

MTP/SCS  
Appendix D-1  
Regional Projections

**Draft October 12, 2010**

**Regional Employment, Population, and Households  
Projections in the SACOG Region, 2008-2035**

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## **Section 1**

### **Introduction and Summary**

This report summarizes new job, population and household projections prepared for the Sacramento Area Council of Governments (SACOG) by the Center for Continuing Study of the California Economy (CCSCE) and DB Consulting. The work was conducted by Stephen Levy of CCSCE and Viviane Doche-Boulos of DB Consulting. This team prepared previous projections for SACOG in 2002 and 2005.

The analysis was completed in early 2010 and presented to the SACOG board in February 2010 and at the SACOG Blueprint conference in April 2010.

These projections are technical inputs to the development by the SACOG staff and board of updated land use and transportation plans for the region. The new technical projections focus on 2035 with interim projections developed for 2020. The projections are for the six-county SACOG region as a whole, i.e., no sub-regional projections were prepared as part of the project work.

Final sub-regional projections and plans will be developed by SACOG after an extensive public outreach and discussion process that will incorporate the vision and choices of local residents and how the region chooses to respond to SB 375 planning requirements. The final regional projections will be adopted in the spring of 2011, following the 2010 Census and discussions with the State Department of Finance and Housing and Community Development.

### **Background**

The long-term growth outlook for the SACOG region is affected by four sets of factors that are largely external to the region or which the region shares with the state and nation:

- Three major changes that affect the regional outlook started before the recession but continued in and were deepened by the recession. First, California no longer significantly outpaces the nation in job growth. This is the most significant change compared to the projections prepared in 2005 and adopted in the 2008 MTP. Second, housing prices and construction began to decline from the peak and unsustainable levels of 2004, 2005 and 2006 before the recession began. Third, the budget challenges and gridlock that were intensified by the recession were beginning to be problems even before the recession started in late 2007.
- Two major changes are ongoing unaffected by the recession. The region, state and nation are beginning to enter the 20 year period in which baby boomers will move from the prime family formation and earnings ages of 35-55 to the changes in labor force participation and housing choices that come with aging and eventual retirement. And the region and state will continue to experience

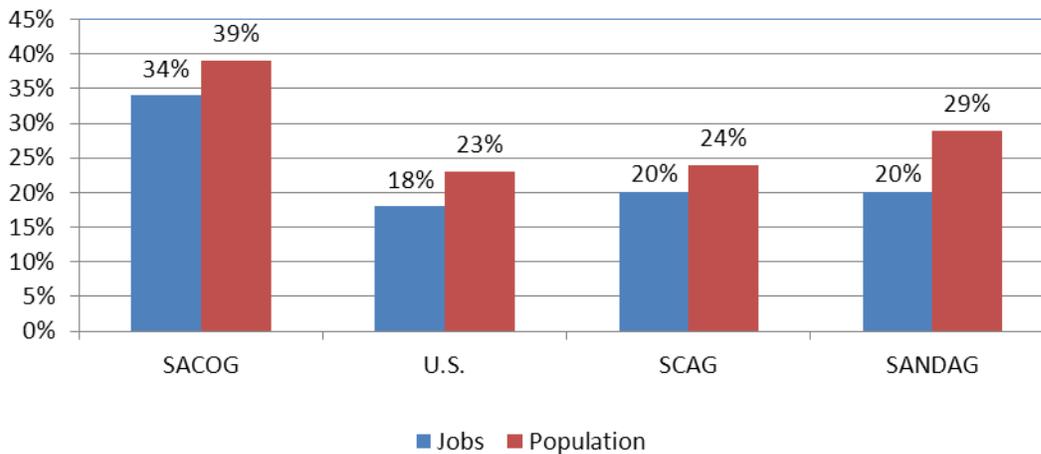
population growth that is largely in Hispanic and Asian residents—both through immigration and births.

- The outlook for U.S. population and job growth has slowed compared to what was expected as recently as three years ago as foreign immigration levels, instead of rising steadily, have slowed and turned down in the past year. Immigration levels will probably increase by 2035 but are likely to run below Census Bureau projections for the next several years.
- The region, state and nation are slowly recovering from the worst recession since the Great Depression with job and income losses and a substantial housing market correction. The resulting state budget challenges will affect job and income levels in the region’s largest economic base sector—state government.

### The Bottom Line

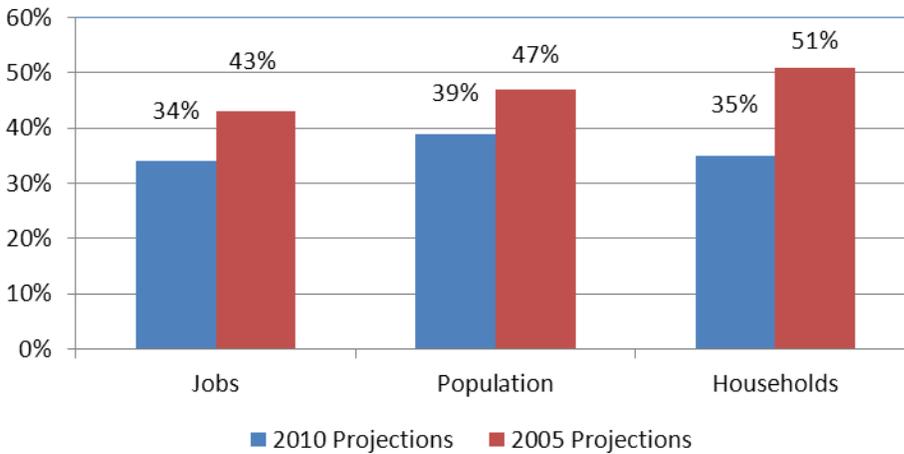
- The SACOG region is projected to grow faster than the nation to 2035. The region is also projected to grow faster than the SCAG and SANDAG regions based on their draft regional technical projections.

### Growth in Jobs and Population 2008-2035



- The SACOG region is projected to grow more slowly than expected in the 2005 projections that were the basis for the 2008 MTP.

## SACOG Region Growth Rates



A summary of the major findings is presented below. More detail is presented in Sections 3 describing the impact of the recession, Section 4 describing the job projection methodology and results and Sections 5 and 6 describing the population and household projection results.

### Jobs Drive Population and Household Growth

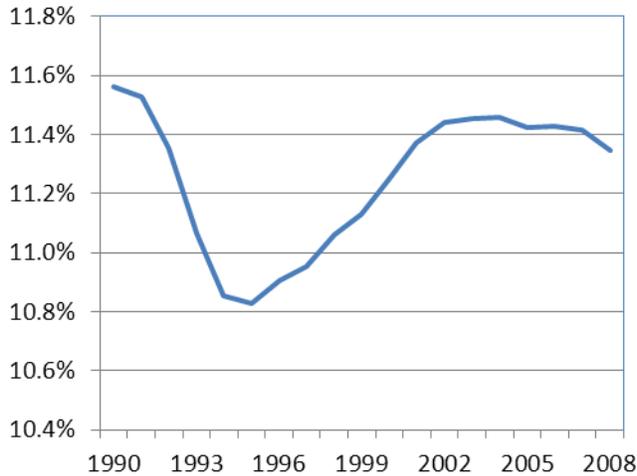
Three major factors determine job growth prospects in the SACOG region: 1) projected U.S. job growth; 2) California's share of future U.S. jobs; and 3) the SACOG region's share of future California job growth.

National job growth will slow in the coming decades as baby boomers retire. In addition recent national trends in immigration, labor force participation rates and unemployment led to lower U.S. job growth projections compared to the 2005 analysis.

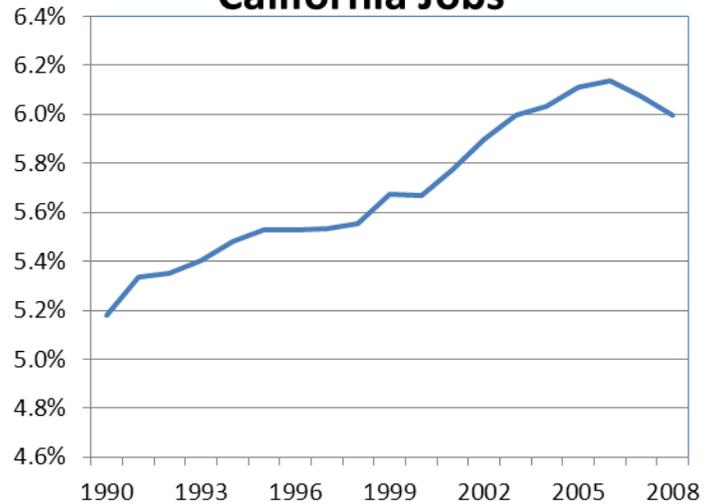
California's share of U.S. jobs stopped increasing after reaching 11.5% in 2003 and 2004. When the last round of projections was developed for SACOG, the state had been outpacing the nation in job growth for ten years. The heavy job losses related to construction caused the state to temporarily fall behind the nation in job growth in recent years. But the trends that started before the recession will likely cause the state to only slightly outpace the nation in job growth to 2035—a major change from the last round of projections.

The SACOG region experienced job growth that was faster than the state average from 1990 to 2007 before the impact of heavy construction losses and the state's budget troubles hurt regional job levels.

## California Share of U.S. Jobs



## SACOG Region Share of California Jobs



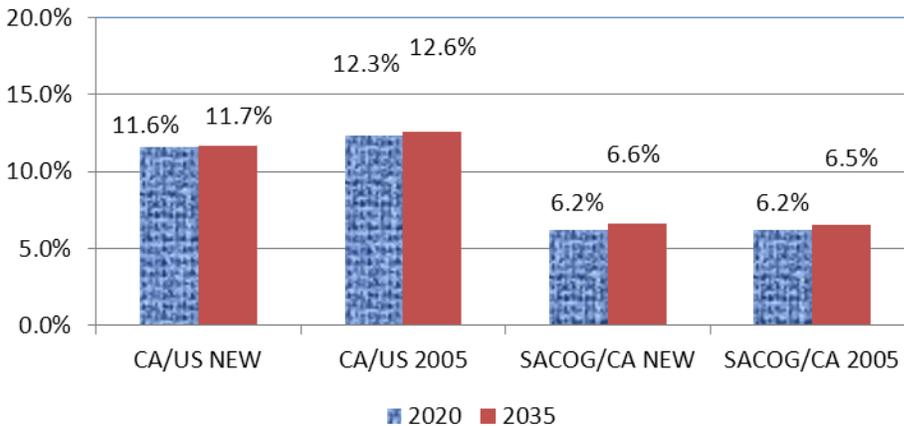
The slow recovery expected in housing plus the impact of budget deficits on state employment and wages (the largest sector in the SACOG region economic base) are expected to restrain job growth to 2020. However, these factors are not expected to affect job levels in 2035.

The SACOG region is expected to capture an increasing share of California jobs to 2035, particularly in the period from 2020 to 2035. State government and the growing professional services sector that serves state government is expected to resume growth in the future as California will add between 400,000 and 500,000 residents each year. The construction downturn, which is severe and will impair growth in the short term, will become a positive as the region experiences continuing population and housing growth.

The current projections have the SACOG region capturing 6.2% of California's jobs in 2020 and 6.6% in 2035. The 2035 projections assume that the region will capture a significant share of new jobs in one or more of the state's new industries such as clean tech and new health care and health care technology fields. Without this assumption the projected increase in jobs would be 41,600 lower, with corresponding decreases in amounts of population and housing growth.

The chart below compares the share projections from the current analysis with those developed five years ago. In both case the SACOG region is projected to outpace the state and nation in job growth. However, the current projections are based on a lower share of national jobs locating in California than was expected five years ago.

## SACOG and California Job Shares



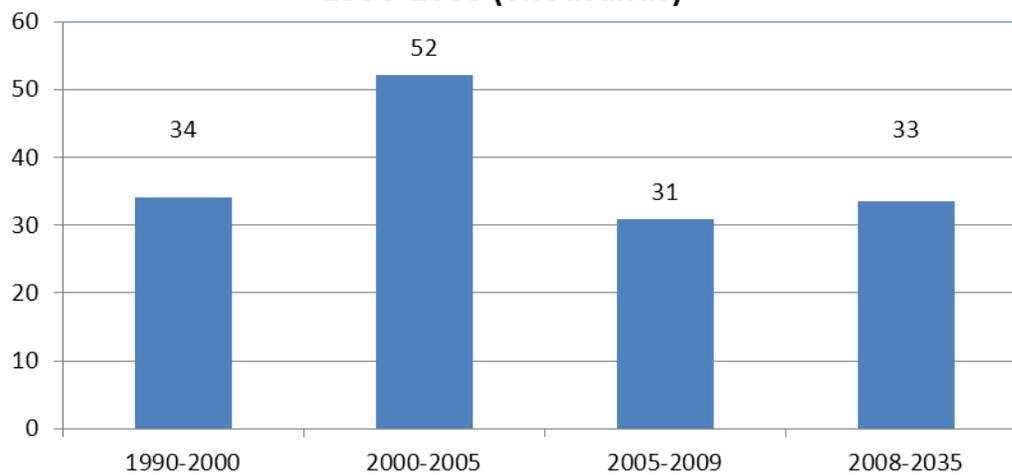
### Population Growth Follows Job Growth

Regional population projections are developed based on the job projections. The methodology assumes that people will migrate into or out of the region in response to job opportunities. Since the SACOG region is expected to experience job growth that is faster than the state and nation, the region will attract migrants from other parts of California, from other states and from abroad—continuing a pattern of in-migration that has existed for several decades, though as shown in Section 4, in-migration has slowed in recent years.

Population growth is projected to average 33,500 per year between 2008 and 2035, which is close to the average growth in the 1990s. The past ten years saw a period of very high growth between 2000 and 2005 and a period of much lower growth after 2005. All of the recent population data are subject to review when the 2010 Census results are published in January 2011.

It is important to note that state population growth has declined from near 600,000 for the years around 2000 to between 400,000 and 450,000 in recent years. State population growth projections to 2020 have been revised downward by the California Department of Finance pending release of the 2010 Census results.

## SACOG Region Annual Population Growth 1990-2035 (Thousands)

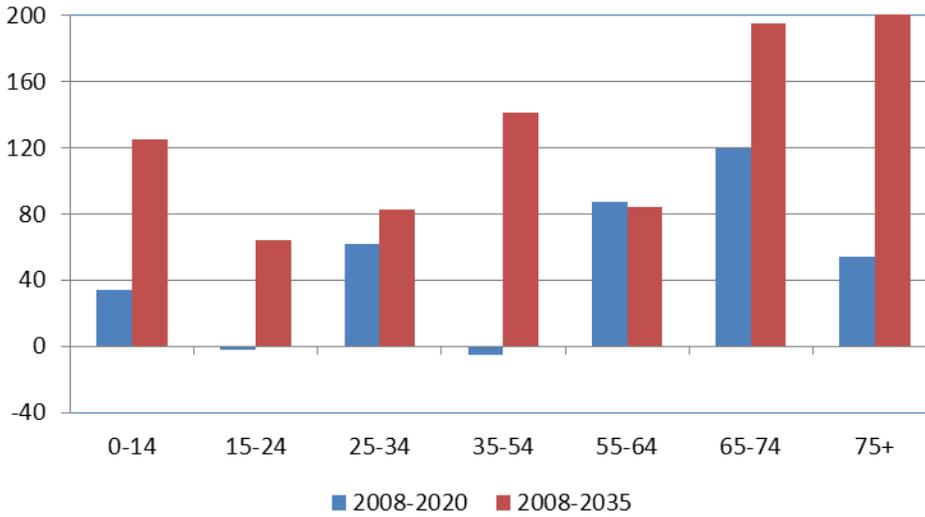


The region will experience major changes in the age profile of the population as baby boomers retire and, after 2025, the region again sees growth in children and family age population. For the period to 2020 population growth will be concentrated in two groups: 1) baby boomers moving from the 35-54 age groups into the 55-64 and 65+ age groups and 2) growth in the young adult (25-34) age group.

There will be a small growth in the number of children in the region to 2020 but virtually no growth in the 15-24 and 35-54 age groups. IN the 35-54 age groups baby boomers will exit and be replaced mainly by foreign immigrants and the children of immigrants with the total number in this important age group remaining constant.

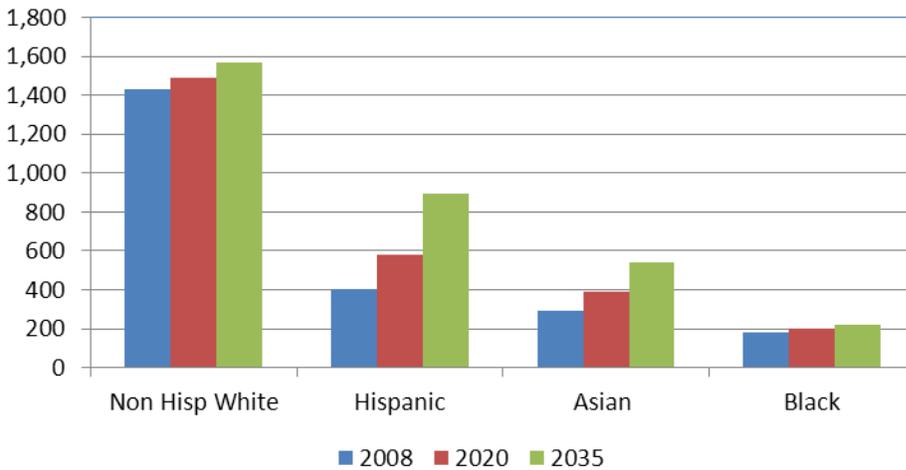
Between 2020 and 2035 there will be very large growth in the population aged 65 and above but also some growth in the family age groups.

## SACOG Population Growth (Thousands)



The region's Non-Hispanic White population is expected to increase to 2035 but the majority of the region's population growth will come from Hispanic and Asian residents continuing the trends since 2000.

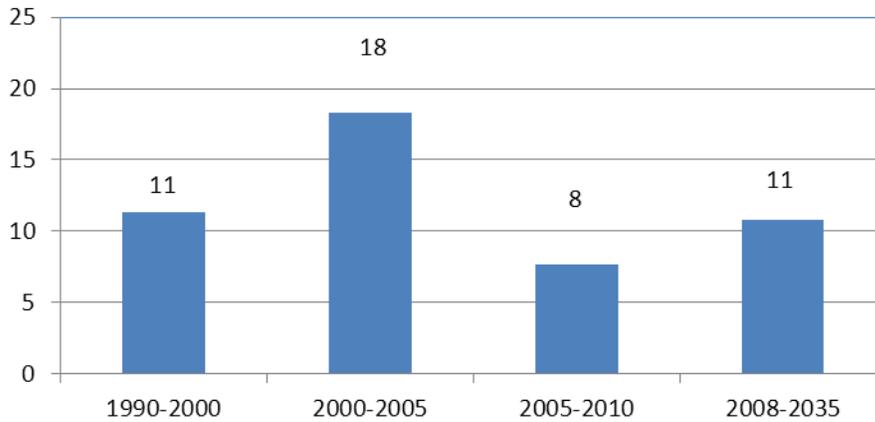
## SACOG Region Population (Thousands)



## Household and Housing Projections

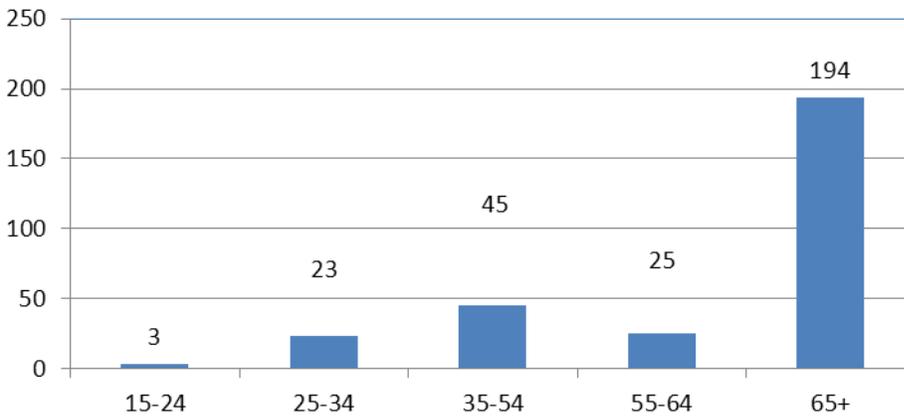
The SACOG region is projected to add close to 11,000 households per year between 2008 and 2035. This is similar to the household growth experienced between 1990 and 2000. The annual population growth for these two periods is similar at near 34,000. Household growth was much higher between 2000 and 2005 and then declined sharply as housing prices surged and then the recession took hold.

## Average Household Growth Thousands per Year



Most of the household growth to 2035 will occur in households headed by residents aged 65 and above. Two of every three added households will be headed by a resident aged 65 and above.

## Household Growth by Age Group 2008-2035 (Thousands)



The housing choices of older residents will play a major role in determining what kind of housing is built in the region over the next twenty-five years. If baby boomers stay in their existing homes as they age and the children move out, more single family housing will be needed for younger households with children. If older households downsize as they age and the children move out, their existing single family homes will be available for younger households. And the downsizing older households will create a large market demand for the kind and location of units they want to move into.

The market for smaller units should increase both because younger and older households are smaller than family households and also as affordability gives households incentives to consider smaller units when they work for their family. Moreover, the demand for rental units may increase, especially for the next ten years, both from demographic factors and because they are affordable to more households.

### Projections to 2035

The regional projections for jobs, population and households to 2035 are shown below along with estimates for 1990 and 2008 and the adopted 2008 MTP projections for 2035.

Jobs, Population and Households  
SACOG Region  
1990-2035 (Thousands)

	1990	2008	2035	2008 MTP 2035
Jobs	730	1,021	1,364	1,529
Population	1,614	2,310	3,219	3,413
Households	599	832	1,122	1,269

## Section 2

### The Methodology for Developing SACOG Region Projections

SACOG region growth was projected in three major analytical phases.

- Job growth was projected first
- Population growth was projected based on projected job growth
- Household growth was projected based on projected population growth

#### Starting with Job Growth

CCSCE follows standard regional projection methodology in basing population and household growth projections on projected job growth. Both theory and historical evidence indicate that population growth follows job growth in regional economies. This is clear from major movements of out migration in California that followed the sharp job losses related to aerospace in the early 1990s. Similarly population growth surged in California after the dot.com boom produced substantial job growth in the late 1990s.

Examples from Midwestern cities including Detroit, Cleveland and Pittsburgh all indicate that job trends (in these cases job losses) were followed by out-migration as residents left these areas in search of better job opportunities.

So the first step in updating the SACOG region growth projections was to develop new regional job projections.

#### Developing Regional Job Projections in Three Steps

Job projections for the SACOG region were developed in three steps:

- Assessing the outlook for U.S. population and job growth
- Projecting California's share of U.S. jobs
- Projecting the SACOG region share of California jobs

The amount of growth expected in the SACOG region depends on the "pool" of U.S. population and job growth and the "share" of that growth that locates in California and, within California, in the SACOG region.

So, the first step in developing SACOG region job projections was to identify reasonable projections of U.S. population and job growth.

Sacramento is the capitol city in California and, as such, depends in part on the expected growth in the state as state government and related activities are a large part of the region's economic base. As a result all of CCSCE's regional job projections have been based, in part, on the expected job and population growth in California. CCSCE has developed a detailed industry model to project state job growth based on how industries are expected to grow in the nation.

Job growth in the SACOG region was projected by using projected industry growth in California and assessing the likely SACOG region share of California job growth.

### **Projecting Population Growth**

DB Consulting followed standard regional population projection methodology in developing SACOG region population projections.

The first step was to take the base year population by age, sex and ethnic group and project it forward to 2020 and 2035 including an initial assumption about foreign immigration and domestic migration into the region. From this projection, DB Consulting projected the labor force that would be in the region based on detailed labor force participation rate projections by age, sex and ethnic group.

The demographic-based labor force projection was compared to the labor force needed to supply the projected job growth. If more workers were needed, the assumption about domestic migration was raised. If fewer workers were needed, the assumed level of domestic migration was reduced until the labor force supply matched the labor force needed to fill the projected jobs.

The final result was a set of population projections by five-year age group, sex and ethnic group for four major ethnic groups—Hispanic, Non-Hispanic White, Non-Hispanic Black and Non-Hispanic Asian and other.

### **Projecting Household Growth**

Projections were developed using the projected population by age and ethnic group combined with projections of household formation rates for each group. These are demographic projections, which are appropriate for long-term analysis, but do not take into account short and medium-term market conditions. Income growth was analyzed to 2010 but no long-term income projections were included in this round of analysis.

Final housing projections for 2020 were developed by SACOG staff taking into account CCSCE's demographic projections and considerations of existing vacancy rates. Final housing projections for 2035 were based on the demographic household projections.

## **Section 3**

### **Recession and Recovery: Implications for 2020 and 2035**

When the SACOG regional projection update analysis was conducted, the nation, state and region were experiencing a substantial downturn in job levels combined with large losses to home and retirement portfolio values for households. The nation was ending the deepest recession since the Great Depression and substantial financial market turmoil, which extended around the world. This was the picture in early 2010.

Though some parts of the U.S. economy were beginning to recover, substantial uncertainty existed about the pace and timing of economic recovery nationally as well as in California and the SACOG region. The projection update analysis was expanded to include consideration of what, if any, adjustments to the 2020 and 2035 national, state and regional projections were appropriate given the depth of the recession.

#### **The National Recession and Implications for 2020 and 2035**

##### **Bottom Line**

The long and deep national recession in 2008 and 2009 will have a modest downward impact on national growth rates to 2020. Smaller impacts are possible to 2035. Three adjustments to the national projections were made reflecting the impact of the recession: 1) a small decrease in expected immigration and population growth in the nation 2) a small increase in the long-term equilibrium unemployment rate and 3) a small decrease in expected labor force participation rates. All three changes caused a decrease in expected U.S. job levels. In addition it is probable that income growth will be lowered for many years by the recession and the downward pressure on wages and benefits.

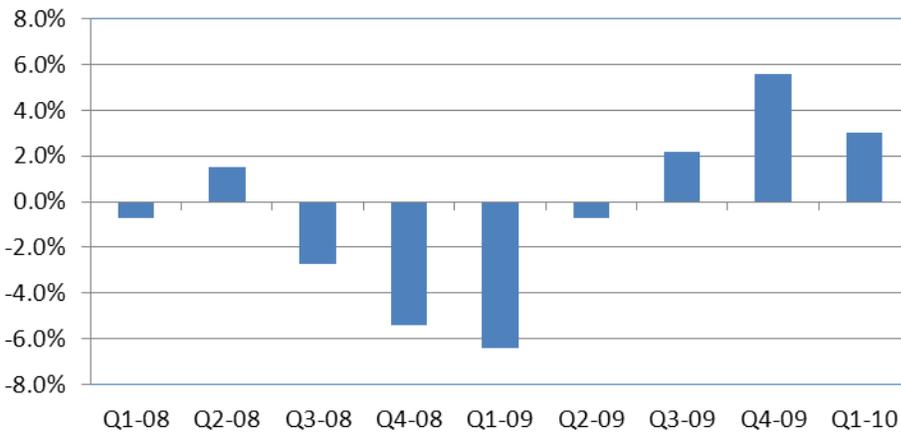
The recession caused the 2020 regional forecast to be slightly lower than it would have been otherwise for two additional reasons: 1) lower expected growth in state government jobs, which are a critical part of the region's economic base and 2) a lowered outlook for near-term construction as existing inventory will constrain new building while existing residential and commercial space remains vacant.

##### **Recovery Underway in U.S. GDP and Job Growth**

United States housing and financial markets experienced substantial turmoil during 2008. There was a sharp decline in home prices and rising numbers of foreclosures which led to a decline in the solvency of many financial and corporate firms as well as declines in the availability of credit and global stock prices. The National Bureau of Economic Research reported that the economy entered a recession in December 2007 and the nation's output of goods and services (GDP) fell over the next six quarters.

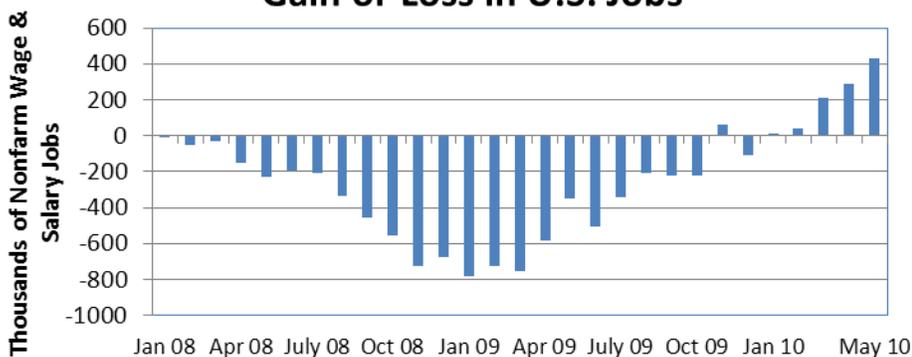
Since then, GDP has increased for three consecutive quarters growing by 2.2% and 5.6% with a May 2010 estimate of a 3.0% advance in the first quarter of 2010. The gains were the result of rebuilding of business inventories, increases in business spending on equipment and software and increases in personal consumption spending. Portions of the GDP gain were attributable to the federal stimulus measures including tax credits for auto and home purchases. Growth in imports and declines in state and local government spending reduced GDP growth in recent quarters.

### U.S. GDP Growth



By December 2009 the nation had lost 8.4 million jobs since the peak in January 2008.

### Gain or Loss in U.S. Jobs

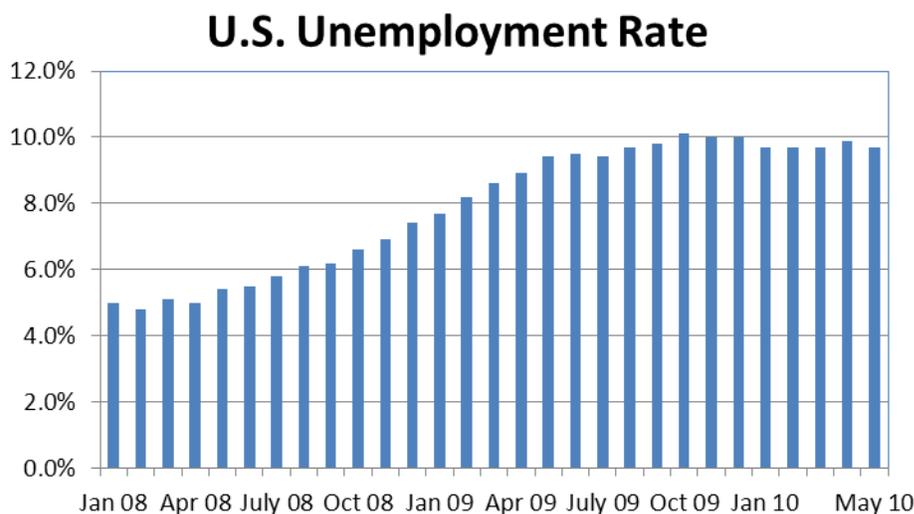


The nation has recorded job gains in each of the first five months of 2010 according to estimates from the U.S. Bureau of Labor Statistics. Job gains in these months totaled 982,000 including an increase of 495,000 private sector jobs and an increase of

126,000 in manufacturing jobs. More than 400,000 temporary Census-related jobs were added in May 2010. Still, in April 2010 nonfarm wages and salary job levels were 7.4 million below the pre-recession peak.

Other economic indicators are pointing to growth in the economy. The Index of Industrial Production increased for nine of the previous ten straight months through April of 2010. The manufacturing sector has expanded for ten straight months and the overall economic activity grew for the 13<sup>th</sup> straight month according to the May 2010 Institute for Supply Management report. And the Conference Board's Index of Leading Economic Indicators increased for 12 of the previous 13 months through April of 2010.

The unemployment rate in the nation remains near 10%. The recent increase in job levels has been matched by an increase in the labor force as workers who left the labor force in 2008 and 2009 are returning in the hope of finding jobs in the strengthening economy. This is a normal pattern and explains why the unemployment rate usually does not decline until after several months of job gains.



CCSCE hosted two conversations with economists during the past year where part of the discussion focused on the impact of recent national economic trends on projections to 2020 and 2035.

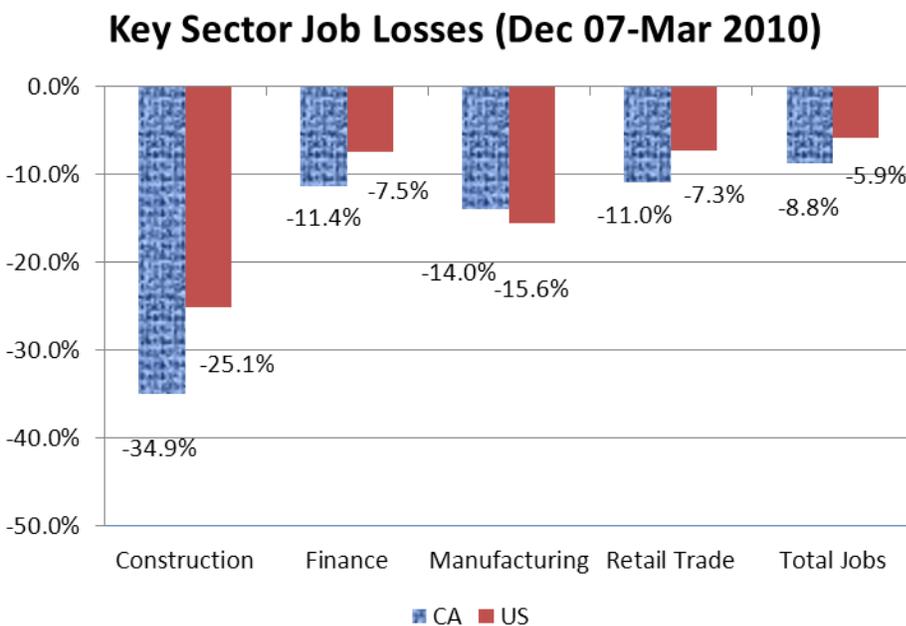
The main conclusions of these discussions were used in developing the SACOG projections. There was broad agreement that the national economy had started growing again although the pace of recovery was likely to be slow. The one impact of the recession on long-term growth that seemed likely to economists was that the long-term equilibrium unemployment rate in that nation could rise to 6% from the 5% rate previously used in long-term national projections. It is also possible that long-term income growth will be lower than previously expected, which could affect housing markets in the medium term future.

Foreign immigration to the United States had leveled off before the recession and immigration levels fell during the recession years as discussed below in Section 4. The level of immigration and population growth in the United States was reduced slightly as explained in Section 4 resulting in a slightly lower projection of U.S. Job growth.

### California Lagged the Nation during the Recession

Job losses in California were deeper than in the nation since the recession began in December 2007. Unemployment rates were higher and housing price declines also were deeper than in the nation.

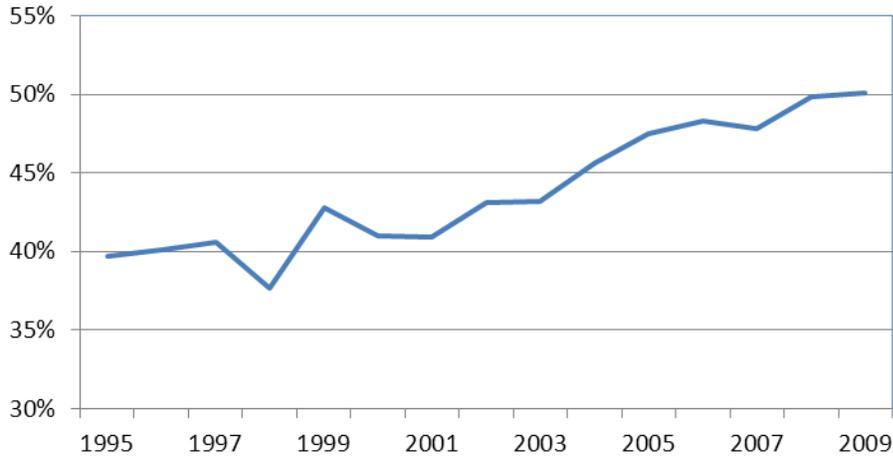
However CCSCE and the economists we talked with believe that the greater percentage job losses in California relative to the nation are temporary and largely the result of the state's greater exposure to the residential building downturn. Residential building permits fell by 80% in California between 2005 and 2009. The pattern of job losses shows that construction related sectors were where California had deeper job losses compared to the nation.



Manufacturing sector job losses in California were slightly below the national average while job losses in construction, finance and retail trade were above the national average. The share of national venture capital funding going to California firms actually increased during recent years as shown on the following page.

As explained below in Section 4 California's share of U.S. job growth to 2020 and 2035 is less than previously projected as a result of a change in long-term trends that began before the recession but continued during the recession.

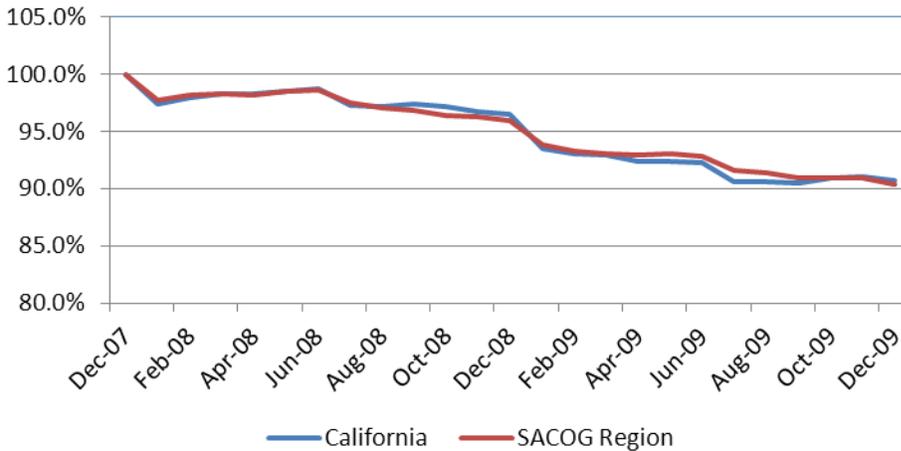
## CA Share of U.S. Venture Capital Funding



## Impact of Recession on the SACOG Region Job Projections

In the recent recession, unlike in the early 1990s, the SACOG region suffered job losses that matched the state average. Between December 2007 and December 2009 the region experienced a 9.6% decline in non-farm wage and salary jobs compared to a 9.3% decline for the state.

## Job Loss Dec 07--Dec 09



The slowdown and eventual downturn in state government jobs in recent months was incorporated into the regional job projections. As explained in Section 4, state government and education jobs and the related professional service jobs are a major part of the region's economic base.

The current reductions in state spending and the political gridlock around developing long-term solutions to the ongoing budget shortfalls is expected to constrain growth in jobs and activities related to state government during the next few years and will result in lower regional job projections for 2020 than would otherwise have occurred.

## Section 4

### Job Projections

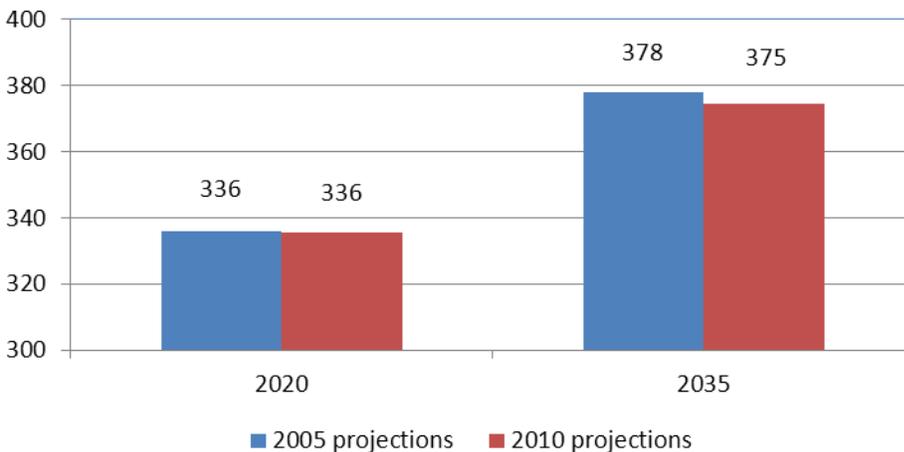
#### National Job Projections

The projections of total jobs for the nation were derived based principally on projected population, projected labor force participation rates and projected unemployment rates.

#### U.S. Population Projections

The projected national population for 2020 and 2035 was slightly lower than the projections used in the 2005 projections and, thus, were only a small source of change for any SACOG regional projections.

#### U.S. Population (Millions)



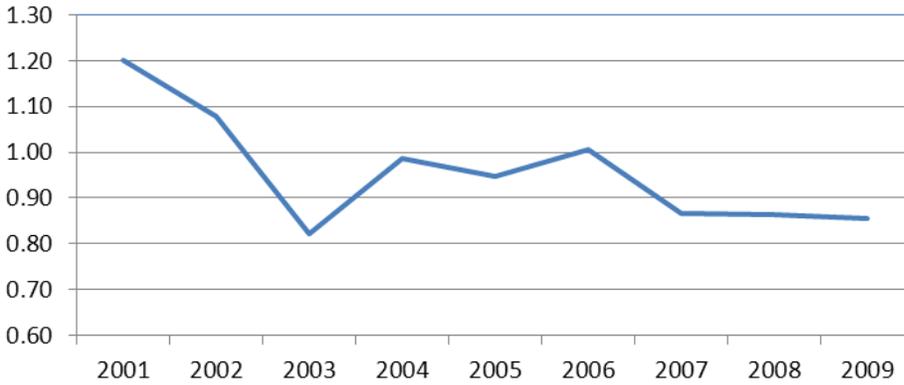
Assumptions about the level of foreign immigration are the principal determinant of how fast the U.S. population is projected to grow. In August 2008 the Census Bureau released a set of population projections based on more rapid growth in foreign immigration than was assumed in the previous set, which was used as the basis for the 2005 SACOG projections.

In December 2009 the Census Bureau released alternative population projections along with revised estimates of current immigration levels.

CCSCE and DB Consulting used the lower sets of immigration projections released in December 2009 as the basis for projecting U.S. population to 2020 and 2035.

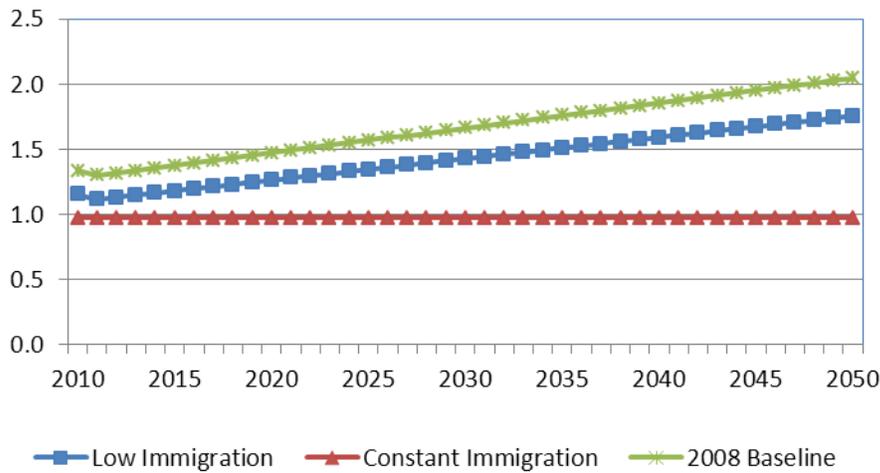
Foreign immigration levels have trended downward since reaching a peak of 1.2 million in 2001. Recent immigration levels, starting well before the recession, were under 1 million in each of the past seven years.

### U.S. Immigration (Millions)



The Census Bureau released a constant immigration set of projections and a low immigration set of projections to go along with the baseline projections released in August 2008. CCSCE and DB Consulting used an average of the constant and low immigration assumptions to derive national population projections for 2020 and 2035.

### U.S. Immigration (Millions per year)

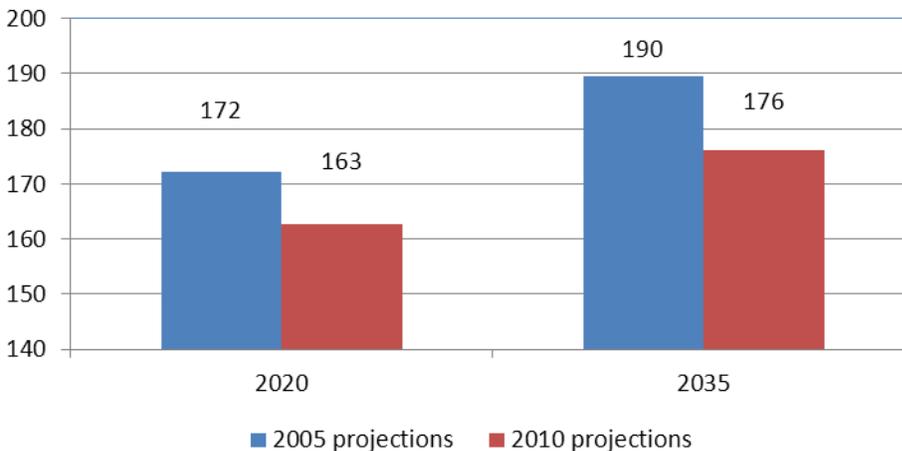


If the August 2008 baseline projections had been used, the resulting national population projections would have been six million higher in 2020 and 15 million higher in 2035 than the national projections used in this analysis.

## U.S. Job Projections

The national job projections used in the 2010 analysis are lower than the projected job levels in the 2005 projections partly as a result of the lower underlying population projections are nearly similar.

### U.S. Total Jobs (Millions)



The primary reason that the new national job projections are lower than the set used in 2005 is because the labor force is projected to grow more slowly. One factor is that the increase in female labor force participation rates has leveled off. Another factor is slightly lower labor force participation in the 25-54 male age groups.

Participation rates for older workers (ages 55 and above) are still expected to increase as people delay retirement and better health allows workers to work longer.

A small part of the lower job growth projection is the use of 6% as the long-term equilibrium unemployment rate instead of 5%.

The pattern of U.S. job growth by major industry is similar to what was expected five years ago. The largest growth is expected in health services and the broad professional, information and business services sector, which is where most venture capital funding is being directed.

Construction and finance jobs are expected to rebound after the effects of the construction downturn end. Manufacturing job levels are expected to trend downward over the next 25 years continuing the recent trend of productivity growth outpacing sales growth and the movement of some production to foreign countries.

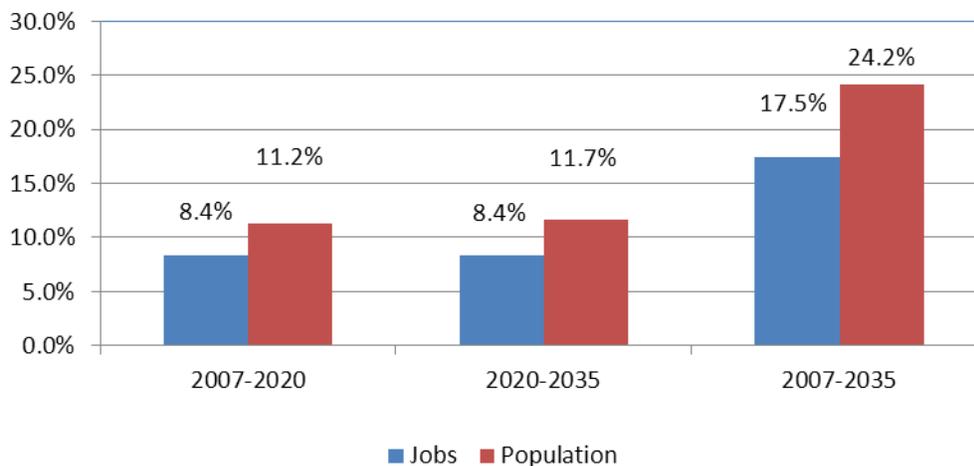
## Baby Boomers Retire—Jobs Grow More Slowly than Population

For the past 40 years job levels have grown faster than population in the nation, state and region. The baby boomers entered the workforce in record numbers and labor force participation rates surged for women.

That trend is about to change. Baby boomers are pushing into the 55+ age groups where labor force participation begins to slow and will eventually move into age groups where workers retire in growing numbers. Even with expected increases in the share of older workers remaining in the workforce, there will be a tidal wave of baby boomer retirements over the next 20 years.

Population growth will outpace job growth in both the period to 2020 and the period between 2020 and 2035. These trends will carry over to the SACOG region as described later in this report.

### Jobs Will Grow More Slowly than Population in U.S.

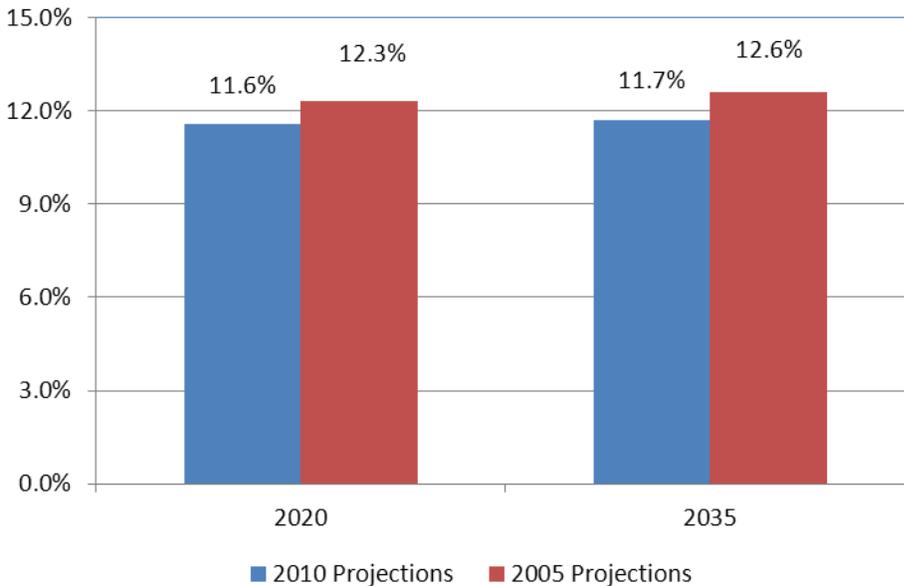


## California Job Projections

In the 2005 SACOG projection analysis, California was projected to record job gains that were far above the national average. As a result California's share of U.S. jobs was projected to increase from 11.5% in 2004 to 12.3% in 2020 and 12.6% in 2035.

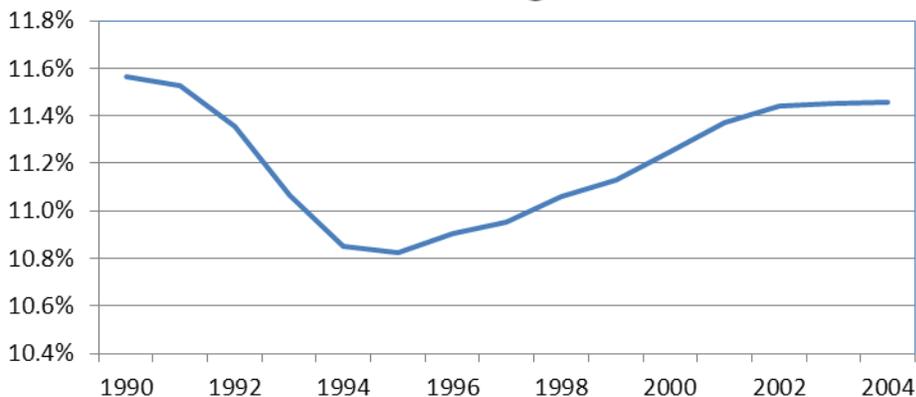
In the current analysis California's share of U.S. jobs is projected to increase to just 11.6% in 2020 and 11.7% in 2035. This is the most significant change in the SACOG projection assumptions between the 2005 and 2010 regional job projection analysis.

## California Share of U.S. Jobs



The outlook for California job growth relative to the nation has changed since the SACOG 2005 projections were prepared. California's share of U.S. jobs increased steadily from the low in 1995, which was the result of the long recession sparked by deep aerospace job losses. The dot.com boom in the late 1990s pushed the state's share higher. The share leveled off after the high-tech correction in 2001 and 2002 but the prospects looked bright in 2005 for continued share increases based on the kind of jobs that were projected to increase in the nation.

## California Share of U.S. Jobs--Future Looked Bright



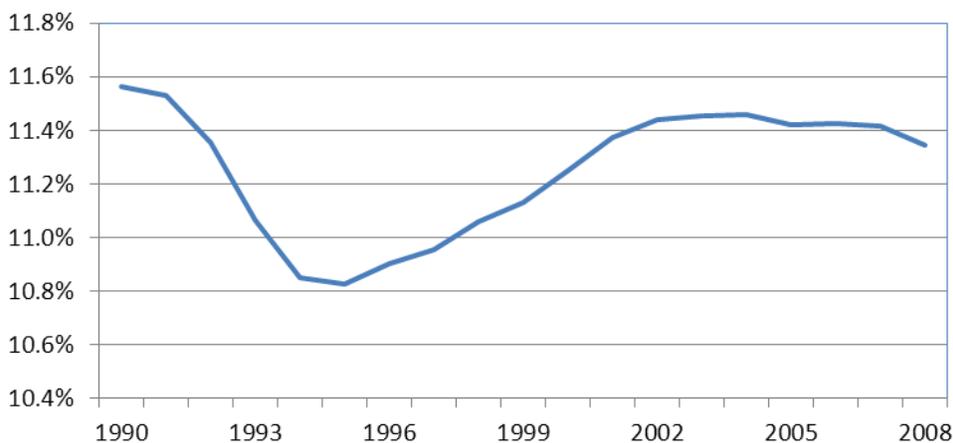
But the next five years saw a halt to California's job share gains. There were many factors contributing to the job slowdown—1) the declines in construction activity that came before the recession, 2) the lack of tech job growth even as venture capital funding and sales increased, 3) the large exposure to the foreign trade and tourism downturn and 4) factors related to the budget and governance gridlock that was felt throughout California during recent years.

As a result California's share of U.S. jobs stabilized around 11.4% between 2002 and 2007 before declining in the recession to 11.3% in 2008 and 11.2% in 2009. The recent share declines are probably temporary and the result of the sharp construction declines in California.

However, new CCSCE projections for California indicate that the state will outpace the nation in job growth after the recession ends but the share gains are far below what was expected five years ago. As shown above, California is expected to get 11.6% of U.S. jobs in 2020 and 11.7% in 2035—close to the share high seen in 1990.

In other words, since 1990 California has become an average job growth state. The resulting national and state growth will still lead to substantial population growth in California—averaging between 400,000 and 500,000 per year over the next 25 years.

### California Share of U.S. Jobs--Share Gains Ended



## SACOG Region Job Projections

The SACOG region job growth projections were determined by two trends: 1) projected job growth in California and 2) the projected SACOG region share of California jobs.

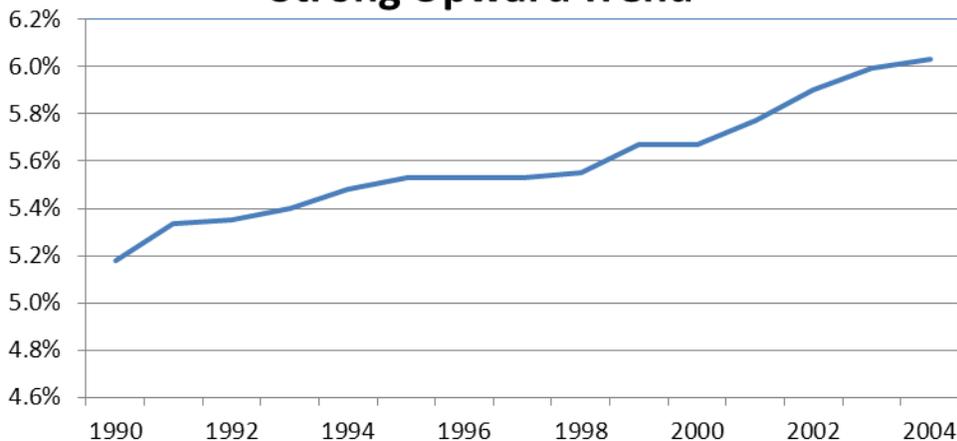
The projected SACOG region share of California jobs was developed by examining the composition of state job growth and the SACOG's region share of job growth by industry. For example, larger job growth in state government would push SACOG region job growth higher (and vice versa) as the region accounts for a large share of state government jobs.

### The SACOG Outlook has changed since 2005

When the 2005 projections were prepared, the region was in the midst of a long period where job growth outpaced the state average and the region's share of California jobs was rising steadily. The region's share of California jobs had risen from 5.2% in 1990 to just over 6.0% in 2004.

The major causes were 1) the growth in state population and related government jobs, 2) the strong growth in jobs related to state government planning, 3) the boom in residential construction, 4) the emergence of a regional high-tech complex and 5) relative stability in the region's manufacturing job base.

### SACOG Share of California Jobs-- A Strong Upward Trend

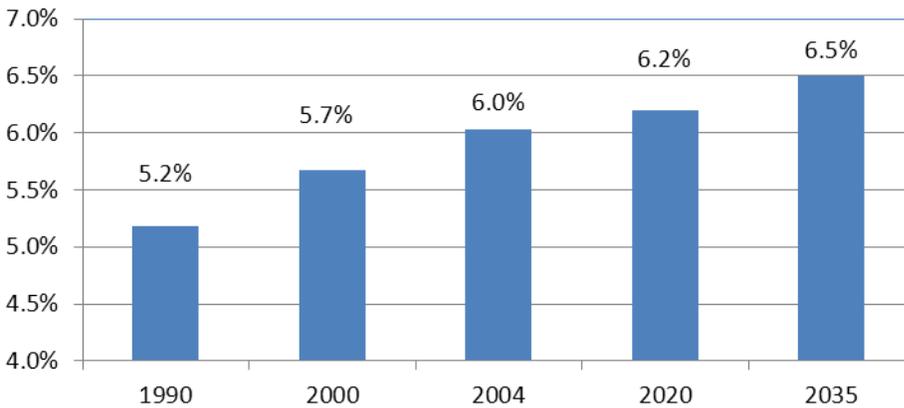


The 2005 projections anticipated a slowdown in the rapid growth of the SACOG region's share of California job growth. The principal reasons were 1) the surge in housing prices that resulted in a loss of competitive position for the region as an inexpensive housing market, 2) the downturn in high-tech jobs and the outlook for future tech job growth and 3) the fact that the composition of future state job growth did not signal a large

competitive edge for the SACOG region except for the expected growth in state government activities.

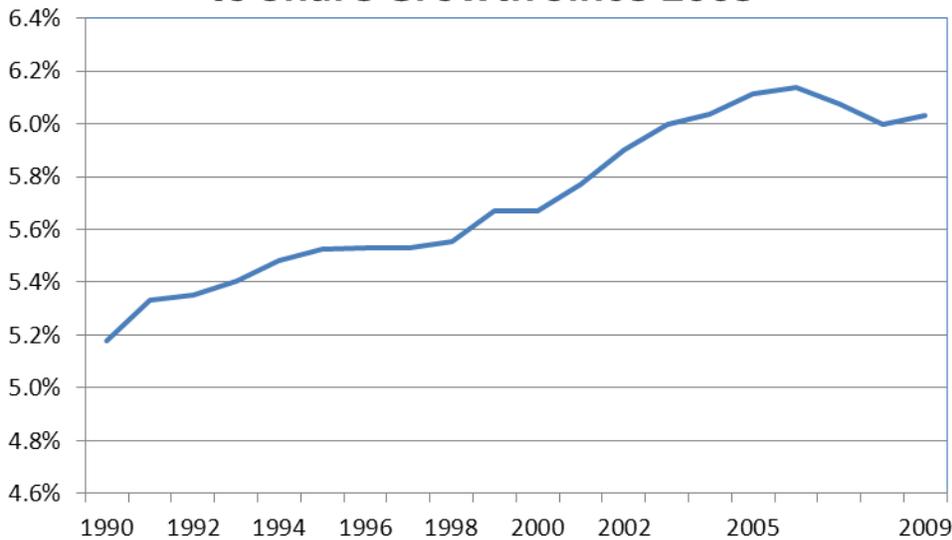
As a result the SACOG region share of California jobs was expected to increase but at a much slower rate than in the previous 15 years. The region's share of state jobs was projected to increase from 6.0% in 2004 to 6.2% in 2020 and 6.5% in 2035.

### SACOG Share of California Jobs 2005 Projections



The slowdown came earlier than expected as the region's share of California jobs stopped growing after 2005 and actually declined slightly as a result of heavy job losses related to the construction slowdown and the impact of declines in the state budget.

### SACOG Share of California Jobs--A Halt to Share Growth Since 2005



## **The Framework for the 2010 Projections**

The new SACOG region job projections were developed by first examining the prospects for growth for those sectors that comprise the region's economic base.

Some sectors (approximately 40% of total jobs) are classified as part of the region's economic base. Jobs in the economic base have two primary characteristics. First, job growth in these sectors does not depend on local population growth. Industries in the region's economic base serve state markets (for example, state government jobs) or state, national and international markets (for example most manufacturing, trade and tourism and Internet-related activities). Regions compete against each other for the location of these kinds of activities. .

Second, relative regional job growth depends on the location of jobs in economic base sectors. Regions with faster basic industry job growth will normally have faster total job growth as the number of local population serving jobs relative to population does not vary much among regions. Other jobs that primarily serve local residents such as retail trade, health services and local government depend on growth in the region's economic base to attract workers and families to the region.

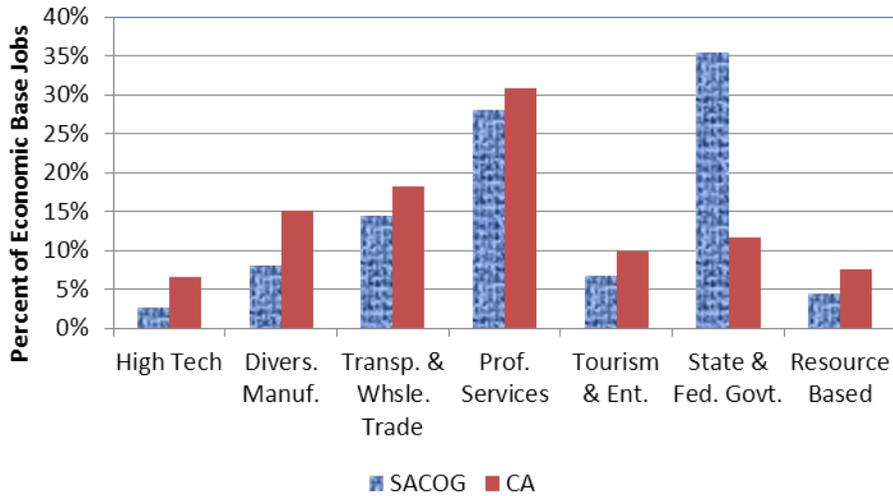
## **The SACOG Region Economic Base**

CCSCE includes 66 industries in the economic base of California regions and, for descriptive purposes, aggregates these industries into seven sectors as shown below.

The SACOG region economic base is dominated by two sectors: 1) state and federal government and 2) professional, business and information services. State government, including state colleges, accounts for over 90% of this sector and this sector accounts for more than 35% of the region's basic jobs compared to 12% for the state as a whole. As a result all other basic industry sectors are relatively smaller in the SACOG region compared to the state.

The professional, business and information services sector accounts for more than 25% of the region's basic industry jobs. Some of the largest components of this sector are computer services, architectural and engineering services, management and consulting services and management of companies. Together these two sectors account for nearly 2/3 of the region's economic base jobs and are the principal determinant of how fast the region's economic base will expand.

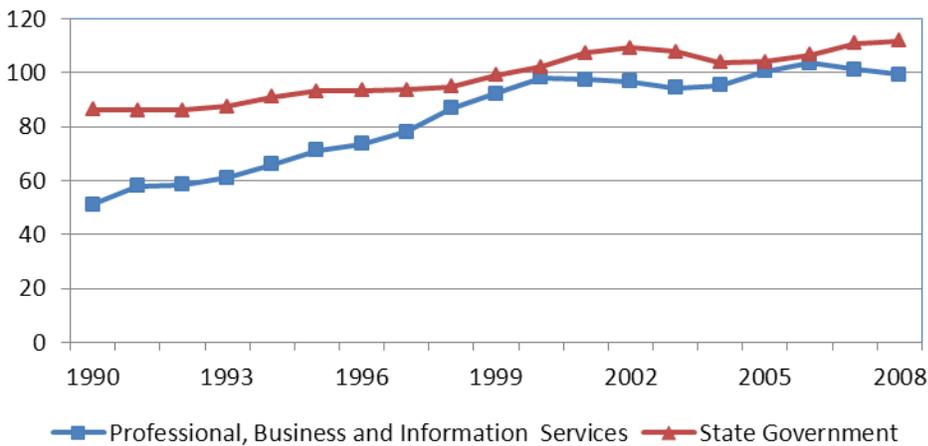
## SACOG Economic Base Compared to California in 2008



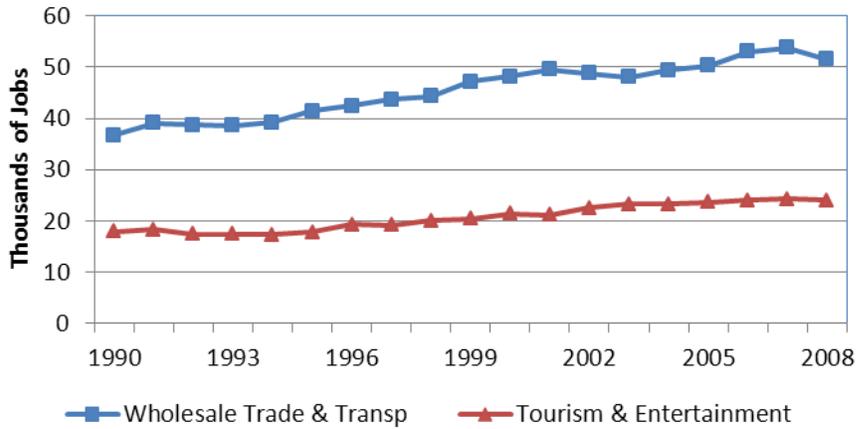
These two sectors experienced steady job growth in the 1990s but job levels stabilized after 2000 as the state government growth slowed. Job growth in the region mirrored state trends and, as a result, the share of California’s jobs in each sector that were located in the SACOG region remained relatively constant after 2000.

Two other sectors—wholesale trade and transportation and tourism and entertainment—posted job gains during this period. In each sector, the region’s share of state jobs increased during the 1990 and 2000 decade.

## SACOG Region Jobs (Thousands)

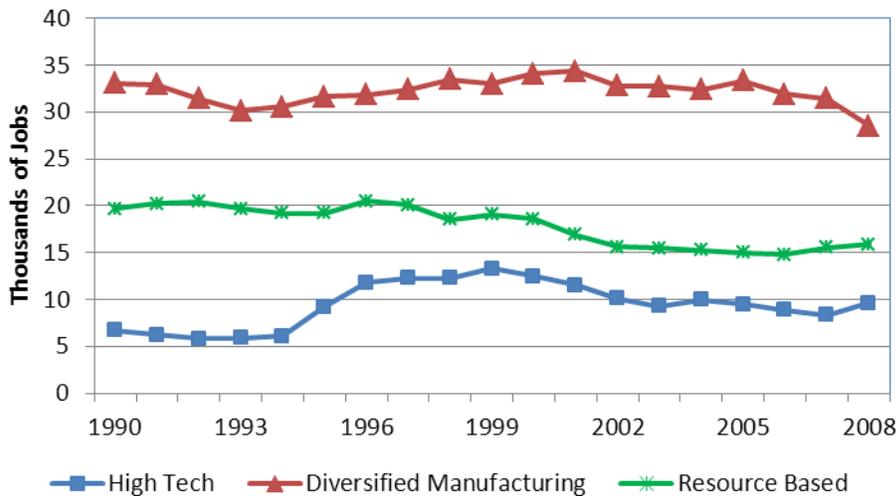


## SACOG Region Jobs (Thousands)



Three other sectors—high-tech manufacturing, diversified manufacturing and resource-based sectors (primarily agriculture) had relatively stable job levels during the past 20 years. The small losses in diversified manufacturing and resource based sectors were less than the comparable state job losses and, as a result, the regional share of jobs in these sectors increased slightly. High tech jobs increased substantially in the 1990s and then declined after 2000 but in this sector also, recent job losses were less than in the state as a whole.

## SACOG Region Jobs (Thousands)

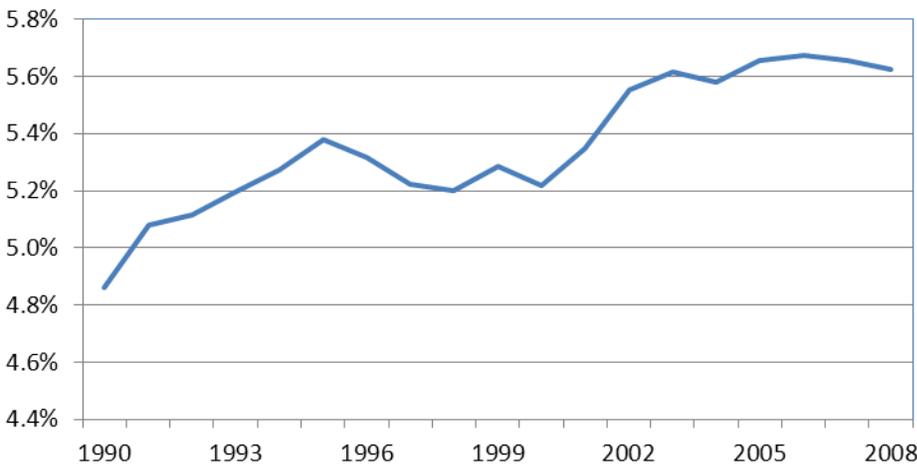


## Summary of Recent Economic Base Trends

The region's share of the state economic base increased from 4.9% in 1990 to 5.7% in 2005 before stabilizing between 5.6% and 5.7%. The region has been vulnerable to the slowdown in state government job levels but has benefited from below-average exposure to job losses in manufacturing and foreign trade.

National and state job levels in the economic base slowed and turned negative in recent years. The SACOG region has participated in these losses but maintained close to the record high share of the state's economic base achieved in 2007.

### SACOG Share of CA Economic Base Jobs



## Outlook for Future Economic Base Job Growth

CCSCE analyzed the prospects for the 66 industries in the region's economic base against the job growth prospects for these industries in California. The results are discussed below while recognizing that all long-term projection analysis is particularly difficult at this time because it is hard to know whether and which long-term trends might have changed as a result of the national and worldwide deep recession and financial sector turmoil.

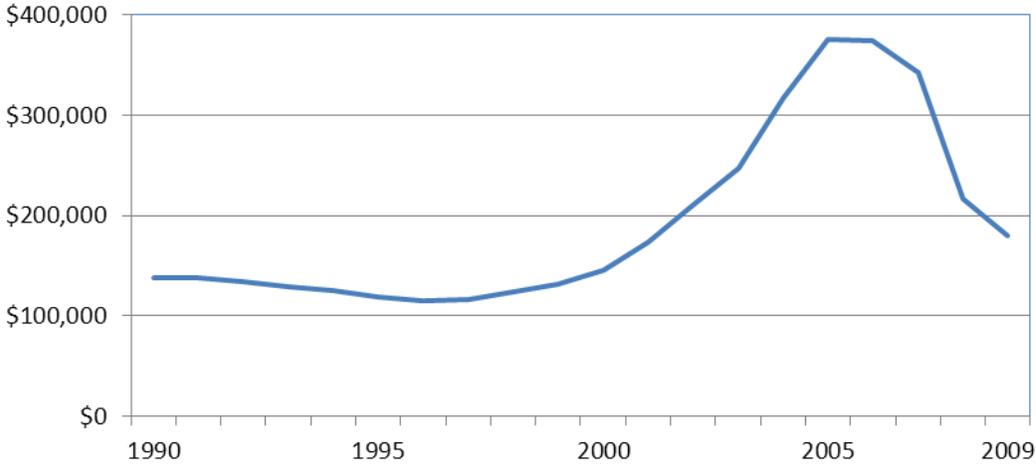
It is especially challenging to project the SACOG region job growth because state government is such a critical sector and currently the long-term future for the state budget and infrastructure planning and spending is caught up in both fiscal and political challenges and gridlock.

## The Region is Once Again Competitively Priced for Housing

The region's housing market went through a period of surge in building and median prices followed by a deep slump in both housing market indicators.

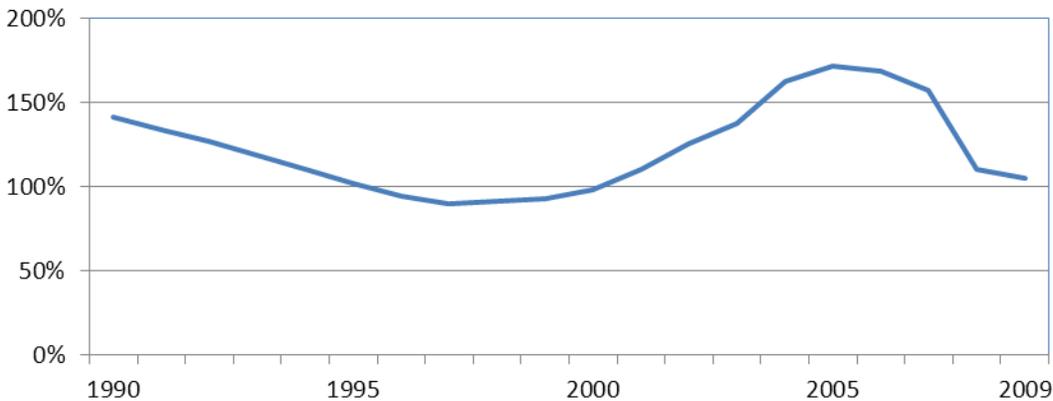
Median resale housing prices surged near \$400,000 briefly in the regional market during the middle of the last decade.

### Median Resale Housing Price in SACOG Region



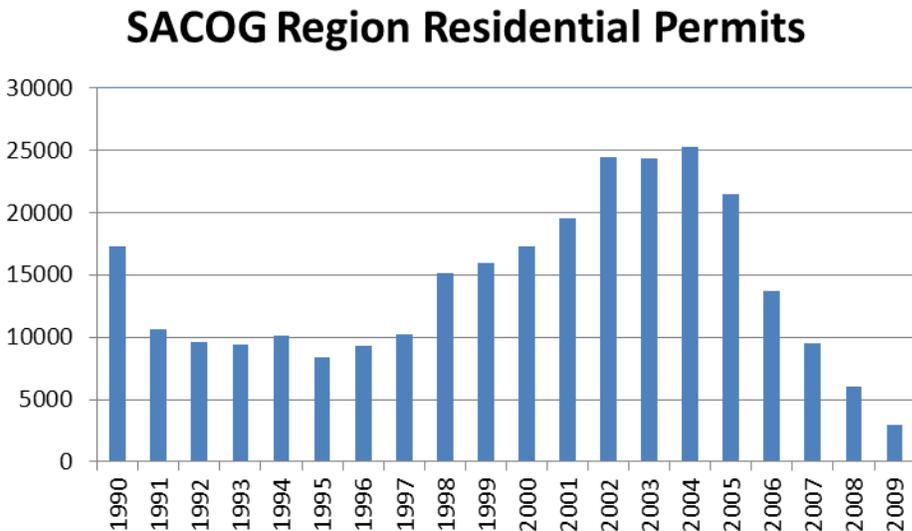
At that point the median price in the region, which had been near the national average between 1994 and 2001 began to surge well above the national median reaching a peak of 72% above the national median price in 2005.

### SACOG Region Versus U.S. Median Resale Housing Price



As a result of the rapid increases in regional housing prices, residential construction plummeted and the region lost, at least temporarily, one of its competitive advantages for the location of jobs and people.

The national recession and financial market crises accelerated the drop in home building but, as the chart below shows, declining construction levels started in 2005 and 2006, well before the national recession in the SACOG region.



The region is, once again, competitively priced for housing. Median prices are under \$200,000 and even if they rise slightly after the foreclosures are taken out of the market, median prices are likely to be near the national average. Previously median prices in the region near the national average proved attractive to buyers compared to other regions in the state and nation.

### **State Government Will Restrain Growth in the Near Term While Being a Positive Factor for Regional Growth to 2035**

State government and education is the largest sector, measured by total jobs, in the region’s economic base and the growth of this sector is an important determinant of how fast the region’s economic base jobs grow.

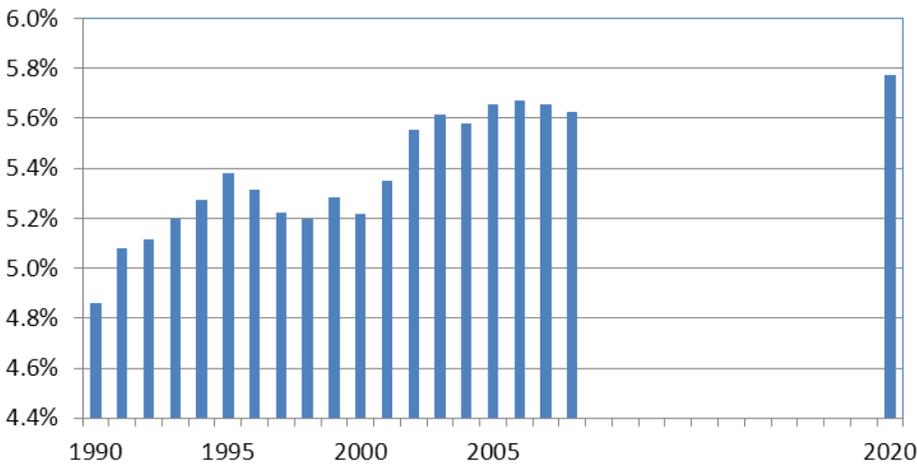
For the projections to 2020 CCSCE has projected positive growth in state government and state education jobs but at a lower growth rate than previously expected. The sector will be a positive factor in the region’s growth after the next two or three years. These projections assume that job levels will eventually increase to serve the 400,000 to 500,000 annual additions to the state’s population and to meet the goals for increased college participation that are broadly agreed upon in California.

The largest economic base growth to 2020 is projected in the professional, business and information services sector mirroring national and state trends. The region is projected to see moderate growth in transportation and wholesale trade and in tourism and entertainment. The region is expected to see small job losses in manufacturing and

resource based sectors to 2020 but these losses are less than projected for the state so the SACOG region share of these activities is projected to increase slightly.

Taking all economic base sectors into account the SACOG region share of the state's basic industry jobs is projected to increase slightly from 5.6% in 2008 to 5.8% in 2020. As a result of this basic industry job growth, the SACOG region share of California jobs is projected to increase from 6.0% in 2008 to 6.2% in 2020.

### SACOG Share of CA Economic Base Jobs



### The Region's Competitive Position Strengthens After 2020

State government job levels will increase to face rising population and planning needs.

California is projected to have job growth that is slightly faster than the nation through 2035. California's share of U.S. jobs is projected to increase from 11.4% in 2008 to 11.6% in 2020 and 11.7% in 2035. Even though the projected state job growth is below the levels projected in the 2005 SACOG regional projections, it is sufficient to support population growth of between 400,000 and 500,000 per year to 2035.

After a period of slow growth in state government activities through 2015, job and spending growth is expected to resume in response to the higher population levels, ongoing infrastructure planning and investment and activities related to environmental and smart growth planning.

Other basic industry sectors will find the SACOG region competitive on housing affordability and choice and quality of life.

If developers can build housing at near the current price levels adjusted for inflation the region will have a strong competitive advantage over coastal regions after 2020 as the

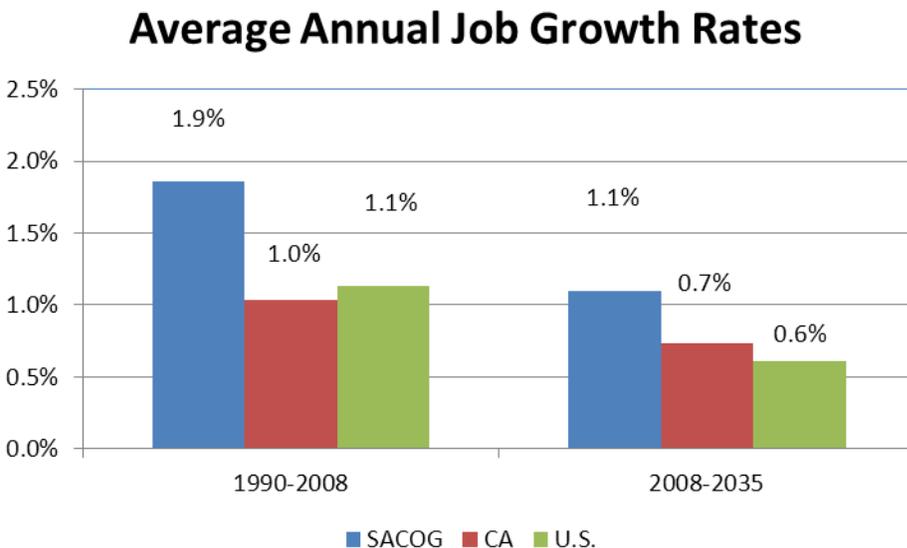
coastal regions become more crowded. The SACOG Blueprint provides a wide variety of housing options and new smart growth opportunities.

The resumption of state government growth and the competitive housing market provide the basis for projecting an increasing share of California jobs locating in the SACOG region between 2020 and 2035.

It is likely that energy efficiency and the application of technology to health care (from biotech to medical records technology) will be among the new emerging job growth areas in the nation and state. It is difficult to assess the job growth potential for the SACOG region as these areas of opportunity are sought by regions all across the country and total future job growth potential is still uncertain.

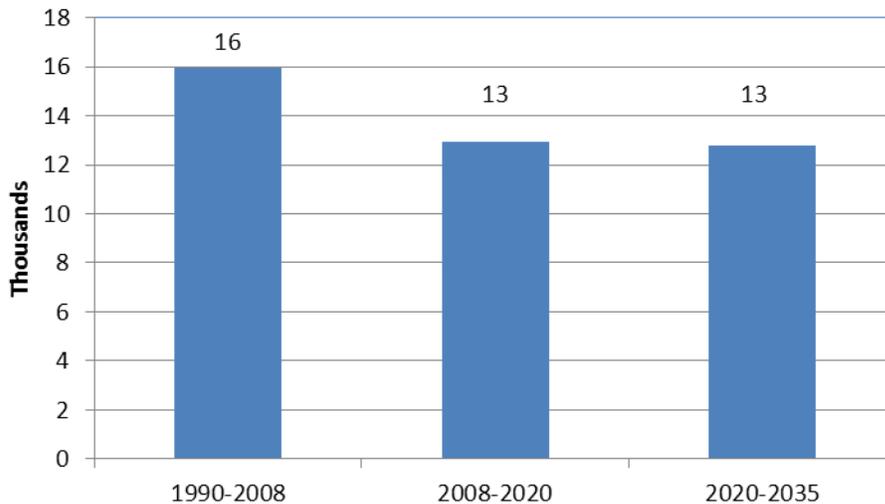
The projections to 2035 are based on the assumption that the region will participate in a significant way in the growth of these innovative activities—either as a direct result of activity at area centers including U.C. Davis and/or as a result of spillover from job growth in the Bay Area as occurred in the technology boom of the 1990s. As a result, the regional job projections to 2035 assume that the region will capture part of a “new” economic base sector during the next 25 years. This assumption adds 41,600 jobs to the 2035 projection.

These factors are projected to result in the SACOG region capturing 6.6% of California jobs in 2035 up from 6.2% in 2020 and 6.0% in 2008. Job levels in the region are projected to increase by 1.1% per year to 2035 compared with a 0.7% annual growth rate for California and 0.6% annual job growth in the nation.



While the SACOG region is expected to outpace the state and nation in job growth between 2008 and 2035, all three areas are expected to see slower job growth than occurred between 1990 and 2008.

## Annual SACOG Region Job Growth



The decline in annual job growth in the region is not the result of lagging competitiveness in the SACOG region. It is primarily the result of the expected slower growth in California job and population levels. Compared to the 2005 projections the region is projected to get a slightly higher share of a much lower projected level of jobs in California.

As shown in the next section, job levels are projected to grow more slowly than population over the period to 2035, reversing the trend of the past 40 years.

The eventual retirement of the large wave of baby boomers will restrict job growth relative to population in the nation, state and SACOG region.

### Jobs by Major Industry Sector

CCSCE developed job projections by major industry group as part of the 2010 projection analysis. The projections for 2020 were developed in CCSCE's detailed industry projection model linking the region to the state and nation. The projections for 2035 were developed by assuming that national industry trends between 2020 and 2035 would be followed in the region although overall regional job growth would exceed the national rate of job growth to 2035.

National industry trends are difficult to project precisely but some major trends can be projected with more confidence.

The largest regional job growth is expected in the health services component of Educational and Health Services (meeting the growing health care needs of an aging population) and in Professional and Business Services, which includes the fast growing computer, architectural and engineering, scientific and R&D laboratory services sectors.

SACOG Region  
 Jobs by Major Industry Group  
 2000-2035  
 (Thousands)

	2000	2008	2020	2035
Agriculture	15.0	12.8	13.1	13.4
Mining	1.2	1.1	1.2	0.9
Construction	55.1	58.1	81.1	101.5
Manufacturing	50.8	41.3	37.8	32.5
Wholesale Trade	26.0	27.8	30.6	32.9
Retail Trade	95.3	101.3	110.8	117.1
Transp., Warehousing and Utilities	24.5	26.3	28.1	32.0
Information	19.0	19.6	20.5	22.0
Financial Activities	53.7	58.9	68.8	77.3
Professional & Business Services	110.8	112.9	155.5	195.0
Educational & Health Services	74.8	105.7	131.5	167.3
Leisure & Hospitality	73.5	89.5	99.7	115.2
Other Services	27.9	30.3	34.2	42.1
Government	221.6	249.6	264.2	300.0
Self Employed	71.2	86.3	94.7	114.8
Total Jobs	920.4	1,021.5	1,172.1	1,364.0

Government sector jobs will be a source of growth, particularly after 2020 and construction job levels are expected to rise in response to the housing rebound and long-term population growth.

The table on page 36 shows which major industry sectors will grow faster than total jobs, leading to a rising share of total jobs, and which sectors are projected to grow more slowly than the total.

Three sectors—construction, professional and business services and educational and health services—are projected to grow substantially faster than total jobs. Manufacturing and retail trade are projected to grow substantially slower than the regional total. Other sectors are projected to grow at slightly above or below the regional total.

SACOG Region  
 Jobs by Major Industry Group  
 2000-2035  
 (Percent of Total Jobs)

	2000	2008	2020	2035
Agriculture	1.6%	1.3%	1.1%	1.0%
Mining	0.1%	0.1%	0.1%	0.1%
Construction	6.0%	5.7%	6.9%	7.4%
Manufacturing	5.5%	4.0%	3.2%	2.4%
Wholesale Trade	2.8%	2.7%	2.6%	2.4%
Retail Trade	10.4%	9.9%	9.5%	8.6%
Transp., Warehousing and Utilities	2.7%	2.6%	2.4%	2.3%
Information	2.1%	1.9%	1.7%	1.6%
Financial Activities	5.8%	5.8%	5.9%	5.7%
Professional & Business Services	12.0%	11.1%	13.3%	14.3%
Educational & Health Services	8.1%	10.3%	11.2%	12.3%
Leisure & Hospitality	8.0%	8.8%	8.5%	8.4%
Other Services	3.0%	3.0%	2.9%	3.1%
Government	24.1%	24.4%	22.5%	22.0%
Self Employed	7.7%	8.4%	8.1%	8.4%
Total Jobs	100.0%	100.0%	100.0%	100.0%

Source: 2000,2008 California Employment Development Department; 2020,2035--CCSCE

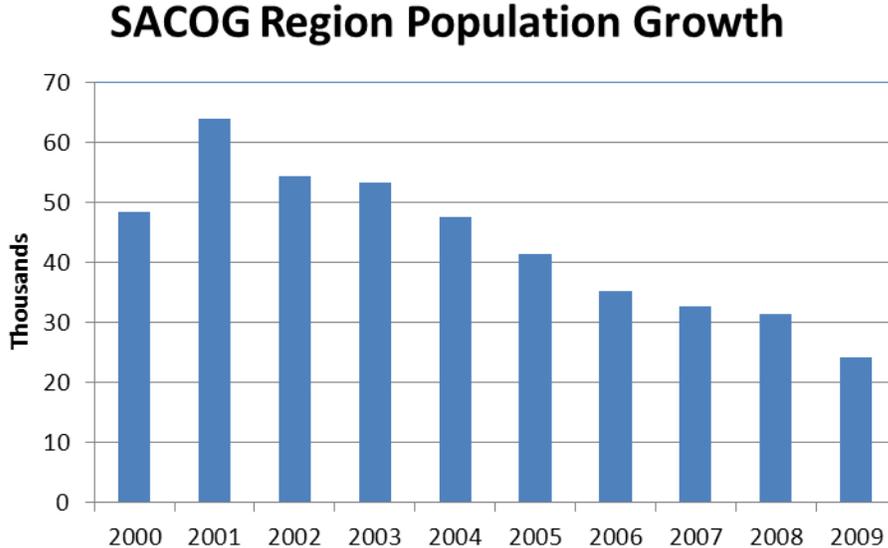
## Section 5

### Population Projections

As described in Section 2 the SACOG region population growth was projected based on the level of anticipated job growth. A summary of the methodology is set forth on page 3 and a detailed description is included in a separate report from DB Consulting.

#### Recent Trends

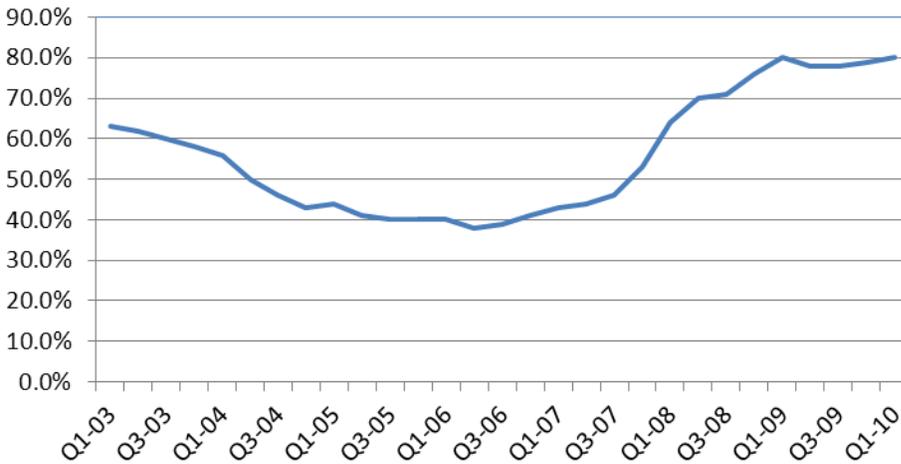
Population growth declined after 2004 from the high levels in the early years after 2000. Annual growth was near 30,000 persons per year during the past four years following annual growth near 50,000 per year from 2000 through 2004.



The decline in annual population (and household) growth coincides with the timing of peak housing prices in the region as shown on pages 29 and 30 and occurred well before the deep recession beginning in late 2007.

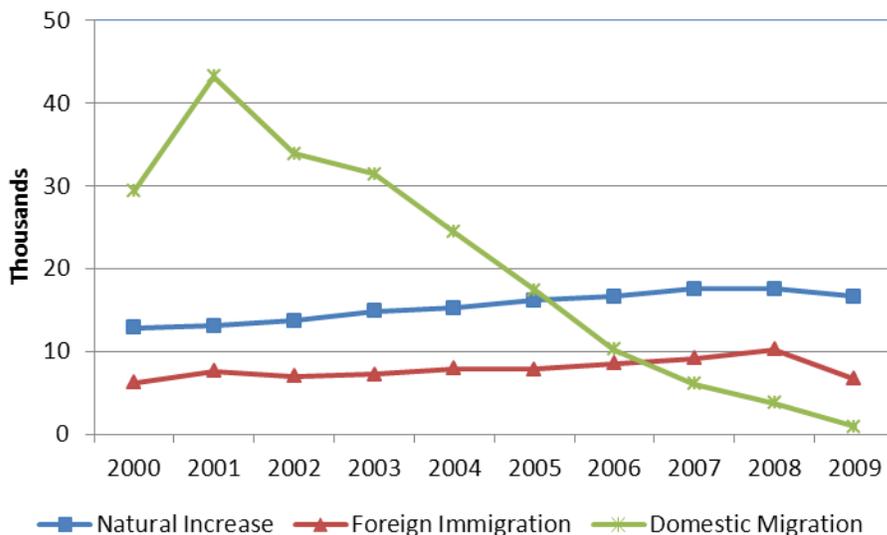
As a result of the sharp increase in regional home prices after 2004, first-time homebuyer affordability plunged according to data collected by the California Association of Realtors. First-time homebuyer affordability dropped from more than 60% in early 2003 to near 40% for most of 2004, 2005, 2006 and 2007 before increasing thereafter as housing prices plummeted.

## First-Time Homebuyer Affordability Index



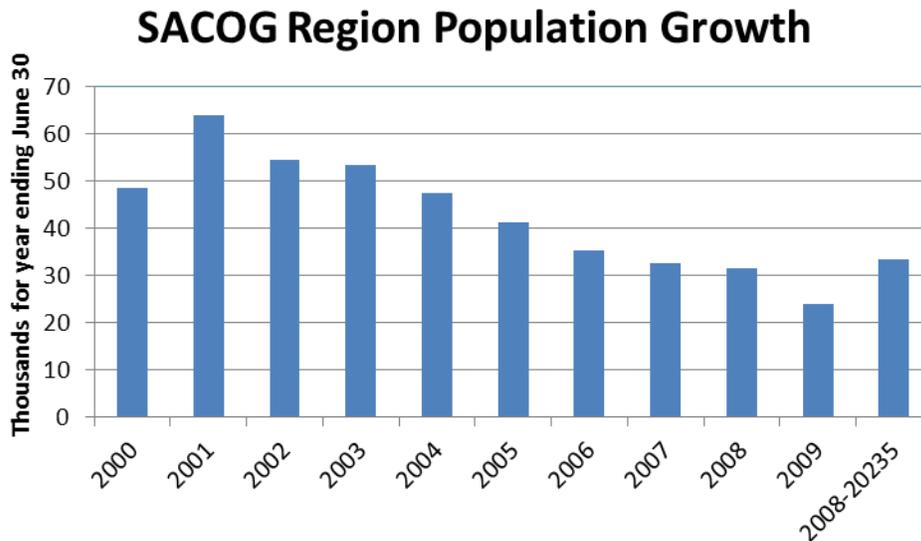
By the time housing affordability rebounded in 2008 and 2009 the recession and associated job losses were continuing to reduce the level of domestic migration into the region from elsewhere in the state and nation. The decline in domestic migration was the principal cause of the decline in population as the contribution to growth from foreign immigration and natural increase (births minus deaths) increased during most years.

## SACOG Components of Population Change



## Population Growth to 2020 and 2035

Based on the trends in projected regional job growth, SACOG region population growth is projected to average 33,500 per year between 2008 and 2035.



The absolute level of annual population growth to 2035 is expected to slow in the nation, state and region compared to what was experienced between 2000 and 2005.

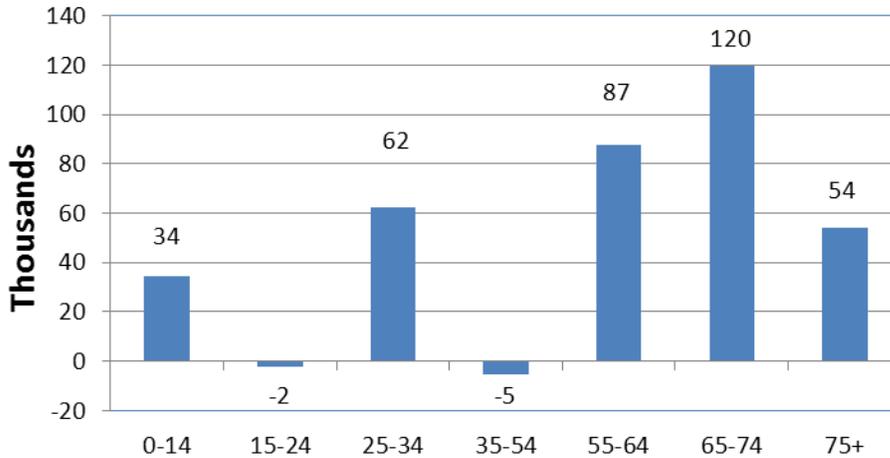
### The Age Profile of Projected Growth

Population growth between 2008 and 2020 will be strongly concentrated in two age groups: 1) 25-34 and 2) 55+.

Nearly 75% of the population growth between 2008 and 2020 will be accounted for by increases in the number of residents in the region over 55—1) an increase of 87,000 in the 55-64 age groups; 2) an increase of 120,000 in the number of residents aged 65-74; and 3) an increase of 54,000 in the 75 and older age groups.

The regional trends are matched in the state and nation and result from the aging of the very large baby boomer generation. The last baby boomer turns 55 in 2018 and the leading edge of the baby boom will be 74 in 2020.

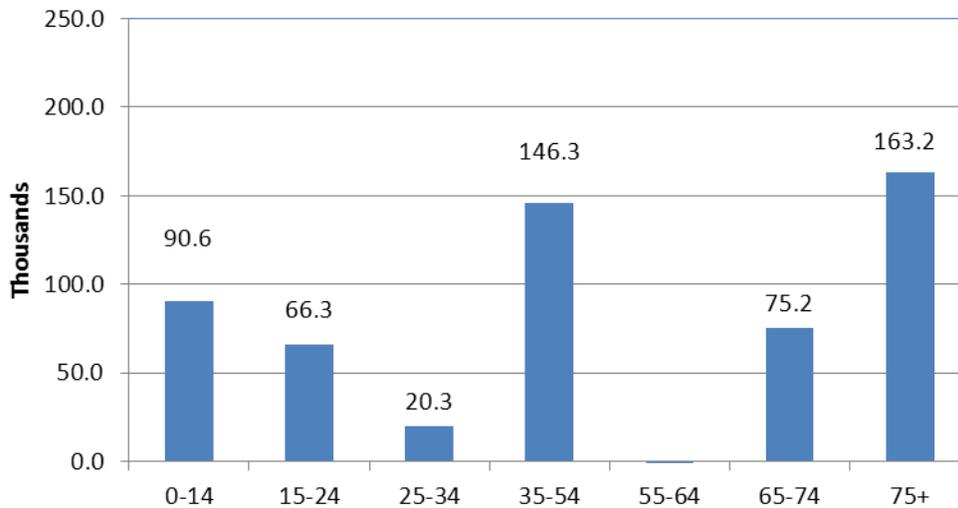
## SACOG Population Growth 2008-2020



The next largest component of growth is projected in the 25-34 age groups, which are projected to grow by 62,000 residents. The number of residents aged 35-54 is projected to decline slightly reversing 20 years of strong growth in these age groups. These age trends will influence regional housing market trends as discussed in Section 6.

After 2020 the age profile of regional population growth changes. Growth of nearly 240,000 residents is projected for residents aged 65 and above. However, after 2020 there will be some renewed growth in the number of residents aged 35 to 54 and in the number of children in the regional population.

## SACOG Population Growth 2020-2035

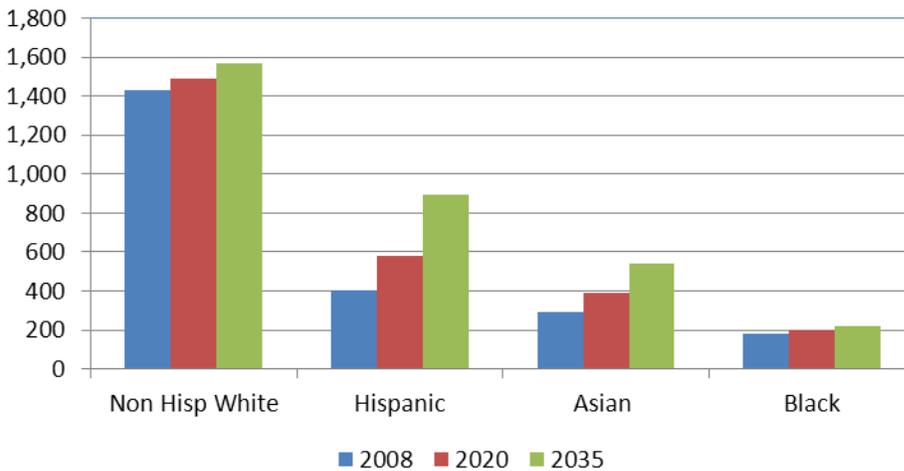


## Population by Ethnic Group

DB Consulting divided the regional population into four major ethnic groups to develop the regional population and preliminary housing projections. These four groups are 1) Hispanic; 2) Non Hispanic White; 3) Non Hispanic Black and 4) Non Hispanic Asian and Other. The Other group includes residents of Pacific Islander and multi-race groups.

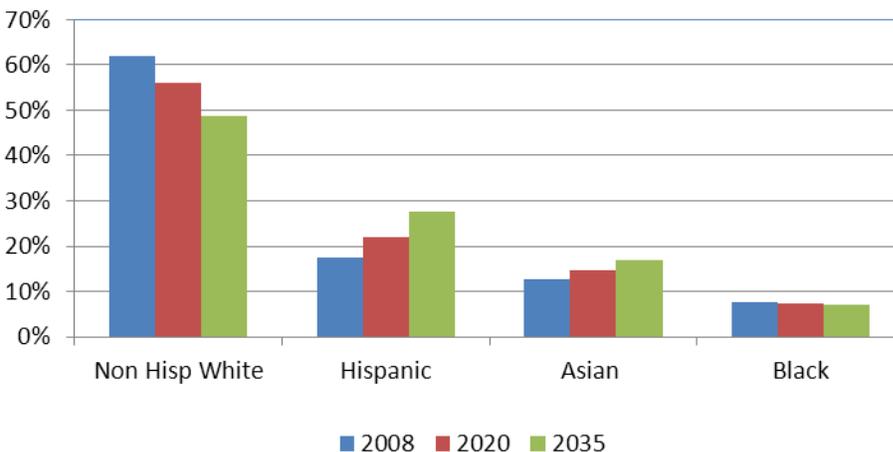
As shown below most of the population growth projected for the SACOG region is in Hispanic and Asian population groups.

### SACOG Region Population (Thousands)



The Non Hispanic White population is projected to remain the largest ethnic group in the region in 2035 with 49% of the regional population compared with 62% in 2008. The Hispanic share is projected to rise to 28% from 18%, the Asian and Other share to increase from 13% to 17% and the Black population to decline to 7% from 8% in 2008.

### Share of SACOG Region Population



## Total Population and Population by Age Group

Population projections by age group for the SACOG region are shown below for 2020 and 2035 along with the 2008 estimates used in the analysis.

SACOG Region Population by Age Group 2008-2035 (Thousands)			
	2008	2020	2035
0-4	146.0	163.0	186.7
5-9	150.6	164.0	195.7
10-14	161.6	165.4	200.7
15-19	174.0	166.5	205.0
20-24	166.5	172.0	199.8
25-29	151.9	182.6	194.4
30-34	146.7	178.1	186.6
35-39	154.8	166.5	195.2
40-44	167.8	158.9	210.4
45-49	173.6	160.4	206.2
50-54	162.6	167.6	187.9
55-59	141.8	175.7	172.2
60-64	114.8	168.3	168.6
65-69	87.7	151.5	176.4
70-74	70.4	126.5	176.8
75-79	54.8	81.0	148.1
80-84	42.7	53.8	106.4
85+	41.6	58.4	101.8
<b>Total</b>	<b>2,310.0</b>	<b>2,660.1</b>	<b>3,218.7</b>

## Section 6

### Households and Housing Projections

CCSCE and DB Consulting prepared household projections for the SACOG region based on demographic factors—1) the age and ethnic profile of projected population growth as described in Section 5 and 2) projections of household formation rates by age and ethnic group.

Household formation rates describe how populations in each age and ethnic group form households. The household formation rates for the SACOG region from the 2000 Census are shown below.

Household Formation Rates  
SACOG Region  
2000 Census

	White	Black	Asian	Hispanic
15-24	16%	19%	13%	15%
25-34	48%	51%	39%	43%
35-44	54%	58%	48%	52%
45-54	58%	60%	48%	55%
55-64	60%	62%	43%	55%
65-74	64%	64%	42%	59%
75+	70%	63%	45%	59%

These rates reflect how many households are formed for each 100 residents in each age/ethnic group. So the 54% household formation rate for White Non Hispanic residents aged 35-44 means that for every 100 residents in this group there are 54 households headed by someone in this age and ethnic group.

The table shows that household formation rates are higher for older age groups compared to younger age groups. Some younger adult residents live with roommates and some still live with their parents. The older age groups have household formation rates above 50% (fewer than 2 adults per household) because more older residents live alone after divorce or death or their spouse.

Hispanic and Asian residents have lower household formation rates compared to Non Hispanic White and Black residents. This is especially true for older Asian residents as shown above. Cultural factors are important in explaining these differences. Many Hispanic and Asian households include adult members (such as grandparents and cousins) in addition to the primary family members.

There are several challenges in projecting household formation rates even before taking into account how the recession and recent housing market turmoil will affect near and

medium term housing decisions. How relevant are the household formation rates of 2000 or 2008 for the population in each age and ethnic group in 2035?

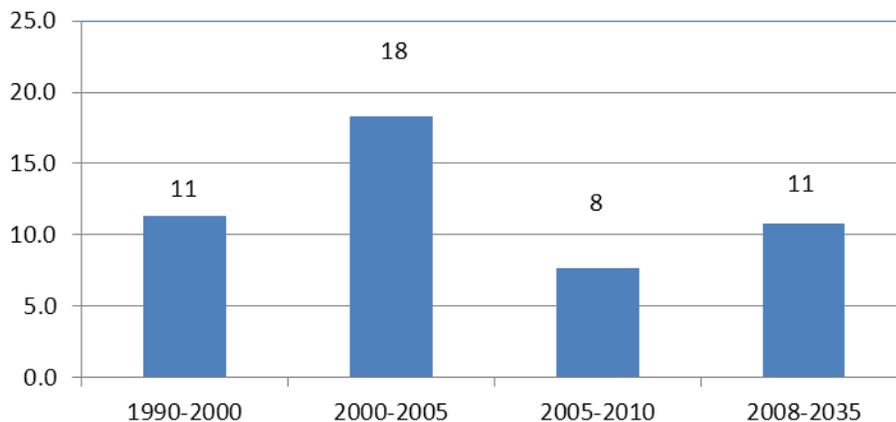
- Will older residents form fewer households as increased longevity reduces the number of single person households in the 55-80 age groups?
- Will cultural patterns persist for Hispanic and Asian households in terms of having grandparents and other relatives living with the primary family?
- Will the recent pattern of slow income growth continue and for how long affecting the ability of younger residents to form independent households?
- Are the household characteristics of SACOG residents in this decade be a good guide to 2035 where many residents will have come from other regions, states and countries?

These questions are difficult to answer for 25 years into the future. The major determinant of household growth is the pattern of population growth by age and ethnic group. Modest changes were made to the SACOG region 2000 household formation rates shown on page 41. The specific assumptions used for the 2035 household projections are described at the end of the section after the major results are presented.

### Total Household Growth

The SACOG region is projected to add close to 11,000 households per year between 2008 and 2035. This is similar to the household growth experienced between 1990 and 2000. The annual population growth for these two periods is similar at near 34,000. Household growth was much higher between 2000 and 2005 and then declined sharply as housing prices surged and then the recession took hold.

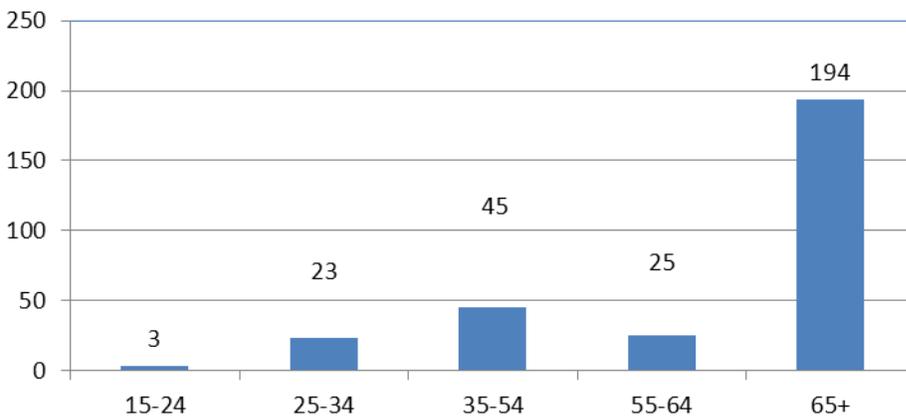
### Average Household Growth Thousands per Year



Most of the household growth to 2035 will occur in households headed by residents aged 65 and above. Two of every three added households will be headed by a resident aged 65 and above. This dominating trend will affect the region's future housing market, which will be heavily determined by the choices these households make in terms of where and in what kind of housing they choose to live.

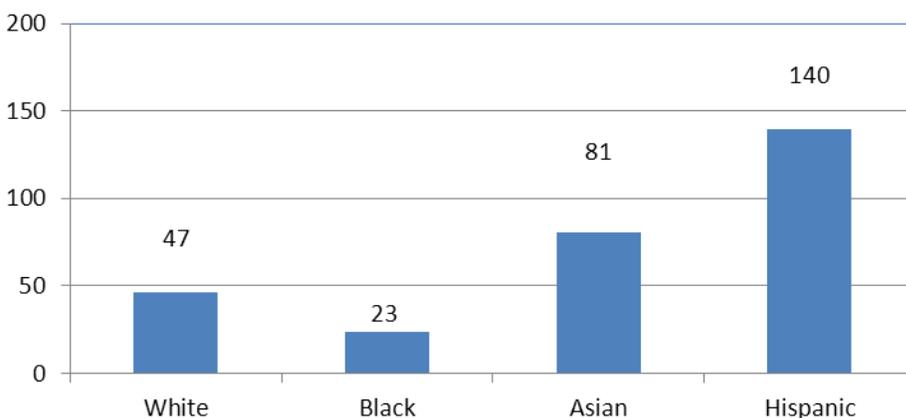
There will be small growth in households headed by residents in younger age groups. As discussed later in this section, most of the increase in households headed by residents aged 25-34 will occur in the early years and all of the growth in households headed by residents aged 35-54 will occur after 2020.

**Household Growth by Age Group**  
2008-2035 (Thousands)



Most of the growth to 2035 will occur in households headed by Hispanic and Asian residents.

**Household Growth by Ethnic Group**  
2008-2035 (Thousands)



## Housing Projections Derived from Household Projections

The projected number of housing units in the SACOG region and the implied construction levels for new housing are derived from and closely track the household growth projections. But they will differ for two main reasons. First, housing construction over time will be larger than household growth to take account of replacing units that are demolished and to take account of the demand for second homes.

Second, in the short and medium term housing construction will differ from the demographic-based household projections for reasons related to housing inventory, vacancy rates, financing terms and consumer sentiment. At the present time all of these factors argue for slower growth in construction relative to the demographic projections. See the discussion below of household growth to 2020.

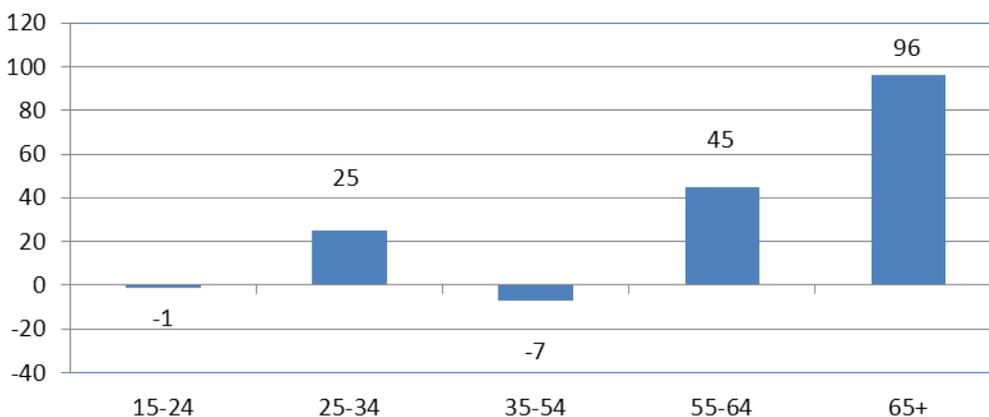
However, for 2035 the household projections will be a good guide to the demand for new housing taking into account replacements and second homes.

SACOG staff is preparing the housing projections based on the household growth projections and the market, replacement and second home considerations discussed above.

## Household and Housing Projections to 2020

The age profile of the household growth for the years from 2008 to 2020 shows a strong concentration in two age groups. Most of the growth will occur in households headed by residents aged 55-64 and 65+. Another, smaller, concentration will occur in young adult households headed by residents aged 25-34. On the other hand a small decrease is projected for households headed by residents in the prime family age groups 35-54.

**Household Growth by Age Group  
2008-2020 (Thousands)**



These age trends for household growth will mean that the market preferences of older and younger households will predominate in the market for the next decade after two decades when the largest growth was in households headed by residents aged 35-54.

These projections are labeled as projections for 2020 and they were derived by using the population by age and ethnic group projected for 2020 and household formation projections for 2020.

But it is likely that when market conditions are taken into account the housing growth implied for 2020 could happen 1-5 years later. Income growth will likely be slow for the next several years and there is an overhang of vacant units in the regional inventory with possibly more supply coming on the market from future foreclosures.

### **Projecting Household Formation Rates**

The SACOG household formation rates for 2000 shown on page 41 were adjusted in the following way to prepare regional household projections for 2020 and 2035.

- California household formation rates for 2000 and 2008 were used as a starting point instead of region-specific rates.

This was done because the region-specific rates were based, for some age and ethnic groups, on very small sample sizes. For the most part the SACOG region household formation rates were similar to the statewide rates. But given that the large majority of population increase is projected to be in Hispanic and Asian residents, who made up a relatively small part of the region's population in 2000, it was considered that the state rates were more representative as a starting point for the analysis.

- The American Community Survey estimate of households for 2008 was used as a starting point instead of the Department of Finance estimate.

The reason is that the higher vacancy rates in the American Community Survey (and associated lower number of occupied housing units) were considered a more reliable measure of vacancies as confirmed by regional market data. This assumption lowered the base year estimate of households by approximately 25,000 and reduced the estimated household formation rates but did not otherwise affect the projected level of household growth.

- The household formation rates were slightly reduced for older age groups reflecting increased longevity and a reduction in the number of older residents living in single-person households compared to the 2000 household formation behavior.

No income projections were prepared as part of this analysis so it was not possible to incorporate information about income growth into the household projections. In the

period since 1999 real median household income will have declined when 2009 and 2010 income estimates, reflecting the recession, are published later this year and next.

The comparatively large growth in the region's Hispanic and Asian populations lowers the rate of household growth as Hispanic and Asian households tend to have more adults per household compared to Non Hispanic White and Black households.

The large growth in the number of older residents increases the rate of household growth as a comparatively large number of older residents live alone.

Both the preferences of older residents and Hispanic and Asian residents can change over a 25 year period, which adds an additional element of uncertainty to long-term household growth projections.

An acceleration of income growth over the next 25 years will push household growth higher while a continuation of recent negative real income growth will constrain household formation.

### **The Housing Market Choices of Older Residents**

The housing choices of older residents will play a major role in determining what kind of housing is built in the region over the next twenty-five years.

To the extent that baby boomers stay in their existing homes as they age and the children move out, more single family housing will be needed for younger households with children. To the extent that older households downsize as they age and the children move out, their existing single family homes will be available for younger households. And the downsizing older households will create a large market demand for the kind and location of units they want to move into.

Since there is not expected to be any growth in the number of households headed by residents aged 35-54 for the next ten to fifteen years, housing choices by residents as they reach 65 and 75 will have an important impact on what kind of housing the market will demand.

The market for smaller units should increase both because younger and older households are smaller than family households and also as affordability gives households incentives to consider smaller units when they work for their family. Moreover, the demand for rental units may increase, especially for the next ten years, both from demographic factors and because they are affordable to more households.



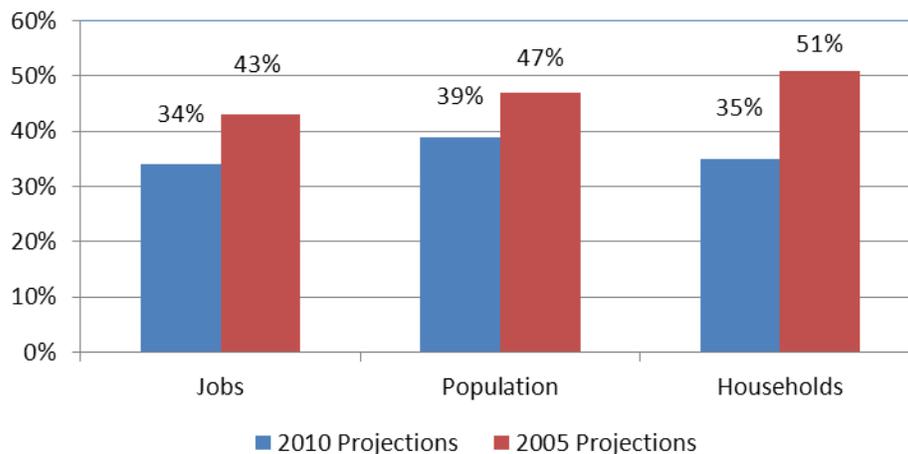
## Summary of Draft Growth Projections and Comparisons to Past Projections

Draft October 2010

What are the major differences in the current (draft) projections from the projections from the MTP2008?

There is less growth than in the last projections for jobs, population, and households. The differences in these changes for the three categories are highlighted below.

### SACOG Region Growth Rates



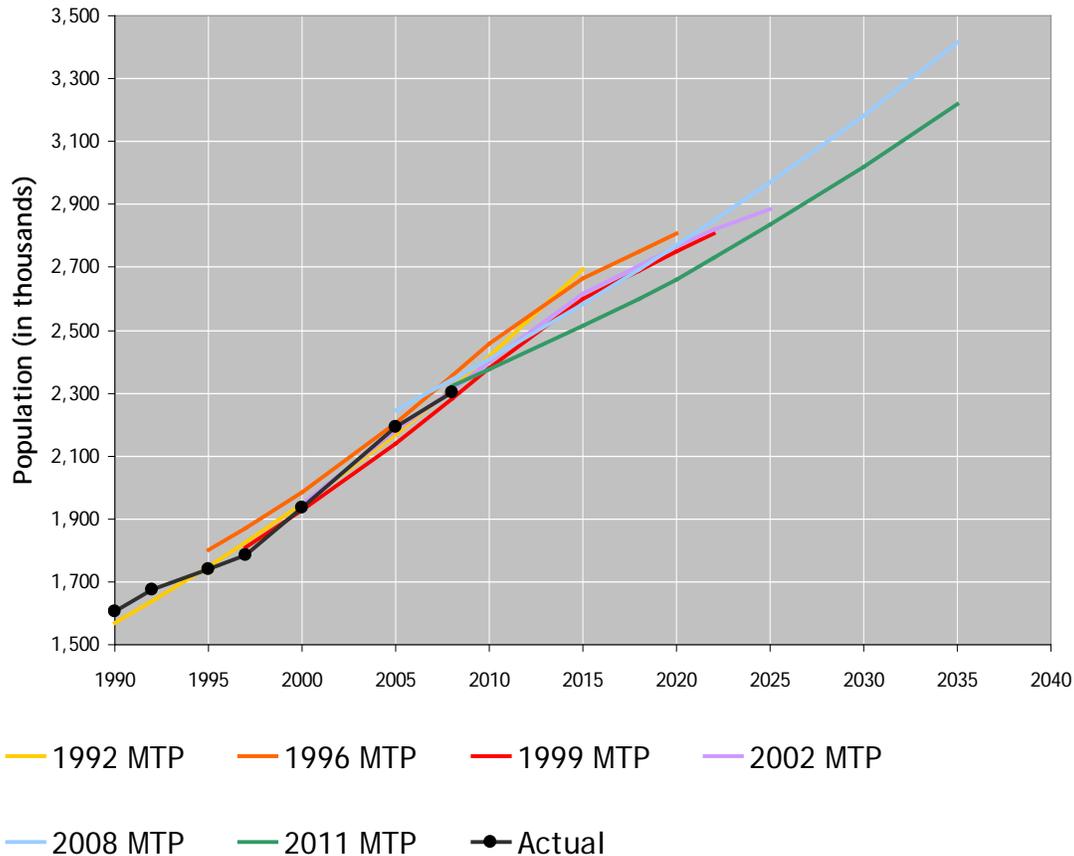
What are the major changes that have actually taken place from 2005 to 2008 compared to what we projected in 2005 when the last projections were developed?

Population and households grew slower while housing units grew faster than our prior projections indicated. Population was almost 15,000 persons less and households were 8,400 less than we expected. However housing units actually were built faster than projected with more than 29,000 more units. One of the consequences of more housing but fewer households is that the vacancy rate of the housing stock increased substantially. Traditionally the region has about a 5% vacancy rate, which allows for normal turnover of housing by both owners and renter occupants. By the end of 2008 we estimate that we had a 9% vacancy rate.

How do these new projections compare to past regional growth projections from SACOG, and how have the past projections compared to actual growth?

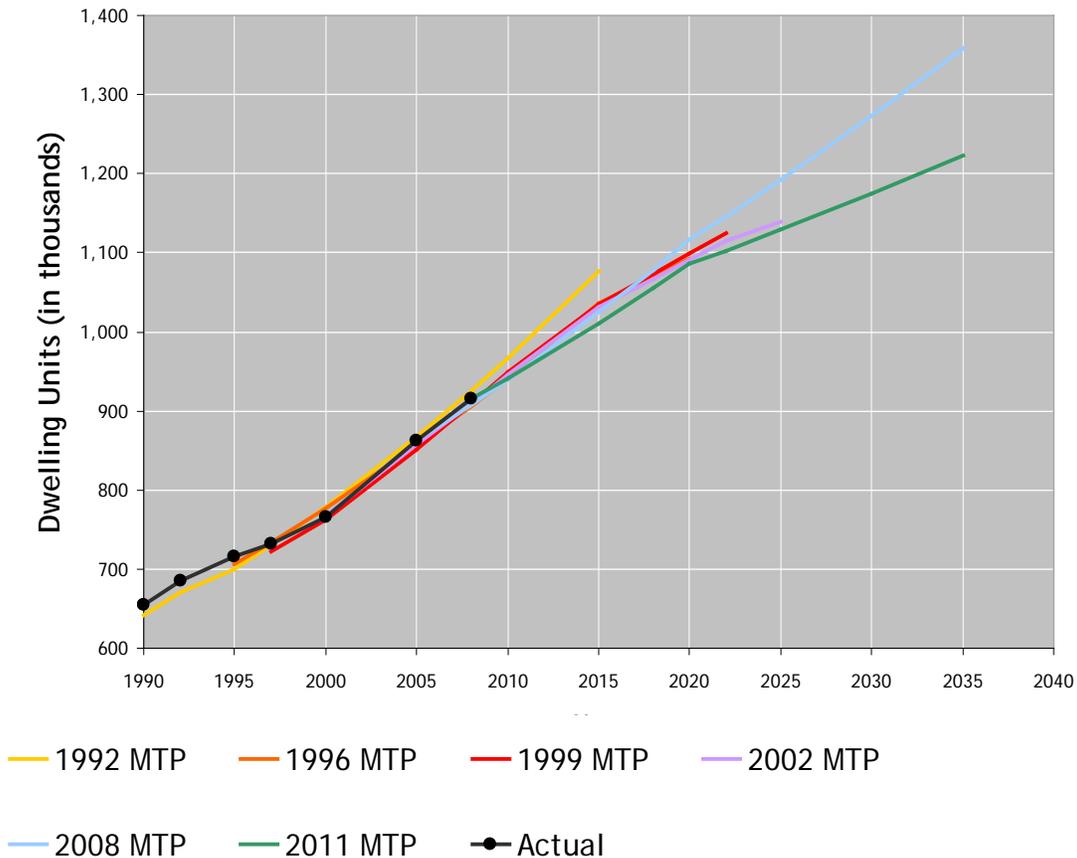
Since 1990, SACOG has produced six series of projections of population, dwellings and jobs for the 6-county region. Each series was prepared for an update of the MTP. SACOG staff has assembled these projections, and compared them to actual observed data on population, dwellings, and jobs to get a sense of how reasonable SACOG’s projections have been over time.

**SACOG Total Population Projections, 6-County Region**



Source: TBA  
 "1992 MTP" from "Metropolitan Transportation Plan" September 1993, adjusted to include Tahoe Basin and Placer County outside Roseville, Lincoln and Rocklin.  
 "1996 MTP" from "SACOG 1995 Regional Housing, Population & Employment Projections: Documentation and Analysis".  
 "1999 MTP" from "Projections Summary for the Sacramento Region", adjusted to include Tahoe Basin.  
 "2002 MTP" from "A Bold First Step..." document, adjusted to include Tahoe Basin.  
 "2008 MTP" and "2011 MTP" from Levy projections documents.  
 "Actual" are DOF.

## SACOG Dwelling Projections, 6-County Region



Source: TBA

"1992 MTP" from "Metropolitan Transportation Plan" September 1993, adjusted to include Tahoe Basin and Placer County outside Roseville, Lincoln and Rocklin.

"1996 MTP" from "SACOG 1995 Regional Housing, Population & Employment Projections: Documentation and Analysis".

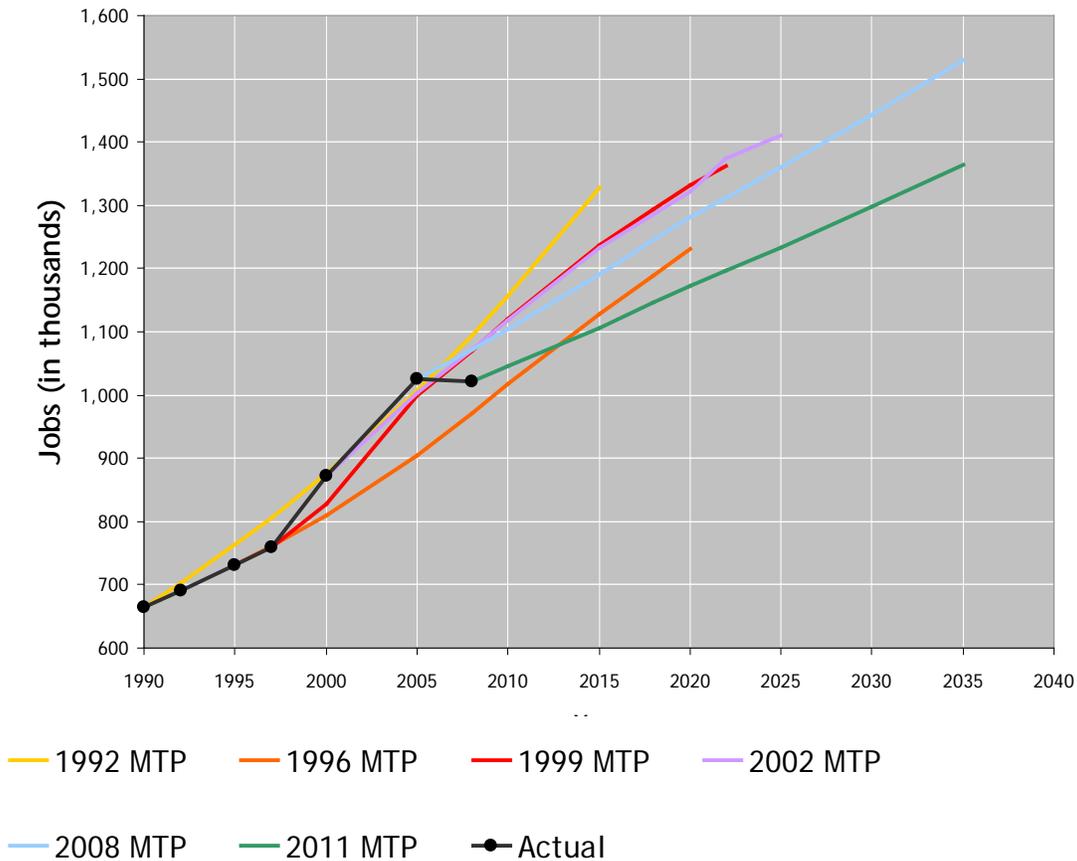
"1999 MTP" from "Projections Summary for the Sacramento Region", adjusted to include Tahoe Basin.

"2002 MTP" from "A Bold First Step..." document, adjusted to include Tahoe Basin.

"2008 MTP" and "2011 MTP" from Levy projections documents.

"Actual" are DOF.

## SACOG Total Jobs Projections, 6-County Region



Source: TBA

"1992 MTP" from "Metropolitan Transportation Plan" September 1993, adjusted to include Tahoe Basin and Placer County outside Roseville, Lincoln and Rocklin.

"1996 MTP" from "SACOG 1995 Regional Housing, Population & Employment Projections: Documentation and Analysis".

"1999 MTP" from "Projections Summary for the Sacramento Region", adjusted to include Tahoe Basin.

"2002 MTP" from "A Bold First Step..." document, adjusted to include Tahoe Basin.

"2008 MTP" and "2011 MTP" from Levy projections documents.

"Actuals" are taken to be the estimate of number of jobs for the base year of each series.

Only four of the six projections series could be evaluated against actual growth. For the two most recent series (the 2008 MTP, and the draft projections for the 2011 MTP) insufficient time has passed to judge reasonableness of the projections against actual data.

- SACOG's projections of population and dwellings have tracked actual data very closely.
  - Total percent error of the longest forecast-to-actual year (i.e. the longest forecast for each projections series for which actual data

are available) is less than 3 percent for both population and dwellings.

- SACOG's projections of jobs have tracked actual data fairly well, but not nearly as well as its projections of population and dwelling units.
  - Total percent error in the longest forecast-to-actual year ranges from less than one percent (for the 2002 MTP series) to more than 8 percent (for the 1992 MTP series)
  - The actual number of jobs in the 6-county region shows much more variability than either population or dwelling units, which accounts for part of the higher error for jobs forecasts.

What data from recent economic base trends are included in this analysis?

The region's share of the state economic base increased from 4.9% in 1990 to 5.7% in 2005 before stabilizing between 5.6% and 5.7%. The region has been vulnerable to the slowdown in state government job levels but has benefited from below-average exposure to job losses in manufacturing and foreign trade.

As job levels in the economic base slowed and turned negative throughout the state in recent, the SACOG region has participated in these losses but maintained close to the record high share of the state's economic base achieved in 2007.

How has employment growth changed in these projections?

Total employment is expected to grow slower than we projected it would in the last forecast with the 2035 total employment declining from 1.53 million to 1.36 million jobs. We had 1.02 million jobs in 2008.

Some of that decrease occurred from 2005 (when the last projections were done) to 2008 (the base year of the new projections), when the region lost 6,000 jobs. We had expected to gain 45,000 jobs during the period. What this means is that about 30% of the decline in the 2035 employment has already occurred from 2005 to 2008.

The largest difference is in the growth of the retail sector where the 2035 projection dropped from 163,000 jobs to 118,000 jobs. (We are at about 101,000 retail jobs in 2008.) Other sectors with significant declines in the amount of growth are government, manufacturing, leisure and hospitality, and education and medical.

Sectors that have increased employment include self-employed and agriculture.

Will the economic profile of the region change from today or from our last projection?

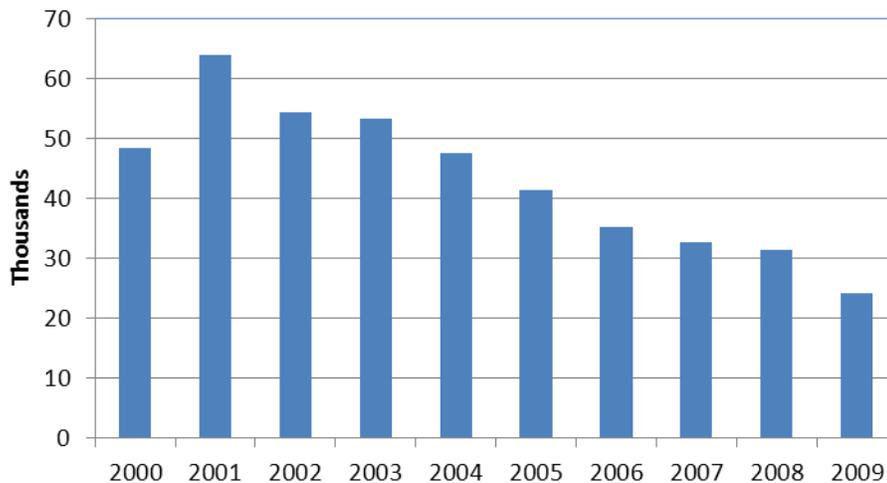
No, not really. Government, particularly state government, will remain the largest sector followed by professional and business services, education and health services, and retail.

The 2035 projections assume that the region will capture jobs in one or more of the state's new industries such as clean tech and new health care and health care technology fields. It is expected to add about 40,000 jobs to the region by 2035.

Did the recession cause the population growth to slow?

**Population growth declined after 2004 from the high levels in the early years after 2000.** Annual growth was near 30,000 persons per year during the past four years following annual growth near 50,000 per year from 2000 through 2004.

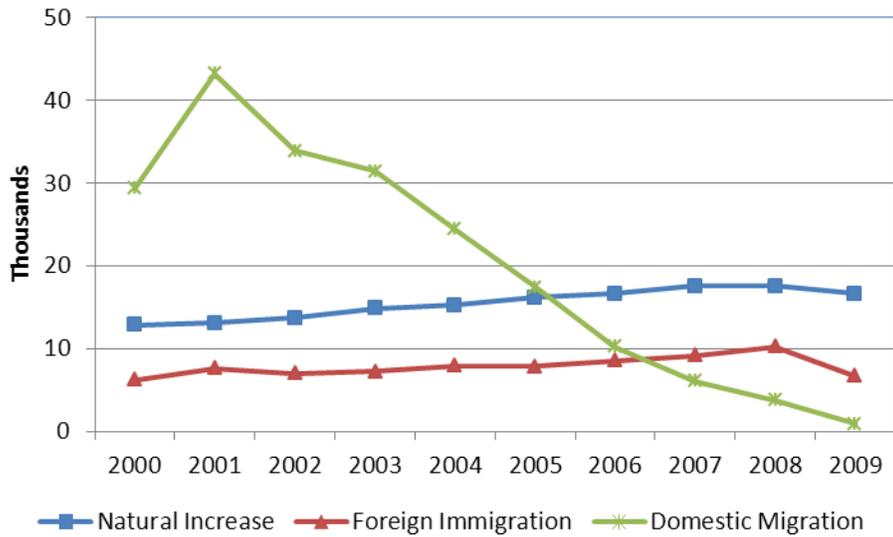
### SACOG Region Population Growth



The decline in annual population (and household) growth coincides with the timing of peak housing prices in the region occurred well before the deep recession beginning in late 2007.

**The decline in domestic migration was the principal cause of the decline in population as the contribution to growth from foreign immigration and natural increase (births minus deaths) increased during most years.**

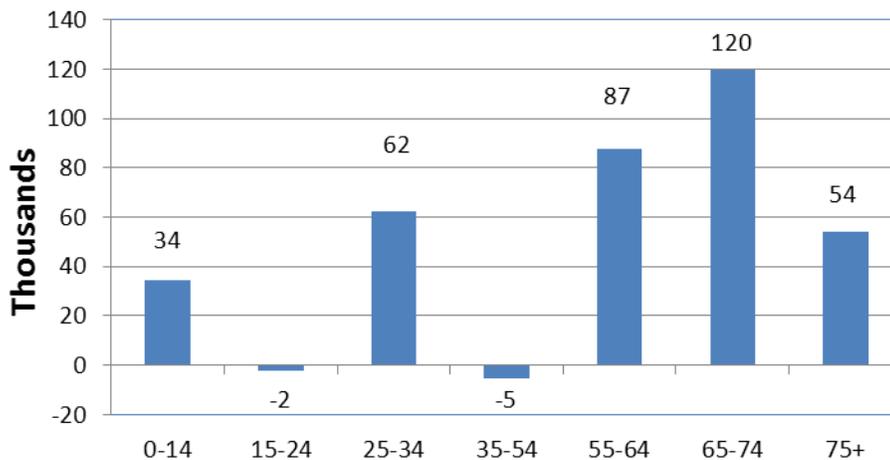
### SACOG Components of Population Change



We have heard a lot about the population aging being an important part of the region's growth story. What are the highlights for these projections?

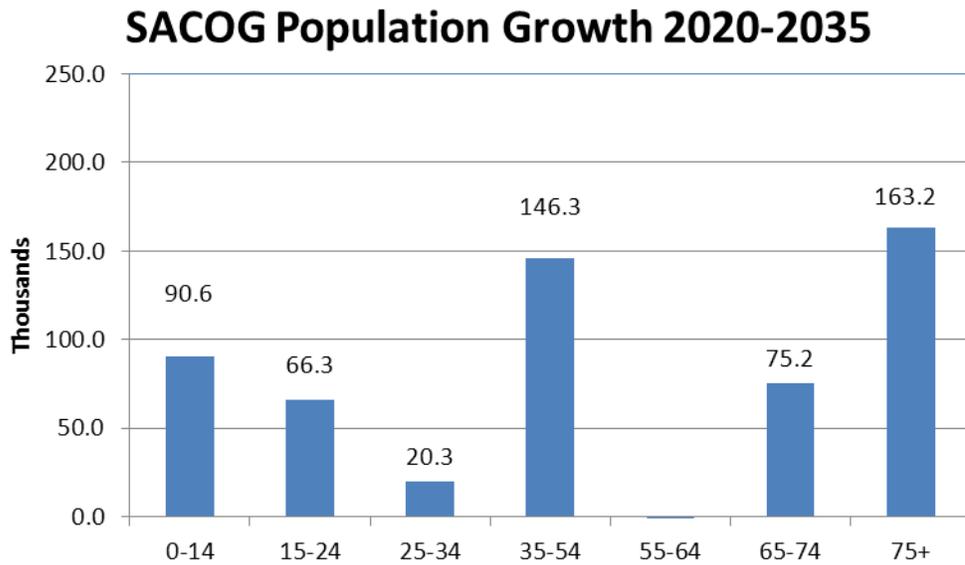
**Population growth between 2008 and 2020 will be strongly concentrated in two age groups: 1) 25-34 and 2) 55+.** Nearly 75% of the population growth between 2008 and 2020 will be accounted for by increases in the number of residents in the region over 55.

### SACOG Population Growth 2008-2020



The next largest component of growth is projected in the 25-34 age groups, which are projected to grow by 62,000 residents. **The number of residents aged 35-54 is projected to decline slightly reversing 20 years of strong growth in these age groups.** These age trends will influence regional housing market trends.

**After 2020 the age profile of regional population growth changes.** Growth of nearly 240,000 residents is projected for residents aged 65 and above. However, after 2020 **there will be some renewed growth in the number of residents aged 35 to 54 and in the number of children in the regional population.**

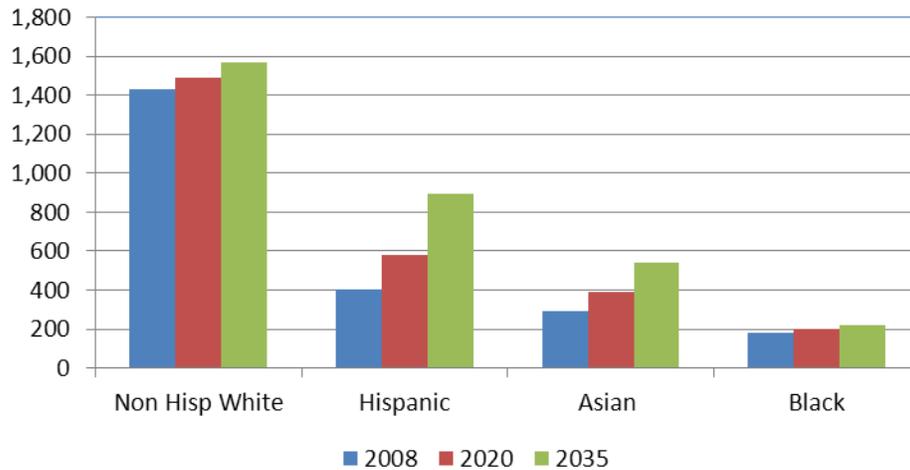


Population projections by age group for the SACOG region are shown below for 2020 and 2035 along with the 2008 estimates used in the analysis.

How is the region's ethnic profile expected to change?

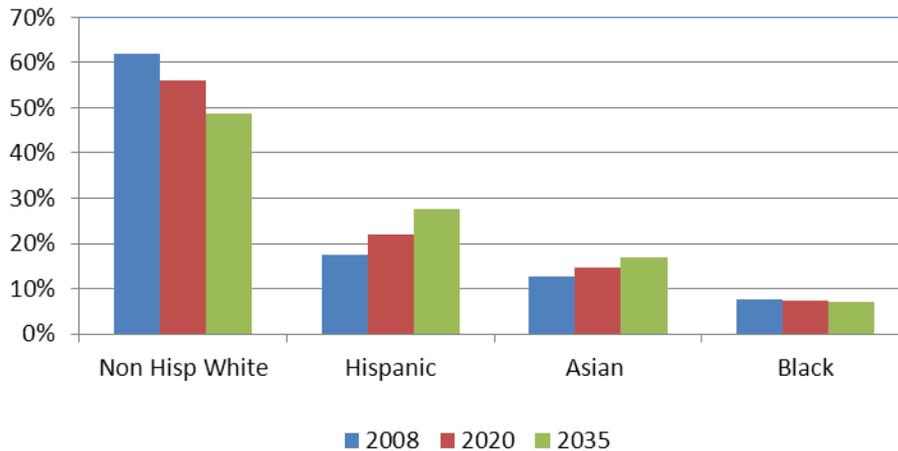
As shown below most of the population growth projected for the SACOG region is in Hispanic and Asian population groups. This trend is in line with the last population projections.

### SACOG Region Population (Thousands)



The Non Hispanic White population is projected to remain the largest ethnic group in the region in 2035 with 49% of the regional population compared with 62% in 2008. The Hispanic share is projected to rise to 28% from 18%, the Asian and Other share to increase from 13% to 17% and the Black population to decline to 7% from 8% in 2008.

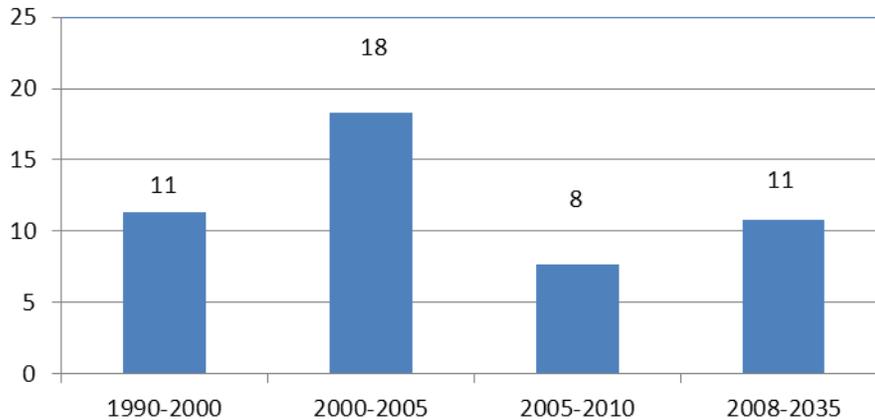
### Share of SACOG Region Population



#### How do the household growth projections compare to the recent past growth?

The SACOG region is projected to add close to 11,000 households per year between 2008 and 2035. This is similar to the household growth experienced between 1990 and 2000. During the past decade there has been two different trends. Between 2000 and 2005, household growth was much higher than these trends, but in the latter half of the decade it declined sharply as housing prices surged and then the recession took hold.

## Average Household Growth Thousands per Year



### Why is household growth rate different than housing unit growth rate?

We have a large stock of vacant housing in the region that will be refilled over time. So each additional household is not going to need an additional housing unit. Working down the housing stock means that the demand for additional housing will be a bit lower.

It is estimated that our region's normal 5% vacancy rate has increased to about 9%. Unfortunately there is no current, comprehensive data source on housing vacancies. We have made this estimate based on available data from local and Census Bureau sources.

In the projections, SACOG staff assumes that it will take some time to work through this oversupply of existing housing. By 2035 we expect the vacancy rate to return to the historic level of 5%. However, we are still working on the pace of change to get back to the "normal" rate.

There is a component of the housing construction industry that should partially offset this lower demand. Replacement of some of the current housing will occur due to demolition and there is also a demand for second homes.

### Why is household growth rate different than population growth rates?

The key factor relating population to households is the number of persons per household. In these projections we expect the average household size to increase, from 2.78 today to 2.87 in 2035. While this may not seem to be significant it is striking in two ways. First, it is a departure from the last projections when we had a decline in the average household size to 2.69 in 2035. Second, it reflects a change in household demographics. If you look at it from a growth perspective, it means that each additional household in the region has 3.13 persons, quite a difference from today's average.