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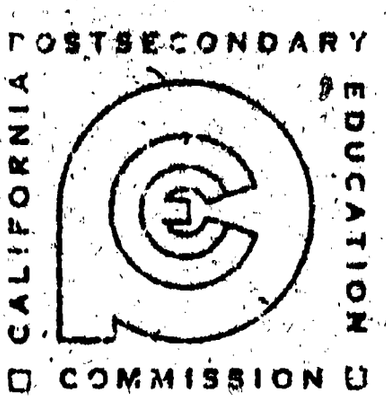
ABSTRACT

Demographic factors that will determine enrollment potential and service needs for California's segments of postsecondary education over the next 15 years are examined. Attention is directed to total population, age distribution, race composition, geographic distribution, and socioeconomic status. To provide some indication of changes that might occur in postsecondary education, information is provided on shifts in the composition and the progression of grade cohorts through the school system from kindergarten to high school graduation. Recent trends in college and university enrollments in the United States and California are reviewed to identify dimensions of participation that will most strongly affect future enrollment potential. Included are differences in participation for California's counties and eight metropolitan regions. Differences in participation for the University of California, California State University, and the community colleges are also identified with a focus on ethnic composition, age distribution, family income, and parental educational attainment. The California Postsecondary Education Commission's computer-based model for simulating the effects on enrollment potential of various potential changes in demographics is also described. (SW)

POPULATION AND ENROLLMENT TRENDS 1985-2000



CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

The California Postsecondary Education Commission was created by the Legislature and the Governor in 1974 as the successor to the California Coordinating Council for Higher Education in order to coordinate and plan for education in California beyond high school. As a state agency, the Commission is responsible for assuring that the State's resources for postsecondary education are utilized effectively and efficiently; for promoting diversity, innovation, and responsiveness to the needs of students and society; and for advising the Legislature and the Governor on statewide educational policy and funding.

The Commission consists of 15 members. Nine represent the general public, with three each appointed by the Speaker of the Assembly, the Senate Rules Committee, and the Governor. The other six represent the major educational systems of the State.

The Commission holds regular public meetings throughout the year at which it takes action on staff studies and adopts positions on legislative proposals affecting postsecondary education. Further information about the Commission, its meetings, its staff, and its other publications may be obtained from the Commission offices at 1020 Twelfth Street, Sacramento, California 95814; telephone (916) 445-7933.

POPULATION AND ENROLLMENT TRENDS: 1985-2000

The Third in a Series of Background Papers
for the Commission's Long-Range Planning Project,
A PROSPECTUS FOR CALIFORNIA POSTSECONDARY EDUCATION
1985-2000

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
1020 Twelfth Street, Sacramento, California 95814

Commission Report 85-16

Adopted March 4, 1985

CONTENTS

TABLES AND FIGURES

INTRODUCTION

This is one of four background papers for the Commission's long-range planning project, A Prospectus for California Postsecondary Education: 1985-2000. The three other papers include a review of statewide long-range planning in California; a study of state, national, and worldwide social and economic trends; and an assessment of future financial support for postsecondary education. These four papers will be followed by a policy paper that draws on all four background papers and that identifies the major issues facing postsecondary education in California in the coming period of rapid demographic change.

The purposes of this background paper on demographics are:

1. To identify the most important demographic variables for postsecondary planning, recognizing the limitations of our current knowledge of each variable;

2. To develop the ability to quantify and simulate the effects on postsecondary enrollment potential of alternative assumptions about these demographic variables; and

3. To define issues posed for postsecondary education by likely demographic shifts and to narrow the range of speculation about these shifts.

The factors that will determine enrollment potential and service needs for California's segments of postsecondary education over the next 15 years may be divided into two sets of roughly equal importance. The first set consists of population variables, including total population, age distribution, race composition, geographic distribution, and socio-economic status. The other set consists of postsecondary participation rates for the various components of the population.

Short of a major catastrophe, the important dimensions of California's population changes over the next decade and a half can be directly estimated, subject primarily to varying assumptions about migration and its effect on the composition of the state's population, and, secondarily, to the influence of the economy on socio-economic status. Thus, the population parameters are largely the "givens" of the enrollment equation.

The policy issues for postsecondary education, however, are largely to be found in the set of postsecondary participation variables, as these are the factors that can be influenced by policy changes. Participation rates, as is well known, vary broadly with age, racial/ethnic background, geographic location, and socio-economic status. They are also affected by fees, student aid, admission requirements, program availability, high school progression and preparation, outreach and support services, articulation among the segments, and a variety of other factors that are more or less within the control of educators and public policy makers.

The most important of all the population and participation variables are treated in this paper under six topics in Chapters One through Six. The

seventh chapter describes the Commission's current development of a computer-based model for simulating the effects on enrollment potential of various foreseeable changes in demographics and alternative assumptions about less foreseeable changes. The result is not a set of official enrollment forecasts, but rather a new capability for testing the importance of various demographic shifts for postsecondary planning. The simulation model, as described in Chapter Seven, is a baseline device. That is, its ongoing refinement is a permanent part of the Commission's planning agenda. As better information on such variables as migration and socio-economic status become available and as more refined assumptions about participation by various components of society become possible, they will be incorporated into the model and tested by it.

While ultimate responsibility for the contents of this background paper rests with the Commission and its staff, their work has been aided and the paper improved by the diligence of a technical advisory group, consisting of the following representatives from the several segments and interested individuals:

Steve Bagley	Westland College
Janis Cox Coffey	Los Rios Community College District
Nancy Conrath	Los Angeles Community College District
Viviane Doche	State Department of Finance
Harriet Fishlow	Office of the President, University of California
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Peter Jegers	Office of the President, University of California
Stewart Marshall	Office of the Legislative Analyst
William Mason	Office of the Chancellor, The California State University
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James Price	Department of Economic and Business Development
Mary Schlosser	State Department of Finance

The Commission is grateful to them for their assistance and advice.

ONE

CALIFORNIA POPULATION TRENDS

The population of the State of California passed 25 million early in 1984. The Population Research Unit of the Department of Finance projects that, in the year 2000, the State's population will have increased an additional one-quarter to 31.4 million. At the same time, other parts of the country, notably the northeast, will continue to decline in population as a result of net migration from east to west and from north to south.

SOURCES AND RATES OF POPULATION GROWTH

About half of California's population growth over the next 15 years will result from natural increase (from more births than deaths) and the other half from net in-migration (from other states and from other countries). Undoubtedly, the largest proportion of immigrants from other countries to California will come from our immediate neighbor, Mexico, where the population has grown from 15 million in 1920 to 70 million currently and will likely double by early in the next century. Despite continued in-migration, however, California's total rate of population growth from all sources is expected to be less in the 1990s than in the 1980s: 1.2 percent per year, compared to 1.8 percent per year.

While California's total population is expected to grow by more than one-quarter by the end of the century, the number of 15- to 24-year-olds, who comprise the high school-college cohort, will increase only 5.3 percent. From 1985 to 1990, in fact, this cohort will decline in numbers by 8.1 percent, before increasing 14.6 percent from 1990 to 2000. So while the total population of the State will consistently increase over these 15 years, the age cohort of most interest and importance for postsecondary planners will first run counter to the general increase and then outstrip it. As a result, the gross outlook for postsecondary education is an appreciable relaxation of enrollment pressure over the remainder of this decade, followed by a recovery to unprecedented levels by the end of the 1990s. However, as the remainder of this paper will point out, postsecondary education must look beyond these gross numbers to the important factors of population composition and distribution as well as changing societal needs, all of which will affect the types and levels of education to be provided.

DISTRIBUTION OF GROWTH AMONG CALIFORNIA'S METROPOLITAN REGIONS

Table 1 on pages 4-5 shows the total population and the 15- to 24-year-old cohort projected to the year 2000 for eight metropolitan regions of the

TABLE 1 Total Population and 15-24-Year Olds of Eight

Metropolitan Region	1980 All	1980 15-24	1985 All	1985 15-24
SAN FRANCISCO BAY AREA				
Alameda	1,109,093	210,951	1,165,317	209,484
Contra Costa	658,199	113,201	705,206	106,024
Marin	222,798	33,815	226,275	30,309
San Francisco	680,785	110,966	703,680	91,628
San Mateo	587,683	99,837	598,898	83,322
Santa Clara	1,299,107	261,617	1,382,483	244,269
TOTAL	4,557,665	830,387	4,781,859	765,036
Indexed to 1980	(1.00)	[1.00]	(1.049)	[0.921]
SACRAMENTO				
Placer	118,397	19,798	140,411	21,527
Sacramento	787,786	152,626	889,806	151,382
Yolo	113,996	31,149	124,958	30,502
TOTAL	1,020,179	203,573	1,155,175	203,411
Indexed to 1980	(1.00)	[1.00]	(1.132)	[0.999]
FRESNO-BAKERSFIELD				
Fresno	516,916	102,679	570,006	100,682
Kern	406,404	76,751	471,211	74,214
Kings	74,197	15,247	82,787	15,931
Tulare	247,489	45,729	278,673	45,937
TOTAL	1,245,006	240,406	1,402,677	236,764
Indexed to 1980	(1.00)	[1.00]	(1.127)	[0.985]
VENTURA-SANTA BARBARA				
Santa Barbara	299,712	65,914	320,409	61,526
Ventura	532,052	99,196	605,413	104,066
TOTAL	831,764	165,110	925,822	165,592
Indexed to 1980	(1.00)	[1.00]	(1.113)	[1.003]
LOS ANGELES-LONG BEACH				
Los Angeles	7,490,473	1,414,506	7,891,318	1,336,769
Indexed to 1980	(1.00)	[1.00]	(1.054)	[0.945]
RIVERSIDE-SAN BERNARDINO				
Riverside	668,894	112,162	804,371	121,668
San Bernardino	903,101	170,457	1,081,873	182,880
TOTAL	1,571,995	282,619	1,886,244	304,548
Indexed to 1980	(1.00)	[1.00]	(1.200)	[1.078]
ORANGE				
Orange	1,942,200	390,082	2,130,173	366,387
Indexed to 1980	(1.00)	[1.00]	(1.097)	[0.939]
SAN DIEGO				
San Diego	1,874,792	412,294	2,135,872	424,809
Indexed to 1980	(1.00)	[1.00]	(1.139)	[1.030]
CALIFORNIA				
All 58 Counties	23,770,978	4,534,666	25,997,721	4,415,239
Indexed to 1980	(1.00)	[1.00]	(1.094)	[0.973]

Sources: California State Department of Finance, 1983; U.S. Department of

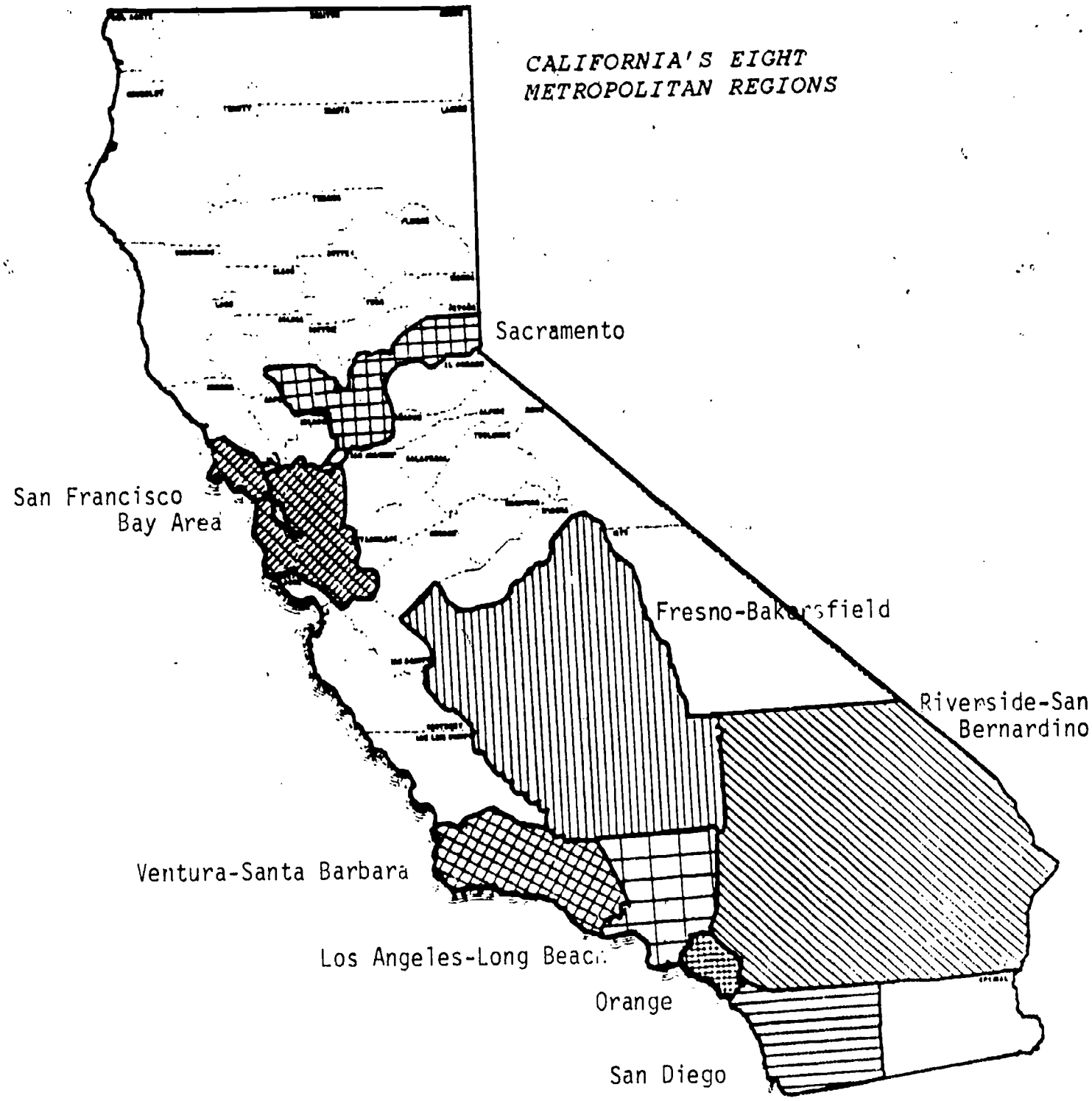
California Metropolitan Regions, 1980 to 2000

1990		1995		2000	
All	15-24	All	15-24	All	15-24
1,208,401	178,382	1,245,977	177,916	1,276,255	182,388
752,633	92,810	796,990	89,909	836,023	99,903
230,643	22,299	234,863	18,550	238,494	16,[illegible]6
698,037	77,882	688,231	75,080	674,832	85,421
615,550	69,712	626,466	62,460	630,327	70,267
1,461,286	214,062	1,533,278	201,435	1,592,523	223,777
4,966,550	655,147	5,125,805	625,350	5,248,454	679,002
(1.090)	[0.789]	(1.125)	[0.753]	(1.152)	[0.818]
167,568	21,114	197,240	22,866	226,263	27,978
993,279	138,033	1,092,556	153,180	1,186,612	171,842
136,808	29,133	148,188	30,072	158,782	32,148
1,297,655	188,280	1,437,984	206,118	1,571,657	231,968
(1.272)	[0.925]	(1.410)	[1.013]	(1.541)	[1.139]
616,925	94,536	660,171	98,681	698,693	115,950
522,804	69,490	569,844	81,751	612,684	102,877
89,877	15,522	95,633	16,669	100,427	17,733
308,557	46,312	337,178	51,212	362,206	61,869
1,538,163	225,860	1,662,472	248,313	1,774,010	298,429
(1.235)	[0.939]	(1.335)	[1.033]	(1.425)	[1.241]
339,691	55,087	358,284	54,748	373,788	58,719
682,361	97,363	762,504	102,768	838,522	115,246
1,022,052	152,450	1,120,788	157,516	1,212,310	173,965
(1.229)	[0.923]	(1.347)	[0.954]	(1.458)	[1.054]
8,127,411	1,187,854	8,326,468	1,167,560	8,474,217	1,278,991
(1.085)	[0.840]	(1.112)	[0.825]	(1.131)	[0.904]
943,792	121,787	1,079,486	136,016	1,200,050	165,568
1,269,117	190,093	1,439,966	204,291	1,597,808	257,463
2,212,909	311,880	2,519,452	340,307	2,797,858	423,031
(1.408)	[1.104]	(1.603)	[1.204]	(1.780)	[1.497]
2,306,756	324,653	2,469,400	308,679	2,605,402	347,003
(1.188)	[0.832]	(1.271)	[0.791]	(1.341)	[0.890]
2,404,716	415,131	2,639,483	431,600	2,848,974	480,894
(1.283)	[1.007]	(1.408)	[1.047]	(1.520)	[1.166]
27,989,698	4,056,478	29,819,615	4,130,132	31,413,955	4,649,396
(1.177)	[0.895]	(1.254)	[0.911]	(1.322)	[1.025]

Commerce, Bureau of the Census, 1982.

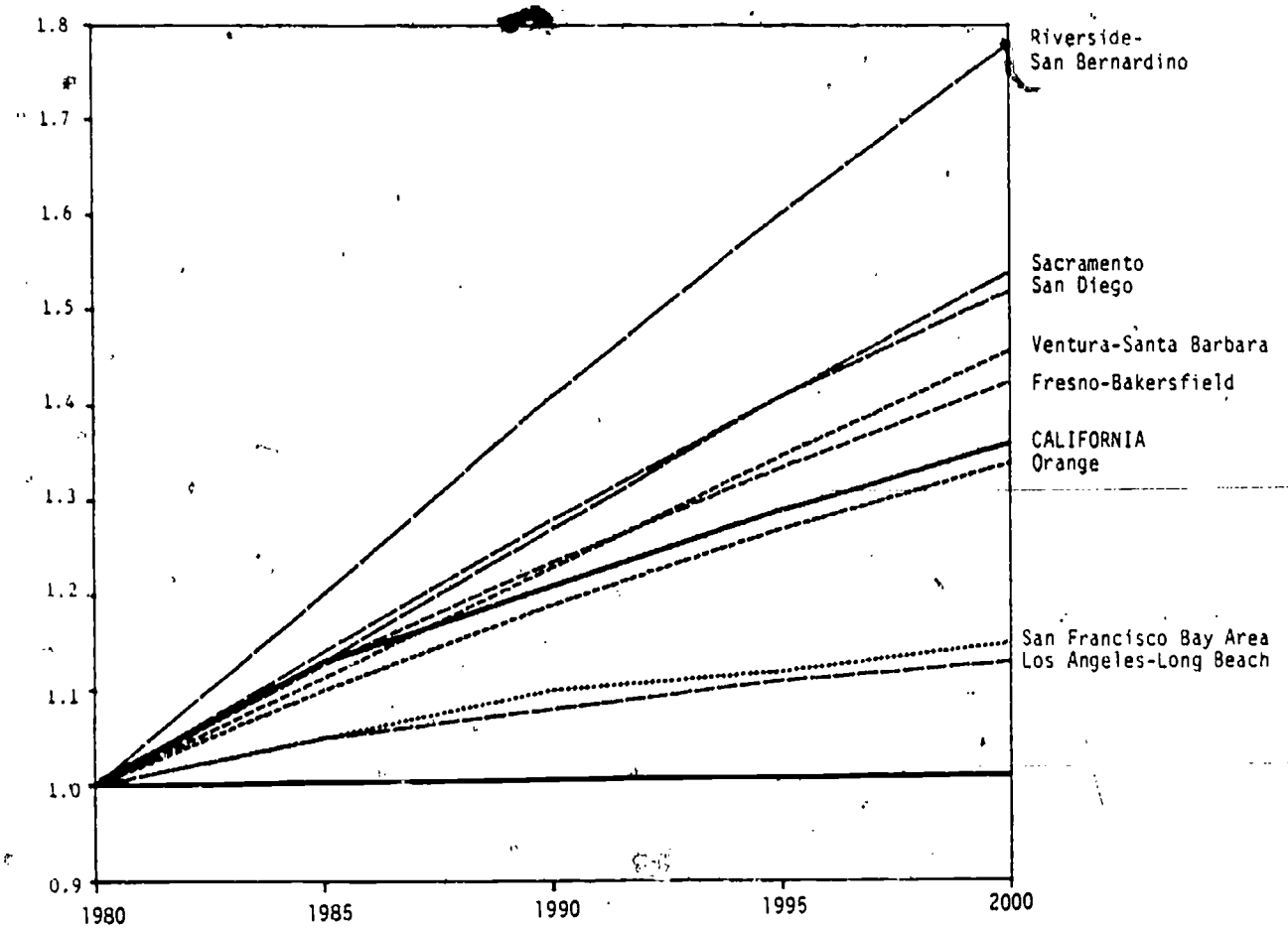
State -- (1) the San Francisco Bay Area, (2) Sacramento, (3) Fresno-Bakersfield, (4) Ventura-Santa Barbara, (5) Los Angeles-Long Beach, (6) Riverside-San Bernardino, (7) Orange, and (8) San Diego. These eight metropolitan regions (shown on the map below) accounted for 86 percent of both the State's population and of the high school-college age cohort in 1980 and they are expected to account for 84 percent of each in the year 2000. The total combined population of the three "northern" metropolitan regions, as well as the total high school-college age cohort, is about half that of the five "southern" regions, and this relative size will hold through the end of the century.

Figures 1 and 2 on the opposite page portray these trends graphically. As Figure 1 shows, the outlook for total population growth is smooth and contin-



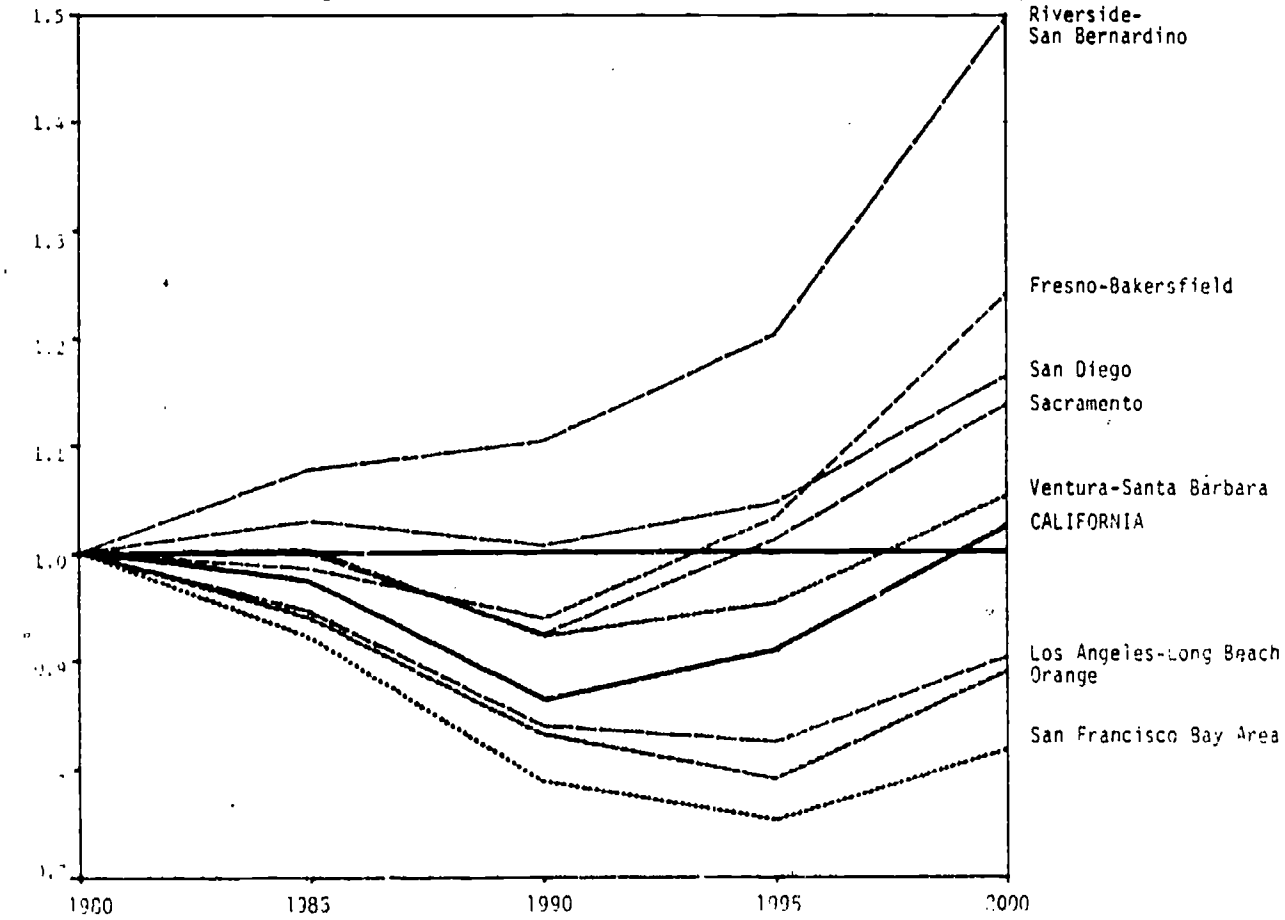
CALIFORNIA'S EIGHT METROPOLITAN REGIONS

FIGURE 1 Total Population of Eight California Metropolitan Regions, Indexed to 1980



Sources: California State Department of Finance, 1983; U.S. Department of Commerce, Bureau of the Census, 1982.

FIGURE 2 Population of 15-24-Year Olds in Eight California Metropolitan Regions, Indexed to 1980



Sources: California State Department of Finance, 1983; U.S. Department of Commerce, Bureau of the Census, 1982.

uous across all eight regions and for the State as a whole. The largest growth, both absolute and relative, will occur in the Riverside-San Bernardino region. In contrast, the Orange County, San Francisco Bay Area, and Los Angeles-Long Beach regions will experience relative growth below that of the State as a whole. These three regions can be characterized as "impacted," in that they are already developed and have high cost of living. The projected growth for the Riverside-San Bernardino region and for the Ventura-Santa Barbara region can be seen largely as spillover from the Los Angeles-Long Beach region. The reasons for the high projected growth of the San Diego and Sacramento regions are not so easily characterized, and the modest growth of the Fresno-Bakersfield region is actually a composite of 50 percent growth for Kern County and only 35 percent for Fresno County.

Figure 2 shows the projected sizes of the high school-college cohorts for the eight metropolitan regions. The projections seem to fall into two sets: those for which the minimum size occurs at or about 1990 and those for which the minimum is not reached until some five years later. Five regions fall into the first category: Riverside-San Bernardino, Fresno-Bakersfield, San Diego, Ventura-Santa Barbara, and Sacramento. For all five, the decline in size of this cohort is less than the average for the State, and their recovery after 1990 out-performs the statewide average. It is not surprising that these are the same high-growth regions for the total population as shown in Figure 1, but some intriguing differences are expected to occur among them. One notable difference is the relatively high growth in the high school-college cohort for the Fresno-Bakersfield region after 1995, compared to that for San Diego, Ventura-Santa Barbara, and Sacramento. (Within this Fresno-Bakersfield region, however, Kern County's high school-college conort is projected to grow 34 percent to Fresno County's 13 percent.)

Comparing Figures 1 and 2, perhaps the major difference between them is that while all eight metropolitan regions will experience growth in their total population through the year 2000, the three most populous regions -- Los Angeles-Long Beach, Orange, and the San Francsico Bay Area -- will close the century with smaller high school-college age cohorts than they had in 1980. Also by that time, Orange County will have been passed in total population by two other regions -- San Diego and Riverside-San Bernardino.

SHIFTS IN POPULATION COMPOSITION

Two important shifts in population composition will occur in the next 15 years: the first is the general aging of the population, the second is increases in the Hispanic and Asian components of the population.

Table 2 shows the median age of the populations of the counties in each of the state's eight metropolitan regions from 1980 to 2000 as projected by the Department of Finance. Over these 20 years, the median age of the population of the state will increase almost 6 years, from 29.92 to 35.82 years. The only county in the State which will have a net decrease in median age is

TABLE 2 Median Age for California's Metropolitan Regions, 1980-2000

Metropolitan Region	1980	1985	1990	1995	2000	20-Year Change	Base/ Change
SAN FRANCISCO BAY AREA							
Alameda	30.65	32.01	33.43	34.67	36.40	+5.75	0/0
Contra Costa	31.49	33.25	34.89	36.84	38.12	+6.63	+/+
Marin	33.81	36.51	38.90	40.68	42.62	+8.81	+/+
San Francisco	33.90	35.79	38.00	40.31	42.67	+8.77	+/+
San Mateo	32.86	35.09	37.25	39.42	41.49	+8.63	+/+
Santa Clara	29.11	30.93	32.99	34.80	36.70	+7.59	0/+
SACRAMENTO							
Placer	32.16	33.51	34.97	36.21	37.89	+5.73	+/0
Sacramento	29.79	31.15	32.95	34.66	36.37	+6.58	0/+
Yolo	26.50	28.24	30.51	31.57	33.21	+6.71	-/+
FRESNO-BAKERSFIELD							
Fresno	28.23	29.26	30.61	32.01	33.20	+4.97	-/-
Kern	28.22	28.95	30.25	31.26	31.77	+3.55	-/-
Kings	26.21	27.07	28.15	29.53	30.90	+4.69	-/-
Tulare	27.93	28.29	28.98	29.87	30.28	+2.35	-/-
VENTURA-SANTA BARBARA							
Santa Barbara	29.73	31.64	33.76	35.51	37.51	+7.98	-/+
Ventura	28.58	30.05	31.74	33.25	35.05	+6.47	-/+
LOS ANGELES-LONG BEACH							
Los Angeles	29.79	30.96	32.28	33.60	34.78	+4.99	0/-
RIVERSIDE-SAN BERNARDINO							
Riverside	31.66	32.63	33.87	35.24	36.54	+4.88	+/-
San Bernardino	28.40	29.38	30.62	31.52	32.66	+4.26	-/-
ORANGE							
Orange	29.48	31.13	33.30	35.39	37.59	+5.73	+/0
SAN DIEGO							
San Diego	28.71	30.03	32.07	33.53	35.60	+6.89	0/+
CALIFORNIA							
All 58 Counties	29.92	31.21	32.83	34.26	35.82	+5.90	0/0

Note: "Base" refers to the 1980 median age. "Change" refers to the 20-year change in median age. A minus sign means the county value was less than the statewide value. A plus sign means the county value was greater than the statewide value. A zero means the county value was within 5 percent of the statewide value.

Source: California State Department of Finance, 1983.

Lake County (not one of the metropolitan counties). More important are the differences between the metropolitan regions in median age, current and projected.

The San Francisco Bay Area -- particularly Marin (8.81), San Francisco (8.77), and San Mateo (8.63) -- will age more rapidly than the State average. All six Bay Area counties except Santa Clara start with older than average median ages, and all except Alameda will age faster than the State as a whole.

The Sacramento and Ventura-Santa Barbara regions will approximate the statewide average for median age and aging.

The Fresno-Bakersfield region shares with all of the counties of the lower central valley a lower than average 1980 median age and a less than average rate of increase in the median age.

The Riverside-San Bernardino region has a 1980 median age close to the statewide average, but, presumably because of in-migration of younger persons, will have less of an increase in median age than will the State as a whole.

The Los Angeles-Long Beach region has a 1980 median age close to the statewide average, but the increase in median age over the 20 years in question will be less than that for the State as a whole.

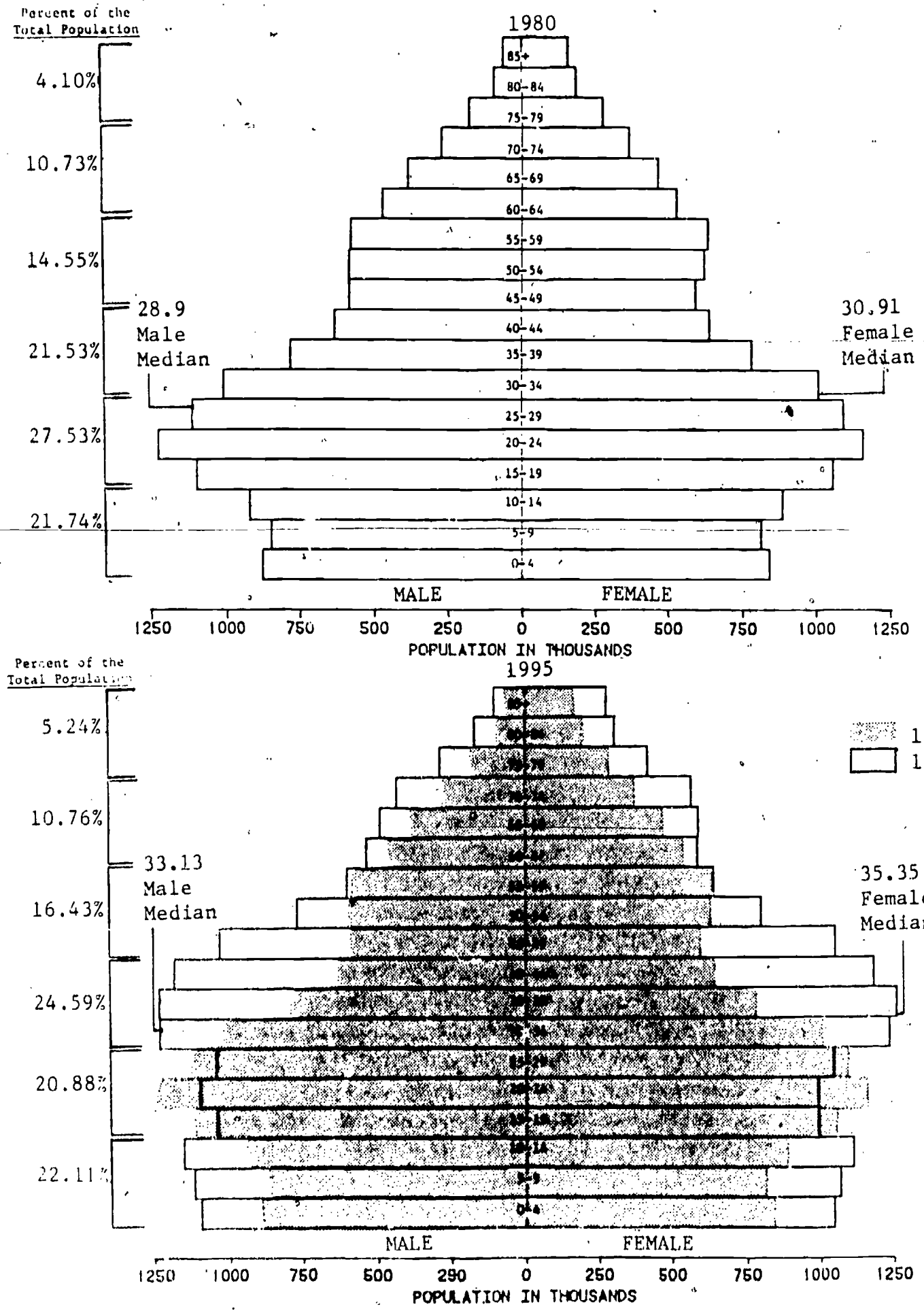
The Orange and San Diego regions begin with median ages close to the statewide average, but the increases (8.11 and 6.89 years, respectively) in their median ages exceed the statewide average.

However, median age is not a sensitive indicator of age shifts. As the population pyramids in Figure 3 on page 11 illustrate, while the median age for Californians will increase only 4.3 years from 1980 to 1995, the distribution of Californians within age bands will undergo profound changes. The number in the 20 through 34 age band (prime years for work, child-bearing, and postsecondary participation) will diminish by 7.6 percent. The number in the age band from 35 to 50 (the "middle" years) will increase by 51.3 percent. Such shifts in the age distribution will affect the responsibilities, opportunities, and life choices of the various age cohorts and will be felt by postsecondary institutions.

At the end of the century, San Francisco County will have the highest median age (42.7). It will probably also have the distinction of being the only county to lose population between 1985 and 2000. In fact, not only is the relative growth projected for the six-county Bay Area (Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara) over the next 15 years only 9.8 percent, compared with 20.8 percent for the State as a whole, but none of the six counties is expected to individually match the State's rate of growth.

But lack of growth itself should not be taken for stagnation. For example, Los Angeles County will grow only 7.4 percent over the next 15 years, and, as noted above, its 15- to 24-year-old cohort will actually shrink. Nonetheless, the five-county Los Angeles basin (Los Angeles, Orange, Riverside, San Bernardino, and Ventura) will be the locus of perhaps the most pronounced and important demographic shifts in the State.

FIGURE 3 Age Distribution of California's Population, Actual 1980 and Projected 1995



Source: California State Department of Finance, 1983.

Both Los Angeles City and County provide a dramatic example of the demographic changes possible in a state of "dynamic equilibrium." As Kevin F. McCarthy noted in his paper, "The Slow-Growing Orange: A Demographer's Look at Future Los Angeles" (1984, p.1):

> Had it not been for immigration -- mostly from Latin American and Asian countries -- the City of Los Angeles would have lost about 250,000 residents between 1970 and 1980; instead it gained 150,000. We are speaking here only of net figures: 250,000 native-born Americans actually did move out of the city -- and 675,000 moved out of Los Angeles County. They were, however, more than replaced by immigrants.

Even in a condition of zero growth, such a flux of outflow and inflow leaves considerable room for change (p. 3):

> The net result is that Los Angeles is following the example of Honolulu in becoming a multiethnic, multiracial metropolis. White non-Hispanics now make up less than half of the city's population, and the relative size of the Black population has declined as well. . . . Meanwhile, the city's and county's Hispanic and Asian populations have boomed; they now constitute one-third of the population and could easily become a majority by the year 2000.

For the school-age cohort, the Hispanic-Asian majority of Los Angeles is already a reality. By 1980, Hispanic children accounted for 54 percent of total elementary school enrollment in the Los Angeles School District, as Leobardo Estrada pointed out in "The Dynamic Growth and Dispersion of the Latino Population" (1983, p. 4), although they comprised only 28 percent of the elementary school enrollment in 1974 -- just six years earlier.

Even allowing for the outmigration of non-Hispanic children from the public schools, these figures are impressive. And similarly impressive changes in ethnic composition can be expected for other populous areas of the State.

SUMMARY

California's total population will consistently grow from 1980 to the year 2000. However, the number of 18 to 24 year olds will decline until 1990 and will recover to the 1980 level only shortly before the end of the century. At the same time, the number of Californians over the age of 30 will greatly increase as the baby boomers pass this landmark. The eight metropolitan regions of the State will share in these trends to varying degrees, but some of the faster-growing regions (beneficiaries of "spillover" from the already developed regions) will see no period of decline in 15 to 24 year olds. And, last but not least, the numbers and proportions of Hispanic and Asian Californians will continue to increase as this State moves to join Hawaii in having a majority of minorities.

TWO

ETHNIC SHIFTS

Between 1950 and 1980, the total population of the United States grew by just under 50 percent, yet in the same period, the Hispanic population grew by 265 percent -- making it without question the country's fastest growing minority. In the latter half of the 1970s, the rate of immigration to this country of Asians was swelled by large numbers of refugees. The secondary effects of migration from this influx will continue to be felt for years to come. Nowhere have the effects of these trends been more evident than in the State of California. Because race or ethnicity is an important variable affecting postsecondary participation, these trends will continue to affect postsecondary education on through the end of the century.

RACIAL/ETHNIC CATEGORIZATION

Categorizing the general population and the student population by ethnicity involves an irreducible element of arbitrariness. For purposes of this study, the Commission's primary concern is comparability of ethnic categories between postsecondary enrollment data and the 1980 Census. Appendix A explains how the Census data on California's total population and its student population have been grouped into the six identifiable ethnic categories used in postsecondary enrollment analyses, plus a small residual category of individuals whose responses regarding their ethnicity defy categorization. Table 3 below lists the components of these six ethnic categories. As can be imagined, the specific groups within the six categories differ from one another with respect to age and income distribution, educational attainment, and other characteristics, just as our six major categories do. Even within a specific group, differences occur in these characteristics between native and foreign-born persons and in relation to their length of time in this country. While the Commission recognizes these further dimensions of diversity, its model is limited by the available data to distinguishing only six major categories.

TABLE 3 Components of Racial/Ethnic Categories

White	Black	Hispanic	Asian	Filipino	American Indian/ Alaskan Native	Other
		Mexican	Japanese		American Indian	None
		Mexican American	Chinese		Eskimo	of
		Chicano	Korean		Aleut	the
		Puerto Rican	Vietnamese			fore-
		Cuban	Asian Indian			going
		Other Hispanic	Hawaiian			
			Guamanian			
			Samoan			

Source: Appendix A.

Table 4 below shows California's rich diversity of ethnic groups compared to that of the nation at large. In California, Hispanics, Asians, Filipinos, and American Indians are better represented among the population than nationally, and its Hispanic and Asian percentages are roughly three times those of the United States as a whole. At the same time, its percentages of Blacks and whites are smaller than for the nation in general.

TABLE 4 Racial/Ethnic Composition of the United States and California Population, 1980

	White	Black	Hispanic	Asian	Filipino	American Indian/ Alaskan Native	Other	Total
National	180,256,096 (79.57%)	26,104,173 (11.52%)	14,347,918 (6.33%)	2,725,787 (1.20%)	774,652 (0.34%)	1,420,400 (0.63%)	916,779 (0.40%)	226,545,805 (100.0%)
California	15,850,775 (66.97%)	1,784,086 (7.54%)	4,428,482 (18.71%)	954,595 (4.03%)	358,378 (1.51%)	231,702 (0.98%)	59,884 (0.25%)	23,667,902 (100.0%)

Source: Commission staff calculations from the 1980 Census.

DISTRIBUTION OF RACIAL/ETHNIC GROUPS AMONG CALIFORNIA'S METROPOLITAN REGIONS

Table 5 on page 15 gives the 1980 population of each of the eight metropolitan regions and of the State analyzed into the six ethnic/racial groups, both their number and their percent of the population in each case. It should be noted that the Los Angeles-Long Beach region accounts for the largest number of all racial/ethnic groups but one. More Filipino Californians live in the San Francisco Bay region. Figure 4 on page 16 shows those percents and gives a visual impression of the relative size of the six groups.

Table 5 also compares the percent for a given group in a particular region with the corresponding statewide percent (i.e., indexed to California). Figure 5 on page 17 shows the indexed representation for the eight regions. For purposes of discussion, we have drawn a band from 20 percent below the statewide value to 20 percent above and will take special note of values outside this band.

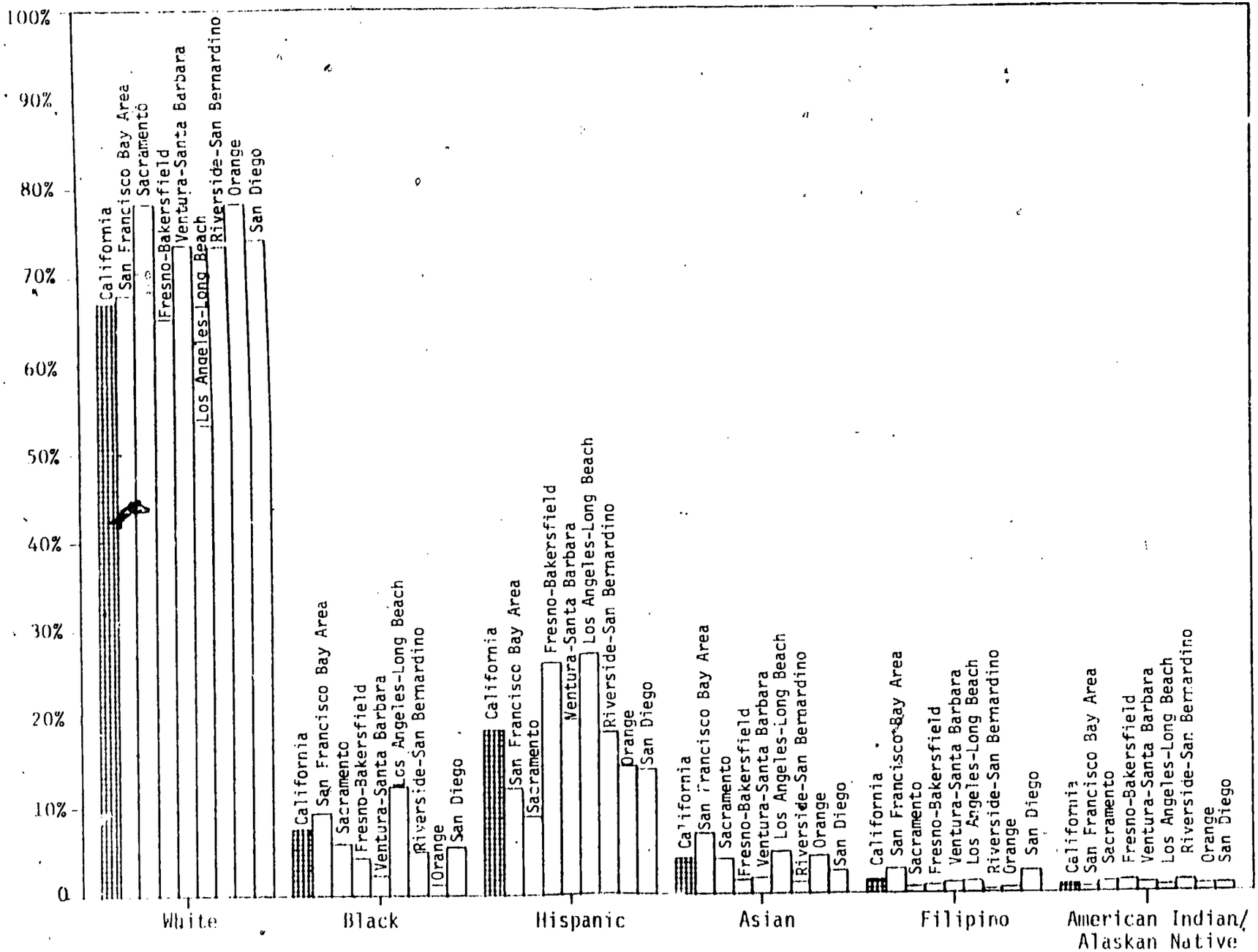
As Figure 5 shows, no two of the eight metropolitan regions share the same racial/ethnic composition. White non-Hispanic representation falls outside the 20-percent band (0.796) only for the Los Angeles-Long Beach region. On the other hand, representation of Black Californians falls outside the 20 percent band for all of the eight regions -- being high for San Francisco Bay and Los Angeles-Long Beach but low for all six other regions. Hispanic representation is high for Fresno-Bakersfield and Los Angeles-Long Beach but is low for the two northernmost regions (San Francisco Bay and Sacramento) and for the two southernmost regions (Orange and, surprisingly, San Diego).

TABLE 5 Racial/Ethnic Composition of California's Eight Metropolitan Regions, 1980

	White	Black	Hispanic	Asian	Filipino	American Indian Alaskan Native
SAN FRANCISCO BAY AREA						
Alameda	680,853	201,064	123,046	62,946	25,940	8,313
Contra Costa	505,921	59,367	53,473	22,782	8,714	4,993
Marin	199,908	5,545	8,826	5,859	711	960
San Francisco	360,841	84,334	78,130	110,579	38,690	3,566
San Mateo	420,365	34,955	68,544	36,369	23,099	2,316
Santa Clara	919,723	41,923	218,071	73,693	28,229	10,011
TOTAL	3,087,611	427,188	550,090	312,228	125,383	30,159
Percent	(67.924)	(9.398)	(12.101)	(6.869)	(2.758)	(0.663)
Indexed to CA	(1.014)	(1.247)	(0.647)	(1.703)	(1.822)	(0.678)
SACRAMENTO						
Placer	105,537	438	8,103	1,488	166	1,362
Sacramento	602,223	57,511	70,752	34,115	6,826	9,938
Yolo	85,641	2,040	18,942	4,475	523	1,383
TOTAL	793,401	59,989	97,797	40,078	7,515	12,683
Percent	(78.245)	(5.916)	(9.645)	(3.952)	(0.741)	(1.251)
Indexed to CA	(1.168)	(0.785)	(0.515)	(0.980)	(0.489)	(1.278)
FRESNO-BAKERSFIELD						
Fresno	318,491	25,147	148,018	13,015	2,451	6,015
Kern	281,115	20,668	85,346	3,915	4,188	6,852
Kings	47,240	3,554	19,535	607	1,619	928
Tulare	160,749	3,496	72,457	2,066	3,091	3,211
TOTAL	807,595	52,865	325,356	19,603	11,349	17,006
Percent	(65.277)	(4.273)	(26.298)	(1.584)	(0.917)	(1.375)
Indexed to CA	(0.975)	(0.567)	(1.405)	(0.393)	(0.806)	(1.404)
VENTURA-SANTA BARBARA						
Santa Barbara	224,200	7,915	53,449	5,901	3,305	3,173
Ventura	384,903	10,966	110,757	9,061	6,690	5,671
TOTAL	609,103	18,881	164,206	14,962	9,995	8,844
Percent	(73.575)	(2.281)	(19.835)	(1.807)	(1.207)	(1.068)
Indexed to CA	(1.099)	(0.303)	(1.060)	(0.448)	(0.797)	(1.091)
LOS ANGELES-LONG BEACH						
Los Angeles	3,985,022	925,832	2,033,334	355,799	100,894	54,569
Percent	(53.293)	(12.382)	(27.193)	(4.758)	(1.349)	(0.730)
Indexed to CA	(0.796)	(1.643)	(1.453)	(1.180)	(0.891)	(0.745)
RIVERSIDE-SAN BERNARDINO						
Riverside	491,808	30,371	121,686	7,211	2,724	8,163
San Bernardino	655,078	46,820	162,285	12,773	4,121	11,922
TOTAL	1,146,886	77,191	283,971	19,984	6,845	20,085
Percent	(73.604)	(4.954)	(18.225)	(1.283)	(0.439)	(1.289)
Indexed to CA	(1.099)	(0.657)	(0.974)	(0.318)	(0.290)	(1.317)
ORANGE						
Orange	1,515,887	23,671	279,274	82,355	11,136	16,586
Percent	(78.433)	(1.225)	(14.450)	(4.261)	(0.576)	(0.858)
Indexed to CA	(1.171)	(0.152)	(0.772)	(1.056)	(0.381)	(0.877)
SAN DIEGO						
San Diego	1,381,595	102,236	262,487	47,984	47,106	16,452
Percent	(74.206)	(5.491)	(14.098)	(2.577)	(2.530)	(0.884)
Indexed to CA	(1.108)	(0.728)	(0.753)	(0.639)	(1.671)	(0.903)
CALIFORNIA						
All 58 Counties	15,850,775	1,784,086	4,428,482	954,595	308,378	231,702
Percent	(66.972)	(7.538)	(18.711)	(4.033)	(1.514)	(0.979)
	(1.000)	(1.000)	(1.000)	(1.000)	(1.000)	(1.000)

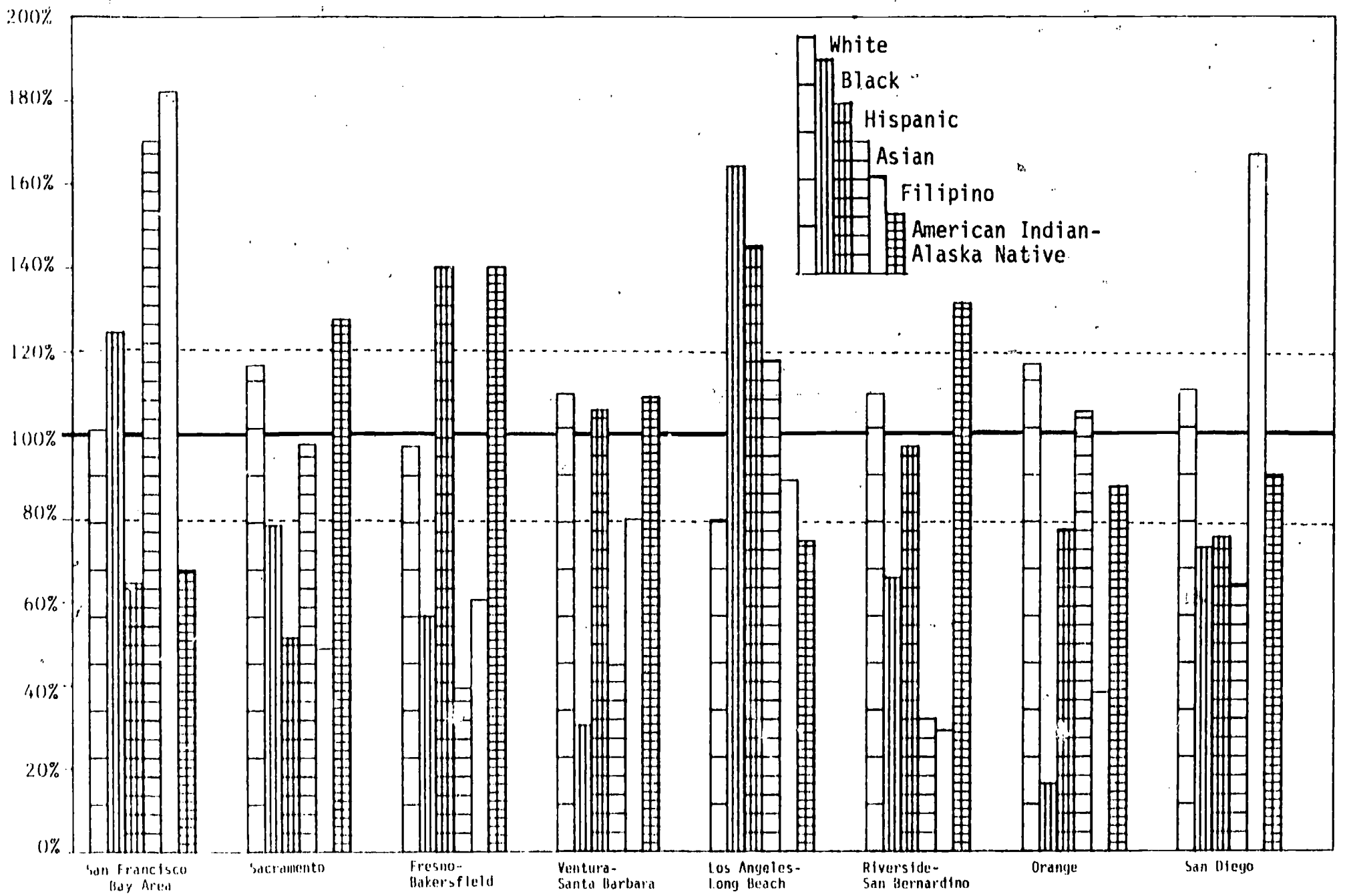
Source: California Postsecondary Education Commission; 1980 U.S. Census.

FIGURE 4 Representation of Six Racial/Ethnic Groups in California's Eight Metropolitan Regions, 1980



Source: California Postsecondary Education Commission staff calculations from the 1980 Census.

FIGURE 5 Representation of Six Racial/Ethnic Groups in California's Eight Metropolitan Regions Indexed to Their Statewide Representation, 1980



Source: California Postsecondary Education Commission staff calculations from the 1980 Census.

The representation of Asian Californians in the San Francisco Bay region is well above the statewide average (some 70 percent above) and approaches 20 percent above average for the massive Los Angeles-Long Beach region. As a result, the values for three other metropolitan regions (Fresno-Bakersfield, Ventura-Santa Barbara, and Riverside-San Bernardino) fall well below the 20 percent band. The proportion of Asians in the San Diego region is below the 20 percent band, and the proportion of Filipino Californians in that region is 67 percent above the statewide average, second only to their 82 percent overrepresentation (compared to the statewide average) in the San Francisco Bay region. Filipino Californians are underrepresented in all the other regions. American Indian and Alaska Native Californians constitute less than 1 percent of the State's population. The proportion of the population is greater for the non-coastal, less-urban regions (Sacramento, Fresno-Bakersfield, and Riverside-San Bernardino).

DEMOGRAPHIC CHARACTERISTICS OF CALIFORNIA'S MINORITY POPULATION

Nationally, the current median age for Hispanic Americans is 23, compared to 30 for the population in general, 29 for Asians, and 25 for Blacks. Several things account for the relative youthfulness of the Hispanic population: First, the average age of immigrants to this country is low, and Hispanic immigration is considerable. Second, the fertility rate for Hispanic women is well above the national average (2.5 versus 1.8), and, although these rates are converging, each year the population includes more foreign-born Hispanic women, whose fertility rate is considerably higher than that of native-born Hispanic women. Within the nation's Hispanic population, Mexican-Americans and Puerto Ricans have the lowest median age of all, and California's Hispanic population is heavily Mexican-American. As of 1980, two-fifths of all Mexican-Americans in the United States lived in California.

Notwithstanding the fact that most of California's farm workers are Hispanic, most Hispanics in California as well as in other states live in urban areas. According to the 1980 Census, fully 88 percent of the nation's Hispanics lived in metropolitan areas, as compared to 75 percent for the general population and 81 percent for Blacks. It should also be noted that California leads all other states in the percentage of population in metropolitan areas (95 percent). However, California's Hispanic population is less concentrated in populous counties (those with 500,000 or more residents) than is its Asian population.

Of the fifty states, only Hawaii has a population where no single ethnic group constitutes a majority. In the second decade of the next century, California will be the first mainland state to join Hawaii in that distinction.

In 1960, minority groups constituted 15 percent of California's population; in 1970, 20 percent; and in 1980, 33.4 percent (Hayes-Bautista, Schinck, and Chapa, 1984). As Table 6 shows, in 1980, five of California's major cities already had a majority of minorities. In East Los Angeles, the percent non-minority is smaller than is the percent minority in any of the cities.

TABLE 6 Racial/Ethnic Minority Population as a Percent of the Population of California's Major Cities, 1970 and 1980

California City	Percent Minority 1970	Percent Minority 1980	Total 1980 Population
Los Angeles	37%	52%	2,966,850
San Diego	19	31	875,500
San Francisco	37	48	679,000
San Jose	21	36	629,400
Long Beach	13	32	361,300
Oakland	47	65	339,300
Sacramento	27	38	275,700
Anaheim	9	24	219,300
Fresno	26	37	218,200
Santa Anna	28	56	203,700
Riverside	17	26	170,900
Huntington Beach	6	15	170,500
Stockton	36	43	149,800
Glendale	10	26	139,100
Fremont	13	25	131,900
Torrance	9	21	129,900
Garden Grove	8	22	123,300
Pasadena	27	45	118,600
San Bernardino	34	43	117,500
East Los Angeles	88	96	110,000
Oxnard	39	57	108,200
Sunnyvale	14	25	106,600
Modesto	8	17	106,600
Bakersfield	27	29	105,600
Berkeley	34	36	103,300
Concord	6	14	103,300
Fullerton	9	21	102,000

Source: Kasarda, 1984, p. 28-29.

The growth of the minority population has been even more pronounced in the K-12 population. From 1967 to 1979, minority representation in the schools increased from 25.3 percent to 40.0 percent. For the 0 to 14 year olds, by the turn of the century, the current majority group will become less than 50 percent.

As Table 7 shows, while the rate of progress toward plurality varies with assumptions about birth rates and migration, the direction is clear. The white non-Hispanic component will shrink toward 50 percent. The Black component will remain a constant proportion. In relative terms, Asian growth may even outstrip Hispanic growth, but in absolute terms the increase in the number of Hispanics will be more than twice the increase in the number of Asians.

TABLE 7 Percent Distribution of California's Population Among Major Racial/Ethnic Groups, 1980 to 2000

Racial/Ethnic Group	Higher/Lower Alternative*				
	1980	1985	1990	1995	2000
White	66.6/66.6	63.2/64.2	60.6/62.5	57.6/60.2	54.8/58.2
Black	7.5/7.5	7.4/7.6	7.4/7.7	7.2/7.6	7.1/7.6
Hispanic	19.2/19.2	21.6/20.7	23.6/21.7	25.9/23.2	28.1/24.4
Asian and Other	6.7/6.7	7.8/7.5	8.5/8.1	9.3/8.8	10.0/9.8

*Higher alternative assumes higher but declining fertility ratios for Hispanic women and higher foreign immigration to California as opposed to internal migration.

Source: Center for Continuing Study of the California Economy, 1982.

IMPLICATIONS FOR POSTSECONDARY EDUCATION

The importance of these trends for postsecondary education lies in the historical differences in educational participation and attainment among ethnic groups. Blacks and Hispanics have historically completed fewer years of school than the population as a whole. There is some evidence that young Hispanics are closing the gap in high school completion, but Mexican-Americans trail other Hispanic groups in this trend. Beyond this, Black and Mexican-American high school graduates tend to score lower than the general population

on standardized tests such as the Scholastic Aptitude Tests, indicating poorer college preparation. In contrast, on all of these indices, California's Asian population outperforms the general population of the State.

The high attrition of Black and Hispanic youth at all points along the high school-college continuum is cause for concern. Among Black and Hispanic eleventh graders in 1979, 35 and 31 percent, respectively, failed to graduate by June 1981. The underrepresentation of these minorities in four-year public colleges and universities increases with each succeeding level. Here again, the Asian representation exceeds the average.

The growth of the Hispanic and Asian populations will not affect all segments of California postsecondary education nor all institutions equally. The severity of the ethnic shift for the State and for regions of the State will depend in large part on a complex set of public policies and personal choices that determine a population's migration.

THREE

MIGRATION

Perhaps the most volatile and uncertain factor affecting the demographic composition of California's population and its counties is that of migration. With no change in the size of a county's population, the composition of its population can shift through in-migration and out-migration of many sorts -- foreign immigration (including undocumented) and interstate and intrastate domestic migration. (Table 8 below contains definitions of these terms.) All of these changes can affect the age, sex, and ethnic mix of the State's and counties' populations.

TABLE 8 Definitions of Terms Related to Migration

Migration: The act of moving from one geographic unit, such as city, county, metropolitan region, or state, and settling in another.

Flow Rate: The total number of people moving into or out of a county between April 1, 1975 and April 1, 1980 as indicated by responses to the 1980 U.S. Census Survey, divided by the population of the region as listed in the 1980 U.S. Census.

Immigration: The act of migration from a foreign country to this country. Also, the number of persons doing so, with proper documentation from the Immigration and Nationalization Service, in a given period.

In-Migration: The act of moving into a particular geographic region and settling there. Also, the number of persons doing so in a given period.

Interstate Migration: The act of moving from one state and settling in another.

Intrastate Migration: The act of moving from one geographic unit within a particular state and settling elsewhere within that same state.

Net Migration: The net increase or decrease in the population of a particular geographic unit through in-migration and out-migration.

Out-migration: The act of moving out of a particular geographic unit and settling elsewhere. Also, the number of persons doing so in a given period.

Relative Flow: The flow rate of a county divided by the average flow rate for all counties of the State.

Undocumented Immigration: The act of immigrating without approved documentation from the Immigration and Nationalization Service. Also, the number of persons doing so in a given period.

Source: California Postsecondary Education Commission.

FLOW RATES FOR THE MAJOR METROPOLITAN REGIONS OF THE STATE AS A MEASURE OF DEMOGRAPHIC CHANGE

Since 86 percent of California's population resides in eight major metropolitan regions, population turnover in these areas can be an important factor affecting postsecondary institutions. Even a region with zero net migration can experience major shifts in demography as a result of flow into and out of the region, and this, in turn, can alter the types of educational services needed and demanded by the residents of the region.

Table 9 on page 25 shows the extent of migration for the counties of the eight metropolitan regions in several ways: first, Column 2 shows the total number of people who in 1980, based on their place of residence in 1975, had moved either into or out of that county; Column 3 shows the difference between the number moving in and the number moving out of a particular county; Column 4 shows the percent of the population moving into or out of a particular county each year; and Column 5 shows the percent change in the population each year due to migration.

Column 5 gives an indication of migration's contribution to population growth for a county. Notice that Placer, Ventura, Riverside, San Bernardino, and San Diego have high rates, while Los Angeles and the San Francisco Bay Area counties have low rates.

On the other hand, a high rate in Column 4 does not necessarily indicate high growth, since a move out of the county counts the same as a move into the county. However, each such transaction represents an opportunity to change the characteristics of the county population (age, gender, ethnicity). It is worth noting that the Bay Area counties, despite their low in-migration rates, have higher-than-average flow rates. Low flow rates are found for the Fresno-Bakersfield region and for Los Angeles-Long Beach.

As noted earlier, migration is the most volatile factor in determining the age and ethnic composition of a particular population. The range of flow rates for the eight metropolitan regions of the State provides an indication of the potential for migration-induced demographic shifts that can affect the size and shape of enrollments in the various segments within that region. Postsecondary planners and decision makers should be aware of this potential for change.

ESTIMATING MIGRATION PATTERNS

The State Department of Finance estimates the age and sex of each county's residents through the year 2020. However, it does not estimate the racial or ethnic composition of the counties' populations. In making projections of net in-migration, the Department must consider both domestic migration (interstate and intrastate) and foreign immigration (legal and undocumented).

TABLE 9 Selected Measures of Migration for California's Eight Metropolitan Regions

Metropolitan Region	1980 Population	Five-Year Total Migration (Number in plus Number out)	Five-Year Net In-Migration (Number in minus Number out)	Relative Total Migration (Percent/Year)	Relative Net In-Migration (Percent/Year)
SAN FRANCISCO BAY AREA					
Alameda	1,109,093	473,428	- 2,750	8.54%	-0.05%
Contra Costa	657,199	291,371	+ 39,455	8.85	+1.20
Marin	222,798	124,464	+ 3,770	11.17	+0.34
San Francisco	680,785	374,450	- 22,610	11.00	-0.66
San Mateo	587,683	281,259	+ 11,599	9.57	+0.39
Santa Clara	1,299,107	557,706	+ 41,016	8.59	+0.63
SACRAMENTO					
Placer	118,397	65,714	+ 19,756	11.10	+3.34
Sacramento	787,786	322,436	+ 41,930	8.19	+1.06
Yolo	113,996	69,801	+ 9,903	12.25	+1.74
FRESNO-BAKERSFIELD					
Fresno	516,916	163,921	+ 13,513	6.34	+0.52
Kern	406,404	153,921	+ 15,095	7.57	+0.74
Kings	74,197	39,470	- 2,762	10.64	-0.74
Tulare	247,489	79,295	+ 10,163	6.41	+1.23
VENTURA-SANTA BARBARA					
Santa Barbara	299,712	164,607	+ 7,709	10.98	+0.51
Ventura	532,052	265,316	+ 54,072	9.97	+2.03
LOS ANGELES-LONG BEACH					
Los Angeles	7,490,473	2,345,260	+ 22,984	6.26	+0.06
RIVERSIDE-SAN BERNARDINO					
Riverside	668,894	341,017	+ 99,363	10.20	+2.97
San Bernardino	903,101	447,293	+132,291	9.91	+2.93
ORANGE					
Orange	1,942,200	938,999	+113,871	9.67	+1.17
SAN DIEGO					
San Diego	1,874,792	893,786	+196,736	9.53	+2.10

Note: Numbers do not include 0-4 year olds.

Source: California Postsecondary Education Commission staff calculations based on the 1980 Census.

In its report, "Population Projections for California Counties, 1980-2020, with Age/Sex Detail to 2020 -- Baseline 83," the Department explains its assumptions with respect to this immigration (pp. 12 and 13):

> Using historical analysis, a weighted average, the most recent data available, and our best judgment we projected California net migration at an annual average of 167,000 out to the year 2020. It is assumed that domestic net migration will continue at its current level. Foreign net migration will continue at a high

level. Although the influx of Southeast Asian refugees will slow, California will continue to receive many secondary migrants as refugees from other states move to California and as California refugees receive their citizenship they will apply to bring additional family members to this country.

Working with local planners, the Department has developed estimates of net migration for each county for the years 1980 to 2020 controlled for the State's projected total net migration.

The effect of migration on the racial or ethnic composition of the counties is the largest uncertainty left in the Commission's planned county-by-county simulations of enrollment potential.

NUMBERS OF UNDOCUMENTED IMMIGRANTS

The Department of Finance estimates that during the late 1970s one-fourth of all documented non-refugee immigrants to the United States settled in California and about one-third of all the Southeast Asian refugees came initially to the State. With respect to undocumented immigrants, however, great uncertainty exists about the number living in California at present or in the past. Preliminary estimates by the U.S. Bureau of the Census are that approximately 1,024,000 undocumented immigrants counted in the 1980 Census are living in California -- just half of the 2.06 million counted for the nation at large.

In "Geographic Distribution of Undocumented Immigrants: Estimates of Undocumented Aliens Counted in the 1980 Census by State" Jeffrey S. Passel and Karen A. Woodrow of the Bureau of the Census observe (1984):

- Undocumented immigrants are concentrated in the most populous states.
- Only 214,000 undocumented immigrants are estimated to have entered California before 1970, compared to 818,000 during the 1970s.
- Mexico accounts for by far the largest number of undocumented immigrants residing in the United States in 1980 -- almost 55 percent of the total.
- The 763,040 undocumented immigrants from Mexico counted in the 1980 Census as living in California amounted to 37 percent of all undocumented immigrants counted in the U.S. and 67 percent of those from Mexico.
- The geographic distribution of any particular group of undocumented immigrants across the states is close to that of their legally resident counterparts. However, the geographic distribution of undocumented immigrants in general is dominated by the preponderance of immigrants from Mexico among the undocumented in contrast to the legally resident -- 55 percent versus 22 percent.
- The flow of immigrants to California, regardless of origin, is higher in undocumented persons than is the flow of immigrants to the rest of the country.

- Over 65 percent of the persons entering the United States between 1975 and 1980 from Mexico were undocumented, but for California, the proportion was even higher -- nearly 73 percent.

In the absence of radical changes in immigration policies and enforcement practices, California will continue to be a popular destination for undocumented immigrants. While recent undocumented immigrants are unlikely college goers, they do contribute to the college-age cohort, and those who stay would be expected to become more inclined to consider college completion for themselves and their children as they become more assimilated into American culture.

ASSUMPTIONS GOVERNING ETHNIC MIGRATION ESTIMATES FOR EACH COUNTY

The Commission's Enrollment Simulation Model (described in Chapter Seven) uses the Department of Finance's age and gender projections for each county but, within those projections, estimates the ethnic composition of each county. As pointed out earlier, California's population growth over the next 15 years will consist of equal parts of natural increase and net in-migration. Since everyone who will be of traditional college-going age in the year 2000 is already born, the major factors affecting the ethnic composition of a county are in-migration and out-migration. In simulating the effect migration on ethnic composition, Commission staff is using the following baseline assumptions:

1. The Federal Immigration and Naturalization Service will maintain its current immigration policies, with the result that the number of "legal immigrants," "refugees," and the "backlog of legal immigrants" will continue at the levels indicated by the April 30, 1981, staff report of the Select Commission on Immigration and Refugee Policy, U.S. Immigration Policy and the National Interest.

2. Illegal immigration from Latin America will continue at the current level estimated by the Immigration and Naturalization Service and the Bureau of the Census, and its composition (age, sex, and ethnicity) will not change.

3. Domestic interstate and intrastate migration will continue at the 1975 to 1980 levels indicated by the Census question "Where did you live five years ago," and its composition (age, sex, and ethnicity) will not change.

The Commission's simulations of enrollment potential for the next 15 years will subsequently test alternative assumptions to these and assess their effect on the size and shape of postsecondary education.

IMPLICATIONS FOR POSTSECONDARY EDUCATION

The flow of persons into and out of the State and the redistribution of population among the regions of the State will affect the demand for postsecondary services as it alters the size and composition of the population. Beyond total size, the population characteristics which can change through the actions of in-migration and out-migration are the age and gender distribution for a county and the ethnic composition of its population. Postsecondary participation varies with age, gender, and ethnicity. Thus, enrollment estimates must consider these other factors, and, in doing so, must test the effects of changing assumptions regarding migration.

FOUR

ENROLLMENT AND GRADUATION TRENDS IN THE ELEMENTARY AND SECONDARY SCHOOLS

Most past projections of postsecondary enrollments have leaned heavily on the estimated size of future high school graduating classes to infer postsecondary enrollment potentials. This measure of California's future postsecondary clientele will not be a primary base for the enrollment estimates being made as part of the Commission's "Prospectus" project. Nonetheless, it is an important referent for perhaps the most predictable part of postsecondary enrollment potential -- that of first-time freshmen aged 19 or younger. Beyond this, however, information on shifts in the composition and the progression of grade cohorts through the entire school system from kindergarten to high school graduation provides an early indication of shifts to come in postsecondary education.

SIZE OF THE HIGH SCHOOL GRADUATING CLASS

As Table 10 and Figure 6 on pages 30 and 31 show, the size of California's high school graduating class has declined some 13 percent over the past ten years and is projected by the Population Research Unit of the Department of Finance to undergo a further net decline of 4 percent by the end of the decade. Between 1990 and 1999, the graduating class is currently projected to grow 40 percent, to a size 13 percent greater than any other graduating class in the twentieth century. However, these projections are based on the assumption that today's composite progression rates and graduation rates will apply in the future.

SIZE OF CLASS COHORTS

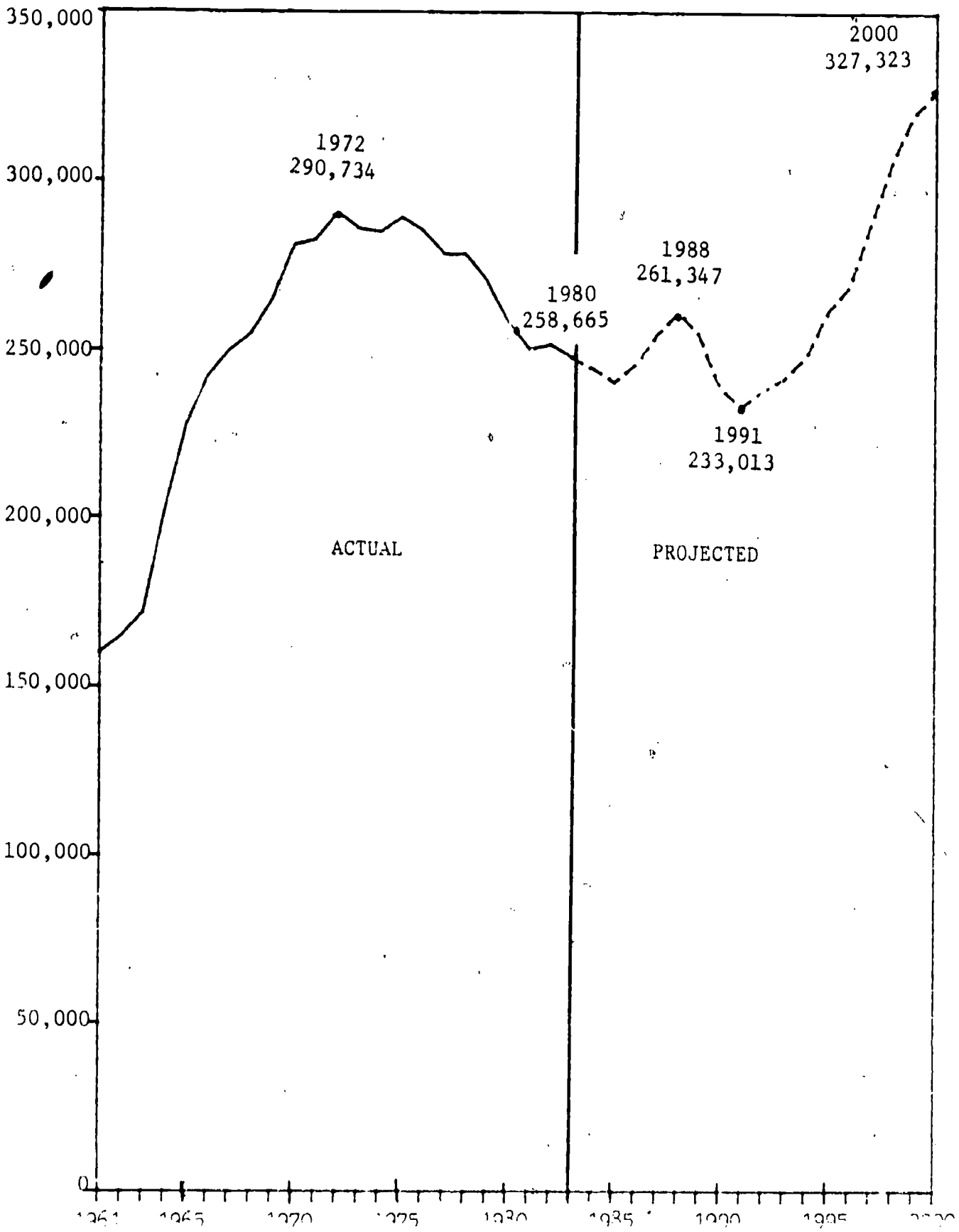
In California as elsewhere, there are important differences among ethnic groups in rates of progression through and graduation from the school system. Table 11 on page 32 shows the change over two years in the size of public school grade cohorts for six major racial/ethnic groups. Because they include accretion (in-migration to the state plus influx to public secondary schools from private elementary schools) as well as attrition, the figures do not represent pure "progression" of the original grade cohort. Yet even with the confounding influence of accretion, it is clear that attrition for Hispanic and Black high school students is higher than for other groups. The proportion of Black students is roughly constant throughout the grades until grades 10-12, when it falls sharply. The proportion of Hispanic students increases in California's lower grades, reaching more than one third for the State's kindergarten class. If current attrition rates for Hispanics students hold into the future, California's composite graduation rate will decline, and the size of its graduating class will be smaller than currently projected.

TABLE 10 Number of Graduates from California Public High Schools, Academic Years 1961-62 Through 1983-84, and Projected, 1984-85 Through 2000-2001

Academic Year	Number	Indexed to 1979-80
Actual		
1961-62	160,000	0.62
1962-63	165,000	0.64
1963-64	172,000	0.66
1964-65	202,000	0.78
1965-66	227,565	0.88
1966-67	242,000	0.94
1967-68	253,000	0.98
1968-69	255,000	0.99
1969-70	265,000	1.02
1970-71	280,881	1.09
1971-72	282,794	1.09
1972-73	290,734	1.12
1973-74	285,862	1.11
1974-75	285,016	1.10
1975-76	289,259	1.12
1976-77	285,272	1.10
1977-78	278,401	1.08
1978-79	278,562	1.08
1979-80	270,499	1.00
1980-81	258,665	0.96
1981-82	250,257	0.93
1982-83	251,873	0.93
1983-84	247,838	0.92
Projected		
1984-85	244,545	0.90
1985-86	240,520	0.89
1986-87	245,988	0.91
1987-88	254,955	0.94
1988-89	261,347	0.97
1989-90	254,802	0.94
1990-91	238,510	0.88
1991-92	233,013	0.86
1992-93	238,217	0.88
1993-94	241,754	0.89
1994-95	248,761	0.92
1995-96	261,810	0.97
1996-97	269,412	1.00
1997-98	288,055	1.06
1998-99	306,525	1.13
1999-2000	320,217	1.18
2000-2001	327,323	1.21

Source: Population Research Unit, California State Department of Finance, 1984.

FIGURE 6 Number of Graduates from California Public High Schools, Academic Years 1961-62 Through 1983-84, and Projected, 1984-85 Through 2000-2001



Source: Table 10.

TABLE 11 Change in Size of Public School Grade Cohorts from Fall 1979 to Fall 1981, by Racial/Ethnic Group (1.00 = no change)

	American Indian/ Alaskan Native	Asian or Pacific Islander[1]	Filipino[1]	Hispanic[1]	Not Hispanic Black	Not Hispanic White
K-2	.996	1.394	1.046	1.018	1.066	.978
1-3	1.007	1.315	1.113	.988	.987	.968
2-4	1.016	1.304	1.112	1.024	.999	.993
3-5	.971	1.273	1.098	1.029	.993	.978
4-6	.880	1.247	1.076	1.020	.999	1.004
5-7	.922	1.217	1.051	1.057	1.050	1.024
6-8[2]	.936	1.248	1.049	1.043	1.026	1.016
7-9[2]	.933	1.376	1.117	1.083	1.045	1.044
8-10[2]	.960	1.576	1.184	1.090	1.098	1.043
9-11	.905	1.326	1.065	.858	.903	.929
10-12	.780	1.063	.921	.712	.723	.847
11-grad[3]	.830	.888	.753	.693	.649	.788

1. The figures in these columns appear to be inflated by inmigration to the State.
2. The values in these two rows are inflated by the flow of private elementary school students into the public high schools.
3. Includes Summer 1981 graduates.

Source: California Postsecondary Education Commission, based on data collected by the State Department of Education.

HIGH SCHOOL GRADUATES BY REGION

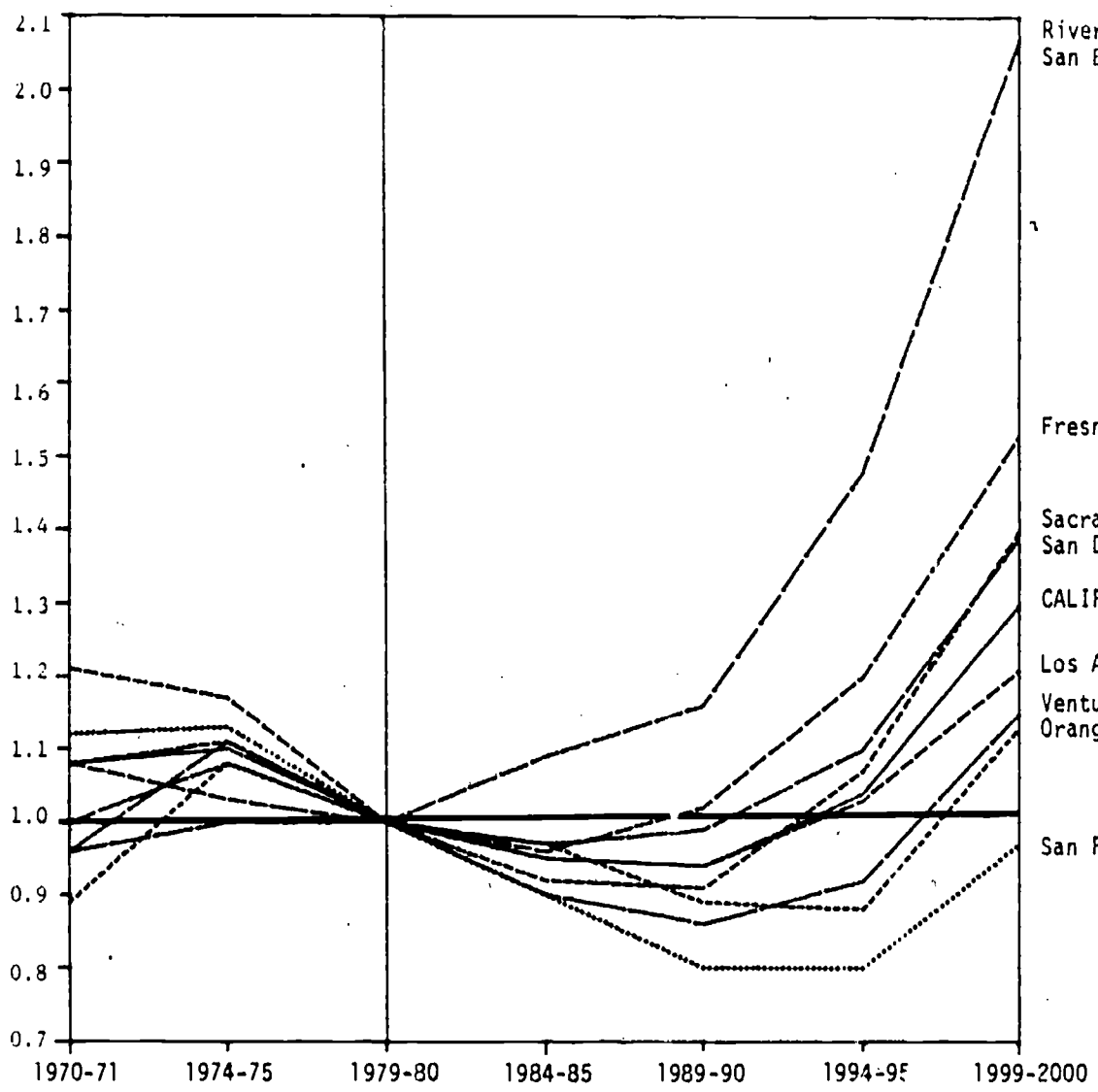
Table 12 on page 33 and Figure 7 on page 34 show the actual and projected size of high school graduating classes from 1970-71 to the end of the century for the eight metropolitan regions of the State. As with other population measures, the eight regions differ markedly from each other and from the State as a whole. At one extreme, the Riverside-San Bernardino graduating class will consistently grow from 1980 onward, doubling in size by the end of the century. At the other extreme, the graduating class of the San Francisco Bay Area will decline 20 percent from 1980 to 1990 and will not significantly recover until the late 1990s, remaining below the 1980 level to the end of the century.

TABLE 12 Number of High School Graduates in California's Metropolitan Regions, 1970-71 Through 1999-2000

Metropolitan Region	19. /71	1974/75	1979/80	1984/85	1989/90	1994/95	1999/2000
SAN FRANCISCO BAY AREA							
Alameda	15,254	15,238	13,467	11,786	11,402	11,223	13,217
Contra Costa	9,975	9,995	9,177	8,439	7,757	7,872	9,651
Marin	3,354	3,419	3,160	2,746	2,095	1,860	2,056
San Francisco	7,102	6,521	5,392	5,174	5,077	5,149	5,900
San Mateo	8,761	8,502	7,130	5,929	4,663	4,590	5,562
Santa Clara	17,324	18,440	16,601	15,286	13,220	13,446	16,684
TOTAL	61,770	62,115	54,927	49,360	44,214	44,140	53,070
Indexed to 1980	(1.12)	(1.13)	(1.00)	(0.90)	(0.80)	(0.80)	(0.97)
SACRAMENTO							
Placer	1,585	1,706	1,846	1,815	1,786	1,967	2,737
Sacramento	11,600	11,867	10,250	9,384	9,390	11,158	14,631
Yolo	1,319	1,378	1,338	1,223	1,102	1,232	1,452
TOTAL	14,504	14,951	13,434	12,422	12,278	14,357	18,820
Indexed to 1980	(1.08)	(1.11)	(1.00)	(0.92)	(0.91)	(1.07)	(1.40)
FRESNO-BAKERSFIELD							
Fresno	7,123	6,739	6,827	6,529	6,711	7,952	9,795
Kern	5,566	5,172	4,764	4,429	4,770	5,589	7,794
Kings	1,077	1,091	959	854	904	1,014	1,169
Tulare	2,906	2,891	2,951	3,096	3,386	3,990	5,021
TOTAL	16,672	15,893	15,501	14,908	15,771	18,545	23,779
Indexed to 1980	(1.08)	(1.03)	(1.00)	(0.96)	(1.02)	(1.20)	(1.53)
VENTURA-SANTA BARBARA							
Santa Barbara	4,348	4,654	3,943	3,253	3,037	3,181	3,993
Ventura	6,388	7,675	7,186	6,881	6,546	7,104	8,777
TOTAL	10,736	12,329	11,129	10,134	9,583	10,295	12,770
Indexed to 1980	(0.96)	(1.11)	(1.00)	(0.91)	(0.86)	(0.92)	(1.15)
LOS ANGELES-LONG BEACH							
Los Angeles	100,611	97,247	83,361	78,819	78,495	85,812	100,929
Indexed to 1980	(1.21)	(1.17)	(1.00)	(0.95)	(0.94)	(1.03)	(1.21)
RIVERSIDE-SAN BERNARDINO							
Riverside	6,500	7,386	7,018	7,296	8,181	10,508	14,722
San Bernardino	10,532	11,017	10,039	10,328	11,523	14,681	20,627
TOTAL	17,032	18,403	17,057	18,624	19,704	25,189	35,349
Indexed to 1980	(1.00)	(1.08)	(1.00)	(1.09)	(1.16)	(1.48)	(2.07)
ORANGE							
Orange	23,123	28,045	25,881	25,149	23,091	22,850	29,319
Indexed to 1980	(0.89)	(1.08)	(1.00)	(0.97)	(0.89)	(0.88)	(1.13)
SAN DIEGO							
San Diego	20,698	21,531	21,596	20,937	21,427	23,754	30,105
Indexed to 1980	(0.96)	(1.00)	(1.00)	(0.97)	(0.99)	(1.10)	(1.39)
CALIFORNIA							
All 58 Counties	302,632	309,728	281,319	265,913	264,746	293,083	365,579
Indexed to 1980	(1.08)	(1.10)	(1.00)	(0.95)	(0.94)	(1.04)	(1.30)

Source: California State Department of Finance.

FIGURE 7 Number of High School Graduates in California's Eight Regions, 1970-71 Through 1999-2000, Indexed to 1979-80



Source: California State Department of Finance.

IMPLICATIONS FOR POSTSECONDARY EDUCATION

The statewide decline in the number of high school graduates will reach bottom in the early 1990s, to be followed by a period of growth. At the same time, the composition of the high school graduating class will reflect larger numbers of youth from ethnic and socio-economic backgrounds associated with low postsecondary participation. Both of these trends will differ in intensity and timing among the eight metropolitan regions of the State, so the outlook for postsecondary institutions will also differ from region to region. Thus the outlook for "college-going" among first-time freshmen aged 19 and under will also vary broadly. Postsecondary planners need to be aware of these trends and variables in the elementary and secondary schools, since they not only constitute an important constraint on postsecondary enrollment potential but also anticipate important shifts in postsecondary clientele and certainly the planners of institutions have to be attuned to the regions they serve rather than to statewide averages.

FIVE

TRENDS IN POSTSECONDARY PARTICIPATION

The enrollment potential of California's colleges and universities is the product of the adult population and their participation in postsecondary education. Earlier sections of this report have reviewed the dimensions of population of importance to postsecondary planners, such as age, gender, ethnicity, geographic distribution, and educational attainment. This section reviews recent trends in college and university enrollments to identify dimensions of participation that will most strongly affect future enrollment potential.

NATIONAL AND STATE ENROLLMENT TRENDS

The Department of Finance has projected headcount enrollments for the three public segments to the year 2000. Table 13 on page 36 and Figure 8 on page 37 show these projections indexed to 1980. It is evident from Figure 8, showing actual enrollment levels from 1972 to 1983, that the Community College headcount dominates the total public figure and that it has been subject to considerable variation in the face of public policy changes. Such shifts cannot be anticipated in projections of enrollments, but it seems unlikely that the next few years will be free of such policy changes.

Figure 9 on page 38 shows projected modest declines in headcount from 1983 to the year 1993 for the University and the State University (5 percent and 3 percent, respectively). Community College enrollments are projected to recover after 1985. The net increases in statewide headcounts projected for the three public segments from 1983 to 2000 are: 17.2 percent for the Community Colleges, 3.7 percent for the University, and 6.3 percent for the State University.

As Table 14 on pages 40-41 shows, public two-year college headcount enrollments -- national and State -- increased by 57 percent and 40 percent respectively over the past decade. At the same time, headcount enrollment of independent institutions increased by roughly 30 percent. In the case of the four-year public segments, headcount growth for the University of California and the California State University bracketed the national average for four-year public institutions (17.1 and 10.2 percent, respectively, compared to 15.3 percent). Overall, California's 1982 headcount constituted the same 14.6 percent of the national total as it did in 1973.

In the ten years from Fall 1973 through Fall 1982, growth in total college and university headcount enrollments of graduate and undergraduate credit students in California very closely paralleled growth in these enrollments nationally. As Figure 10 on page 39 shows, the ten-year growth at both State and national levels was not smooth. Decreases occurred in 1976, 1978, and, for California, again in 1982. One reason is that California Community College enrollments not only dominate the overall headcount enrollment of

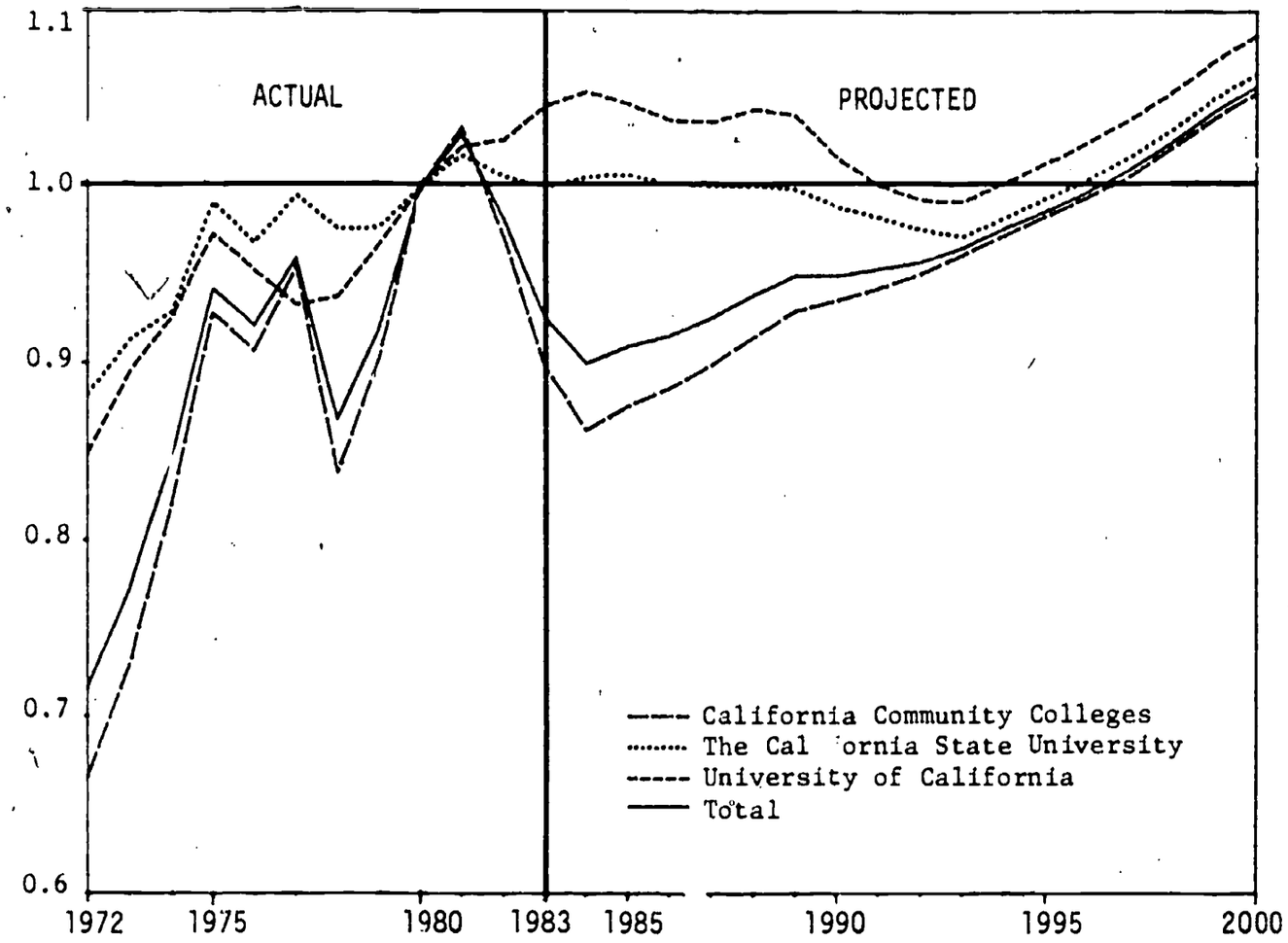
TABLE 13 Actual and Projected Fall-Term Headcount Total Enrollment in California's Three Segments of Public Postsecondary Education, 1972 to 2000

Year	Community Colleges[1]	1980 Index	California State University	1980 Index	University of California[2]	1980 Index	Total	1980 Index
Actual								
1972	921,955	0.666	276,737	0.882	104,662	0.849	1,303,354	0.716
1973	1,009,307	0.729	286,633	0.913	110,303	0.895	1,406,243	0.772
1974	1,136,478	0.821	291,542	0.929	114,109	0.926	1,542,129	0.847
1975	1,284,824	0.928	310,891	0.991	119,899	0.973	1,715,614	0.942
1976	1,255,678	0.907	303,734	0.968	117,460	0.953	1,676,872	0.921
1977	1,321,739	0.955	312,380	0.995	115,024	0.933	1,749,143	0.960
1978	1,159,819	0.838	306,175	0.976	115,641	0.938	1,581,635	0.868
1979	1,248,459	0.902	306,801	0.977	119,168	0.967	1,674,428	0.919
1980	1,384,068	1.000	313,850	1.000	123,251	1.000	1,821,169	1.000
1981	1,430,634	1.034	319,565	1.018	126,071	1.023	1,876,270	1.030
1982	1,344,119	0.971	315,814	1.006	126,538	1.027	1,786,471	0.981
1983	1,243,005[3]	0.898	313,900	1.000	128,981	1.046	1,685,886	0.926
Projected								
1984	1,193,700	0.862	315,600	1.006	129,900	1.054	1,639,200	0.900
1985	1,212,300	0.876	315,900	1.007	129,000	1.047	1,657,200	0.910
1986	1,226,300	0.886	314,400	1.002	127,900	1.038	1,668,600	0.916
1987	1,244,500	0.899	314,300	1.001	127,800	1.037	1,686,600	0.926
1988	1,266,500	0.915	314,100	1.001	128,700	1.044	1,709,300	0.939
1989	1,286,700	0.930	313,400	0.999	128,300	1.041	1,728,400	0.950
1990	1,294,900	0.936	310,500	0.989	125,400	1.017	1,730,800	0.950
1991	1,304,600	0.943	308,500	0.983	123,400	1.001	1,736,500	0.954
1992	1,316,400	0.951	306,300	0.976	122,400	0.993	1,745,100	0.958
1993	1,332,100	0.962	305,200	0.972	122,300	0.992	1,759,600	0.966
1994	1,346,700	0.973	308,500	0.983	123,600	1.003	1,778,800	0.977
1995	1,361,300	0.984	311,900	0.994	125,000	1.014	1,798,200	0.987
1996	1,376,600	0.995	315,400	1.005	126,400	1.026	1,818,400	0.998
1997	1,394,300	1.007	319,400	1.018	128,000	1.039	1,841,700	1.011
1998	1,415,300	1.023	324,200	1.033	129,900	1.054	1,869,400	1.026
1999	1,438,000	1.039	329,400	1.050	132,000	1.071	1,899,400	1.043
2000	1,457,000	1.053	333,800	1.064	133,800	1.086	1,924,600	1.057

1. Preliminary projection.
2. Excludes health sciences enrollments.
3. Fall 1983 enrollment for the San Mateo Community College District is estimated.

Source: Population Research Unit, California State Department of Finance, May 1984.

FIGURE 8 Actual and Projected Fall Term Headcount Enrollments in California's Three Segments of Public Postsecondary Education, 1972 to 2000, Indexed to 1980

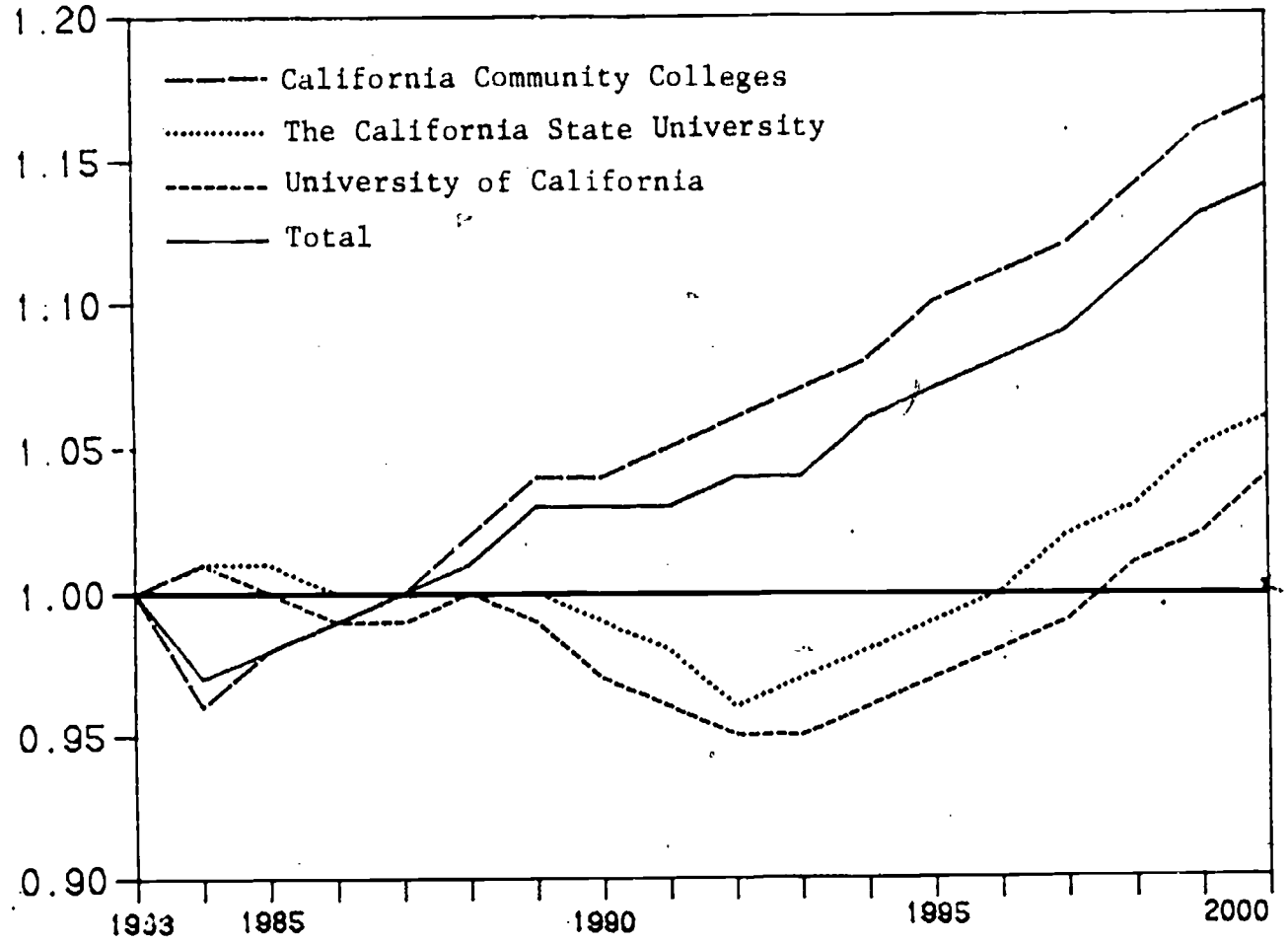


Source: Table 11.

California but also influence national enrollments significantly, since California contributes to the national community college headcount enrollments more than twice the proportion of the State's population to the national population. In fact, the reversals in the national headcount enrollments over the past decade would disappear if the California Community College enrollments were not included.

The close parallel between California's total headcount and that of the California Community Colleges in Figure 11 on page 39 illustrates the latter's dominance of the total. Figure 11 also shows that the growth in headcount enrollments of the community colleges and California's independent institutions throughout the decade outstripped the State total, while growth for the University and the State University was modest. (Because of variations in the number of independent colleges and universities in California reporting their enrollment each year to the Commission, the figures for this segment must be used with caution.)

FIGURE 9 Projected Fall-Term Headcount Enrollments for California's Three Segments of Public Postsecondary Education, 1972 to 2000, Indexed to 1983



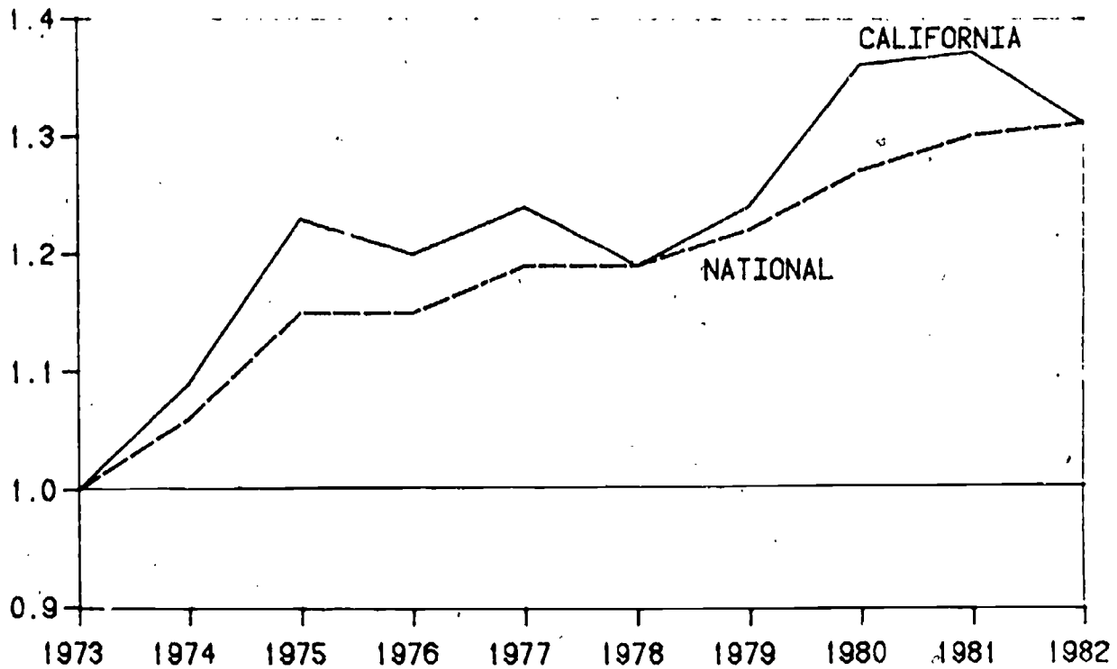
Source: Table 11.

CHANGES IN PARTICIPATION RATES

The growth in California's headcount enrollments shown in Table 14 and Figures 10 and 11 can be attributed both to population growth and to changes in college and university participation rates.

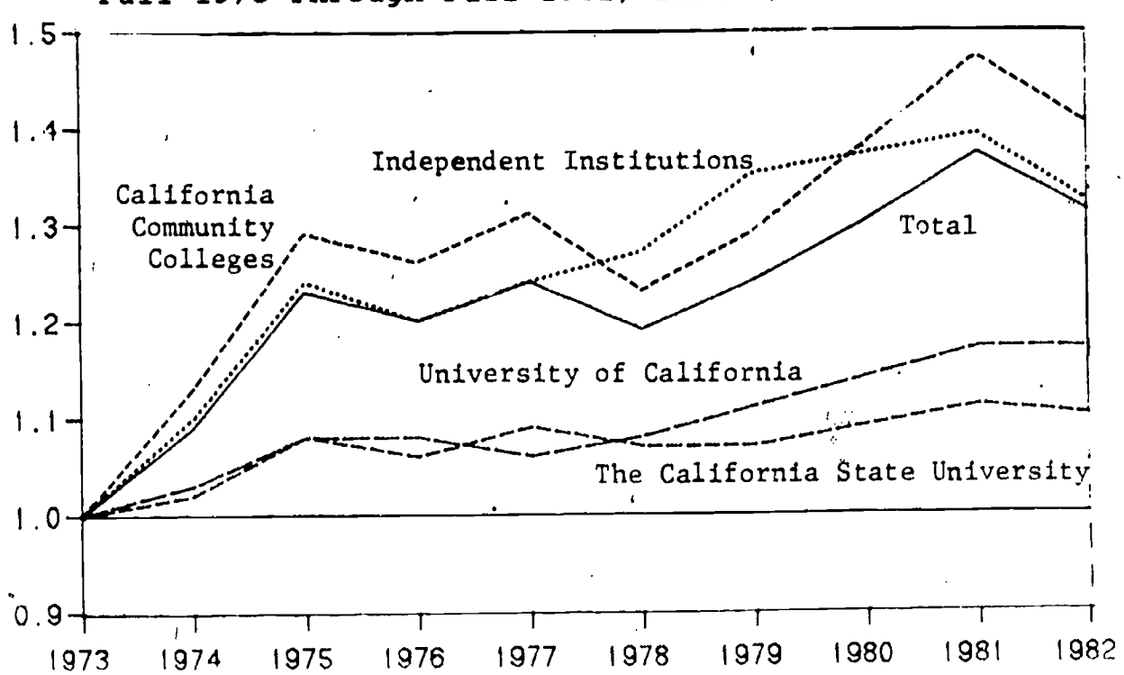
California's postsecondary participation rate has long been among the highest for any state. Even so, the percent of State's population 18 years and over enrolling in California's degree-granting institutions has increased over this ten-year period (Table 15, pages 44-45). As Figure 12 on pages 43 shows, however, both the University of California and the California State University enrolled a smaller percentage of those 18 and over in Fall 1982 than they had in Fall 1973. Conversely, the shares of both the California Community Colleges and the independent institutions increased over this period. The net effect was a modest 4.8 percent increase in the overall postsecondary participation rate for California.

FIGURE 10 Undergraduate and Graduate Credit Headcount Enrollments in California and the United States, Fall 1973 Through Fall 1982, Indexed to Fall 1973



Source: Table 14.

FIGURE 11 Change in California Credit Headcount Enrollment, Fall 1973 Through Fall 1982, Indexed to Fall 1973



Source: Table 14.

TABLE 14 Undergraduate and Graduate Credit Headcount Enrollments Indexed to Fall 1973

Institution	Fall 1973 Headcount/ Indexed	Fall 1974 Headcount/ Indexed	Fall 1975 Headcount/ Indexed	Fall 1976 Headcount/ Indexed	Fall 1977 Headcount/ Indexed
TOTAL NATIONAL ENROLLMENTS	9,602,123 1.00	10,223,729 1.06	11,014,209 1.15	10,994,637 1.15	11,415,020 1.19
Two-Year Public	2,889,621 1.00	3,285,482 1.14	3,816,409 1.32	3,751,786 1.30	3,912,968 1.35
Four-Year Public	4,529,895 1.00	4,703,018 1.04	4,981,202 1.10	4,884,191 1.08	4,994,623 1.10
Independent	2,182,607 1.00	2,235,229 1.02	2,216,598 1.02	2,358,660 1.08	2,507,429 1.15
TOTAL CALIFORNIA ENROLLMENTS	1,400,945 1.00	1,530,636 1.09	1,717,474 1.23	1,676,960 1.20	1,736,844 1.24
California Community Colleges	852,817 1.00	959,707 1.13	1,101,548 1.29	1,073,104 1.26	1,120,520 1.31
California State University	286,633 1.00	291,542 1.02	310,891 1.08	303,734 1.06	312,380 1.09
University of California	118,854 1.00	122,456 1.03	128,486 1.08	128,648 1.08	126,505 1.06
Independent	142,641 1.00	156,931 1.10	176,549 1.24	171,474 1.20	177,439 1.24

Sources: National data: National Center For Education Statistics.
California data: California Postsecondary Education Commission.

in California and the United States, Fall 1973 Through Fall 1982,

Fall 1978 Headcount/ Indexed	Fall 1979 Headcount/ Indexed	Fall 1980 Headcount/ Indexed	Fall 1981 Headcount/ Indexed	Fall 1982 Headcount/ Indexed	Ten-Year Change
11,391,950 1.19	11,707,126 1.22	12,234,644 1.27	12,517,753 1.30	12,588,520 1.31	+2,986,397 (+31.1%)
3,882,823 1.34	4,069,462 1.41	4,342,607 1.50	4,496,675 1.55	4,537,425 1.57	+1,647,804 (+57.0%)
4,960,378 1.10	5,026,942 1.11	5,175,479 1.14	5,212,544 1.15	5,224,820 1.15	+694,925 (+15.3%)
2,548,749 1.17	2,610,722 1.20	2,716,558 1.24	2,808,534 1.29	2,826,275 1.29	+643,668 (+29.5%)
1,662,107 1.19	1,731,082 1.24	1,826,351 1.30	1,913,208 1.37	1,835,834 1.31	+434,889 (+31.0%)
1,047,167 1.23	1,100,220 1.29	1,180,841 1.38	1,257,160 1.47	1,192,920 1.40	+340,103 (+39.9%)
306,175 1.07	306,801 1.07	313,842 1.09	319,566 1.11	315,814 1.10	+29,181 (+10.2%)
127,881 1.08	131,856 1.11	135,821 1.14	138,726 1.17	139,138 1.17	+20,284 (+17.1%)
180,884 1.27	192,205 1.35	195,847 1.37	197,756 1.39	187,962 1.32	+45,321 (+31.8%)

Differences Among the Segments

As Figure 12 also shows, the participation rates for the University and State University peaked in 1975 and generally declined after that. The general decline in participation for all segments from 1975 to 1976 corresponds to a point when many Vietnam-era veterans had used up their educational benefits. Table 16 on pages 44-45 shows that in that same year enrollments of men declined in all segments, while enrollments of women continued to increase in all segments -- reinforcing the suggestion that the 1976 decrease in participation was associated with the end of certain veterans benefits. The later two declines in the Community College participation rate, from 1977 to 1978 and from 1981 to 1982, can be attributed to fiscal restraints on resources -- namely the immediate aftermath of Proposition 13 in 1978 and a $30 million budget cutback for 1982-83.

The Gender Shift

The number and proportion of women enrolling as undergraduates and graduate students in California's colleges and universities has increased steadily since Fall 1973. Though much of this growth can be attibuted to more women enrolling in Community Colleges, all segments participated in this trend. As Table 17 on pages 48-49 shows, in Fall 1973 women accounted for 43.5 percent of the State's total credit headcount. By Fall 1982, they accounted for 52.5 percent. Their enrollment increase of 58.0 percent accounted for 81.5 percent of the total enrollment growth over the decade. Over this same period, male headcount enrollment increased only 10 percent, and in the State University it actually declined by 10,617 students or roughly 6.6 percent.

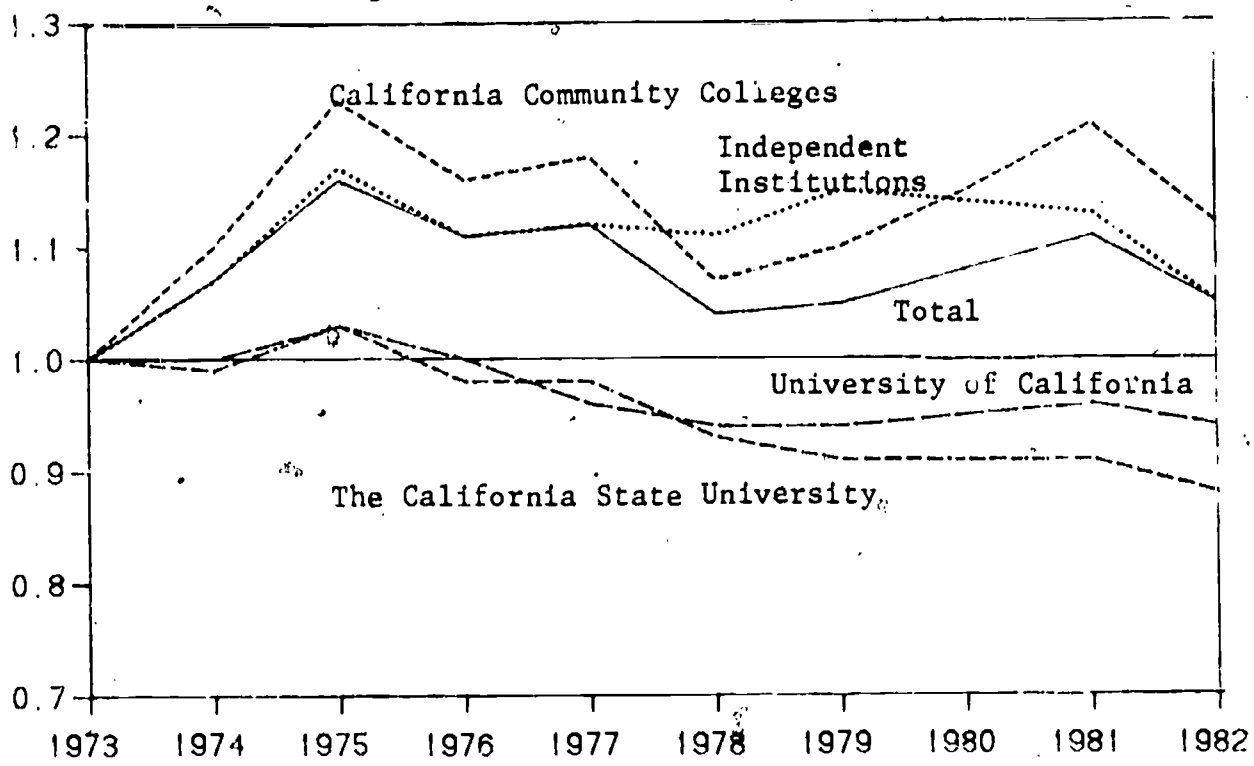
The year 1977 was the watershed when the percentage of women surpassed that of men, although even today the University of California and California's independent institutions still have male majorities. Nonetheless, the consistency of the gender shift over the years and across all the segments is perhaps the most important aspect of the information contained in Table 17. Beyond this consistent trend, a second noteworthy fact is that while California's independent institutions started with the greatest preponderance of men of any segment, their relative increase in enrollment of women has exceeded that for the University.

For purposes of postsecondary planning, it appears that the gender proportions are tending toward an equilibrium close to 50/50 parity. All four segments appear to be converging on parity from their respective sides of this balance. In the absence of some profound change in policy, such as restoration of the military draft, it is difficult to envision the proportions straying as far from parity as they were in 1973.

Differences Between Full-Time and Part-Time Enrollment

The data discussed thus far have dealt with headcount enrollments, making no distinction between full-time students and students enrolled part time,

FIGURE 12 Change in the Ratio of Credit Enrollments in California's Degree-Granting Institutions to California's Population Aged 18 and Over, Fall 1973 Through Fall 1982, Indexed to Fall 1973



Source: Table 15.

often for a single class and perhaps with no long-term educational objective in mind. The past ten years, however, have seen a marked increase in California's number and proportion of part-time students -- by definition, those enrolled for less than three-fourths the normal full-time load.

As Table 18 on pages 48-49 shows, the State's part-time headcount enrollment increased from 50.4 percent of the total in 1973 to 58.3 percent in 1982. The bulk of this increase occurred in the Community Colleges, with only slight increases in the other segments. In fact, the proportion of part-time students peaked in 1981 -- the year before the $30-million cut -- at 75.7 percent for the Community Colleges, and, as a result at 60.1 percent for all institutions.

Part-time headcount remains a small proportion of total headcount for the University of California (6.8 percent), although this proportion has increased by about 25 percent over the past ten years. At the State University, the part-time proportion fluctuated over the ten years but made little net change. Although not shown, the change in the State University's fee structure for 1983 appears to have had the effect of reducing its part-time enrollments. The part-time proportion for the independent institutuions has

TABLE 15 Percent of California's Population 18 and Over Enrolling Indexed to Fall 1973

Segment	Fall 1973	Fall 1974	Fall 1975	Fall 1976	Fall 1977
Total	9.749%	10.386%	11.346%	10.786%	10.880%
	1.00	1.07	1.16	1.11	1.12
California Community College	5.935	6.512	7.277	6.902	7.019
	1.00	1.10	1.23	1.16	1.18
California State University	1.995	1.978	2.054	1.954	1.957
	1.00	0.99	1.03	0.98	0.98
University of California	0.827	0.831	0.849	0.827	0.792
	1.00	1.00	1.03	1.00	0.96
Independent	0.993	1.065	1.166	1.103	1.111
	1.00	1.07	1.17	1.11	1.12

Source: California Postsecondary Education Commission.

TABLE 16 Credit Headcount Enrollment in California Colleges and

Segment and Gender	Fall 1973	Fall 1974	Fall 1975	Fall 1976	Fall 1977
California Total	1,400,945	1,530,636	1,717,474	1,676,960	1,736,844
California Total Male	791,204	843,731	950,949	872,884	868,916
California Total Female	609,741	686,905	766,525	804,076	867,928
Community College Total	852,817	959,707	1,101,548	1,073,104	1,120,520
Community College Total Male	468,928	513,171	597,125	534,659	531,127
Community College Total Female	383,889	446,536	504,423	538,445	589,393
State University Total	286,633	291,542	310,891	303,734	312,380
State University Total Male	161,210	159,748	168,699	159,359	159,598
State University Total Female	125,423	131,794	142,192	144,375	152,782
University Total	118,854	122,456	128,486	128,648	126,505
University Total Male	70,956	72,093	74,868	73,991	71,858
University Total Female	47,898	50,363	53,618	54,657	54,647
Independent Total	142,641	156,931	176,549	171,474	177,439
Independent Total Male	90,110	98,719	110,257	104,875	106,333
Independent Total Female	52,531	58,212	66,292	66,599	71,106

Source: California Postsecondary Education Commission.

in California's Degree Granting Institutions, Fall 1973 to Fall 1982,

Fall 1978	Fall 1979	Fall 1980	Fall 1981	Fall 1982	Ten-Year Change
10.122%	10.259%	10.564%	10.893%	10.216%	+ 4.8%
1.04	1.05	1.08	1.11	1.05	
6.377	6.520	6.830	7.158	6.638	+11.8%
1.07	1.10	1.15	1.21	1.12	
1.865	1.818	1.815	1.819	1.757	-11.9%
0.93	0.91	0.91	0.91	0.88	
0.779	0.781	0.786	0.790	0.774	- 6.4%
0.94	0.94	0.95	0.96	0.94	
1.102	1.139	1.133	1.126	1.046	+ 5.3%
1.11	1.15	1.14	1.13	1.05	

Universities by Gender of Students, Fall 1973 Through Fall 1982

Fall 1978	Fall 1979	Fall 1980	Fall 1981	Fall 1982	Ten-Year Change
1,662,107	1,731,072	1,826,351	1,913,208	1,835,834	+434,889
818,281	831,303	871,331	901,208	871,740	+80,536
843,826	899,769	955,020	1,012,000	964,094	+354,353
1,047,167	1,100,220	1,180,841	1,257,160	1,192,920	+340,103
487,730	498,289	534,799	561,992	540,393	+71,465
559,437	601,931	646,042	695,168	652,527	+268,638
306,175	306,801	313,842	319,566	315,814	+29,181
152,568	149,206	150,708	152,264	150,593	-10,617
153,607	157,595	163,134	167,302	165,221	+39,798
127,881	131,856	135,821	138,726	139,138	+20,284
71,559	73,099	74,473	75,018	74,482	+3,526
56,322	58,757	61,348	63,708	64,656	+16,758
180,884	192,195	195,847	197,756	187,962	+45,321
106,424	110,709	111,351	111,934	106,272	+16,163
74,460	81,486	84,496	85,822	81,690	+29,159

likewise fluctuated but remains roughly one-third of the total headcount for this segment. Overall, the proportion of part-time headcount for the four-year public segments in Fall 1982 was virtually unchanged from Fall 1973 -- 28.1 percent, compared to 28.5 percent.

Part-time headcounts in the Community Colleges are a major component of their enrollment. During the reversals in Community College headcount enrollments of 1976, 1978, and 1982, these colleges' part-time enrollment proved no more volatile than their full-time enrollments. In fact, in both 1976 and 1978 their part-time proportion increased. Their full-time headcount enrollment peaked in 1975 and was actually less in 1981 than it had been in 1973.

For postsecondary planning, it seems safe to assume that the general trend toward increased proportions of part-time enrollment in the Community Colleges (and thus in statewide headcount enrollment) will likely resume with the return to more consistent State budgets. However, the steady recovery of the full-time headcount for the Community Colleges from its 1978 low was interrupted in 1983 and further eroded in 1984. Changes in the demography of the State could intensify questions of credit load as well as time and mode of delivery for all segments in years to come.

REGIONAL DIFFERENCES IN PARTICIPATION

The 58 counties in California vary widely in their levels of postsecondary participation. This variation is affected by differences in, among other factors, (1) the proportion of persons of "college-going" age (18 and 19 year-olds); (2) the proportion of adults aged 18 and over; (3) the proportion of high school graduates; (4) the college-going rates of those 19 and under; (5) the general educational attainment of the adult population; (6) the proximity of campuses; (7) the economic well-being of the county; and (8) racial/ethnic composition of the population. This section of the report presents historical data and projections of the foregoing measures for the eight metropolitan regions of the State. Appendix B lists the public institutions within or adjacent to these metropolitan regions.

Regional Differences in General Postsecondary Participation

Regional participation rates for purposes of this section are defined as the number of persons from that region enrolled in a particular postsecondary segment divided by the total adult population aged 18 and older for that region. The person's county of origin is determined on the basis of the following criteria: (1) high school last attended, (2) permanent address, or (3) institution last attended. For the Community Colleges it is necessary to modify the criteria as follows: (1) for persons 19 and under, high school last attended; but in the absence of this information and for those 20 and over, (2) the county of the college is considered the person's county of origin.

Table 19 on page 50 shows participation rates over five recent years for the eight metropolitan regions. The large variations in participation rates from county to county and from region to region can be attributed to a variety of factors. First, and perhaps most important, is campus proximity. As expected, counties in which campuses of a segment are located generally have high participation rates for that segment, and counties remote from a campus generally have low participation rates. Second, affluence and general educational attainment of the adult population affect participation rates. The more affluent and the higher the educational attainment for a region, the higher the postsecondary participation for that region. Finally, counties with large minority population components generally have low general participation rates.

Among the eight metropolitan regions, three -- the San Francisco Bay Area, Sacramento, and Orange -- stand out as particularly high in participation. The San Francisco Bay Area is extremely high in University participation, Sacramento is particularly high in State University participation; and the Orange region is particularly high in Community College participation.

On the other hand, two regions (Fresno-Bakersfield and Riverside-San Bernardino) stand out as low, having lower-than-average rates on virtually all measures of participation. Only in State University participation does the Fresno-Bakersfield region (with two resident California State University campuses) equal the statewide average rate.

There are few perceptible trends in participation to be perceived in these five years of data. The statewide rates for the University and the State University have not changed appreciably, and changes in Community College participation are better explained as immediate responses to shifts in policy rather than as long-term trends. The regional participation rates are likewise quite stable, with the possible exception of the Riverside-San Bernardino region, where consistent and cumulatively significant declines in four-year institution participation rates occurred.

Of course, these overall participation rates provide only a composite picture of the many different clienteles for postsecondary education. Succeeding sections examine some of those components.

Number of 18- and 19-Year Olds

Table 20 on page 51 shows that wide variations exist in the number of 18- and 19-year olds among California's eight metropolitan regions. Los Angeles County accounts for more than one-fourth of the state's 18- and 19-year olds. In fact, in 1980, just four regions (Los Angeles-Long Beach, the San Francisco Bay Area, Orange, and San Diego) accounted for two-thirds of the State's population of 18- and 19-year olds. The number of 18- and 19-year olds in many of the state's larger counties has declined slightly in recent years. However, the Department of Finance's Population Research Unit projects an increase in the statewide cohort to 10 percent above the 1980 level by the year 2000. As Figure 13 on page 52 shows, several of the larger regions will not recover to 1980 levels before the end of the century, while several of the smaller metropolitan regions will never drop much below their 1980 levels. Despite these variations, the statewide college-going potential should reach an historic high in the late 1990s.

TABLE 17 Percentage of California Credit Headcount Enrollment

Segment and Gender	Fall 1973	Fall 1974	Fall 1975	Fall 1976	Fall 1977
California Total Male	56.4	55.1	55.4	52.0	50.0
California Total Female	43.5	44.9	44.6	48.0	50.0
Community College Total Male	55.0	53.4	54.2	49.8	47.4
Community College Total Female	45.0	46.6	45.8	50.2	52.6
State University Total Male	56.2	54.8	54.3	52.5	51.1
State University Total Female	43.8	45.2	45.7	47.5	48.9
University Total Male	59.7	58.9	58.3	57.5	56.8
University Total Female	40.3	41.1	41.7	42.5	43.2
Independent Total Male	63.2	62.9	62.5	61.2	59.9
Independent Total Female	36.8	37.1	37.5	38.8	40.1

Source: California Postsecondary Education Commission.

TABLE 18 Full-Time and Part-Time Credit Headcount Enrollments in

Segment and Status	Fall 1973	Fall 1974	Fall 1975	Fall 1976	Fall 1977
California Total	1,400,945	1,530,636	1,717,474	1,676,957	1,736,844
California Total Full-Time	694,330	724,629	799,118	749,964	751,493
California Total Part-Time	706,615	806,007	918,356	926,993	985,351
Community College Total	852,817	959,707	1,101,548	1,073,104	1,120,520
Community College Full-Time	306,070	324,281	374,473	328,107	321,524
Community College Part-Time	546,747	635,426	727,075	744,997	798,996
State University Total	286,633	291,542	310,891	303,734	312,380
State University Full-Time	179,043	178,006	186,560	183,077	186,404
State University Part-Time	107,590	113,536	124,331	120,657	125,976
University Total	118,854	122,456	128,486	128,648	126,505
University Total Full-Time	112,416	115,843	121,750	120,050	118,293
University Total Part-Time	6,438	6,613	6,736	8,598	8,212
Independent Total	142,641	156,931	176,549	171,471	177,439
Independent Full-Time	96,801	106,499	116,335	118,730	125,272
Independent Part-Time	45,840	50,432	60,214	52,741	52,167

Source: California Postsecondary Education Commission.

by Gender of Students, Fall 1973 Through Fall 1982

Fall 1978	Fall 1979	Fall 1980	Fall 1981	Fall 1982	Ten-Year Change
49.2	48.0	47.7	47.1	47.5	-15.8%
50.8	52.0	52.3	52.9	52.5	+20.7%
46.6	45.3	45.3	44.7	45.3	-17.6%
53.4	54.7	54.7	55.3	54.7	+21.6%
49.8	48.6	48.0	47.6	47.7	-15.1%
50.1	51.4	52.0	52.4	52.3	+19.4
56.0	55.4	54.8	54.1	53.5	-10.4%
44.0	44.6	45.2	45.9	46.5	+15.4%
58.8	57.6	56.9	56.6	56.5	-10.6%
41.2	42.4	43.1	43.4	43.5	+18.2%

California's Degree-Granting Institutions, Fall 1973 Through Fall 1982

Fall 1978	Fall 1979	Fall 1980	Fall 1981	Fall 1982	Ten-Year Change
1,662,107	1,731,072	1,826,351	1,913,208	1,835,834	+434,889
714,575	725,236	750,340	762,846	766,043	+71,713
947,532	1,005,836	1,076,011	1,150,362	1,069,791	+363,176
1,047,167	1,100,220	1,180,841	1,257,160	1,192,920	+340,103
285,133	286,017	294,380	305,490	311,600	+5,530
762,034	814,203	886,461	951,670	881,320	+334,573
306,175	306,801	313,842	319,566	315,814	+29,181
182,817	184,986	191,279	193,238	195,571	+16,528
123,358	121,815	122,563	126,328	120,243	+12,653
127,881	131,856	135,821	138,726	139,138	+20,284
119,372	121,474	126,207	128,613	129,667	17,251
8,509	10,382	9,614	10,113	9,471	+3,033
180,884	192,195	195,847	197,756	187,962	+45,321
127,253	132,759	138,474	135,505	129,205	+32,404
53,631	59,436	57,373	62,251	58,757	+12,917

TABLE 19 Enrollment in Each Public Postsecondary Segment as a Percent of the Population Aged 18 and Over in California's Eight Metropolitan Regions, 1979 to 1983

Metropolitan Region	1979	1980	1981	1982	1983
SAN FRANCISCO BAY AREA					
University of California	0.71%	0.77%	0.77%	0.77%	0.77%
California State University	1.56	1.55	1.56	1.55	1.55
California Community Colleges	6.69	6.97	7.60	7.00	N/A
TOTAL	8.87	9.29	9.93	9.32	N/A
SACRAMENTO					
University of California	0.53	0.57	0.55	0.52	0.53
California State University	1.78	1.78	1.74	1.60	1.82
California Community Colleges	6.53	7.00	7.41	6.82	6.26
TOTAL	8.84	9.35	9.70	8.94	8.61
FRESNO-BAKERSFIELD					
University of California	0.20	0.21	0.20	0.21	0.20
California State University	1.50	1.54	1.50	1.42	1.42
California Community Colleges	4.35	N/A	N/A	4.12	3.86
TOTAL	6.05	N/A	N/A	5.75	5.48
VENTURA-SANTA BARBARA					
University of California	0.66	0.71	0.66	0.67	0.69
California State University	1.05	1.09	1.00	0.99	0.98
California Community Colleges	5.11	5.61	5.44	5.14	4.50
TOTAL	6.82	7.41	7.10	6.80	6.17
LOS ANGELES					
University of California	0.53	0.52	0.52	0.52	0.53
California State University	1.40	1.37	1.36	1.33	1.30
California Community Colleges	5.23	5.20	5.47	5.51	5.03
TOTAL	7.16	7.09	7.35	7.36	6.86
RIVERSIDE/SAN BERNARDINO					
University of California	0.34	0.33	0.32	0.31	0.29
California State University	0.88	0.86	0.85	0.84	0.81
California Community Colleges	5.54	5.42	5.76	5.54	4.64
TOTAL	6.76	6.61	6.93	6.69	5.74
ORANGE					
University of California	0.58	0.60	0.63	0.63	0.66
California State University	1.64	1.65	1.69	1.68	1.68
California Community Colleges	8.70	10.39	11.16	9.90	8.76
TOTAL	10.92	12.64	13.48	12.21	11.10
SAN DIEGO					
University of California	0.50	0.49	0.50	0.54	0.53
California State University	1.25	1.27	1.26	1.18	1.19
California Community Colleges	6.51	7.13	6.67	6.42	5.92
TOTAL	8.26	8.89	8.43	8.14	7.64
CALIFORNIA					
University of California	0.53	0.53	0.53	0.53	0.53
California State University	1.43	1.42	1.47	1.39	1.37
California Community Colleges	6.16	6.52	6.72	6.44	5.66
TOTAL	8.12	8.47	8.72	8.36	7.56

Source: California Postsecondary Education Commission.

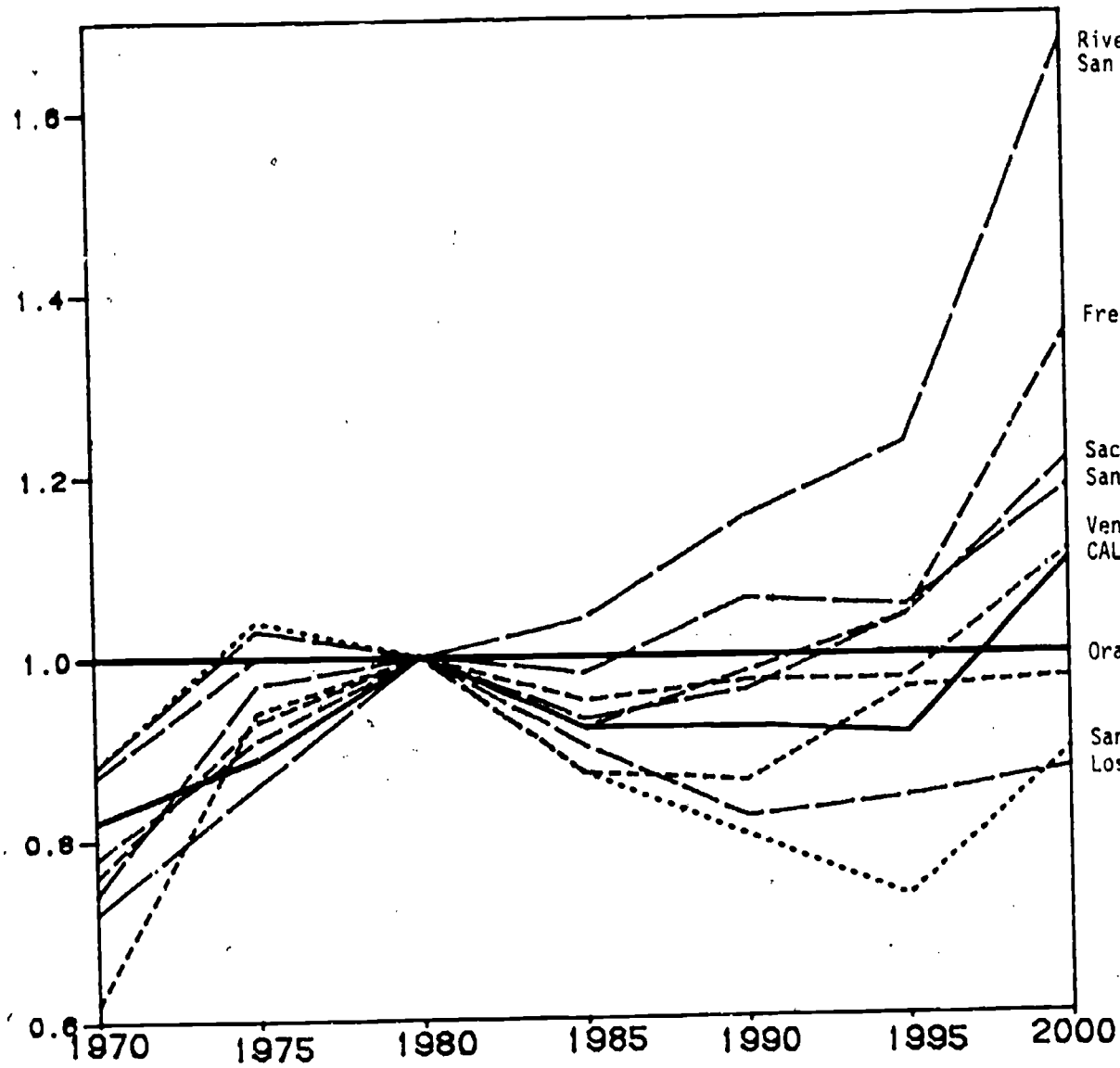
TABLE 20 Number of 18- and 19-Year Olds in California's Eight Metropolitan Regions, 1970 to 2000

Metropolitan Region	1970	1975	1980	1985	1990	1995	2000
SAN FRANCISCO BAY AREA							
Alameda	39,919	46,330	42,970	39,827	37,354	35,586	40,251
Contra Costa	18,959	20,783	23,103	19,140	19,396	16,636	22.104
Marin	5,818	6,780	6,552	5,190	4,162	2,863	2,769
San Francisco	24,025	25,408	19,996	17,003	14,605	14,241	18,002
San Mateo	18,827	20,709	19,086	15,184	12,866	11,534	13,454
Santa Clara	38,862	51,169	52,944	46,732	44,088	40,126	49,793
TOTAL	146,410	171,179	164,651	143,076	132,471	120,986	146,373
Indexed to 1980	(0.88)	(1.04)	(1.00)	(0.87)	(0.80)	(0.73)	(0.89)
SACRAMENTO							
Placer	2,860	3,380	4,179	3,939	4,436	4,342	6,420
Sacramento	23,957	30,309	30,142	27,278	28,089	30,803	35,524
Yolo	4,468	7,566	8,134	8,428	8,254	8,912	9,721
TOTAL	31,285	41,255	42,455	39,645	40,779	44,057	51,665
Indexed to 1980	(0.74)	(0.97)	(1.00)	(0.93)	(0.96)	(1.04)	(1.21)
FRESNO-BAKERSFIELD							
Fresno	16,831	19,424	20,774	19,260	19,766	20,033	25,954
Kern	11,818	14,445	15,344	13,617	14,722	17,259	22,611
King	2,598	2,664	3,129	3,232	3,322	3,443	3,366
Tulare	6,883	8,091	9,535	8,555	10,167	10,039	14,070
TOTAL	38,130	44,624	48,802	44,664	47,977	50,774	66,001
Indexed to 1980	(0.78)	(0.91)	(1.00)	(0.92)	(0.98)	(1.04)	(1.35)
VENTURA-SANTA BARBARA							
Santa Barbara	12,975	14,571	14,748	13,840	13,541	13,161	14,733
Ventura	13,541	17,905	20,352	19,599	20,398	20,807	24,366
TOTAL	26,516	32,476	35,100	33,439	33,939	33,968	39,099
Indexed to 1980	(0.76)	(0.93)	(1.00)	(0.95)	(0.97)	(0.97)	(1.11)
LOS ANGELES-LONG BEACH							
Los Angeles	243,192	278,455	278,255	250,003	228,192	232,364	269,543
Indexed to 1980	(0.87)	(1.00)	(1.00)	(0.90)	(0.82)	(0.84)	(0.97)
RIVERSIDE-SAN BERNARDINO							
Riverside	15,445	19,855	22,473	23,333	25,192	27,454	36,222
San Bernardino	25,086	28,777	34,131	35,813	39,921	41,271	58,447
TOTAL	40,531	48,632	56,604	59,146	65,113	69,725	94,669
Indexed to 1980	(0.72)	(0.86)	(1.00)	(1.04)	(1.15)	(1.23)	(1.67)
ORANGE							
Orange	49,320	73,656	78,548	68,588	67,216	59,580	75,959
Indexed to 1980	(0.62)	(0.94)	(1.00)	(0.87)	(0.86)	(0.76)	(0.97)
SAN DIEGO							
San Diego	78,592	92,521	89,437	87,983	94,535	93,537	106,039
Indexed to 1980	(0.88)	(1.03)	(1.00)	(0.98)	(1.06)	(1.05)	(1.19)
CALIFORNIA							
All 58 Counties	751,611	904,922	916,233	845,047	839,294	836,068	1,010,065
Indexed to 1980	(0.82)	(0.99)	(1.00)	(0.92)	(0.92)	(0.91)	(1.10)

Source: State Department of Finance.

Another major contributing factor to student enrollment, especially at the community college level, is the pool of potential adult attenders. As Table 21 on page 53 shows, adult population of the State will increase from 17,356,683 in 1980 to 23,548,747 in the year 2000 -- a 35.7 percent increase. Figure 14 on page 54 shows continuous growth to the year 2000 for the total adult population aged 18 and over of the State and of the eight metropolitan regions. The figure also shows (as noted earlier) that the high growth metropolitan counties will be the Los Angeles Basin counties of Ventura, San,

FIGURE 13 Number of 18- and 19-Year Olds in California's Eight Metropolitan Regions, 1970 to 2000, Indexed to 1980



Source: Table 20.

Bernardino, and Riverside. The two largest and most-urban regions of the State (Los Angeles-Long Beach and the San Francisco Bay Area) will grow at less than the statewide rate. Even so, together these two largest metropolitan regions will account for one quarter of the statewide growth in the adult population.

First-Time Freshman Enrollments

One important component of general postsecondary participation is first-time freshmen. Although the number of young people graduating from California's

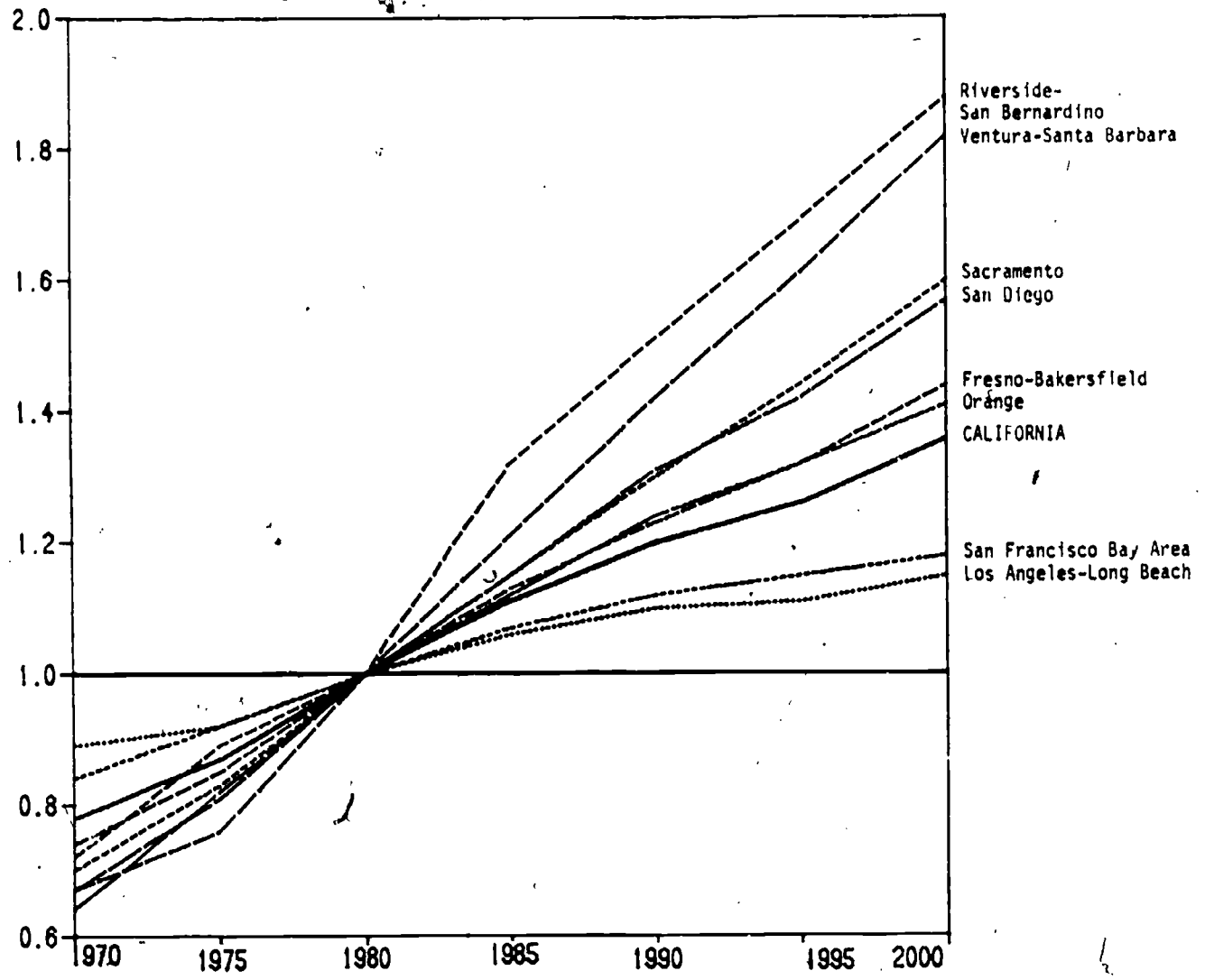
TABLE 21 Adult Population Aged 18 and Over of California's Eight Metropolitan Regions, 1970 to 2000

	1970	1975	1980	1985	1990	1995	2000
SAN FRANCISCO BAY AREA							
Alameda	743,867	801,774	831,109	887,860	926,855	949,927	981,187
Contra Costa	359,947	407,244	476,702	525,948	565,389	598,731	632,346
Marin	141,593	161,783	172,701	182,870	190,066	192,599	195,297
San Francisco	555,023	552,417	564,238	578,767	572,408	557,276	552,791
San Mateo	382,935	422,596	448,812	465,538	481,921	487,257	495,973
Santa Clara	684,908	803,783	939,933	1,025,495	1,098,783	1,148,375	1,209,236
TOTAL	2,868,273	3,149,597	3,433,495	3,666,478	3,835,422	3,934,165	4,066,830
Indexed to 1980	(0.84)	(0.92)	(1.00)	(1.04)	(1.12)	(1.15)	(1.18)
SACRAMENTO							
Placer	52,082	64,519	85,827	105,124	125,983	148,267	171,467
Sacramento	412,477	480,786	576,463	662,130	741,313	815,248	899,177
Yolo	62,650	73,649	86,177	95,986	105,521	113,966	123,531
TOTAL	527,209	618,957	748,467	863,240	972,817	1,077,481	1,194,175
Indexed to 1980	(0.70)	(0.83)	(1.00)	(1.15)	(1.30)	(1.44)	(1.60)
FRESNO-BAKERSFIELD							
Fresno	266,385	304,335	362,813	402,965	435,964	465,544	503,928
Kern	210,324	243,292	280,946	324,640	353,720	385,616	425,507
Kings	42,151	44,869	49,587	56,366	61,627	66,069	71,444
Tulare	119,998	141,373	166,549	187,191	205,735	225,078	247,981
TOTAL	638,858	783,869	859,895	971,162	1,057,046	1,142,307	1,248,860
Indexed to 1980	(0.74)	(0.85)	(1.00)	(1.13)	(1.23)	(1.33)	(1.45)
VENTURA-SANTA BARBARA							
Santa Barbara	180,859	202,323	227,318	246,213	262,512	274,861	290,097
Ventura	233,896	288,639	326,039	430,927	490,802	551,457	613,872
TOTAL	414,755	490,962	553,357	677,140	753,314	826,318	903,969
Indexed to 1980	(0.75)	(0.89)	(1.00)	(1.22)	(1.36)	(1.49)	(1.63)
LOS ANGELES-LONG BEACH							
Los Angeles	4,832,047	5,044,881	5,456,771	5,783,939	5,989,724	6,064,307	6,206,103
Indexed to 1980	(0.89)	(0.92)	(1.00)	(1.06)	(1.10)	(1.11)	(1.15)
RIVERSIDE-SAN BERNARDINO							
Riverside	307,797	373,147	483,048	585,005	689,249	787,261	887,835
San Bernardino	444,462	475,677	630,279	760,887	887,686	1,005,408	1,135,947
TOTAL	752,259	848,824	1,113,327	1,345,892	1,576,935	1,792,669	2,023,782
Indexed to 1980	(0.67)	(0.76)	(1.00)	(1.21)	(1.42)	(1.61)	(1.82)
ORANGE							
Orange	913,634	1,166,631	1,414,283	1,588,874	1,746,944	1,859,980	1,993,690
Indexed to 1980	(0.64)	(0.82)	(1.00)	(1.12)	(1.24)	(1.32)	(1.41)
SAN DIEGO							
San Diego	937,142	1,133,018	1,396,105	1,603,854	1,824,691	1,988,966	2,186,158
Indexed to 1980	(0.67)	(0.81)	(1.00)	(1.15)	(1.31)	(1.42)	(1.57)
CALIFORNIA							
All 58 Counties	13,490,759	15,105,577	17,356,683	19,200,335	20,772,324	22,024,491	23,548,747
Indexed to 1980	(0.78)	(0.87)	(1.00)	(1.11)	(1.20)	(1.26)	(1.36)

Source: State Department of Finance.

high schools declined some 10 percent from 1973 to 1982, the number of first-time freshmen in California's public segments of higher education has increased over the same period by some 26 percent -- at the University of California by some 16 percent; at the California State University by about 12 percent, and at the Community Colleges by about 31 percent (Table 22 on pages 54-55 and Figure 15 on page 55). The data on the independent segment

FIGURE 14 Adult Population Aged 18 and Over of California's Eight Metropolitan Regions, 1970 to 2000, Indexed to 1980



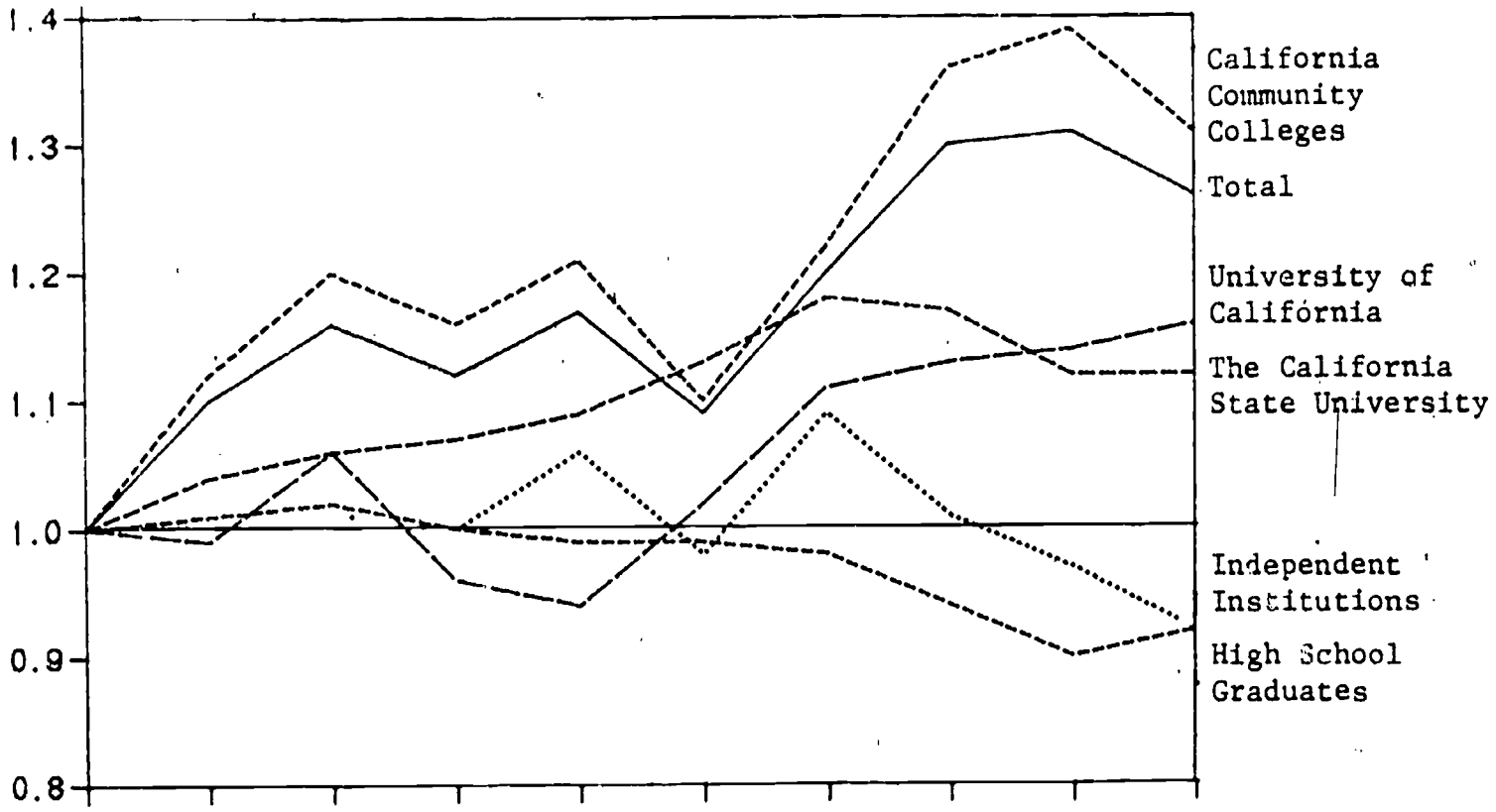
Source: Table 21.

TABLE 22 Number of High School Graduates and First-Time Freshmen and 1976 for Independent Institutions

High School Graduates	June 1973	June 1974	June 1975	June 1976
Total High School Graduates	288,118 1.00	289,714 1.01	293,941 1.02	289,454 1.00
Segment	**Fall 1973**	**Fall 1974**	**Fall 1975**	**Fall 1976**
Total First-Time Freshmen	280,183* 1.00	307,894* 1.10	325,807* 1.16	315,161 1.12
California Community Colleges	216,914 1.00	243,801 1.12	260,289 1.20	251,106 1.16
The California State University	23,173 1.00	24,116 1.04	24,448 1.06	24,700 1.07
University of California	16,843 1.00	16,724 0.99	17,817 1.06	16,102 0.96
Independent Institution	N/A	N/A	N/A	23,253 1.00

*Assumes the 1976 level for independent institutions.

FIGURE 15 Change in the Number of First-Time Freshmen Enrolling in California's Degree-Granting Institutions, Fall 1973 Through Fall 1982, Indexed to Fall 1973



Source: Table 22.

1973 Through 1982, Indexed to 1973 for Public Institutions

June 1977	June 1978	June 1979	June 1980	June 1981	June 1982
285,360	283,841	281,047	270,971	260,229	265,924
0.99	0.99	0.98	0.94	0.90	0.92

Fall 1977	Fall 1978	Fall 1979	Fall 1980	Fall 1981	Fall 1982
327,131	305,713	336,654	364,979	368,248	352,000
1.17	1.09	1.20	1.30	1.31	1.26
261,434	239,547	265,263	295,542	300,472	285,108
1.21	1.10	1.22	1.36	1.39	1.31
25,281	26,112	27,403	27,095	25,902	26,004
1.09	1.13	1.18	1.17	1.12	1.12
15,854	17,227	18,735	18,949	19,245	19,461
0.94	1.02	1.11	1.13	1.14	1.16
24,551	22,827	25,253	23,393	22,629	21,427
1.06	0.98	1.09	1.01	0.97	0.92

Source: California Postsecondary Education Commission.

are less reliable, but they suggest no increase in first-time freshmen since Fall 1976 -- the first year for which data on them are available.

College-Going Rates

Perhaps the most traditional component of college and university participation is "college-going rate" - that is, the ratio of the fall enrollment of first-time freshmen 19 years and under to the size of the high school graduating class for the prior academic year. While the size of the high-school graduating class has declined since 1975, this was offset by increases in college-going rates (Table 23 below) for all three public segments to Fall

TABLE 23 College-Going Rates for Recent High School Graduates Aged 19 and Under at California's Four Segments of Higher Education, 1974 to 1982.

Year	UC	CSU	CCC	Total Public	Independent	Grand Total
1974	5.1% (1.00)	7.6% (1.00)	41.3% (1.00)	54.0% (1.00)	--	--
1975	5.3 (1.04)	7.5 (0.99)	43.1 (1.04)	55.9 (1.035)	--	--
1976	5.1 (1.00)	7.8 (1.03)	41.7 (1.01)	54.6 (1.01)	--	--
1977	5.2 (1.02)	8.0 (1.05)	43.3 (1.05)	56.5 (1.05)	3.6% (1.00)	60.1% (1.00)
1978	5.5 (1.08)	8.4 (1.11)	41.4 (1.00)	55.3 (1.02)	3.4 (0.94)	58.7 (0.98)
1979	5.8 (1.14)	8.7 (1.14)	42.1 (1.02)	56.6 (1.05)	3.4 (0.94)	60.0 (1.00)
1980	6.0 (1.18)	9.0 (1.18)	43.0 (1.04)	58.0 (1.07)	3.5 (0.97)	61.5 (1.02)
1981	6.4 (1.25)	9.0 (1.18)	42.1 (1.02)	57.6 (1.07)	3.3 (0.92)	60.8 (1.01)
1982	6.4 (1.25)	9.0 (1.18)	42.8 (1.04)	58.2 (1.08)	3.2 (0.89)	61.4 (1.02)
1983	7.0 (1.37)	8.9 (1.18)	37.9 (0.86)	53.8 (1.00)	3.4 (0.94)	57.2 (0.95)

Note: Public institution rates are indexed to 1974. Independent institution rates are indexed to 1977.

Source: Adapted from California Postsecondary Education Commission, 1983a, p. 7.

1982. The decline in the total college-going rate from Fall 1982 to Fall 1983 is entirely attributable to the 9-percent drop in the college-going rate at the California Community Colleges. College-going actually increased for the University of California and did not significantly change for the State University or the independent institutions.

Table 23 shows an increase for the University from 5.1 percent in 1974 to 6.4 percent in 1982. The State University absorbed a comparable increase from 7.6 percent to 9.0 percent. And the Community Colleges' rate held virtually constant at about 42 percent.

Within this general picture of gradual growth in the statewide college-going rates since 1975 and until 1983, there are major differences among the counties. A comprehensive analysis of these differences appears in the Commission's recent report, California College-Going Rates: 1983 Update, which notes that "the statewide participation rate for the University in Fall 1983 was 7.0 percent, but countywide rates for counties with over 1,000 high school graduates in 1982-83 ranged from 1.7 for Tulare and 2.0 for Shasta to 15.4 for Marin" (1985a, p. 25). It also notes a range of college-going rates for the State University and the Community Colleges (pp. 25, 26):

> County rates for the State University in Fall 1983 ranged around the statewide rate of 8.9 from a high of 13.2 for San Francisco and 13.6 for Fresno to lows of 3.8 for San Joaquin and 3.9 for Tulare.
>
> California counties varied widely around the statewide Community College participation rate of 37.5 in Fall 1983. Among the 21 counties with the largest numbers of high school graduates, five had rates below 35.0 percent -- Fresno (33.5), San Francisco (34.1), Los Angeles (34.6), Kern (32.5), and Marin (26.1) -- and all experienced a decrease from Fall 1982 and earlier years. Four counties experienced small increases in rates between Fall 1982 and Fall 1983, reversing an earlier trend: Sonoma, up from 37.9 percent to 44.6; Placer, from 38.4 to 40.0; San Diego, from 35.7 to 37.1; and Santa Cruz, from 42.4 to 43.6. Sacramento, Shasta, and Yolo Counties had approximately the same Community College rates for 1982 and 1983.

College-going rates for counties with over 1,000 high school graduates in 1981-82 varied by a factor of ten for the University, a factor of four for the State University, a factor of two for the Community Colleges, and a factor of six for independent institutions. Since the total college-going rate for all 57 counties varies by only about 30 percent, it appears that the logistics involved in attending a particular institution is still a major consideration in students' college-going decisions.

Table 24 on page 58 shows for the ten-year period of 1974-83 the number of high school graduates in the eight metropolitan regions of the State and their college-going rates in the three public segments. The number of high school graduates declined 9.5 percent statewide over this period. Most of the loss (83 percent) occurred in the Los Angeles-Long Beach region and in

TABLE 24 First-Time Freshmen Aged 19 and Under Enrolled in Each Public Postsecondary Segment as a Percent of High School Graduates in California's Eight Metropolitan Regions, 1974 to 1983

Metropolitan Region	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
SAN FRANCISCO BAY AREA										
UC	7.3%	7.4%	6.9%	6.9%	7.8%	8.2%	8.7%	9.1%	10.0%	10.0%
CSU	9.3%	8.6%	9.1%	9.3%	9.4%	9.4%	10.0%	10.0%	10.7%	10.1%
CCC	41.1%	44.0%	42.0%	42.1%	39.0%	40.3%	38.4%	N/A	N/A	38.2%
Total	57.7%	60.0%	58.0%	58.3%	56.2%	57.9%	57.1%	N/A	N/A	58.3%
High School Graduates	59,841	60,203	59,670	58,874	58,550	56,718	53,862	51,272	46,146	50,898
SACRAMENTO										
UC	3.7%	4.2%	3.9%	4.1%	4.3%	4.5%	5.3%	5.5%	5.1%	6.1%
CSU	6.7%	6.7%	6.0%	6.6%	6.7%	8.1%	7.0%	8.6%	9.0%	8.7%
CCC	40.6%	41.8%	41.2%	43.6%	40.9%	42.0%	42.4%	49.0%	40.3%	40.1%
Total	51.0%	52.7%	51.1%	54.3%	51.9%	54.6%	54.7%	63.1%	54.4%	54.9%
High School Graduates	14,106	14,119	13,708	13,784	13,898	13,142	12,773	11,588	11,418	12,037
FRESNO-BAKERSFIELD										
UC	2.0%	1.9%	1.7%	1.6%	1.9%	2.0%	2.4%	2.3%	2.2%	2.3%
CSU	8.7%	8.4%	8.4%	8.4%	8.2%	8.7%	9.7%	9.7%	9.2%	8.8%
CCC	42.6%	44.9%	45.6%	43.8%	43.2%	43.4%	43.7%	N/A	41.4%	34.7%
Total	53.3%	55.2%	55.7%	53.8%	53.3%	54.1%	55.8%	N/A	52.8%	45.8%
High School Graduates	15,039	14,862	14,978	14,886	15,015	14,840	14,857	14,409	14,003	13,881
VENTURA-SANTA BARBARA										
UC	4.1%	4.1%	4.5%	3.9%	4.4%	4.9%	5.7%	5.7%	5.9%	6.5%
CSU	4.3%	4.0%	4.0%	4.5%	4.9%	5.6%	5.0%	5.5%	5.5%	5.5%
CCC	46.9%	47.0%	46.6%	46.3%	45.6%	47.6%	51.8%	47.5%	48.9%	37.7%
Total	55.3%	55.1%	55.1%	54.7%	54.9%	58.1%	62.5%	58.7%	60.3%	49.7%
High School Graduates	10,890	11,471	11,588	11,179	11,012	10,585	10,646	10,285	10,409	10,441
LOS ANGELES-LONG BEACH										
UC	5.7%	6.2%	6.0%	5.9%	6.4%	6.4%	6.5%	7.4%	7.2%	7.6%
CSU	8.6%	9.2%	9.7%	10.0%	10.8%	10.2%	10.5%	10.7%	10.7%	10.2%
CCC	38.5%	41.1%	36.1%	40.5%	41.3%	42.8%	41.9%	45.1%	41.0%	34.6%
Total	52.8%	56.5%	51.8%	56.4%	58.5%	59.3%	58.9%	63.3%	58.9%	52.4%
High School Graduates	90,817	91,048	88,607	86,439	83,753	83,849	79,389	72,747	76,814	76,814
RIVERSIDE-SAN BERNARDINO										
UC	3.6%	3.3%	3.7%	3.7%	3.7%	3.9%	3.8%	3.9%	4.1%	4.1%
CSU	4.2%	4.3%	4.8%	5.5%	5.4%	5.8%	6.4%	6.3%	6.0%	5.7%
CCC	39.7%	38.7%	38.3%	40.8%	37.8%	40.0%	42.4%	45.9%	45.5%	39.2%
Total	47.5%	46.3%	46.8%	50.0%	46.9%	49.7%	52.6%	56.1%	55.6%	44.0%
High School Graduates	16,645	17,369	17,302	16,588	16,756	16,188	16,415	16,442	16,797	16,451
ORANGE										
UC	5.3%	5.3%	5.2%	5.4%	5.5%	6.2%	6.2%	6.7%	7.1%	8.4%
CSU	7.7%	7.4%	7.9%	8.2%	8.5%	9.9%	10.0%	10.2%	10.4%	10.0%
CCC	45.3%	44.3%	46.1%	47.8%	42.5%	45.6%	50.4%	47.3%	46.3%	41.8%
Total	58.3%	57.0%	59.2%	61.4%	56.5%	61.8%	66.6%	64.3%	64.1%	60.2%
High School Graduates	25,206	27,079	27,200	26,921	26,558	26,107	25,342	26,319	25,604	25,196
SAN DIEGO										
UC	5.0%	5.6%	5.4%	5.7%	6.1%	6.4%	6.0%	6.9%	6.9%	7.2%
CSU	6.6%	6.0%	6.3%	5.9%	6.6%	8.3%	8.8%	7.8%	7.4%	7.8%
CCC	40.9%	44.3%	46.4%	44.9%	42.5%	42.9%	45.7%	39.5%	35.7%	37.1%
Total	52.5%	55.9%	58.1%	56.5%	55.2%	57.7%	60.5%	54.2%	50.0%	52.1%
High School Graduates	20,456	20,412	19,547	20,388	21,323	20,048	20,553	20,099	20,582	20,652
CALIFORNIA										
UC	5.1%	5.3%	5.1%	5.2%	5.5%	5.8%	6.0%	6.4%	6.4%	7.0%
CSU	7.6%	7.5%	7.8%	8.0%	8.4%	8.7%	9.0%	9.0%	9.0%	8.9%
CCC	41.3%	43.1%	41.7%	43.3%	41.0%	42.1%	43.0%	42.1%	42.8%	37.5%
Total	54.0%	55.9%	54.6%	56.5%	55.3%	56.6%	58.0%	57.6%	58.2%	53.4%
High School Graduates	289,714	293,941	289,454	285,360	283,841	278,548	270,971	260,229	265,924	262,160

Source California Postsecondary Education Commission, 1983a.

the San Francisco Bay area. The number of high school graduates for the Sacramento region and the Fresno-Bakersfield region also declined noticeably. The other four metropolitan regions were stable in this respect, and none of them had a significant increase in high school graduates.

All eight regions share in the statewide ten-year trend of increasing college-going rates for the University and the State University. General trends in Community College-going rates for the regions are more difficult to discern. All but San Diego registered drops in Community College-going from 1982 to 1983; but even in San Diego, the ten-year trend was one of decline. No region showed a ten-year increase in Community College-going. The two most nearly stable regions of all regarding these rates were Sacramento and Riverside-San Bernardino.

Recent college-going rates for Community Colleges vary only some eight percentage points (from 37 percent to 45 percent) from region to region, while college-going rates for the four-year public segments span a factor of two (from 10 percent for Riverside-San Bernardino to 20 percent for the San Francisco Bay area). The three regions with the highest public college-going rates -- Orange, the San Francisco Bay Area, and Sacramento -- are projected to be the slowest growing of all eight regions.

SUMMARY AND IMPLICATIONS

The ten-year trend in postsecondary enrollments has been a general increase punctuated by reversals corresponding to changes in public policies and in availability of resources. The percent of adult Californians enrolling in postsecondary education did not change from Fall 1974 to Fall 1982. However, the declines in Community College enrollments in 1983 and 1984 can be expected to depress the total for those years. Enrollments of women have increased in all postsecondary segments -- passing enrollments of men in 1977. Part-time enrollments grew 51 percent from 1973 to 1982 while full-time enrollments grew only 10 percent.

From metropolitan region to metropolitan region, total participation rates (headcount enrollment divided by the adult population aged 18 and over) vary by a factor of two, while college-going rates (first-time freshmen aged 19 and under divided by high school graduates) differ by only about one quarter. Several of the projected high-growth regions are those with the lowest historic participation rates.

Dimensions of postsecondary participation such as ethnicity, gender, age, credit load, and geography that influenced California's enrollment trends of the last ten years will likely continue to be important for the next 15. Each of these discrete variables will have to be considered if not quantified in estimating the State's enrollment potential.

SIX

DIFFERENCES IN SEGMENTAL CLIENTELE

One of the cornerstones of California's tripartite system of public higher education is stratified admissions, as expressed in the eligibility criteria of the three public segments: (1) The University admits students from the top one-eighth of their high school graduating class; (2) the State University admits those from the top one-third of their class; and (3) the Community Colleges admit all those who can benefit from instruction. Thus the students of the public segments are differentiated by academic achievement and ability on the basis of some combination of grade-point average and scores on standardized tests.

ETHNIC DIFFERENCES

Nationally, as Table 25 on page 62 shows, ethnic groups differ on Scholastic Aptitude Test scores, with the combined mean scores for Black and Hispanic students considerably lower than those for other ethnic groups, and the percentages of these two groups scoring above 500 on the verbal and the mathematics sections in all cases lower than other groups. These test scores correlate with high school grade-point averages, and both lead to differential eligibility rates for different ethnic groups.

Table 26 on page 63 shows that the pattern of enrollment of the various ethnic groups in California's segments of higher education is consistent with this national pattern of test scores. For the seven years shown, the percentage of Black students has not changed and remains below the representation of Blacks in the California population. The percentage of enrollment accounted for by Hispanics has grown but still lags behind their representation in the general population. Asian representation, always above average, has grown out of proportion to the growth of Asians as a population group. The percentage of whites in the student population has declined along with their representation in the general population.

While Black and Hispanic students are underrepresented in the total headcount of postsecondary education, they are particularly underrepresented in institutions with selective admission requirements and eligibility criteria -- the University of California and some independent institutions and, to a lesser extent, the California State University.

Figures 16 and 17 on pages 64 and 65 illustrate eligibility rates for various subgroups of the 198[illegible] public high school graduating class as compared to the 1960 Master Plan guidelines for the University and the State University. As can be seen, eligibility rates are higher for women than for men, and eligibility rates for Hispanic and Black Californians are considerably lower than for their white and Asian colleagues and are also considerably below the Master Plan guidelines.

TABLE 25 National Scholastic Aptitude Test Scores by Ethnicity, 1981 Through 1984

Year and Item	White	Black	Hispanic	Asian/ Pacific Islander	American Indian	Other	All Students*
1981 National Total	719,176	75,425	14,403	29,765	4,654	18,569	993,672
California Total	64,000	6,110	6,540	11,800	721	3,788	105,320
% Scoring over 500 Verbal/Math (National)	30/45	7/10	12/21	22/56	16/27	19/35	26/41
Mean Score Verbal/Math	442/483	332/362	370/410	397/513	391/425	388/447	424/466
Combined Mean Score	925	694	780	910	816	835	890
1982 National Total	710,915	73,864	14,720	32,584	4,537	18,445	987,942
California Total	62,600	6,430	6,830	12,970	703	3,763	106,700
% Scoring Over 500 Verbal/Math (National)	29/44	7/10	14/23	22/55	15/26	19/34	26/40
Mean Score Verbal/Math	444/483	341/366	377/416	398/513	388/424	392/449	426/467
Combined Mean Score	927	707	793	911	812	841	893
1983 National Total	684,957	71,488	15,314	35,207	4,318	18,016	962,542
California Total	60,300	6,080	7,090	13,940	669	3,693	104,920
% Scoring Over 500 Verbal/Math (National)	29/46	7/12	13/22	22/55	16/27	19/34	25/40
Mean Score Verbal/Math	443/484	339/369	371/410	395/514	388/425	386/446	425/468
Combined Mean Score	927	708	781	909	813	832	893
1984 National Total	678,086	71,174	16,118	37,297	4,065	18,160	964,685
California Total	60,400	6,050	7,370	14,620	638	3,795	107,080
% Scoring Over 500 Verbal/Math (National)	31/46	7/12	14/25	23/58	17/29	19/35	27/42
Mean Score Verbal/Math	445/487	342/373	376/420	398/519	390/427	388/450	426/471
Combined Mean Score	932	715	796	917	817	838	897

*Does not equal the sum of ethnic category totals because not all categories are included in this table.

Note: Standard deviation between 92 and 120 for all categories and years.

Sources: College Entrance Examination Board, 1981, 1982, 1983, 1984.

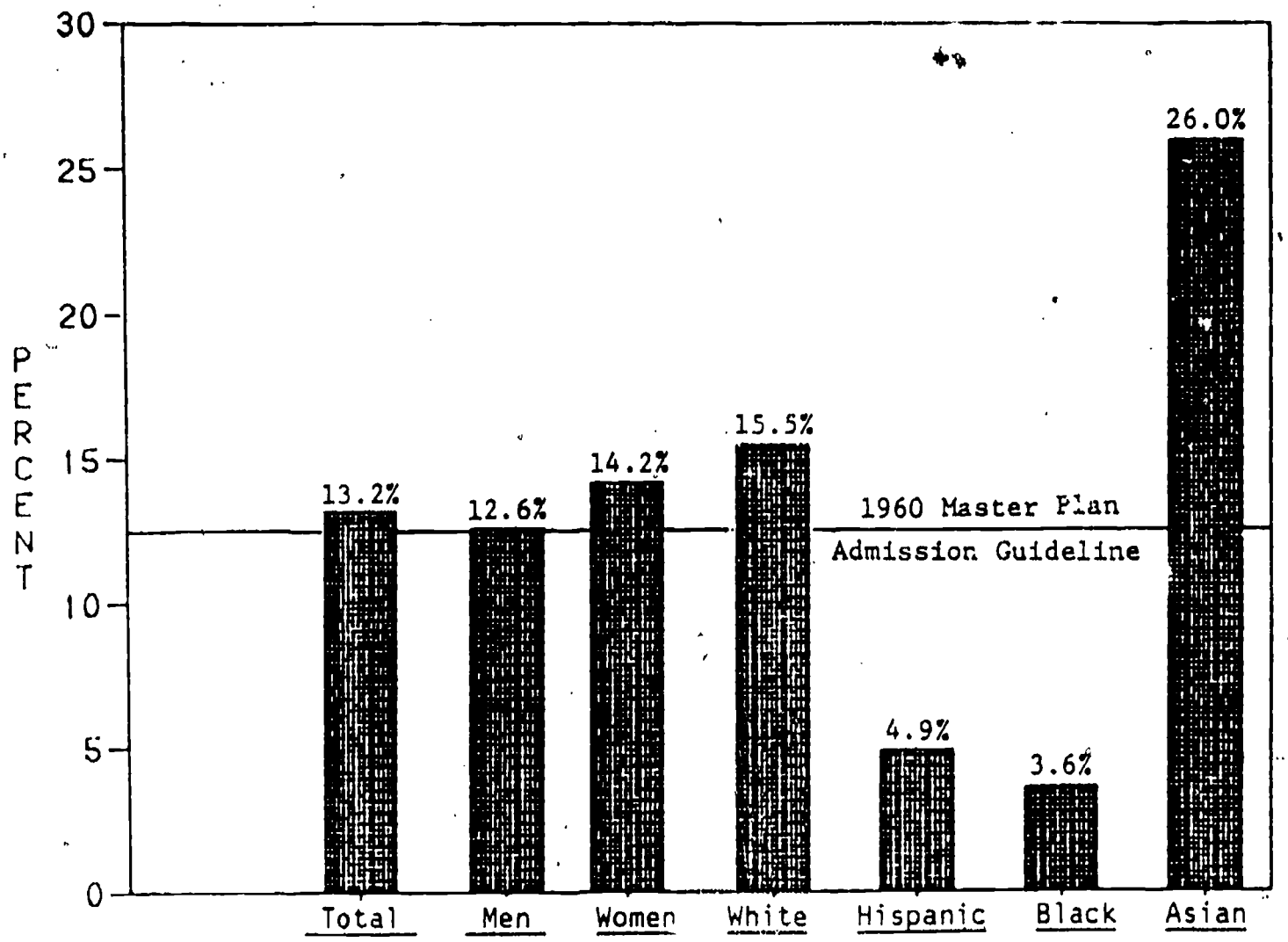
In 1982, Blacks represented 3.9 percent of the University's headcount enrollment but 9.7 percent of Community College students. Asians, on the other hand, represented 14.8 percent of the University's headcount (up from 9.7 percent in 1976) but only 8.2 percent of the Community Colleges' enrollment. These patterns of attendance are consistent with the patterns of test scores and of elementary and secondary school progression shown earlier. Both the patterns of achievement and those of participation are critical considerations for the next 15 years, as they will affect the size and vitality of the post secondary enterprise.

TABLE 26 Percentages of Various Ethnic Groups in the Total Credit Headcount Enrollment of California's Segments of Higher Education, Fall 1976 Through Fall 1982

Segment	Fall 1976	Fall 1977	Fall 1978	Fall 1979	Fall 1980	Fall 1981	Fall 1982
California Community Colleges							
Black	9.0%	10.4%	9.8%	9.6%	9.2%	9.2%	9.7%
Hispanic	10.0	10.6	10.4	11.1	11.0	12.0	12.5
American Indian	1.7	1.4	1.5	1.4	1.5	1.7	1.7
Asian	4.2	5.5	5.0	5.8	6.4	7.1	8.2
White	75.1	72.0	72.9	72.1	71.8	70.0	68.0
The California State University							
Black	6.8%	6.8%	7.7%	7.3%	7.1%	6.9%	6.5%
Hispanic	7.4	7.7	8.6	8.9	9.2	9.0	9.2
American Indian	1.3	1.2	1.4	1.4	1.3	2.5	1.9
Asian	7.2	7.7	8.6	9.3	9.3	9.9	10.8
White	77.3	76.6	73.8	73.2	73.2	71.7	71.7
University of California							
Black	4.2%	4.2%	4.3%	4.0%	4.3%	4.0%	3.9%
Hispanic	5.4	5.5	5.6	5.7	6.0	5.9	6.2
American Indian	0.6	0.6	0.6	0.5	0.5	0.5	0.5
Asian	9.7	10.5	11.0	11.6	12.8	13.8	14.8
White	80.1	79.3	78.9	78.3	76.4	75.9	74.6
Independent							
Black	6.1%	6.2%	5.8%	6.0%	5.5%	6.1%	5.8%
Hispanic	5.5	6.0	5.7	5.8	6.4	6.0	6.3
American Indian	0.6	0.7	0.5	0.6	0.6	0.6	0.5
Asian	5.7	5.[illegible]	6.1	6.2	6.5	7.9	8.0
White	82.2	81.6	81.8	81.5	80.9	79.5	79.4
Total							
Black	8.1%	9.2%	8.5%	8.5%	8.1%	8.2%	8.3%
Hispanic	8.9	9.5	9.5	9.8	9.8	10.6	10.8
American Indian	1.4	1.3	1.3	1.3	1.3	1.7	1.5
Asian	5.1	6.2	6.1	6.8	7.3	8.1	9.1
White	76.5	73.9	74.5	73.6	73.5	71.5	70.3

Source: California Postsecondary Education Commission.

FIGURE 16 Estimated Eligibility Rates for Freshman Admission to the University of California of 1983 Graduates of California's Public High Schools, by Sex and Major Ethnic Group

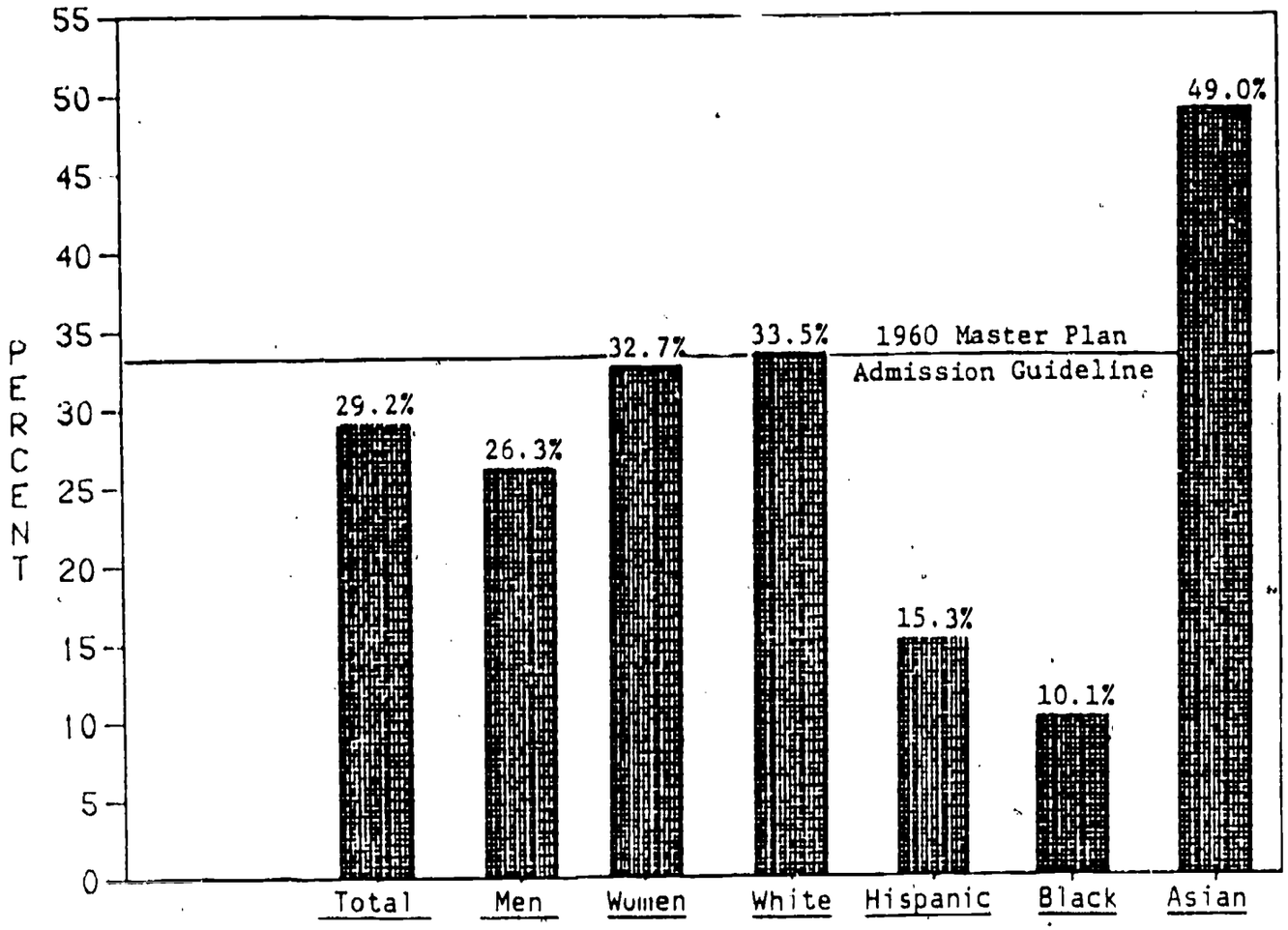


	Total	Men	Women	White	Hispanic	Black	Asian
Eligibility Pool	13.2%	12.6%	14.2%	15.5%	4.9%	3.6%	26.0%
Precision Level	±0.54%	±0.79%	±0.82%	±0.73%	±0.91%	±1.23%	±2.89%
Confidence Level	95%	95%	95%	95%	95%	95%	95%
Sample Size	13,860[a]	6,657[a]	7,203[a]	9,045	2,261	1,202	893

a. Includes Filipino and American Indian graduates, but small sample sizes for these two ethnic groups preclude computing their eligibility rates.

Source: California Postsecondary Education Commission, 1985b, p. 12.

FIGURE 17 Estimated Eligibility Rates for Freshman Admission to the California State University of 1983 Graduates of California's Public High Schools, by Sex and Major Ethnic Group



	Total	Men	Women	White	Hispanic	Black	Asian
Eligibility Pool	29.2%	26.3%	32.7%	33.5%	15.3%	10.1%	49.0%
Precision Level	±0.73%	±1.05%	±1.09%	±0.95%	±1.41%	±1.89%	±3.08%
Confidence Level	95%	95%	95%	95%	95%	95%	95%
Sample Size	13,860[a]	6,657[a]	7,203[a]	9,045	2,261	2,202	893

a. Includes Filipino and American Indian graduates, but small sample sizes for these two ethnic groups preclude computing their eligibility rates.

Source: California Postsecondary Education Commission, 1985b, p. 15.

AGE DIFFERENCES

The age distribution of students is of interest because of what it may imply about the demand for various educational services. As Table 27 below shows, the public segments differ in the age profile of their undergraduates. More than 90 percent of the University's undergraduates fall into the "traditional" college-age group of 18- to 24-year olds, whereas this group constitutes only 72 percent of the State University's undergraduates and only 48 percent of the Community Colleges students.

The net effect of this difference is seen in Table 28 on page 67. Even including graduate enrollment, the average age of University students (23.1 years) is less than that for the State University (25.5 years), and both of these are considerably less than that for Community College students (29.7 years). Current trends in the age of students include a slight increase in the average age of University students (perhaps explained by graduate enrollment growth) and fluctuations in the average age of Community College students consistent with the patterns of part-time enrollment discussed earlier.

SOCIO-ECONOMIC STATUS

Beyond these individual characteristics of student ethnicity and age, a set of family measures referred to as socio-economic status also affect partici-

TABLE 27 Age Distribution of Undergraduates in California's Public Postsecondary Institutions, Fall 1982

Age	University of California	The California State University	California Community Colleges
Under 20	36.2	18.5	20.8
20-24	55.6	53.9	27.3
25-34	6.9	20.8	28.0
35 and Over	1.4	6.8	23.9

Source: California Postsecondary Education Commission.

TABLE 28 Average Age of All Undergraduate and Graduate Students in California's Public Postsecondary Institutions, Fall 1976 Through Fall 1982

Segment	Fall 1976	Fall 1977	Fall 1978	Fall 1979	Fall 1980	Fall 1981	Fall 1982
University of California	22.8	22.8	22.8	23.0	23.0	23.0	23.1
California State University	25.4	25.5	25.5	25.4	25.5	25.6	25.5
California Community Colleges	--	29.1	29.1	29.4	30.3	30.4	29.7

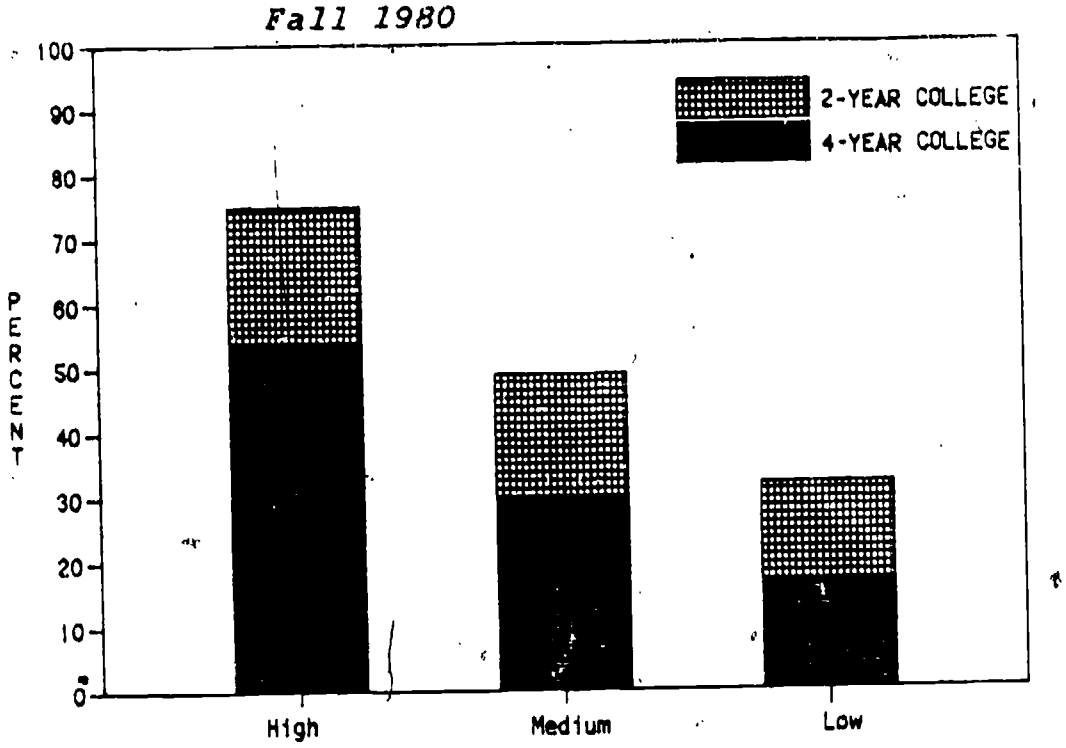
Source: California Postsecondary Education Commission.

pation (Figure 18 on page 68). These measures include parental education, family income, father's occupation, and household characteristics. They have been shown to correlate not only with postsecondary participation but to vary by ethnicity. Some of the differences in participation rates by ethnicity that were discussed earlier are explained by such socio-economic measures. Thus differences in the socio-economic status of students across the segments of California postsecondary education and changes in these measures are instructive in planning for postsecondary education in the State.

The two main points to be inferred from Figure 18 are (1) the percentage of high school seniors who enroll in college the next fall is strongly dependent on socio-economic background, and (2) recourse to Community Colleges is greatest for those of lower socio-economic background. Table 29 on page 69 reinforces these two points in terms of the Spring 1980 enrollment of American high school seniors of varying socio-economic background and academic ability in three types of high school program -- academic, general, and vocational. Most striking is the fact that only 21 percent of the low socio-economic status seniors were pursuing an academic or college-preparatory curriculum, compared to 62 percent of the high socio-economic status seniors.

An important socio-economic factor influencing participation rates for youth is the level of educational attainment of their parents. Table 30 on page 69 shows data on high school and college completion for California adults aged 25 and over by major racial/ethnic groups. While the categories as defined are not mutually exclusive, it is striking that of the Black and Hispanic groups only roughly half had graduated from high school, compared

FIGURE 18 Percent of 1980 High School Seniors in the United States Enrolled in College, by Socio-Economic Status, Fall 1980



Note: Socio-economic status is measured by a composite of parental education, family income, father's occupation, and household characteristics.

Source: Western Interstate Commission for Higher Education, Teacher's Insurance and Annuity Association, and the College Entrance Examination Board, 1984.

to 70 percent for the white group. Perhaps even more striking is the fact that the percentage of the white group graduating from college was twice that for the other groups. All else being equal and in the absence of positive intervention, this legacy of low adult educational attainment would be expected to result in low participation rates for succeeding generations of Black and Hispanic youth.

The other major socio-economic factor affecting postsecondary participation is income. It is well established that family income correlates positively with postsecondary participation, but it also affects choice among types of institutions. Figure 19 on page 70 shows the distribution of family income for full-time students in California's four degree-granting segments. At the Community Colleges the two lowest income categories account for more than half of their full-time students. For the University, in contrast, these low income categories account for less than 35 percent of its students.

TABLE 29 Percentage of 1980 American High School Seniors Enrolled in Different Programs by Sex, Academic Ability, and Socio-Economic Status, Spring 1980

Characteristic	Program[1]			Sample Size
	Academic	General	Vocational	
TOTAL	38.7%	6.9%	24.5%	27,775
SEX				
Male	39.0	38.0	23.0	12,724
Female	38.4	35.9	25.8	13,878
ACADEMIC ABILITY[2]				
Low	13.8	47.1	39.0	6,796
Middle	33.5	40.9	25.8	12,081
High	72.3	20.0	7.8	5,822
SOCIO-ECONOMIC STATUS[3]				
Low	21.1	43.4	35.4	8,237
Middle	36.3	38.4	25.2	12,655
High	62.0	27.4	10.5	6,129

1. Curricular programs can be generally defined as follows: "Academic": those preparing students for college; "Vocational": those preparing students for employment immediately following high school graduation; and "General": those with students considering themselves to be in neither academic or vocational programs.
2. The academic ability index is derived from four base-year "Test Book" scores; vocabulary, reading, letter groups, and mathematics.
3. The socio-economic status index is based on a composite score involving five components: father's education, mother's education, parental income, father's occupation, and a household items index.

Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond, unpublished tabulations, August 1982.

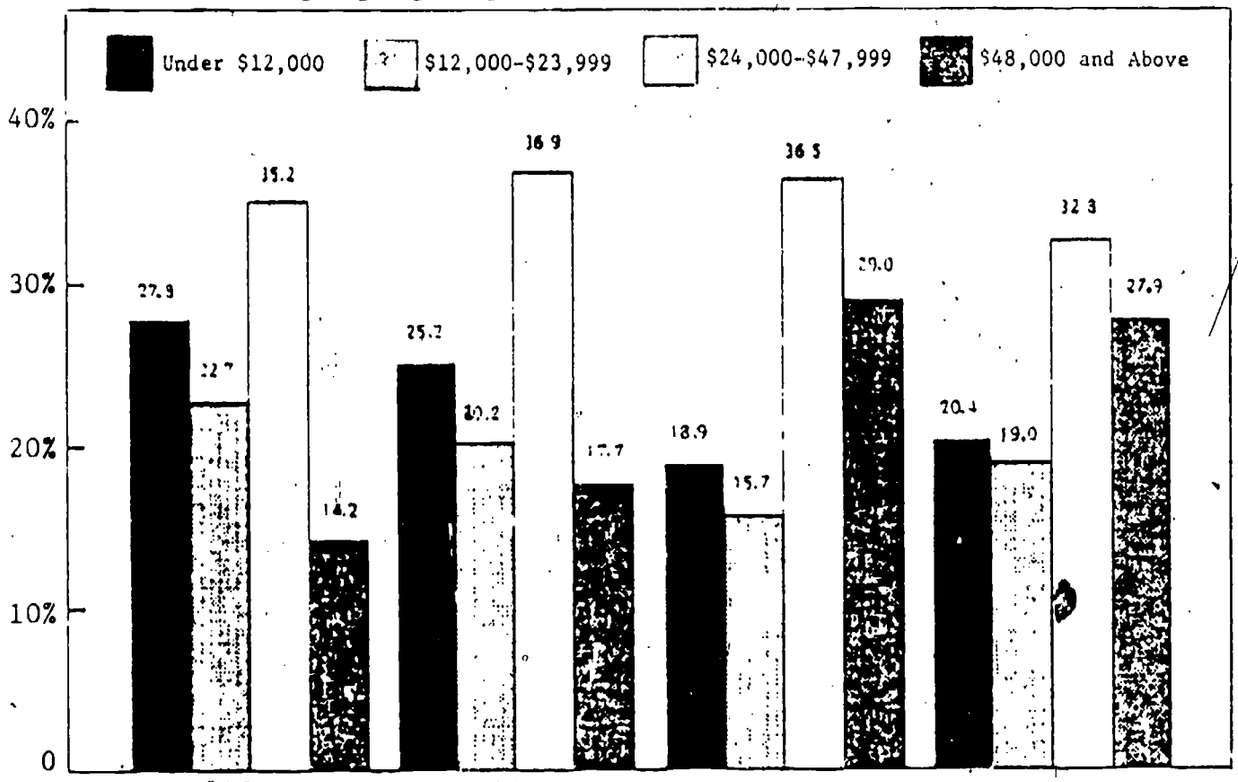
TABLE 30 Educational Attainment of Californians Aged 25 or Older, by Racial/Ethnic Group, March 1980

Race/Ethnicity	Population in Thousands	Percent High School Graduates[1]	Percent College Graduates[2]
White	112,899	70.5%	17.8%
Black	12,631	51.2	7.9
Hispanic[3]	5,896	45.3	7.9

1. Completed four years of high school or more.
2. Completed four years of college or more.
3. Persons of Hispanic origin may be of any race and may be included in the White and Black counts.

Source: U.S. Department of Commerce, Bureau of the Census, March 1980 Current Population Survey, unpublished tabulations.

FIGURE 19 Percent of Full-Time Students in Each Family Income Category by Segment, 1982-83



Segment	Under $12,000	$12,000-$23,999	$24,000-$47,999	$48,000 And Up
Community Colleges (311,505)	27.8%	22.7%	35.2%	14.2%
State University (180,935)	25.2	20.2	36.9	17.7
University of California (92,461)	18.9	15.7	36.5	29.0
Independent Institutions (203,277)	20.4	19.0	32.8	27.9

Source: California Postsecondary Education Commission Weights, Student Expenses and Resources Survey.

SUMMARY AND IMPLICATIONS

The clientele of the several postsecondary segments differ in many respects: in ethnic composition, age distribution, family income, parental educational attainment, and other socio-economic measures. Some of these patterns are explained by differences in preparation, achievement, and eligibility rates for various subgroups of the population, while others are a matter of curricular offerings and logistics.

These differences in clientele are important from at least two perspectives. Insofar as they represent a legacy of unequal access based on ethnicity and socio-economic status, they are a problem to be solved. Insofar as they reflect differences in the intended roles and missions of the segments in terms of age and part-timeness, they gauge the relative importance for each of the segments of the demographic changes to come.

SEVEN

ESTIMATES OF ENROLLMENT POTENTIAL FROM THE COMMISSION'S ENROLLMENT SIMULATION MODEL

One important part of the Commission's work on its "Prospectus" project is a look ahead at the future ebb and flow of students within the state's colleges and universities. As earlier chapters in this report have demonstrated, however, predicting the future activities of even the most stable element of California's population is an inherently complex task. As such, estimating future enrollment patterns for the various components of the population and for the various segments would appear, at least at first glance, to be a particularly difficult undertaking.

Three relatively recent State-level developments have, however, served to make this task more manageable.

- First, the recent series of lean budget years experienced by California's state government (and its public postsecondary education institutions) has increased the awareness of state-level and segmental officials of the need for improved long-range planning and, in particular, more comprehensive future enrollment estimates. This awareness has led to an increased willingness to support additional research into the characteristics and expected activities of future generations of California students.

- Second, this heightened interest in long-range planning has come at an opportune time for population and enrollment planning, as it has coincided with the recent release of new population information by the federal Bureau of the Census. This information, developed as a byproduct of the 1980 Census, provides a wealth of current, comprehensive, reliable, inexpensive, and readily-accessible data describing both the nation's and California's overall population and numerous population subsets. These data provide the base from which an examination of California's current and future adult populations may be undertaken. Further, they are capable of supporting extrapolations of present enrollment patterns and activities into the future.

- Third and finally, the current availability of large-scale computing equipment and persons knowledgeable in its use has made the job of enrollment estimating substantially easier -- if not more accurate -- than in the past. The sheer magnitude of the effort required to manually acquire, maintain, manipulate, and report upon various population elements has, in the past, proved the undoing of many a well-intended project. Today, computational tasks that would not have been feasible in the past are practical, thereby improving the ability of demographers to describe population characteristics, widening the scope of their investigations, and broadening the data base for further analyses.

These three developments place the State and the Commission in a much better position to undertake population and enrollment studies than at any time in the past.

DEVELOPMENT OF THE COMMISSION'S ENROLLMENT SIMULATION MODEL

The Commission's initial effort in the development of its Enrollment Simulation Model -- a model capable of developing future statewide enrollment estimates as a function of changes in educational policy and population demographics -- was to inventory the work performed by others in the field and to capitalize upon the population projection activities of the Population Research Unit of the Department of Finance.

The Population Research Unit is statutorily charged to prepare a variety of population estimates on an annual basis. It recently issued official population estimates for California through the year 2020, based on county-by-county analyses, with each county's projection being differentiated by gender and by single year of age (e.g., the number of 18-year old men and women).

The Commission's Enrollment Simulation Model uses these county-by-county projections as the basis for its estimates. As such, it does not depart from the Population Research Unit's countywide population gender and age figures. Within these projections, the model tests alternate assumptions as to ethnic composition of county populations as well as assumptions regarding postsecondary participation in order to estimate future segmental enrollment potential. It does so via a three-step process.

Step One: Baseline Projections of the Ethnicity of Future California Populations

Because the Population Research Unit's population estimates through the year 2020 are not differentiated by ethnicity, to estimate the future ethnic composition of the California population, the Commission's Enrollment Simulation Model employs a file prepared by the Bureau of the Census containing ethnic profiles for California's counties in 1980. The Bureau's file includes 23 different ethnic classifications, but as illustrated in Appendix A, the Commission's Enrollment Estimating Model collapses the 23 into these seven categories:

1. American Indian
2. Asian and Pacific Islander
3. Black
4. Filipino
5. Hispanic
6. White
7. Other and Unknown

With the Bureau's ethnic information consolidated into these seven categories for each county, the Enrollment Estimating Model applies these data to the county population estimates developed by the Population Research Unit. The end product is a single file containing baseline population estimates for each year through the year 2000, with each year's figures being differentiated by county, gender, age, and seven categories of ethnicity.

Step Two: Estimating Historical Student Participation Rates

Beginning in 1976, the Commission has annually received a data file from the three public segments describing each year's fall enrollments. Every record contained in these files represents a single student enrolled in the fall term, and each record contains thirteen demographic elements; such as the student's age, sex, ethnicity, major field of study, credit load, county of origin, student level (such as freshman or sophomore) and institution where enrolled.

The Enrollment Simulation Model employs these 1976-1983 enrollment files to compute the relative distributions of students enrolled within each segment by county of origin, gender, age, ethnicity, and student level.

When considered collectively, these enrollment "histories" describe the proportion that each fall's class represents of the same year's population. For example, they indicate the number of 20-year-old Asian women who graduated from high schools in Orange County and were enrolled as undergraduates in the State University in fall 1980. When used in conjunction with population statistics for the same year, these figures are used to compute student participation rates as a function of segment, county, gender, age, ethnicity, and student level.

Step Three: Simulating Future Student Participation Rates and Enrollment Potentials

This step in the Enrollment Simulation Model's activities employs the information files prepared separately in Steps One and Two to determine future segmental participation rates.

In Step One, as noted above, the model develops future county population estimates for each year through the year 2000, with each year's figures being differentiated by county, gender, age, and ethnicity.

In Step Two, the model creates a file containing historical student participation rates as a function of segment, county, gender, age, ethnicity and student level.

In this third step, the two files are in effect merged to develop future enrollment potentials through the year 2000. To compute these figures, the model operates in a step-wise procedure wherein it:

1. accesses a single cell in the population estimates file (gender, age, ethnicity, county, and year) generated by Step One;

2. accesses the corresponding single cell in the participation rates file (gender, age, ethnicity, county of origin, segment, and year) generated by Step Two; and

3. multiplies the two together to obtain a baseline estimate of the number of persons from that cell who will enroll in a California college or university in any future year through 2000.

For example, to compute one enrollment element for Alamada county in 1988, the model first estimates the number of 20-year-old Hispanic males who are projected to reside in Alameda county in 1988. With this population estimate in hand, it next determines the percentage of 20-year-old Hispanic males who have historically enrolled as undergraduates in the University of California after graduating from a high school in Alameda county. It then multiplies the two figures together. The resulting product reflects the model's baseline estimate of the number of 20-year-old Hispanic males from Alameda county expected to enroll as undergraduates in the University of California in 1988.

Next, the model locates the historical undergraduate participation rate for 20-year-old Hispanic males attending the California State University after graduating from a high school in Alameda county. It uses this percentage to compute an enrollment potential for that segment.

In similar fashion, the model steps through each segment, age group, ethnic category, and student level before proceeding to the next county (Amador) for 1988. Upon completion of a single year's enrollment estimates, it proceeds to the next year -- in this instance, 1989 -- and begins anew.

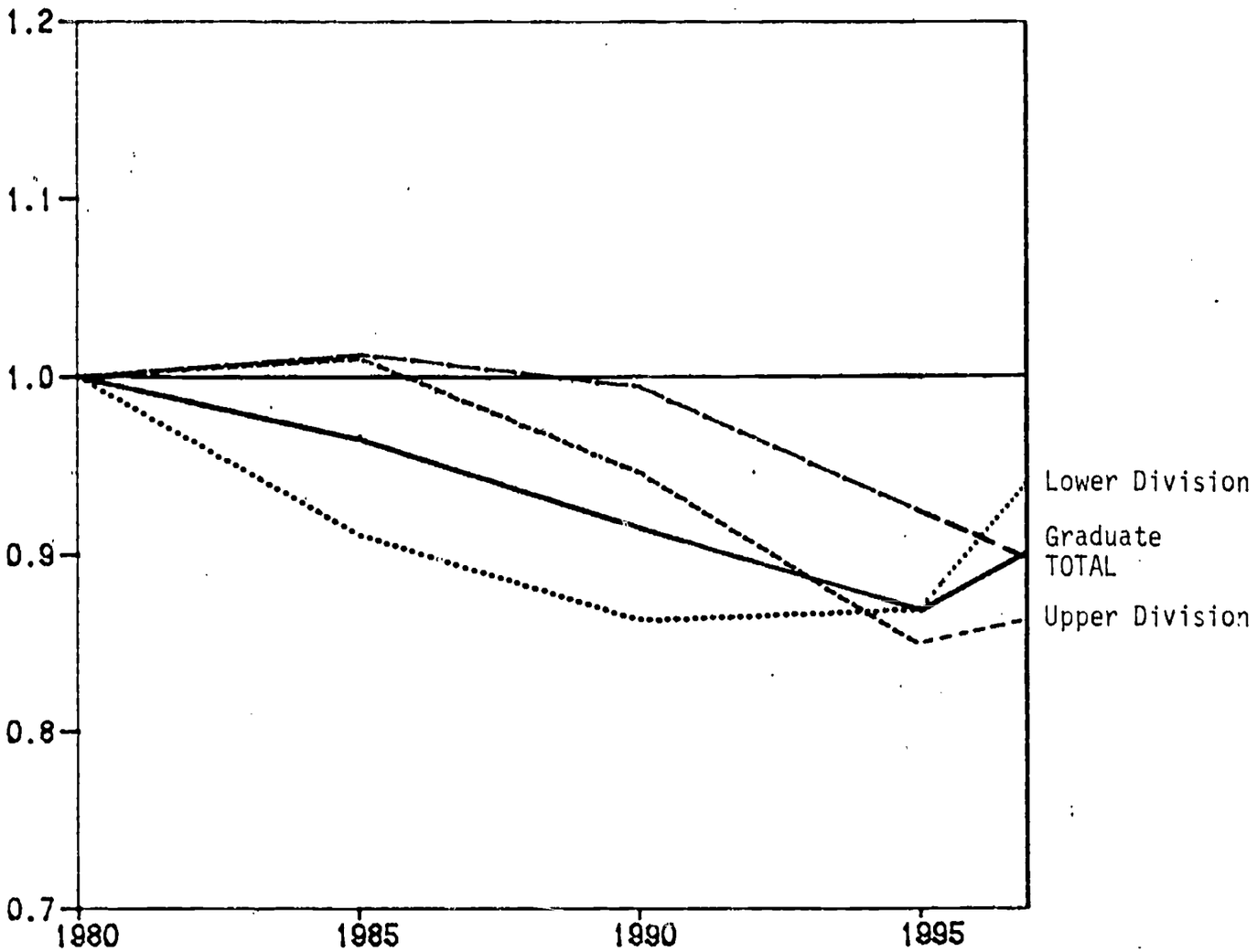
THE BASELINE SIMULATIONS

The intital runs conducted with the model are baseline simulations of enrollment potential using the average of 1979, 1980, and 1981 participation rates for residents of each of California's counties, for each of the public segments, each age cohort, each racial/ethnic group, both genders, at each level (lower, upper, graduate), and full-time and part-time credit load. In these runs, assumptions about change are minimized. Subsequent runs will build on this baseline to test other assumptions about population variables and participation variables.

These initial runs should be regarded as the point of departure for a range of estimates. The products of this run are not estimates of enrollments but rather simulations of enrollment potentials. Actual headcount and full-time equivalent enrollment estimates are the product of further factors not included in this baseline. Figure 20 on page 77, showing enrollment potentials for the University through 1997, illustrates this distinction. While the baseline enrollment potential for the lower division (based on 1979-1981 average participation rates) declines from the base year of 1980 to 1985, the actual lower-division enrollment for Fall 1984 (the most recent year) was higher than the lower-division enrollment of Fall 1980. This difference between actual enrollment and enrollment potential reflects the change in college-going rates of the University of California from 1980 to 1983, discussed on pages 56-57 and shown in Table 23 on page 5[illegible]. Subsequent runs will adjust the lower-division participation rate for the University of California based on 1983 enrollment.

Beyond this, Figure 20 shows that all else being equal, shifts in the population will cause the University's lower-division enrollment potential to decline through the year 1990. The upper-division enrollment potential

FIGURE 20 Baseline Estimate of University of California Enrollment Potential, 1980 to 1997, Indexed to 1980



Headcount Enrollment	1980	1985	1990	1995	1997
Total	1.000	0.965	0.915	0.868	0.901
Part-Time	1.000	0.972	0.927	0.905	0.944
Full-Time	1.000	0.964	0.914	0.864	0.897
Lower Division	1.000	0.911	0.863	0.869	0.939
Upper Division	1.000	1.010	0.946	0.848	0.859
Undergraduate	1.000	0.957	0.902	0.859	0.902
Graduate	1.000	1.021	0.994	0.924	0.895
Male	1.000	0.977	0.924	0.873	0.902
Female	1.000	0.953	0.905	0.863	0.899

Source: California Postsecondary Education Commission Enrollment Simulation Model.

would follow five years later and continue to decline until 1995. Both potentials recover between 1995 and 1997. A corresponding decline in graduate enrollment potential (but probably not in graduate enrollments) would follow still later.

Figure 21 on page 79 shows enrollment potentials for the California State University through 1997. It illustrates a lag between lower-division and upper-division enrollment potential in both near-term decline and long-term recovery. It also shows that graduate enrollment potential, driven by the growth in the older population may increase to 1990 and not decline below the 1980 level for the rest of this century.

Figure 22 on page 80 shows total, full-time, and part-time enrollment potentials for the California Community Colleges through 1997. Here again, recent experience illustrates the distinction between these estimates of enrollment potentials and actual enrollments. The two-year decline in total headcount from Fall 1982 to Fall 1984 is not accounted for by this baseline simulation. The demographics of the State suggest a slight decline in full-time enrollment potential at the Community Colleges with a dramatic recovery in the last half decade of this century. At the same time, part-time enrollment potential (dominating the total enrollment potential) may increase constantly to the end of the century.

These initial runs are presented to suggest future lines of inquiry such as the distribution of educational services among age cohorts and racial/ethnic groups, and education's influence on the work force and society in general. These lines of inquiry will be pursued in the final report of the Prospectus project.

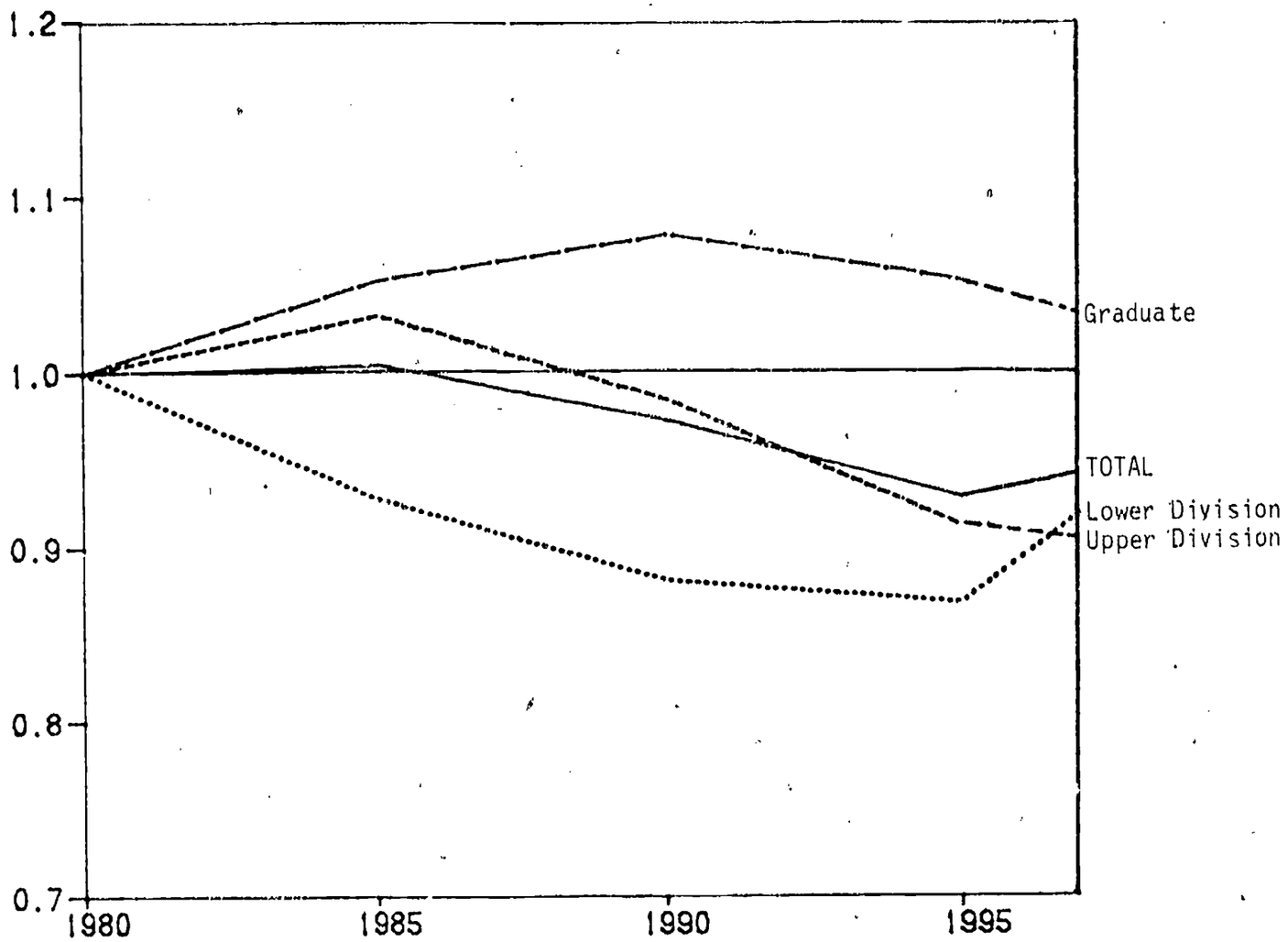
FUTURE DEVELOPMENTS FOR THE ENROLLMENT SIMULATION MODEL

The Enrollment Simulation Model's set of baseline estimates of enrollment potential from 1985 through 2000, although compiled with the best available information, remain quite crude. They assume the status quo for participation rates and only roughly take account of migration's effect on the racial/ethnic mix of the population.

The Enrollment Simulation Model, at this writing, is thus still in its infancy, and refinements will be made in it. Specifically, it will be modified over the next few months to:

1. Improve the Application of Historical Segmental Participation Rates: The model computes historical segmental participation rates based upon an eight year Fall enrollment history. Currently, the segmental participation rates that it employs are an unweighted average of the 1979-1983 record. In the future, the model will be modified to test different historical segmental participation figures. Other alternatives include the use of weighted averages for these same five years, moving averages, and various extrapolations of trends in the record.

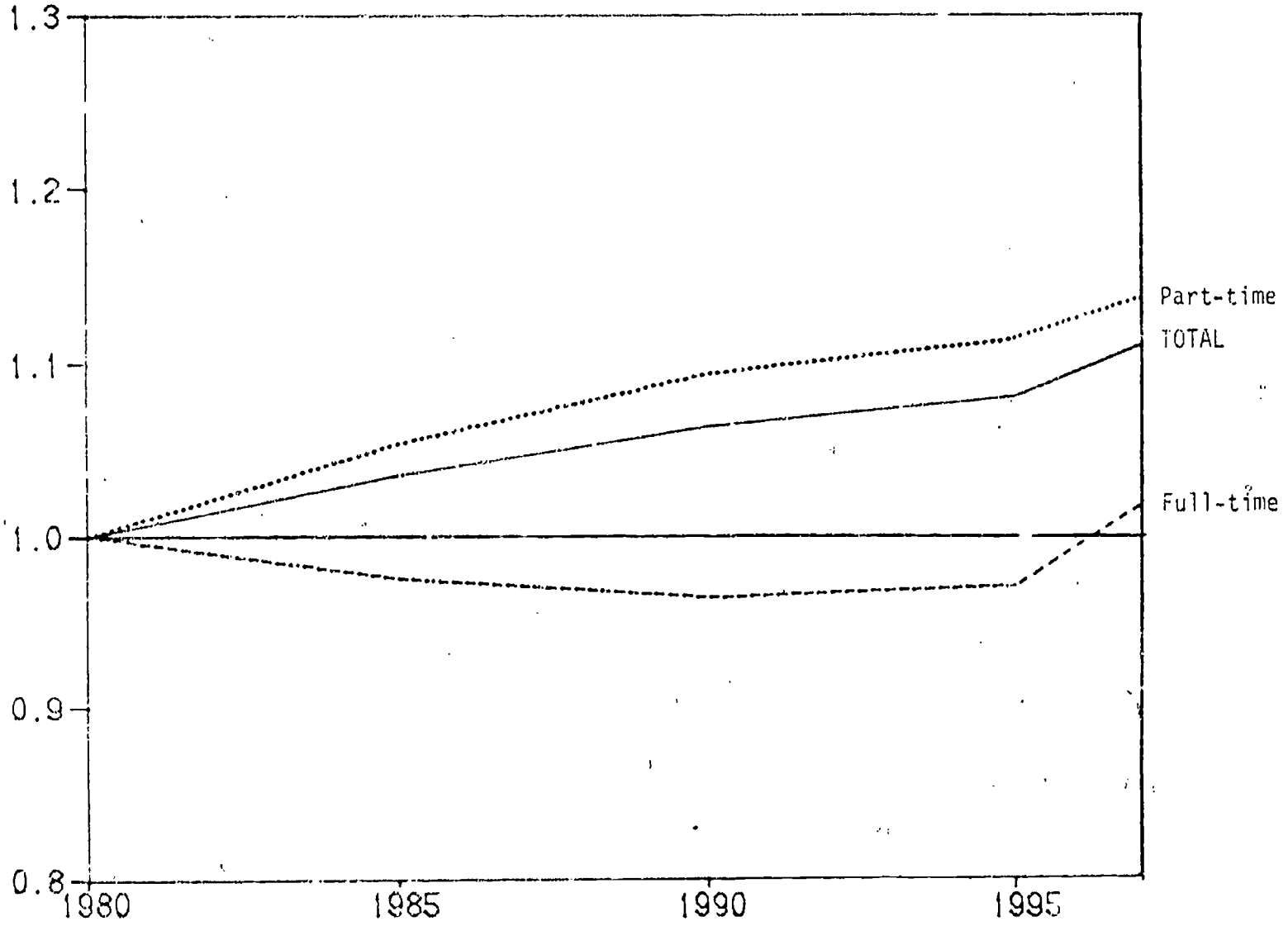
FIGURE 21 Baseline Estimate of California State University Enrollment Potential, 1980 to 1997, Indexed to 1980



Headcount Enrollment	1980	1985	1990	1995	1997
Total	1.000	1.004	0.972	0.928	0.941
Part-Time	1.000	1.041	1.044	1.011	1.005
Full-Time	1.000	0.981	0.925	0.873	0.898
Lower Division	1.000	0.928	0.881	0.868	0.922
Upper Division	1.000	1.032	0.984	0.912	0.911
Undergraduate	1.000	0.992	0.944	0.895	0.915
Graduate	1.000	1.052	1.076	1.052	1.035
Male	1.000	1.000	0.959	0.909	0.919
	1.000	1.008	0.984	0.944	0.960

Source: California Postsecondary Education Commission Enrollment Simulation Model.

FIGURE 22 Baseline Estimate of California Community Colleges Enrollment Potential, 1980 to 1997, Indexed to 1980



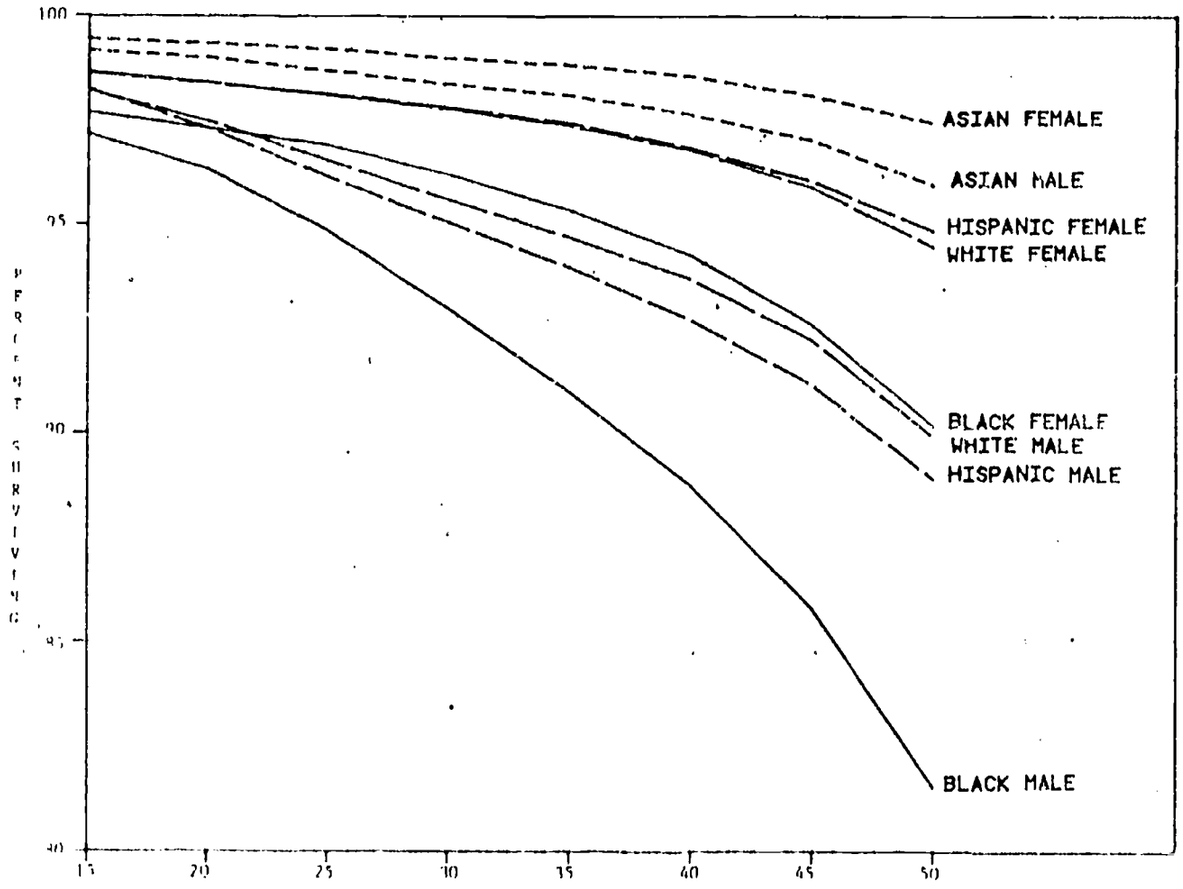
Headcount Enrollment	1980	1985	1990	1995	1997
Total	1.000	1.036	1.064	1.081	1.105
Part-Time	1.000	1.054	1.094	1.114	1.132
Full-Time	1.000	0.975	0.964	0.971	1.012
Male	1.000	1.034	1.056	1.068	1.112
Female	1.000	1.037	1.071	1.091	1.114

Source: California Postsecondary Education Commission Enrollment Simulation Model.

2. Apply Differential Migration Rates to County Population Estimates: In its present form, the model applies the ethnic distribution of Californians in 1980 to all future years. Clearly the state's demography will change from that reported in 1980, and the model's population figures should be adjusted accordingly. In future work, the model will be refined to consider the effect upon the ethnic composition of county populations and subsequent segmental enrollments of (1) in-migration to the state, (2) out-migration from the state, and (3) inter-county migration.

3. Adjust Population Composition to Account for Differential Survival: Figure 23 below shows the extent of differences in the percentage of various population subgroups surviving over the ages of interest to postsecondary education. While at age 20 the range of differences (that between Asian females and Black males) is only 3 percent, by age

FIGURE 23 Differential Survival of California Men and Women, by Racial/Ethnic Group, from Age 15 to Age 50



Source: California Center for Health Statistics, 1983, pp. 23-33.

40 the range is 10 percent, and they rapidly diverge from there. Thus the effects of differential survival on the composition of the population cannot be ignored in the enrollment simulation model.

4. Simulate Changes in Eligibility and Participation Rates as a Function of Gender and Ethnicity: The model does not currently consider that either specific high school graduation rates or subsequent postsecondary educational participation rates as a function of gender, ethnicity, or geographic origin will change over time. New data on high school progression and postsecondary eligibility will be examined and potential policy changes modeled to test their effects on enrollment potential.

CONCLUSION

This description of the Commission's new Enrollment Simulation Model is necessarily incomplete. The evolution of the model will be the most important product of its application. The refinement of the information used and the utility of the simulations run will improve over time and out of practice.

APPENDIX A

Determination of Ethnicity

The two 1980 Census Survey questions from which "ethnicity" must be inferred are Questions 4 and 7, as follows:

4. Is this person - Fill One Circle

- o White
- o Black or Negro
- o Japanese
- o Chinese
- o Filipino
- o Korean
- o Vietnamese
- o Indian (Amer.) Print Tribe _____
- o Asian Indian
- o Hawaiian
- o Guamanian
- o Samoan
- o Eskimo
- o Aleut
- o Other - Specify _____

7. Is this person of Spanish/Hispanic origin or descent? Fill One Circle

- o No (not Spanish/Hispanic)
- o Yes, Mexican, Mexican-American, Chicano
- o Yes, Puerto Rican
- o Yes, Cuban
- o Yes, other Spanish/Hispanic

The ethnic groups listed in the Commission's 1981 Information Digest are:

- o American Indian
- o Asian
- o Filipino
- o Black
- o Hispanic
- o White
- o No Response/Other

The Commission's primary concern is correspondence between responses to these two Census survey questions and responses to the student survey questions.

The way the Commission staff is maximizing correspondence in its county-by-county simulations is to look first at Census Question 4. Anyone who fills in the circle abreast of Japanese, Chinese, Korean, Vietnamese, Asian Indian, Hawaiian, Guamanian, or Samoan will be classified as "ASIAN/PACIFIC ISLANDER" and their files retired.

Of those who remain, those who fill in the circle on Question 4 abreast of Filipino will be classified a "FILIPINO" and their files retired.

Of those who remain, those who fill in on Question 4 the circle abreast of Indian (Amer.), Eskimo, or Aleut will be classified as "AMERICAN INDIAN/ALASKAN NATIVE" and their files retired.

Of those who remain, those who fill in on Question 7 any of the four circles abreast of "Yes, . . ." will be classified as "HISPANIC" and their files retired.

Of those who remain, those who fill in on Question 4 the circle abreast of Black will be classified as "BLACK" and their files retired.

Of those who remain, those who fill in on Question 4 the circle abreast of White will be classified as "WHITE" and their files retired.

The ultimate remainder (that is, "Other - Specify" plus "No, not Spanish/Hispanic") will be treated as "OTHER."

In summary:

1. Responses to Question 4 except Black, White, or Other dominate responses to Question 7 (categories: "Asian/Pacific Islander," "Filipino," and "American Indian/Alaskan Native").

2. For Black, White, and Other a "yes" response to Question 7 will classify the individual as "Hispanic."

3. For Black, White, and Other a "no" response to Question 7 will classify the individual as "Black", "White", or "Other" respectively.

APPENDIX B

Public Postsecondary Institutions In or Near the Eight Metropolitan Regions*

Region	University of California	California State University	California Community College Districts
San Francisco Bay Area	Berkeley (Santa Cruz)	San Francisco Hayward San Jose (Sonoma)	Contra Costa Foothill Fremont-Newark Gavilan Marin Peralta San Francisco San Jose San Mateo West Valley South Country
Sacramento	Davis	Sacramento	Los Rios Sierra
Fresno-Bakersfied		Fresno Bakersfield	Kern State Center West Hills West Kern
Ventura-Santa Barbara	Santa Barbara	(Northridge)	Ventura Santa Barbara
Los Angeles-Long Beach	Los Angeles	Long Beach Los Angeles Northridge Pomona Dominguez Hills	Antelope Valley Cerritos Citrus Compton El Camino Glendale Long Beach Los Angeles Mount an Antonio Pasadena Rio Hondo Santa Clarita Santa Monica
Riverside-San Bernardino	Riverside	San Bernardino	Barstow Chaffey Coachella Valley Mount San Jacinto Palo Verde Riverside San Bernardino
Orange	Irvine	Fullerton	Coast North Orange Rancho Santiago Saddleback
San Diego	San Diego	San Diego	Grossmont Mira Costa Palomar San Diego Southwestern

*Parentheses apply to four-year campuses that are within easy commuting distance of the region but that are located outside the region.

APPENDIX C

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