not (Figures 24 and 25).

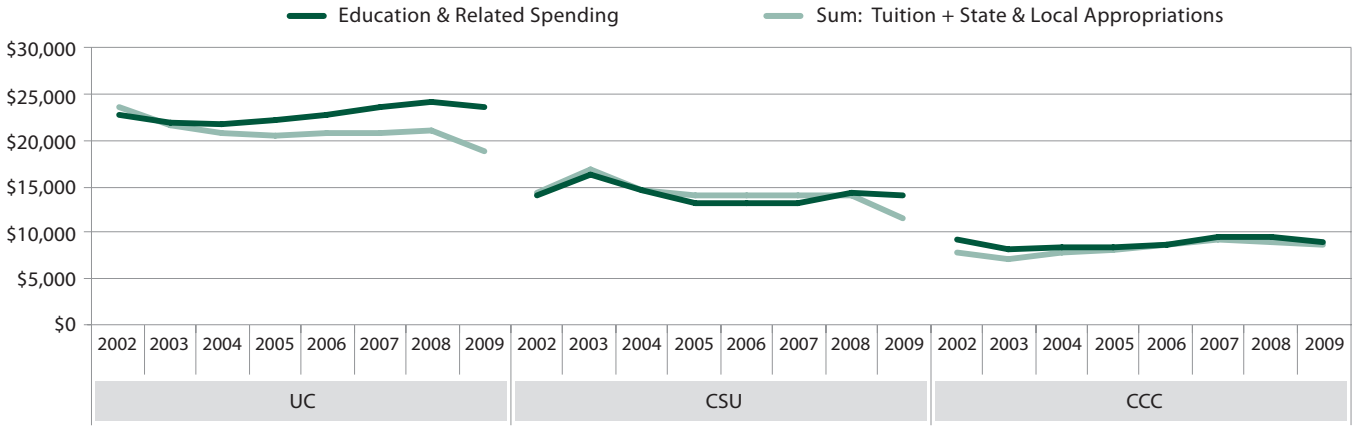
- UC's spending on E&R has increased while state & local appropriations have declined and its spending has outstripped the *combined* revenue stream (state & local appropriations and net tuition). In 2002, the two revenue sources covered E&R spending but since then UC has needed other sources to cover rising spending (in addition to ARRA funds in 2009).
- CSU's E&R spending closely tracked the decline in revenue until 2009 when spending levels were sustained by ARRA funds.
- CCC's increased spending on E&R has closely tracked increasing revenues.

Figure 24
Trends in Education & Related Spending and State & Local Appropriation Revenues in the UC, CSU, CCC (in Dollars per FTES)



*2009 revenues do not reflect federal stimulus (ARRA) funding that was used to backfill most of the drop in state appropriations.

Figure 25
Trends in Tuition, State & Local Appropriations, and Education and Related Expenditures



*2009 revenues do not reflect federal stimulus (ARRA) funding that was used to backfill most of the drop in state appropriations.

Key Policy Consideration

The lack of comprehensive finance policy on appropriate student and state shares of educational costs has resulted in steeply increasing shares for UC and CSU while CCC students still hardly contribute to the revenue base of the colleges. The segments' unique responses to this policy drift are causing even greater disparities in education spending levels.

What Do We Get?

Patterns and trends in college outcomes

Ideally, we would look at a wide range of outcomes—learning outcomes, earning gains, civic engagement, health and welfare indicators, even personal growth and development—to understand the value of higher education to the individual and to society. In the absence of these kinds of metrics, we can only look at major educational outcomes like degrees and completions to assess higher education outcomes and productivity. Though these metrics are limited in what they can tell us about educational quality, they are valuable for gauging whether California is on track to meet its future workforce needs. And given that state resources are limited, policymakers should be guided by some understanding of how much money is spent in each system to produce a graduate.

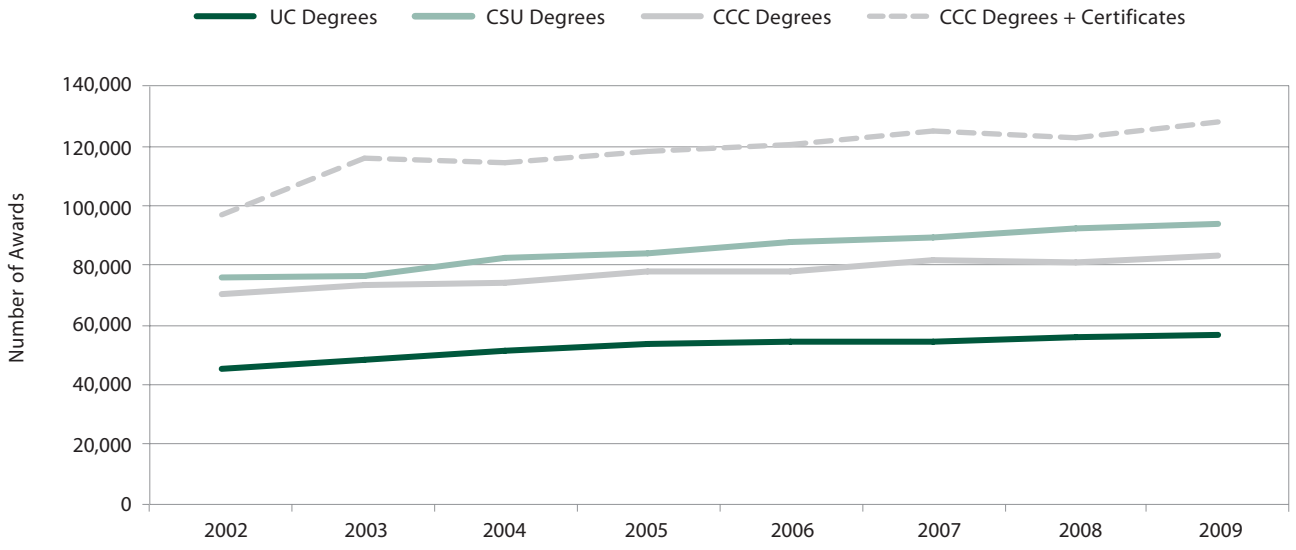
It is well worth noting that degree and certificate completion is not a comprehensive metric for understanding success rates in the community colleges because many students enroll for non-credential workforce training and many transfer without earning a credential. In addition, there is a tremendous variety in the length and value of the certificates awarded by community colleges that is only recently beginning to be examined. It is certainly not appropriate to a use a completion metric to compare community colleges with the 4-year university systems, all of whose students are presumably pursuing a degree. Still, it is a reasonable way to look at institutional productivity and to track increases or decreases in productivity over time.

Key Points:

In all three systems, colleges are producing more degrees and completions (Figure 26).

- The number of degrees produced by UC annually increased by 24% between 2002 and 2009.
- The number of degrees produced annually by CSU increased by an average of 23%.
- The number of degrees produced annually by CCC increased by 18% and the number of completions (degrees plus certificates) increased by 33%.

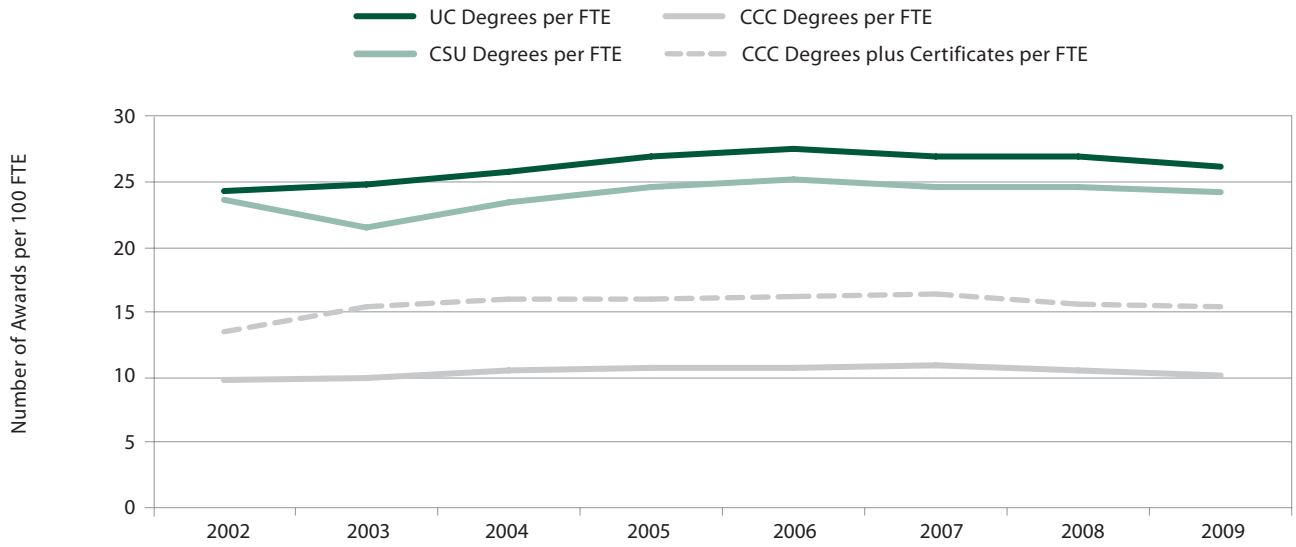
Figure 26
Trends in Total Awards in UC, CSU, CCC



One way to look at productivity is the number of degrees and completions produced per 100 full-time equivalent students. Again, all three systems showed progress on this metric (Figure 27).

- The number of UC degrees produced per FTES increased by 8% between 2002 and 2009—about 1% per year.
- The number of CSU degrees produced per FTES increased by 3% between 2002 and 2009—less than .5% per year.
- The number of CCC degrees produced per FTES increased by 3% percent between 2002 and 2009 and the number of completions per FTES increased by 14% (2% per year).

Figure 27
Trends in Awards per FTE in UC, CSU, CCC



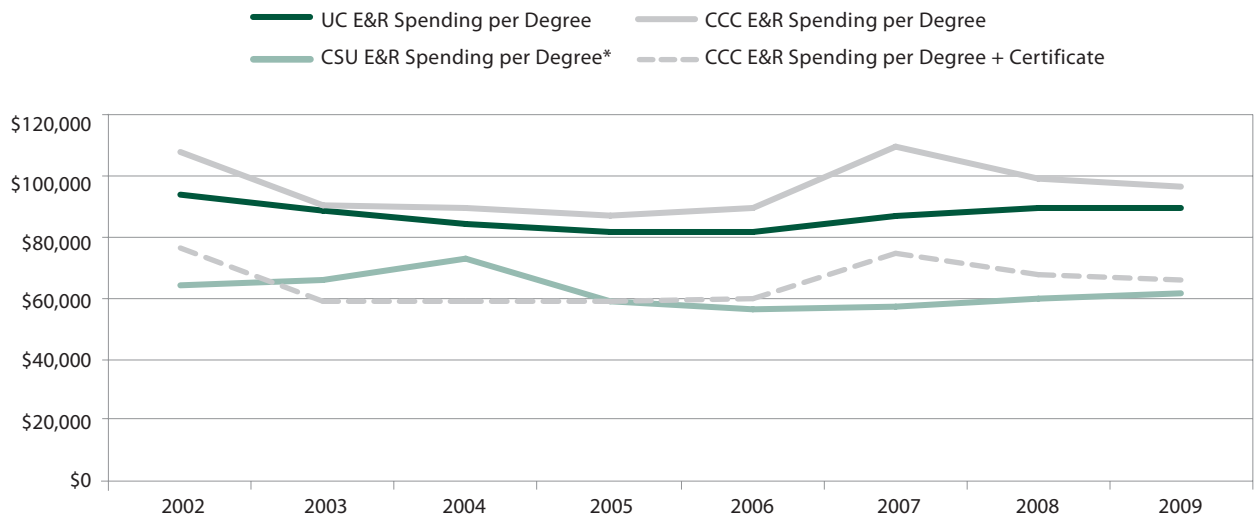
What Do We Get?

Patterns and trends in college outcomes

Productivity is also increasing in all three systems by another measure—spending per completion—as costs per completion fall. CCC's relatively high cost per completion is not because spending is high but because completion rates are low (Figure 28).

- In each system, spending per degree fluctuated between 2002 and 2009, but ultimately declined during that time period: UC and CSU each by 5% and the community colleges by 11%. Spending per completion in the CCC fell by 14%, likely reflecting the lower costs involved in getting students through shorter-term certificate programs.
- The amount of spending per completion at CCC is strikingly high ($65,474) given how little is spent annually on E&R costs per FTES ($8,877) and the shorter length of programs. Spending per degree is even higher at $96,098. These costs reflect that (1) many students are not seeking credentials, (2) most transfer students don't earn an associate degree (something that should change with the new associate degrees for transfer), and (3) low completion rates typically accompany an open access mission.

Figure 28
Trends in Education & Related Spending per Award in UC, CSU, CCC



** E&R spending per degree average for CSU excludes CSU Channel Islands for 2003 because the amount was an outlier in that college's first year of operation ($17,190,288).*

All three segments spend more per degree than the national average for their respective sectors (Figure 29).

- Nationally, public associate level institutions are the most cost-effective institutions at producing credentials. In California, however, CSU is the most cost effective sector. California's community colleges spend 30% more than the national average per degree and 40% more per completion.
- CSU's spending per degree is 11% above the national average in that sector. The UC spends 36% more per completion than public research institutions nationally.
- Across sectors, nationally, community colleges spend the most per degree and the least per completion (which includes certificates). In California, CCC spends the most per degree, but even when certificates are counted, their costs are higher than those at CSU.

Figure 29
Education & Related Spending per Degree and per Completion—2009 Data

	Public Research Institutions	Public Masters Institutions	Public Associates Institutions (per Degree)	Public Associates Institutions (per Completion)*
California	$89,450	$61,173	$96,098	$65,474
National Average	$65,632	$55,358	$73,940	$46,759

** Degrees plus Certificates*

Key Policy Consideration

All three segments, but particularly the community colleges, are spending more per degree than their national counterparts—so improving productivity without compromising quality is perhaps the most important challenge facing policymakers.

Conclusion

Key Findings Frame a Policy Agenda

California is not alone in trying to find a way forward for higher education in the context of a faltering economy, with increasingly constrained public resources, growing and diversifying enrollments, shortages of educated citizens, and mounting questions about whether the product justifies the cost. But California stands atop states in the urgency of the need to increase education levels. Its size, growth, demographics, and economic standing make its success in reversing falling education levels vital to the country's future competitiveness and, of course, to its own well-being. The Delta Cost Project, on whose data and methods we drew for this report, was created to improve the consistency and quality of financial data and to supply states with better ways to think and talk about revenues and spending as tuition has risen and state and local contributions have fallen in nearly every state. From those data we have identified a number of key findings that should help frame policy discussions about financing higher education in California.

Comparisons with the rest of the nation have revealed some *unique* characteristics of the California higher education fiscal landscape. These include:

- the largest disparity in the nation by far in educational expenditures per student between the research university sector and the community college sector
- a community college sector that receives but one-tenth of its revenue from tuition (compared to a national average of one-third), and
- costs per degree at UC and CCC that are 30% to 40% higher than the national average for each sector.

Comparisons among UC, CSU, and CCC and over time have revealed some fundamental changes in financial circumstances for students and the institutions. These include:

- a large and precipitous decline in state subsidies for UC and CSU and a large rise in the student share of costs as tuition has risen to partially offset the loss of state funds
- moderate growth in state subsidies per FTES for CCC, with the student share of cost still very low
- increased spending levels at UC that are diverging from decreasing revenue levels, with spending levels sustained by revenues unidentified in state budgeting, and
- increased productivity at all segments—but well short of the annual increases that are needed for economic competitiveness moving forward.

Three Crucial Questions for Policymakers

We have identified three critical policy questions from a review of the data comparing California's colleges and universities to their national counterparts, to one another, and over time, all in the context of the need for more college graduates. Each question addresses an aspect of the overriding policy question of how California can most wisely spend its scarce public subsidy dollars in view of the pressing tasks at hand.

1. Who should pay for higher education and how much should they pay?

This is without a doubt the core policy question facing policymakers in California and across the nation. We have documented, through 2009, a rapidly shifting change in the relative roles of students and the state in funding the basic educational costs of the state's universities. State budget cuts and tuition increases since then have brought a full-scale role reversal in at least one segment, with students paying a share greater than the state.[17] We are unaware of any policy conversations that are explicitly addressing the mix of public and private benefits from the perspective of societal value judgments. The particular distribution of resources we have today—both among the three systems and the resulting student share of educational costs—does not reflect a deliberate strategy. Our state Master Plan describes mission differentiation and eligibility for the three systems, but offers no guidance on dividing resources among the three systems to produce desired levels of education, or on funding higher education as a whole. Our state has no stated principles to guide us on what we mean by affordability, how costs should be shared between students and the state, whether or how shares of cost should vary by segment, and what quality education should cost in each segment. In essence, we've stumbled into the arrangement we have now.

At UC, the steep decline in revenue from the state has sparked policy debate about the University's obligation to California and the prospect of charging higher tuition for the more selective campuses. UC Berkeley's Chancellor suggested recently that the state is becoming a "tertiary player" and that Berkeley is effectively transforming into a federal university. In assessing this claim, it would be important to understand the extent to which non-state revenues can be used for E&R purposes. If non-state revenues are largely restricted to other purposes, then the state will continue to provide most of the funds to support students' education and can hardly be considered a tertiary player. As of 2009, state subsidies had dropped significantly but at more than $10,000 per student were still well above the national average. More clarity on the allowable uses of non-state revenues would inform the discussion about the responsibilities of the state and UC for increasing educational attainment.

By any comparison (to other community colleges or to the other segments in California), CCC tuition is extremely low. Net tuition revenue has increased the least in CCC, despite the fact that it is already much lower than in the other systems. Scant tuition revenue is the principal reason for the comparatively poor funding basis for the community colleges, as the state contribution per student is above the national average for the two-year sector. California will not get the gains in education levels it needs if the sector it most relies on to educate broad sectors of the population continues to operate with comparatively low revenues.

2. What does quality education cost?

We documented significant differences across the three segments in E&R spending levels and different spending trends over time. UC spends considerably more than CSU and CCC and far more than its national counterparts, and is increasing its spending at a higher rate (CCC reduced spending over the period examined). We can question why the segment that serves the hardest-to-serve students spends the least, but we don't know how CCC spending compares to what UC and CSU spend on their lower division students. We don't know what UC or CSU spend on undergraduate education because neither segment has ever been willing or forced to disaggregate undergraduate from graduate spending. UC faculty research costs are buried in these totals as well because research activity is funded through reduced teaching loads, compared to CSU and CCC. Without more detailed information, it will be difficult for policymakers to know whether expenditure differences across segments are justifiable. Differences might appropriately reflect the differences in mission but they might instead reflect a mismatch between mission and resources. Most perplexing is the current inability to correlate spending levels with quality. Institutions may argue—perhaps accurately, perhaps not—that higher spending reflects higher quality and that cost reductions risk eroding quality. Linking spending levels to quality is no easy task but surely more transparency in accounting for expenditures would increase the capacity of state leaders to engage in resource planning aimed at providing quality education to broad sectors of Californians.

3. Can educational attainment increase sufficiently within the existing set of institutions, missions, and eligibility standards?

Increasing the number of adults with college credentials will require greatly increasing productivity levels—specifically at CCC. California relies more heavily than most states on its public sector and within the public sector, it relies more heavily on its community colleges. Historically funded at levels well below the universities, CCC has been relatively favored over the 2002-2009 period we analyzed, seeing slightly rising state revenues while state support for UC and CSU declined sharply. But completion rates are such that the cost of producing an associate degree exceeds the cost of producing a bachelor's degree at either university system. The new associate degree for transfer will reduce this cost as more students earn degrees prior to transferring, but the open access mission assigned to CCC constrains productivity. The emphasis on unfettered access leads to the enrollment of many individuals who attend college part-time and/or sporadically and have no interest in, or need for, a college credential. Providing state subsidy to accommodate students without credential goals reduces the subsidy directed toward credential production.

Increasing productivity in CCC is also hampered by the fact that the vast majority of entering students are not ready for college work. California, and the nation at large, are paying a huge price for erroneously believing that remediation can be provided by community colleges on the cheap. Without

Conclusion

dramatically more effective approaches to remediating under-prepared students, significant productivity gains at CCC, and to a lesser degree at CSU, are likely to be elusive.

While some level of productivity gain can surely be accomplished at each segment, larger gains may involve more fundamental changes. One possibility is to admit a greater proportion of degree-seeking freshmen directly into CSU and UC, bringing the reliance on the transfer function to produce bachelor's degrees more in line with other states. Different kinds of institutions might be able to educate certain populations less expensively. These might include a new delivery system for serving under-prepared adults, selective undergraduate institutions without a graduate/professional and research component, and specialized technical institutes—as some examples. California has the highest percent of adults who lack basic literacy skills among all 50 states and ranks 36th in the percent of adults ages 18-64 who have a high school education or less and are living in families with incomes below a living wage.[18] Any comprehensive plan to increase the portion of California adults with college credentials will have to address the failure of the current shared arrangement between CCC and K-12 to serve this adult population. In addition, the career technical education mission of CCC has been greatly under-emphasized, resulting in scant production of career-oriented credentials.[19] California may need degree productivity beyond what can reasonably be expected from a two-year sector that comprises only *comprehensive* community colleges that must balance several missions.

Policy Drift Leaves Vital Issues Unaddressed

As revenues decline, the general response of state policymakers is to assess unallocated cuts to each segment (of approximately the same size at UC and CSU) and let the segments accommodate the reductions. There is no state-level discussion of how revenues and expenditures for each segment relate to what the state expects in terms of college graduates. And there are no policy discussions of resource allocation adjustments that *cross segments*. For instance, should all undergraduate education be funded at the same rate, effectively shifting subsidies among the segments? Should more than one-third of high school graduates start in universities? Should every UC have graduate and professional programs?

The general response of the three higher education segments to this laissez faire approach to finance policymaking has been to (1) maintain historical cost structures, (2) reduce enrollment, as possible, to maintain funding per FTES in order to protect quality, (3) make changes at the margins (e.g., achieve administrative efficiencies in procurement, eliminate low-enrolled courses and programs), and (4) raise revenues from other sources (mostly tuition) to maintain expenditure levels. There have been few actions commensurate with the rhetoric that this may indeed be "the new normal," perhaps in the hope of a resumption of past public priorities for taxation and support of public education at all levels.

In these dynamic and trying times, state leaders should be keeping much closer track of funding in higher education: how resources are spent on undergraduate and graduate education, what portion of costs are shouldered by students versus the state, and how productive and efficient the systems are relative to state priorities and needs. State leaders should be asking the systems for better information about what drives the base cost of education, why and how it has changed over time, and what are the relationships between spending and educational quality that can aid resource decisions. System leaders, in turn, should require individual institutions to collect and report the information that will feed into these systemwide analyses and help make internal decision-making and priority-setting more transparent. This report is a start toward framing policy conversations around data on revenues, spending, and productivity.

Working together, the state and the three systems of higher education should have a deliberate guiding strategy for funding higher education to meet the needs of Californians—one that strikes a balance between opportunity and personal responsibility and that shares the cost burden appropriately among the state, students, and the institutions of higher education. Public higher education figured prominently in California's rise as an economic power in the last half of the twentieth century. Now, California's future depends more than ever on its ability to educate its people, and the present state of policy drift is unlikely to get the job done.

Endnotes

1 Jones, D. National Center for Higher Education Management Systems. Presentation, September 15, 2009, for California Convening on Utilizing College Access & Completion Fund.

2 Ibid.

3 Ibid.

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5 Johnson, H. & Sengupta, R. (2009). *Closing the gap: Meeting California's need for college graduates*. San Francisco: Public Policy Institute of California; Offenstein, J. & Shulock, N. (2009). *Technical difficulties: Meeting California's workforce needs in science, technology, engineering, and math (STEM) fields*. Sacramento, CA: Institute for Higher Education Leadership & Policy; PolicyLink (2010). *Pathways out of poverty for vulnerable Californians: Policies that prepare the workforce for middle-skill infrastructure jobs*. Oakland, CA: Author; The Workforce Alliance (2009). *California's forgotten middle-skill jobs: Meeting the demands of a 21st century economy*. Washington, DC: Author; California Community College Association for Occupational Education (2010). *Proposed regional workforce and economic development strategy*. Retrieved from http://www.cccaoe.org/Splash/2010/Regional_Workforce_Economic_Development_Strategy_Overlay.html.

6 The community colleges have not transitioned to the use of "tuition" as have UC and CSU, and still use the term "fee".

7 Three different methods – those used by IPEDS, the California Postsecondary Education Commission, and the California Community Colleges Management Information System – for computing FTES yield substantially different values for the community colleges. For internal consistency, we use only the method that the Delta Cost Project used, based on IPEDS, to report enrollment trends as well as revenue and expenditure trends per FTES.

8 Johnson & Sengupta, *Ibid.*; The Workforce Alliance (2009). *California's forgotten middle-skill jobs: Meeting the demands of a 21st century economy*. Washington, DC: Author.

9 U.S. Dept. of Education, National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS), 2009 data.

10 UC has broadened its eligibility criteria to define the "top one-eighth" in ways that extend beyond grades and college admission tests.

11 Snyder, T.D. & Dillow, S.A. (2010). *Digest of education statistics 2010*. Washington, DC: National Center for Education Statistics.

12 National Center for Higher Education Management Systems (NCHEMS). NCHEMS Information Center for Higher Education Policymaking and Analysis. http://www.higheredinfo.org/

13 Trends in College Spending (TCS) Online http://www.tcs-online.org/Home.aspx.

14 Ibid., Page 33.

15 See the California Legislative Analyst's Office, *2011-12 Budget: Higher Education Budget in Context*, January 19, 2011, for further explanation of the ARRA funding in relation to state General Fund support, http://www.lao.ca.gov/analysis/2011/highered/hed_budget_in_context_011911.aspx#zzee_link_5_1295463086.

16 California Legislative Analyst's Office (2011). *The 2011-12 budget: Achieving general fund savings at UC and CSU*. Sacramento, CA: Author, Page 4. Available at: http://www.lao.ca.gov/analysis/2011/highered/uc_csu_genfund_012411.pdf.

17 A statement released by the UC Office of the President indicates that under the 2011-12 budget (even prior to the additional cuts levied subsequently) student contributions exceed those of the state. http://www.universityofcalifornia.edu/news/article/24763 Similar comments have been made informally by the CSU.

18 National Center for Higher Education Management Systems Information Center for Higher Education Policymaking and Analysis. http://www.higheredinfo.org/

19 Shulock, N., Moore, C., & Offenstein, J. (2011). *The Road Less Traveled: Realizing the Potential of Career Technical Education in the California Community Colleges*. Sacramento, CA: Institute for Higher Education Leadership & Policy.

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