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Trends in the California Higher Education Sector and Its Environment

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PREFACE

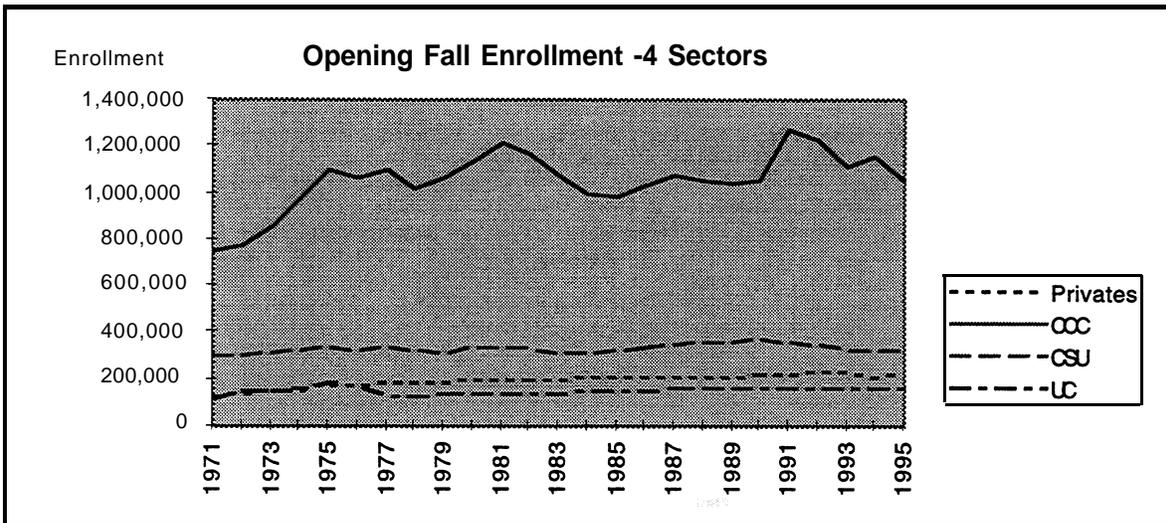
The following set of graphs with accompanying descriptions examines trends in the California higher education sector and its environment. The trends examined include: undergraduate and graduate enrollment, student migration in and out of California's higher education sector, college-going rates of California's high school graduates, tuition and fees in California and neighboring states, state and institutional aid, revenues available to higher education institutions, R&D expenditures, and faculty trends. To the extent possible, these trends are examined separately for the University of California, the California State University, the California Community Colleges, and California's Independent Colleges and Universities.

This document has been prepared for the California Higher Education Roundtable to encourage discussion about the findings and their policy implications for the future of higher education in California.

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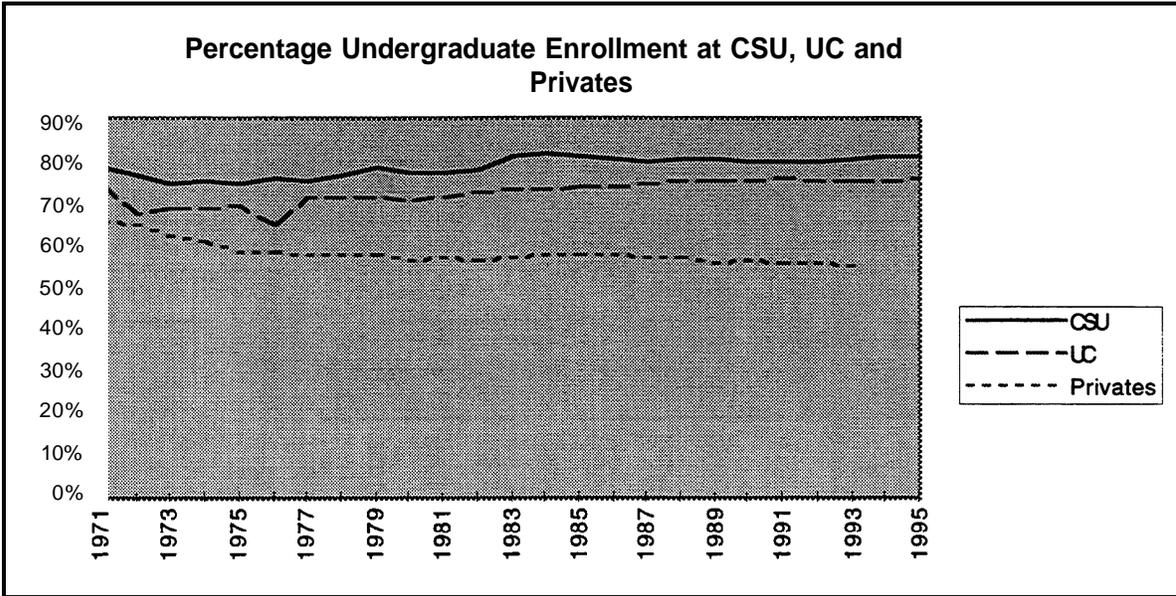
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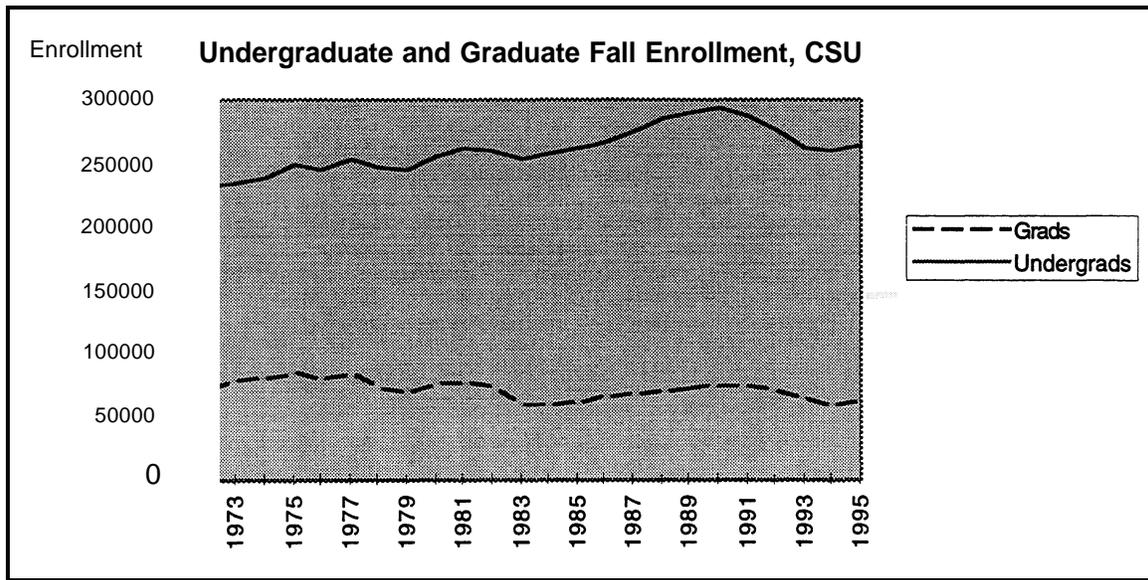
Source: National Center for Education Statistics; California Postsecondary Education Commission

The number of students enrolled in higher education in California rose from about 1.3 million in fall 1971 to about 1.8 million in fall 1995. The share of total students enrolled in each segment of higher education changed somewhat over that time period with a larger percentage of students enrolling in private colleges and universities and the California Community Colleges over time. The percentage of total students enrolling in the California State University system has dropped over time and the percentage of students enrolling in the University of California has stayed about the same.



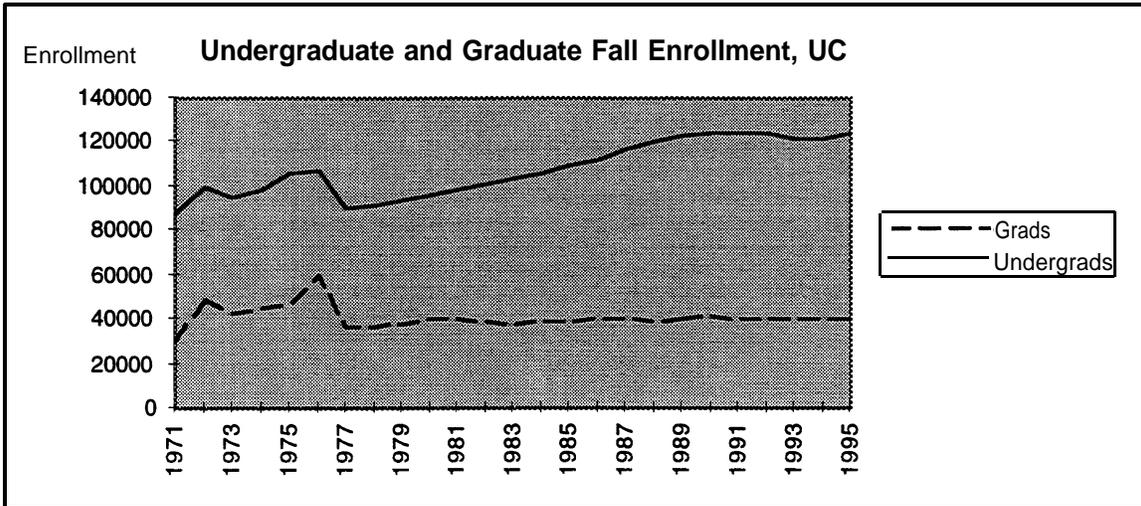
Source: California Postsecondary Education Commission; National Center for Education Statistics

The percentage of undergraduate enrollment at CSU and UC has slowly increased over time. The percentage of undergraduate enrollment has steadily decreased at private higher education institutions in California.



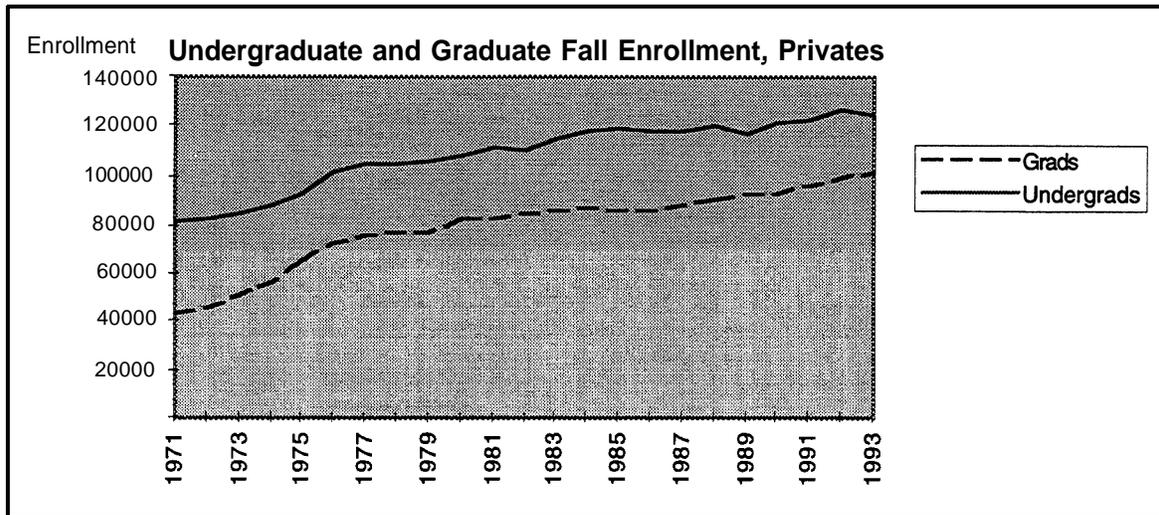
Source: California Postsecondary Education Commission; National Center for Education Statistics

At CSU, the percentage of undergraduate enrollment increased from 78 percent of total enrollment in 1971 to 81 percent of total enrollment in 1995.



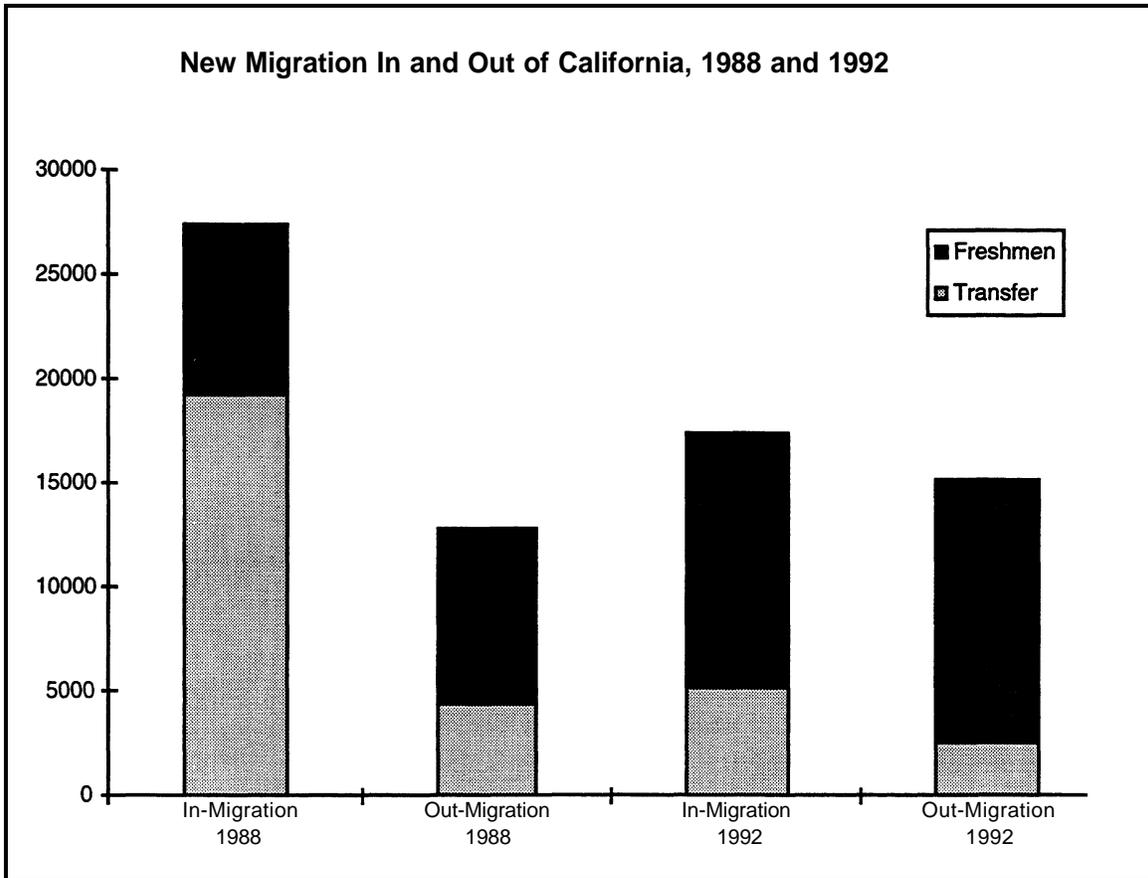
Source: California Postsecondary Education Commission; National Center for Education Statistics

Throughout the early 1970s, undergraduate enrollment at the University of California represented about 70 percent of total enrollment. Undergraduate enrollment grew more rapidly than graduate enrollment in the 1980s and grew to represent about 76 percent of total enrollment in 1995.



Source: California Postsecondary Education Commission; National Center for Education Statistics

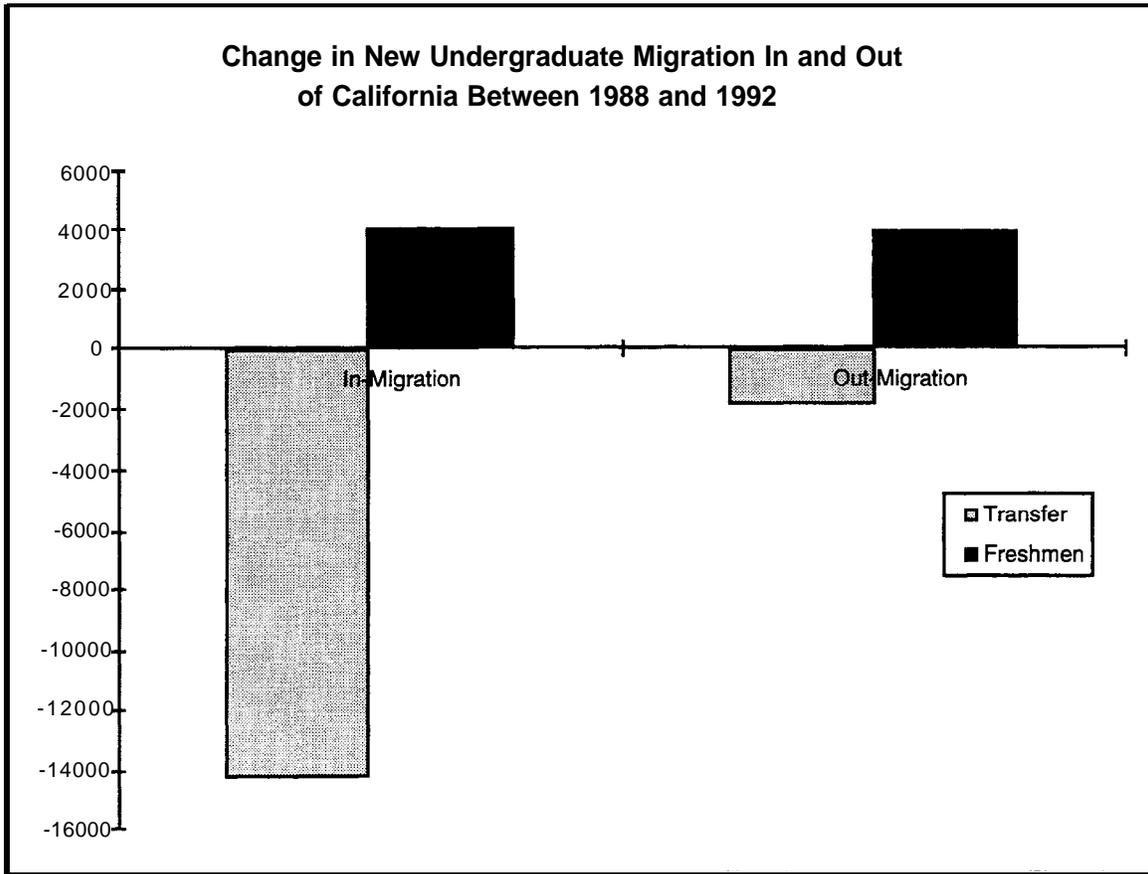
Undergraduate enrollment in independent institutions in California fell from representing about 65 percent of total enrollment in 1971 to representing about 55 percent of total enrollment in 1993.



Source: National Center for Education Statistics Student Migration Data; California Postsecondary Education Commission

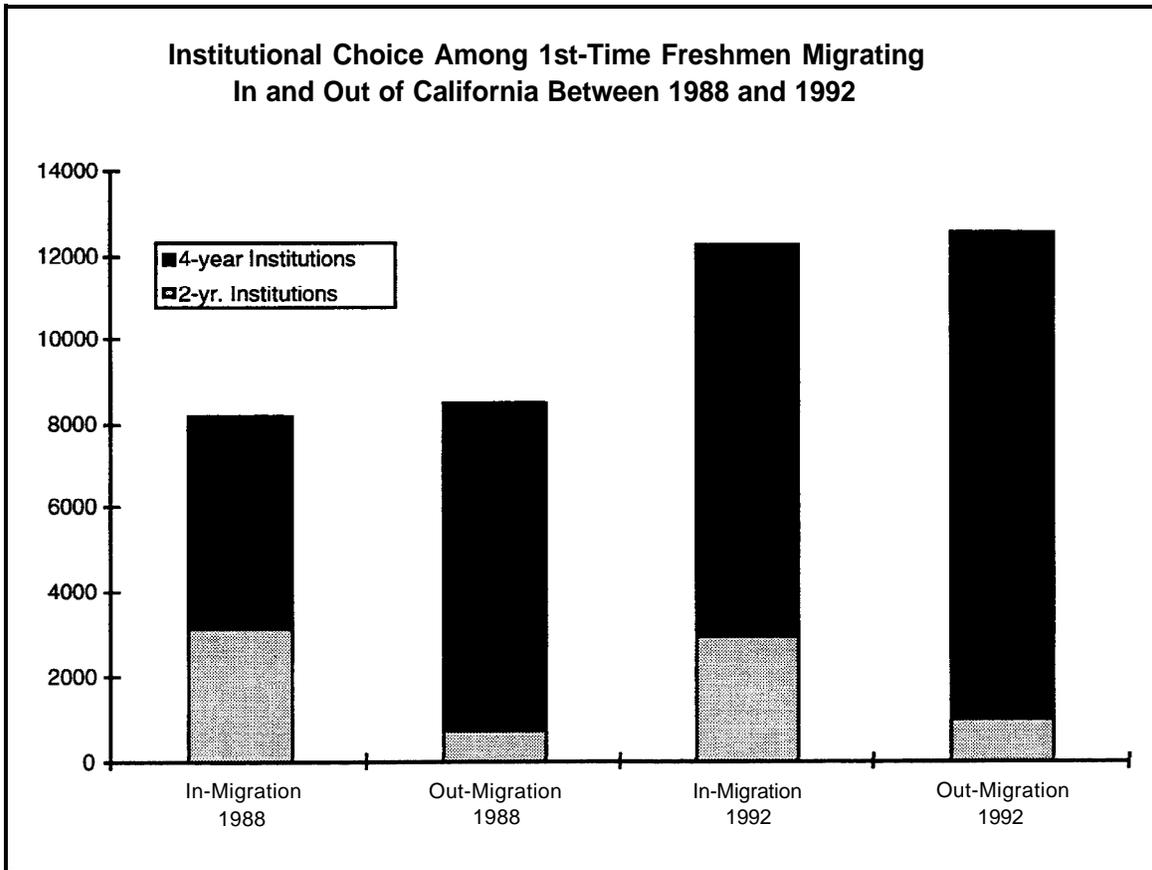
California has historically been a net importer of college students with patterns similar to those for 1988 as shown above. For every new undergraduate who left California to enroll in a higher education institution in another state in Fall 1988, two new out-of-state undergraduate students enrolled in a California institution. Seventy percent of these incoming students transferred from a postsecondary institution in another state. For those enrolling as freshmen, the ratio of students entering California to those leaving was almost one-to-one--8,204 new freshmen entered California and 8,555 Californians left to be new freshmen at out-of-state institutions. However, the institutions these freshmen enrolled in were different with 40 percent of the incoming freshmen to California enrolling in a community college and over 90 percent of those leaving enrolling in a baccalaureate degree-granting institution.

The historical pattern of interstate migration changed significantly in 1992. In 1992, undergraduate students entering California exceeded those leaving by only 2,000. In particular, there was a steep decline in students transferring into California's colleges and universities.



Source: National Center for Education Statistics Student Migration Data; California Postsecondary Education Commission

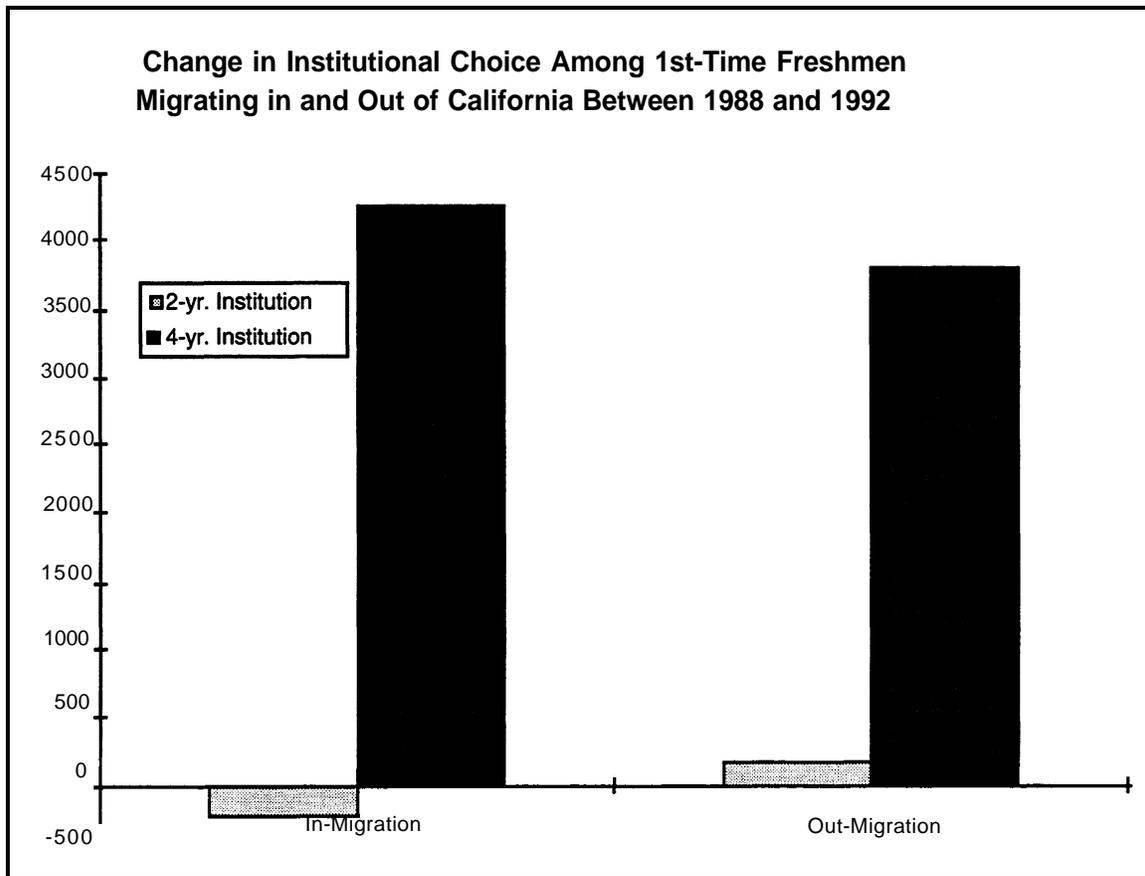
The interstate flow of students shifted dramatically between 1988 and 1992. The most dramatic change over that period was the decrease in students entering California—a decline of 10,000 students from other states choosing to enroll in California colleges and universities. Overall, the number of incoming new undergraduate students dropped from 27,328 in 1988 to 17,296 in 1992. The proportion of students entering California who were transferring from an out-of-state postsecondary institution dropped from 70 percent to 29 percent, a decrease of more than 14,000 students (from 19,124 to 5,040). During this same period, the number of out-of-state students enrolling as first-time freshmen in California actually increased by about 4,000 from 8,204 to 12,226. Interestingly, the number of recent California high school graduates leaving the state to enroll as first-time freshmen outside California also increased by about 4,000 students, maintaining the approximate one-to-one ratio of in-migrating to out-migrating freshmen.



Source: National Center for Education Statistics Student Migration Data; California Postsecondary Education Commission

The types of higher education institutions the groups of freshmen migrating in and out of California sought were substantially different. The increases in in-migration and out-migration were almost entirely situated at baccalaureate granting institutions. An increasing proportion of the in-migrating freshmen enrolled in baccalaureate institutions--75 percent in 1992 as compared to 61 percent in 1988. But, California public institutional data clearly show that these freshmen were enrolling in the State's independent colleges and universities. Enrollment of first-time freshmen

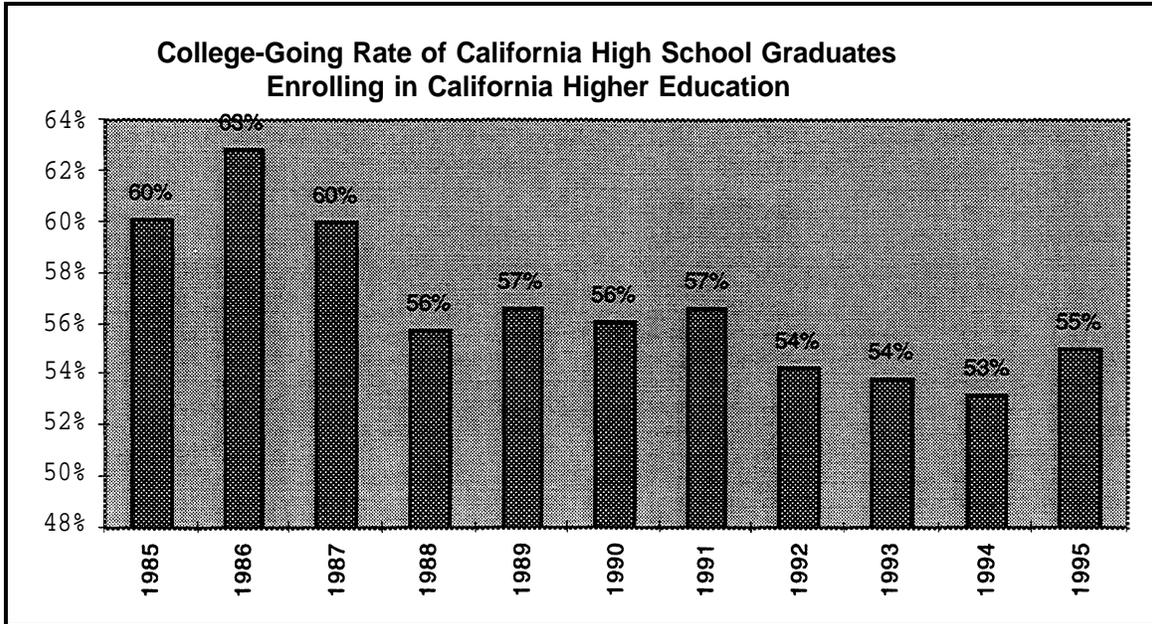
From outside of California declined at both the California State University and the University of California during this period. Among recent California high school graduates in 1992 who left California for college, 92.5 percent chose to enroll in a baccalaureate degree-granting institution. This increase in the out-migration of 3,790 freshmen to baccalaureate granting institutions in other states may account for a substantial portion of the decrease in first-time freshmen enrollments at the State's public universities in 1992 and may have played some small role in the decreases at the community colleges.



Source: National Center for Education Statistics Student Migration Data; California Postsecondary Education Commission

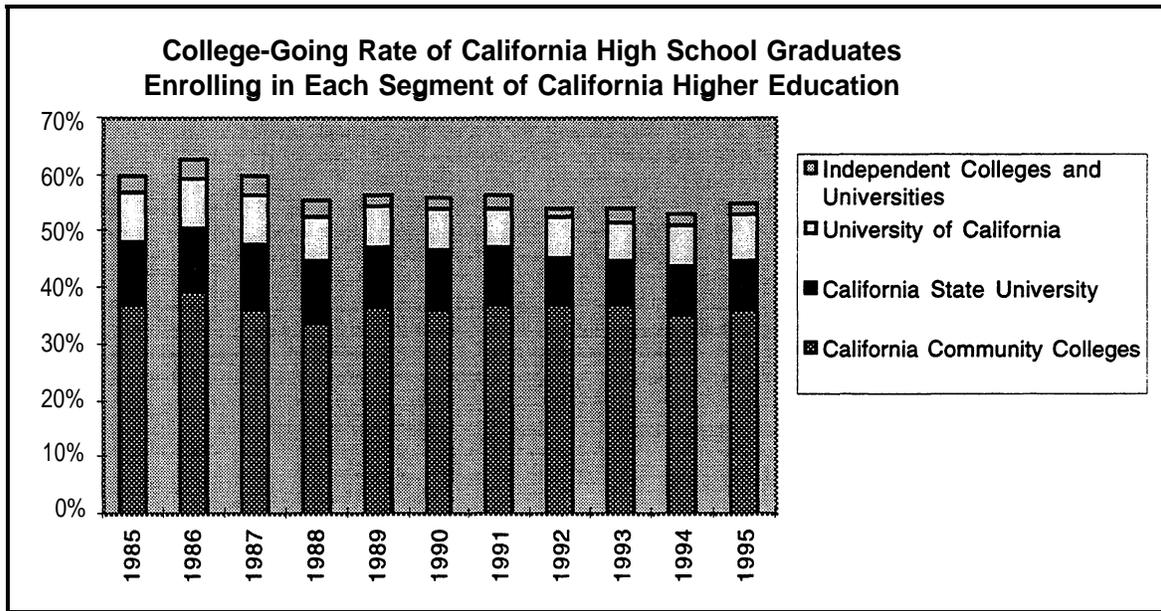
The increase in the out-migration of 3,790 freshmen to baccalaureate granting institutions in other states may account for a substantial portion of the decrease in first-time freshmen enrollments at the State's public universities in 1992 and may have played some small role in the decreases at the community colleges. This loss to the State's public institutions is particularly great given that the growth in in-migration of first-time freshmen largely went to 4-year private institutions.

The interstate student migration data for Fall 1994 will not be available until 1997. As a result, it is unclear whether the migration patterns of students observed in 1992 will persist or revert to an earlier pattern.



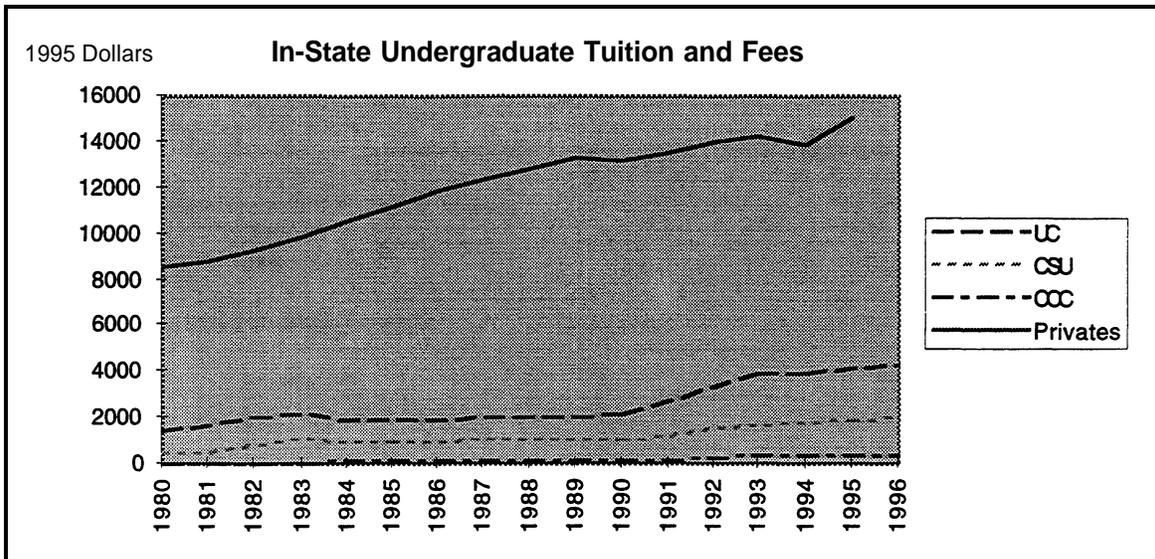
Source: California Postsecondary Education Commission

After participation of recent high school graduates in higher education in California reached unparalleled levels, the rate has plummeted to about 54 percent in 1995.



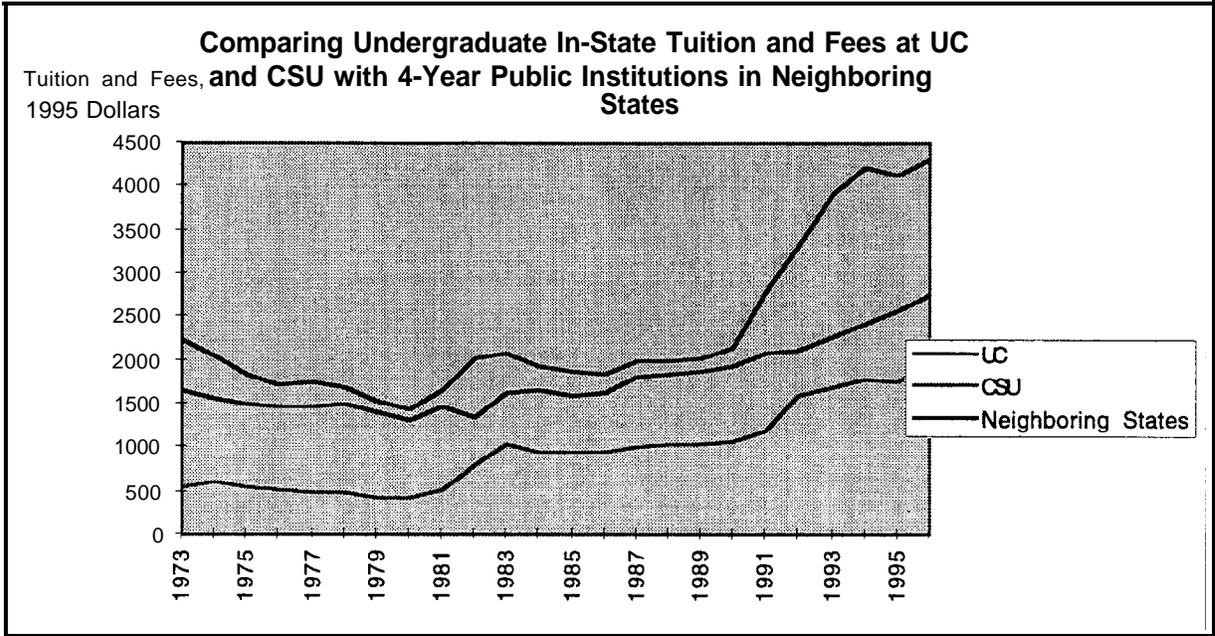
Source: California Postsecondary Education Commission

The most substantial decreases in the college going rate to California higher education occurred at the California State University for which the participation rate dropped from 10.8 percent to 7.6 percent from 1989 to 1993. In 1995, the rate increased at the California State University to almost 9 percent. In addition, a continued decline in the participation rate at the California Community Colleges has resulted in a lower overall participation rate for public postsecondary education.



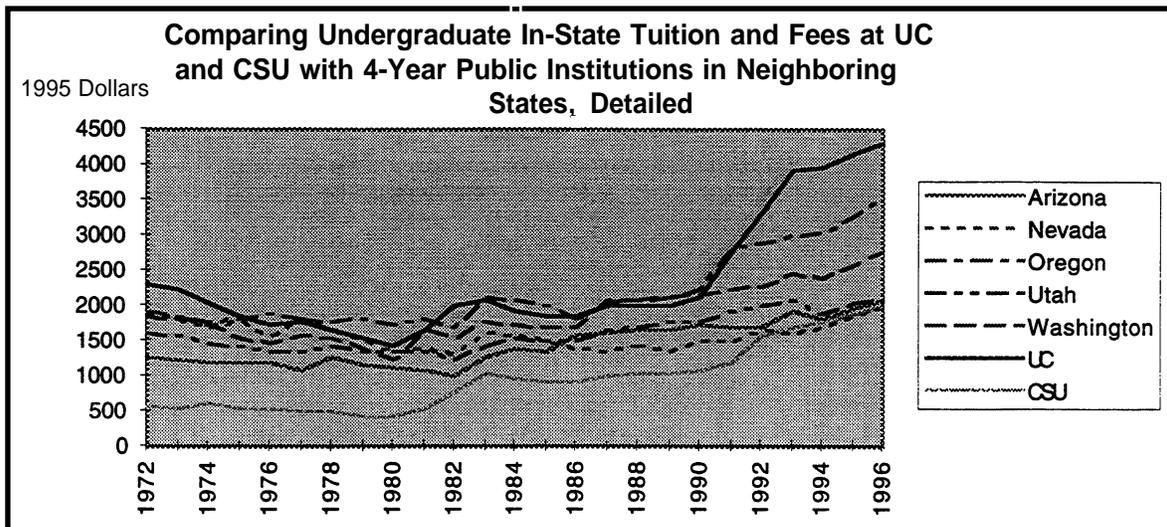
Source: California Postsecondary Education Commission

While in-state fees at the public higher education systems rose more rapidly than tuition and fees at the private institutions in the 1990s, the gap between public and private tuition and fees has widened since 1980. Real private tuition and fees rose steadily throughout the 1980s as real fees at California's public institutions remained relatively flat. Real fees at California's public institutions remained relatively flat during the recession in the early 1980s. This was not the case during the recession in the 1990s.



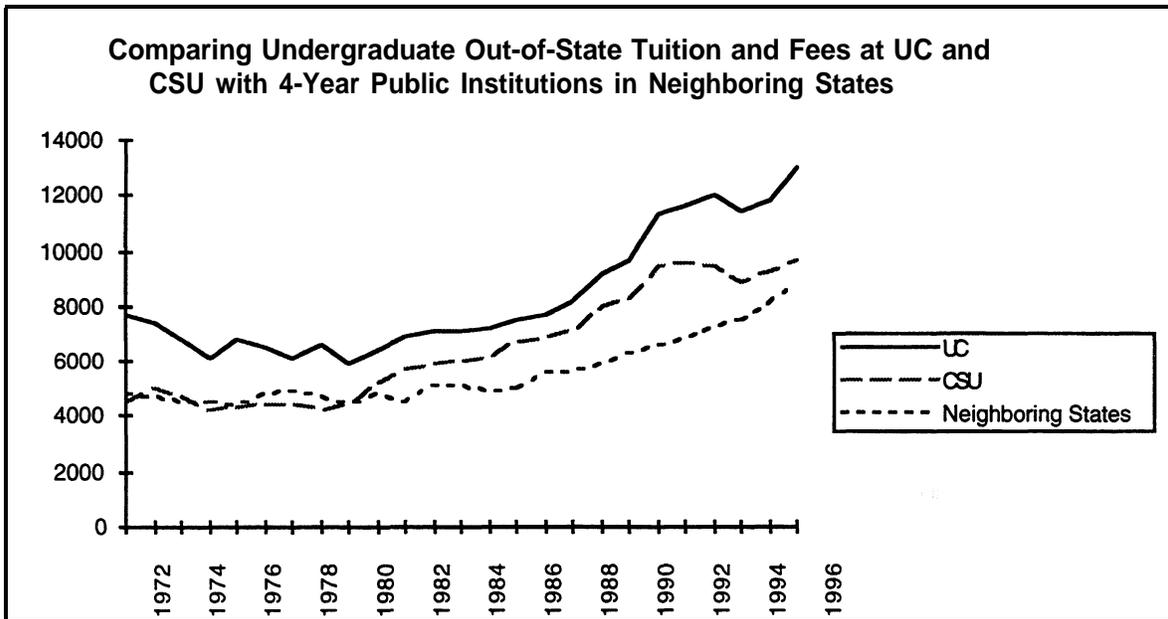
Source: California Postsecondary Education Commission; National Center for Education Statistics

In-state undergraduate tuition and fees at the University of California were above those at 4-year public institutions in neighboring states in the early 1970s before moving close to the average in-state tuition and fees in neighboring states throughout the 1970s and 1980s. In the early 1990s, fees at UC institutions rapidly moved well above those in neighboring states. The gap between in-state undergraduate fees at CSU institutions and in-state tuition and fees at neighboring state's four-year public institutions has steadily diminished.



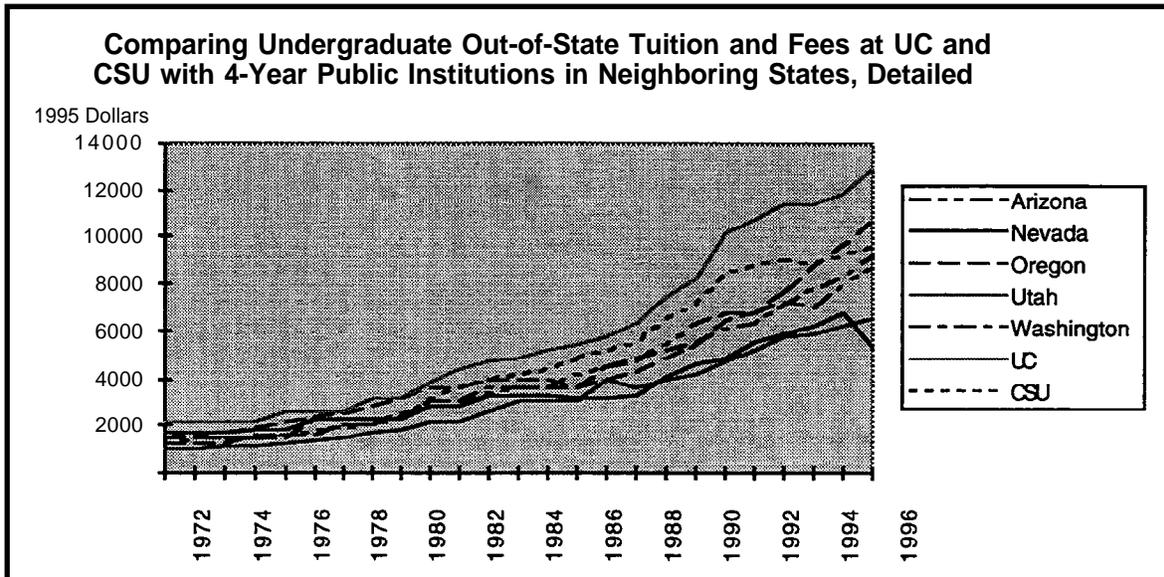
Source: California Postsecondary Education Commission; National Center for Education Statistics

In-state undergraduate tuition and fees at the University of California moved closely with those in Washington and Oregon throughout the 1970s and 1980s. In the early 1990s, in-state fees at UC institutions have rapidly moved well above those charged in all neighboring states. In-state tuition and fees at CSU institutions were well below in-state tuition and fees in neighboring states throughout the 1980s. Since then, in-state tuition and fees at CSU institutions have closed the gap with neighboring states, particularly Nevada and Arizona.



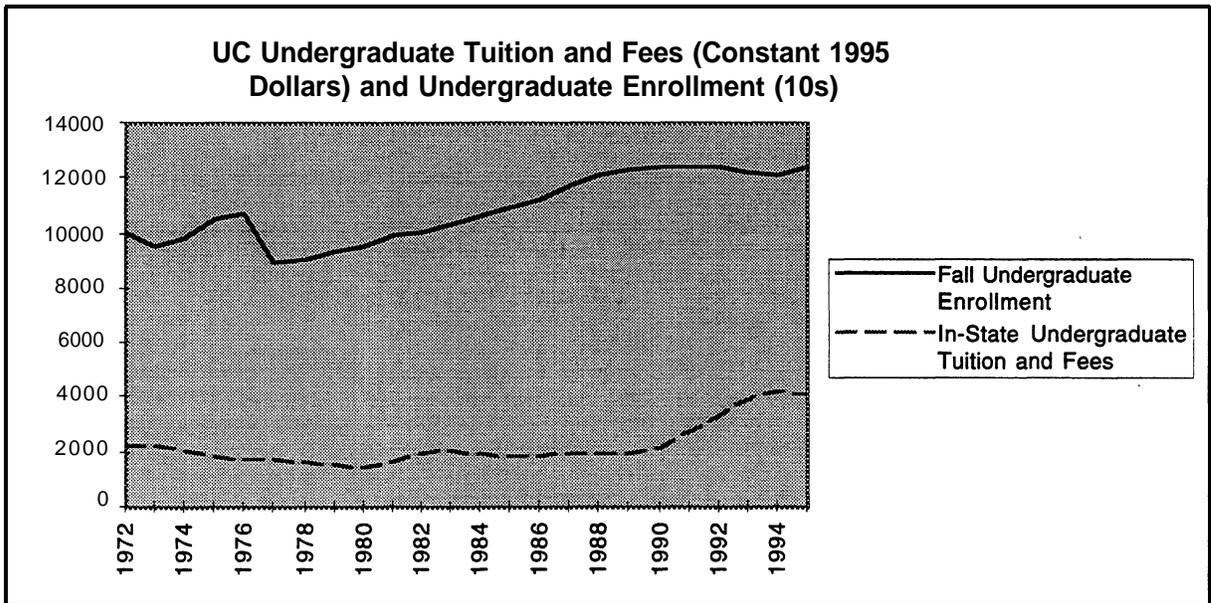
Source: California Postsecondary Education Commission; National Center for Education Statistics

The gap between undergraduate out-of-state tuition and fees at UC institutions and 4-year public institutions in neighboring states has grown steadily since 1980. Out-of-State tuition and fees at CSU have grown rapidly relative to out-of state tuition and fees charged at 4-year public institutions in neighboring states.



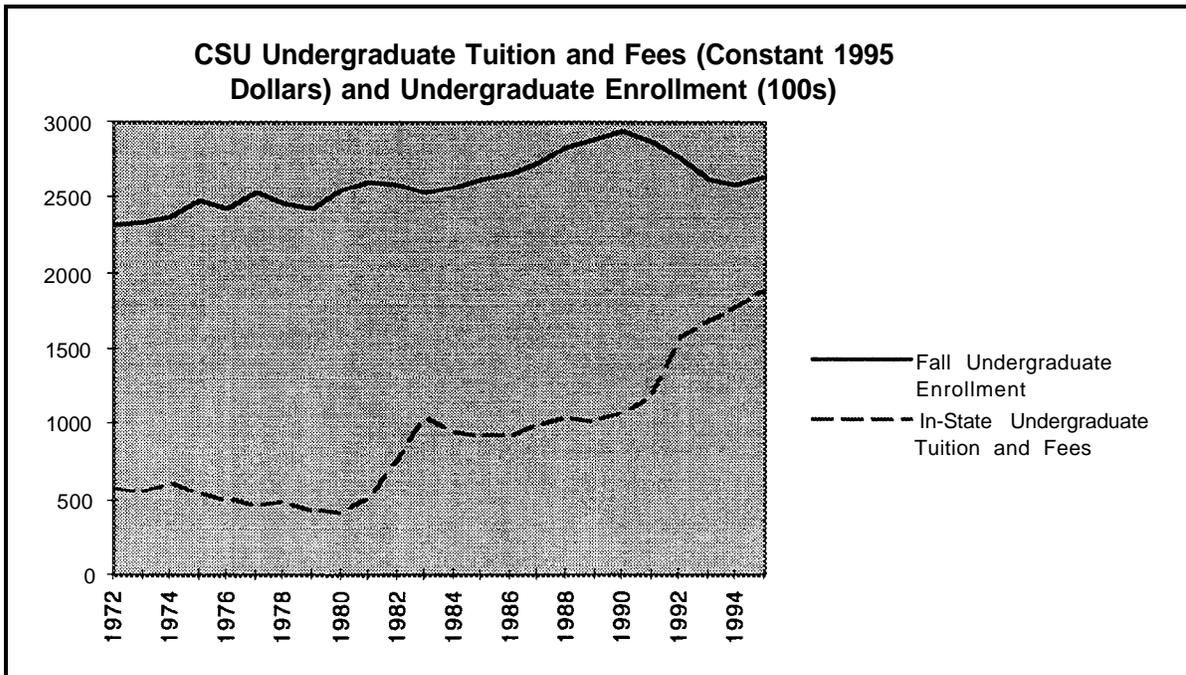
Source: California Postsecondary Education Commission; National Center for Education Statistics

In 1996, UC institutions charged about \$2,300 more in out-of-state tuition and fees than did 4-year public institutions in the next highest state, Oregon. Out-of-state tuition and fees charged at CSU institutions relative to 4-year public institutions in neighboring states changed considerably between 1972 and 1996. By 1984, out-of-state tuition and fees at CSU institutions were higher than those charged at public 4-year institutions in any neighboring states.



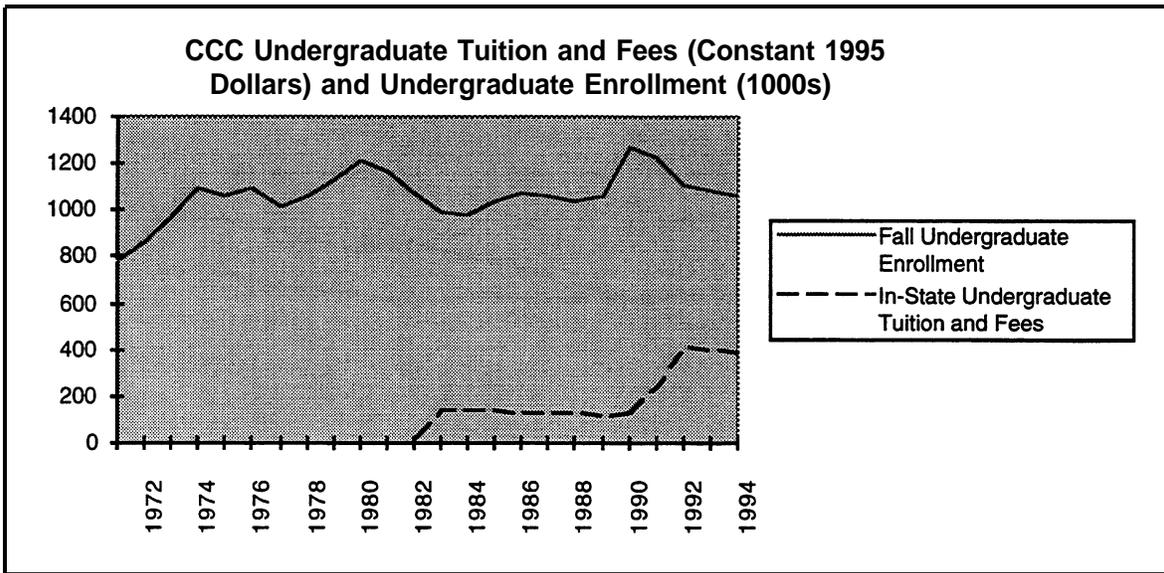
Source: California Postsecondary Education Commission; National Center for Education Statistics

Undergraduate enrollment at University of California institutions dropped between the years 1991 and 1994, the same period as tuition and fees have seen large real increases. Only recently has there been an increase in enrollment and a decrease in tuition and fees. As seen in the following graphs, undergraduate enrollment at UC campuses did not drop as quickly as undergraduate enrollment at CSU and CCC campuses.



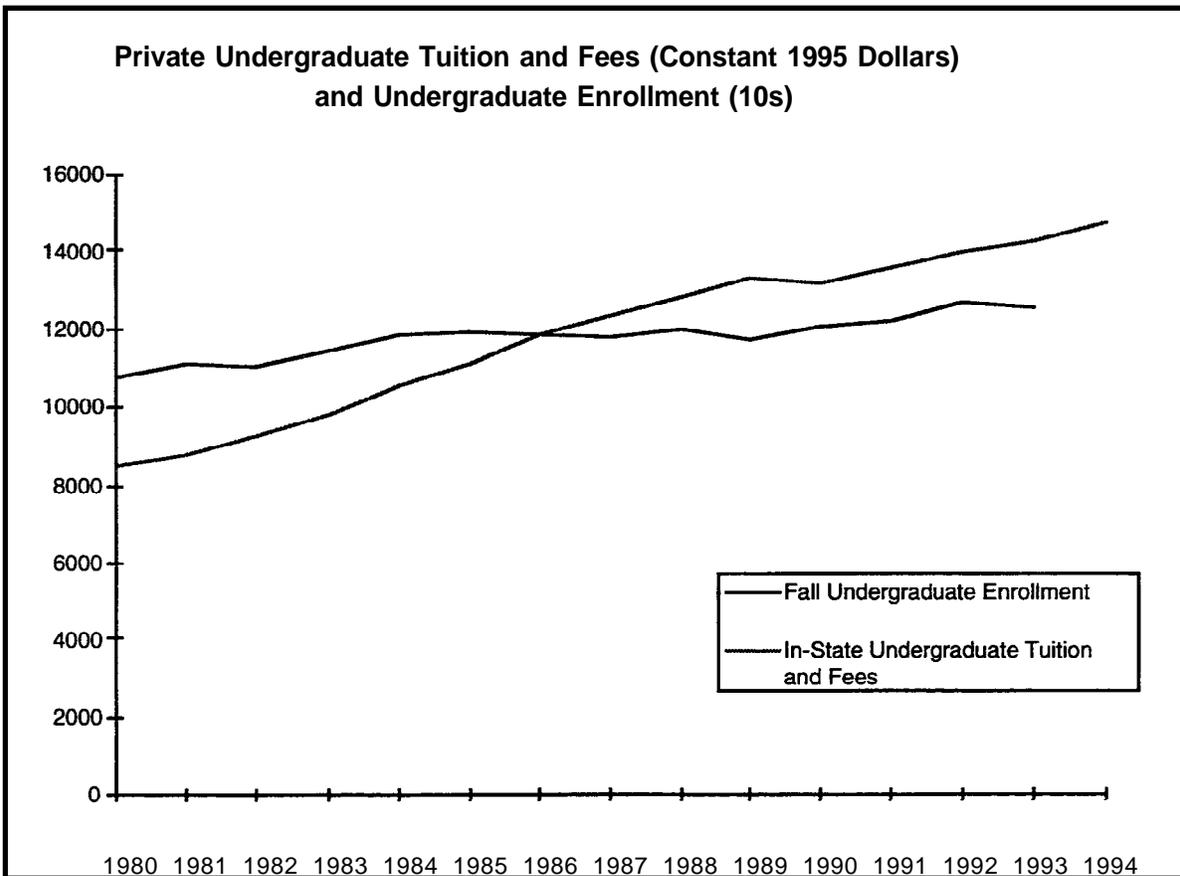
Source: California Postsecondary Education Commission; National Center for Education Statistics

Undergraduate enrollment dropped steadily at California State University institutions between 1990 and 1994. In no other period since 1972 has the CSU system seen a similar period of sustained decline in undergraduate enrollments. During the tuition and fee increases seen in the early 1980s, CSU enrollments did not respond as they have in the 1990s.



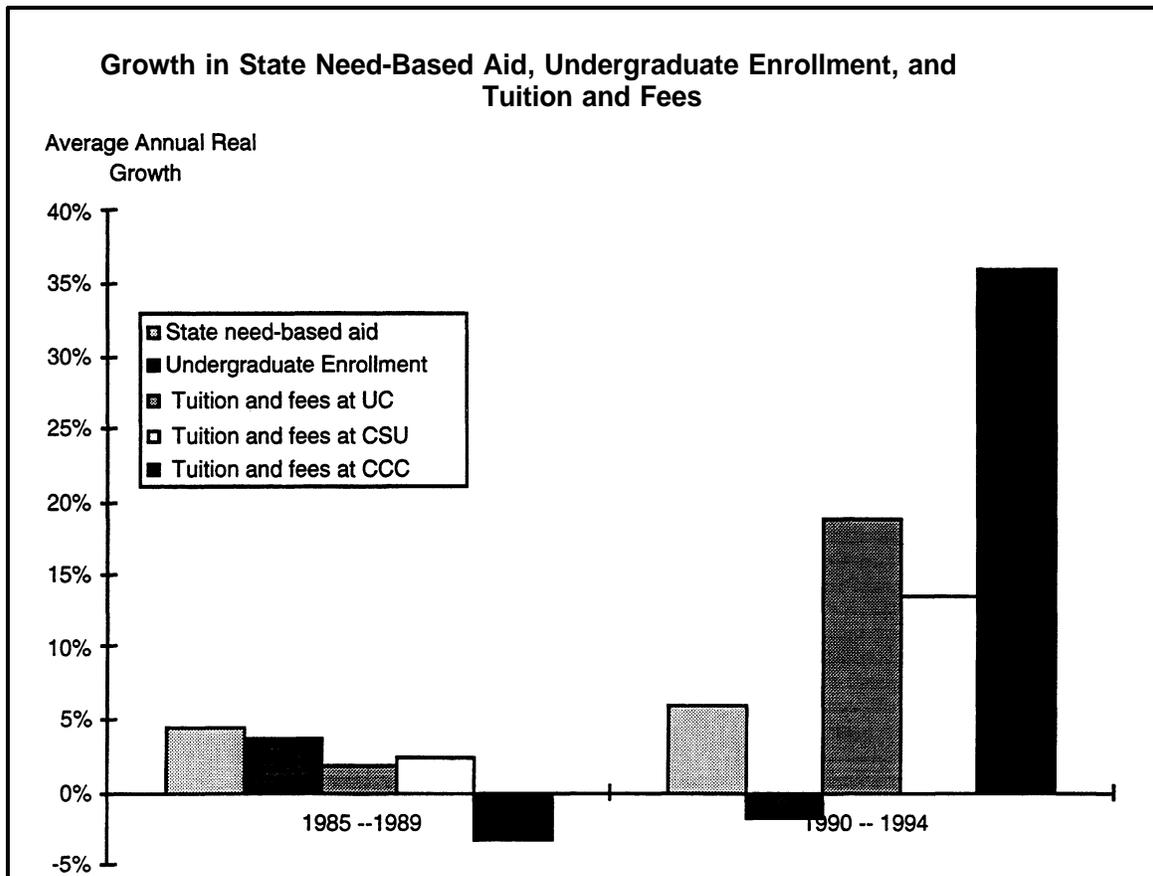
Source: California Postsecondary Education Commission; National Center for Education Statistics

Enrollment in the California Community Colleges has been up and down over time. Enrollments fell sharply in 1992 and 1993, the same period as tuition and fees at the community colleges rose rapidly. The other period in which enrollments dropped rapidly for at least two consecutive years was in the early 1980s. Enrollments did not get back to their 1980 level for over a decade.



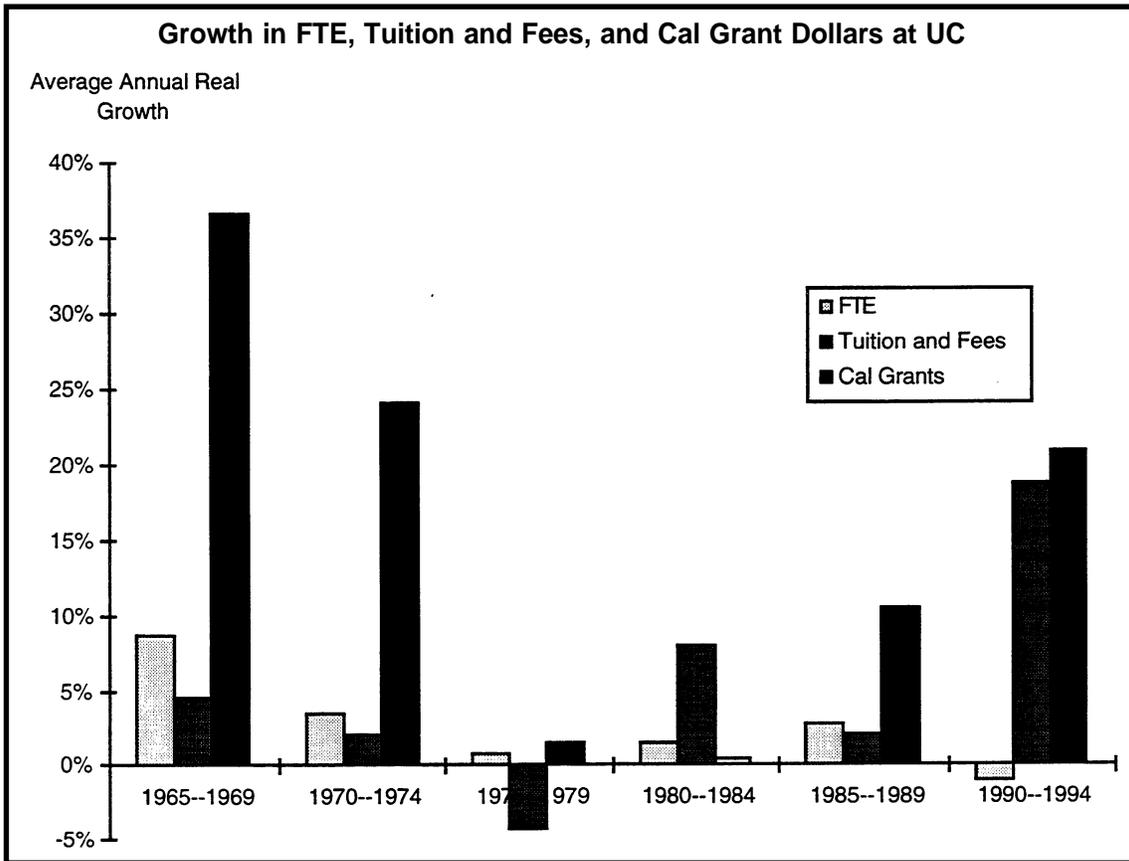
Source: California Postsecondary Education Commission; National Center for Education Statistics

Independent institutions undergraduate enrollments have been slowly increasing over time as real undergraduate tuition and fees have been steadily increasing. Undergraduate enrollments in independent institutions in the 1990s have been increasing as they have been falling in the public institutions. This is true despite real increases in tuition and fees in the independent institutions. The independent institutions have seen slower real increases in tuition and fees relative to the public institutions in the 1990s.



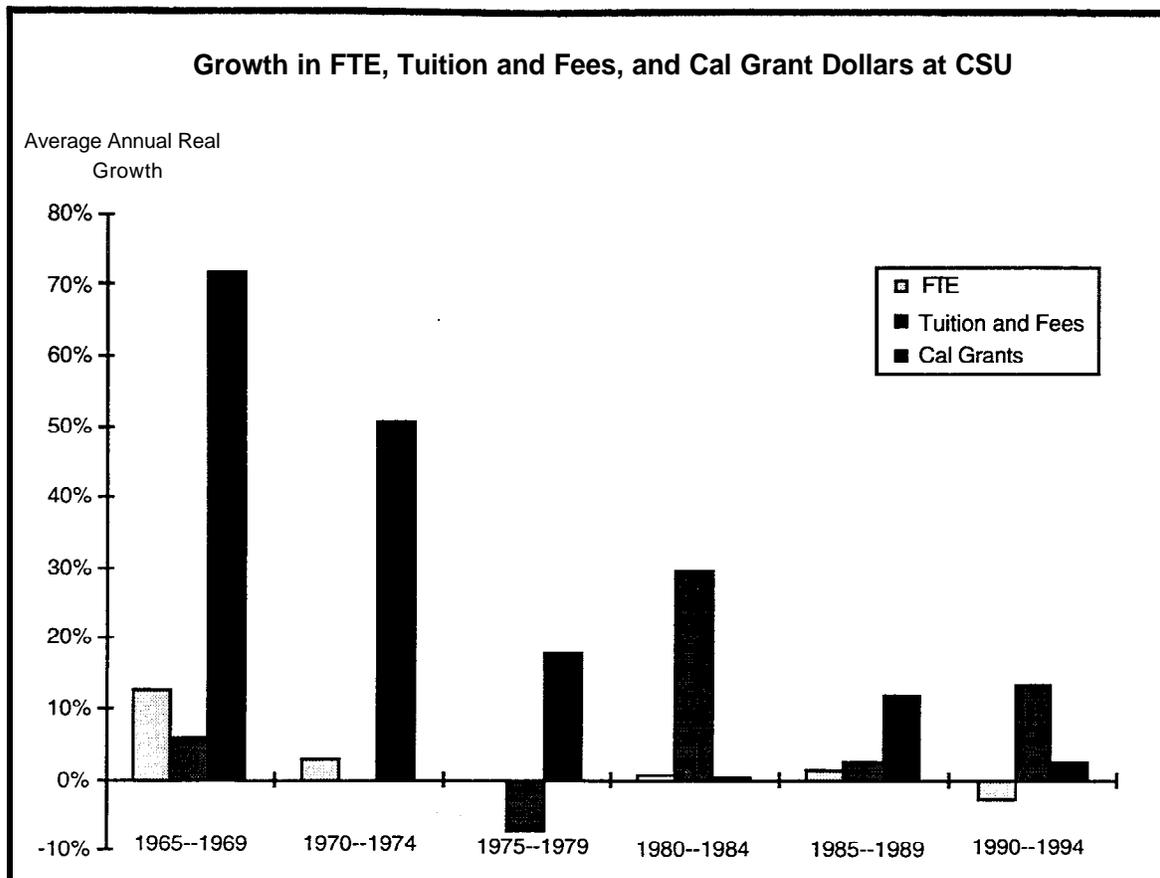
Source: National Association of State Scholarship and Grant Programs; Annual Survey and California Postsecondary Education Commission

In the period 1985-1989, state need-based aid grew faster than did undergraduate enrollment and tuition and fees at each of the public higher education systems. This pattern changed significantly in the period 1990 to 1994. While need-based aid grew more rapidly than it had in the earlier period, it fell well behind the growth in tuition and fees at each of the public higher education systems.



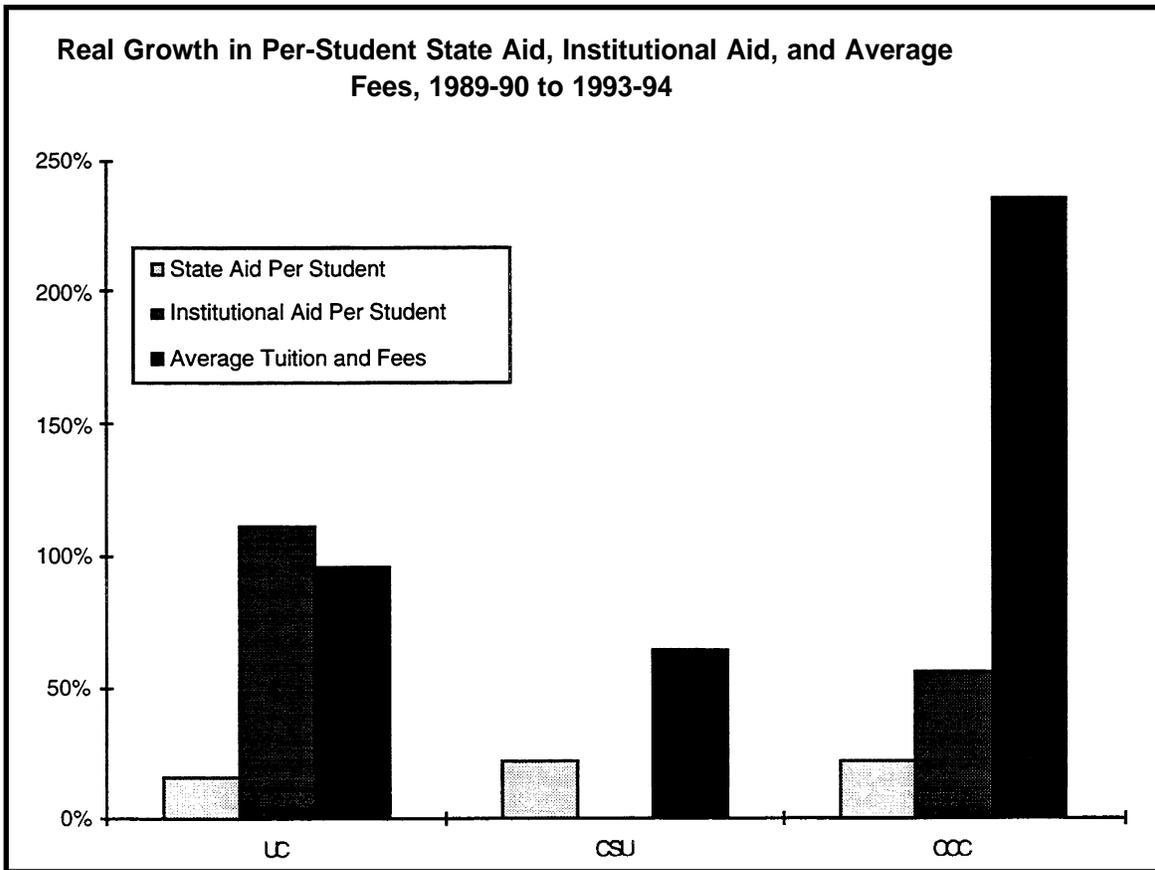
Source: California Higher Education Policy Center

During the late 1960s and early 1970s, average annual real growth in Cal Grant Dollars to UC institutions far exceeded real growth in tuition and fees and full-time equivalent enrollment. The period 1980 to 1984 was the only period in which the average annual dollar growth in Cal Grants was smaller than the growth in FTE students and tuition and fees. In the 1990-94 period, growth in Cal Grant dollars was again greater than the growth in tuition and fees and FTE students. The growth in Cal Grant dollars relative to the growth in tuition and fees was not as great as it had been in previous periods.



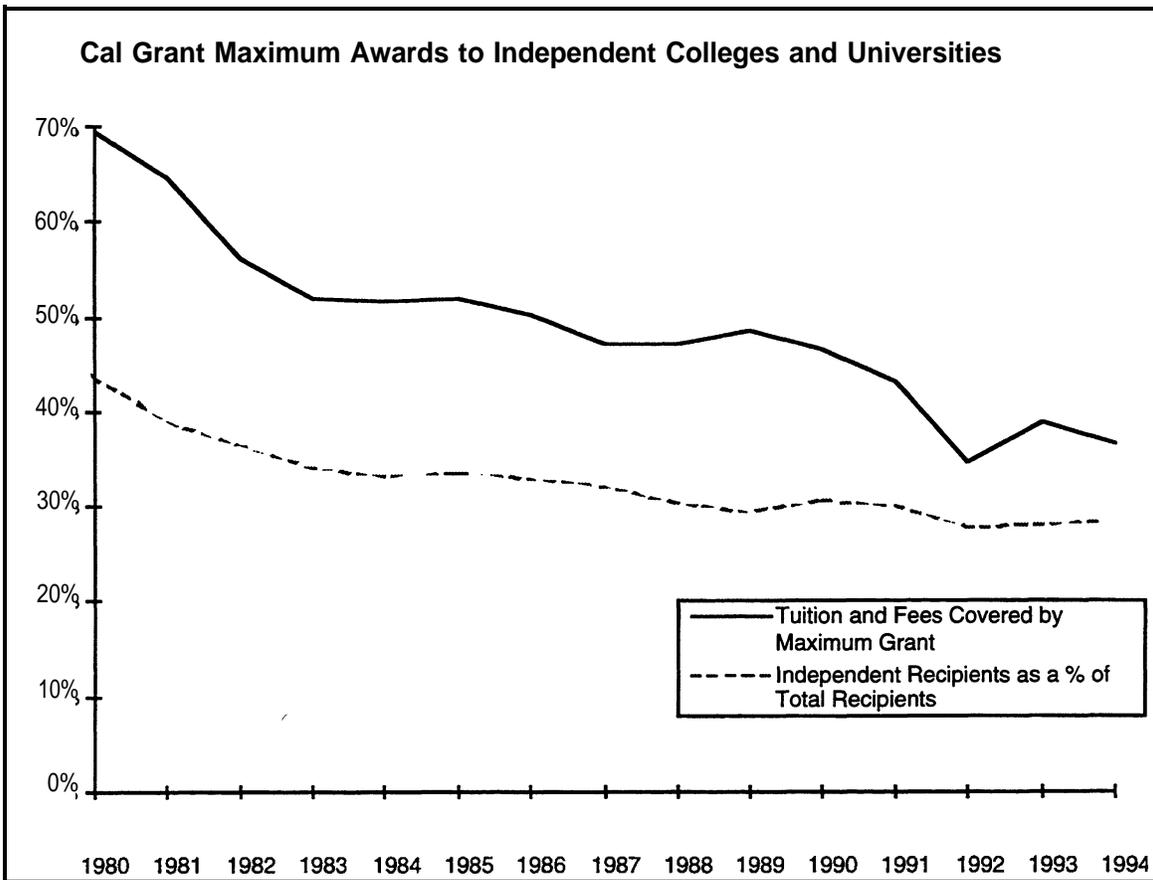
Source: California Higher Education Policy Center

While the growth in Cal Grant dollars to UC was greater than the growth in FTE students and tuition and fees at UC institutions over the period 1990-1994, Cal Grant dollar growth did not keep up with tuition and fee growth for CSU institutions over this same time period.



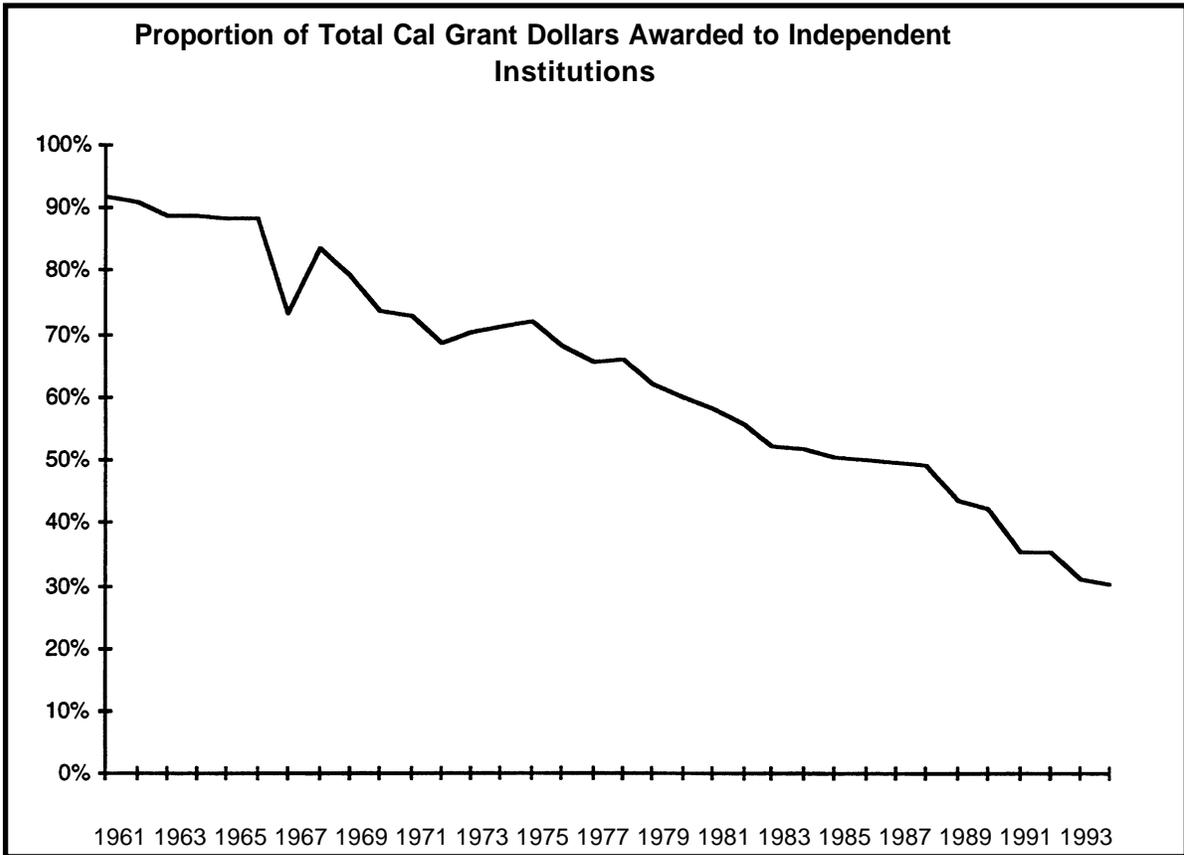
Source: National Center for Education Statistics; California Postsecondary Education Commission

Real growth in state aid per student has not kept pace with average fee growth in any of the three public segments of higher education in California. At the University of California, institutional aid per student grew over 100 percent during the period 1989-90 to 1993-94 and has outpaced average fee growth. This suggests the University of California's growing reliance on institutional aid as state aid per student has not kept pace with fee increases. This pattern of per-student institutional aid keeping pace with fee increases has not been seen at the California State University or the California Community Colleges. At the CSU and CCC systems, average fee growth has been well above the growth in institutional aid and state aid.



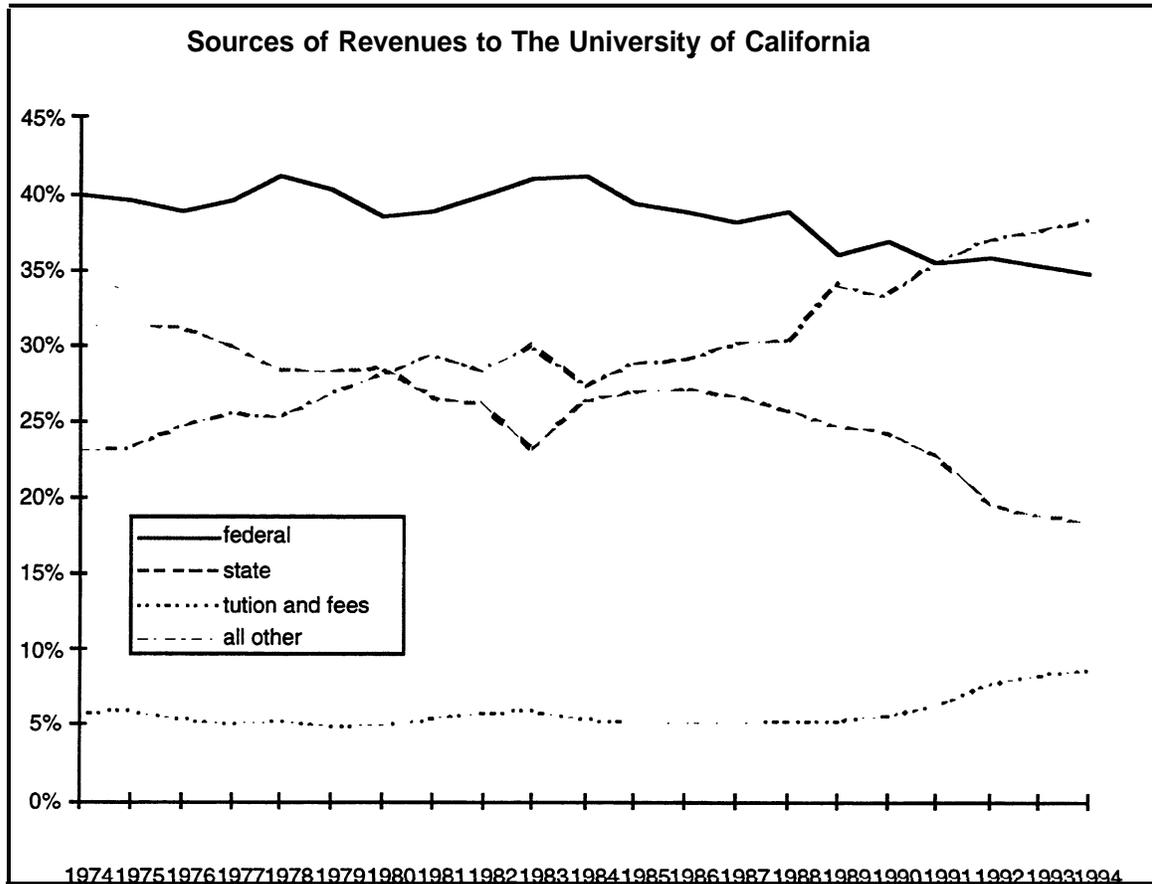
Source: California Postsecondary Education Commission

For independent institutions, the Cal Grant Program has withered from being the centerpiece of their student financial aid promise to being one among many programs, causing it to decline in importance.



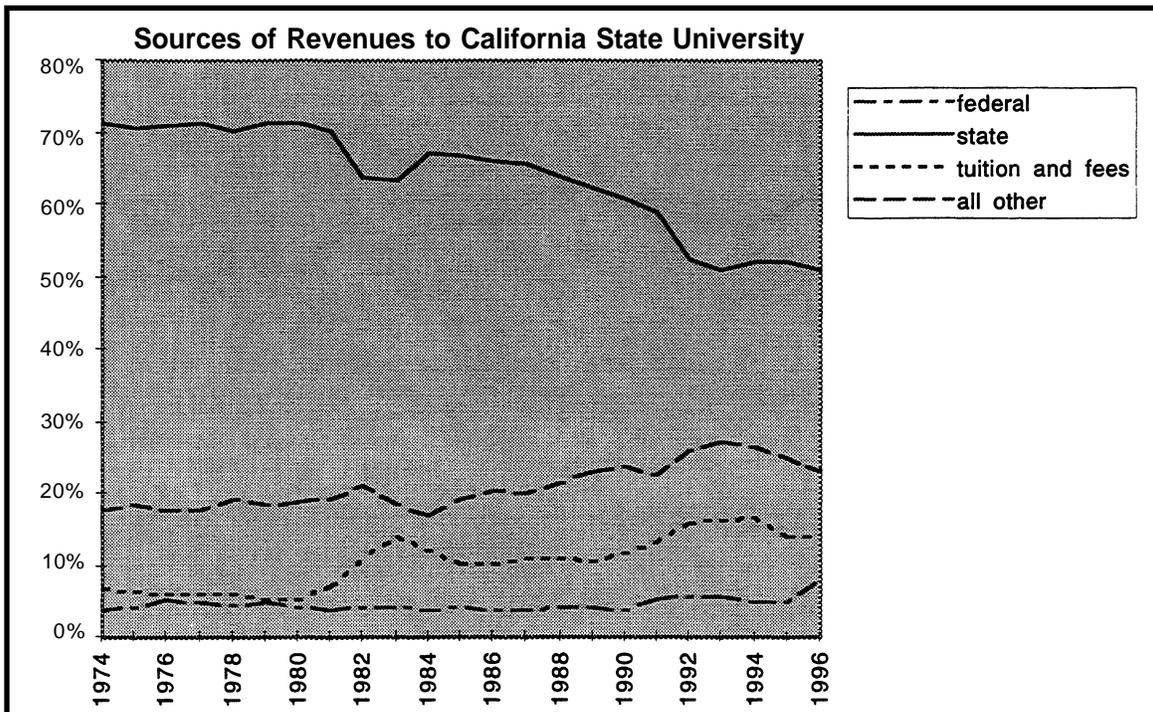
Source: California Higher Education Policy Center

The California Master Plan's original purpose of providing student financial aid primarily for private institutions changed dramatically between 1960 and 1990. More than 91 percent of the State Commission's grants in 1961 went to students in the private sector. By 1994, the proportion had fallen to 30 percent. The number of Cal Grant A awards, which provided coverage for tuition primarily for private institutions, grew robustly from 1970 to 1980 (doubling from 15,914 to 38,735) but grew hardly at all during the 1980s and 1990s. This dramatic decline in the proportion of Cal Grant dollars awarded to independent institutions did not result from adopted policy to re-direct funds away from the independent sector. Rather, it was a natural by-product of the state's adding numerous grant programs with purposes other than grants to private institutions.



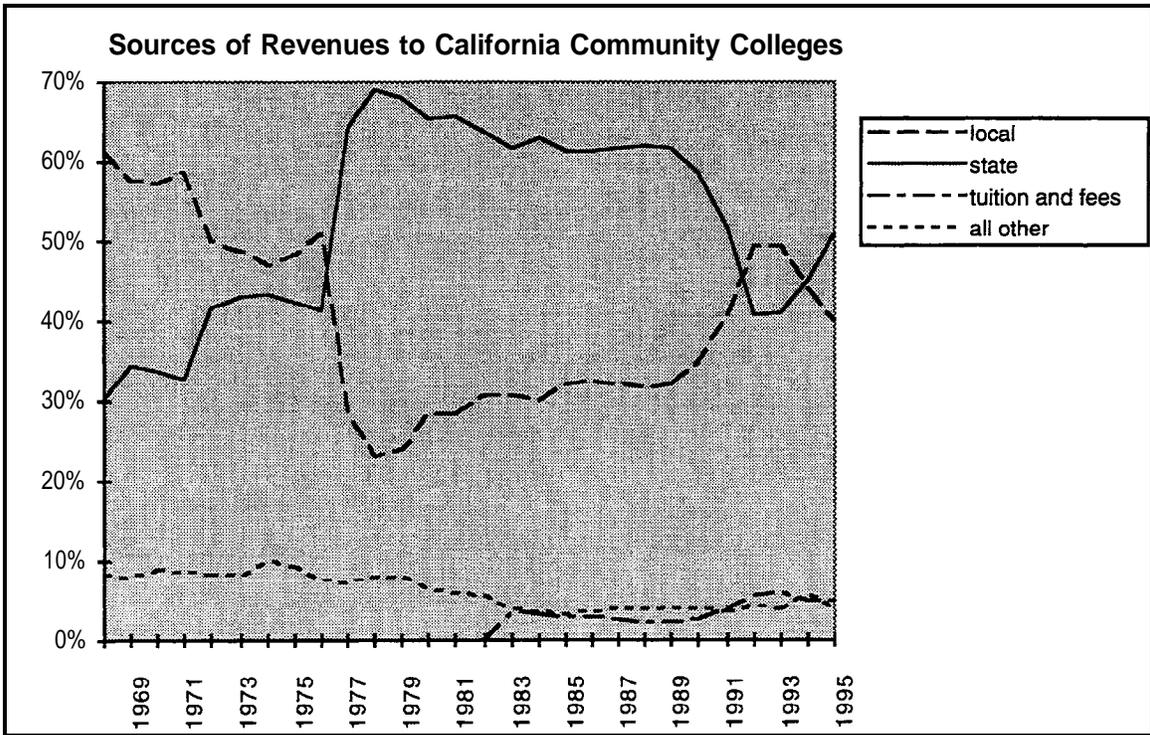
Source: California Postsecondary Education Commission; California Higher Education Policy Center

Federal and state revenues to the University of California have taken on a smaller role relative to tuition and fees and other revenues over time. In particular, state revenues have steadily dropped from representing 32 percent to 18 percent of total revenues since 1974. Beginning in 1991, "all other" revenues overtook federal revenues as the largest source of revenues to the UC system. Federal revenues historically had represented the largest source of revenues to the UC system.



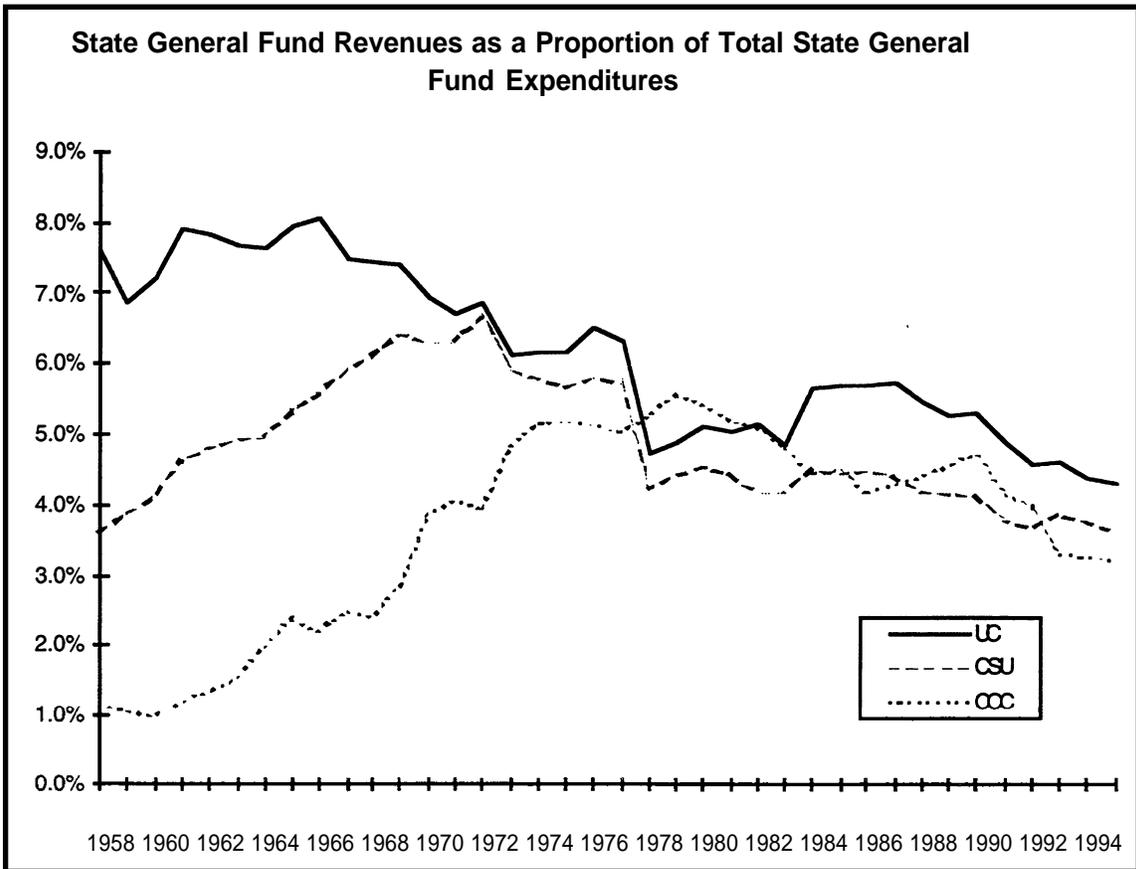
Source: California Postsecondary Education Commission; California Higher Education Policy Center

Similar to the University of California system, state revenues have steadily taken on a smaller role to the CSU system. Federal revenues have been fairly flat as a percentage of total revenues but federal revenues represent only a small share of total revenues to the CSU system. Tuition and fees showed the largest percentage point gain in total revenues, representing 6 percent of total revenues in 1974 and 17 percent of total revenues in 1994.



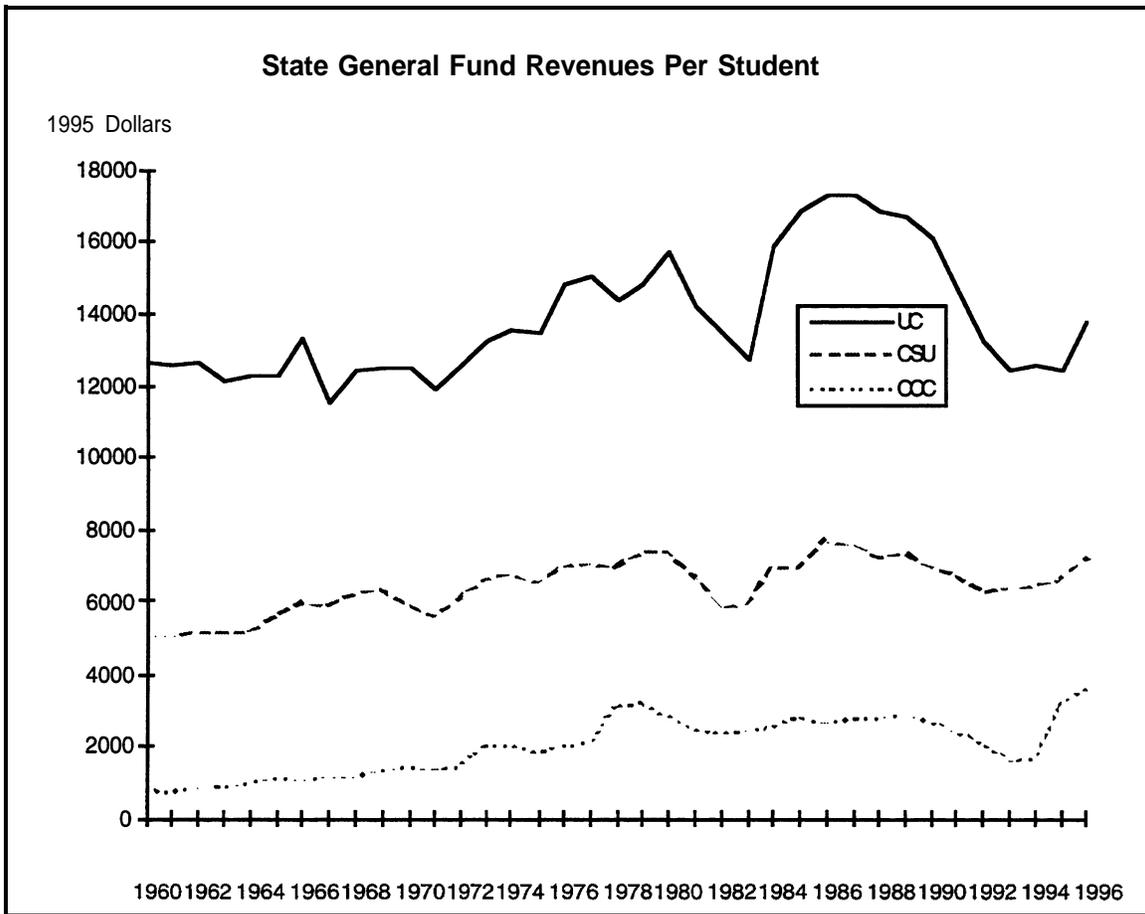
Source: California Postsecondary Education Commission; California Higher Education Policy Center

State revenues took on a significantly larger role beginning in 1978 with the passage of Proposition 13. The state role began to decrease again in the early 1990s, and interestingly, the local government again took on the largest role in providing revenues to the California Community Colleges in 1993. Tuition and fees rose from representing zero percent of total revenues through the early 1980s to representing 5 percent of total revenues in 1996.



Source: California Higher Education Policy Center

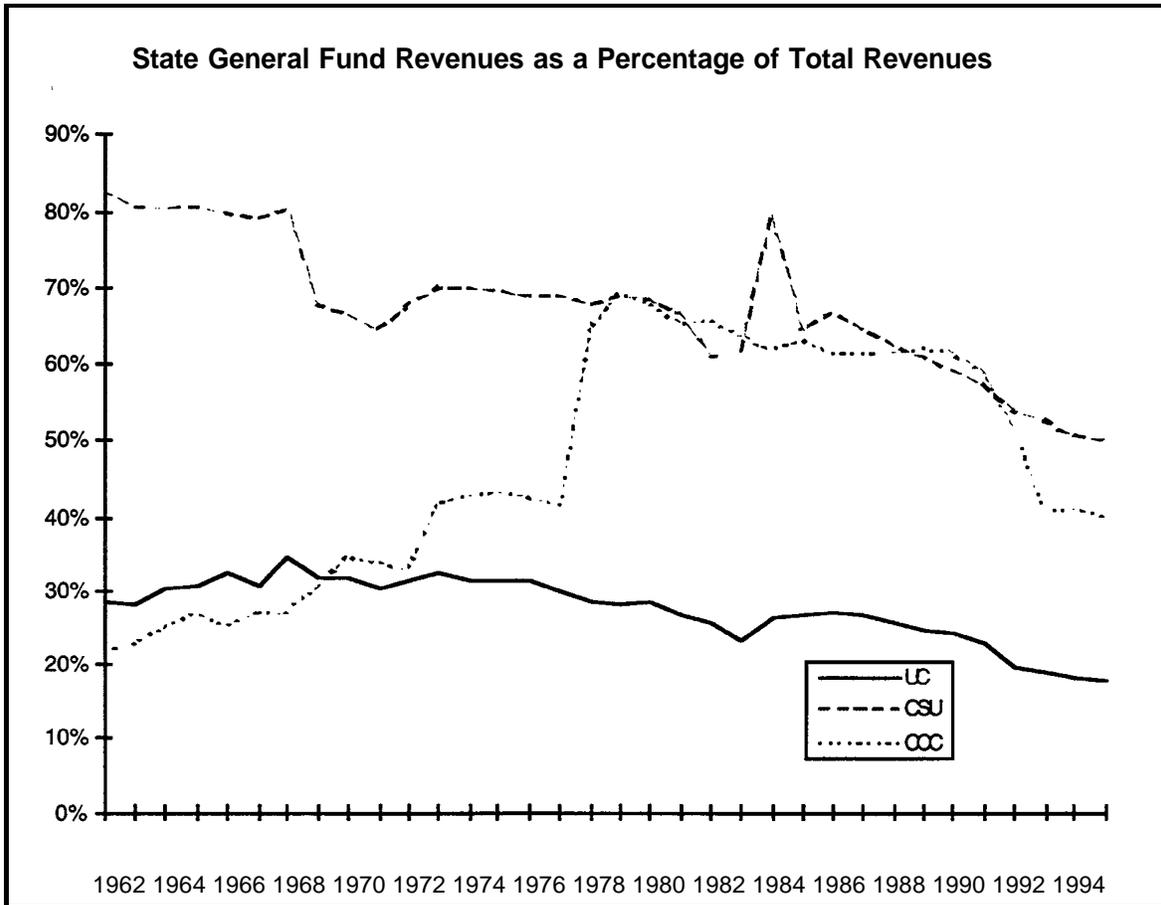
The percentage of state general fund expenditures committed to the three public higher education sectors changed little in total between 1960 and 1994--from 12.3% to 13.9%. But, the percentage of state expenditures shifted substantially among the 3 sectors--the proportion to the California Community Colleges went up and the proportion to University of California went down. After rising in the 1960s, the proportion of state general fund revenues allocated to CSU was about the same in 1994 as it was in 1958.



Source: California Higher Education Policy Center

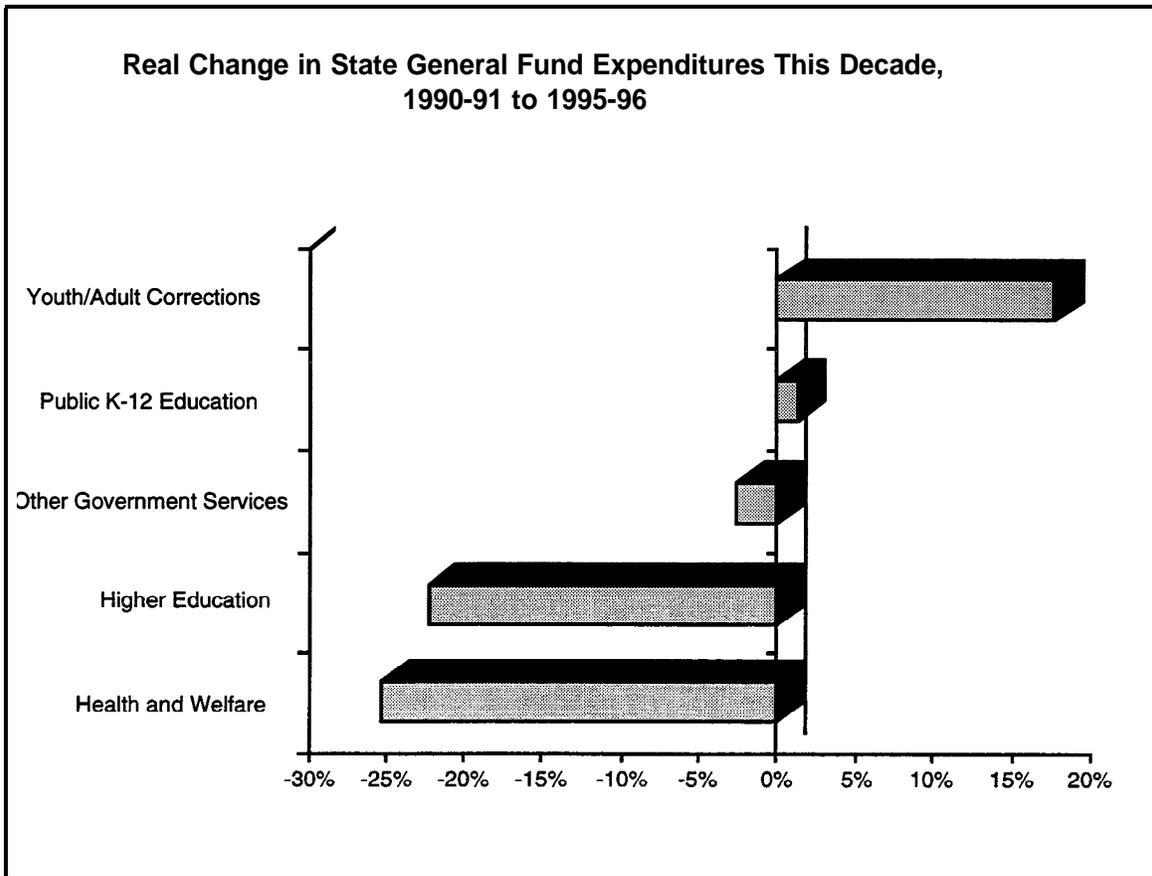
Real per-student state general fund dollars to the University of California are virtually the same in 1996 and 1960. But, getting from 1960 to 1996 is a giant roller coaster. Real per-student state general fund dollars to CSU increased by about 43% between 1960 and 1996. Similar to UC, there were ups and downs over that time period. Real per-student state general fund dollars to the California Community Colleges have increased by about 370% between 1960 and 1996. The big jump in state funds to the CCC occurred in 1978 with the passage of Proposition 13.

Per-student general fund revenues to each sector would have fallen more steadily in the 1990s if the drop in students in each sector over this period had not occurred.



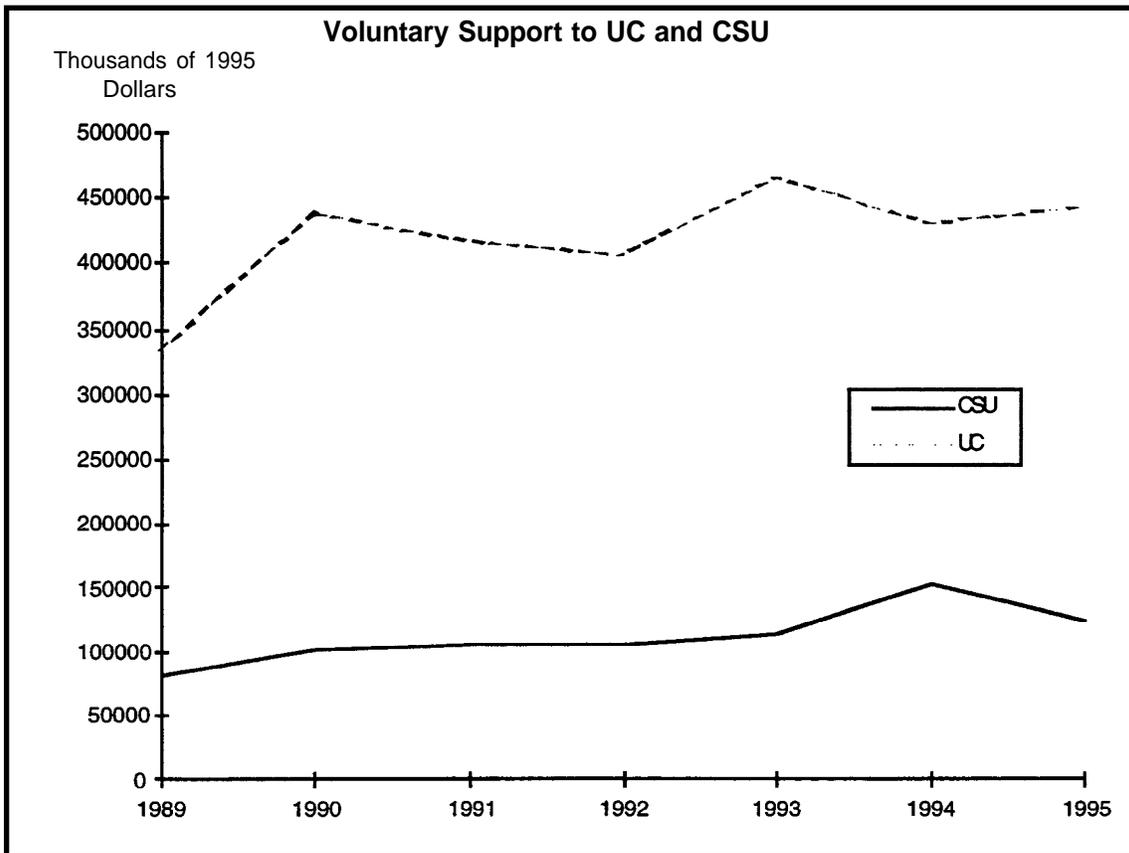
Source: California Higher Education Policy Center

Over the years, the state has played less and less of a role in financing public higher education as shown by the decline in state appropriations as a percent of each public higher education sector's total revenues.



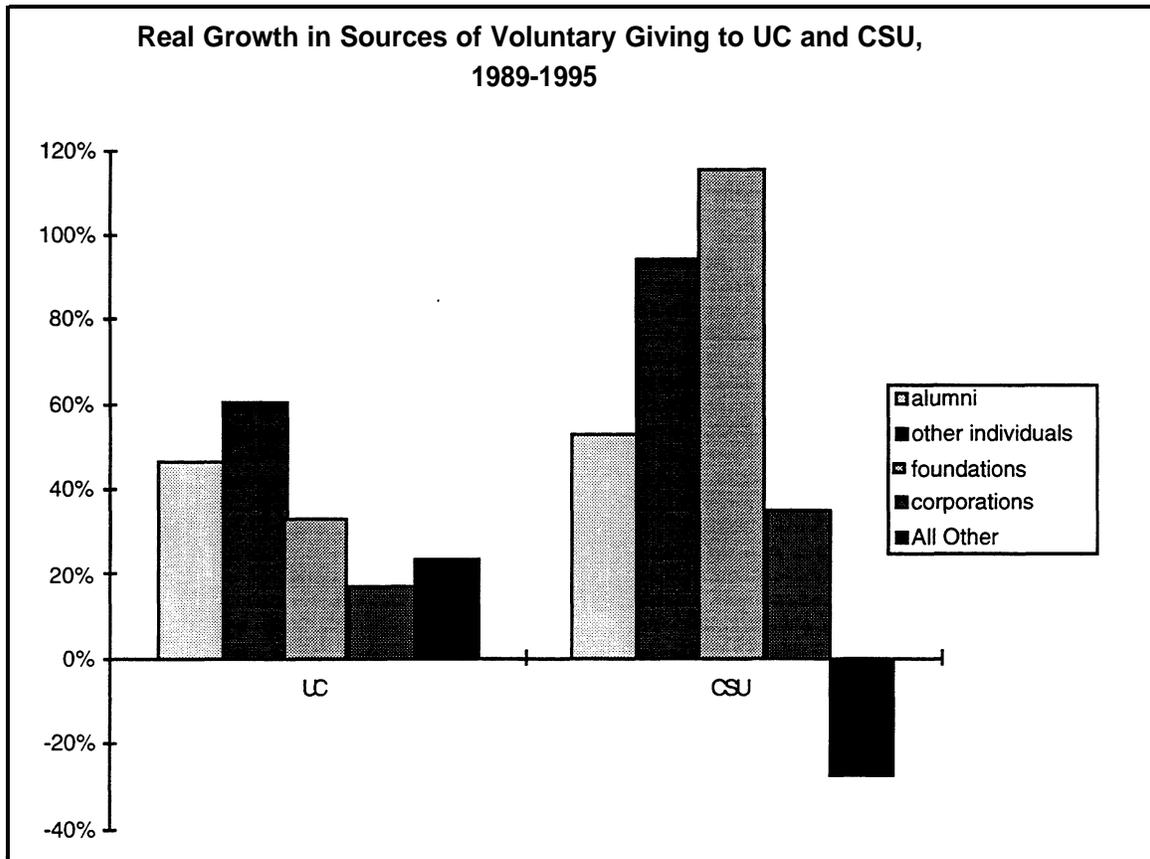
Source: California Postsecondary Education Commission

In 1994-95, the State provided a solid maintenance budget for the three public systems of higher education in California which stopped a four-year decline of State funding. In addition, the California State University and the University of California have reached a four-year funding compact with the Governor to provide modest yet stable increases in their respective base funding through 1999. However, enrollment growth is not fully funded, nor is financial aid. Overall, state general fund appropriations for higher education have declined in real terms by about 22 percent since 1990-91. This is the second lowest percentage “growth” of any of the State’s expenditure categories.



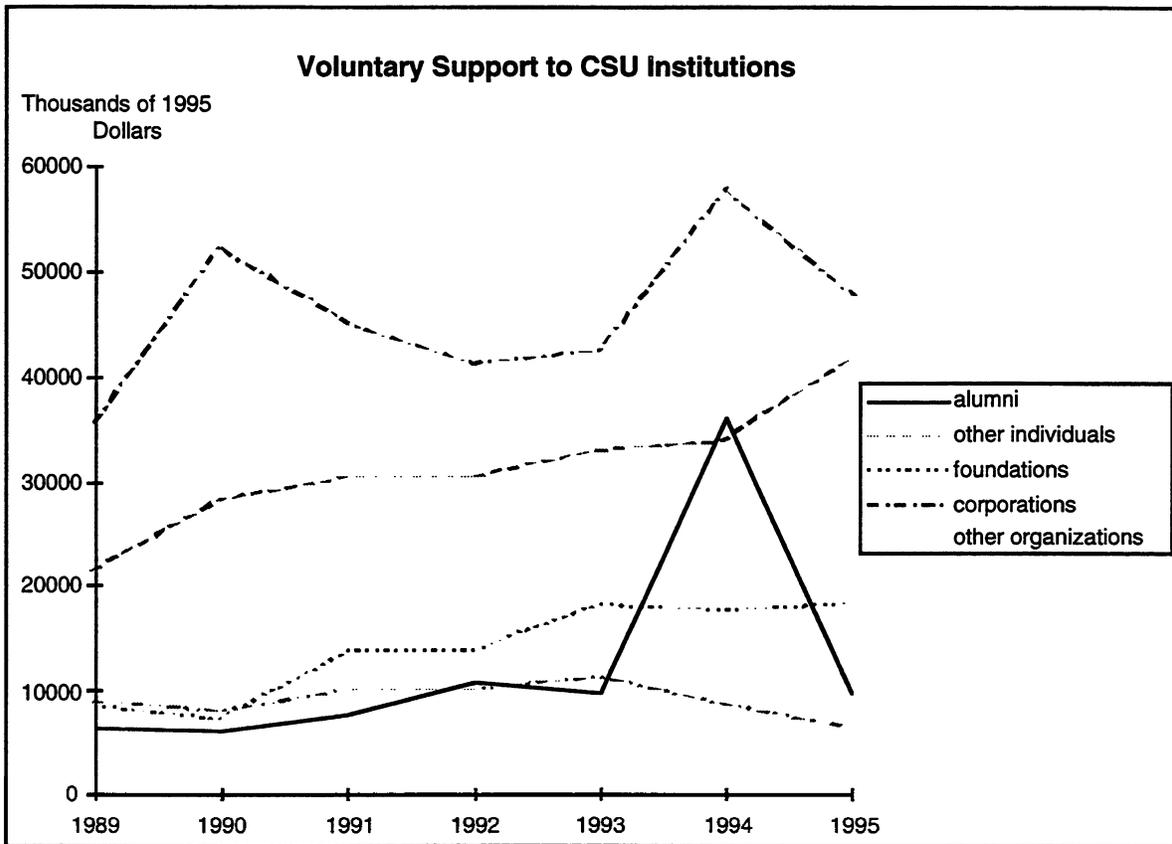
Source: Council For Aid To Education

The University of California institutions receive about three times more voluntary support than do the California State University institutions as a whole. While voluntary support to CSU grew steadily over the 1989 to 1994 period, voluntary support fell in 1995. Voluntary support to UC has also grown but at a less even pace. Voluntary support to UC grew to represent about 8 percent of total expenditures in 1995. Voluntary support to CSU grew to represent about 6 percent of total expenditures in 1995.



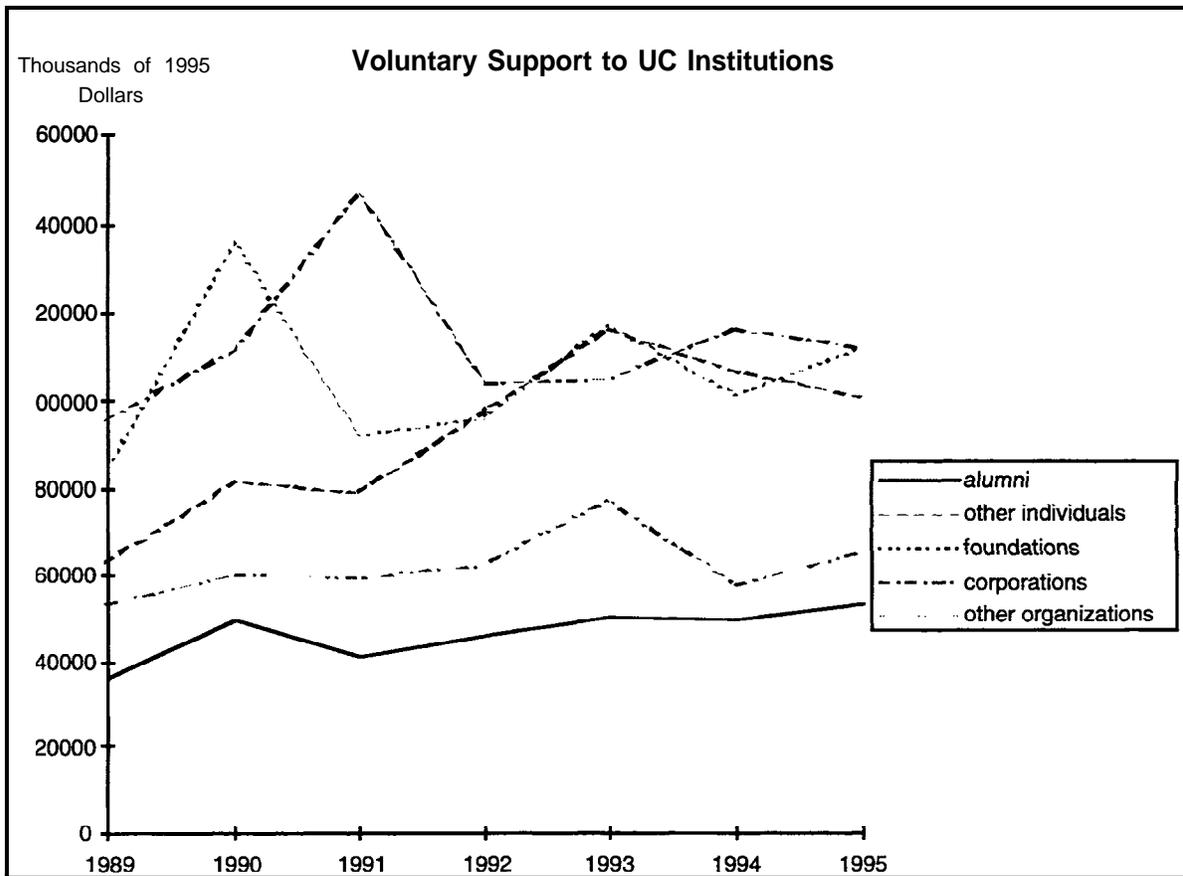
Source: Council For Aid To Education

Total real growth in voluntary support to UC and CSU between 1989 and 1995 has been 33 percent and 55 percent, respectively. In particular, CSU has seen steady growth in support from foundations, followed closely by support from other individuals. Support from corporations has seen relatively slow growth, although this is still the largest source of voluntary support to both the UC and CSU systems as seen in the following graphs.



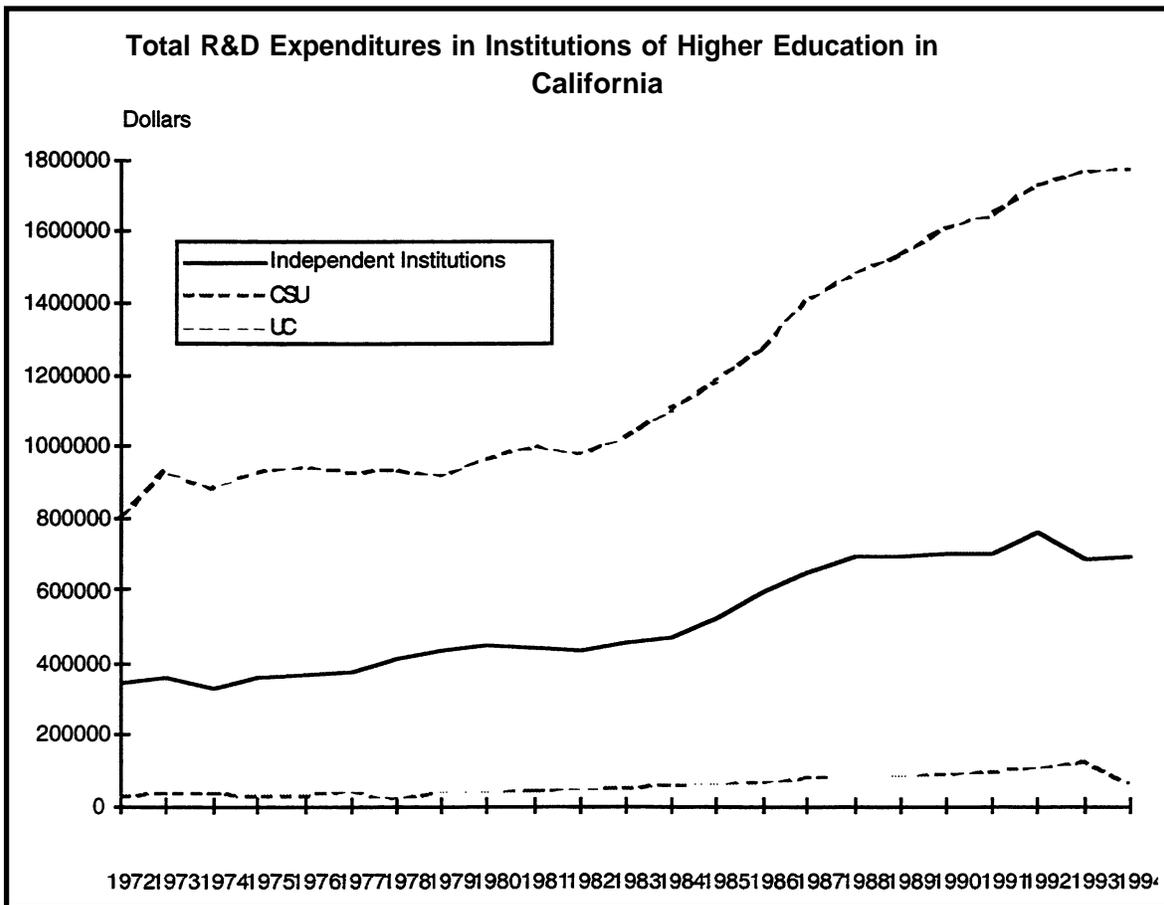
Source: Council For Aid To Education

There is generally a lot of fluctuation from year to year in the various sources of voluntary support, particularly from corporate support and alumni support. Support from other individuals and foundations has been steadily increasing over time.



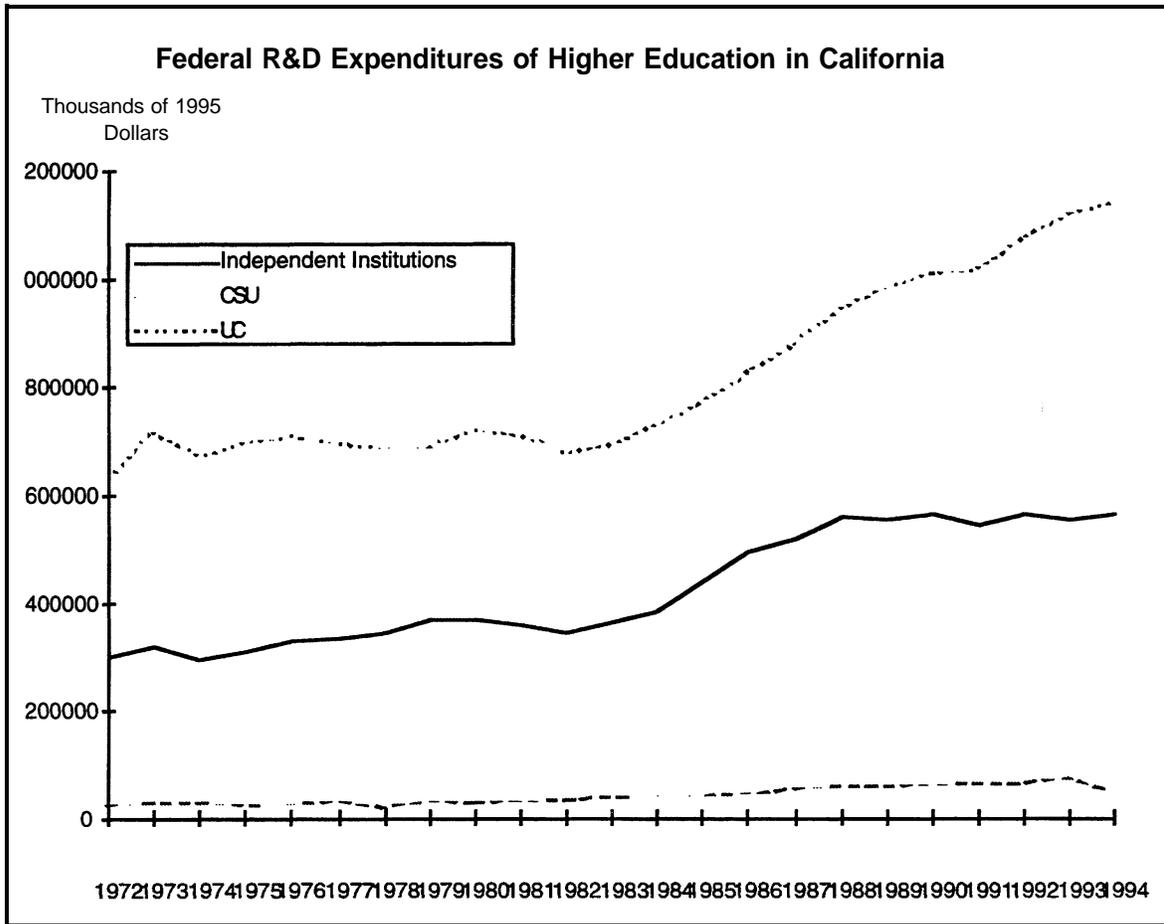
Source: Council For Aid To Education

Support from corporations and foundations represents the largest categories of voluntary support to UC institutions. Alumni support represents the smallest category of voluntary support.



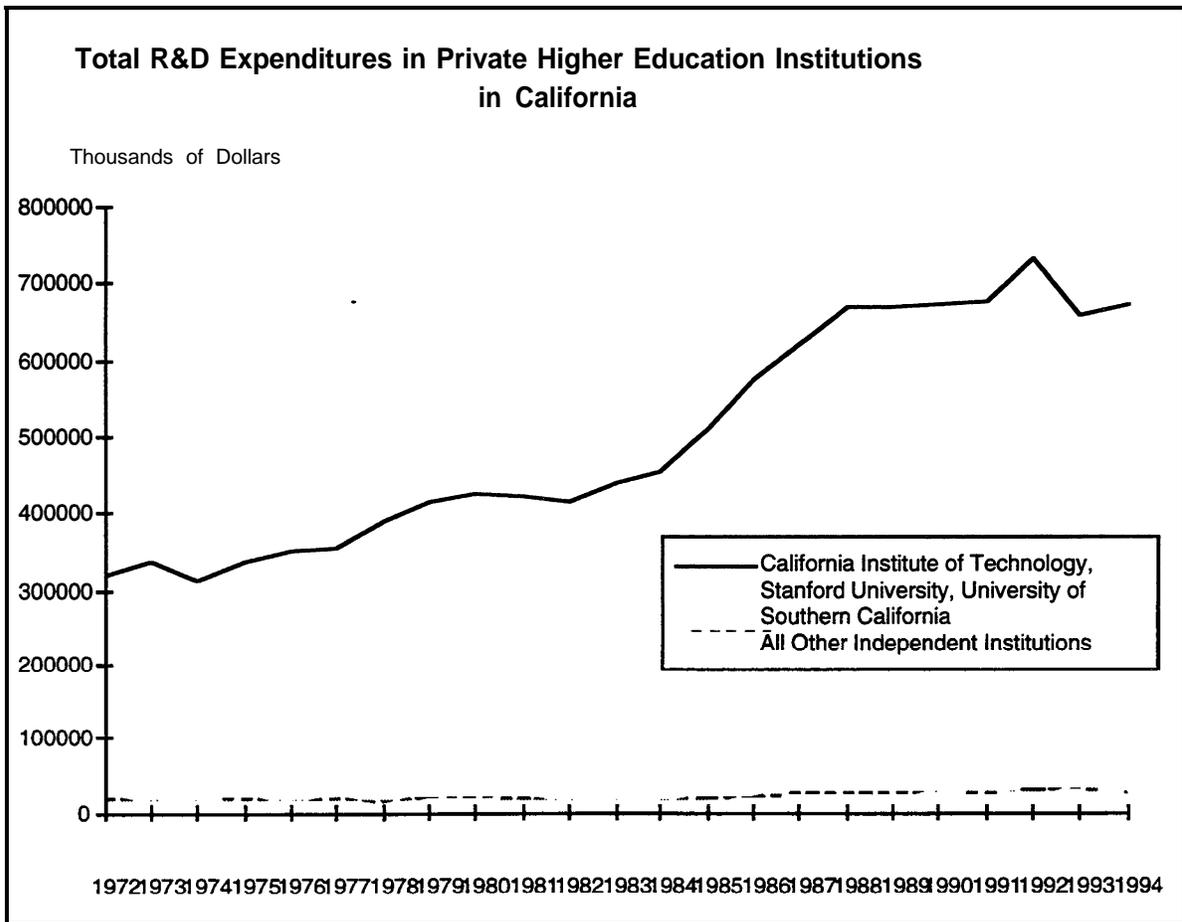
Source: National Science Foundation R&D Data

Real R&D expenditures have increased over time at UC, Independent Institutions, and CSU. The University of California system has seen the greatest real increases in R&D expenditures with particularly strong growth since 1982.



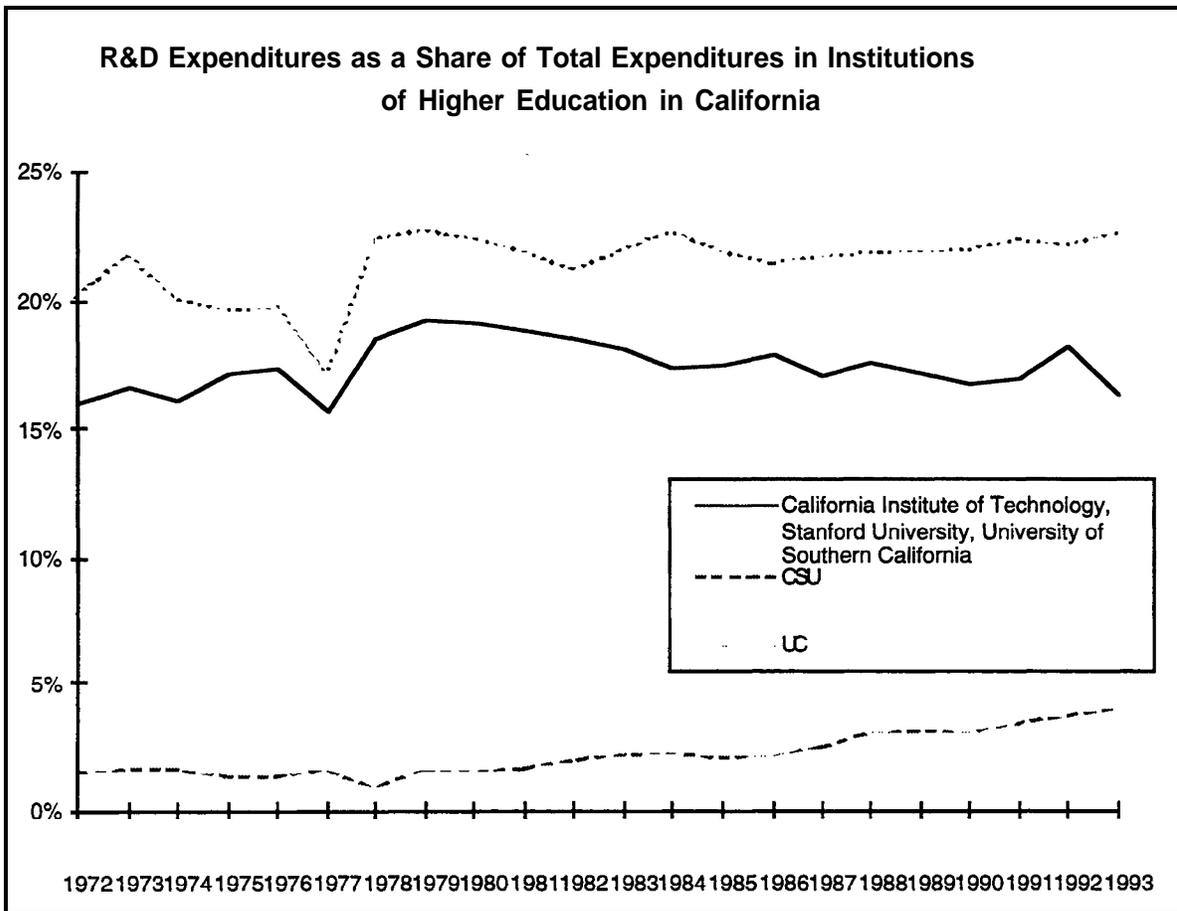
Source: National Science Foundation R&D Data

Federal R&D expenditures represent the majority of total R&D expenditures. Federal R&D expenditures represent 64 percent, 68 percent and 80 percent of total R&D expenditures at CSU, UC, and private institutions, respectively.



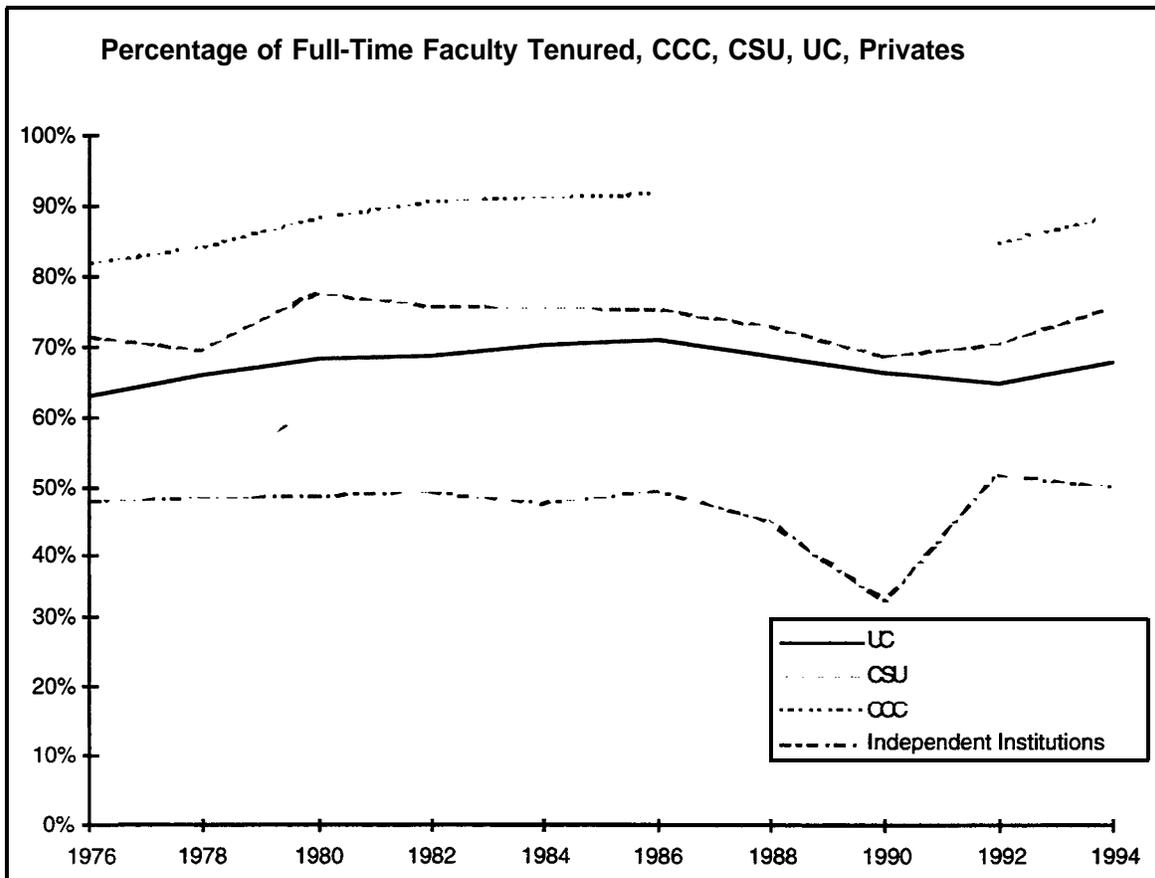
Source: National Science Foundation R&D Data

The vast majority of R&D expenditures in independent higher education institutions in California are made from three institutions.



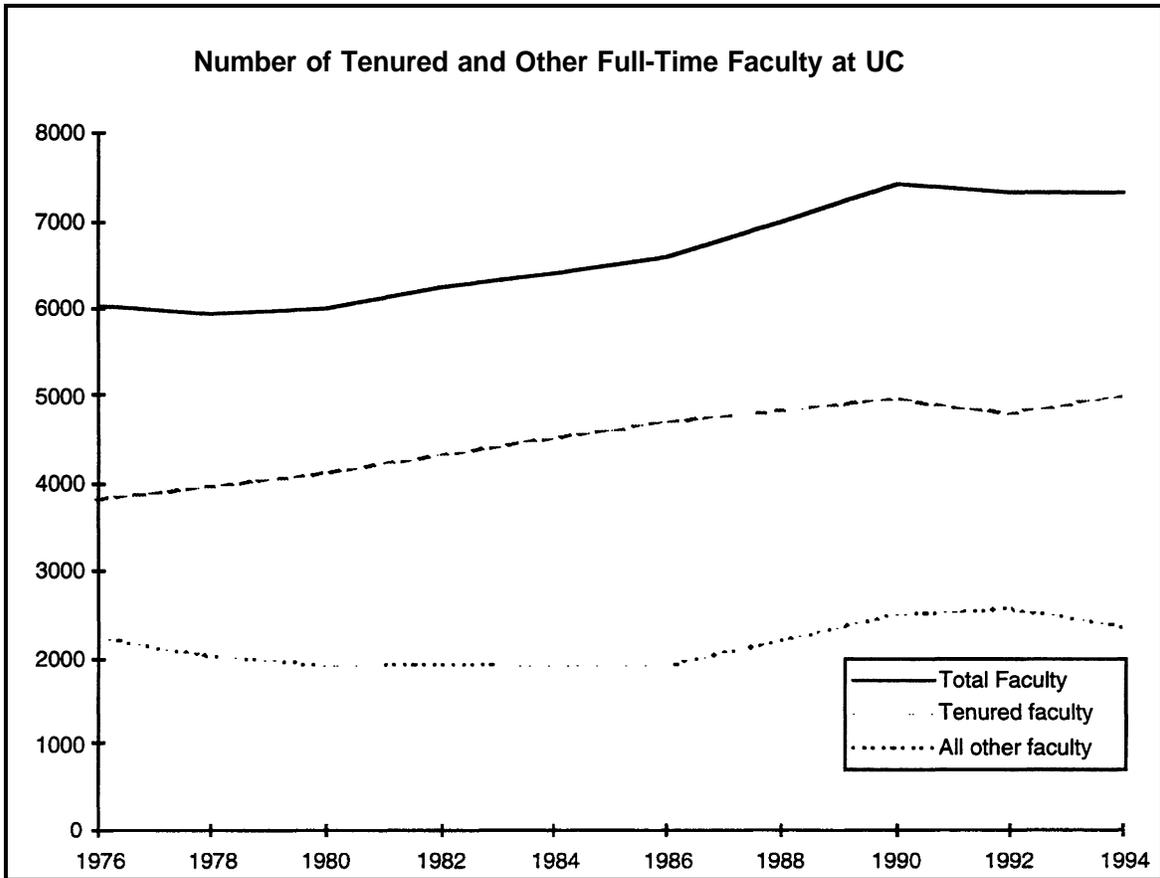
Source: National Science Foundation R&D Data

Since 1980, R&D spending has consistently represented over 20 percent of total spending for the UC system. R&D spending has steadily taken on an increasing role at CSU institutions.



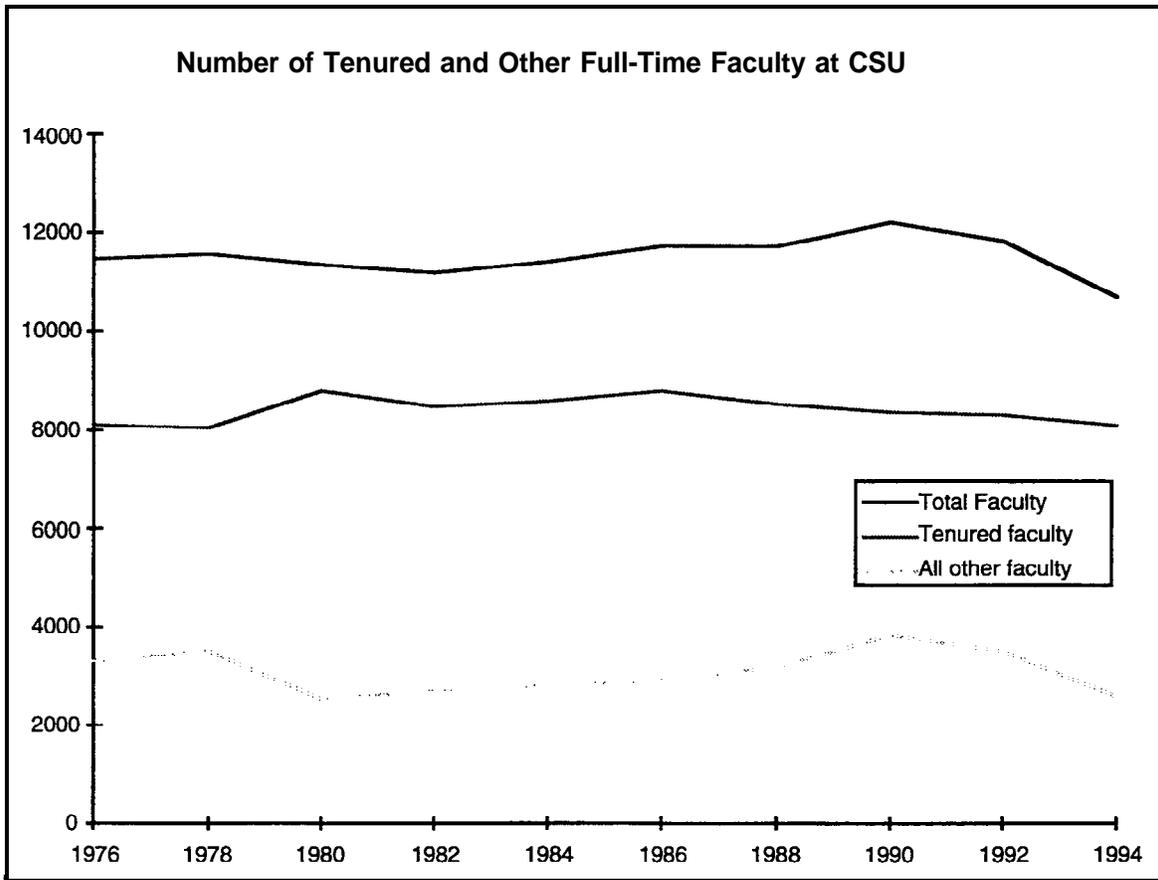
Source: National Center for Education Statistics

The percentage of full-time faculty with tenure has increased slowly over time at the California Community Colleges, California State University, and University of California and has decreased slightly over time at the private institutions. For example, at CSU the percentage of full-time faculty with tenure increased from 69 percent to 76 percent over time. In part, the growth in the percentage of tenured faculty is due to the total number of faculty dropping in the early 1990s, with the number of non-tenured faculty generally dropping more than the number of tenured faculty. The California Community College system has the largest percentage of full-time faculty that is tenured. This is in part due to CCC employing a relatively large percentage of part-time faculty with the full-time faculty almost all being tenured faculty. The private institutions have the lowest percentage of full-time faculty with tenure.



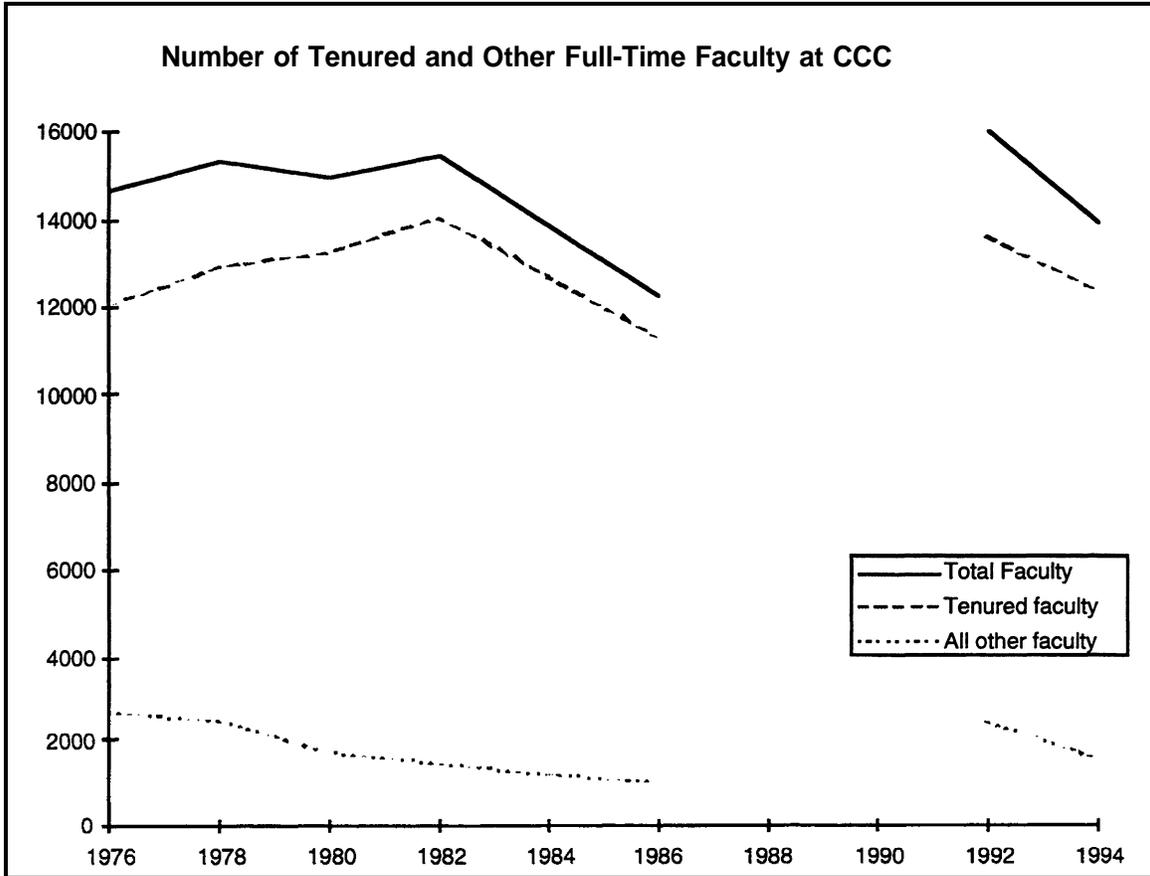
Source: National Center for Education Statistics

The total number of full-time faculty at the University of California grew from about 5,900 in 1975 to about 7,300 in 1994. Over this time period, the gap between the number of tenured and non-tenured full-time faculty has grown.



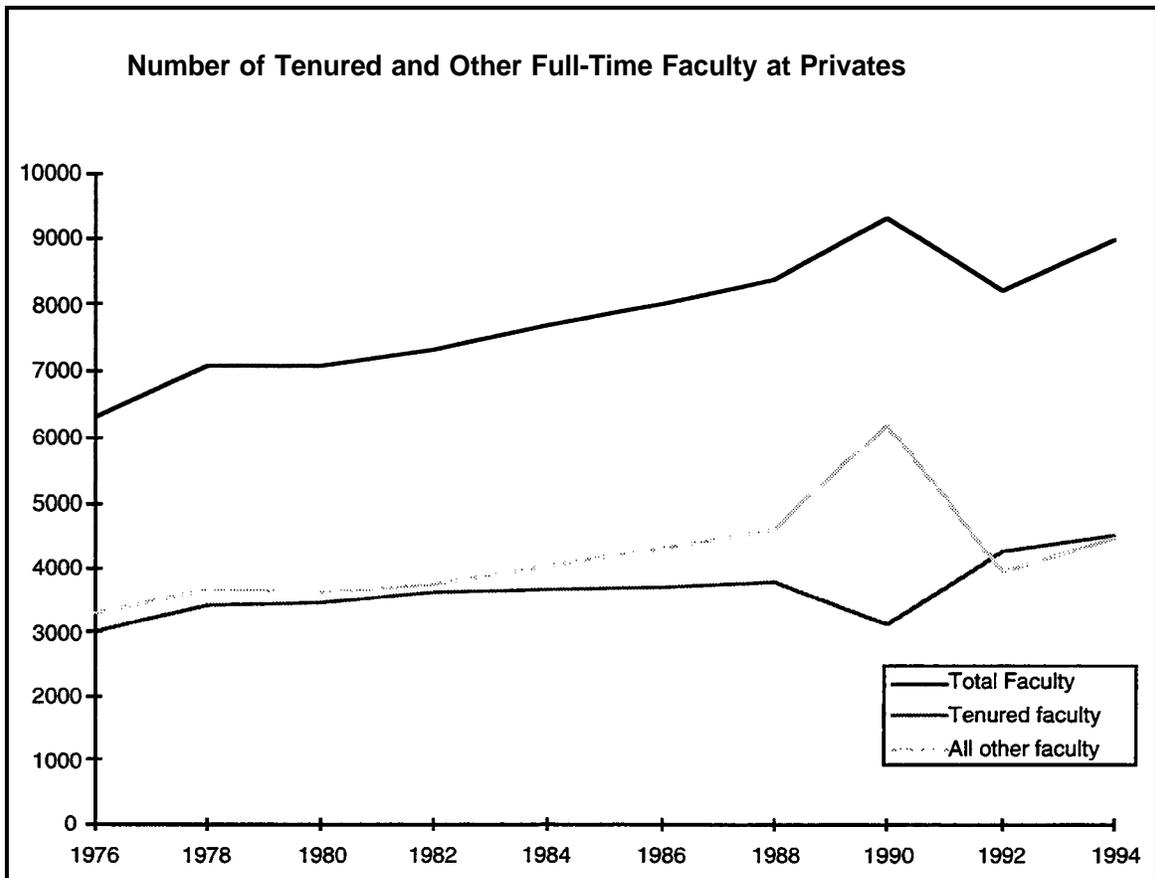
Source: National Center for Education Statistics

The number of total full-time faculty at the California State University system fell sharply in the 1990s. This drop in total faculty was led by the drop in the number of non-tenured faculty.



Source: National Center for Education Statistics

The total number of full-time faculty at the California Community Colleges was flat in the late 1970s and early 1980s with the number of tenured faculty rising and the number of non-tenured faculty falling. Unlike the UC and CSU systems, the total faculty at the CCC dropped during the mid-1980s and rose during the early 1990s. The gap between the number of tenured and non-tenured faculty closed significantly in the late 1980s and early 1990s before beginning to grow again. The drop in total faculty that was seen in the early 1990s at the CSU and UC systems was seen starting in 1994 at the CCC system.



Source: National Center for Education Statistics

With the exception of the period from 1988 to 1992, the number of tenured faculty and the number of non-tenured faculty at Independent institutions have tracked each other very closely over time. Generally, about 50 percent of full-time faculty in Independent institutions are tenured.