

**Projections of Employment, Population, Households,  
and Household Income in the SACOG Region  
for 2000 – 2050**

**Prepared by**

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**Prepared for**

**Sacramento Area Council of Governments**

## Executive Summary

The Center for Continuing Study of the California Economy (CCSCE) was asked by the Sacramento Area Council of Governments (SACOG) to prepare long-term job, population, household, and household income projections. CCSCE partnered with Viviane Doche-Boulos of DB Consulting for the demographic analysis component of the project. Stephen Levy, CCSCE's Director and Senior Economist conducted the job and income analyses.

The job and population projections included in this report are updates to the series prepared for SACOG in 2002. This final report summarizes the updated projections, and includes information in Appendix A on the differences between the results of the 2002 and 2005 analyses. The focus of this report is on the middle set of job projections and on the projections prepared for 2030. Projections were prepared in five-year increments to 2050.

In 2004, CCSCE was asked to compile and analyze historical information on household income trends, and to prepare projections of median and average household income and the number of households by income group for the SACOG region to 2050. Results from this work are also summarized in this report. (Note that all income figures in this report are in 1999 dollars.)

Together, these analyses yield a picture of our region's likely future in terms of jobs, population, housing, and household income. The following tables summarize the results

### Summary of Job, Population, Household, and Income Projections

	2000	2030	2050
Jobs	920,265	1,445,137	1,800,211
Households	712,866	1,209,216	1,445,678
Population	1,948,700	3,232,589	3,952,098
Household Population	1,940,800	3,168,100	3,873,255
White	1,261,821	1,716,348	1,867,808
Black	147,219	295,928	394,147
Asian	224,525	419,283	544,073
Hispanic	307,234	736,540	1,067,228
Median Household Income (1999 \$)	\$45,267	\$65,700	\$83,481
Mean Household Income (1999 \$)	\$58,376	\$81,571	\$101,135

CCSCE's methodology for projecting jobs prescribes analysis of California's share of the country's economic growth, and then in turn, our Region's portion of California's growth. The jobs projections reflect CCSCE's analysis that the SACOG Region will capture 8.35% of California's job growth from 2000 to 2030, and 8.90% from 2030 to 2050.

Population projections are made using a model that starts with existing population and then ages that population by applying rates of births and deaths by ethnicity. In addition, people are projected to move into and out of the Region. The birth and death rates, and the breakdown of net migration by racial/ethnic category are supplied by the California State Department of Finance (DOF), Demographic Research Unit. The DOF researchers monitor migration trends and fertility and survival rates for racial/ethnic groups for the entire state.

Like the DOF model, CCSCE's model is run first without any constraints. CCSCE then takes the additional step of ensuring that the number of people who live in this Region is consistent with the number of people who work here. The constraint impacts the net migration numbers; specifically, it limits the number of people who are able to move into the Region. Because of this constraint, CCSCE's population totals are much lower than the DOF's totals. Technical information about these differences is available in Appendix B.

CCSCE's population projections show the Region reaching a population of 3.23 million people by 2030, and 3.95 million by 2050. This implies an average annual growth rate of 1.70% for the first 30 years, and 1.01% for the following twenty years. The majority of the population is considered household population, the remainder being those people in group quarters. The racial/ethnic distribution of the population in households is projected. The composition of household population in 2030 is forecasted to be 54% White, 9% Black, 13% Asian, and 23% Hispanic. By 2050, that distribution is forecasted to change so that 48% of the population is White, 10% is Black, 14% is Asian, and 28% is Hispanic.

The analysis of current and projected household income trends performed by CCSCE show that median household income in the SACOG region, adjusted for inflation, is projected to rise from \$45,267 in 1999 to \$58,516 in 2020 and \$83,481 in 2050. Average household income is projected to increase from \$58,376 in 1999 to \$73,565 in 2020 and \$101,135 in 2050. For reasons discussed in more detail in this report, median household income is projected to grow faster than average household income, reversing three decades of growing inequality in the income distribution.

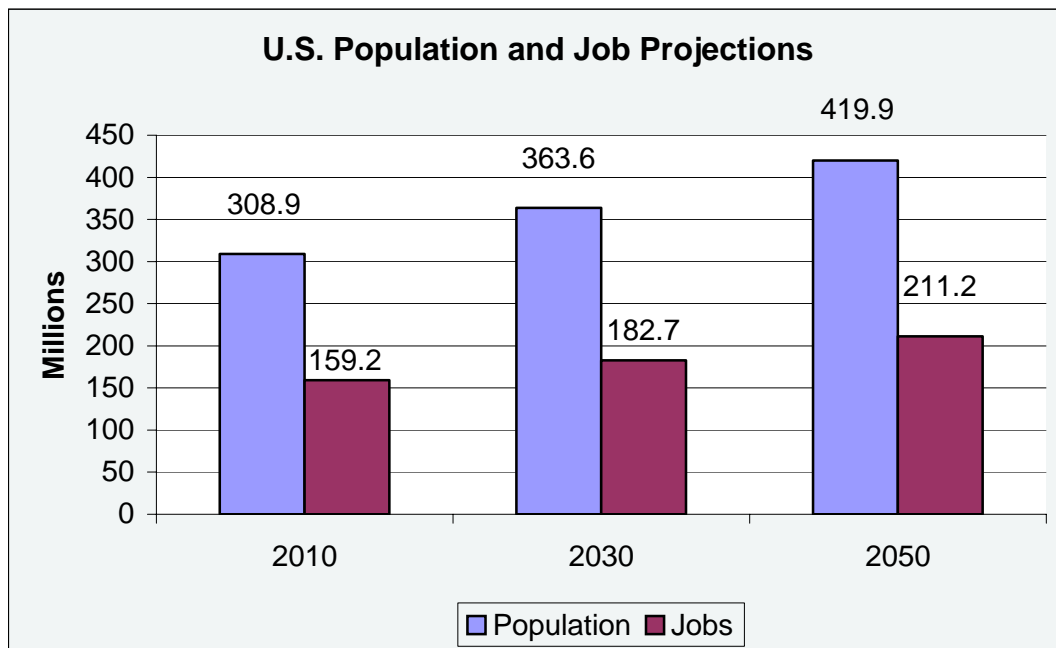
## Section 2 – Background and Historical Trends

The projections of jobs in the SACOG Region were prepared based on national and state level projections. The following sections describe the national and state data used to inform the job projections for the Region.

### U.S. Job Projections

New United States job projections were developed based upon 1) new Census Bureau projections of U.S. population growth and 2) new Bureau of Labor Statistics projections of trends in labor force and job growth. These new national job projections are slightly lower than the comparable projections prepared in 2002 for the first projections of the SACOG Region prepared by CCSCE.

In March 2004 the United States Census Bureau released new population projections incorporating data from the 2000 Census. The new population projections are slightly lower than the ones used in preparing the SACOG 2002 projections. The new projections are 6 million people lower in 2030 and 12 million people lower in 2050.

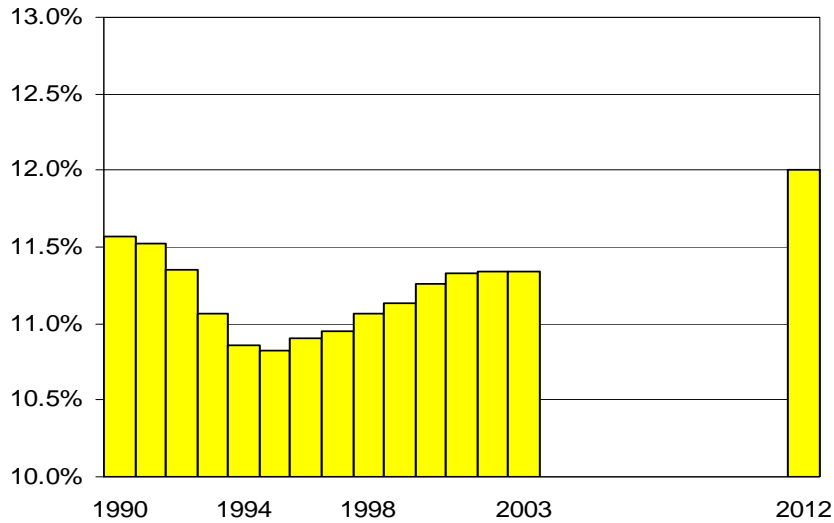


CCSCE developed new national job projections by extending the new Bureau of Labor Statistics analyses to 2012 that were published in February 2004. The projections assume a large increase in the labor force participation rates (delayed retirement) of persons over 55.

## California Job Projections

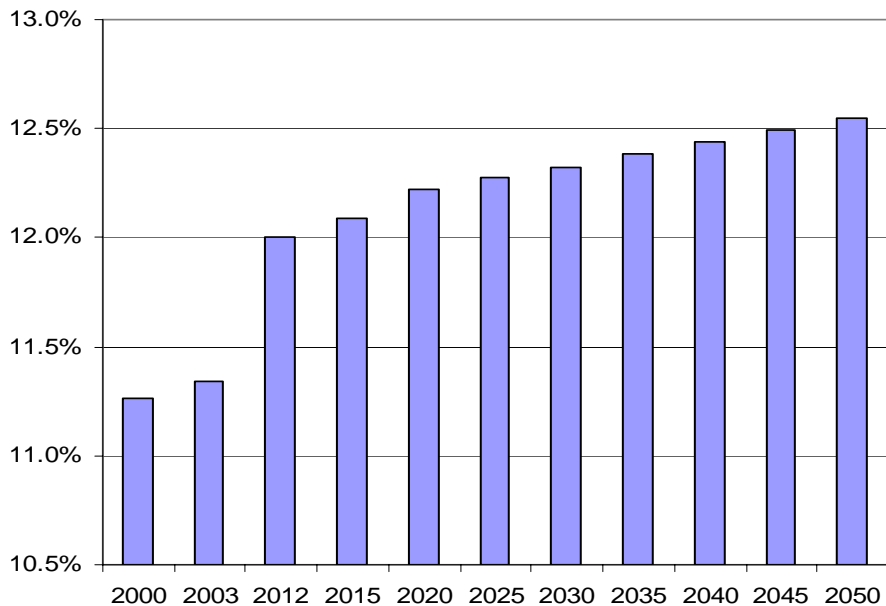
The share of U.S. jobs captured by California is the key to developing California and Regional job projections. California's share dropped in the early 90s and rose during the period leading up to 2000. During the past three years, the state's share of U.S. jobs has leveled.

**California Share of U.S. Total Jobs**



CCSCE projects that California's share will rebound during the next ten years and then continue to rise more slowly during the period to 2050.

**California Share of U.S. Total Jobs**



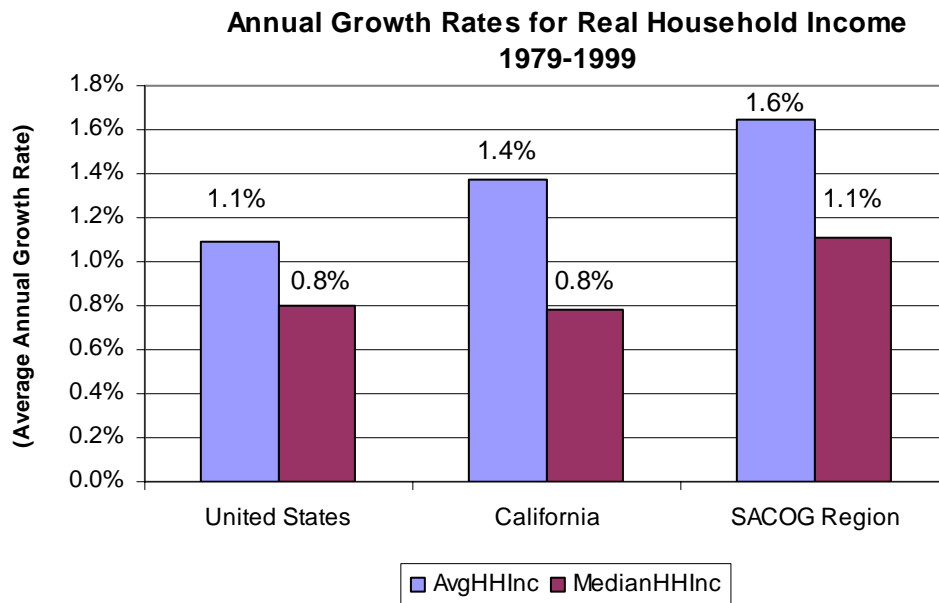
## Historical Household Income Trends

This report shows historical data and projections that are comparable in form to the household income estimates reported in the 2000 Census. Historical data are expressed both as reported and converted to \$1999. All projections are expressed in \$1999. Expressing the household income results in \$1999 allows discussion of the real growth of household income; income growth that is after accounting for the impact of inflation.

The Census reports two summary measures of household income – 1) mean (average) household income and 2) median household income. Median household income is the income level at which half of all households have higher incomes and half of all households have lower incomes.

Both median and average household income in the SACOG region grew faster than the rate of inflation between 1979 and 1999. Household income in the region grew slightly faster than in the nation. Average household income is higher than median income in the region, state, and nation. The explanation is that a small number of very high-income households pull up the average. This is the reason that many analysts prefer to focus on trends in median household income which ensures that the behavior of a few households cannot distort the overall trends.

After adjusting for inflation, real median household income in the SACOG region grew by 24.7% between 1979 and 1999, equal to an average annual growth rate of 1.1%. The region's growth exceeded the 0.8% annual gains for the state and nation.



The distribution of income became less equal among households in the SACOG region, state and nation between 1979 and 1999. The spread between average and median household incomes is one measure of income equality. In 1979, average household income in the SACOG region was 16% higher than the region's median household income. By 1999, the gap had grown to 29%. The explanation is that households in the top income brackets experienced larger percent gains in income than other households. Measured in this way, the region's income distribution became less equal between 1979 and 1999.

Average incomes grew faster than median incomes throughout the state and nation between 1979 and 1999. The regional pattern reflected a national trend toward greater income inequality during this period. In 1999, the ratio of average and median household income was lower in the region (1.29) than in the state (1.38) or nation (1.35). Regional income inequality was slightly less than in the state and nation.

Dividing households into three income groups in the region, state and nation gives insight into the distribution of income. The region has a slightly smaller share of households with incomes under \$30,000 in 1999 (31.8%) compared to the nation (35.1%). The region has a slightly larger share of households with incomes between \$30,000 and \$100,000 (54.7%) compared of the nation (52.6%) and a slightly larger share (13.5% to 12.3%) of households with incomes over \$100,000.

Median household income varies within our region by county, and by racial/ethnic group. In 1999 three counties in the SACOG region had median household incomes above the national average (Sacramento, Placer, and El Dorado) and three counties fell below the national average. Placer County residents had the highest median incomes (\$57,535) followed by El Dorado (\$51,484) and Sacramento (\$43,816). Yuba county residents had the region's lowest median income at \$30,460. Median income for Hispanic and Black households was below the median for Asian and Non Hispanic White households in 1999. Median household income for SACOG region households was above the national average for all groups except Asian households in 1999. For example, median income for Hispanic households in the SACOG region was \$36,848, below the regional median of \$45,267, but above the national Hispanic household median income of \$33,676.

### **SACOG Region Housing Price Competitive Advantage is Narrowing**

The SACOG region attracted jobs and people largely on the basis of providing a high quality of life with significantly lower housing prices than in California's major urban regions. In recent years, however, the region's housing price advantage

has narrowed and all California housing markets have become less affordable compared to other regional markets nationwide.

The housing trends suggest caution in projecting the region's competitive position for future job growth. SACOG region median housing prices were in the \$100,000 – \$150,000 range for most of the 1990s. They are now near \$350,000.

In the mid 1990s regional housing prices became more attractive relative to prices elsewhere in the state. The region median dropped compared to both the state and Bay Area medians between 1995 and 2000.

However, the regional median resale housing price is now steadily converging on the state and, perhaps more importantly, the Bay Area medians. Another way to look at the same phenomena is to compare affordability ratios. Affordability has dropped in both the region and state but the regional drop has been larger.

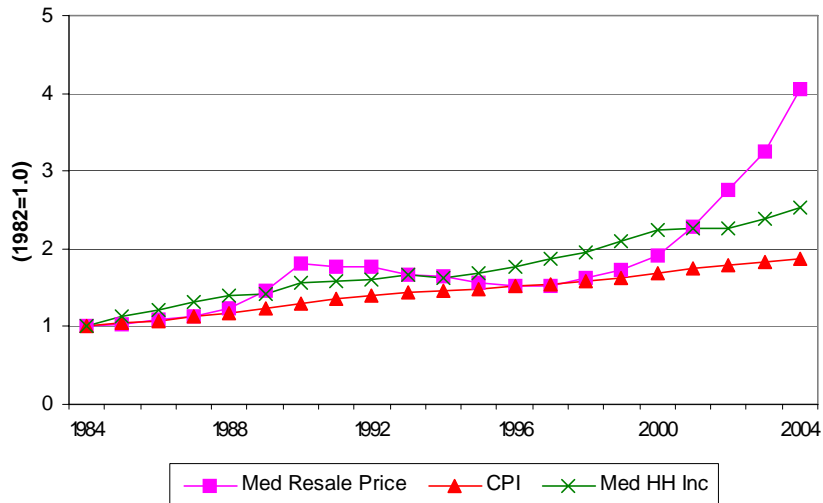
So the major issues for this analysis are 1) identification of sectors that could push the region's economic base to grow faster than the state, 2) determination of whether or not we can expect the region to grow as fast relative to statewide growth as in the 1990s, and 3) consideration of the impact on the region's relative growth rate of the narrowing housing cost advantage – an advantage that no longer exists relative to most regions outside California.

### **Home Price and Affordability Trends**

Prior to 1999, median home prices and housing affordability in the Sacramento region were near the national average and far better than housing prices and affordability in the urban coastal regions of California.

In 1999, the median price of existing homes in the region was \$131,500 compared to \$132,900 in the nation and \$217,300 in the state. The share of households able to afford the median-priced house was 58% in the region, 55% in the nation and 37% in California.

### Sacramento Region Median Resale Prices vs. CPI and Income



By 2004, however, regional home prices had surged and affordability has fallen well below the national average. In December 2004, the median price of an existing home in the Sacramento region was \$347,790, up almost \$170,000 from four years earlier. And the regional affordability ratio had dropped from 53% to 29%.

Housing prices and affordability trends deteriorated in the region relative to national trends. The region's median home price was 85% above the national average in 2005 after being below the national average in 1999. And the region's affordability ratio was 47% below the national average in 2004 after being slightly above the national average in 1999.

The purpose of this analysis is to develop projections of household income in a manner consistent with the population, household, and employment projections originally done in 2002 and updated in 2005. It is not to project or forecast housing affordability.

The relatively modest annual increases in household income shown for this projection, however, are far below the recent annual average increases in housing prices. Obviously it will take more than this analysis's trends of income gains to offset the housing price increases.

### Historical Poverty Rates and Likely Future Trends

CCSCE expects that poverty rates will fall in the SACOG region during the next 20 and 50 years. There are four major reasons.

First, the 1.1% annual real wage growth will slowly move more and more residents out of poverty.

Second, the retirement of baby boomers will support higher wage growth among the remaining workforce, which should help the income prospects for minorities and immigrants.

Third, the first generation of immigrants will be replaced by their children and grandchildren, who will have been educated in the United States. While immigration will continue in California and the SACOG region, the proportion of residents who are new immigrants will fall over time.

Finally, the region's population will move increasingly into the 65+ age group, where poverty rates are the lowest as a result of Social Security and growing private retirement income.

For information on historical poverty rates, please see Appendix C.

## Section 3 – Projections for the SACOG Region

### SACOG Region Job Projections

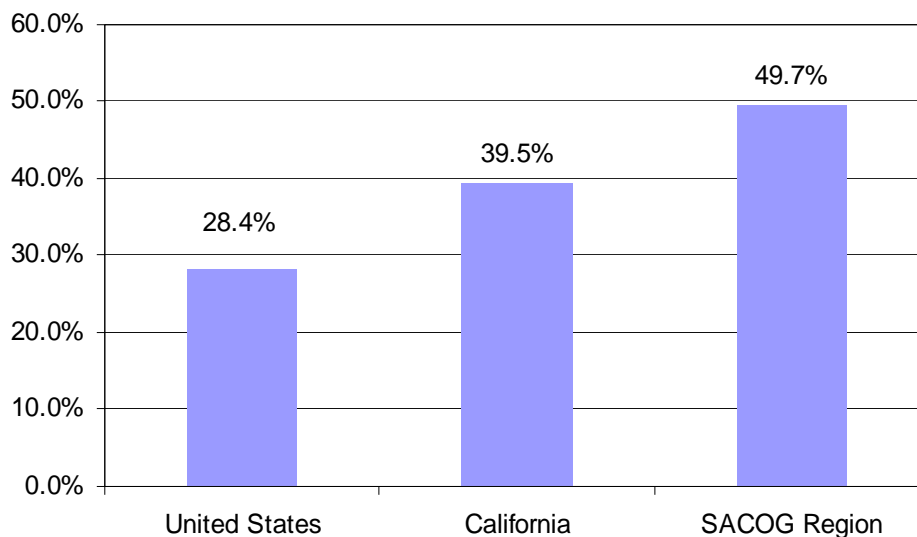
CCSCE developed a range of job projections for the SACOG region. These projections are presented below together with an explanation of how they were developed. For the job projections, low, middle and high series have been developed.

The final part of this section contains a more detailed analysis of the SACOG regional economy and the issues related to assessing future job growth prospects for the region.

The principal methodology is to analyze the prospects for job growth in the region's key industries relative to projected job growth for these industries in the nation and state.

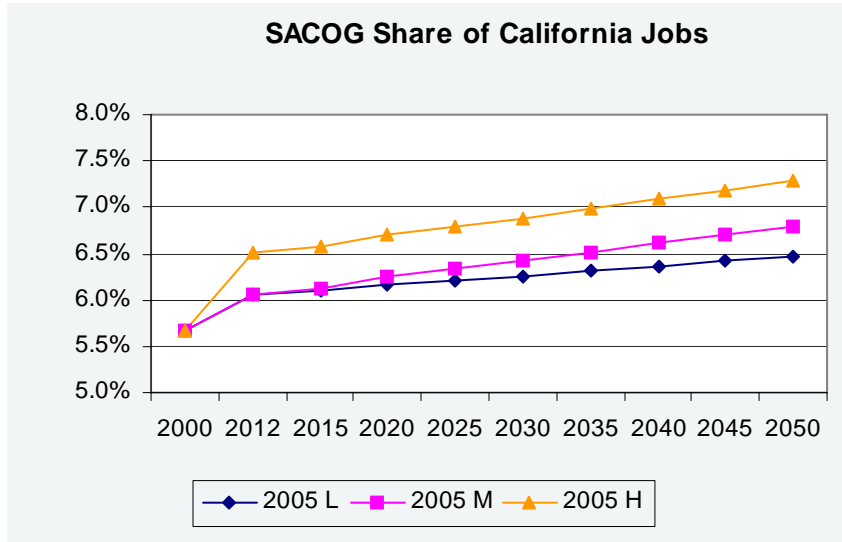
The middle projection series has 1,445,100 jobs for the SACOG region in 2030 up from 965,500 jobs in 2003. The region is projected to experience a 49.7% job increase between 2003 and 2030, which is higher than the projected 39.5% statewide job gain and the 28.4% national job gain. The number of added jobs is close to 500,000 during the period to 2030.

#### Job Growth 2003-2030

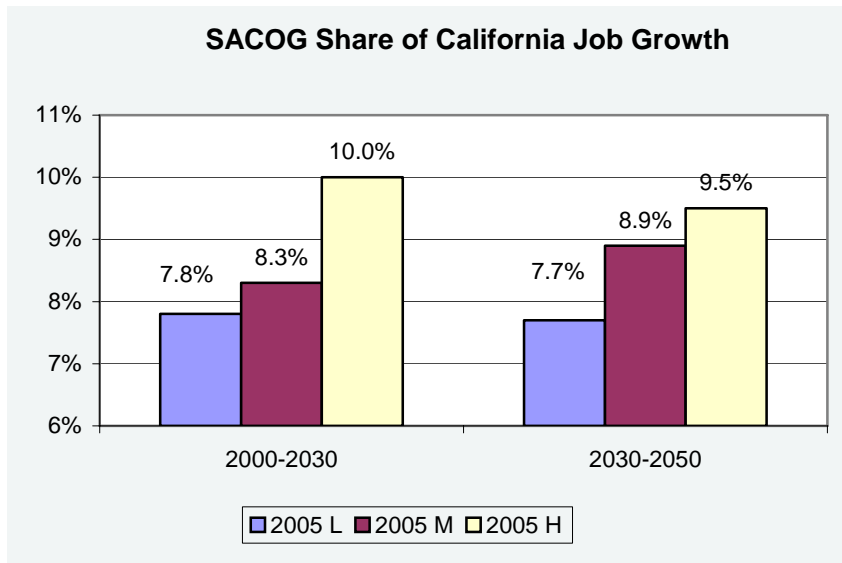


For 2030 the SACOG region is projected to capture between 6.3% and 6.9% of California jobs. The middle 2005 projection set and the final 2002 projection set both had the region getting 6.4% of statewide jobs in 2030.

For 2050 the SACOG/CA share ranges between 6.5% and 7.3%. The 2005 middle projections set and the 2002 final projection set both had the region getting 6.8% of statewide jobs.



The next graph shows the share of future state job growth captured by the SACOG region. In the middle 2005 regional projection, the SACOG region captures 8.3% of statewide job growth between 2000 and 2030. The SACOG region is projected to get 8.9% of statewide job growth between 2030 and 2050 in both the 2005 middle projections series.



The 2005 low projection set used 1) the actual share for 2000-2003, 2) CCSCE's 6.4% share for 2003-2012 and the average of 6.4% and 8.9% (7.65%) for 2012-2050. The resulting low projection shares of CA job growth were 7.8% for 2000-2030 and 7.65% for 2030-2050.

The low projection set is consistent with 1) slow growth in state government and related jobs and 2) no new rapid growth sector emerging in the region's economic base.

The middle projections set used 1) the actual share for 2000-2003, 2) CCSCE's 6.4% share for 2003-2012 and 8.9% thereafter for 2012-2050. The resulting middle projection shares are 8.3% for 2000-2030 (compared to 8.1% in the 2002 final set) and 8.9% for 2030-2050 (the same as in the 2002 final projection set). The middle projection set is consistent with 1) moderate growth in state government and related jobs and 2) some new fast growth basic industry sectors emerging.

The high projection set uses 1) the actual 2000-2003 share, 2) an 8.9% share (1990- 2000) for 2003-2012 instead of CCSCE's 6.4% share and 3) 9.5% for 2012-2050. The resulting high projection shares are 10.0% for 2000-2030 and 9.5% for 2030-2050.

The high growth projection set is consistent with 1) moderate to fast growth in state government and related jobs and 2) more than one new fast growing basic industry sector.

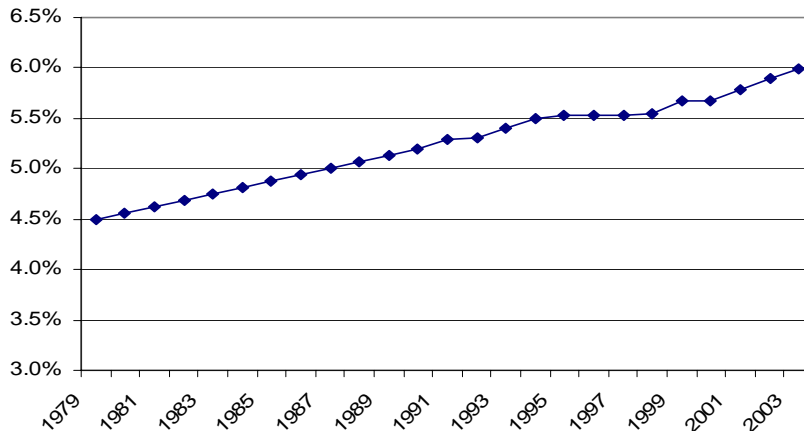
The Middle Series is summarized by sector below:

<b>SACOG - Middle Series Employment Projections (000)</b>									
	<b>2012</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>	<b>2050</b>
Farm	12.8	12.5	11.0	9.4	9.0	7.7	7.2	5.9	5.3
Natural Resources and Mining	0.8	0.6	0.1	0.3	0.3	0.6	0.6	0.9	0.8
Construction	78.7	82.1	88.1	92.5	97.0	102.5	108.4	114.4	120.8
Manufacturing	57.4	55.2	48.1	48.4	48.1	49.4	49.2	49.8	49.1
Wholesale Trade	33.0	33.8	34.8	35.6	36.9	38.2	40.0	41.4	43.2
Retail Trade	126.6	131.1	138.8	146.2	153.2	162.6	171.8	181.9	191.8
Transp., Warehousing and Utilities	31.8	33.0	35.2	37.5	39.4	42.1	44.6	47.5	50.2
Information	29.2	30.5	32.6	32.8	34.0	34.6	36.3	37.0	38.8
Financial Activities	70.9	73.5	78.1	82.3	86.3	91.6	96.9	102.6	108.4
Professional and Business Services	145.4	154.2	170.8	177.1	186.2	194.4	206.3	215.9	228.9
Educational and Health Services	120.2	128.2	145.8	160.7	172.1	189.1	203.7	221.9	238.2
Leisure and Hospitality	101.8	106.5	115.2	121.2	127.5	135.0	143.2	151.4	160.2
Other Services	38.3	40.1	43.8	47.6	50.5	54.9	58.7	63.4	67.4
Government	267.0	276.8	293.8	309.5	324.9	345.3	365.4	387.3	408.9
Self Employed	76.9	78.1	78.0	77.7	79.8	81.0	83.9	85.3	88.2
<b>Total Jobs</b>	<b>1,190.6</b>	<b>1,236.2</b>	<b>1,314.2</b>	<b>1,378.7</b>	<b>1,445.1</b>	<b>1,529.1</b>	<b>1,616.2</b>	<b>1,706.6</b>	<b>1,800.2</b>

## Analysis of SACOG Region Competitive Position: 1979 – 2000

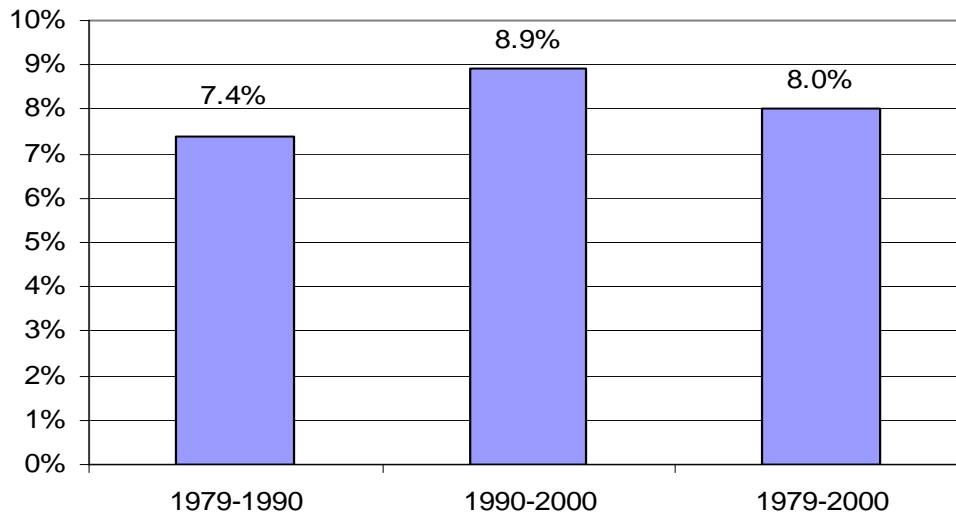
The region's share of state jobs grew from 4.5 % in 1979 to 5.2% in 1990 and 5.5% in 1995. Then the share growth slowed as other regions grew rapidly in the 1995-2000 period. By 2000 the SACOG region had 5.7% of California's jobs. Between 2000 and 2003 the region's share surged mainly because the rest of California lost jobs during the recession.

**SACOG Region Share of California Jobs**



The region's share of state jobs grew between 1979 and 2000 because the region consistently attracted an above average share of state job growth. The region captured 7.4% of California job growth between 1979 and 1990 and 8.9% between 1990 and 2000. For the total 1979-2000 period, the SACOG region accounted for 8.0% of California's job growth.

**SACOG Region Share of California Job Growth**

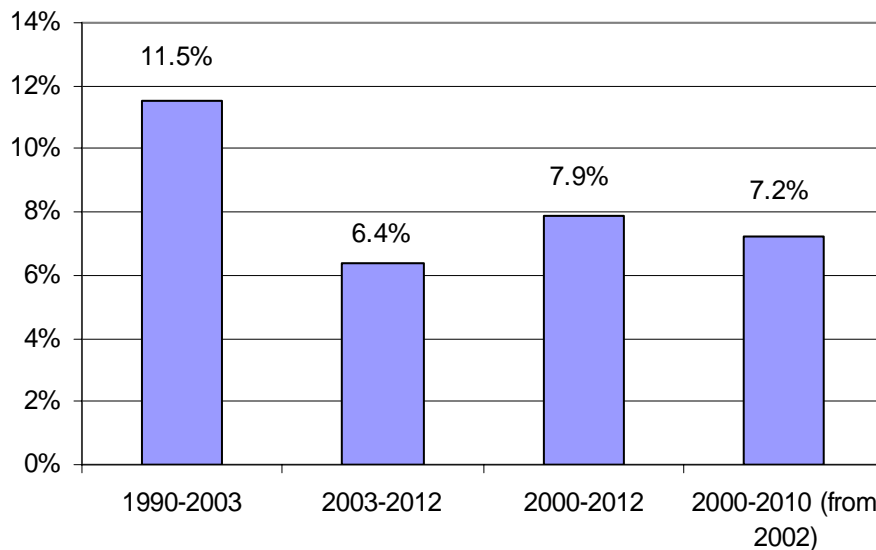


## Analysis of SACOG Region Competitive Position: Beyond 2000

Between 2000 and 2003, the region added jobs while the state lost jobs, mainly as the result of substantial job losses in the San Francisco Bay Area. As a result, the region accounted for 11.5% of state job growth between 1990 and 2003. This share will increase slightly when the 2004 data are included.

In *California Economic Growth—2004 Edition*, CCSCE projected that the SACOG region would get 6.4% of California job growth between 2003 and 2012 and 7.9% of California job growth between 2000 and 2012.

**SACOG Region Share of California Job Growth**



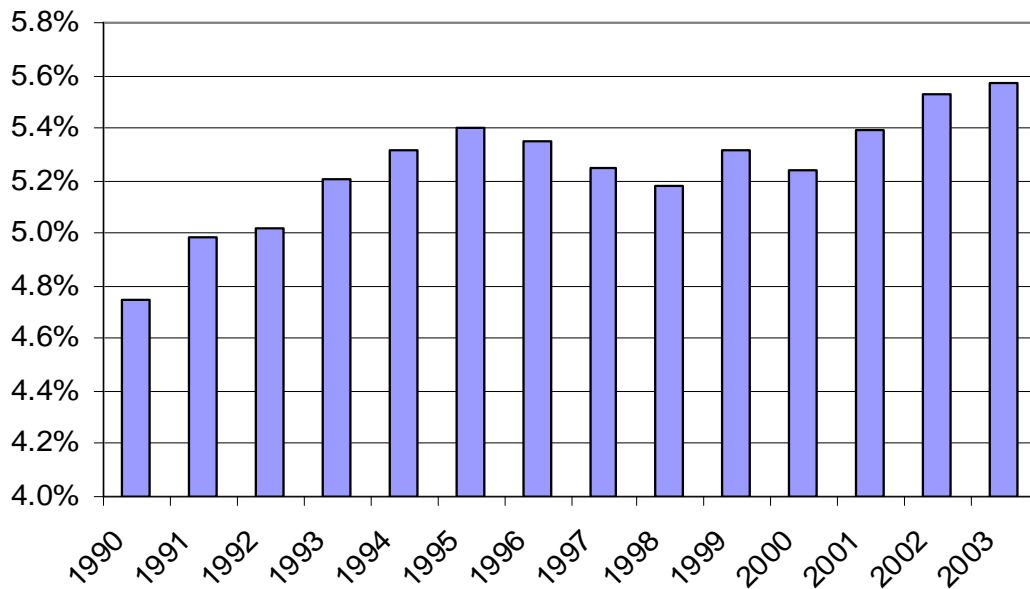
In the projections prepared in 2002, CCSCE saw the region getting 7.2% of state job growth between 2000 and 2010. In the current set of projections the region accounts for 7.9% of state job growth between 2000 and 2012. Yet the striking number on the graph above is the region's projected 6.4% share of state job growth between 2003 and 2012.

There are two broad trends that account for the 6.4% share projection to 2012.

- The 2003-2012 shares are affected by an expected “rebound” in the shares of other regions from the jobs recession that bypassed the SACOG region.
- The SACOG economic base looks more vulnerable in 2005 compared to how it looked in 2002.

- The graph below shows the SACOG region share of state basic jobs. The following material and discussion is based on the Sacramento Region section of *California Economic Growth—2004 edition*.

### SACOG Share of California Basic Jobs



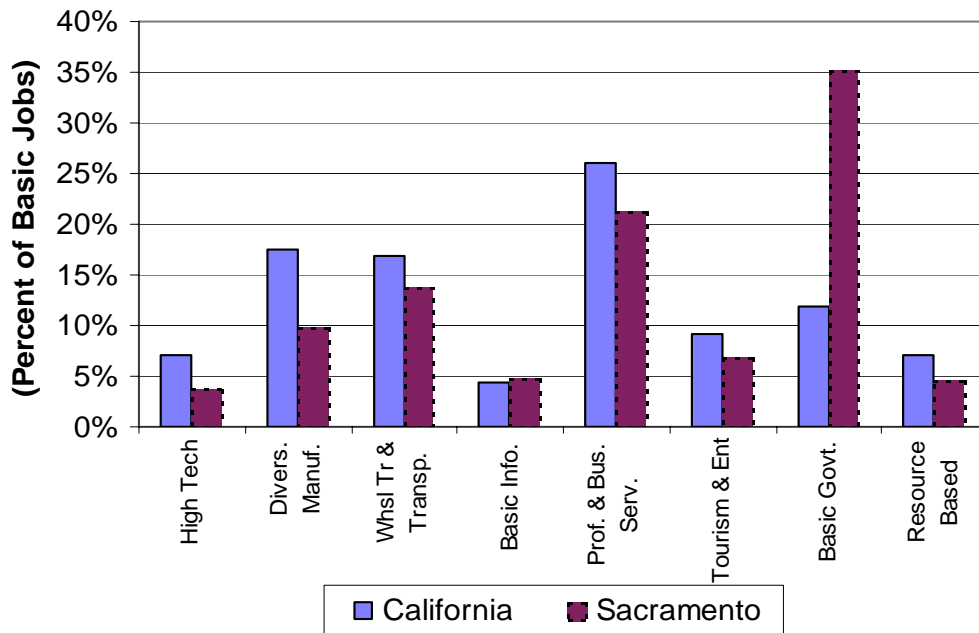
The rapid growth in share between 1990 and 1995 was accounted for by 1) the decline in basic jobs in Southern California and 2) the birth of the high tech surge in the SACOG region. The mid 1990s were characterized by two offsetting trends: 1) the rapid growth elsewhere (e.g. Bay Area) and 2) the growth in state government jobs and professional service jobs associated with state government.

The surge in share after 2000 was primarily the result of declines in basic jobs elsewhere in the state as high tech jobs fell in the region and state government job growth slowed. If you take out the data after 2000, the SACOG region share of California basic jobs was virtually the same in 1993 and 2000.

The structure of the region’s economic base is another concern for the short and medium term. The SACOG region economic base is heavily concentrated in one sector—state government—and underrepresented in most other sectors.

State and federal government jobs represented 35% of the region’s economic base in 2003 compared with 12% of statewide basic jobs. With such a high share, the fate of this one sector is critical for overall growth in the region’s economic base.

### Profile of Economic Base in 2003



High tech is not expected to provide much, if any, job growth in the state or nation in the years ahead. Information jobs may grow rapidly but from a very small base. The region has a solid entertainment and tourism sector but not on the scale of Southern California or the Bay Area.

These trends leave the burden of growth in basic jobs on state government and/or the professional and management services sectors. And much of the growth in professional services has been tied to the growth in state-government related activities.

### Household Income Projections for the SACOG Region

Projections of median and average household income and projections of the number of households by income group were prepared by CCSCE for the SACOG region for the period 2010-2050.

The major components of personal income are shown below in the table. Historical annual data for the period 1979-2001 was analyzed for the SACOG region by adding the county data published by the United States Department of Commerce. Similar data for the United States and California were also analyzed.

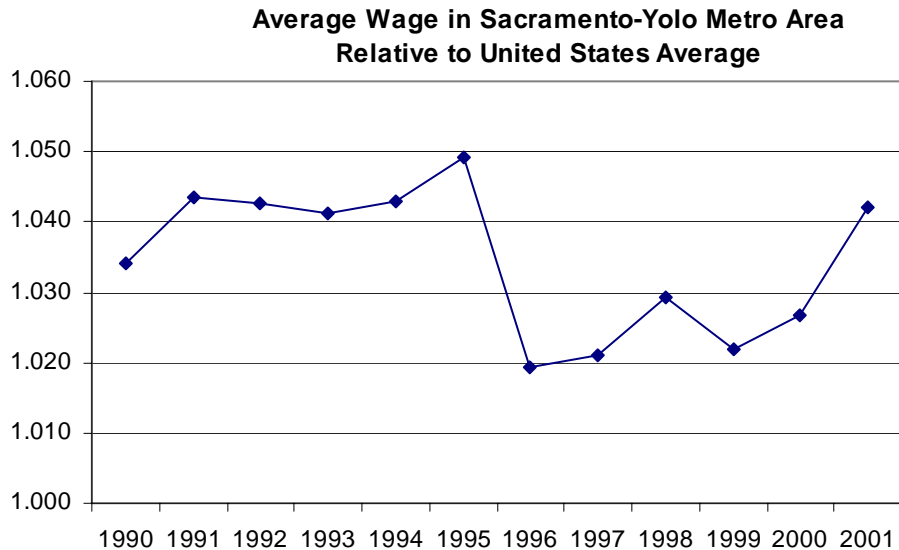
Earnings income represents the largest share of total personal income in the region, state and nation. Earnings income accounted for nearly 70% of personal income in the region in 2000. Wages and salaries account for the majority of earnings income followed by other labor income (benefits) and the income of

self-employed individuals and unincorporated businesses. Income projections were prepared to 2050 but most of this section reports on the projections to 2020.

<b>SACOG Region Components of Personal Income 2000 and 2020</b>				
	<b>(Billions of \$2000)</b>		<b>Percent of Total</b>	
	<b>2000</b>	<b>2020</b>	<b>2000</b>	<b>2020</b>
Wages and Salaries	\$30.7	\$56.5	53.6%	53.8%
Benefits	3.5	5.4	6.1%	5.1%
Proprietors' Income	5.3	9.7	9.2%	9.2%
<b>Total Earnings Income</b>	<b>39.5</b>	<b>71.6</b>	<b>68.9%</b>	<b>68.1%</b>
Dividends, Interest and Rent	10.2	18.0	17.7%	17.1%
Social Security	2.6	5.4	4.6%	5.1%
Medicare	1.3	4.3	2.2%	4.0%
Other Transfer Payments	3.7	5.8	6.5%	5.5%
<b>Total Non Earnings Income</b>	<b>17.8</b>	<b>33.5</b>	<b>31.1%</b>	<b>31.9%</b>
<b>Total Personal Income</b>	<b>\$57.3</b>	<b>\$105.0</b>	<b>100.0%</b>	<b>100.0%</b>

Source: 2000 - U. S. Department of Commerce; 2020 - CCSCE

The major assumption underlying these household income projections is that the average wage will increase by 1.1% per year faster than the rate of inflation. The 1.1% annual growth projection is used by the Social Security Trustees in projecting the long-term national growth rate for real wages. Wage levels in the region have kept pace with national growth as shown below.



The 1.1% annual growth rate projection for the SACOG region is conservative for two major reasons. One, productivity growth for workers has been rising by faster than 2% annually since the early 90s. The rate of productivity growth has stayed high through the current recession and the nation may well be moving into an era of long-term high productivity growth rates.

Two, the regional average wage may outpace the national growth. Two forces might push the regional wage growth rate above the national average. One is the growing number of professional service jobs that relate to the region's role as the state's capitol. The other factor is a potential continuation of the region's growth as a high tech alternative to the Bay Area.

The projections assume that other labor income (benefits) will grow more slowly than wages, as has been the case in recent years. Proprietors' income is projected to grow at the same rate as average wages.

Non-earnings income includes two major categories – 1) dividends, interest and rents, and 2) transfer payments. Transfer payments include Social Security income, public medical payments like Medicare and MediCal and income-related payments like the value of food stamps, unemployment insurance and welfare payments.

Dividend, interest and rent income is projected to grow slightly more slowly than the overall economy. Above average growth in dividends will be offset by low interest income gains as the current low interest rates are now built into many multi-year obligations.

Transfer payment income will increase as the region's population ages. Medicare payments will show the highest growth rate. Social Security income overall will increase as a higher share of the region's population reaches retirement ages, but the projections assume that the average individual Social Security checks will just keep pace with inflation in future years after many years of real growth in Social Security benefits.

The household income projections for the region were developed using these assumptions and the previously projected regional job, population, population by age group and household projections.

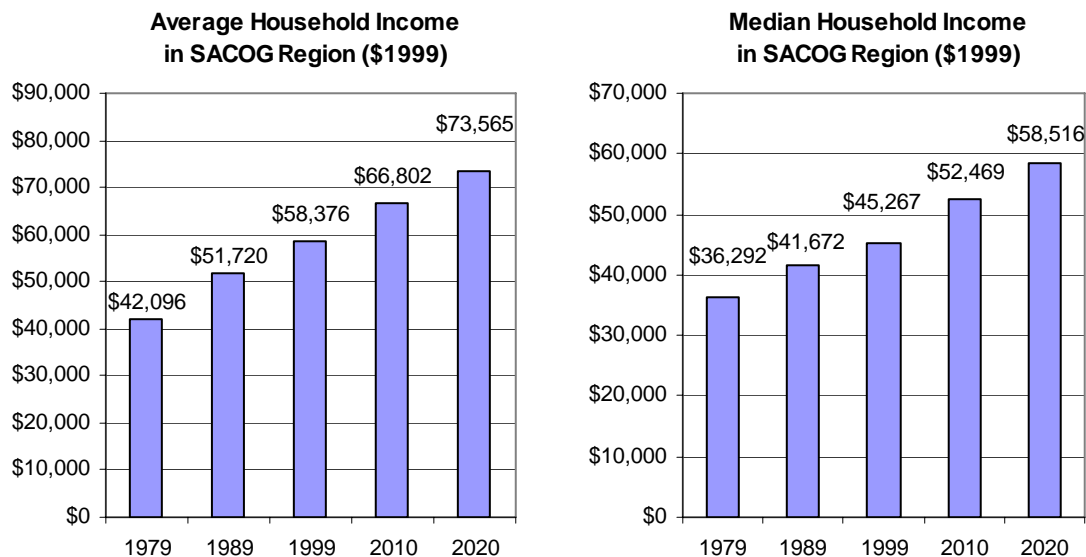
Moderate real increases in annual household income will raise regional incomes substantially over the next 20 to 50 years.

<b>SACOG Region Median and Average Household (\$1999)</b>						
	<b>1979</b>	<b>1989</b>	<b>1999</b>	<b>2010</b>	<b>2020</b>	<b>2050</b>
Median Income	\$36,292	\$41,672	\$45,267	\$52,469	\$58,516	\$83,481
Average Income	\$42,096	\$51,720	\$58,376	\$66,802	\$73,565	\$101,135

Source: 1979-1999--U.S. Census Bureau; 2010-2050--CCSCE

Median household income in the SACOG region, adjusted for inflation, is projected to rise from \$45,267 in 1999 to \$58,516 in 2020 and \$83,481 in 2050. Average household income is projected to increase from \$58,376 in 1999 to \$73,565 in 2020 and \$101,135 in 2050.

The projected household income gains would continue the pattern of moderate real income gains experienced over the past two decades in the region.



Median household income is projected to grow faster than average household income, reversing three decades of growing inequality in the income distribution. Four factors will contribute to the projected decrease in income inequality:

- The nation is in the midst of a reversal of the high stock option and executive compensation growth of the late 1990s. Some of the factors that created above-average gains in the incomes of high-income households are being reversed as companies change compensation strategies and executive pay is coming under increased shareholder scrutiny.

- The generation with the highest incomes is about to reach retirement ages. Particularly after 2010, there will be an unprecedented wave of retirements for

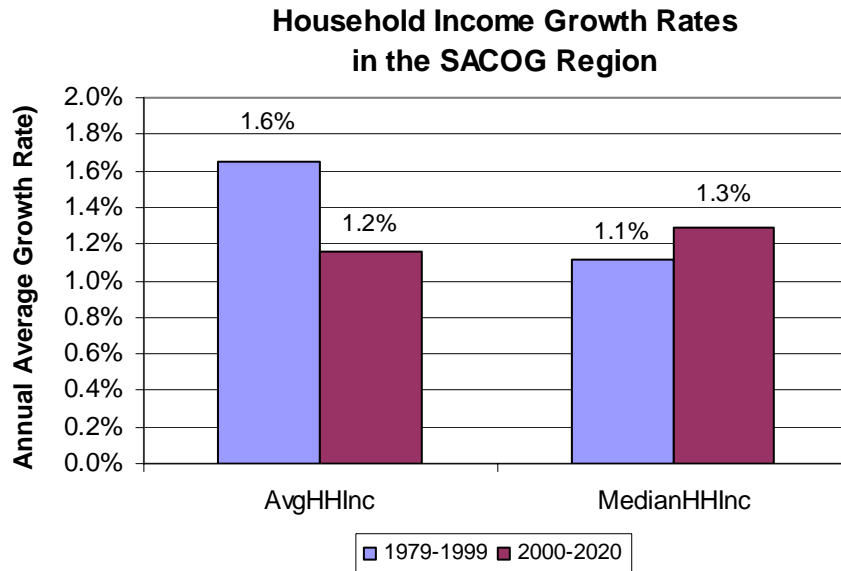
individuals in high-income households.

–As the baby-boom generation retires, the nation will begin a period of labor market tightness. Real wage levels for the remaining workforce should be pushed up as skilled workers enter retirement.

–The retirement wave will come largely from the region’s Non Hispanic White population, which currently has the highest household incomes. The remaining workforce will become increasingly Hispanic, Asian and Black. These changes will have the effect of decreasing the income inequality by ethnic group that currently exists and should reduce the overall level of inequality in the region.

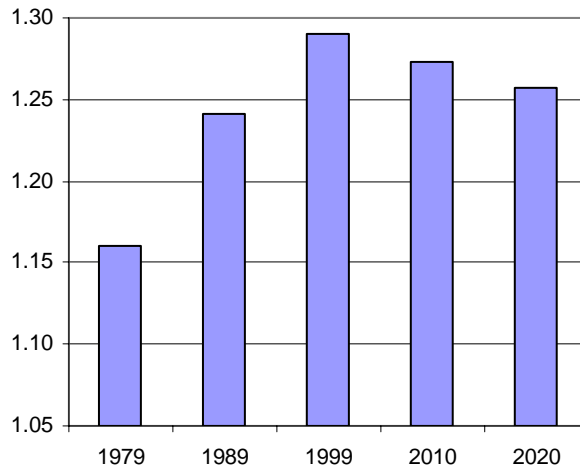
There are several ways to show the projected rise in regional household incomes and the expected modest improvement in income equality.

Real median household income in the SACOG region is projected to increase by 1.3% per year between 1999 and 2020 — slightly faster than the 1.2% annual increase between 1979 and 1999. On the other hand, average household income gains are projected to slow from 1.6% annually between 1979 and 1999 to 1.1% per year in the 1999-2020 period.



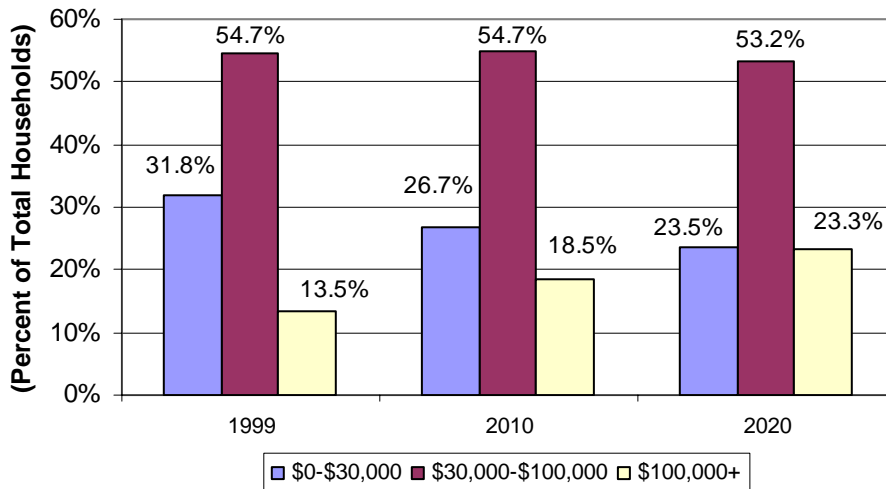
As a result of these trends, the ratio of average to median household income is projected to fall in future years, reversing the steady upward climb of the past two decades. This is another indicator of the modest expected reduction in regional income inequality.

**Average/Median Household Income Ratio in SACOG Region**



In 1999, the region had a far larger share (31.8%) of households with incomes under \$30,000 than there were households (13.5%) with incomes above \$100,000. Two decades of steady real income growth will change these proportions dramatically. By 2020, the share of households with incomes above \$100,000 (in \$1999) is projected to rise to 23.3% from 13.5% in 1979, while the share of households with incomes below \$30,000 is projected to decline to 23.5% from 31.8% in 1979.

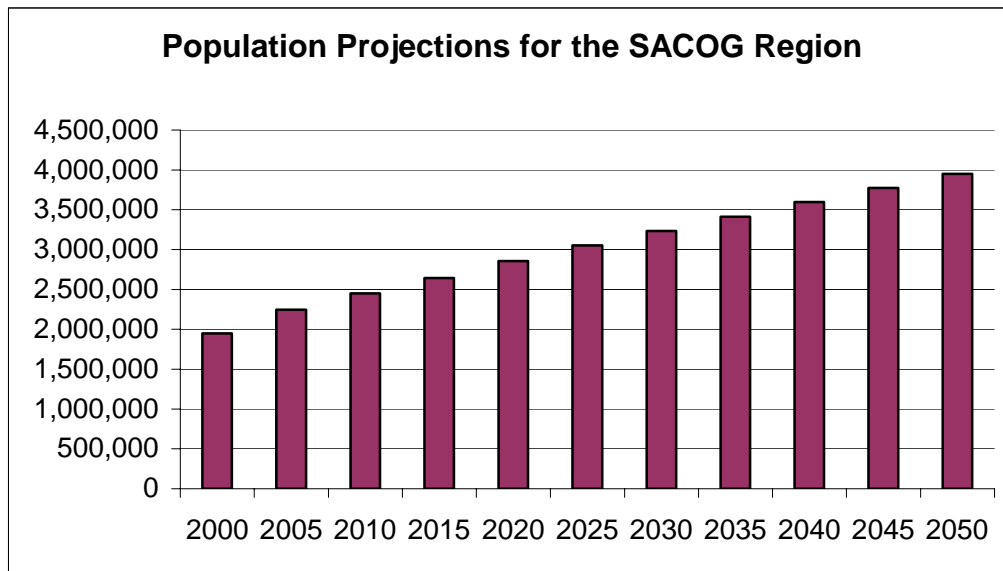
**Households by Income Group in the SACOG Region (\$1999)**



## Population and Household Projections

The population and household projections for the SACOG region were developed based on the middle alternative projection of jobs. The population projections are based on the job projections and the number of residents required to fill the projected job levels. The household projections are based on the population projections and household formation rates from the 2000 Census.

Regional population projections based upon the 2005 middle set of job projections are depicted in the graph below.



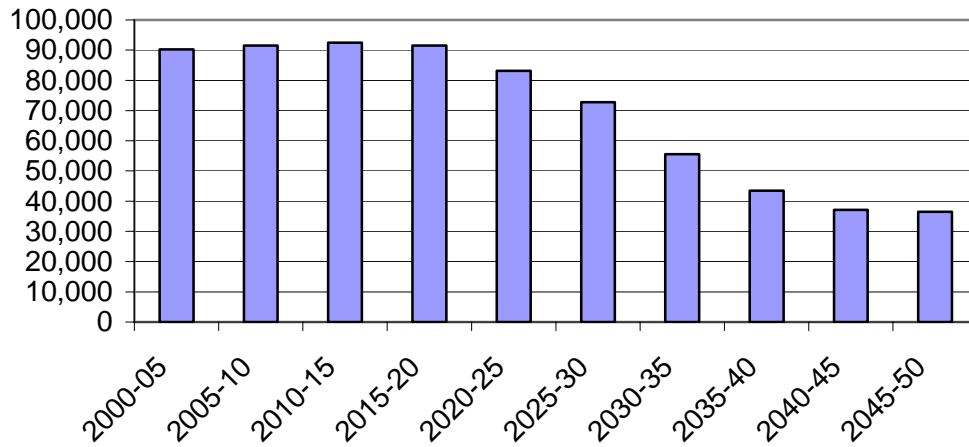
In 2030, the regional population is projected to be 3,233,000 and is forecasted to grow to 3,952,000 by 2050.

SACOG region population growth is projected to be substantially higher than in the state or nation. Between 2004 and 2030, regional population is projected to increase by 47.0% compared to 31.5% in California and 23.8% in the nation.

Natural increase (the number of births minus the number of deaths) is higher in the 2005 projection series compared to the 2002 series before 2030 and lower than previously projected after 2030. Prior to 2030, natural increase is higher because 1) the starting population is higher and 2) there is a slightly larger share of Hispanic residents in the regional population.

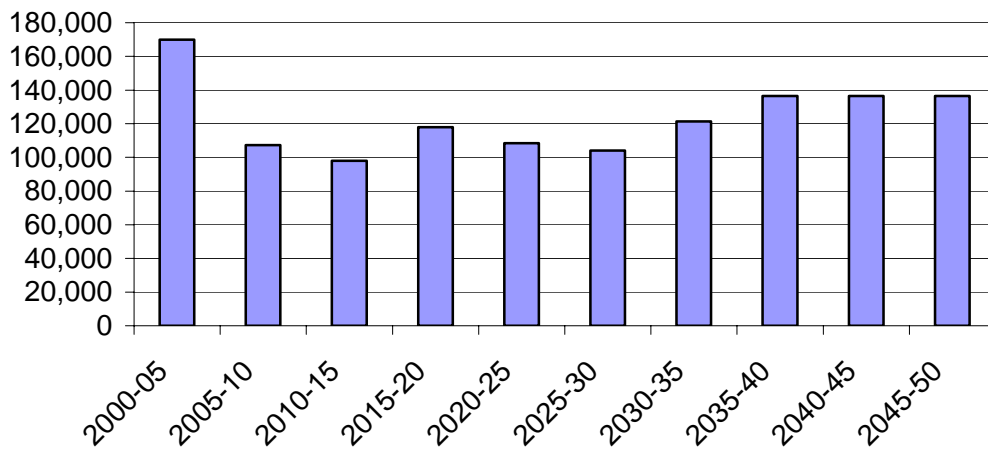
After 2030, natural increase falls steadily because of lower fertility rates and lower survival rates in older age groups.

### Natural Increase in the SACOG Region

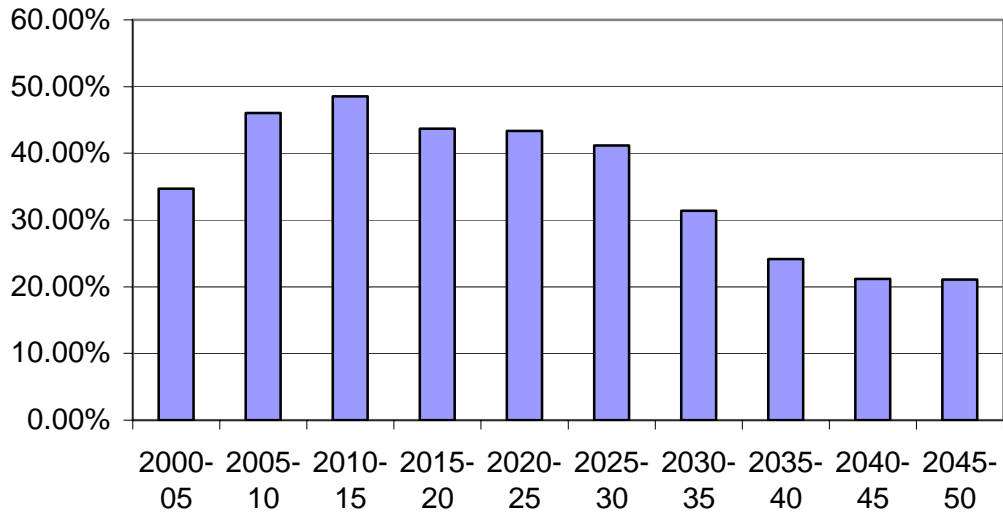


The amount and share of population growth accounted for by net migration is steadily increasing from 2010 to 2050. In part these trends represent a continuation of trends in the past three years where 1) net migration into the region has been substantial and 2) fertility rates are beginning to fall throughout California. These trends mean that people coming from other areas will fill a large and growing share of regional job growth.

### Net Migration in the SACOG Region



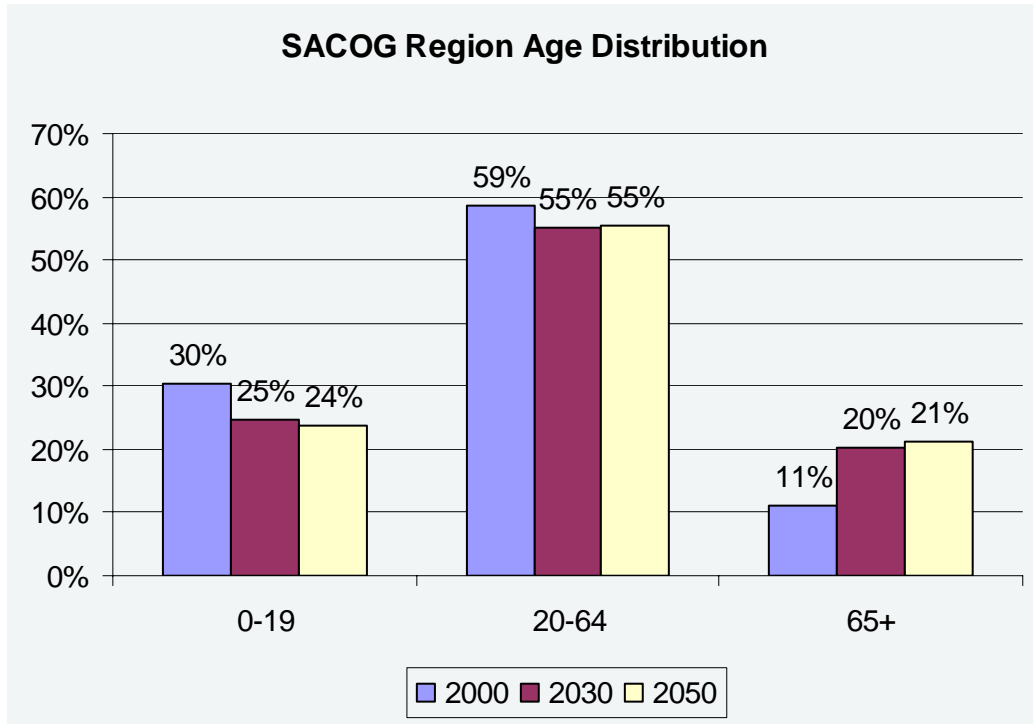
### Share of Population Growth from Natural Increase



### Population Change by Time Period

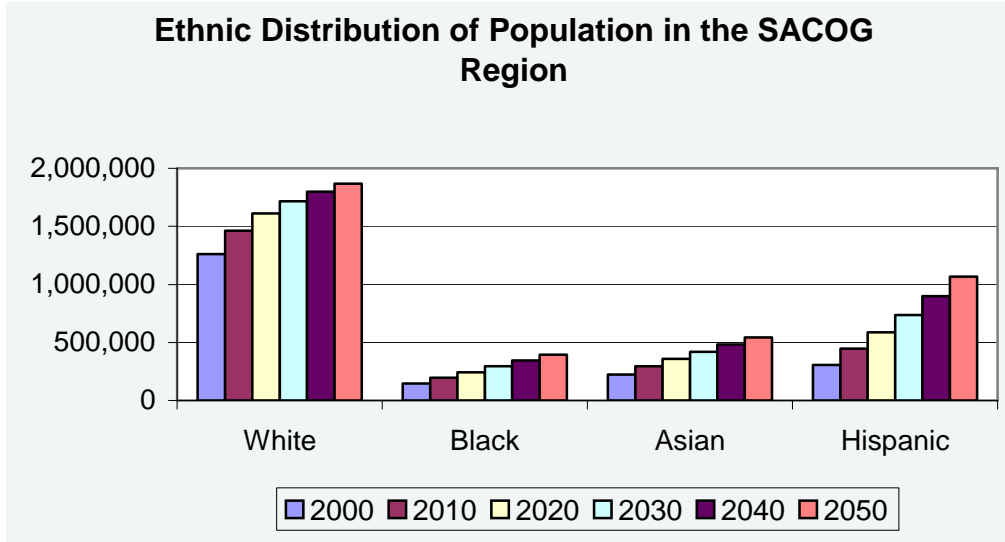
<u>Increment</u>	<u>Total Growth</u>	<u>Natural Increase</u>	<u>Net Migration</u>
2000-05	260,152	90,295	169,858
2005-10	198,815	91,531	107,284
2010-15	190,517	92,448	98,069
2015-20	209,369	91,537	117,831
2020-25	191,581	83,097	108,483
2025-30	176,853	72,794	104,059
2030-35	176,946	55,545	121,400
2035-40	180,041	43,474	136,567
2040-45	175,151	37,106	136,567
2045-50	173,018	36,451	136,567

The baby boom generation will reach 65 in the region and increase the share of residents over 65 between 2000 and 2030. The share of SACOG population 65 and older is projected to increase from 11% in 2000 to 20% in 2030, and 21% in 2050. On the other hand the share of regional population under 20 is projected to decline from 30% in 2000 to 25% in 2030, and 24% by 2050.



### Population by Ethnic Group

The model developed by DB Consulting has four ethnic groups: Hispanic, Non-Hispanic White, Non-Hispanic Black and Non-Hispanic Asian and Other. The major result is that the Non-Hispanic White share of total population in the SACOG region declines over time and the share of each of the other three groups increases.

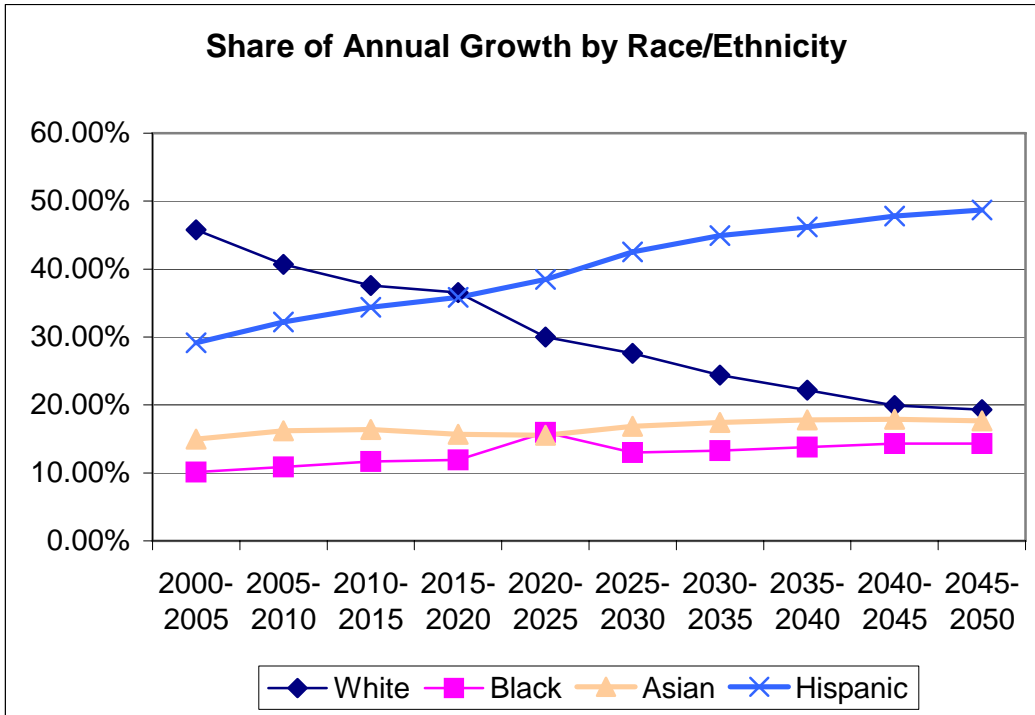


Between 2000 and 2030 the Non-Hispanic White share of SACOG region population total falls from 65.0% to 54.2%; the Hispanic share increases from 15.8% to 23.2%; the Non-Hispanic Black share increases from 7.6% to 9.3% and the Non-Hispanic Asian and Other share increases from 11.6% to 13.2%.

The following table and chart show the share of annual growth by racial/ethnic category.

#### Percentage of Annual Growth by Race/Ethnicity

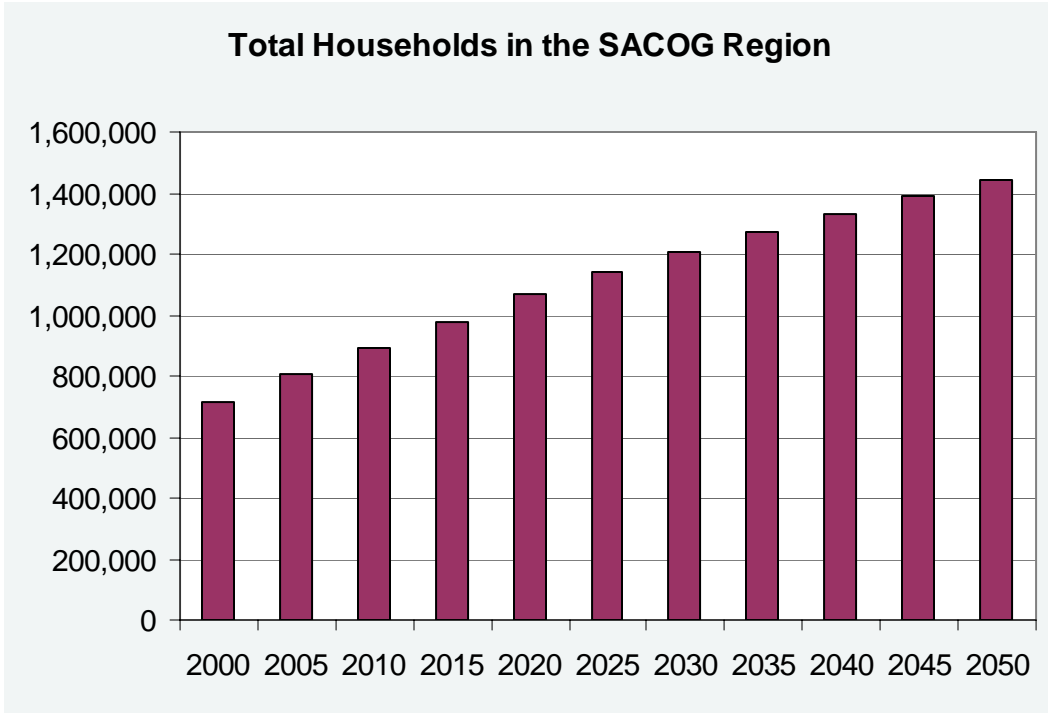
Growth Increment	White	Black	Asian	Hispanic
2000-2005	45.78%	10.13%	14.96%	29.13%
2005-2010	40.71%	10.86%	16.21%	32.23%
2010-2015	37.60%	11.67%	16.37%	34.37%
2015-2020	36.56%	11.90%	15.68%	35.85%
2020-2025	30.02%	15.97%	15.53%	38.48%
2025-2030	27.59%	13.02%	16.88%	42.51%
2030-2035	24.38%	13.27%	17.41%	44.93%
2035-2040	22.20%	13.80%	17.79%	46.22%
2040-2045	19.94%	14.34%	17.92%	47.81%
2045-2050	19.33%	14.32%	17.67%	48.68%



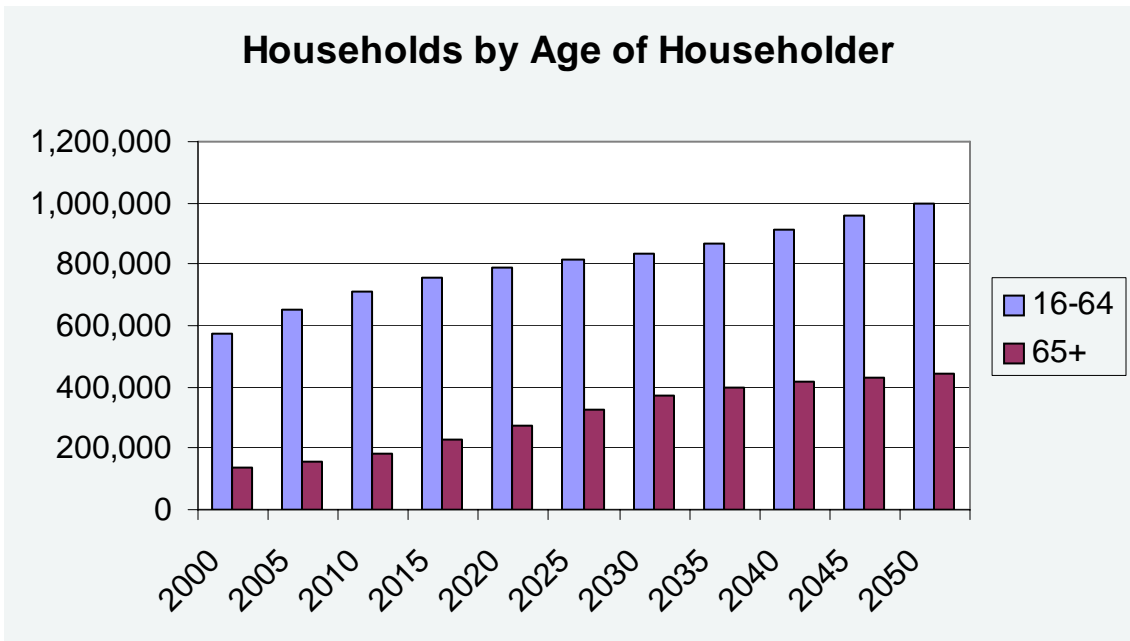
### Household Growth Trends

The number of households in the SACOG region is projected to increase by just over 500,000 households or by 70% between 2000 and 2030. The household projection for 2030 is 1,210,000. The Region is expected to gain an additional 240,000 households by 2050, a 20% increase from 2030. The household projections for 2050 is 1,450,000.

The methodology used in making these projections ties population and household growth to the economic forecast. Jobs and housing are equilibrated so that net commuting is close to zero. This is an important assumption that warrants careful evaluation. Please see the attached appendix on the recent and current extent of inter-regional commuting between the Sacramento Region and the San Francisco Bay Area.



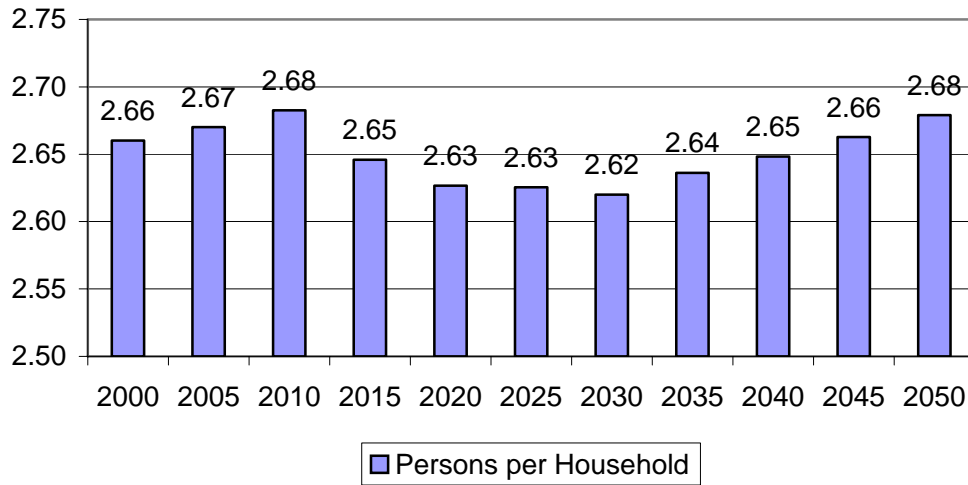
Nearly half of the projected household growth is expected in households headed by persons aged 65 and above. In 2030 approximately one third of the region's households will be headed by a resident aged 65 and above.



Age of Householder	2000	2010	2020	2030	2040	2050
16-64	576,612	711,388	791,935	835,721	915,137	1,000,092
65+	136,254	183,166	273,945	373,494	415,915	445,586
Total	712,866	894,553	1,065,880	1,209,216	1,331,052	1,445,678

Average household size in the region is expected to stay fairly stable between 2000 and 2050. Persons per household falls as the region’s population ages because older households tend to be smaller than younger households. This effect is counterbalanced by higher fertility rates, which result in more children per household. As the population changes in racial/ethnic composition, those groups with historically higher fertility rates become a larger portion of the population. As we approach 2030, the average household size decreases reflecting the aging population. From 2030 through 2050, the average household size begins to increase, which results from the “post-baby boomer” cohorts aging and having families.

**Persons per Household in the SACOG Region**



The household projections were developed by using population projections separated into ethnic and age groups. For each age and ethnic group, DB Consulting applied household formation rates (the number of households formed per 100 people in each group) to the projected population. The result was a set of household projections by age and ethnic group.