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What Explains Crowding in California?

California Research Bureau

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C F O R N I A R E S E A R C H B U R E A U

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Executive Summary

Crowding (defined as more than one person per room) has been rising in California. The average household size (number of persons in the household) has increased as well. A number of observers believe that this increase in household size reflects a rise in crowding in response to the lack of affordable housing. Concerns about whether new building construction was enough for the increased demand posed by California's growing population, emerged with the housing market conditions of the late 1990s. Annual housing production in the 1990s fell well below that of the 1980s, and lagged the growth in new jobs and households, while housing prices have increased significantly.

This study looked at the determinants of crowding in California by examining demographic factors and measures of housing availability. Trends in crowding are discussed for California as a whole as well as some specific geographic areas. Using 1990 Census data, we measured the relationships between a household's characteristics and its probability of being crowded. We examined the following household characteristics: age, sex, marital status, income, education, race and ethnicity, nativity of the householder, house's tenure (whether the house is rented or owned), and region. Using these probabilities and more recent annual data on the determinants of crowding, we estimated crowding rates for the 1994-2000 period. We also examined the correlation between housing affordability, vacancy rates, and changes in household size.

Contrary to the general belief that crowding is mostly determined by housing market conditions, we found that demographic variables, particularly nativity (whether or not a person is born in the United States), were the most significant factors explaining crowding. Households headed by immigrants are much more likely to be crowded than households headed by U.S. natives. For example, households headed by foreign-born Hispanics were 26 times more likely to be crowded than those headed by native-born Whites. Other significant factors were the sex, marital status, and age of the householder, and the region and the ownership status of the house. Perhaps surprisingly, measures of housing availability and affordability at the city and county level appear to be uncorrelated with changes in household size. For example, average household size has increased faster since 1998 in the Bay Area than in Southern California or the rest of the state, but household sizes are still significantly smaller in the Bay Area than elsewhere. Despite the anecdotal evidence of crowding as a response to increases in home prices, demographic factors are much more powerful predictors of crowding.

This does not imply that higher prices never lead to crowding, and some crowding may well occur in response to the kind of rapid price increases seen in the Bay Area in the last few years. This type of crowding may be confined to smaller geographic areas than cities, and *cannot* be identified with the data used in this report.

Our results suggest that the number of crowded housing units increased after 1990, peaking in 1994 at just under 13% of households. Between 1995 and 1997, crowding rates decreased, but have increased since then. According to our estimates, the 2000

crowding rate was not significantly different from the 1990 rate, when 11.7% of households were characterized as crowded.

Our data analysis strongly suggests that crowding is about the same in 2000 as it was in 1990. We found that crowding is driven strongly by demographic factors (mainly the influx of young immigrants from countries that tend to have large families) rather than rising housing prices. Large families tend to generate large households, and that implies a higher level of crowding. Rather than being associated with high levels of crowding, areas with high housing costs tend to have low crowding levels. Indeed, our analyses indicate that high prices and the relative lack of new housing in some areas of the state price out those who would live in crowded housing. For example, the Bay Area, with relatively little new housing and very high housing costs, is simply not affordable to the types of households that are most likely to be crowded. Policy makers may be concerned about the relatively low level of housing construction in this business cycle, but they should not expect the level of crowding to change dramatically, even if housing construction is substantially increased.

Introduction

This study looks at historical trends in crowding (more than one person per room) in California and some specific geographic areas, by examining its relationship to socioeconomic factors, demographic factors, and measures of housing availability. Understanding crowding is important because it might be a sign of housing stress – people might be forced to live in crowded situations because of a lack of affordable housing. To the extent that crowding reflects a lack of housing in the right places at the right prices, it could be due to insufficient new construction (a subject to be taken up in a subsequent report).

To many observers, recent hints of increased crowding are the natural response to higher housing prices and low increases in new building construction in California, in general, and some specific areas, in particular. The second half of the 1990s saw a rapid increase in home prices and rents in California and, despite declining interest rates, housing affordability fell in most areas while new construction remained sluggish compared to previous decades. Shortages in the supply of houses have become more acute after 1996, when housing prices began to rise after falling sharply in the previous recession. Price increases in Silicon Valley made national headlines and policy makers began to worry that the lack of housing affordability was leading more people to live in crowded conditions – as evidenced by the steadily increasing average household size.[1] This lack of homebuilding recovery has been a major concern for policy makers.

Thus, one hypothesis is that crowding might be a response to a very tight housing market that was unable to keep pace with population growth. If this is correct, crowding in all types of households should have increased substantially. Another hypothesis is that crowding could be also the response to the increasing numbers of low-income households in California, particularly recent immigrant households. If over time low-income groups have become relatively poorer, or the amount of people in low-income groups has increased faster than other income groups, crowding might occur due to higher housing costs.

Our data analyses, however, strongly suggest that the most significant factors explaining crowding are demographic, and that demographic factors such as nativity, race/ethnicity, sex, age, and marital status of the householder are more powerful predictors of crowding than home prices and housing availability.[2] Household size (number of persons per household), a close proxy for crowding, is determined by more than just economic conditions, and the important role that immigration has played in the state over the past decade suggests that demographic factors are important determinants of household size and crowding.

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[1] According to the current population survey (CPS) definitions, a household consists of all the persons who occupy a house, an apartment, or other group of rooms, or a room, which constitutes a housing unit.

[2] According to the CPS, a householder, or household head is the person (or one of the persons) in whose name the housing unit is owned or rented. If the house is owned or rented jointly by a married couple, the householder may be either the husband or wife.

Thus, crowding is not a good measure of housing availability, since we can expect high levels of crowding for certain types of households, regardless of the housing market conditions.

In this paper, we first looked at the historical trends of crowding in California (pp. 7-9). Since we did not have recent data on the number of persons per room, we used household size as reported by Current Population Surveys as a proxy to examine the historical trends of crowding in California. Statistical tests based on 1990 Census data indicate that household size is a good indicator of crowding.[3]

We also projected crowding rates (persons per room) for the period 1994-2000, using the statistical relationship of various socio-economic factors and crowding as reported in the 1990 Census.[4] We used the 1990 Census since Census data on crowding for the year 2000 is not yet available. Then, we compared trends of our estimated crowding rates to the household size trends (as reported by the CPS). Both approaches indicate that crowding in 2000 seems to be similar to crowding in 1990.

Second, we analyzed the profile of crowded households and focused on the relationship between the characteristics of the households and the householders (pp. 11-21). Again, as a proxy of crowding, we used household size to describe these relationships. However, we also estimated the relative importance of socio-economic and demographic characteristics in predicting the probability of a household being crowded using 1990 Census data. Using these probabilities and current population survey data on the determinants of crowding, we projected crowding rates for various demographic groups for the period 1994-2000.

To project crowding, we related the likelihood of a household being crowded to demographic and socioeconomic characteristics of the householder (age, sex, marital status, income, education, race and ethnicity, and nativity). We also looked at some household characteristics such as whether the house is rented or owned and its geographic location. The household's geographic location is pertinent because different locations have different market conditions (shortages or surpluses of housing units, vacancy rates, and prices). Thus, by considering crowding trends in different geographic locations, we indirectly evaluate market influences on crowding.

We then analyzed 2000 Census data on population, total housing units, household size (a good proxy for crowding) and vacancy rates by city and Census-designated places (CDP) (pp. 23-27). This type of analysis also suggests the importance of demographic factors in explaining crowding. We found that cities and CDPs with large increases in average household size did not experience significant decreases in vacancy rates. This is particularly true in geographic areas with high Hispanic population growth rates.

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[3] See Appendix I. A very important demographic determinant of crowding is nativity. Data on nativity is only available in the CPS, but only since 1994. Hence, our projections start in 1994.

[4] See Appendix I. The American Housing Survey measures crowding (number of persons per room) for each year, but we did not work with these data due to the small sample of this survey and because this survey does not collect information on nativity, a very important demographic determinant of crowding.

An analysis of household size and housing affordability data at the county level (pp. 29-32) also suggests that crowding is more related to demographic factors than housing market conditions. However, a closer look at particular sub-groups of housing markets and types may yield some relationship between prices and crowding. For example, it may be the case that shortages in the supply of low-income homes in some cities could have a more significant explanatory role than indicators of housing shortages at the county may be able to capture.

What is crowding? Before discussing the results of our analysis, it is important to define crowding. Crowding relates the number of rooms to the number of people per housing unit. The U.S. Department of Housing and Urban Development (HUD) defines crowded housing units as those having more than 1 person per room, and severely crowded housing units those that have more than 1.5 persons per room. The number of rooms in a housing unit includes all rooms except bathrooms.[5]

When analyzing data, we looked at alternative measures of crowding as well. Some analysts believe that it is not reasonable to treat a three-room house where four adults are living the same as a three-room house occupied by two children and two adults. Using one alternative measure, counting children as half a person in the household, leaves the measured proportion of households that are crowded much smaller than that using the standard HUD definition. For example, using the HUD definition, in 1990 11.6% of California households were crowded. However, if we consider children to count for only half a person, crowding rates are reduced to 8.7 percent; and if we don't count children at all, only 4.8 percent of California households would be considered crowded. Table 1 shows similar results for extreme crowding.

Table 1

Measures of Crowding in California 1990	
Alternatives	**Percent of California Households Crowded**
Crowding:	
HUD definition	11.6%
Children count as 0.5 people	8.7
Children excluded	4.8
Extreme Crowding:	
HUD definition	6.5
Children count as 0.5 people	4.3
Children excluded	2.9

In this analysis we use the HUD definition because we believe that, although children may not need as much privacy as adults, a three-room house (a living room, kitchen, and one bedroom) with two adults and two children is still crowded.

[5] For example, a three-bedroom house with a living room, dining room, and kitchen (six rooms) would be crowded if seven or more people were living in it, and severely crowded if the number of people living in it was ten or more.

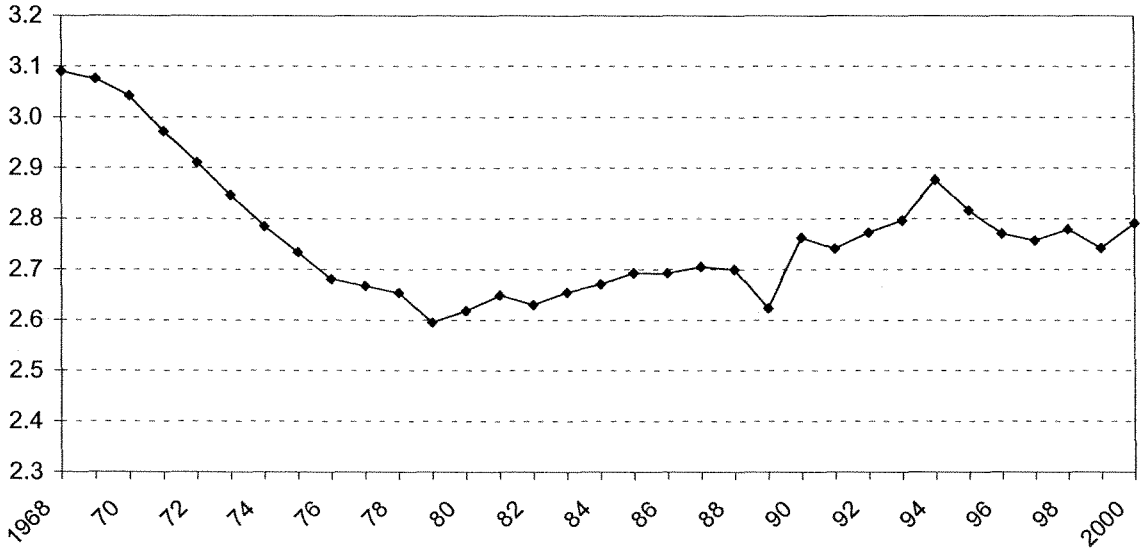
Patterns of Crowding in California

In this section we look at historical trends of crowding in California from two viewpoints. First, we consider trends in household size as reported by the CPS. Household size is statistically very closely related to crowding, and therefore it is a good proxy to measure crowding. Second, we report our estimated rates of crowding for the 1994-2000 period. To estimate rates of crowding we 1) calculated the statistical relationship (coefficients) between various socioeconomic and demographic variables and overcrowding, using 1990 Census data, and 2) applied these coefficients to current population survey (CPS) data for the years 1994 though 2000. Both approaches yield similar results.

Average Household Size Trends

Figure 1 shows the trend in average household size. The figure indicates that household size declined rapidly from the late 1960s to 1979. Since then through 1994, the average number of people by household increased significantly. However, after 1994 this trend has reversed, and average household sizes now appear to have leveled off at around 2.8 people per household.[6] The decline from the late 1960s to the late 1970s can be

Figure 1
Average Household Size in California, 1968-2000



Source: Current Population Surveys

Note: Beginning in 1994, the CPS includes estimates for the undercount. In 1989, the sample in California was dramatically decreased, especially in Los Angeles.

attributed to the baby bust. This period, immediately following the baby boom, was a time when fertility rates and average family size declined substantially. Household sizes increased since then as baby boomers began having children and large flows of

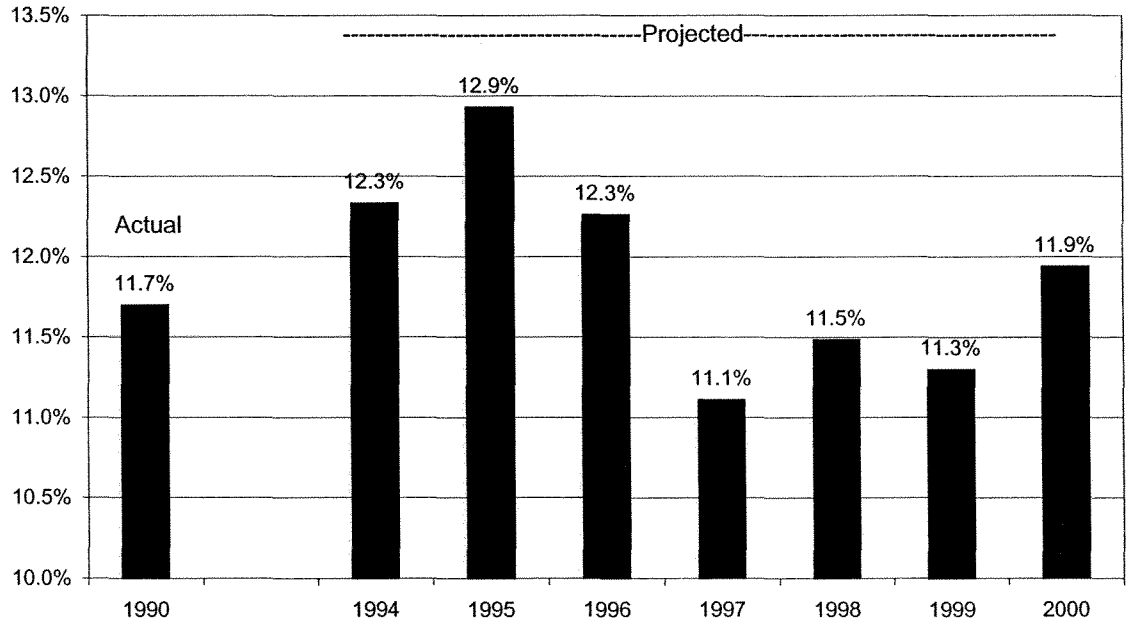
[6] Data for the 1989 year are not very reliable because the sample size of the CPS survey was reduced sharply, particularly in Los Angeles where the sample was reduced by one-third. Los Angeles has the largest proportion of California households.

immigrants came to California. The decline and subsequent leveling off of average household sizes since 1994 could be related to economic recovery and demographic effects. With the economic recovery, the state poverty rate (that had peaked at 18 percent during the 1993 recession) fell to 12.9 percent in the year 2000. Since poor and low-income households have higher household sizes, the average household size decreases with economic growth. Another factor contributing to lower average size of households is that the older age groups of the population are also increasing, and the older population (particularly those over 45 years old) tend to live in smaller households than the group between 30-44. The number of births in California has been declining also.

Estimated Trends of Crowding During the 1994-2000 Period

Figure 2 shows patterns of crowding for the period 1994-2000, as projected from the analysis of 1990 Census data and use of more recent CPS data. Our estimates indicate that crowding in California increased until 1995 and it has been decreasing slowly since then. Our estimated rate of crowding for 2000 is slightly higher than the 1990 rate (11.7 percent according to the actual 1990 Census data).[7]

Figure 2
Percent of Households Overcrowded



Source: 1990 census, authors' simulations based on CPS data for 1994-2000

[7] Since CPS data reports slightly lower household sizes than the Census, it may be possible that our crowding figures are also a little bit low. However, these differences are expected to be minor. Methodological details are in Appendix I.

A comparison of figures 1 and 2 indicates that trends in the average household size are very consistent with our best estimates of crowding in California when looking at the 1994-2000 period. The decline in crowding from 1995 to 1997 could be related to strong and sustained economic growth during this period. The subsequent slight increases in crowding could be related to higher housing prices in California. Overlaying these cyclical economic determinants are demographic factors, which appear to be strongly associated with crowding. Over long time periods, these demographic factors seem to be strongly associated with changes in household size and hence crowding in California. We discuss those factors in the next sections.

Profile of Crowded Households in California

In the last section we looked at the historical trend of crowding in California. This section looks at the historical profile of crowding according to various socio-economic and demographic characteristics of California households.

In this section we use three sets of data: 1) CPS data on household size (a good proxy for crowding), 2) the results of statistical analysis using 1990 Census data on householder characteristics and crowding rates, and 3) trends as shown by our projected crowding rates.[8]

The interpretation of figures showing household size trends is different from the interpretation of figures showing crowding projections. Figures dealing with household size are only descriptive in nature, showing simple associations. These figures do not take into account other factors that may be indirectly determining the relationship between the two variables shown in the graph. In contrast, when we discuss household probabilities of being crowded we are looking at the independent relationship between crowding and a given determining factor, once all other characteristics are taken into account.

The Role of Socioeconomic and Demographic Factors on Crowding

We specifically looked at the following factors associated with the probability that a particular household is crowded: household size, sex, marital status, age, income, race and ethnicity, nativity, tenure status (whether the house is rented or owned) and the geographic location of the household.

The number of people living in a household is a function of housing costs, income, family size, and extended family living arrangements. Income, family size, and extended family living arrangements are a function of the socioeconomic and demographic characteristics of the householder. Furthermore, rented homes tend to be more crowded than owned homes. This is not surprising since income, a significant factor explaining crowding, largely determines whether somebody is renting or owning the house where they live. Finally, the geographic location of the household is important because it is an expression of the market conditions in that area.

The analysis of 1990 Census data indicates that, once all other factors are controlled, the probability of a household being crowded is higher for households headed by males, single persons, younger persons, Hispanics or Asians, and foreign-born individuals, particularly foreign-born Hispanics.[9]

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[8] Projected crowding was estimated using the statistical relationship between 1990 Census data on various characteristics and crowding rates (persons per room) and CPS data for 1994-2000. Please see Appendix I.

[9] These relationships were estimated using statistical relationships shown in Appendix II.

We found that:

- Single-parent households are crowded compared to non-family households (persons living in the same household and not related by blood).

- Single-parent households are slightly less likely to be crowded than married-couple households.

- Households headed by younger adults are 1.2 times more likely to be crowded than those headed by older adults.

- Poor households are 2.4 times more likely to be crowded than households that have incomes above the poverty level.[10]

- There is a close association between race and ethnicity of the householder and crowding, even when other factors are controlled. In other words, these associations persist after taking into account differences in income, education, and the other socio-economic and demographic variables included in our analysis. Compared to the probability of households headed by Whites being crowded, households headed by Hispanics are 4.5 times more likely to be crowded, while Asians are 2.7 times more likely, American Indians are 2.6 times more likely, and Blacks are 2.8 times more likely.

- Households headed by foreign-born persons are 2.8 times more likely to be crowded than other households. This probability is very high for households headed by foreign-born Hispanics (26.3 times higher) and Asians (14.1 times higher).

- Rented houses are 3 times more likely to be crowded than owned houses.

- The probability of a household being crowded is much lower in the San Francisco Bay Area than in the rest of the state (0.6 times), while households in Southern California are 1.4 times more likely to be crowded than in the rest of the state. Given the high cost of housing in the Bay Area, this is intriguing. However, low new construction rates of housing units in the San Francisco area due to (among other factors) the lack of land available for new developments, may prevent those individuals that are more likely to live in crowded conditions from obtaining any form of housing in this city.

Recent Trends in Household Size

The figures below show historical trends of household size (a good proxy for crowding) by demographic and socio-economic characteristics of the householder or other

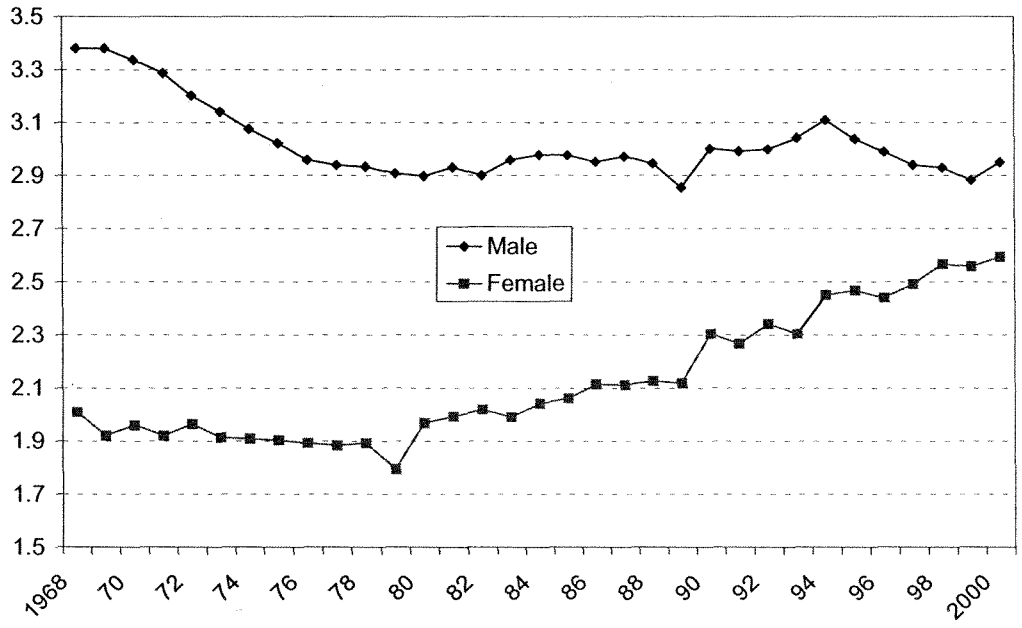
[10] We found that the educational level of the household head was highly correlated to income and poverty measures, so we dropped this factor from our analysis.

household features as reported by the CPS data. For a few demographic characteristics, we have estimated rates of crowding for the years 1994 through 2000.

TRENDS OF HOUSEHOLD SIZE BY SEX OF THE HOUSEHOLDER

Figure 3 shows trends of household size (a crowding measure) by sex of the householder.[11] In general, male-headed households are of larger household size since most married-couple families in the CPS list the male as the householder. Since the mid-1970s, there has been little change in the size of male-headed households. However, there has been a large increase in the number and size of female-headed households. This is explained by increased divorce rates and increases in the number of female single parents that lead to a higher number of family households headed by women.

Figure 3
Average Household Size in California by Gender of Householder, 1968-2000



Source: CPS Data.

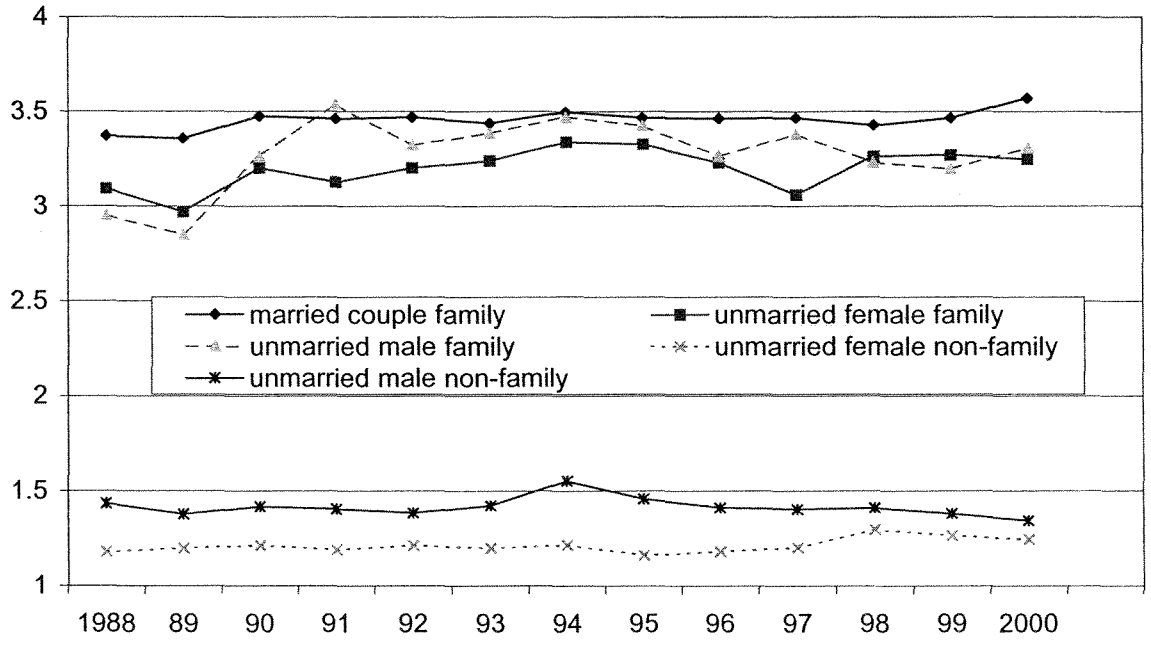
[11] The Census Bureau defines the householder as the person in whose name the housing unit is owned or rented. If more than one person is listed, the respondent identifies a single householder.

HOUSEHOLD SIZE BY FAMILY TYPE

Family households are much larger than non-family households (the latter consists of people living alone or with unrelated roommates). There is not too much difference between the size of family households headed by married persons and those headed by single individuals. Married couple families are only a little larger, on average, than families headed by unmarried females or unmarried males. (See Figure 4).

Figure 4

Average Household Size by Family Type

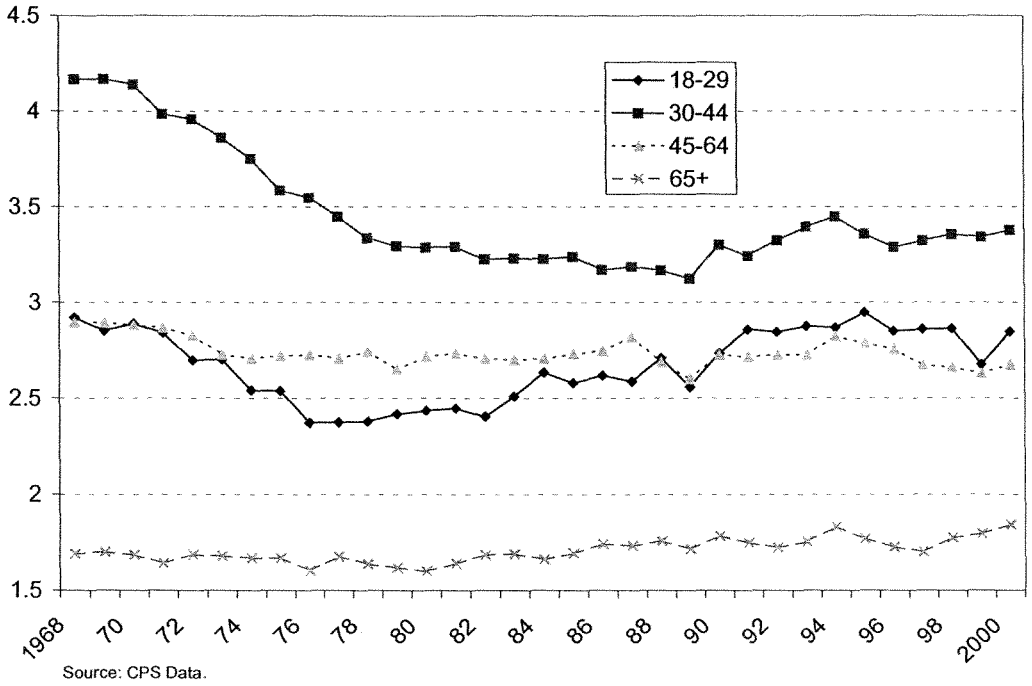


Source: CPS Data

HOUSEHOLD SIZE BY AGE OF THE HOUSEHOLDER

Figure 5 shows trends in household size by age of the householder. Households headed by people who are between the ages of 30 and 44 are the largest. This age group is more likely to be married with children. Households headed by seniors have fewer members on average than those headed by younger adults.

Figure 5
Average Household Size in California by Age of the Householder

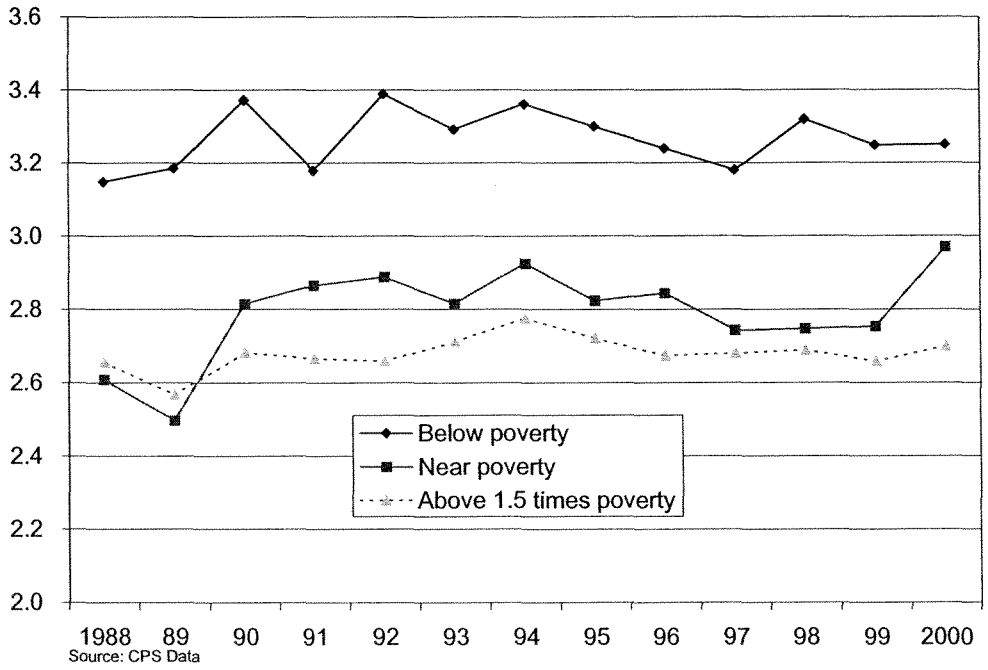


Source: CPS Data.

HOUSEHOLD SIZE BY POVERTY STATUS

Income is one of the most cited determinants for crowding. People live in crowded conditions because they cannot afford larger houses. Lack of income may induce families to live with other members of the family or acquaintances. Thus, the probability of a household being crowded is expected to be higher for households headed by persons living in poverty. The figure below illustrates that households in poverty have significantly higher average size than households above poverty.

Figure 6
Average Household Size in California by Poverty Status, 1988-2000



Source: CPS Data

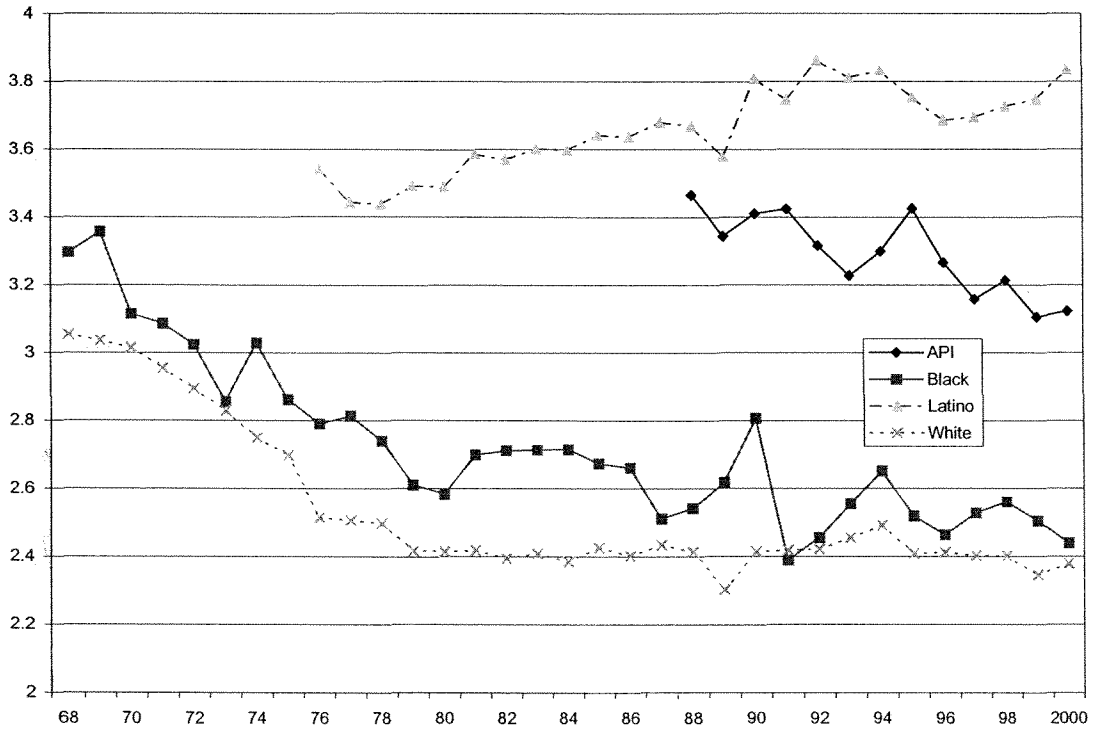
HOUSEHOLD SIZE BY RACE/ETHNICITY

Figure 7 shows trends in the average size of the household according to the ethnicity of the householder. As stated earlier, the year 1989 was an unusual year in terms of data collection, so data for this year has to be taken with caution. The graph indicates that:

- Latinos and Asians have substantially higher average household sizes than do Whites and Blacks.

- Blacks and Whites have relatively low household sizes. After declining in the late 1960s and 1970s, average household sizes have been fairly stable for Whites and Blacks for the past ten years. Still, in our statistical model controlling for other variables, we find that Blacks are more likely to live in crowded housing conditions than are Whites. Thus, higher rates of crowding for Blacks are caused not by greater numbers of people per housing unit, but by a fewer number of rooms per unit.

Figure 7
Average Household Size in California by Race and Ethnicity, 1968-2000



Source: CPS
Note: 3 year moving average

- From the mid-1970s to the 1990s, average household sizes have increased substantially for Latinos, with little change afterwards.

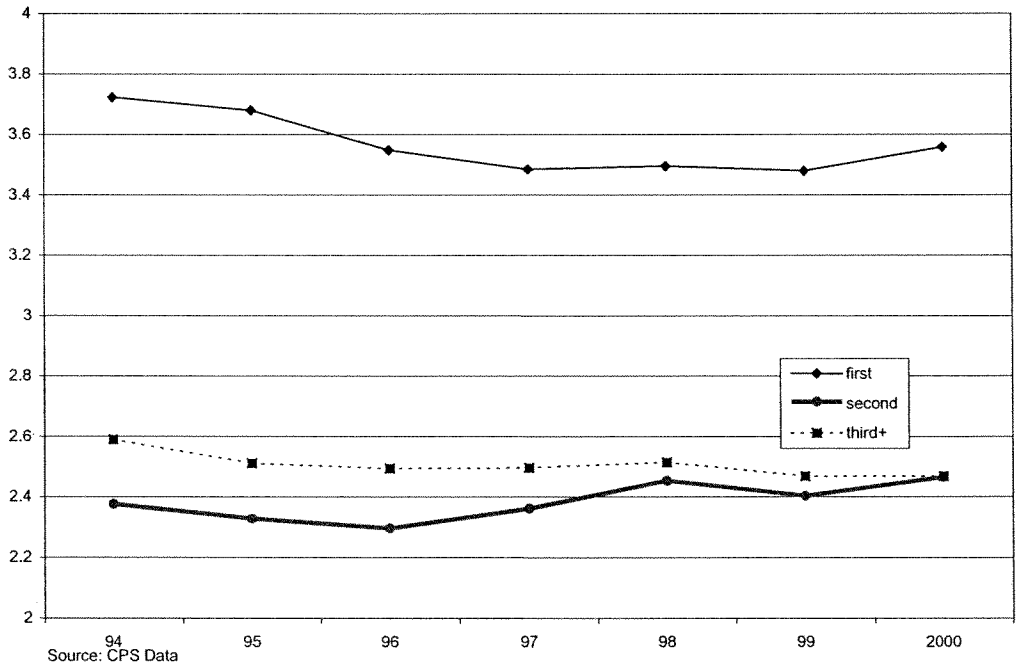
- Asians and Pacific Islanders have high but decreasing household size. Asians have experienced a slight decline in average household sizes since the late 1980s.

The information provided by Figure 7 is consistent with the analysis of crowding rates using Census data for the period 1970-1990 and with the results from our statistical analysis.

HOUSEHOLD SIZE AND NATIVITY OF THE HOUSEHOLDER

Figure 8 shows that households headed by immigrants have the highest average household sizes (CPS data). Census data analysis corroborates the importance of nativity on rates of crowding. Data on nativity from the CPS are only available for the period 1994-2000. The decline in average household sizes from households headed by first-generation immigrants to households headed by second-generation descendants of immigrants is large, and suggests that intergenerational economic progress is substantial. We find little difference in average household sizes between second and third generations.[12]

Figure 8
Average Household Size in California by Nativity of the Householder, 1994-2000



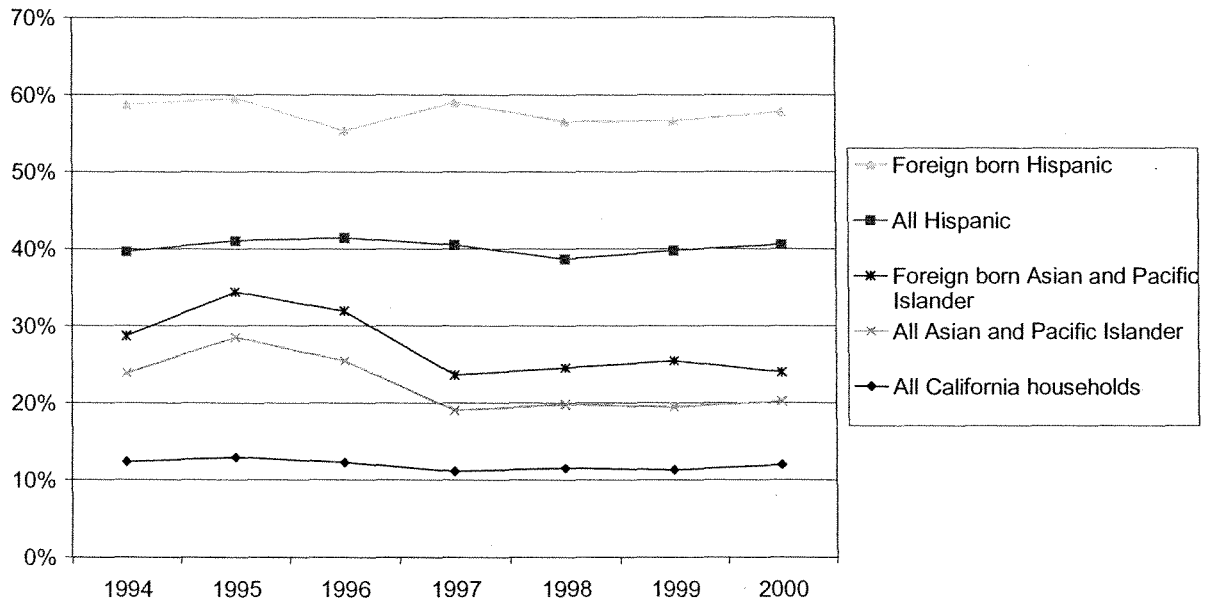
Source: CPS Data

[12] The slightly lower average household sizes of the second generation as compared to the third generation in the mid-1990s might be due to age structure effects, with households headed by second generation less likely to be in prime childbearing years.

While Figure 8 shows crowding by nativity, as measured by household size from the CPS, Figure 9 shows our projected trends in crowding for the period 1994-2000 by race/ethnicity and nativity for selected groups.[13] Again, foreign-born households have higher rates of crowding, particularly households headed by foreign-born Hispanics and Asians. Foreign-born Asians head more than 97 percent of crowded households headed by Asians and foreign-born Hispanics head more than 90 percent of crowded households headed by Hispanics.

These broad race and ethnic groups mask much diversity within the groups. Unfortunately, the sample size from the CPS does not allow further disaggregation. However, data from the 1990 Census shows a great range in crowding rates between Asian subgroups. For example, households headed by Japanese have very low levels of crowding (less than 5 percent for U.S. born), while those headed by foreign-born Southeast Asians have tremendously high levels of crowding (about 75 percent). Among Hispanic subgroups, foreign-born Mexicans have higher rates of crowding (about 70 percent in 1990) than Hispanics from the Caribbean (about 20 percent).

Figure 9
Projected Crowding Rates in California for Selected Groups
1994-2000

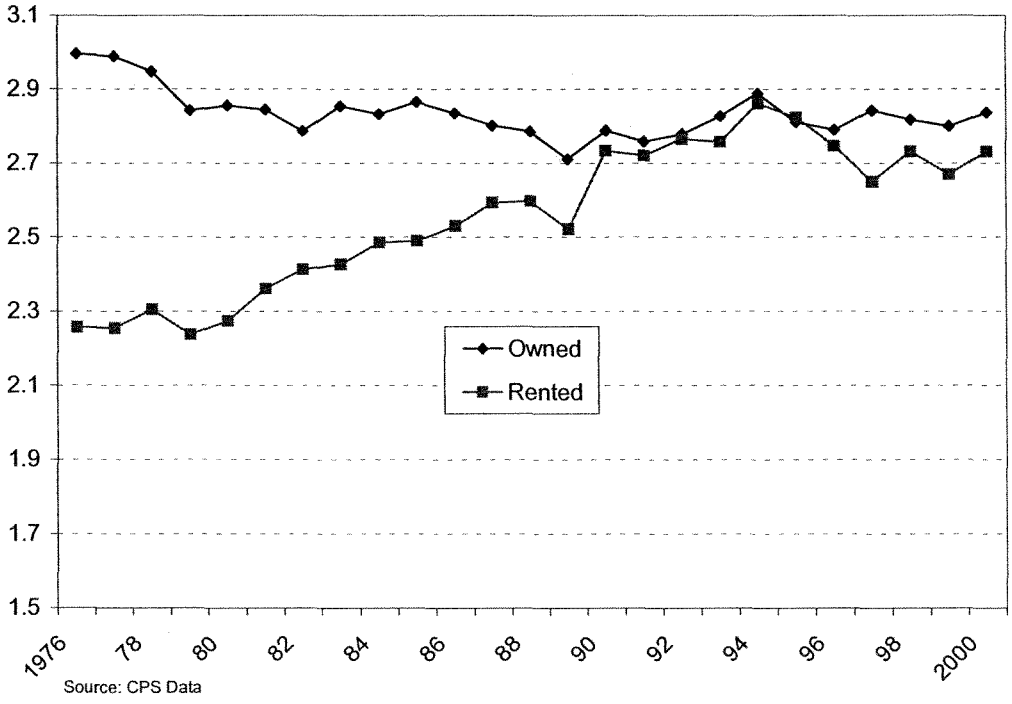


[13] Once more, these projections were based on statistical relationships (as measured by coefficients) between socio-economic and demographic variables and crowding, using 1990 Census data. We applied these coefficients to 1994-2000 CPS data.

HOUSEHOLD SIZE BY RENTED/OWNED HOMES

According to current population survey data, the average number of people in rented housing units increased substantially from 1976 to 1990, while the number of people in owner-occupied homes declined until the late 1980s, before remaining fairly constant since then. (See figure 10). Because rented units tend to have fewer rooms than houses that are owned, crowding is more prevalent in rented units.

Figure 10
Average Household Size in California by Tenure, 1976-2000

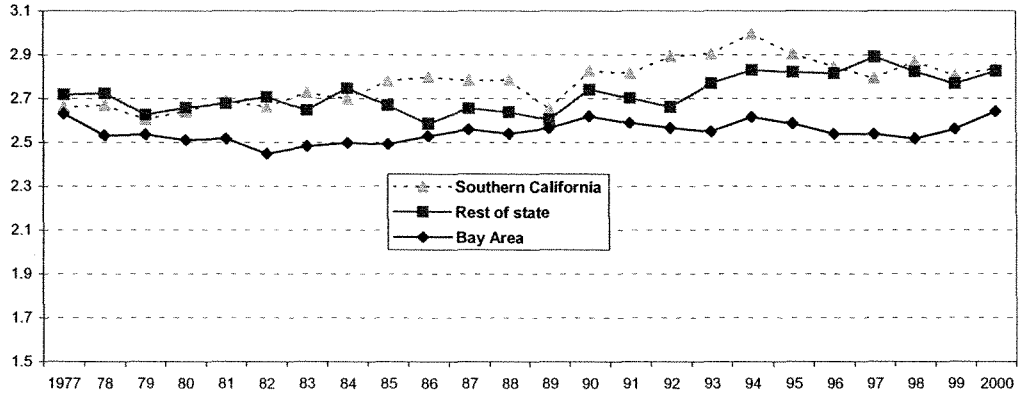


Source: CPS Data

HOUSEHOLD SIZE BY GEOGRAPHIC LOCATION

CPS data indicates that the size of households located in the Bay area is significantly smaller than in Southern California and the rest of the state. The size of households in Southern California has decreased since 1994, while the opposite trend is observed in the Bay Area since 1998, perhaps as a result of the recent economic boom that took place in that area that drove housing prices up.

Figure 11
Average Household Size by Region in California, 1978-2000



Source: CPS Data.

Trends in Crowding at the City Level

Although 2000 Census data on crowding rates are not yet available, data on population, total housing units, persons per household (household size), and the occupancy and tenure status of housing units are already published.[14] In this section we look at crowding by cities as measured by changes in average household size. Specifically we look at how California cities have accommodated changes in population. Cities with large increases in average household size are those most likely to be experiencing increases in crowding, especially those cities which have not experienced much change in their housing stock.

First, we verify that crowding and average household size as measured for cities are strongly correlated. Census data for cities and Census-designated places for 1990 corroborate that persons-per-household (household size) is strongly related to crowding. Figure 12 describes the relationship between these two measures.

Figure 12
Average Household Size by Percent Crowded for CDPs and Cities in California in 1990

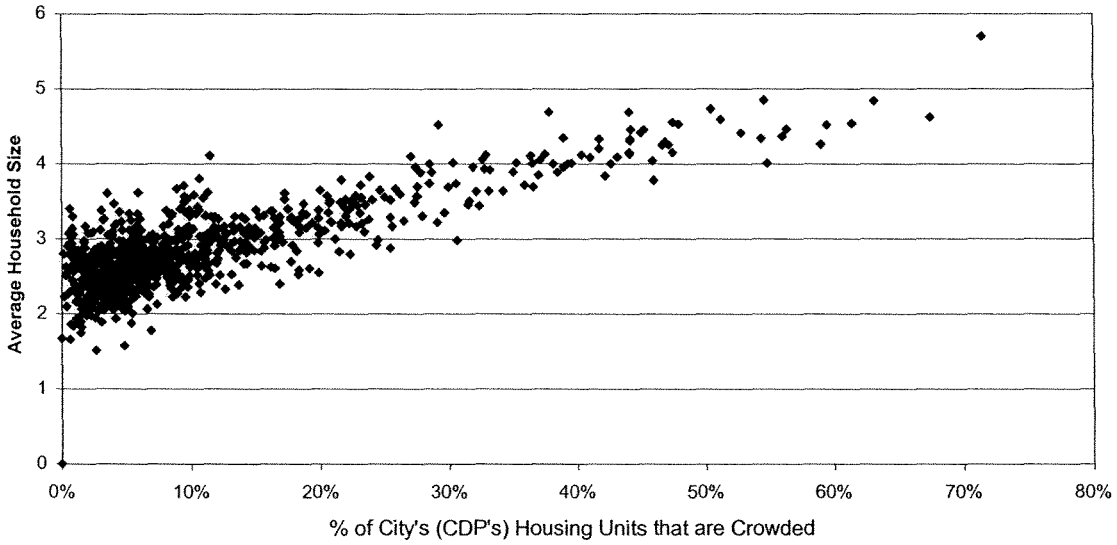


Table 2 shows changes in population, in housing units (total and occupied), and average household sizes between 1990 and the year 2000 for the 30 most populated cities in the state.[15] The figures suggest that many California cities seem to have accommodated their increase in population by increasing the number of people per household rather than by large increases in the number of housing units. Santa Ana is the most extreme example. During the 1990s, Santa Ana experienced a large increase in population but a *decrease* in total housing units (and a very small increase in occupied housing units). The same situation is observed less dramatically in many of California's largest cities, with

[14] It might take more than one year to have crowding figures from the 2000 Census.
[15] Appendix III shows the same table for the rest of the California cities.

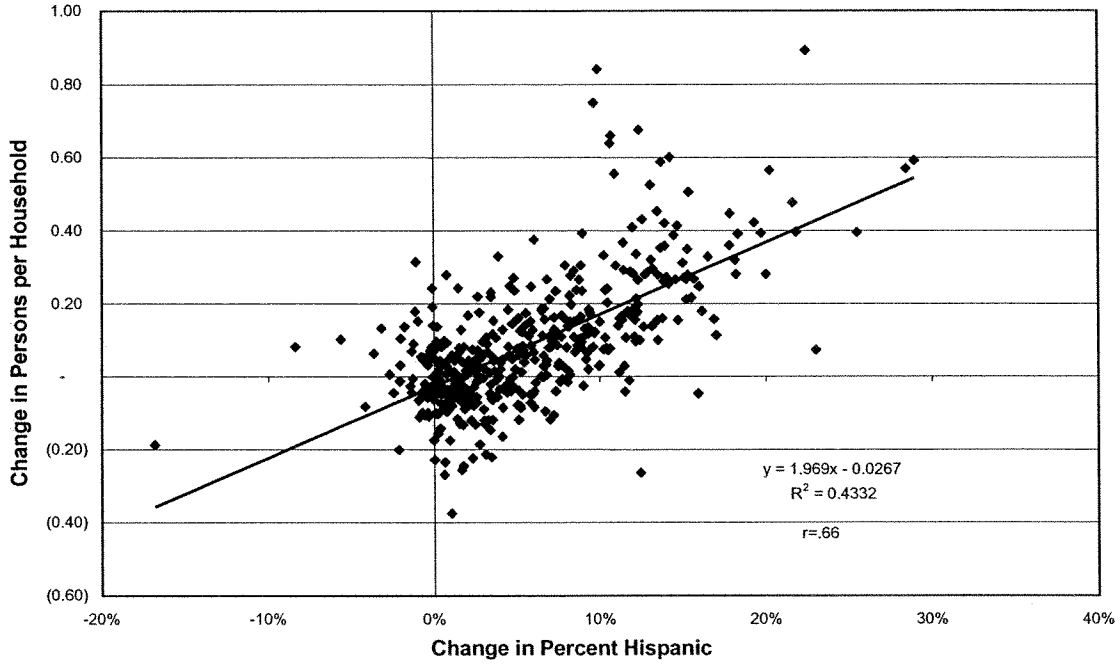
population growth outpacing the growth of housing units. Furthermore, the Hispanic population has increased significantly in these cities that experienced the largest differences between increases in housing units and increases in population. This corroborates our previous results, which suggest that crowding is more related to demographic factors than to the lack of housing.

Table 2

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Los Angeles	3,694,820	37,743	58,007	199,637	3.44	2.80	2.83	6.6%
San Diego	1,223,400	37,967	44,595	115,900	2.60	2.61	2.61	4.7%
San Jose	894,943	22,476	26,380	113,334	4.30	3.08	3.20	3.5%
San Francisco	776,733	18,056	24,116	57,646	2.39	2.29	2.30	0.2%
Long Beach	461,522	1,244	4,113	36,125	8.78	2.61	2.77	12.2%
Fresno	427,652	19,621	18,272	72,998	4.00	2.84	2.99	10.0%
Sacramento	407,018	10,595	10,137	36,789	3.63	2.50	2.57	5.4%
Oakland	399,484	2,771	6,269	27,938	4.46	2.52	2.60	8.0%
Santa Ana	**337,977**	**(385)**	**1,391**	**46,124**	**33.16**	**4.00**	**4.55**	**10.9%**
Anaheim	328,014	6,542	9,381	61,996	6.61	2.99	3.34	15.3%
Riverside	255,166	5,734	6,542	27,032	4.13	2.92	3.02	12.2%
Bakersfield	247,057	22,087	20,974	71,393	3.40	2.75	2.92	11.9%
Stockton	243,771	9,517	9,762	32,248	3.30	3.00	3.04	7.5%
Fremont	203,413	7,052	8,039	29,549	3.68	2.86	2.96	0.2%
Glendale	194,973	1,599	3,201	14,743	4.61	2.59	2.68	-1.2%
Huntington Beach	189,594	2,926	4,778	8,045	1.68	2.62	2.56	3.4%
Modesto	188,856	6,301	7,001	23,812	3.40	2.79	2.86	9.2%
San Bernadino	185,401	4,731	1,848	21,447	11.61	2.90	3.19	12.9%
Chula Vista	173,556	9,646	9,881	39,040	3.95	2.79	2.99	12.3%
Oxnard	170,358	3,919	4,274	27,740	6.49	3.56	3.85	11.8%
Garden Grove	165,196	719	1,253	21,958	17.52	3.17	3.56	9.0%
Oceanside	161,029	8,472	9,747	32,703	3.36	2.72	2.83	7.7%
Ontario	158,007	2,646	3,248	24,588	7.57	3.28	3.60	18.2%
Santa Clarita	151,088	11,309	12,313	40,277	3.27	2.84	2.95	7.1%
Salinas	151,060	5,082	4,938	33,203	6.72	3.21	3.66	13.5%
Pomona	149,473	1,132	1,412	16,170	11.45	3.52	3.82	13.2%
Santa Rosa	147,595	9,852	10,328	32,113	3.11	2.44	2.57	9.7%
Irvine	143,072	11,490	10,942	27,804	2.54	2.69	2.66	1.1%
Moreno Valley	142,381	3,486	4,260	22,951	5.39	3.40	3.61	15.5%
Hayward	140,030	3,706	4,687	27,751	5.92	2.75	3.08	10.3%

Figure 13

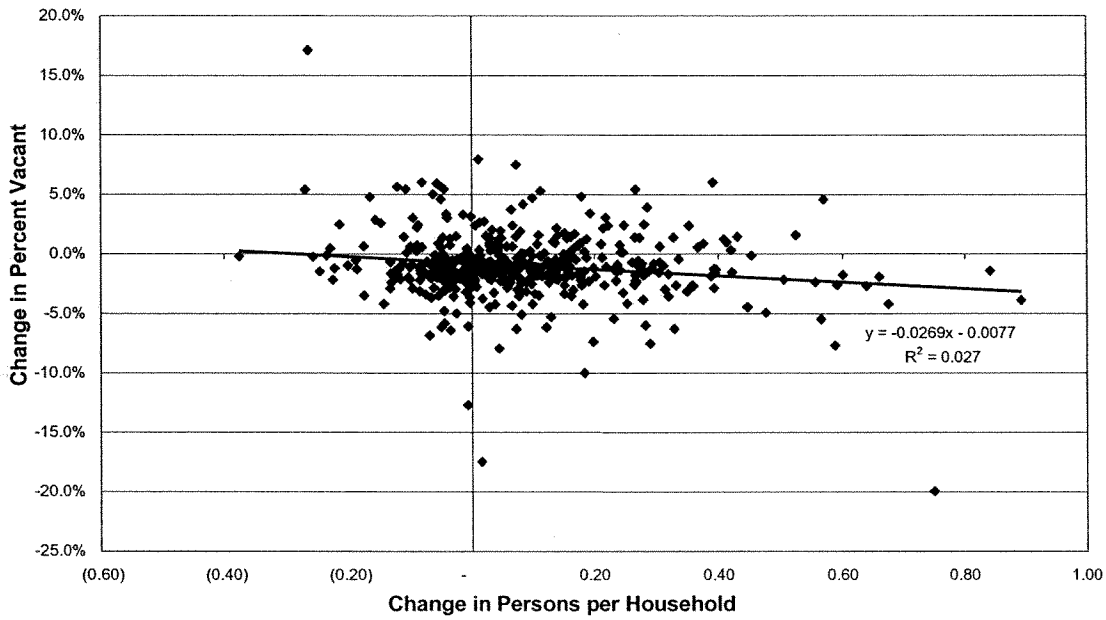
Change in Persons per Household by Change in Percent Hispanic, 1990-2000
For Cities in California



Indeed, Figure 13 demonstrates that there is a strong relationship between increases in household size and percent of Hispanics in California cities. Cities that had the largest increases in Hispanic populations (in the right on the figure) were those most likely to have large increases in average household size.

We also found practically no relationship between declines in vacancy rates and increases in the average household size of a particular city (or Census-designated area). Figure 14 illustrates this point. To the extent that declining vacancy rates are indicative of shortages in the supply of housing, this result suggests that cities in California that had the greatest shortages of housing units were not the same cities that had the greatest increases in crowding. Thus, increases in crowding may be more related to demographic factors rather than market conditions.

Figure 14
Change in Percent Vacant (not Seasonal) Vs. Change in Persons per Household, California Cities, 1990-2000

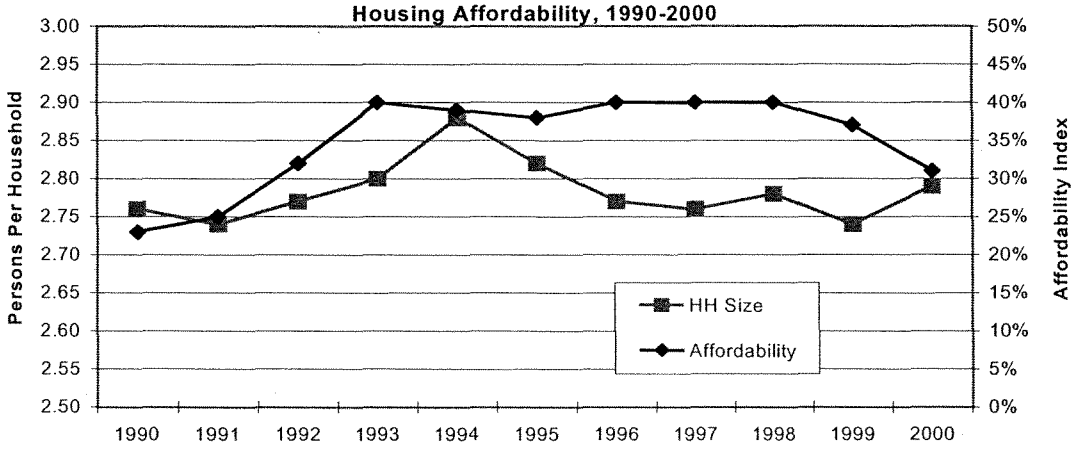


Housing Affordability and Household Size at the County Level

An analysis of household size and housing affordability data at the local level also suggests that crowding is more related to demographic factors than housing market conditions.

The California Association of Realtors calculates the Housing Affordability Index (HAI) as the fraction of households that can afford the median single-family home. This is not an ideal measure as it doesn't address the rental market directly, nor does it correct for changes in housing quality over time. Since it uses the median home price, it also cannot address the distribution of housing prices and income. It is, however, the best single measure available for characterizing the relative price of housing across regions and is widely cited by those who assert a link between changes in housing prices and household size. Statewide, affordability rose from an average of 23% throughout 1990, to 38-40% from 1993 to 1999, before falling again to 31% in 2000 (Figure 15).

Figure 15
Statewide Mean Household Size and Housing Affordability, 1990-2000



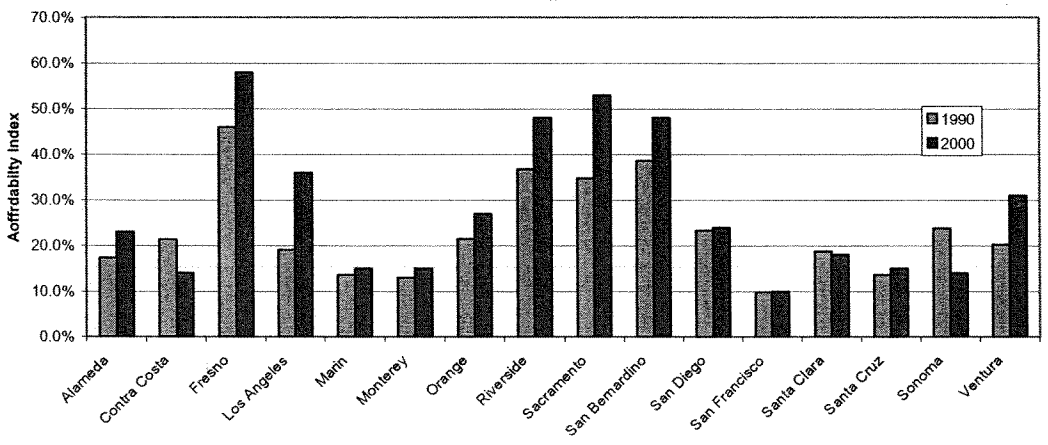
Source: Household Size, Dept of Finance; Affordability, California Association of Realtors.

Thanks to both lower mortgage rates and rapidly rising personal income, housing is actually much more affordable on average in this business cycle than it was in the previous cycle – despite the much lower pace of housing construction. This phenomenon will be addressed in a subsequent paper. But it is an important observation that, at the statewide level, household size rose from 2.76 persons per household in 1990 to 2.88 in 1994, while the share of households that could afford the median price home shot from 23% to 39%. In contrast, from 1994 to 1998, household size fell from 2.88 to 2.78, while affordability remained essentially constant. Then household size inched up to 2.79 while affordability dropped from 40% to 31% in the past two years. There is no obvious connection between changes in affordability and changes in household size, at least when examined at the state level.

Families do not purchase homes in "the state" but rather in a specific region within the state, and there is wide variation in the rate of change of housing prices, affordability and household size across counties. Statewide numbers do not reflect the conditions in any particular real estate market and any household response to a fall in housing affordability should occur at a more localized level. We can obtain a more accurate sense of any relationship by comparing these changes at the county level. Consistent figures for the HAI are available at the county level for sixteen counties over the last business cycle (1990-2000); these counties accounted for 81% of the state's population in 1999.[16]

All counties experienced an increase in average household size. The share of households that were able to afford the median price home in their county in 1990 ranged from under 10% (in San Francisco) to 46% (in Fresno). In 1999 the affordability indices ranged from 18% to 58%, and at the peak of the market in 2000 the range was from 11% in San Francisco to 58% in Fresno (Figure 16).[17] Only three of the sixteen counties in our sample, all located in the San Francisco Bay Area, were less affordable in 2000 than they were in 1990 – Contra Costa, Santa Clara (although by less than 1%), and Sonoma – yet average household size increased in every county. As a result, it is not surprising that the correlation between the change in housing affordability and the change in household size is only 0.11.

Figure 16
Housing Affordability by County, 1990 and 2000



Source: California Association of Realtors.

It is important to distinguish between any relationship that might exist between the changes over time in two variables (i.e., longitudinal or time-series correlation), and a relationship between the level of each variable at a point in time (i.e., cross-sectional differences). Although there is no discernible relationship between the changes over time

[16] The counties with affordability indices for the entire period are: Alameda; Contra Costa; Fresno; Los Angeles; Marin; Monterey; Orange; Riverside; Sacramento; San Bernardino; San Diego; San Francisco; Santa Clara; Santa Cruz; Sonoma; and Ventura.

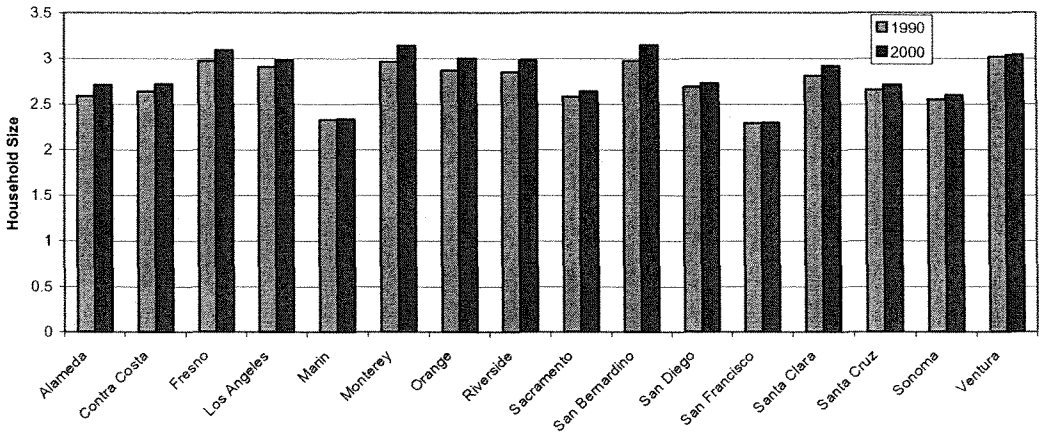
[17] Due to the lack of 2000 data for some variables, the analysis in most of this section uses 1990-99 data. Using the 2000 affordability data does not change the relationship between affordability and household size at the county level.

in affordability and household size at the county level, there does appear to be some relationship between household size and affordability at a given point in time. The correlation between household size and affordability in 1990 is 0.44, and in 2000, it is 0.51. This shows that the counties with the most affordable housing also had the largest households. This is true despite the lack of any relationship between changes in affordability and changes in household size.

The fact that counties with the most affordable housing also have the largest households is likely due to the income dynamics of counties such as Marin and San Francisco versus those such as Fresno or Los Angeles, as well as the relationship between family size and family income. Affluent counties like Marin or San Francisco are more likely to attract professionals and two-career families that can afford the region's prices; services that cater to their preferences and firms wishing to employ them reinforce these tendencies. Counties such as Fresno and Riverside are attractive to lower-income, and generally larger, households due to their abundance of affordable housing. Geographic and regulatory barriers to new development can reinforce these dynamics.

Figure 17 shows the mean household size by county for 1990 and 2000. There is significantly less variation in household size across counties than there is in housing affordability. The coefficient of variation – a measure of the dispersion of a variable – is five to six times larger for affordability than it is for household size.[18]

Figure 17
Mean Household Size by County, 1990 and 2000



Source: Department of Finance.

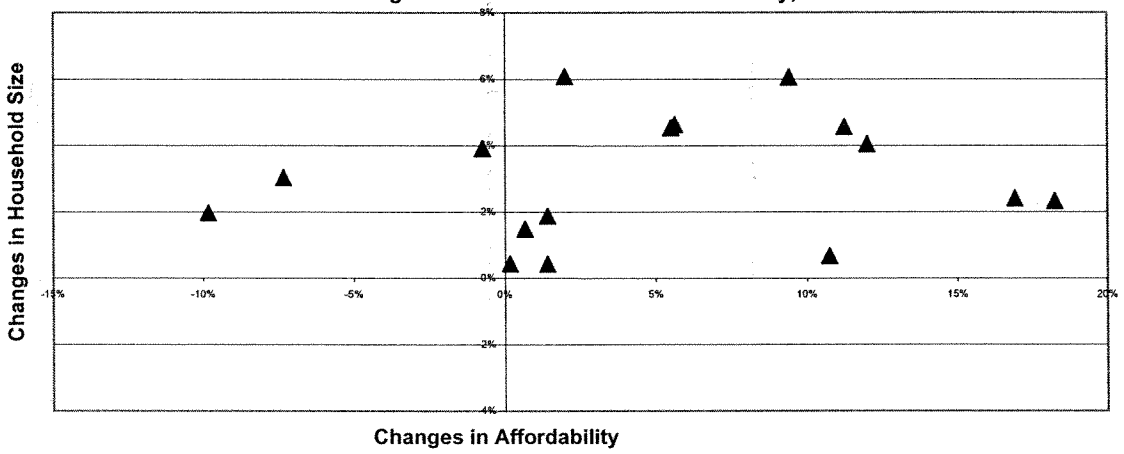
There is also more variation in changes in affordability than there is in household size, although the coefficient of variation for changes in affordability is less than three times that for changes in size. The smaller volatility in household size changes is rooted in the demographic determinants of household size over the course of an entire generation, while the volatility in housing prices and affordability is rooted in changes in

[18] The coefficient of variation is the ratio of the standard deviation – a measure of the spread of a distribution – to the mean of that distribution, so the larger the number, the greater the dispersion in a variable such as affordability or size.

employment and income levels over the course of the business cycle (typically less than ten years). Figure 4 shows the intersection of these two cycles — occurring over such different lengths of time — by comparing the change in housing affordability to the change in household size in each county. Household size changes ranged from less than one percent to six percent of the average size in 1990, while affordability changes ranged from one percent to an increase of eighteen percent of the 1990 value.

A glance at Figure 18 shows that there is no discernible relationship between the changes in the two series. Counties with large increases in affordability had little change in average household size, and counties with little change in affordability had the largest increases in household size. Both the two counties with the largest increases in affordability, and the two counties with the largest decreases, had very similar changes in household size. The six counties with essentially no change in affordability over the decade spanned the entire range of household size changes, from no change to a 6% increase in average size. The results of this analysis reinforce the need to focus in more detail on the demographic determinants of household size and how they have changed over time if we seek to understand crowding phenomena. Although there may be issues with sub-county markets, or with segments of the residential market within a given county, the link between housing affordability and crowding seems extremely weak at the aggregate level.

Figure 18
Changes in Household Size and Affordability,



Conclusions and Policy Implications

In this paper we have analyzed Census and CPS data to provide a description of crowding in the state. The main conclusions from our analyses are:

- Household size (defined as the number of persons in a household) is a good proxy for crowding. The probability of a household being crowded is largely determined by this factor.

- Demographic factors may have a higher explanatory role in the phenomenon of crowding than previously thought. The most important predictor for crowding was the nativity of the householder. While the total rate of crowding decreased between 1994 and 2000 in California, crowding rates for households headed by Blacks and Whites decreased sharply. However, Asian crowding decreased only slightly while crowded households headed by Hispanics increased significantly. For all race/ethnic groups, immigrants are the most likely to live in crowded conditions. Households with foreign-born Hispanic heads are 26 times more likely to be crowded than those for native-born non-Hispanics.

- Other significant factors determining crowding are sex, marital status, income, and age of the householder, the geographic location of the household, and the owner/rented status of the house. Poor households tend to be 2.4 times more crowded.

- Our analysis of 1990 and 2000 Census data for counties, cities and Census-designated areas on population increases, vacancy rates, changes in housing occupied units, and housing affordability also suggests that crowding is more related to demographic factors than housing market conditions. However, a closer look at particular types of housing and some population sub-groups may deepen our insights into crowding. Further research is necessary to evaluate the role of increased prices on household size.

There are three factors that may explain the disproportionate number of crowded households headed by Hispanics, after controlling for income and other demographic variables. First, Hispanics are more likely to live in extended family conditions.[19] Second, Hispanics are a relatively youthful population, with many young adults and children. Young adults are more likely to be married with young children, and thus more likely to live in crowded households, than people in other age groups. Hispanics, and Hispanic immigrants in particular, tend to have more children than other groups. Third, California has a very large number of Hispanic immigrants. Immigrants usually come to stay with friends or relatives, who generally are previous immigrants already established in California. These relatives provide their household as a temporary arrangement while

[19] 2000 CPS data show that ten percent of Latinos in California were extended family members, compared to only four percent of non-Latinos. Extended family members are any other relatives living in the household who are not part of a nuclear family, made up of married couples and children.

the new immigrant gets established. These living arrangements may not be a negligible factor in the explanation of crowding in households headed by Hispanics.

The objective of our analytical exercise was to provoke new thinking on the nature of crowding, usually centered on housing market conditions. The conclusions of this paper imply that, over all, the housing market does not drive crowding, as current policy discussions often assume. Therefore, crowding could be a poor indicator of housing market conditions.

This is important when policy makers are evaluating housing market trends or designing programs to improve housing conditions for low-income people. Looking at crowding as a performance measure may be misleading. Policy makers may have a distorted picture if they expect the level of crowding to change much, even when housing construction is significantly increased.

A second policy implication is that the design of effective policies oriented to decrease crowding or to provide low-income housing, needs to look more closely at geographic areas, cities, and communities with large numbers of Hispanics and immigrants. Perhaps the design of affordable housing for Hispanics and/or other groups that tend to live in more crowded houses could provide for more rooms per total space, to accommodate relatively larger households.

Appendix I

Data Sources and Analytical Approach. To have a complete picture of the historical trends of overcrowding in California and relate it to various factors, we have worked with three data sources. The most reliable data source is the Census since this database includes all households and regions. Unfortunately, Census data is published every 10 years and detailed data from the 2000 Census is not yet available. Our second data source is the current population surveys for California (CPS). These surveys provide extensive detail on the demographic and socio-economic composition of individuals living in households; however, they do not present data on housing characteristics, such as the number of rooms or square footage of the house. There is also a third source, the American Housing Survey (AHS). These surveys collect data for California in general and for some specific geographic areas, however, the sample is small and the surveys do not provide data on the immigration status of the household head.

We based most of our historical analysis on CPS data. Working with current population surveys has two advantages. First, these data allow us to analyze trends over more than 30 years, and second, we can analyze the effect of various socio-economic and demographic characteristics of household heads (including immigration status) on overcrowding.

However, we have also used data from the 1990 Census, and from the 1999 AHS. We used Census and AHS data as a framework for the evaluation of our CPS data analysis. First, to evaluate the consistency between the CPS, the AHS, and Census data, we compared the average household size and persons per household data from these three databases. We found that these three databases were very consistent; in other words, the three sources measure the same attributes. However, although the CPS measures are very close to Census data, CPS numbers tend to be slightly lower than the Census figures and this difference is larger for the year 2000. Table 3 illustrates this point.

Table 3

Persons Per Household

Source	Total	Owned	Rented
2000 CPS	2.79	2.84	2.73
2000 Census	2.87	2.93	2.79
1999 CPS	2.74		
1999 AHS	2.77		
1990 CPS	2.76	2.79	2.73
1990 Census	2.79	2.84	2.74

Our second step was to use the 1990 Census data and a statistical technique called logit regression to 1) relate the socio-economic and demographic characteristics of the household heads to overcrowding, and 2) use the coefficients from that statistical relationship to calculate the probability of any household being overcrowded.

We calculated overcrowding rates for the period 1994-2000 using CPS data. In this calculation we used the relative weights of the various socio-economic characteristics of the household heads in determining the probability that a household is overcrowded, as estimated by our logit regression on 1990 Census data. We could not estimate overcrowding rates for years prior to 1994 because one of the most important characteristics associated with overcrowding is the immigration status of the household head by race. The reporting of this data did not start until 1994.

We found that the most important factor predicting the probability of living in overcrowded housing was the number of persons living in the household (household size). Due to the close association between household size and overcrowding, we also used household size data from the CPS to analyze trends of overcrowding in California according to the demographic and socio-economic conditions of the household head. The benefit of using household size is being able to deal with actual data over a longer period of time (1968-2000).

The following page shows the results from the logit regression used to predict overcrowding rates. We also report the matrix of Hosmer and Lameshow goodness-of-fit test. The test indicates that our statistical model did not perform very well when predicting extreme cases (those with the lowest and highest probability of being overcrowded). However, on average, our model performs very well and we believe that the deviations observed at the extreme cases cancel out.

LOGIT REGRESSION USED IN OVERCROWDING RATES PROJECTION

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq	Standardized Estimate
Intercept	1	-0.4241	0.0689	37.8421	<.0001	
Black	1	0.7368	0.0261	799.6162	<.0001	0.0961
Asian	1	0.5885	0.0672	76.5886	<.0001	0.0289
Asian/Pac. Islander	1	0.9226	0.054	291.8687	<.0001	0.1392
Hispanic	1	1.1218	0.0217	2673.5238	<.0001	0.2471
Age	1	-0.0828	0.00277	891.3111	<.0001	-0.7154
Age Square	1	0.000718	0.000029	609.2089	<.0001	0.6265
Female	1	-0.1699	0.0195	76.1327	<.0001	-0.0399
Foreign	1	1.1835	0.0292	1643.6886	<.0001	0.2768
Foreign Hispanic	1	0.3212	0.0362	78.5945	<.0001	0.0569
Foreign Asian/Pac. Is.	1	0.3289	0.0623	27.9103	<.0001	0.0445
Renter	1	1.5714	0.0155	10312.0202	<.0001	0.421
Poverty	1	-0.5195	0.0185	787.4492	<.0001	-0.0835
Pers01	0	0	.	.	.	
Pers02	1	-2.7463	0.0245	12574.8005	<.0001	-0.7434
Pers03	1	-1.8358	0.0209	7703.9852	<.0001	-0.4158
Pers04	1	-1.0228	0.0186	3033.5355	<.0001	-0.2227
Pers06	1	1.0894	0.0238	2097.8293	<.0001	0.1236
Pers07	1	2.1147	0.0332	4060.9808	<.0001	0.1814
Pers08	1	3.0272	0.0632	2292.5376	<.0001	0.1559
Pers09	1	3.7867	0.1123	1136.6382	<.0001	0.1502
Pers10	1	15.9086	37.6183	0.1788	0.6724	0.7386
Head of Hous. Married	1	0.1376	0.0294	21.8206	<.0001	0.0345
Head of Hous. Single	1	0.3363	0.0309	118.1957	<.0001	0.0743
Bay Area	1	-0.3451	0.0725	22.6855	<.0001	-0.0228
Southern California	1	0.1284	0.0434	8.7464	0.0031	0.00954

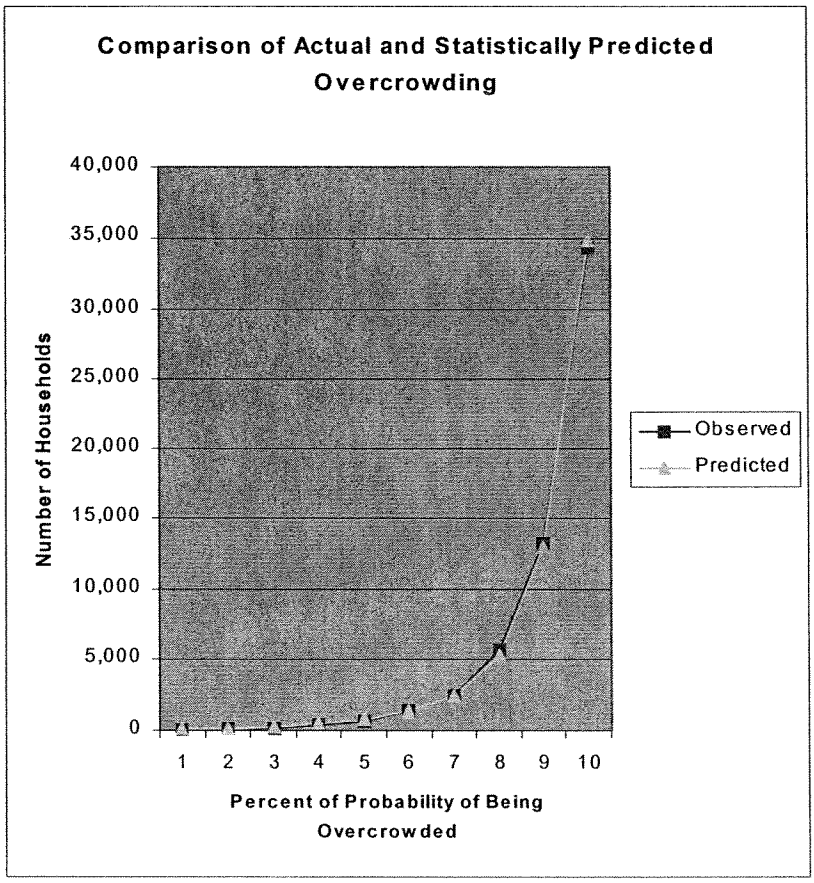
Partition for the Hosmer and Lemeshow Test

	crowd = 1		crowd = 0		
Group	Total	Observed	Predicted	Observed	Expected
1	36,263	64	92	36199	36170.54
2	38,975	77	128	38898	38847.35
3	38,480	120	256	38360	38224.25
4	39,323	381	472	38942	38851.15
5	39,349	620	732	38729	38616.62
6	39,282	1,357	1,274	37925	38007.94
7	39,283	2,404	2,339	36879	36944.50
8	39,308	5,630	5,170	33678	34138.07
9	39,298	13,250	12,916	26048	26382.30
10	43,541	34,390	34,897	9151	8643.52
	393,102	58,293	58,276	334,809	334,826.24

Hosmer and Lemeshow Goodness-of-Fit Test

Chi-Square	DF	Pr > ChiSq
241.4929	8	<.0001

The chart below shows the predicted number of overcrowded units by our logit regression versus actual units by estimated probabilities of being overcrowded. The chart corroborates that our model fits the data very well and predicts perfectly for 94 percent of all households (overcrowded or not).



APPENDIX II

LOGIT REGRESSION TO ESTIMATE RELATIVE INFLUENCE OF VARIOUS SOCIO-ECONOMIC CHARACTERISTICS

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq	Standardized Estimate
Intercept	1	-5.7614	0.0582	9792.0160	<.0001	
Black	1	1.0277	0.0225	2079.3929	<.0001	0.1362
Asian	1	0.9616	0.0573	281.6159	<.0001	0.0469
Asian/Pac. Islander	1	0.9961	0.0459	471.7329	<.0001	0.1433
Hispanic	1	1.5034	0.0188	6393.5624	<.0001	0.3133
Age	1	0.0159	0.00239	43.8775	<.0001	0.1482
Age Square	1	-0.00042	0.000025	275.6411	<.0001	-0.4094
Female	1	-0.3084	0.0165	347.3966	<.0001	-0.0790
Foreign	1	1.0294	0.0256	1613.2780	<.0001	0.2318
Foreign Hispanic	1	0.7386	0.0314	553.4609	<.0001	0.1209
Foreign Asian/Pac. Is.	1	0.6259	0.0531	138.8435	<.0001	0.0795
Renter	1	1.1028	0.0126	7665.6381	<.0001	0.2995
Poverty	1	0.8659	0.0157	3037.4158	<.0001	0.1423
Head of Hous. Married	1	2.3074	0.0237	9495.0180	<.0001	0.6327
Head of Hous. Single	1	2.2046	0.0251	7743.4390	<.0001	0.4422
Bay Area	1	-0.4594	0.0640	51.5075	<.0001	-0.0313
Southern California	1	0.3169	0.0351	81.4266	<.0001	0.0231

Hosmer and Lemeshow Goodness-of-Fit Test

Chi-Square	DF	Pr > ChiSq
219.4991	8	<.0001

Appendix III

Table 4

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Torrance	137,946	1,040	1,927	4,673	2.43	2.51	2.51	2.7%
Pasadena	133,936	1,100	1,645	3,306	2.01	2.53	2.52	6.1%
Escondido	133,559	3,010	4,550	24,628	5.41	2.73	3.01	15.3%
Sunnyvale	131,760	2,964	4,243	14,168	3.34	2.42	2.49	2.3%
Fontana	128,929	6,525	7,629	41,377	5.42	3.30	3.78	21.6%
Orange	128,821	3,886	4,139	16,798	4.06	2.90	3.02	9.3%
Rancho Cucamonga	127,743	5,767	7,228	22,929	3.17	3.01	3.04	7.8%
Fullerton	126,003	1,815	2,737	11,050	4.04	2.74	2.83	8.9%
Corona	124,966	12,733	13,919	48,650	3.50	3.16	3.29	5.3%
Concord	121,780	1,368	2,080	10,192	4.90	2.63	2.74	10.3%
Lancaster	118,718	5,528	5,323	18,671	3.51	2.83	2.92	8.9%
Thousand Oaks	117,005	5,193	5,336	12,359	2.32	2.82	2.75	3.5%
Vallejo	116,760	1,317	2,218	8,658	3.90	2.85	2.90	5.1%
Palmdale	116,670	12,696	12,333	47,814	3.88	3.13	3.40	15.7%
El Monte	115,965	591	903	10,249	11.35	4.00	4.24	-0.1%
Inglewood	112,580	(65)	703	3,192	4.54	2.99	3.02	7.5%
Simi Valley	111,351	4,161	4,423	10,703	2.42	3.12	3.04	4.1%
Costa Mesa	108,724	795	1,739	11,404	6.56	2.51	2.69	11.7%
Downey	107,323	457	976	16,073	16.47	2.71	3.11	25.5%
West Covina	105,080	946	1,315	8,631	6.56	3.18	3.32	11.1%
Daly City	103,621	1,149	1,765	11,414	6.47	3.15	3.34	-0.1%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Norwalk	103,298	307	541	10,148	18.76	3.48	3.79	15.0%
Berkeley	102,743	1,140	1,502	5,479	3.65	2.10	2.16	1.4%
Santa Clara	102,361	1,757	1,981	8,519	4.30	2.49	2.58	0.8%
San Buenaventura (Ventura)	100,916	2,460	3,116	8,140	2.61	2.55	2.56	6.8%
Burbank	100,316	1,631	2,333	6,662	2.86	2.36	2.39	2.3%
Richmond	99,216	1,512	1,876	11,307	6.03	2.63	2.82	12.0%
South Gate	96,375	1,323	785	10,213	13.01	3.84	4.15	8.9%
Fairfield	96,178	5,435	5,445	17,637	3.24	2.92	2.98	5.5%
El Cajon	94,869	737	1,306	5,764	4.41	2.63	2.70	8.5%
Compton	93,493	556	4	3,124	781.00	4.02	4.16	13.2%
Mission Viejo	93,102	6,592	7,275	19,446	2.67	2.88	2.84	4.4%
San Mateo	92,482	1,321	1,858	7,298	3.93	2.36	2.44	5.0%
Santa Barbara	92,325	850	1,257	4,879	3.88	2.41	2.47	3.6%
Rialto	91,873	2,209	2,766	18,749	6.78	3.30	3.69	19.7%
Visalia	91,565	5,500	4,772	15,889	3.33	2.84	2.91	10.5%
Antioch	90,532	7,143	7,937	28,250	3.56	2.89	3.07	6.5%
Vista	89,857	2,396	3,506	17,143	4.89	2.78	3.03	14.2%
Carson	89,730	896	840	4,884	5.81	3.51	3.59	7.0%
Vacaville	88,625	5,036	5,478	15,518	2.83	2.82	2.83	2.0%
Westminster	88,207	1,088	1,329	9,910	7.46	3.10	3.32	2.6%
Alhambra	85,804	465	872	3,845	4.41	2.83	2.88	-0.6%
Hawthorne	84,112	415	1,399	12,865	9.20	2.61	2.93	13.1%
Santa Monica	84,084	110	(363)	(2,767)	7.62	1.88	1.83	-0.6%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Whittier	83,680	219	634	6,174	9.74	2.72	2.88	16.9%
Redding	80,865	6,564	5,998	13,762	2.29	2.48	2.44	1.5%
Roseville	79,921	14,136	14,177	35,010	2.47	2.65	2.57	0.7%
San Leandro	79,452	1,145	1,514	10,723	7.08	2.33	2.57	4.9%
Lakewood	79,345	515	751	5,692	7.58	2.81	2.95	8.1%
Buena Park	78,282	626	1,122	8,974	8.00	3.08	3.32	9.0%
Carlsbad	78,247	6,563	6,526	15,666	2.40	2.47	2.46	-2.1%
Santa Maria	77,423	1,703	2,239	14,725	6.58	3.04	3.40	14.0%
Baldwin Park	75,837	251	347	6,576	18.95	4.13	4.44	7.9%
Redwood City	75,402	2,074	2,567	9,154	3.57	2.52	2.62	7.1%
Livermore	73,345	5,121	5,480	16,598	3.03	2.74	2.80	4.5%
Bellflower	72,878	130	462	11,129	24.09	2.67	3.09	19.3%
Napa	72,585	2,854	3,064	10,512	3.43	2.53	2.64	11.6%
Alameda	72,259	1,124	1,148	2,547	2.22	2.36	2.35	0.2%
Mountain View	70,708	945	1,252	3,374	2.69	2.23	2.25	2.2%
Newport Beach	70,032	2,427	2,211	3,151	1.43	2.14	2.09	0.7%
Lynwood	69,845	462	237	6,937	29.27	4.29	4.70	12.0%
Clovis	68,468	6,362	6,088	17,855	2.93	2.75	2.79	4.0%
Upland	68,393	971	1,474	4,900	3.32	2.73	2.76	10.0%
Tustin	67,504	6,201	5,499	18,273	3.32	2.66	2.82	13.5%
Chino	67,168	1,761	1,668	8,171	4.90	3.27	3.43	11.2%
Union City	66,869	2,618	2,941	13,225	4.50	3.39	3.57	-1.1%
Walnut Creek	64,296	1,457	1,954	3,533	1.81	2.11	2.09	1.3%
Victorville	64,029	6,871	6,652	23,106	3.47	2.83	3.03	10.5%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Merced	63,893	2,567	2,153	7,173	3.33	3.03	3.06	11.5%
Pleasanton	63,654	4,612	4,827	13,046	2.70	2.73	2.72	1.2%
Redlands	63,591	1,601	1,608	3,308	2.06	2.65	2.61	5.1%
Pico Rivera	63,428	491	466	4,422	9.49	3.67	3.83	5.1%
Redondo Beach	63,261	1,323	1,849	2,943	1.59	2.25	2.21	2.0%
Milpitas	62,698	2,899	3,033	12,066	3.98	3.37	3.47	-2.0%
Hesperia	62,582	3,989	3,415	11,897	3.48	3.04	3.12	10.4%
Montebello	62,150	223	226	2,730	12.08	3.17	3.28	7.0%
Laguna Niguel	61,891	4,993	6,045	17,208	2.85	2.58	2.65	2.6%
Huntington Park	61,348	820	957	5,418	5.66	4.01	4.12	3.7%
South San Francisco	60,552	1,057	1,158	6,286	5.43	2.91	3.05	4.7%
Davis	60,308	5,335	5,022	13,168	2.62	2.46	2.50	2.2%
Monterey Park	60,051	(89)	59	(715)	(12.12)	3.10	3.06	-2.4%
Chico	59,954	8,091	7,968	19,911	2.50	2.38	2.42	3.6%
La Habra	58,974	771	835	7,412	8.88	2.81	3.08	15.1%
Yorba Linda	58,918	2,226	2,478	6,425	2.59	3.12	3.05	0.8%
Hemet	58,812	9,709	7,855	21,616	2.75	2.04	2.26	8.2%
Palo Alto	58,598	860	1,010	3,600	3.56	2.24	2.30	-0.3%
Encinitas	58,014	1,720	2,048	3,956	1.93	2.57	2.52	-0.5%
Gardena	57,746	2,004	2,198	7,945	3.61	2.70	2.80	8.7%
Temecula	57,716	8,440	9,163	30,607	3.34	2.97	3.15	4.5%
Camarillo	57,077	3,215	3,329	4,715	1.42	2.84	2.62	3.4%
Lodi	56,999	1,702	1,691	5,984	3.54	2.63	2.71	10.2%
Tracy	56,929	5,913	6,412	23,206	3.62	2.98	3.21	3.4%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Pittsburg	56,769	1,591	2,098	9,048	4.31	3.02	3.17	8.5%
Diamond Bar	56,287	295	750	2,497	3.33	3.18	3.18	1.4%
San Rafael	56,063	1,809	2,076	7,095	3.42	2.31	2.42	9.0%
Turlock	55,810	3,695	3,719	12,517	3.37	2.81	2.92	8.5%
Paramount	55,266	865	979	7,637	7.80	3.64	3.93	11.4%
Fountain Valley	54,978	454	755	1,085	1.44	3.07	3.00	2.6%
San Marcos	54,977	4,386	4,494	15,990	3.56	2.85	3.03	9.4%
La Mesa	54,749	789	980	2,016	2.06	2.23	2.22	3.7%
Santa Cruz	54,593	2,140	2,321	4,669	2.01	2.50	2.44	3.8%
Petaluma	54,548	3,758	3,870	11,127	2.88	2.66	2.70	5.4%
National City	54,260	179	245	3,316	13.53	3.22	3.39	9.5%
Apple Valley Town	54,239	3,491	2,969	7,941	2.67	2.95	2.90	5.9%
Rosemead	53,505	211	212	1,900	8.96	3.72	3.80	-8.4%
Arcadia	53,054	487	797	4,828	6.06	2.60	2.74	0.0%
Santee	52,975	558	700	606	0.87	2.89	2.81	0.6%
Folsom	51,884	8,550	8,439	21,858	2.59	2.64	2.61	-1.4%
Cerritos	51,488	243	364	(1,739)	(4.78)	3.54	3.34	-2.1%
Cupertino	50,546	2,627	2,846	10,148	3.57	2.60	2.75	-1.0%
San Clemente	49,936	1,927	2,694	8,635	3.21	2.46	2.56	3.0%
Glendora	49,415	269	492	1,343	2.73	2.88	2.88	6.6%
Manteca	49,258	2,956	2,928	8,236	2.81	3.02	2.98	7.3%
Woodland	49,151	2,302	2,553	9,323	3.65	2.75	2.89	12.7%
Indio	49,116	3,881	3,124	12,262	3.93	3.35	3.48	7.3%
Poway	48,044	1,328	1,579	4,501	2.85	3.10	3.08	3.4%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Colton	47,662	913	1,054	7,540	7.15	2.96	3.26	11.0%
Novato	47,630	212	288	(649)	(2.25)	2.59	2.52	5.8%
Covina	46,837	254	440	3,647	8.29	2.74	2.89	14.7%
La Mirada	46,783	1,457	1,849	6,185	3.35	3.06	3.10	7.6%
Placentia	46,488	1,593	1,668	5,194	3.11	3.07	3.07	6.4%
Cypress	46,229	1,313	1,375	3,388	2.46	2.98	2.93	2.1%
San Ramon	44,722	4,021	4,099	9,357	2.28	2.75	2.63	1.4%
Azusa	44,712	(219)	(102)	2,610	(25.59)	3.17	3.41	10.3%
Highland	44,605	2,296	2,161	10,086	4.67	3.03	3.29	13.9%
Watsonville	44,265	1,786	1,944	13,162	6.77	3.24	3.84	14.3%
San Luis Obispo	44,174	1,429	1,687	1,834	1.09	2.39	2.27	2.2%
Bell Gardens	44,054	242	222	1,792	8.07	4.52	4.61	5.8%
Tulare	43,994	2,937	2,684	10,525	3.92	3.04	3.22	11.8%
Madera	43,207	2,991	2,819	13,897	4.93	3.15	3.57	13.9%
Palm Springs	42,807	306	1,894	2,479	1.31	2.13	2.05	5.0%
Cathedral City	42,647	2,664	3,109	12,469	4.01	2.75	3.03	12.8%
Newark	42,471	866	977	4,579	4.69	3.15	3.26	5.7%
Rohnert Park	42,236	1,893	2,094	5,467	2.61	2.66	2.65	4.6%
Danville Town	41,715	3,664	3,752	10,079	2.69	2.82	2.78	0.5%
Hanford	41,686	3,111	3,076	10,477	3.41	2.80	2.93	9.1%
Gilroy	41,464	2,385	2,357	9,976	4.23	3.27	3.46	6.5%
Yucaipa	41,207	1,836	1,874	8,119	4.33	2.44	2.67	7.4%
Palm Desert	41,155	9,773	8,589	17,794	2.07	2.18	2.13	3.3%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Lompoc	41,103	360	555	2,541	4.58	2.81	2.88	10.5%
La Puente	41,063	375	442	4,409	9.98	4.06	4.34	8.2%
San Bruno	40,165	(198)	37	2,176	58.81	2.58	2.72	5.5%
San Gabriel	39,804	173	371	2,461	6.63	3.00	3.10	-5.6%
Porterville	39,615	2,618	2,298	9,864	4.29	2.93	3.20	14.6%
Delano	38,824	2,348	2,173	11,082	5.10	3.64	4.02	6.0%
Culver City	38,816	187	445	452	1.02	2.34	2.31	3.9%
Pacifica	38,390	505	654	685	1.05	2.81	2.73	1.1%
Campbell	38,138	426	614	1,946	3.17	2.35	2.38	2.7%
El Centro	37,835	2,083	1,806	6,064	3.36	3.21	3.23	9.3%
Stanton	37,403	256	461	6,827	14.81	2.92	3.43	15.4%
Monrovia	36,929	13	260	1,101	4.23	2.68	2.71	6.8%
Yuba City	36,758	2,844	2,707	8,966	3.31	2.54	2.70	6.7%
Bell	36,664	(186)	(95)	2,068	(21.77)	3.78	4.05	4.8%
Rocklin	36,330	6,862	6,195	17,277	2.79	2.69	2.74	0.9%
Perris	36,189	2,792	2,926	14,708	5.03	3.16	3.73	20.3%
Martinez	35,866	1,627	1,785	4,030	2.26	2.44	2.41	1.8%
West Hollywood	35,716	289	552	(218)	(0.39)	1.58	1.53	0.1%
Brea	35,410	679	843	2,522	2.99	2.68	2.70	4.9%
Dana Point	35,110	1,016	1,755	3,323	1.89	2.48	2.41	1.6%
San Dimas	34,980	1,024	1,215	2,468	2.03	2.86	2.78	6.0%
Ceres	34,609	1,698	1,854	8,456	4.56	3.04	3.31	15.2%
Hollister	34,413	3,702	3,820	15,291	4.00	3.21	3.52	-1.1%
Claremont	33,998	728	809	784	0.97	2.68	2.56	5.1%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Manhattan Beach	33,852	339	482	1,776	3.68	2.29	2.34	0.1%
San Juan Capistrano	33,826	1,708	1,915	7,373	3.85	2.89	3.06	11.3%
Beverly Hills	33,784	133	471	1,849	3.93	2.19	2.24	-0.8%
Morgan Hill	33,556	2,934	3,038	9,609	3.16	3.00	3.05	4.1%
Temple City	33,377	126	283	2,278	8.05	2.77	2.90	1.6%
Montclair	33,049	151	262	4,346	16.59	3.29	3.69	21.8%
Pleasant Hill	32,837	381	749	1,237	1.65	2.39	2.35	1.8%
Lawndale	31,711	91	328	4,405	13.43	2.95	3.31	17.8%
Seaside	31,696	(233)	(808)	(1,395)	1.73	3.10	3.21	17.0%
La Verne	31,638	173	330	637	1.93	2.82	2.79	4.8%
West Sacramento	31,615	481	352	2,864	8.14	2.58	2.75	5.5%
Moorpark	31,415	1,179	1,373	5,935	4.32	3.34	3.49	5.8%
Menlo Park	30,785	467	571	2,872	5.03	2.28	2.41	5.9%
San Pablo	30,215	(77)	348	5,027	14.45	2.84	3.29	17.9%
Walnut	30,004	304	414	885	2.14	3.71	3.63	-4.1%
Dublin	29,973	2,880	2,523	5,205	2.06	2.86	2.65	3.1%
Saratoga	29,843	334	400	1,901	4.75	2.76	2.83	-0.2%
Monterey	29,674	(115)	(93)	(1,876)	20.17	2.26	2.13	3.0%
East Palo Alto	29,506	(260)	23	6,287	273.35	3.31	4.20	22.4%
Lake Elsinore	28,928	2,524	2,751	10,745	3.91	2.99	3.27	12.0%
Foster City	28,803	262	403	642	1.59	2.50	2.47	-0.5%
Santa Paula	28,598	279	472	3,712	7.86	3.22	3.49	12.3%
Los Gatos Town	28,592	545	715	1,180	1.65	2.37	2.33	0.2%
Burlingame	28,158	(45)	182	1,361	7.48	2.13	2.21	0.4%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Maywood	28,083	21	(27)	318	(11.78)	4.26	4.33	3.2%
San Carlos	27,718	353	411	1,429	3.48	2.36	2.40	1.2%
Los Altos	27,693	620	625	1,395	2.23	2.63	2.61	-0.1%
Calexico	27,109	2,151	2,085	8,466	4.06	3.92	3.96	-0.3%
Imperial Beach	26,992	214	192	451	2.35	2.85	2.84	11.8%
Benicia	26,865	960	1,120	2,426	2.17	2.65	2.60	1.6%
Atascadero	26,411	973	1,047	2,069	1.98	2.70	2.62	2.0%
Paradise Town	26,408	741	546	824	1.51	2.26	2.22	0.8%
Eureka	26,128	(144)	(180)	(1,356)	7.53	2.35	2.26	3.0%
Suisun City	26,118	1,117	1,294	3,366	2.60	3.39	3.26	1.7%
Los Banos	25,869	2,979	2,949	11,664	3.96	2.94	3.33	14.5%
Belmont	25,123	257	313	805	2.57	2.34	2.35	1.0%
Marina	25,101	276	(1,163)	(5,315)	4.57	3.05	2.79	12.5%
Ridgecrest	24,927	60	(523)	(2,983)	5.70	2.67	2.51	4.1%
Lemon Grove	24,918	84	99	1,017	10.27	2.78	2.87	8.7%
El Paso de Robles (Paso Robles)	24,297	1,192	1,572	4,841	3.08	2.65	2.73	9.6%
South Pasadena	24,292	131	245	428	1.75	2.31	2.30	2.6%
Cudahy	24,208	126	158	1,389	8.79	4.34	4.47	5.2%
Seal Beach	24,157	(140)	(322)	(933)	2.90	1.86	1.83	1.4%
Norco	24,157	492	544	1,045	1.92	3.27	3.15	3.2%
Coronado	24,100	349	407	881	2.16	2.28	2.27	1.6%
Lafayette	23,908	64	176	556	3.16	2.59	2.60	0.7%
San Jacinto	23,779	2,631	2,292	7,612	3.32	2.65	2.84	6.6%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Laguna Beach	23,727	119	424	586	1.38	2.08	2.05	-0.2%
La Quinta	23,694	5,386	4,514	12,442	2.76	2.85	2.80	5.8%
South Lake Tahoe	23,609	(61)	785	2,055	2.62	2.48	2.50	8.1%
San Fernando	23,564	138	141	1,189	8.43	3.96	4.07	6.5%
Banning	23,562	1,483	1,492	3,008	2.02	2.72	2.60	7.0%
Brentwood	23,302	5,160	5,022	15,751	3.14	3.04	3.10	-3.6%
El Cerrito	23,171	151	284	252	0.89	2.29	2.25	1.3%
Atwater	23,113	692	58	689	11.88	3.08	3.15	23.0%
Coachella	22,724	1,194	1,094	5,795	5.30	4.55	4.72	2.1%
Brawley	22,052	914	840	3,027	3.60	3.23	3.28	4.7%
Port Hueneme	21,845	427	536	1,630	3.04	2.85	2.86	11.2%
Duarte	21,486	47	105	1,018	9.70	3.06	3.16	8.8%
Wasco	21,263	659	500	2,650	5.30	3.57	3.79	3.4%
South El Monte	21,144	(143)	(154)	434	(2.82)	4.33	4.57	1.5%
Barstow	21,119	644	(4)	(593)	148.25	2.79	2.71	5.2%
Reedley	20,756	1,209	1,145	4,905	4.28	3.35	3.53	9.3%
Millbrae	20,718	(45)	23	309	13.43	2.53	2.56	0.3%
Agoura Hills	20,537	66	264	124	0.47	3.08	2.98	0.8%
La Canada Flintridge	20,318	71	129	917	7.11	2.87	2.95	0.2%
Lomita	20,046	40	144	670	4.65	2.44	2.48	6.8%
Lemoore	19,712	1,936	1,784	6,104	3.42	2.92	3.06	9.3%
Hercules	19,488	894	1,115	2,635	2.36	3.17	3.03	0.4%
Galt	19,472	3,138	3,064	10,570	3.45	2.99	3.23	8.6%
Selma	19,444	1,119	1,040	4,705	4.52	3.21	3.45	10.5%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Pinole	19,039	332	484	1,367	2.82	2.79	2.79	3.9%
Sanger	18,931	490	386	2,085	5.40	3.46	3.60	8.1%
Loma Linda	18,681	1,560	1,515	2,511	1.66	2.60	2.41	2.7%
Hermosa Beach	18,566	151	304	249	0.82	1.98	1.95	-0.2%
Adelanto	18,130	2,320	1,833	8,121	4.43	2.96	3.53	28.5%
Orinda	17,599	269	291	935	3.21	2.63	2.66	0.8%
Santa Fe Springs	17,438	116	178	697	3.92	3.33	3.35	4.0%
Dinuba	16,844	834	760	4,357	5.73	3.31	3.72	14.7%
Arcata	16,651	970	978	1,323	1.35	2.29	2.16	2.5%
Desert Hot Springs	16,582	1,540	1,273	4,870	3.83	2.52	2.80	20.0%
Albany	16,444	(220)	(181)	128	(0.71)	2.26	2.34	-0.1%
Artesia	16,380	64	76	865	11.38	3.40	3.54	-1.8%
Moraga Town	16,290	73	100	25	0.25	2.63	2.59	1.3%
Dixon	16,103	1,617	1,669	5,703	3.42	3.04	3.17	5.2%
El Segundo	16,033	71	287	790	2.75	2.25	2.27	1.9%
Arroyo Grande	15,851	691	754	1,426	1.89	2.48	2.41	2.1%
Riverbank	15,826	2,051	2,002	7,292	3.64	3.30	3.45	3.6%
Pacific Grove	15,522	116	(26)	(540)	20.77	2.16	2.10	1.1%
Oakdale	15,503	1,199	1,189	3,540	2.98	2.67	2.73	3.0%
Ukiah	15,497	312	323	721	2.23	2.48	2.47	7.6%
La Palma	15,408	131	164	(13)	(0.08)	3.20	3.09	-0.9%
Hawaiian Gardens	14,779	106	112	1,196	10.68	4.00	4.21	7.0%
Twentynine Palms	14,764	994	1,123	2,904	2.59	2.61	2.60	4.6%
Avenal	14,674	285	338	2,468	7.30	3.46	4.14	12.4%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Corcoran	14,458	302	236	1,218	5.16	3.28	3.44	7.8%
Carpinteria	14,194	7	37	522	14.11	2.74	2.82	6.9%
Fillmore	13,643	324	362	1,682	4.65	3.45	3.56	7.3%
Mill Valley	13,600	147	192	624	3.25	2.16	2.20	0.7%
Susanville	13,541	758	675	1,647	2.44	2.50	2.49	8.1%
Palos Verdes Estates	13,340	71	47	(165)	(3.51)	2.73	2.67	-0.1%
Rancho Mirage	13,249	2,456	1,980	3,564	1.80	1.98	1.92	2.5%
Red Bluff	13,147	505	297	719	2.42	2.47	2.47	4.7%
Clearlake	13,142	290	353	1,287	3.65	2.27	2.35	5.3%
Grover Beach	13,067	441	515	1,326	2.57	2.58	2.58	2.9%
Oroville	13,004	588	369	881	2.39	2.51	2.50	2.6%
Solana Beach	12,979	110	259	23	0.09	2.35	2.25	0.1%
Arvin	12,956	695	625	3,706	5.93	3.85	4.28	12.6%
San Marino	12,945	(28)	(37)	136	(3.68)	2.98	3.03	-0.6%
Shafter	12,736	983	735	3,708	5.04	3.28	3.67	18.4%
Greenfield	12,583	800	836	5,126	6.13	4.11	4.75	10.6%
Commerce	12,568	47	35	444	12.69	3.70	3.80	2.9%
Auburn	12,462	686	724	1,869	2.58	2.27	2.31	1.7%
San Anselmo Town	12,378	78	137	456	3.33	2.27	2.30	-0.4%
Marysville	12,268	(84)	(112)	(23)	0.21	2.43	2.49	6.6%
Blythe	12,155	1,987	1,362	3,685	2.71	3.02	2.91	-0.5%
Larkspur	12,014	447	420	995	2.37	1.90	1.93	0.4%
Half Moon Bay	11,842	712	867	2,236	2.58	2.79	2.75	1.0%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Coalinga	11,668	625	632	2,761	4.37	2.81	3.09	18.2%
Grand Terrace	11,626	399	364	572	1.57	2.81	2.70	7.2%
Patterson	11,606	559	580	2,780	4.79	3.35	3.62	8.8%
Los Alamitos	11,536	50	133	(146)	(1.10)	2.74	2.62	3.5%
Scotts Valley	11,385	867	931	2,639	2.83	2.48	2.56	1.5%
Beaumont	11,384	540	369	1,743	4.72	2.70	2.89	12.2%
Soledad	11,263	884	895	4,066	4.54	4.53	4.54	-2.7%
Lincoln	11,205	1,544	1,360	3,937	2.89	2.85	2.86	1.2%
Parlier	11,145	826	688	3,224	4.69	4.45	4.51	-0.1%
Chowchilla	11,127	440	382	1,723	4.51	2.67	2.94	14.0%
King City	11,094	378	555	3,510	6.32	3.44	4.03	13.7%
Tehachapi	10,957	484	340	792	2.33	2.63	2.59	11.5%
Piedmont	10,952	11	49	348	7.10	2.82	2.88	-0.2%
Grass Valley	10,922	881	868	1,873	2.16	2.12	2.13	2.6%
Hillsborough Town	10,825	15	63	162	2.57	2.94	2.93	-1.3%
Clayton	10,762	1,563	1,551	3,419	2.20	3.14	2.76	1.0%
Healdsburg	10,722	372	355	1,271	3.58	2.60	2.69	7.4%
Sierra Madre	10,578	55	127	(174)	(1.37)	2.30	2.20	0.2%
Fortuna	10,497	703	654	1,651	2.52	2.44	2.45	5.3%
Livingston	10,473	730	736	3,135	4.26	4.41	4.37	-1.4%
Lathrop	10,445	951	981	3,631	3.70	3.53	3.59	1.1%
Morro Bay	10,350	557	500	773	1.55	2.09	2.04	3.7%
Lindsay	10,297	187	141	1,871	13.27	3.21	3.74	13.1%
Ripon	10,146	879	902	2,581	2.86	3.02	2.98	4.6%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Capitola	10,033	27	11	(99)	(9.00)	2.13	2.11	4.3%
McFarland	9,618	284	305	1,610	5.28	4.12	4.30	2.7%
Placerville	9,610	677	607	1,559	2.57	2.29	2.34	6.1%
Signal Hill	9,333	127	246	1,187	4.83	2.40	2.56	7.2%
Kingsburg	9,199	774	702	2,037	2.90	2.80	2.82	3.0%
Exeter	9,168	517	432	1,865	4.32	2.81	3.02	12.2%
Sonoma	9,128	507	555	1,124	2.03	2.07	2.07	1.7%
Corte Madera Town	9,100	133	199	820	4.12	2.31	2.41	0.6%
Anderson	9,022	345	241	696	2.89	2.62	2.64	2.6%
Farmersville	8,737	537	468	2,495	5.33	3.70	4.05	13.7%
Tiburon Town	8,666	460	439	1,072	2.44	2.29	2.31	0.3%
Pismo Beach	8,551	948	489	899	1.84	2.04	2.02	0.4%
Kerman	8,551	714	701	3,072	4.38	3.23	3.57	12.2%
California City	8,385	1,176	948	2,372	2.50	2.81	2.72	6.7%
Westlake Village	8,368	341	440	904	2.05	2.63	2.56	0.4%
Los Altos Hills Town	7,902	134	134	327	2.44	2.88	2.86	-0.5%
Mendota	7,890	120	142	1,082	7.62	4.04	4.32	0.8%
Ojai	7,862	99	88	250	2.84	2.47	2.48	3.6%
Sebastopol	7,774	379	400	766	1.92	2.38	2.33	1.3%
Orange Cove	7,722	451	401	2,148	5.36	4.31	4.56	4.6%
Rolling Hills Estates	7,676	7	9	(125)	(13.89)	2.78	2.73	0.4%
Imperial	7,560	1,013	993	3,443	3.47	3.11	3.26	8.2%
Gonzales	7,525	502	582	2,938	5.05	4.09	4.42	3.9%
Sausalito	7,330	133	161	166	1.03	1.75	1.72	0.2%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Fairfax Town	7,319	193	214	358	1.67	2.24	2.20	0.8%
Yreka	7,290	201	175	250	1.43	2.32	2.27	2.0%
Calipatria	7,289	194	179	504	2.82	3.74	3.55	-16.8%
Atherton Town	7,194	(13)	10	201	20.10	2.78	2.85	-1.3%
Ione	7,129	245	225	627	2.79	2.65	2.68	-2.0%
Mammoth Lakes Town	7,093	858	862	2,102	2.44	2.45	2.44	7.7%
Newman	7,093	656	735	2,876	3.91	3.09	3.38	8.5%
Fort Bragg	7,026	422	341	736	2.16	2.38	2.35	9.0%
Waterford	6,924	622	576	2,220	3.85	3.31	3.47	11.3%
Emeryville	6,882	634	748	1,075	1.44	1.78	1.71	-0.9%
Cloverdale	6,831	586	627	1,838	2.93	2.63	2.71	10.6%
Corning	6,741	186	186	861	4.63	2.60	2.76	13.8%
Woodlake	6,651	289	241	973	4.04	3.69	3.74	9.2%
Cotati	6,471	152	251	739	2.94	2.51	2.55	4.0%
Taft	6,400	108	24	78	3.25	2.61	2.62	8.2%
Huron	6,306	452	445	2,054	4.62	4.37	4.45	1.8%
Orland	6,281	301	277	1,272	4.59	2.61	2.86	16.0%
Loomis Town	6,260	243	242	576	2.38	2.88	2.82	-0.4%
Live Oak	6,229	390	358	1,724	4.82	3.06	3.43	11.4%
Willows	6,220	128	(4)	208	(52.00)	2.73	2.83	12.4%
Winters	6,125	390	401	1,480	3.69	3.08	3.21	4.1%
Villa Park	5,999	42	43	(319)	(7.42)	3.30	3.07	0.6%
Escalon	5,963	492	460	1,500	3.26	2.78	2.89	3.2%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
St. Helena	5,950	343	242	959	3.96	2.31	2.48	7.7%
Firebaugh	5,743	338	233	1,253	5.38	3.74	4.01	6.8%
La Habra Heights	5,712	(210)	(204)	(514)	2.52	2.98	3.03	2.7%
Guadalupe	5,659	72	62	234	3.77	4.01	4.00	1.5%
Holtville	5,612	140	142	722	5.08	3.35	3.51	11.4%
Big Bear Lake	5,438	141	81	70	0.86	2.36	2.31	5.9%
Colusa	5,402	120	93	468	5.03	2.69	2.81	9.7%
Gridley	5,382	153	122	646	5.30	2.68	2.86	12.3%
Woodside Town	5,352	138	136	311	2.29	2.78	2.74	0.5%
Solvang	5,332	212	270	632	2.34	2.37	2.37	3.9%
Calistoga	5,190	92	85	758	8.92	2.23	2.51	13.5%
Willits	5,073	45	30	(23)	(0.77)	2.61	2.56	2.2%
Needles	4,830	214	(51)	(242)	4.75	2.54	2.48	1.3%
Lakeport	4,820	249	143	491	3.43	2.28	2.36	4.5%
Gustine	4,698	180	160	767	4.79	2.58	2.79	15.3%
Dos Palos	4,581	73	71	367	5.17	3.10	3.20	13.5%
Rio Vista	4,571	568	543	1,255	2.31	2.48	2.43	3.5%
Portola Valley Town	4,462	97	70	249	3.56	2.54	2.58	0.4%
Sonora	4,423	113	102	218	2.14	2.06	2.06	-0.1%
Del Mar	4,389	43	(46)	(447)	9.72	2.17	2.01	0.2%
Carmel-by-the-Sea	4,081	10	(24)	(126)	5.25	1.82	1.79	-0.2%
Crescent City	4,006	(25)	(67)	(406)	6.06	2.55	2.40	3.4%
Jackson	3,989	241	238	457	1.92	2.16	2.13	2.4%
Hughson	3,980	164	193	715	3.70	3.16	3.25	3.2%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Fowler	3,979	175	189	770	4.07	3.00	3.16	8.9%
Indian Wells	3,816	824	724	1,169	1.61	2.10	1.93	0.9%
Williams	3,670	204	221	1,231	5.57	3.11	3.70	29.0%
Mount Shasta	3,621	135	162	150	0.93	2.27	2.14	1.5%
Brisbane	3,597	449	320	647	2.02	2.24	2.20	1.2%
Bishop	3,575	88	3	124	41.33	2.01	2.08	6.0%
Monte Sereno	3,483	47	48	196	4.08	2.83	2.88	-0.6%
San Joaquin	3,270	189	170	965	5.68	4.33	4.66	16.6%
Rio Dell	3,174	190	58	163	2.81	2.58	2.59	3.3%
Avalon	3,127	(49)	(52)	159	(3.06)	2.40	2.65	5.9%
Angels City	3,004	263	242	617	2.55	2.29	2.34	2.5%
Nevada City	3,001	16	24	7	0.29	2.18	2.14	0.2%
Weed	2,978	38	15	(52)	(3.47)	2.49	2.41	2.4%
Yountville Town	2,916	153	153	208	1.36	2.05	1.95	-0.4%
Alturas	2,892	(46)	(109)	(319)	2.93	2.43	2.38	5.3%
Ross Town	2,329	37	37	206	5.57	2.80	2.94	0.2%
Sutter Creek	2,303	154	183	467	2.55	2.18	2.25	1.5%
Wheatland	2,275	137	181	644	3.56	2.70	2.90	8.3%
Portola	2,227	6	(4)	22	(5.50)	2.42	2.45	2.4%
Westmorland	2,131	235	217	751	3.46	3.38	3.41	10.0%
Belvedere	2,125	22	(8)	(22)	2.75	2.23	2.22	0.3%
Dunsmuir	1,923	41	(62)	(197)	3.18	2.28	2.22	0.0%
Hidden Hills	1,875	65	59	146	2.47	3.40	3.30	-0.7%
Rolling Hills	1,871	8	9	0	0.00	2.94	2.90	0.3%

Table 4 (continued)

City	2000 Total Population	1990-2000 Change in Total Housing Housing Units	1990-2000 Change in Occupied Housing Units	1990-2000 Total Household Population Change	Ratio of Household Population Change To Change in Occupied Housing Units	1990 Persons per Household	2000 Persons per Household	Change in Hispanic Population
Biggs	1,793	65	50	212	4.24	3.03	3.14	12.1%
Del Rey Oaks	1,650	(6)	8	(11)	(1.38)	2.39	2.34	0.1%
San Juan Bautista	1,549	6	13	(14)	(1.08)	2.82	2.73	1.8%
Colfax	1,496	15	67	189	2.82	2.39	2.43	2.1%
Montague	1,456	56	61	44	0.72	2.79	2.57	2.3%
Irwindale	1,446	96	95	394	4.15	3.89	3.96	2.7%
Ferndale	1,382	68	45	51	1.13	2.35	2.26	1.9%
Colma Town	1,191	(95)	(86)	52	(0.60)	2.63	3.47	9.9%
Blue Lake	1,135	16	7	(100)	(14.29)	2.48	2.25	0.0%
Maricopa	1,111	22	(12)	(82)	6.83	2.87	2.75	3.0%
Tulelake	1,020	17	(20)	10	(0.50)	2.67	2.85	16.2%
Plymouth	980	98	64	171	2.67	2.47	2.50	2.0%
Dorris	886	19	3	(6)	(2.00)	2.63	2.59	6.1%
Loyalton	862	(51)	(21)	(70)	3.33	2.62	2.58	-0.8%
Bradbury	855	30	18	26	1.44	3.12	3.01	-0.3%
Isleton	828	32	15	8	0.53	2.50	2.41	5.2%
Etna	781	11	12	(54)	(4.50)	2.63	2.37	1.7%
Industry	777	(15)	15	143	9.53	3.49	4.24	9.7%
Fort Jones	660	28	38	21	0.55	2.46	2.21	1.8%
Point Arena	474	22	16	67	4.19	2.33	2.48	4.9%
Tehama	432	20	16	31	1.94	2.46	2.41	15.9%
Trinidad	311	28	(2)	(50)	25.00	2.12	1.85	0.6%
Sand City	261	1	1	13	13.00	2.33	2.46	-3.1%
Amador City	196	4	6	0	0.00	2.48	2.31	0.0%
Vernon	91	(26)	(24)	(55)	2.29	2.98	3.64	10.7%