

FUTURE DEMOGRAPHIC CHALLENGES TO CALIFORNIA SCHOOL DISTRICTS¹

by

Peter A. Morrison
RAND

Revised: February 28, 2005

ABSTRACT

California's demographic distinctiveness imposes extraordinary demands on the state's public education system, shaping current and future statewide educational needs. First, California has within its borders 12.8 percent of the nation's school-age population but only 11.8 percent of the nation's adult population (potential taxpayers). Consequently, California taxpayers shoulder disproportionate responsibility for persons of school age. Second, ethnic and racial diversity is much more advanced among California's youth than those of most other states, especially in the public schools. One in 10 Californians is a recent immigrant, generating an abundance of "English learners" and linguistically isolated households. Both of these disparities heighten educational costs for affected school districts. English learners impose specialized and/or higher per capita staffing needs; linguistic isolation hampers two-way communication between schools and parents. Third, the continuing geographic redistribution of population within the state will amplify public school enrollment growth in particular clusters of counties. Inevitably, particular school districts will be strained by enrollment pressure, staffing needs, and crowding of existing facilities. Finally, California trails the nation and displays a worsening trend in the proportion of children living in poverty. Child poverty is costly for schools and limits educational attainment.

¹ Paper for presentation at the 2005 Population Association of America meetings, session on School Demography. Author contact: Peter A. Morrison, RAND, 863 Radcliffe Ave., Pacific Palisades, CA 90272. Voice: (310) 454-0142; e-mail: morrison@rand.org

INTRODUCTION

Among the demographic characteristics that make California distinct from other states are its ethnic diversity and abundance of English learners, the relatively young age of its population, its prevalence of child poverty, and the fact that its neediest school age population is concentrated in just a few counties. Some of these characteristics are problems in and of themselves for California's children—child poverty, for example—but they all cause secondary problems in that they isolate children linguistically, hamper their access to computers and the Internet (computer literacy is widely recognized as essential for future members of the workforce), and affect educational outcomes, such as school enrollment.

California's distinctive demographic profile is expected to continue imposing extraordinary demands on the state's public elementary and secondary education system. This paper explores the state's demographic characteristics and the challenges they pose. It is adapted from a broader study of California's public schools (Carroll et al., 2005).

HISTORICAL PERSPECTIVES

California's demographic distinctiveness derives from historical growth patterns extending back many decades. Public school enrollment mushroomed in the aftermath of the baby boom "echo," taking annual increases, which had averaged 0.9% during the early 1980s, to levels of 3.5% - 3.8% in the early 1990s.

An increasing share of these growing enrollments were the children of immigrants. In 1970, only 11% of all births in California were to mothers born outside the United States; by 1995, however, that percentage had risen to 44%, as reflected in the kindergarteners of 2001.

California has long been a destination for migrants seeking opportunities beyond their regions of birth. Newcomers to California once originated in Texas, Arkansas, and other states; but recent decades have witnessed many newcomers from Latin America, Asia, and other continents. By 1990, half of all Southeast Asian refugees who had come to America had made California their home. By 2000, two-fifths of the nation's 1.1 million Vietnamese Americans were Californians. Included in this influx are many who settled initially in other states, later wending their way to California.

Over the decades, kinship ties have reinforced and perpetuated the state's ongoing attractiveness to people from foreign origins. Future growth is likely to be continued by these firmly anchored social mechanisms.

RACIAL/ETHNIC DIVERSITY AND FLUENCY IN ENGLISH

Today, according to Census 2000, fewer than one in 20 persons in the United States is a recent immigrant (i.e., a foreign-born person who entered the United States within the past 10 years). However, nearly one in 10 persons in California is a recent immigrant. California is among the most ethnically/racially diverse states, with a “majority minority” population that is expected to increase in the future (see Figure 1).

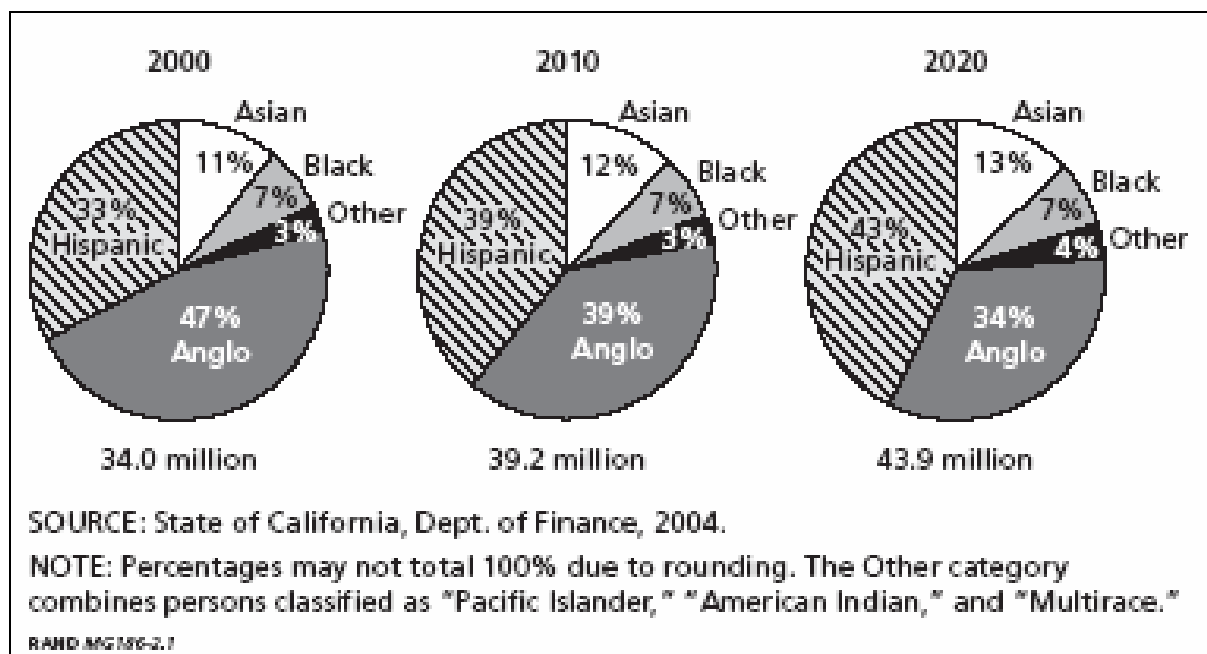


Figure 1—California’s Population by Race/Ethnicity

Ethnic/racial diversity is greater among California’s youth, especially in the public schools, than among the general population. On a statewide basis, K–12 public school enrollments in 2002–2003 were 45 percent Hispanic, 34 percent Anglo (non-Hispanic white), 11 percent Asian, 8 percent black, and 2 percent others (see Figure 2).² Fifteen years earlier (1986–87), the corresponding percentages were 30% Hispanic, 50% Anglo, 11% Asian and others, and 9% black.

² The classifications shown in Fig. 2 (and notes thereto) are the only racial/ethnic classifications available; the state does not publish more-detailed data for enrollments. Data for these classifications are available since 1986–87. Prior to then, the available data only distinguish “white or black” or “white or non-white,” depending on the year.

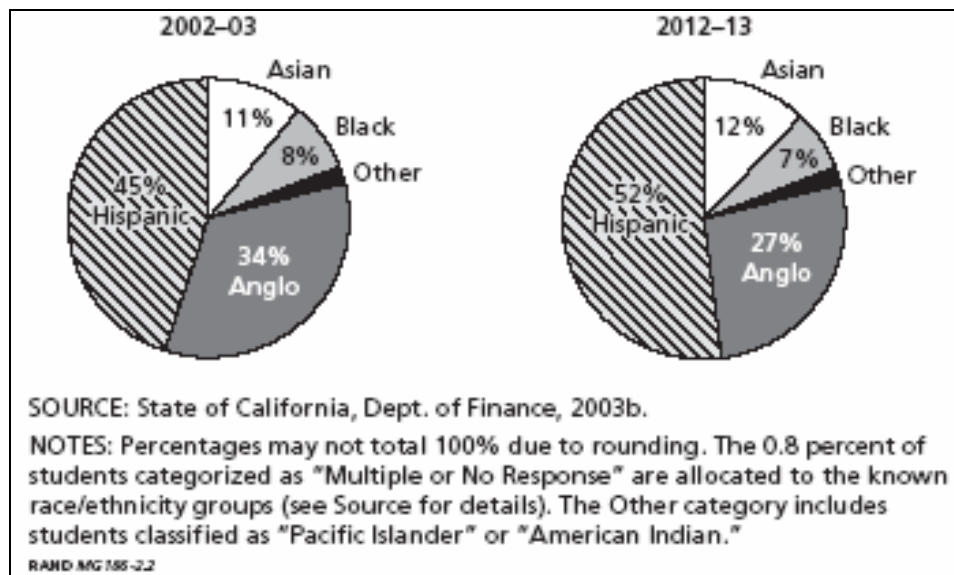


Figure 2—Student Population Enrolled in California Public Schools by Race/Ethnicity

By 2012–13, the majority of students in California’s public schools will be Hispanic according to official state projections. Figure 3 shows the numerical shift for the two most numerous groups—Hispanics and Anglos.

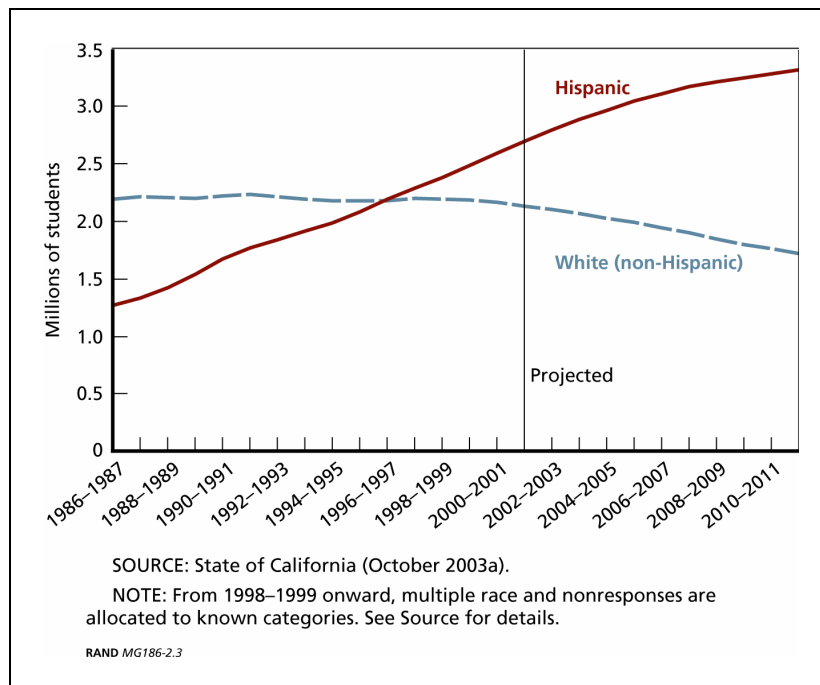
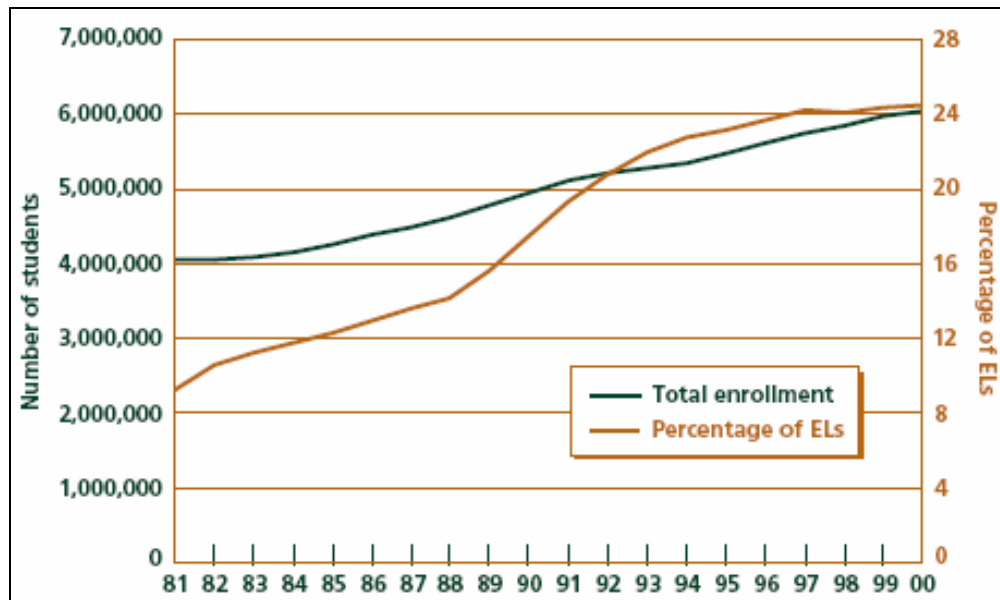


Figure 3—California K–12 Public School Enrollment, 2003 Series

Blurring these group distinctions are the growing numbers of California children classified as multiracial on Census 2000. They now exceed 7 percent of all California children, well above the 4 percent at the national level.



Source: Tafoya (2002), Figure 1.

Figure 4—California K-12 Enrollment and Percentage of English Learners

An important correlate of California’s ethnic diversity is that some of the population is in the process of learning English or becoming more fluent. As an immigrant “entry port,” California has an abundance of English learners and linguistically isolated households.³

English learners are defined as students who lack the English language proficiency to succeed in a school’s regular instructional programs. Of the nation’s 3.4 million students identified as English learners, 41 percent reside in California (Tafoya, 2002). English learners accounted for nearly 25% of California’s public school students in 2000 (see Figure 4).

More generally, California ranks nationally as the state with the highest percentage of children with limited English fluency. Fully 5.8 percent of all California children ages 5–17 have difficulty speaking English vs. 2.5 percent nationally.⁴ Within this age group, 13.4 percent are linguistically isolated (vs. 5.1 percent nationally). Both these disparities heighten educational costs for affected school districts: English learners impose specialized and/or higher per capita staffing needs, and linguistic isolation hampers two-way communication between schools and parents.

³ Children ages 5-17 are classified as being linguistically isolated if they reside in a household in which no one age 14 and over speaks English “very well.”

⁴ “Difficulty” is defined as speaking English “less than very well” on Census 2000.

AGE COMPOSITION

The age structure of California's population differs from that of the national population: The share of the population that is under age 18 is 27.3% for California and only 25.7% for the nation. Consequently, California has within its borders 12.8 percent of the nation's school-age population but only 11.8 percent of the nation's adult population—which means that the number of potential taxpayers (i.e., adults) in California available to shoulder the financial responsibility for persons of school age is relatively small. Put another way, California's youth-to-adult dependency ratio is 9 percent higher than that of the nation as a whole.⁵

CHILD POVERTY

About one of every five California children lives in poverty, i.e., in a family whose income is below federally established poverty thresholds (which vary according to a family's size and the ages of its members). For California children in single-mother families, the proportion living in poverty is 39.7%, which is marginally lower than the corresponding 40.6% for the nation (see Table 1). For those living in married-couple families (by far the most common type), the proportion of children living in poverty is noticeably higher for California than for the nation—12.9 percent compared with 8.4 percent. Overall, California's poor children are just as numerous in married-couple families as in single-parent families.

Table 1.
Number and Percentage of Related Children Under Age 18 in Poverty in 2000,
by Family Type, California and the United States

Family Type	California		United States	
	Number in poverty	Percent of all children	Number in poverty	Percent of all children
Related children under 18	1,705,797	19.0	11,386,031	16.1
In married-couple families	844,893	12.9	4,255,820	8.4
In single-mother families	711,818	39.7	6,281,647	40.6
In single-father families	149,046	23.9	848,564	20.8

SOURCE: Census 2000.

NOTE: "Related children" are all household members, regardless of marital status, who are related to householder; householder's spouse and foster children are excluded.

California trails the nation and displays a worsening trend on two key indicators of child poverty: the percentage of children living below the poverty line (19.5 percent in 2000)

⁵ The youth-to-adult dependency ratio compares the number of persons in the population under age 18 to the number 18 and older. In 2000, this ratio was 0.376 for California and 0.346 for the United States.

and the percentage of children living in high-poverty neighborhoods (29.6 percent in 2000)—see Figure 5. Each California percentage is higher than the corresponding national level and has risen since 1990, contrary to the national trend.

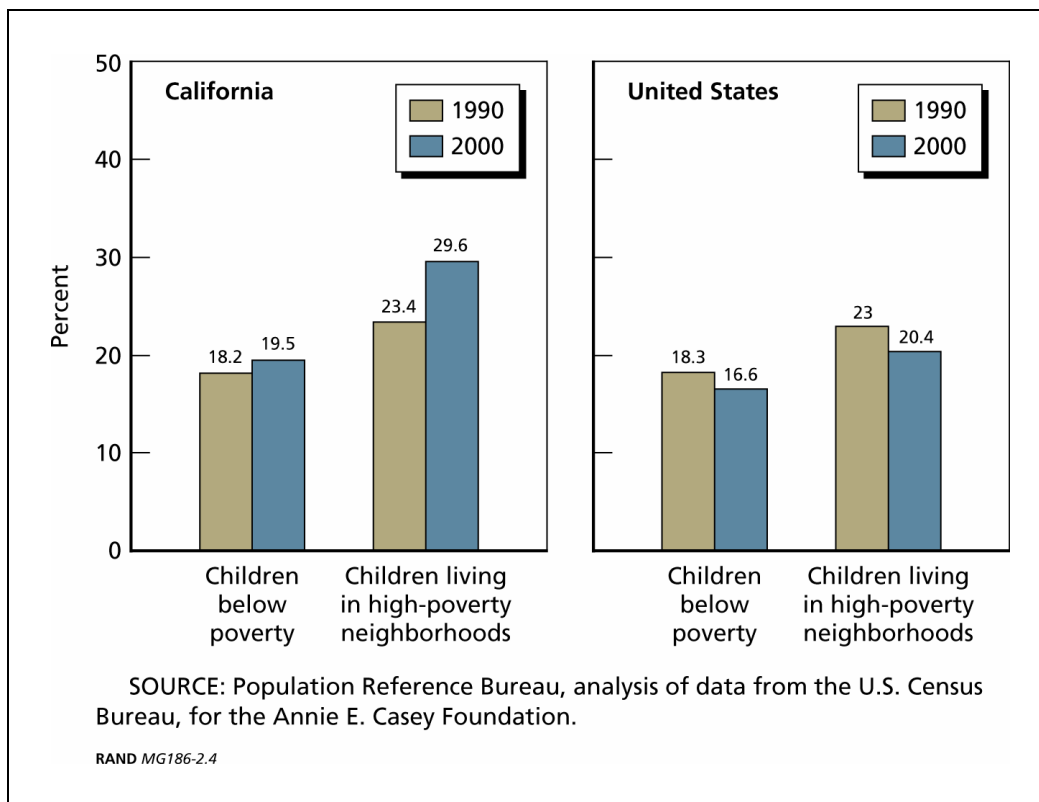


Figure 5—Selected Key Indicators of Child Well Being, California and the United States, 1990–2000

The evidence showing that child poverty limits educational attainment is abundant.⁶ The indirect public costs of child poverty (to schools, health clinics, etc.) are tied to the uneven prevalence of children in poverty across the state. Child poverty is most prevalent in a handful of Central Valley counties (Tulare, Fresno, Madera, and Merced), and the levels of child poverty in Tulare and Fresno counties puts them among the poorest tenth of the nation's 3,142 counties.

GEOGRAPHIC REDISTRIBUTION

As California's population grows, its continuing redistribution will amplify public school enrollment growth in particular clusters of counties—for example, the Central Valley and the counties surrounding Los Angeles County will experience particularly high

⁶ For a review of evidence, see U.S. Department of Education, National Center for Education Statistics, 2003.

enrollment growth (see Figure 6 and Table 2).⁷ Inevitably, particular school districts in California's most rapidly growing regions, highlighted in Figure 6, will be strained by enrollment pressure, staffing needs, and the crowding of existing facilities.

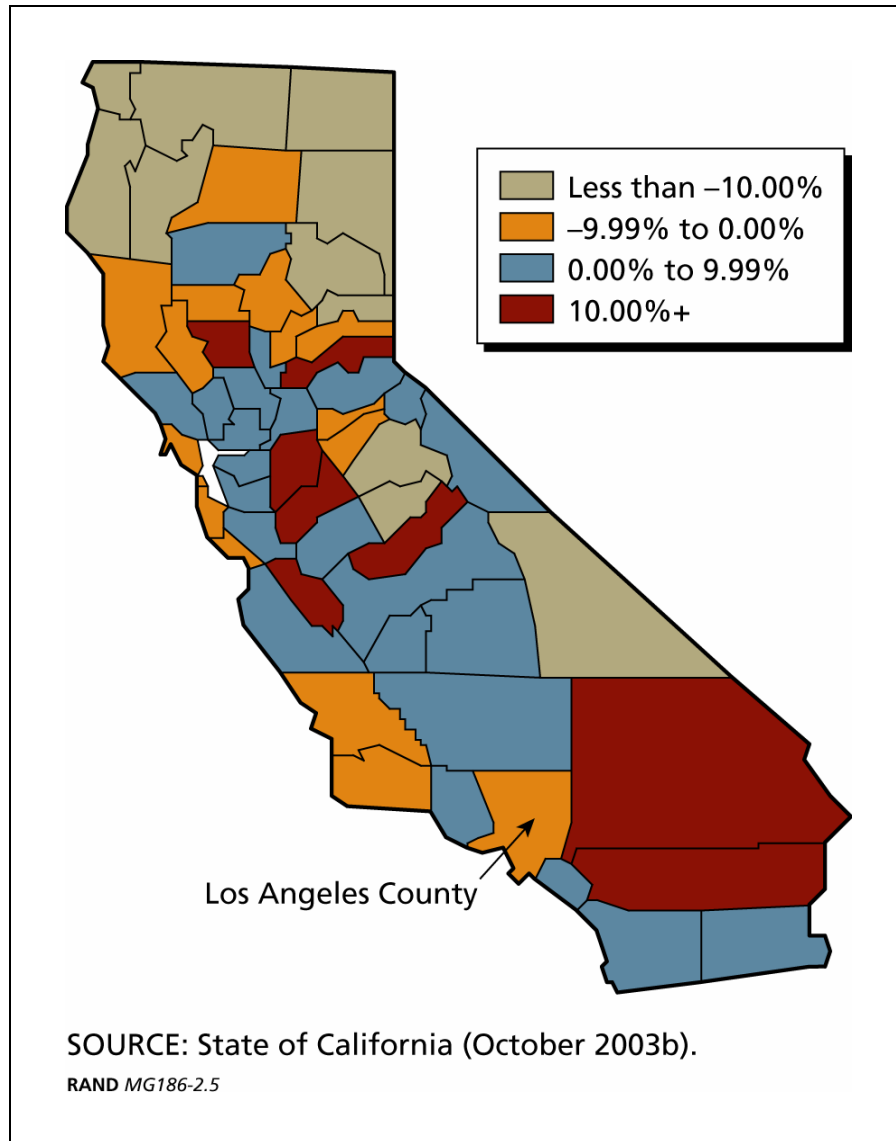


Figure 5—Percent Change in K–12 Enrollment by County, 2002–2012

⁷ The county-level enrollment projections shown in Figure 6 and Table 2 were prepared using a cohort survival projection technique, with grade progression ratios representing the proportion of students expected to progress from one grade to the next. The most likely progression model is chosen based on an analysis of historical trends, knowledge of each county's migration trends and demographic characteristics (including the most recent population estimates), and survey results from selected school districts. For further details on methodology, see Source noted on Table 2.

Table 2.
Projected California Public K–12 Enrollment, by County and School Year

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-2011	2011-2012	2012-2013
Alameda	217,839	218,681	220,290	221,602	222,206	222,264	222,436	222,874	223,575	224,515
Alpine	141	147	143	146	148	154	155	158	164	161
Amador	4,906	4,881	4,835	4,834	4,752	4,715	4,696	4,646	4,615	4,633
Butte	33,709	33,323	32,924	32,606	32,216	31,789	31,421	31,097	30,871	30,652
Calaveras	6,821	6,767	6,712	6,619	6,580	6,464	6,421	6,408	6,414	6,449
Colusa	4,402	4,458	4,521	4,594	4,604	4,666	4,716	4,767	4,828	4,876
Contra Costa	162,778	164,684	167,133	169,175	170,722	171,415	172,336	173,333	174,453	175,749
Del Norte	4,817	4,704	4,593	4,459	4,357	4,216	4,108	4,013	3,946	3,875
El Dorado	29,064	29,016	28,966	28,903	28,894	28,842	28,773	28,911	29,218	29,485
Fresno	188,053	189,014	190,024	190,895	192,056	192,738	193,205	194,031	194,986	196,280
Glenn	5,955	5,831	5,738	5,678	5,632	5,586	5,576	5,578	5,604	5,672
Humboldt	20,201	19,870	19,480	19,251	18,930	18,601	18,286	18,024	17,830	17,572
Imperial	34,537	34,768	35,004	35,136	35,200	35,244	35,434	35,650	36,008	36,397
Inyo	3,330	3,267	3,183	3,134	3,034	2,950	2,883	2,815	2,787	2,729
Kern	155,777	157,536	159,536	160,853	162,087	162,864	163,575	164,525	165,715	167,273
Kings	26,172	26,375	26,634	26,770	27,066	27,226	27,300	27,384	27,509	27,699
Lake	10,377	10,265	10,241	10,218	10,177	10,159	10,196	10,267	10,381	10,511
Lassen	6,854	6,800	6,663	6,492	6,424	6,342	6,243	6,176	6,125	6,037
Los Angeles	1,717,596	1,730,719	1,738,157	1,732,446	1,721,904	1,702,746	1,681,020	1,661,332	1,638,242	1,615,011
Madera	27,020	27,529	28,049	28,597	29,002	29,390	29,810	30,255	30,757	31,215
Marin	28,279	28,162	28,198	28,134	27,984	27,734	27,604	27,462	27,431	27,521
Mariposa	2,551	2,502	2,460	2,435	2,388	2,320	2,276	2,252	2,232	2,238
Mendocino	14,656	14,500	14,390	14,277	14,160	14,003	13,946	13,923	13,953	13,999
Merced	54,019	54,590	55,261	55,721	56,182	56,150	56,236	56,407	56,582	56,837
Modoc	2,270	2,233	2,199	2,141	2,070	2,008	1,929	1,853	1,784	1,722
Mono	2,279	2,253	2,249	2,262	2,277	2,268	2,279	2,311	2,346	2,385
Monterey	73,753	74,144	74,632	75,115	75,577	75,868	76,251	76,979	77,687	78,958
Napa	19,669	19,716	19,810	19,937	20,017	20,082	20,141	20,173	20,211	20,341
Nevada	14,176	14,091	14,177	14,282	14,363	14,403	14,424	14,481	14,606	14,744
Orange	518,738	527,172	534,669	538,040	539,544	537,944	535,493	532,548	528,954	525,593
Placer	62,315	64,474	66,719	68,825	71,074	73,057	75,017	76,994	78,820	80,641
Plumas	3,093	3,022	2,963	2,898	2,866	2,837	2,802	2,774	2,765	2,771
Riverside	358,168	370,135	382,181	391,757	401,690	409,618	417,285	424,684	431,038	436,898
Sacramento	236,027	240,297	244,329	247,908	251,029	253,787	255,937	257,861	259,680	261,894
San Benito	12,086	12,511	12,805	13,203	13,523	13,790	14,065	14,326	14,584	14,858
San Bernardino	412,338	419,639	425,395	430,866	435,850	439,609	443,333	447,312	451,475	455,678
San Diego	500,818	504,147	507,179	508,662	508,900	507,600	506,714	505,788	505,198	505,168
San Francisco	58,905	58,248	57,782	56,982	56,309	55,604	54,870	54,031	53,309	52,562
San Joaquin	128,833	131,342	134,255	136,407	138,633	140,417	142,245	144,418	146,558	149,031
San Luis Obis	36,137	35,861	35,702	35,417	35,028	34,510	34,091	33,867	33,822	33,742
San Mateo	89,123	88,953	88,908	88,517	88,006	87,312	86,660	86,366	86,322	86,601
Santa Barbara	67,410	67,551	67,745	67,600	67,455	66,920	66,412	66,174	66,025	66,042
Santa Clara	248,896	249,570	251,348	252,131	252,622	252,262	251,990	251,502	251,279	251,377
Santa Cruz	39,040	38,708	38,488	38,273	37,883	37,551	37,250	37,070	37,125	37,305
Shasta	29,799	29,432	29,090	28,820	28,518	28,180	28,043	27,978	27,942	27,944
Sierra	674	612	589	541	553	554	563	576	594	613
Siskiyou	6,694	6,568	6,340	6,153	6,021	5,877	5,763	5,678	5,595	5,576
Solano	72,671	72,545	72,802	72,899	72,737	72,564	72,395	72,410	72,641	73,089
Sonoma	72,597	72,342	72,270	72,282	71,952	71,661	71,548	71,681	72,029	72,555
Stanislaus	104,669	106,538	108,177	109,816	111,656	113,076	114,307	115,626	116,917	118,002
Sutter	16,749	16,895	17,006	17,183	17,342	17,446	17,551	17,654	17,804	17,997
Tehama	11,025	11,039	11,150	11,122	11,140	11,085	11,085	11,096	11,073	11,091
Trinity	2,064	1,997	1,955	1,923	1,887	1,817	1,797	1,761	1,728	1,701
Tulare	88,589	89,313	90,482	91,699	92,746	93,477	94,242	95,151	96,120	97,318
Tuolumne	7,567	7,513	7,464	7,399	7,307	7,224	7,136	7,100	7,063	7,023
Ventura	144,983	146,552	148,021	148,961	149,419	149,078	148,911	148,842	148,827	149,235
Yolo	29,673	29,975	30,269	30,558	30,842	31,050	31,281	31,576	31,843	32,120
Yuba	14,511	14,512	14,553	14,544	14,577	14,593	14,648	14,651	14,682	14,648
California	6,246,193	6,308,289	6,366,838	6,398,098	6,418,118	6,413,707	6,407,110	6,405,580	6,402,672	6,404,609

SOURCE: State of California, Department of Finance, 2003a.

NOTE: Projections include California Youth Authority and state special schools.

The geographic redistribution of the population is important in another way, as well: Recent immigrants, English learners, and poor families are overly concentrated in certain California counties, adding to the strain on these counties to provide appropriate services. The extent of local variation across the state is apparent in comparisons of the state's 58 counties, 53 congressional districts, dozens of metropolitan areas, and hundreds of incorporated cities on specific indicators of educational outcomes or socio-demographic burdens.⁸ The percentage of children with limited English fluency exceeds 20 percent in four counties (Imperial, Monterey, Los Angeles, and Merced). And it exceeds 35 percent in three congressional districts—31 and 34 (both of which are in Los Angeles County) and 47 (in Orange County), making these three districts the highest nationwide.

SCHOOL ENROLLMENT

The universality of school enrollment among school-age children is one measure of child well-being. Proportionally fewer 3–4 year olds are enrolled in school in California (45.8 percent) than are enrolled nationwide (49.3 percent). Among 5–14 year olds, California compares closely with the nation; and among 15–17 year olds, California boasts a slightly higher percentage than the nation as a whole (see Table 3).

Table 3.
School Enrollment in 2000 for Children Ages 3–17,
California and the United States

Children's Age	Percent Enrolled in School	
	California	United States
3–17	90.3	90.8
3–4	45.8	49.3
5–9	96.0	95.9
10–14	98.7	98.9
15–17	95.3	94.9

SOURCE: Census 2000.

CONCLUSIONS

The educational challenges posed by the demographics of California for school-age children are not altogether different from those found among their counterparts elsewhere in the nation. Extremes within the state, though, are remarkable. Particular subgroups of children (e.g., Hispanics; recent immigrants; children in particular family types, such as single-parent families), and children in certain locales (e.g., California's Central Valley, Imperial County, metropolitan Los Angeles) are far more disadvantaged than their counterparts statewide and nationally. There are wide variations as well across

⁸ An extensive set of geographic rankings is accessible at the Annie Casey Foundation's Kids Count website: <http://www.aecf.org/kidscount/census/>.

California's 53 congressional districts, reflecting constituencies for addressing specific needs or shortcomings. Several distinctive features of California's demographic profile will shape the state's future educational needs:

- *The relative youth of the population.* California has within its borders 12.8 percent of the nation's school-age population but only 11.8 percent of the nation's adult population of potential taxpayers, so the state will shoulder disproportionate responsibility for persons of school age.
- *Ethnic diversity and an abundance of English learners and linguistically isolated households.* On a statewide basis, K–12 graded public school enrollments in 2002-2003 were 45 percent Hispanic, 34 percent Anglo (non-Hispanic white), 13 percent Asian and other (mostly Filipino), and 8 percent black. By 2012–13, the majority of students in California's public schools will be Hispanic according to official state projections. Many California children ages 5–17 have difficulty speaking English, and many are linguistically isolated. Both these disparities heighten educational costs for affected school districts: English learners by imposing specialized and/or higher per capita staffing needs; linguistic isolation by hampering two-way communication between schools and parents.
- *The continuing geographic redistribution of the population.* Public school enrollment will grow the most in particular clusters of counties, notably within the Central Valley and surrounding the Los Angeles basin. Inevitably, particular school districts will be strained by enrollment pressure, staffing needs, and the crowding of existing facilities.

REFERENCES

- Annie Casey Foundation's Kids Count website, <http://www.aecf.org/kidscount/census/>
- Carroll, S. J., C. Krop, J. Arkes, P. A. Morrison, A. Flanagan. 2005. *California's K-12 Public Schools: How Are They Doing?* MG-186-EDU. Santa Monica, CA: RAND.
- State of California, Department of Finance, "California Public K-12 Enrollment and High School Graduate Projections by County, 2003 Series," Sacramento, CA, October 2003(a).
- State of California, Department of Finance, "California Public K-12 Enrollment Projections by Ethnicity, 2003 Series," Sacramento, CA, October 2003(b).
- State of California, Department of Finance, "Population Projections by Race/Ethnicity, Gender and Age for California and its Counties 2000-2050," Sacramento, CA, May 2004.
- Tafoya, Sonya M., "The Linguistic Landscape of California Schools," *California Counts* 3 (4), issued by the Public Policy Institute of California, February 2002.
- U. S. Department of Education, National Center for Education Statistics, *The Condition of Education 2003*, 2003 (available at <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2003067>, accessed January 2, 2004.