



AGENDA ITEM 4  
REPORT

Southern California Association of Governments  
Remote Participation Only  
February 3, 2022

To: Executive/Administration Committee (EAC)  
Regional Council (RC)

EXECUTIVE DIRECTOR'S  
APPROVAL

From: Kevin Kane, Senior Regional Planner  
(213) 236-1828, kane@scag.ca.gov

Subject: Connect SoCal 2024 Preliminary Regional and County Growth Projections

**RECOMMENDED ACTION:**

Receive and File

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians. 3: Be the foremost data information hub for the region.

**EXECUTIVE SUMMARY:**

*Among the first steps in Connect SoCal 2024 is the development of growth projections for households, employment, and population in the region and six counties. With the help of an expert panel and consultants, staff developed a framework and high, medium, and low regional growth ranges for discussion. These ranges were presented to CEHD in September and November 2021. As background for the Joint Policy Committee Meeting, this report presents the preliminary regional and county forecast for growth from 2019 to 2050, the Connect SoCal horizon, and next steps. In March, the CEHD will consider principles and a process which will guide local jurisdiction input and review of Connect SoCal 2024's forecasted regional development pattern at the local levels.*

**BACKGROUND:**

Understanding the demographic and economic underpinnings of the region's future growth sets the stage for Connect SoCal 2024's next formative steps, which include allocating where within each of the region's counties this growth is likely to occur and the development of additional plan strategies.

Even before the COVID-19 pandemic, emerging data suggested that the growth trajectory of Connect SoCal 2020 would require reassessment and downward revisions were likely.<sup>1</sup> Fewer

<sup>1</sup> For its horizon year of 2045, Connect SoCal 2020 had projected a regional population of 22.5 million, 7.6 million households, and 10.0 million jobs.

births, more deaths, and temporary slowdown of foreign immigration from the pandemic will result in a few years of near-zero or even negative population growth. While these near-term shocks have been assessed and integrated into forecast assumptions, the primary goal of the Connect SoCal 2024 forecast is to assess growth to 2050. This long-range exercise is more influenced by the strengths of Southern California compared to other US regions. With a favorable mix of industries, strong innovation hubs, a welcoming culture, and desirable natural amenities, it is difficult to foresee Southern California decreasing in jobs compared to the US. As such, the middle growth scenario titled “Slower growth, steady improvement” reflects the overall direction of the preliminary Connect SoCal 2024 projection.

While population growth is expected to continue, albeit more slowly, there are two major reasons why the growth rate in households is expected to exceed the population growth rate. First, the population is ageing even more quickly than previously anticipated which increases the number of small households. Second, evidence is also emerging that continued strength in housing production despite low population growth is beginning to address the previously existing housing shortage. This is reflected in the forecast with household formation rates which gradually return to more normal levels such as those seen during the mid-2000s.

While there are still unknowns, that is the nature of long-range forecasting. Staff have integrated new 2020 Census data and completed a deep, expert-driven review of these unknowns to deliver the most robust possible forecast for 2050 upon which to build the rest of Connect SoCal 2024.

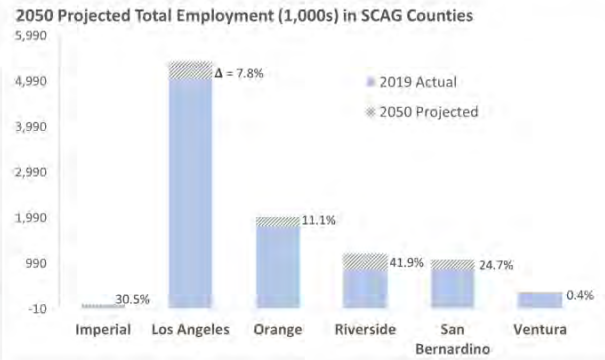
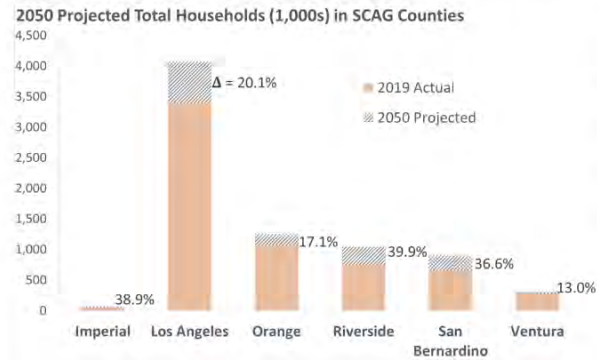
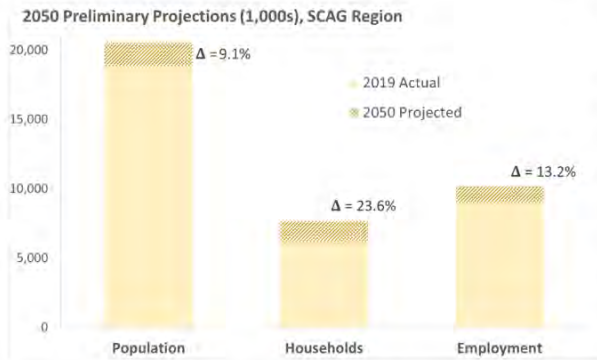
The below tables and figures provide SCAG’s preliminary growth forecast for the region and six counties for the Connect SoCal 2024 horizon. The attached reports from the Population Reference Bureau and the Center for the Continuing Study of the California Economy provide additional detail on forecast assumptions and modeling practice.



**SCAG Connect SoCal 2024 Preliminary Regional and County Growth Forecast**  
*Provided to SCAG's Joint Policy Committee on February 3, 2022*

	2019	2020	2025	2030	2035	2040	2045	2050	2019-2050	
									Growth	% Growth
<b>Total Population</b>										
Imperial	181,000	180,000	186,000	193,000	198,000	203,000	207,000	210,000	29,000	16.1%
Los Angeles	10,046,000	10,018,000	10,079,000	10,233,000	10,423,000	10,590,000	10,673,000	10,658,000	612,000	6.1%
Orange	3,191,000	3,188,000	3,212,000	3,253,000	3,307,000	3,372,000	3,422,000	3,427,000	235,000	7.4%
Riverside	2,394,000	2,418,000	2,509,000	2,608,000	2,699,000	2,783,000	2,866,000	2,943,000	549,000	22.9%
San Bernardino	2,175,000	2,182,000	2,222,000	2,263,000	2,306,000	2,376,000	2,433,000	2,477,000	302,000	13.9%
Ventura	846,000	844,000	841,000	842,000	845,000	846,000	843,000	838,000	(8,000)	-1.0%
CAG	18,832,000	18,830,000	19,049,000	19,392,000	19,780,000	20,171,000	20,444,000	20,551,000	1,719,000	9.1%
<b>Total Households</b>										
Imperial	52,000	52,000	56,000	61,000	65,000	68,000	70,000	72,000	20,000	38.9%
Los Angeles	3,392,000	3,420,000	3,602,000	3,785,000	3,931,000	4,019,000	4,067,000	4,075,000	683,000	20.1%
Orange	1,066,000	1,077,000	1,122,000	1,165,000	1,199,000	1,227,000	1,247,000	1,249,000	182,000	17.1%
Riverside	747,000	763,000	822,000	883,000	935,000	977,000	1,013,000	1,045,000	298,000	39.9%
San Bernardino	657,000	668,000	725,000	776,000	816,000	851,000	878,000	898,000	241,000	36.6%
Ventura	277,000	280,000	293,000	305,000	313,000	316,000	315,000	313,000	36,000	13.0%
SCAG	6,192,000	6,260,000	6,622,000	6,975,000	7,259,000	7,456,000	7,590,000	7,652,000	1,460,000	23.6%
<b>Total Employment</b>										
Imperial	69,000	69,000	73,000	78,000	82,000	85,000	88,000	91,000	21,000	30.5%
Los Angeles	5,037,000	4,622,000	5,112,000	5,262,000	5,384,000	5,454,000	5,461,000	5,430,000	393,000	7.8%
Orange	1,806,000	1,657,000	1,869,000	1,926,000	1,974,000	2,004,000	2,011,000	2,006,000	200,000	11.1%
Riverside	848,000	805,000	905,000	973,000	1,041,000	1,103,000	1,156,000	1,204,000	356,000	41.9%
San Bernardino	860,000	838,000	903,000	948,000	992,000	1,028,000	1,053,000	1,072,000	212,000	24.7%
Ventura	366,000	346,000	371,000	376,000	379,000	379,000	374,000	367,000	2,000	0.4%
SCAG	8,986,000	8,337,000	9,233,000	9,562,000	9,851,000	10,053,000	10,144,000	10,170,000	1,184,000	13.2%

*Note: Figures rounded to the nearest 1000. Regional totals and growth percents based on unrounded data.*



The next step of the Connect SoCal 2024 growth forecast is to develop a forecasted regional development pattern consistent with SB375 (2008) requirements which allocates growth to the jurisdictional and transportation analysis zone (TAZ) levels. Government Code 65080(b)(2)(B) et seq. requires that SCAG:

*“set forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board and will allow the regional transportation plan to comply with Section 176 of the federal Clean Air Act (42 U.S.C Sec. 7506).”*

With the assistance of the Technical Working Group (TWG), SCAG plans to engage directly with all 197 local jurisdictions through the Local Data Exchange (LDX) process<sup>2</sup> in order to review data inputs and preliminary projections. While data development and initial outreach is underway, staff plan to complete a preliminary set of jurisdictional and traffic analysis zone (TAZ)-level projections for local review in Spring 2022. Based on prior adopted plan practice and statutory requirements,

<sup>2</sup> For Connect SoCal 2020, this process was referred to as the Bottom-Up Local Input and Envisioning Process

---

staff proposes the following principles in developing and refining the forecasted regional development pattern in collaboration with local jurisdictions:

1. **Rooted in local planning policies.** The forecasted regional development pattern will use available local general plan information as a starting point, and local jurisdictions will be asked to update and review the forecast with their expertise of local planning context and ongoing planning work.
2. **Steered by a regional vision.** The forecasted regional development pattern will integrate growth strategies adopted by the SCAG Regional Council with Connect SoCal in September 2020 and follow regional and county forecast totals as guided by the Panel of Experts.
3. **Aligned with state policy.** The forecasted regional development pattern will reflect policies including the 6<sup>th</sup> cycle housing element process and be assessed considering SCAG's SB 375 greenhouse gas emission reduction targets.

Following additional refinement, staff plans to present these principles and additional detail of the Local Data Exchange process to the CEHD Committee in March 2022.

**FISCAL IMPACT:**

Work for this item is covered by OWP item 055.4856.04 Regional Growth and Policy Analysis.

**ATTACHMENT(S):**

1. Population Reference Bureau - SCAG forecast summary
2. CCSCE - Preliminary Job Projections
3. PowerPoint Presentation - Connect SoCal 2024 Preliminary Projection



1875 Connecticut Ave., NW  
Suite 520  
Washington, DC 20009

202.483.1100  
www.prb.org

## Memorandum

Date: January 11, 2022  
From: Beth Jarosz, PRB  
To: SCAG Joint Policy Committee  
Subject: Preliminary Connect SoCal 2024 Regional and County Projections for 2019-2050

In consultation with an expert panel, the Population Reference Bureau (PRB), SCAG staff, and Center for Continuing Study of the California Economy (CCSCE) jointly developed a projection of population, households, and employment for the SCAG region and its six individual counties from 2019-2050 for use as Connect SoCal 2024's preliminary forecast. This report details:

- Long range forecast development and practice
- Brief description of models used
- Expert panelists and key points
- Regional ranges: exploring high, medium, and low growth
- SCAG regional projection
- Assumptions and model results
  - Population growth and aging
  - Relationship to job growth
  - Household formation
- County projections

Producing any long-range projection requires making assumptions in the face of future uncertainty. While uncertainty may seem particularly high in light of the ongoing pandemic, sociopolitical polarization, labor shortages, supply chain disruptions, and inflation, the reality is that any three-decade period is likely to have dramatic disruptions such as 1970s stagflation, 1980s banking crisis, 1990s digital revolution, and 2000s Great Recession. The early years of the projections presented here predict very slow growth and, in some years, population decline, but—as described at the December 2021 SCAG Economic Summit—the region continues to demonstrate economic resilience in the face of current challenges. There is reason to be confident that the region will resume growth over the long term.

Long-range forecasting can and must use the best available expert opinion to assess the effects of existing and likely future policy and other conditions which can change the future levels of population, households, and jobs. This includes, for example, the future of federal immigration policy, the likelihood and potential scope of future childcare-supportive policy, changes in state housing policy, as well as technological and environmental change.

To solicit expert input, SCAG held two Panel of Experts meetings in August 2021. SCAG staff and outside experts reviewed trend predictions and assumptions for the regional growth forecast. Panelists were asked to consider the most likely, but also reasonable higher and lower levels of seven key inputs to SCAG’s long-range forecast. These included **jobs, births, deaths, immigration, domestic migration, labor force participation, and household formation**. Panelists did not always achieve consensus in their feedback, but in general, they expect conditions that would result in slowing population growth, moderate job growth, and faster household growth.

The regional growth forecast reflects recent and past trends, key demographic and economic assumptions, and expectations for local, regional, state, and national policy, with input from the Panel of Experts, mentioned above and described in more detail below. The objective of the forecast is to project reasonably foreseeable future growth in population, households, and employment over a long-range time horizon extending from 2019-2050. It is the technical underpinning of much of the policy work associated with the development of the RTP/SCS.

### Technical Framework for Developing Regional Projections

As described in further detail in the Regional Growth Forecast Framework presented to the CEHD committee in September 2021 and reviewed in November 2021, SCAG projects population using a cohort-component model. Cohort-component models are widely used in population forecasting and are based on the demographic equation that population at a future point is equal to the existing population plus births and in-migrants and minus deaths and out-migrants (Figure 1).<sup>1</sup>

SCAG’s age, sex, and race/ethnicity-specific population forecasts are assigned to group quarters or household populations, based on historical patterns of group quarters residence. Group quarters populations are expected to live in dorms, barracks, prisons, or other group residential facilities. Household population data are multiplied by a set of household formation (headship) rate assumptions to generate a disaggregated forecast of households. Similarly, labor force supply is projected by applying labor force participation and double-jobbing rates to the population.

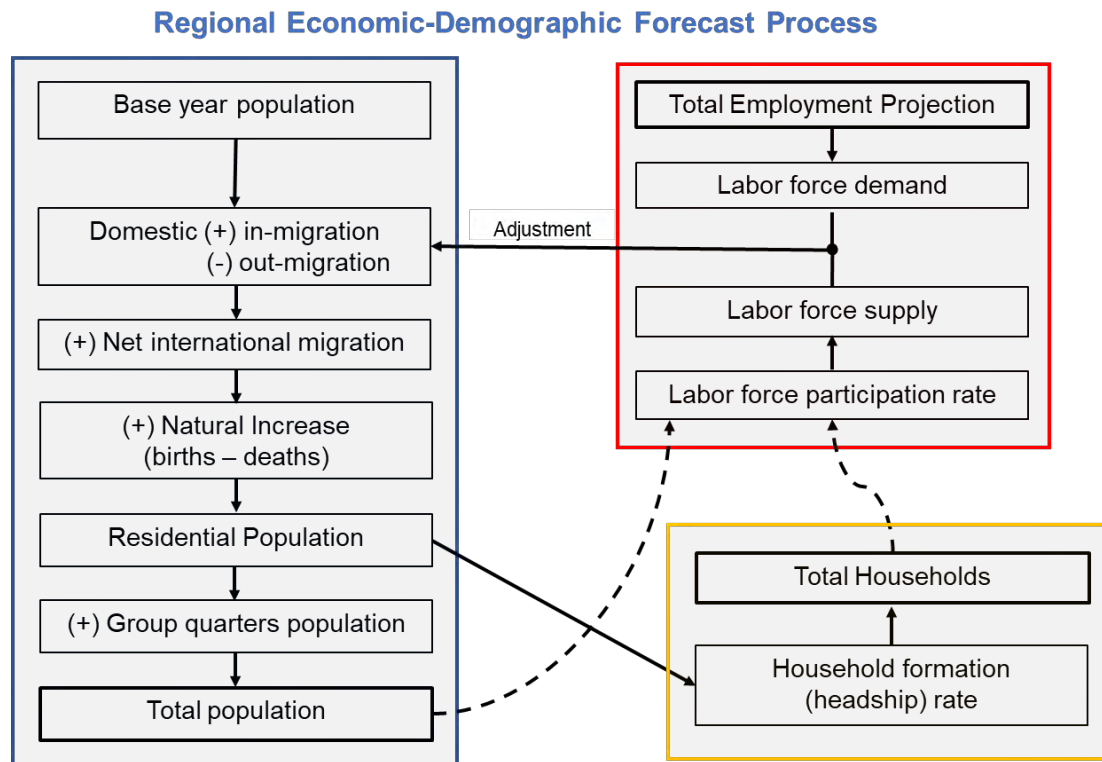
SCAG projects employment using a shift-share model. Household formation rates are applied to the population to project households (Figure 1). To ensure model sensitivity to demographic trends, the cohort component, household, and labor force components of the model rely on male and female population by single year of age and eight racial/ethnic groups.

---

<sup>1</sup> Thomas Wilson, Irina Grossman, Monica Alexander, Philip Rees, Jeromey Temple, “Methods for small area population forecasts: state-of-the-art and research needs,” SocArcXiv (2021), <https://osf.io/preprints/socarxiv/sp6me/>.

Jacob Siegel and David Swanson, *The Methods and Materials of Demography* (San Diego, CA: Elsevier. 2004).

Figure 1: Regional Forecast Framework Includes Interrelationships Between Population, Jobs, and Housing



The development of regional projection ranges began with a baseline employment projection produced by the CCSCE and three population projections developed by SCAG and PRB staff and utilizes inputs and insights from the Panel of Experts.

In two sessions held on August 5, 2021 and August 11, 2021, SCAG convened a forecast Panel of Experts to review trend predictions and assumptions for the regional growth forecast. Panelists included economists and demographers representing industry, academia, and government (Table 1). The panel also included expertise across each of the six SCAG counties. Two outside experts, Beth Jarosz of the Population Reference Bureau and Steve Levy of the Center for Continuing Study of the California Economy, moderated along with SCAG staff.



*Table 1: Participants in the Panel of Experts*

<b>Name</b>	<b>Affiliation</b>
<b>Billy Leung</b>	Regional Economic Models, Inc.
<b>Dan Hamilton</b>	California Lutheran University
<b>Deborah Diep</b>	Cal State Fullerton, Center for Demographic Research
<b>Dowell Myers</b>	University of Southern California
<b>Jerry Nickelsburg</b>	UCLA Anderson Forecast
<b>John Husing</b>	Economics & Politics, Inc.
<b>John Weeks</b>	San Diego State University
<b>Mark Schniepp</b>	California Economic Forecast
<b>Michael Bracken</b>	Development Management Group, Inc.
<b>Richelle Winkler</b>	Michigan Technological University
<b>Simon Choi</b>	Chung-Ang University
<b>Somjita Mitra</b>	California Dept. of Finance, Economics Research Unit
<b>Wallace Walrod</b>	Orange County Business Council
<b>Walter Schwarm</b>	California Dept. of Finance, Demographic Research Unit

In addition to the panel meetings, panelists participated in a pre-meeting survey to solicit expectations about future growth as well as their input on the seven key model assumptions: jobs, births, deaths, immigration, domestic migration, labor force participation, and household formation.

Staff adopted CCSCE's total jobs projection (see separate report) as the baseline employment projection and adjusted it in order to balance with the population in SCAG's cohort-component model. This was done to reflect more recent input data suggesting lower population and fertility declines not captured in the inputs used in CCSCE's employment model and resulted in a reduction in population-serving jobs only.

Key points relevant to the baseline projection are as follows:

- Census 2020 indicates that the current population is lower than previously projected. The 2020 Census showed a SCAG region population of 18,824,382, which is below the 2016 base year population estimate (18,832,000) for the 2020 RTP/SCS.
- Since the 2020 RTP/SCS regional forecast was produced in July 2017, fertility rates have declined sharply in the SCAG region, mirroring national and global trends. In addition, the final few years of the last decade saw slowing international immigration and more net domestic out-migration.
- Despite the lower base year population, the region's number of households was far closer to expectations, largely due to the aging population and smaller average household sizes.
- The region lost over 700,000 jobs in 2020. However, by November 2021, the region had recovered 66.4% of the wage and salary jobs lost since February 2020. While this exercise focuses on a long-range forecast, expert assessment of short-term job

growth suggests a continued steep recovery, a return to pre-pandemic levels by late 2022, and continued strong growth through 2024.

- Other forecasts, such as the latest forecasts from the California Department of Finance and Caltrans, show a substantial slowing in population growth for the SCAG region. Both forecasts predict that the region’s population will grow slowly in the near term and then, before 2050, the population will begin to decline in the region.
- Labor force participation rates by race/ethnicity, age, and gender reflect the Panel of Expert’s insights that female and older-age labor force participation will increase in the long run.

### Regional Growth Ranges

Due to the various federal and state planning requirements that drive SCAG’s regional planning and the technical requirements of the activity-based travel demand model (ABM), the forecast must ultimately demonstrate a single growth trajectory. Exploring regional growth ranges helps acknowledge and assess the uncertainties described above in order to provide a strong basis for the preliminary regional baseline projection which will then be allocated to the jurisdiction and Transportation Analysis Zone (TAZ) levels for further review and plan development.

As part of a Regional Growth Ranges technical exercise, presented to CEHD in October 2021, staff developed low and high projection scenarios for population, households, and jobs. The scenarios were based on model assumptions—developed with input from and review by the Expert Panelists—shown in Table 2.

*Table 2: Assumptions for Regional Growth Forecast and Low/High Ranges*

<b>Factor</b>	<b>Regional Growth Forecast: Slower Growth, Steady Improvement</b>	<b>Low: Secular Stagnation</b>	<b>High: Robust and Equitable Future Growth Supported by Policy and Technology</b>
<b>Births</b>	1.5 births/woman	1.4 births/woman	1.6 births/woman
<b>Deaths</b>	Stable rates (2019) starting in 2022	Same	Rates decline through equity improvements
<b>Net Migration</b>	Net international migration is high, net out migration moderate	Net international migration is low, net out migration continues	Net international migration is high, net out migration is low
<b>Labor Force</b>	Slight increase, but close to 2019	Same	Same
<b>Household Formation</b>	Most groups return to 2005-07 levels.	No improvement (2015-19 levels)	Most groups return to 2005-07 levels.
<b>Economy</b>	Region remains competitive and innovative; climate	Climate change & high relative cost of living are challenges	Region captures a larger share of U.S. jobs; climate resilience and

---

change has no net  
effect on growth

---

---

easing cost of living  
encourage growth

---

## Regional Projections

After the ranges exercise, SCAG staff took some additional panelist input and made minor modifications to the projections. Net domestic migration was adjusted downward for 2019-2022 to reflect the higher out-migration which was likely experienced during the pandemic and in the short-term future but has not yet been reflected in American Community Survey (ACS) or California Department of Finance (DOF) data. This results in a slightly lower regional population and household forecast by 2050.

The baseline population projection for the SCAG region suggests that the region will grow to just under 20.6 million residents by 2050 (Table 3). This is slightly lower than the 20.8 million mid-range projection presented to CEHD in November 2021. Revisions reflect the latest information about fertility, mortality, migration, and labor force participation rates.

*Table 3: Regional Projections 2019-2050 (Numbers in Thousands)*

	Population	Households	Employment
<b>2019 Actual</b>	18,832	6,192	8,986
<b>2050 Projection</b>	20,551	7,652	10,170
<b>Percent Change</b>	9.1%	23.6%	13.2%

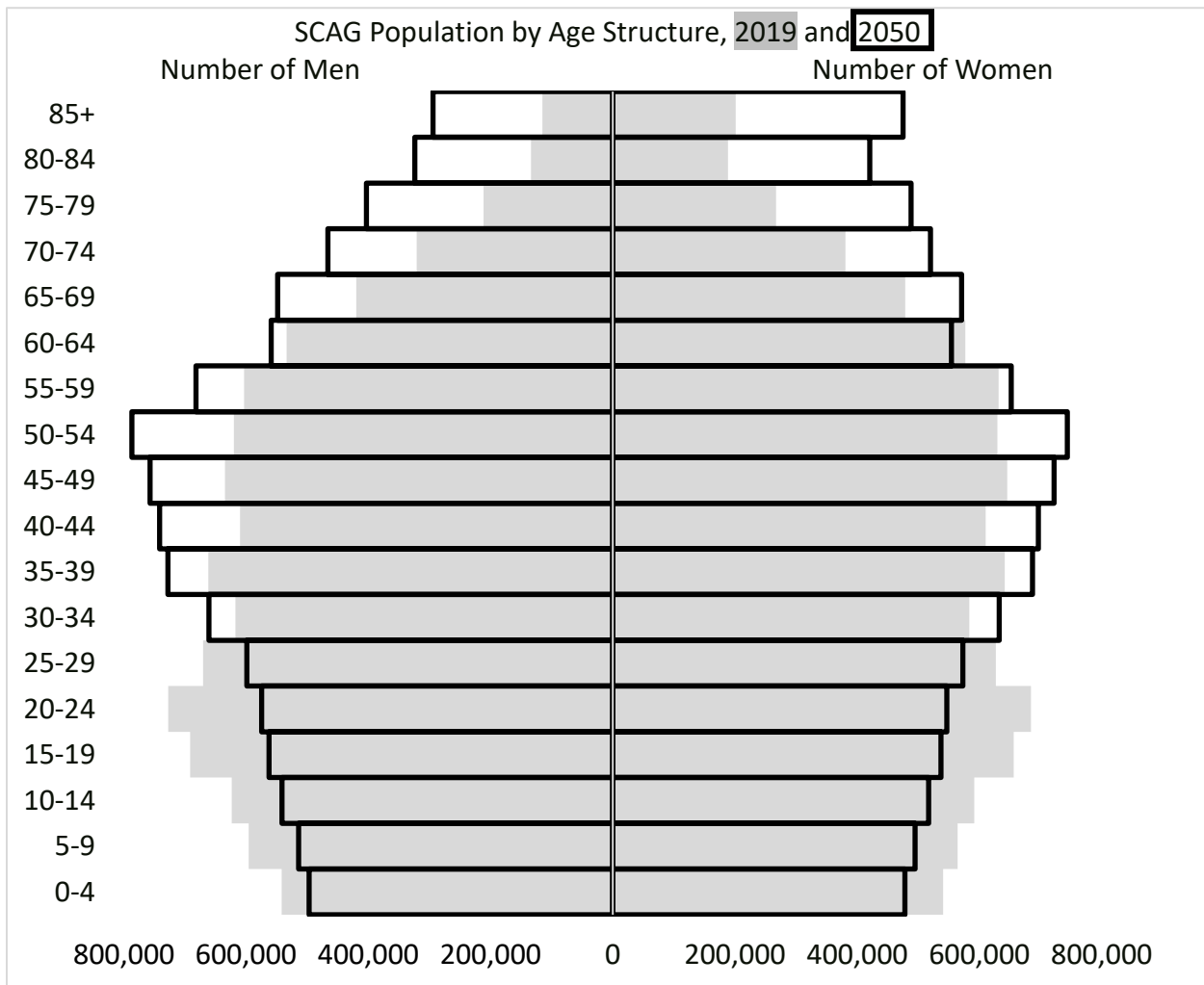
Source: Preliminary Connect SoCal 2024 Regional and County Projections for 2019-2050.

While 2019 is the base year for the 2024 Regional Growth Forecast, data have been benchmarked to the 2020 Census counts that have been released through December 2021 including county population by race/ethnicity and broad age group (0-17 and 18 and older), group quarters and household population, and households. To do this benchmarking, SCAG used the existing 2020 population data from DOF by single year of age, sex, and eight racial/ethnic groups, grouped those to adult (ages 18 and older) and child (ages 0-17) population by racial/ethnic group and created adjustment factors that they applied to either increase or decrease the single-year-of-age population to match 2020 Census totals. SCAG then developed revised 2019 estimates by adjusting backward to match DOF's total population change between 2019 and 2020.

## Population Growth and Aging

A key characteristic of the regional growth forecast is the region's age structure. The current age structure, coupled with low fertility rates and moderate net migration, leads to dramatic population aging by 2050 (Figure 2). This aging of the population has implications for population growth, labor force composition, and housing demand, each of which are described in more detail below.

Figure 2: SCAG Region Likely to See Considerable Population Aging 2019-2050

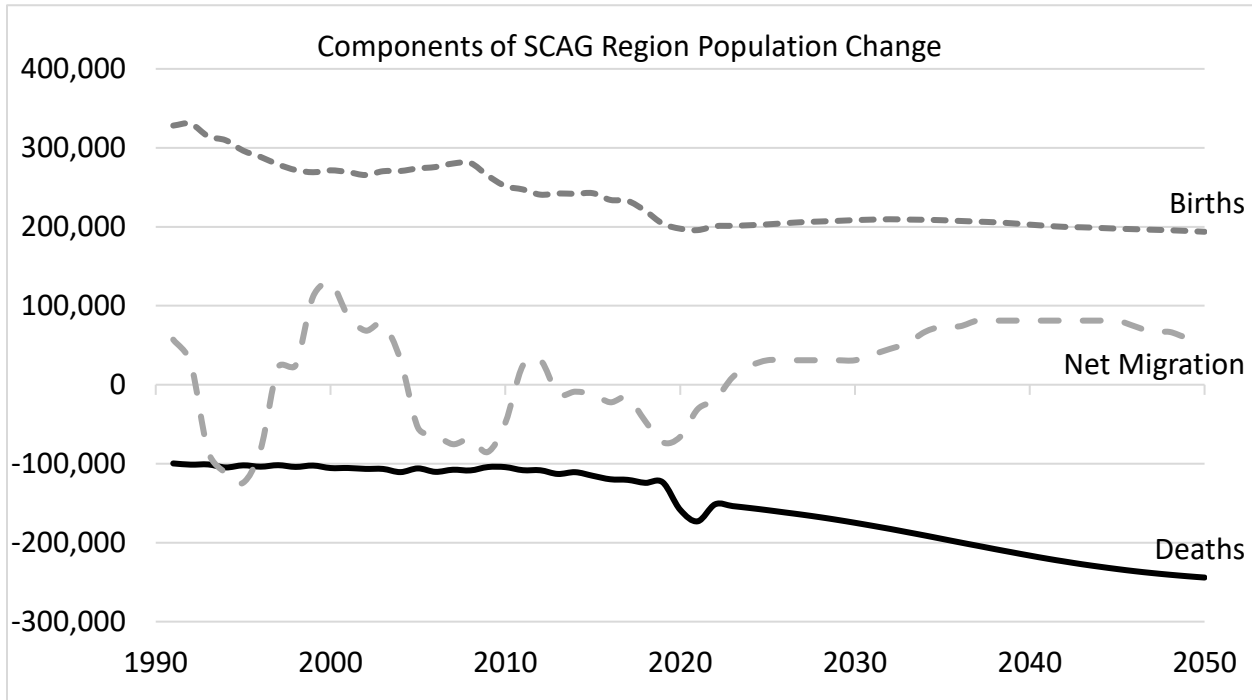


Source: Preliminary Connect SoCal 2024 Regional and County Projections for 2019-2050.

The child population, ages 0-17, in the SCAG region is expected to decrease between 2019 and 2050—both as a share of the total population (22% to 18%) and in absolute number (4.2 million to 3.7 million). This decline will be driven, largely, by low birth rates. The population ages 18-64 is expected to grow slightly (11.9 million to 12.3 million) but decline in share (63% to 60%), and the population ages 65 and older is expected to grow rapidly both in number (2.7 million to 4.5 million) and share (14% to 22%). Within the oldest age groups, the population ages 85 and older is expected to more than double between 2019 and 2050.

Population growth is expected to be slow in the short term, with at least one year showing population loss. The slow rate of growth is the net result of a declining number of births, a rising number of deaths, and a moderate increase in net migration (Figure 3).

Figure 3: Future Population Change Will Be Driven by Rising Deaths, Offset by an Increase in Net Migration



Source: Preliminary Connect SoCal 2024 Regional and County Projections for 2019-2050.

Birth rates have been falling in the SCAG region, across the nation, and worldwide. In this forecast, birth rates continue on the same trajectory they have been since their recent peak in the mid-2000s—falling for teens and young adults, rising at older ages. Forecast rates stabilize early in the forecast at approximately 1.5 births per woman. A combination of low birth rates and an aging population leads to a declining number of births in later years of the forecast.

From 2022 through 2050, projected mortality rates remain stable (at 2019 levels), reflecting uncertainty and lack of consensus among the Panel of Experts about the direction of change. Improvements in life expectancy had stalled even before the pandemic. Some panelists suggested that health care interventions could lead to improvements in life expectancy, while others suggested that climate change and COVID-19 could raise mortality and that rising rates of “deaths of despair” (suicide, overdose) were “just beginning” in California. However, even with stable rates, an aging population results in more deaths in later years of the forecast. Deaths are expected to outnumber births by the late 2030s.

In this forecast, immigration to the SCAG region returns to higher levels seen in the early 2000s with the expectation that the need for workers will continue to drive immigration. U.S. immigration policy is expected to remain favorable and Southern California remains a key destination for immigrants. The trend of net domestic out-migration continues in the short term, in part as family-seeking Millennials and middle-class workers consider out-of-region alternatives such as Texas, Arizona, and Nevada, and as telework-eligible workers choose lower-cost locations. However, increases in housing production combined with the continual draw of

jobs, amenities, and a welcoming culture result in net losses of fewer residents to other regions and states throughout the duration of the forecast.

Key points:

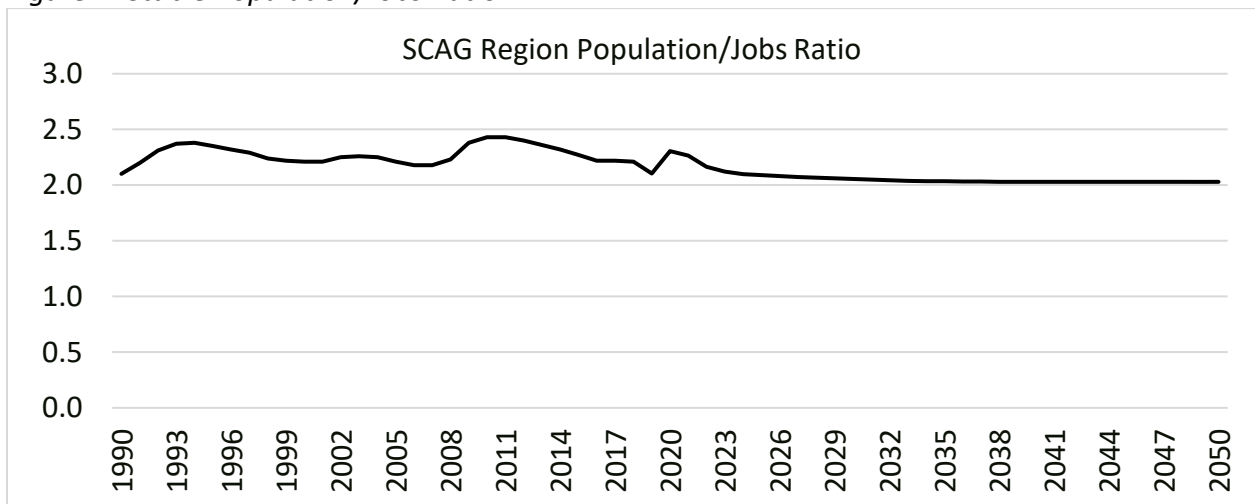
- An aging population will affect population growth, labor force composition, and housing demand.
- The number of births will fall and the number of deaths will rise, with deaths outnumbering births in later years of the forecast.
- Net migration will rise in response to job growth.

### Jobs and Labor Force

The region has been recovering from the pandemic-related recession and is expected to continue growing. The region’s growth outlook is due to structural economic advantages, such as a diverse industry mix, accessible ports, natural amenities, world-class educational institutions, and a welcoming place for all types of people, which promotes innovation. Recent investment in education increases regional human capital and provides a foundation for innovation. A detailed description of employment by industry projections is provided by CCSCE under separate cover.

High labor force participation mitigates the slower population growth, allowing job growth in the region to slightly outpace the nation as a whole. However, given that labor force participation drops at the oldest ages, as people retire, population aging is a drag on labor force growth, particularly in the later years of the forecast. To balance slow (and aging) population growth with robust job growth, this forecast assumes that labor force demand results in modest shifts in migration patterns—favoring a larger share of working-age adults moving to or staying in the region. This forecast assumption reflects the Panel of Experts’ perspective that the composition of migration flows may be a balancing factor between robust job growth and an aging population. The net result is a low-but-stable population/jobs ratio (Figure 4).

Figure 4: Stable Population/Jobs Ratio



Source: Preliminary Connect SoCal 2024 Regional and County Projections for 2019-2050.

Key points:

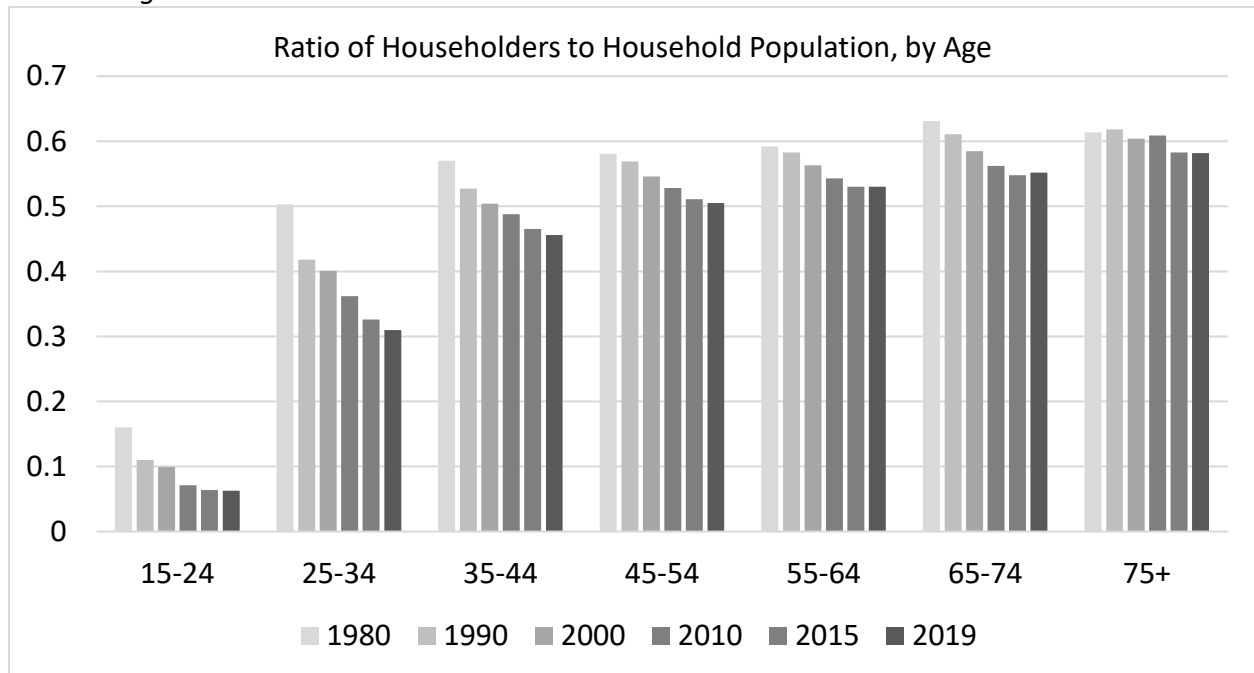
- Jobs are expected to return to pre-pandemic levels by late 2022, with continued strong growth through 2024.
- Job growth will lead to a tight labor market, which will keep labor force participation rates high, and will result in higher net migration of working-age adults.

Household Projections

Household projections are based on the household population, rather than the total population, because some people live in group quarters such as dorms, barracks, prisons, or other group quarters facilities. People living in group quarters represent about 2% of the region’s population, and that share remains fairly constant throughout the forecast.

Household demand is affected by a wide variety of factors, but some basic patterns of household formation vary throughout the life course (Figure 5). Rates tend to be lowest at youngest ages, as youth and young adults stay with their families or live with roommates—and those rates have been falling for decades as markers of the “transition to adulthood” (completing schooling, beginning full-time work, becoming financially independent, getting married, and becoming a parent) have been shifting to older ages. Rates tend to be highest at the oldest ages. Rates also vary by race/ethnicity.

Figure 5: Household Formation Rates Have Been Falling Across Age Groups, May Be Stabilizing at Older Ages



Source: U.S. Census Bureau.

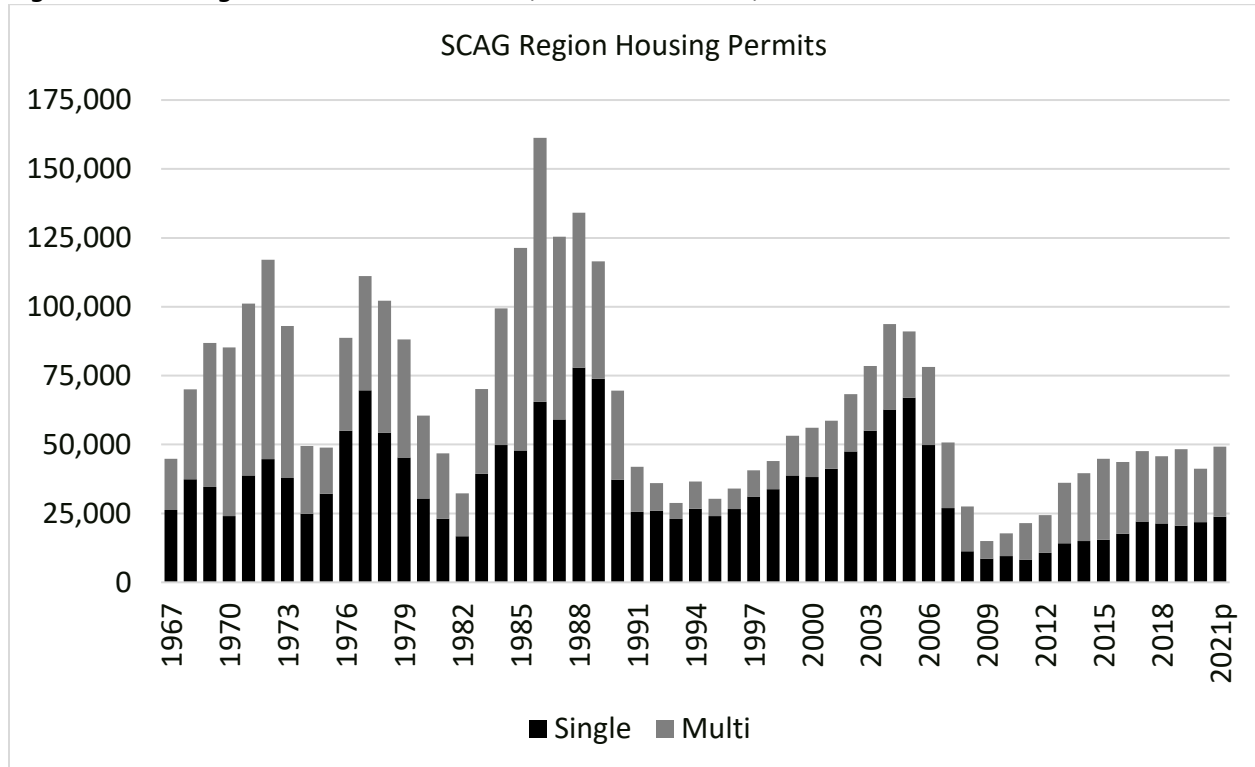
Because household formation rates are highest at the oldest ages, even if rates remained unchanged, population aging would result in faster household growth than population growth.

Due to aging alone, households would be expected to increase by more than 16 percent, compared with 9 percent population growth.

Household formation is also affected by the supply and cost of housing. People are more likely to live with extended family, friends, or roommates when housing costs are high and supply is low. This pattern of declining household formation is evident across nearly all age groups in the SCAG region from 1980 through 2015. (See Figure 5, above.) Declining rates among teens and young adults reflect, at least in part, national trends toward rising college enrollment and older age at marriage. However, much of the decline at other ages—and at least some of the decline at younger ages—can be attributed to high cost and increasing latent demand. In other words, adults may prefer to form their own households but may live with roommates or relatives due to economic pressures, particularly in high-cost regions. While rates dropped steadily for decades, the most recent 2019 data suggest that rates may be at an inflection point, at least for some age groups.

Housing construction dropped considerably in the wake of the Great Recession, and while it has rebounded somewhat in more recent years, it remains well below historic peaks (Figure 6). Nevertheless, recent changes in state housing policy are aimed at increasing housing supply.

Figure 6: Housing Permits Peaked at 160,000 in the 1980s, Have Been Lower in Recent Years



Source: Analysis by SCAG of CIRB New Units from Building Permit Data.

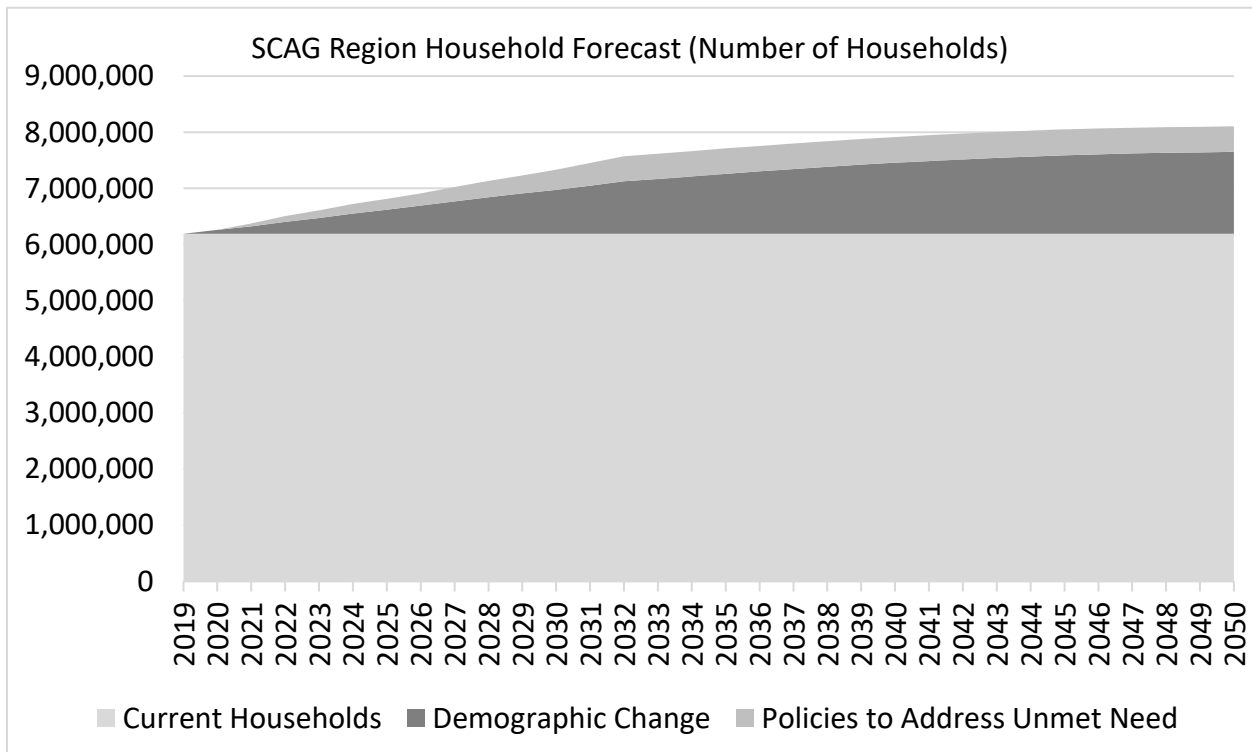
In addition to population aging, the household projections are based on an assumption that headship rates will trend back upward toward 2005-2007 levels for most age groups. This trend reflects an expectation that housing policies will successfully increase housing production to address existing unmet need (reflected in current overcrowding and vacancy rates). Although



this forecast assumes a return to higher headship for most ages, rates for teens and young adults are expected to stay low, reflecting nationwide demographic shifts described above. Headship rate assumptions in this forecast are similar to those used by the California Department of Finance when projecting household growth for 2030.

Figure 7 shows the share of forecasted household growth attributable to demographic change and the share attributable to policy-related increases in housing supply. While policy assumptions to address unmet need do result in household growth, demographic change accounts for nearly three-quarters of the change over the forecast period.

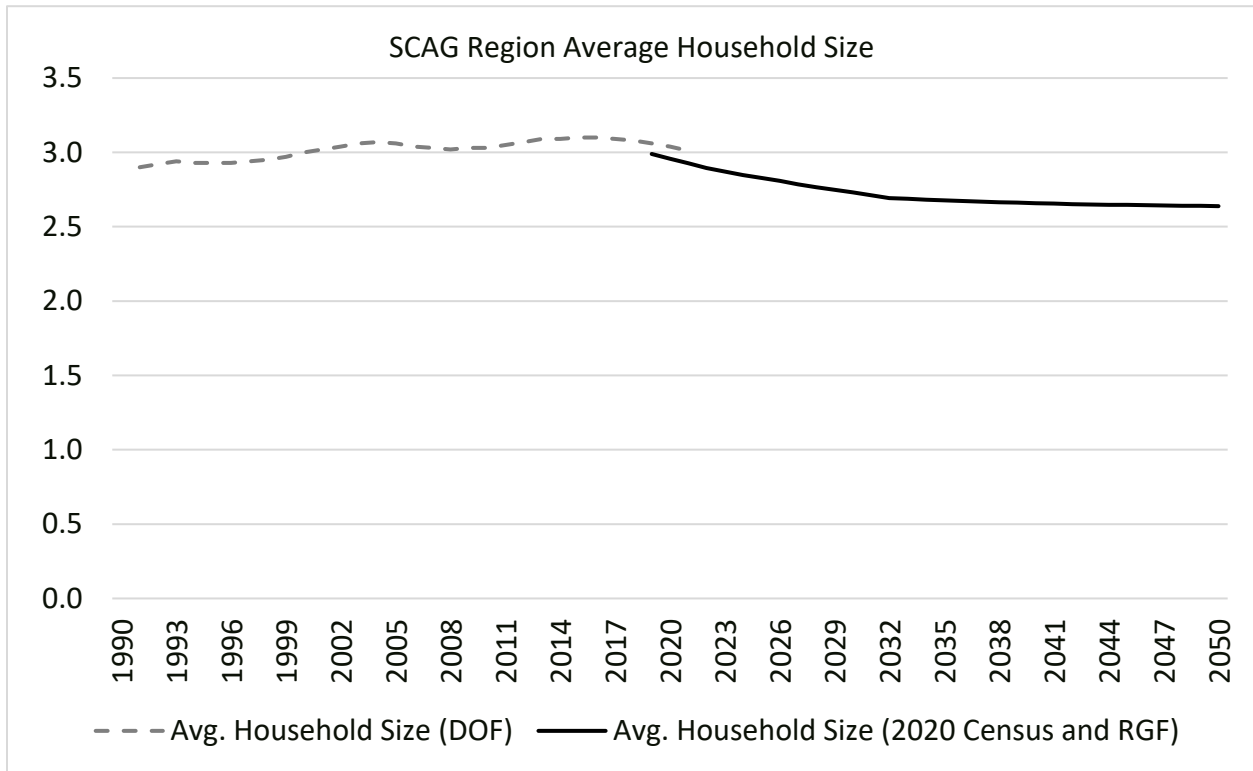
*Figure 7: Household Forecast Reflects Demographic Change and Policies to Address Unmet Housing Needs*



Source: Preliminary Connect SoCal 2024 Regional and County Projections for 2019-2050.

Rising headship, coupled with an aging population, results in the number of households growing faster than the population (23.6% compared with 9.1%). As more small households form, and existing overcrowding pressures ease, the average household size decreases by roughly 0.35 (Figure 8). While this shift is substantial, it reflects a combination of long-term demographic trends including declining birth rates, resulting in smaller average family sizes, and more people living alone. The shift also reflects an expectation that policy changes will begin to address unmet housing demand.

Figure 8: Average Household Size in the SCAG Region Is Likely to Fall



Sources: Historical data from California Department of Finance E-5 Estimates; 2019-2050 data from Preliminary Connect SoCal 2024 Regional and County Projections for 2019-2050.

Figure 8 also shows a break in series. Historical data from the California Department of Finance are benchmarked to the annual American Community Survey (ACS). However, more recent data from the 2020 Census suggest that average household sizes in the SCAG region may be lower than estimates from the ACS. The projections are benchmarked to the 2020 Census.

Key points:

- An aging population will lead to more households, even if the population size remains stable.
- The household forecast reflects both demographic change and expectations that state housing policy will address the existing unmet need.

### County Projections

The county projections, benchmarked to the regional forecast, are based on the same framework and seven key assumptions as the regional forecast: jobs, births, deaths, immigration, domestic migration, labor force participation, and household formation. The model uses historical trend data specific to each county for all key inputs, except for limited instances where data were not available. In those cases, regional rates were used as a proxy.

The results of the six county forecasts are shown in Table 4 and Figure 9. The greatest increase in total population is expected to be in Los Angeles County, and the fastest growth rate is

expected to be in Riverside County. Ventura County is expected to have a stable population through most of the forecast period, with a slight decline in the later years of the forecast. Los Angeles County is also expected to see the largest growth in households, while Imperial and Riverside have the fastest growth rates. For job growth, Los Angeles County is expected to see the largest numeric change and Riverside the fastest rate of growth.

Table 4: County Projections of Population, Households, and Jobs 2019-2050.

Total Population			Change 2019-2050	
	2019	2050	Number	Percent
Imperial	181,000	210,000	29,000	16.1%
Los Angeles	10,046,000	10,658,000	612,000	6.1%
Orange	3,191,000	3,427,000	235,000	7.4%
Riverside	2,394,000	2,943,000	549,000	22.9%
San Bernardino	2,175,000	2,477,000	302,000	13.9%
Ventura	846,000	838,000	-8,000	-1.0%
SCAG	18,832,000	20,551,000	1,719,000	9.1%

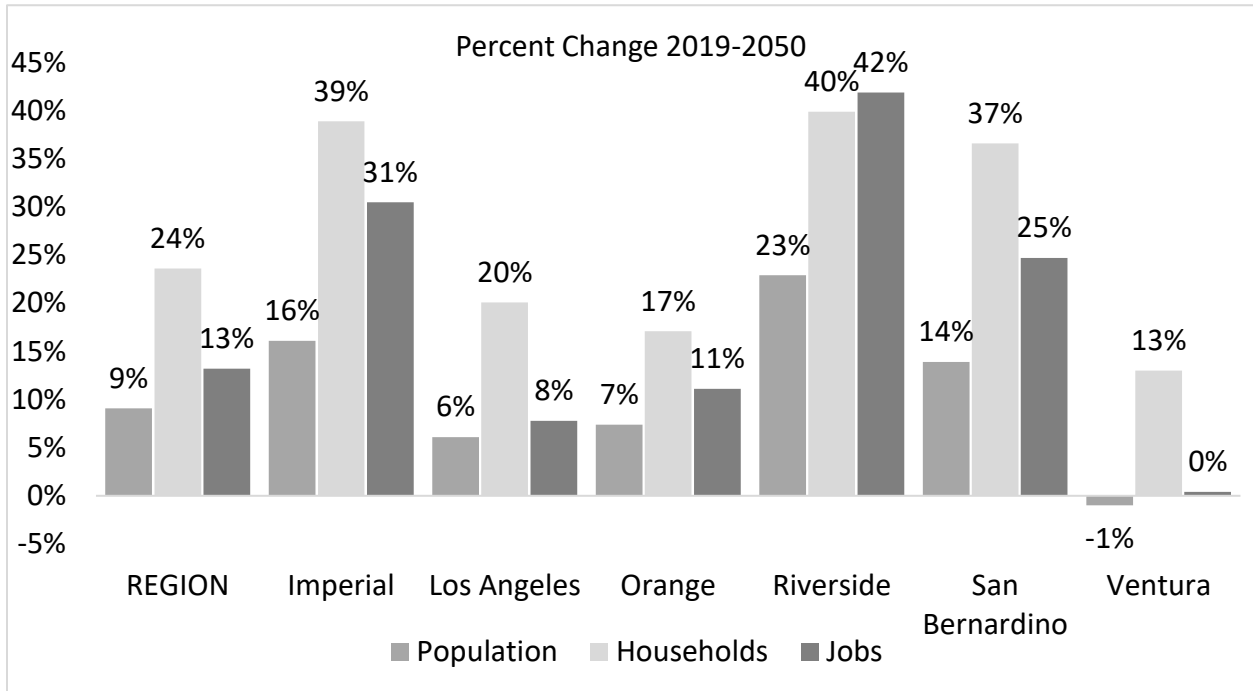
Total Households			Change 2019-2050	
	2019	2050	Number	Percent
Imperial	52,000	72,000	20,000	38.9%
Los Angeles	3,392,000	4,075,000	683,000	20.1%
Orange	1,066,000	1,249,000	182,000	17.1%
Riverside	747,000	1,045,000	298,000	39.9%
San Bernardino	657,000	898,000	241,000	36.6%
Ventura	277,000	313,000	36,000	13.0%
SCAG	6,192,000	7,652,000	1,460,000	23.6%

Total Employment			Change 2019-2050	
	2019	2050	Number	Percent
Imperial	69,000	91,000	21,000	30.5%
Los Angeles	5,037,000	5,430,000	393,000	7.8%
Orange	1,806,000	2,006,000	200,000	11.1%
Riverside	848,000	1,204,000	356,000	41.9%
San Bernardino	860,000	1,072,000	212,000	24.7%
Ventura	366,000	367,000	2,000	0.4%
SCAG	8,986,000	10,170,000	1,184,000	13.2%

Note: Growth is calculated based on unrounded values. Numbers displayed are rounded to the nearest 1,000.

Source: Preliminary Connect SoCal 2024 Regional and County Projections for 2019-2050.

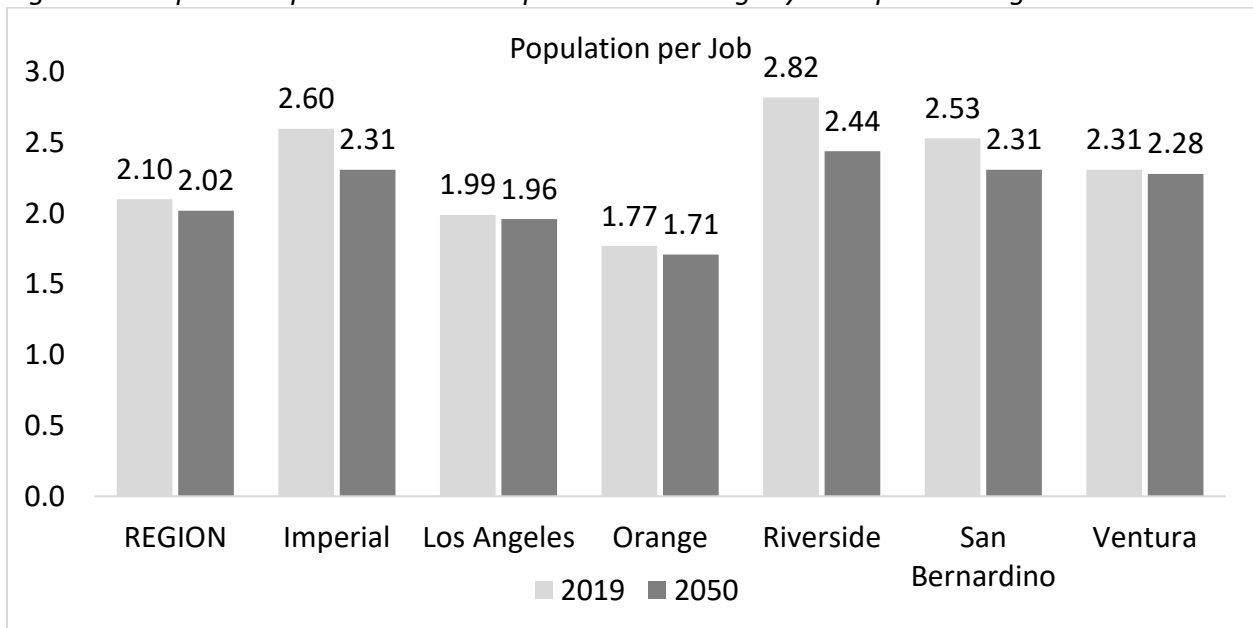
Figure 9: Growth Rates Are Expected to Vary Across the Region, But in All Counties Households Are Expected to Grow Faster Than Population



Source: Preliminary Connect SoCal 2024 Regional and County Projections for 2019-2050.

As noted in the regional forecast summary, the population-to-employment ratio is expected to fall slightly in all counties in the SCAG region between 2019 and 2050. All counties have averages of at least 1.77 people per job in 2019 and 1.71 or higher in 2050 (Figure 10).

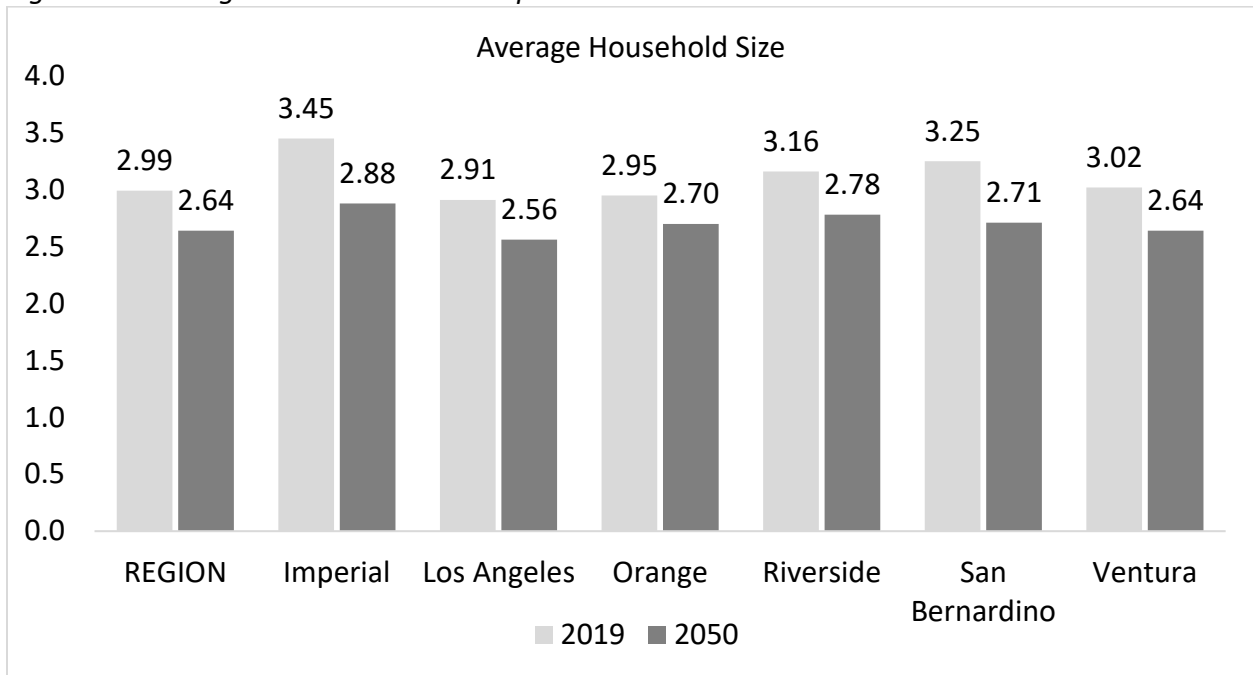
Figure 10: Population per Job Ratio is Expected to Fall Slightly as Population Ages



Source: Preliminary Connect SoCal 2024 Regional and County Projections for 2019-2050.

As noted in the regional forecast summary, average household size is expected to fall in all counties in the SCAG region between 2019 and 2050. All counties have averages of 2.9 people per household or higher in 2019 and no county is expected to be above that level in 2050 (Figure 11). Imperial has, and is expected to continue to have, the highest average household size while Los Angeles has, and is expected to continue to have, the lowest average household size.

Figure 11: Average Household Size Is Expected to Fall in All Counties



Source: Preliminary Connect SoCal 2024 Regional and County Projections for 2019-2050.

# CENTER FOR CONTINUING STUDY OF THE CALIFORNIA ECONOMY

385 HOMER AVENUE • PALO ALTO • CALIFORNIA • 94301

TELEPHONE: (650) 814-8553

FAX: (650) 321-5451

[www.ccsce.com](http://www.ccsce.com)

DATE: January 12, 2022

TO: **SCAG Joint Policy Committee**

FROM: Stephen Levy

SUBJECT: Summary of SCAG Region Baseline Job Projections for 2050

This memo presents a summary of CCSCE's key results and a summary of the projection methodology. Projections were developed for the year 2050. These long-term projections are based on expected changes in the national and world economy over the next 30 years, past and expected demographic trends including immigration and changing age structure, and analysis of competitive conditions in the state and SCAG region economies.

Understandably, the pandemic and associated job losses are a major focus of attention during the development of this forecast. CCSCE worked with SCAG staff in two other periods of short-term job losses, large net out-migration, and lagging behind the nation in job growth—in the early 1990s after the aerospace/defense cuts and in the 2008-2010 recession marked by large increases in foreclosures. In each period, the regional economy recovered based on adaptability and long-term strengths.

These projections were prepared for SCAG in July 2021. This memo is organized as follows:

- Summary of Key Results
- Methodology for Developing the Job Projections
  - The U.S. Job Projections
  - The California Job Projections
  - The SCAG Region Job Projections
    - Historical Trends
    - Projections—Basic Industry Jobs
    - Projections—Local Serving Jobs
- Recent Events and Their Relationship to These Projections
- What Could Lead to Higher or Lower SCAG Region Job Growth

## Summary of Key Results

The CCSCE methodology projects SCAG region jobs in relation to job growth (or decline) projected at the national and state level. Total job growth is projected by

examining growth in 103 separate industries, which can be aggregated to 20 2-digit NAICS code sectors.

Job growth in the SCAG region is projected to be slightly faster than the national growth rate. Jobs in the SCAG region are projected to grow slightly more slowly than jobs in the state to 2050, while jobs in the state are projected to grow faster than jobs in the nation. Job growth in each geography is projected to be slow in terms of compound annual growth (CAGR), with the SCAG region projected to grow at 0.47% per year to 2050.

The source for all projections is CCSCE, as explained in each section. The sources for historical U.S. job estimates are the Bureau of Labor Statistics (BLS). California and SCAG region estimates are from the California Employment Development Department (EDD).

**Projected Job Growth Rates (thousands)**

	<b>2019</b>	<b>2050</b>	<b>% Change</b>	<b>CAGR</b>
US	162,794.8	186,401.9	14.5%	0.44%
CA	19,410.7	23,167.7	19.4%	0.57%
SCAG Region	8,986.7	10,402.7	15.8%	0.47%

The growth rates from 2019 to 2050 are far lower than the growth rate since 1990 for all three areas. Growth is slowing as the population ages, and birth rates decline. There will be fewer births, more deaths, and a smaller share of the population in the workforce. Compound annual growth will slow to roughly half the growth rate from the past 30 years.

**Historical Comparison of Job Growth Rates (thousands)**

	<b>1990</b>	<b>2019</b>	<b>2050</b>	<b>CAGR 1990-2019</b>	<b>CAGR 2019-2050</b>
US	121,678.5	162,794.8	186,401.9	1.0%	0.4%
CA	14,148.0	19,410.7	23,167.7	1.1%	0.6%
SCAG Region	7,012.7	8,986.7	10,402.7	0.9%	0.5%

The principal driver of regional job growth is the growth potential in the region's economic base (i.e., "Basic Industry" jobs)—those sectors that can choose where they locate (mostly) and sell goods and services primarily to state, national, and world markets. Regions compete for these jobs, which makes policies to increase SCAG region competitiveness important.

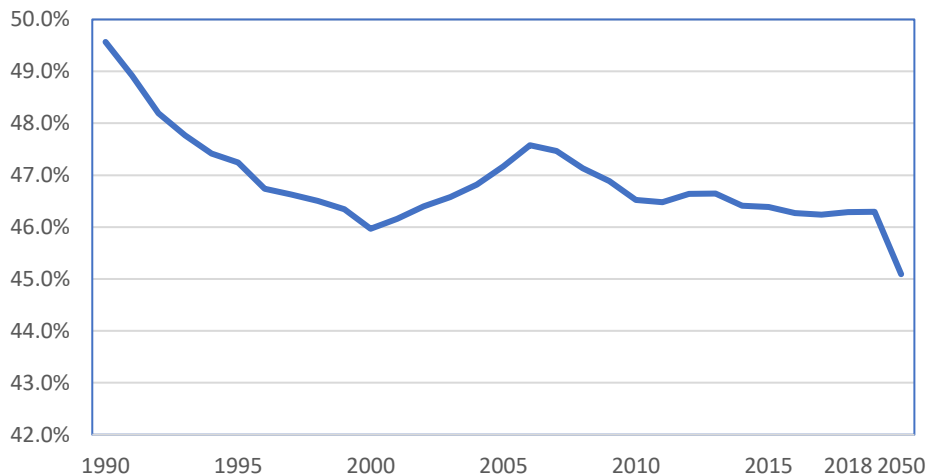
Jobs in the SCAG region's economic base are projected to increase slightly faster than the comparable industries nationally but slower than the state's

economic base between 2019 and 2050. The SCAG region is projected to have 45.1% of the state's jobs in 2050, down slightly from 46.3% in 2019.

The base year for these projections is 2019—prior to the pandemic—though pandemic effects were considered in developing the projections. The final section of this memo explains how the pandemic affects this jobs forecast.

These projections were developed by CCSCE, and as noted below, SCAG staff adjusted the SCAG region job projection based on their analysis of labor force participation trends suggested by the SCAG expert panel. CCSCE concurs with the staff adjustments.

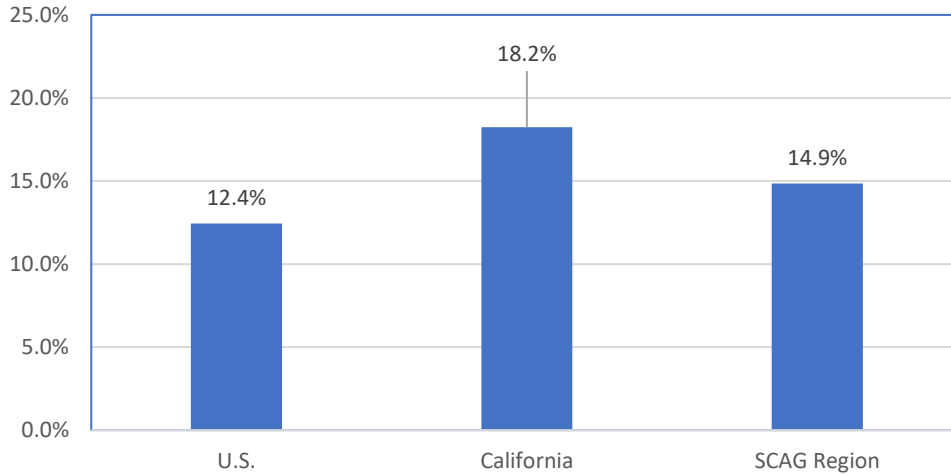
SCAG Region Share of California Jobs



As shown above, the region's share of state jobs fell sharply in the 1990s after the aerospace and defense base closure cuts in the early 1990s. The region lost over 130,000 jobs in those sectors leading to the loss of 490,000 jobs overall and net out-migration of 1 million residents in the early 1990s. As this comprised a significant portion of Southern California's economic base, these losses affected the region far more than the state and nation. The regional share rebounded after 2000 until 2007 and declined back to the 2000 level in 2019. As noted above, a small additional decline is projected between 2019 and 2050.



### Projected Growth in Basic Industry Jobs 2019-2050



The SCAG region's economic base job growth to 2050 is concentrated in three sectors—1) professional, business, and information service industries, 2) Wholesale Trade and Transportation and 3) Tourism and Entertainment.

#### Projection of SCAG Region Basic Industry Jobs (Thousands)

	2019	2050	Change 2019-2050
High Tech Manuf.	152.2	158.6	6.4
Divs. Manuf.	462.0	419.6	-42.4
Whls Trade & Transp.	743.6	897.6	154.0
Prof, Bus & Info Serv.	951.4	1,162.0	210.6
Tourism & Entertainment	415.8	509.5	93.7
Basic Govt	245.1	273.0	27.9
Resource-Based	73.8	75.7	1.9
<b>Total Basic</b>	<b>3,043.8</b>	<b>3,496.1</b>	

- The high-tech manufacturing sector includes computer manufacturing, pharmaceuticals, and aerospace except food.
- The diversified manufacturing sector includes all other manufacturing industries.
- Wholesale trade and transportation include wholesale trade and all transportation industries, including warehousing.
- The professional, business, and information services sector includes all professional, scientific, and technical industries, software publishing, internet-related services, and employment services.
- The tourism and entertainment sector includes motion pictures, amusement industries, and hotels.

- Basic government jobs include federal and state government jobs, and the resource-based sector includes agriculture, mining, and food manufacturing.

## Methodology for Developing the Job Projections

### The U.S. Job Projections

The national projections include a projection of total population, total jobs, and jobs by industry. SCAG provided CCSCE with a national set of projections developed by Regional Economic Models, Inc (REMI) in 2021.

Based on CCSCE's judgment confirmed by input from the SCAG panel of experts, CCSCE made two small adjustments to the REMI projection of total U.S. population and jobs in 2050. The population projection was raised by 1% to 384.1 million based on the assumption that immigration levels would be roughly 100,000 per year (10% higher) than the last Census population projection in 2017<sup>1</sup>. The thinking was 1) the aging of the population and lower birth rates assumed in the population projection would increase the pressure for labor-skill based immigration, 2) the new administration was removing some of the Trump era restrictions, and 3) there is a broad business consensus around higher levels of immigration to fill job openings.

The second adjustment (supported by the panel of experts) was to raise the number of jobs relative to the population based on the assumption of increased labor force participation rates (LFPRs) relative to the REMI model projections. Overall, LFPRs would decline with the aging population but less so than REMI projects.

Additionally, there would be increases for women as education levels increased, birth rates dropped, and services like free pre-K and more affordable child care became available, and the region's relatively high cost of living necessitates more two-earner households.

The result was a national 2050 population projection of 384.1 million people and 186.4 million jobs, both slightly higher than the REMI projection.

The approximately 100 individual industry job projections were developed as follows based on 1) the REMI 2050 projections, 2) BLS projections to 2030, and 3) CCSCE judgment.

When the REMI 2050 and BLS 2030 projections showed similar average annual growth rates, the REMI projected growth rate to 2050 was used.

---

<sup>1</sup> See <https://www.census.gov/data/datasets/2017/demo/popproj/2017-popproj.html>

There were many industries in CCSCE's model where REMI did not provide a projection. When REMI provided a projection for an industry that the CCSCE sub-industry was a part of (for example, REMI projected chemical manufacturing and CCSCE split the sector into pharmaceuticals and other chemicals), the REMI projection was used for the larger sector if it was consistent with the BLS growth trend. CCSCE made the sub-industry projections using the BLS 2030 growth trends in most cases.

When REMI did not provide a projection needed in the CCSCE model, and the step above was not possible, CCSCE used the BLS growth trend. When REMI and BLS disagreed on the long-run industry growth, CCSCE used judgment to select which trend to follow. The major changes made by CCSCE were to reduce some BLS growth rates past 2030 when the BLS 2020-2030 projections were used.

The national pattern of basic industry growth is shown below and is the most important input to the state and SCAG region projections.

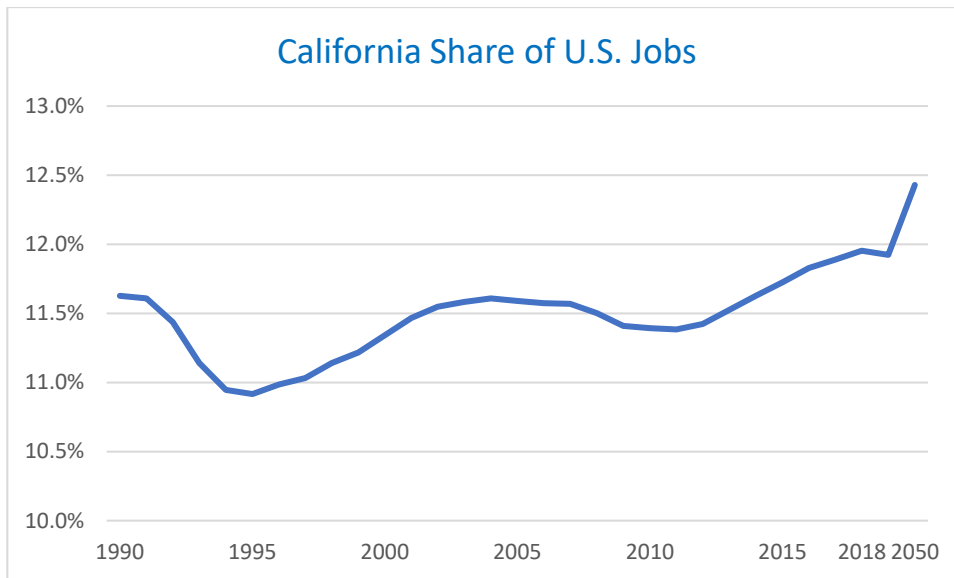
- By far, the largest sector growth is in professional, business, and information services, almost all in high-tech services.
- The tourism and entertainment sectors have the second-highest growth rate, and both of these sectors are strengths of the California economy.
- Diversified manufacturing jobs are projected to decline slightly. While the expected output increases in high-tech manufacturing are large, these largely reflect strong productivity growth, and job growth is expected to be small.
- Growth in other sectors is modest, and the growth in transportation is largely in warehousing and home delivery jobs due to the rise in e-commerce.

**Projection of U.S. Basic Industry Jobs (thousands)**

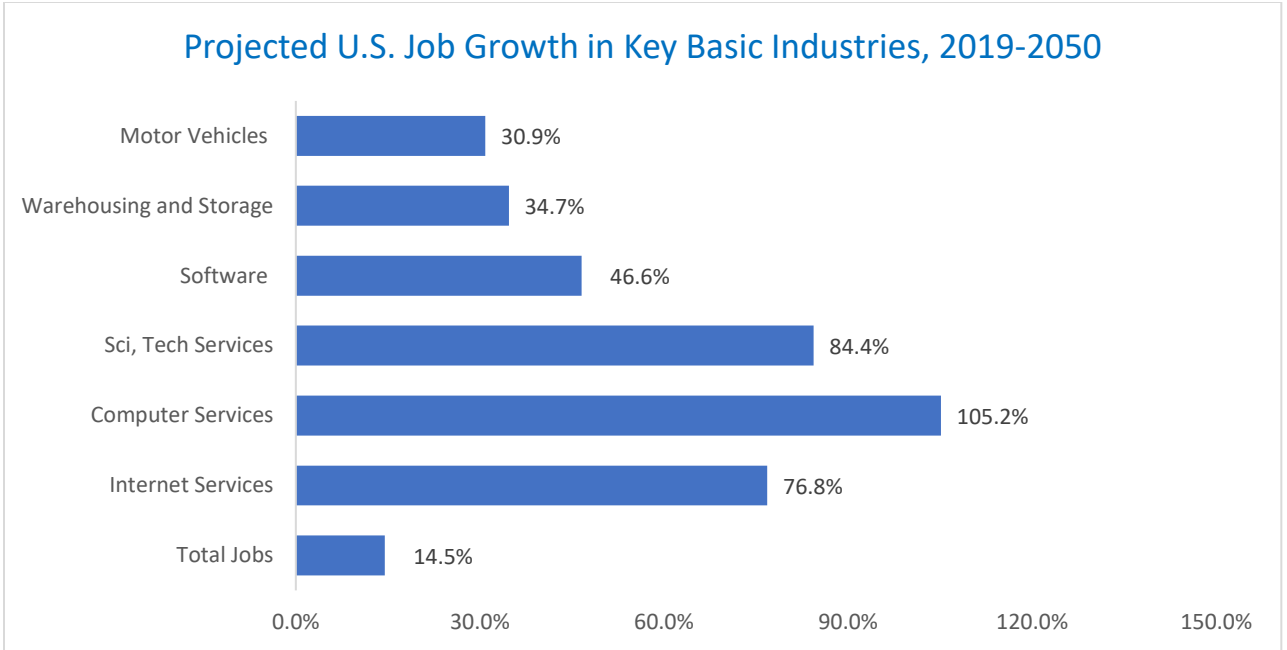
	<b>2019</b>	<b>2050</b>	<b>Change 2019-2050</b>	<b>% Change</b>
High Tech Manuf	1,920.7	1,999.3	78.6	4.1%
Divs. Manuf.	8,100.3	7,754.0	-346.3	-4.3%
Whls Trade & Transp.	8,675.5	9,144.8	469.3	5.4%
Prof, Bus & Info Serv.	16,744.9	21,641.2	4,896.3	29.2%
Tourism & Entertainment	4,266.0	5,127.7	861.7	20.2%
Basic Govt	2,834.0	3,032.1	198.1	7.0%
Resource-Based	3,128.9	3,255.9	127.0	4.1%
<b>Total Basic Jobs</b>	<b>45,670.3</b>	<b>51,955.0</b>	<b>6,284.7</b>	<b>13.8%</b>

## The California Job Projections

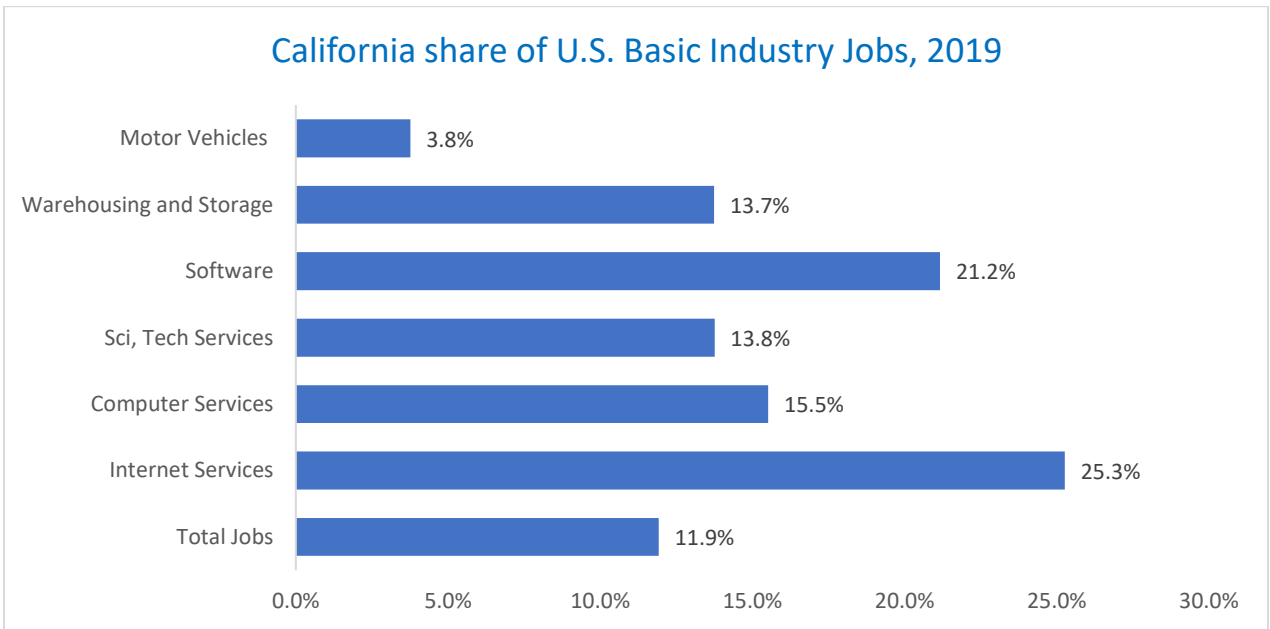
California is projected to add jobs at a faster rate than the nation. The state is projected to capture 12.4% of the nation's jobs in 2050—an increase from 12.0% in 2018 and 11.9% in 2019. The state has captured an increasing share of national jobs in recent years on the strength of the state's economic base.



The case for the strength of California's economic base is straightforward. We have a high share in some of the nation's fastest growing sectors. The chart below shows some of the nation's fastest-growing economic base industries.



These are sectors in which California has a relatively large share of current jobs.



The case for above-average job growth in California's economic base rests on three major findings:

- California remains a center for innovation in tech, design, and entertainment
- California benefits from its location on the Pacific Rim for trade, tourism, and talent

- California benefits from being a welcoming place to live and work

The SCAG region also benefits from being a welcoming place. What does this mean, and why is it important? A welcoming place is a place where people feel welcome no matter where they were born, their sexual or religious preferences, and the color of their skin. Welcoming places attract talented workers and entrepreneurs who might not feel welcome in other regions and is, thus, a competitive advantage.

California is projected to get 13.5% of U.S. basic industry jobs in 2050, up from 12.8% in 2019.

The largest numerical job gains are in the professional, business, and information service industries, followed by entertainment and tourism and wholesale trade and transportation industries. Other basic industry subsectors are projected to have small job gains, and diversified manufacturing jobs are projected to decline.

The table below clusters key subsectors and shows that the projected industry shares remain relatively stable. While we project California to have a larger share of basic industry employment relative to the U.S., most of the share gains between 2019 and 2050 are the result of the industry mix in the state rather than from the projected share increases in the individual industries.

Small share increases were projected for some professional and information service sectors as well as warehousing, support for transportation, and motor vehicle manufacturing—all continuing but slowing, recent share gains.

***Projection of California Basic Industry Jobs***

	<b>Jobs (Thousands)</b>		<b>% of US Jobs</b>	
	<b>2019</b>	<b>2050</b>	<b>2019</b>	<b>2050</b>
High Tech Manuf.	406.9	427.9	21.2%	21.4%
Divs. Manuf.	666.2	644.1	8.2%	8.3%
Whls Trade & Transp.	1,050.7	1,169.9	12.1%	12.8%
Prof, Bus & Info Serv.	2,333.2	3,178.3	13.9%	14.7%
Tourism & Ent.	622.5	762.1	14.6%	14.9%
Basic Govt	248.2	266.4	8.8%	8.8%
Resource-Based	502.1	540.5	16.0%	16.6%
<b>Total Basic Jobs</b>	<b>5,829.8</b>	<b>6,989.2</b>	<b>12.8%</b>	<b>13.5%</b>

The local (population and business) serving jobs were projected in the following manner.

California has historically had a very similar ratio of local serving jobs to basic jobs as the nation. CCSCE projected the total of local serving jobs in relation to the projection of basic industry jobs using our relation to the national share.

Specifically, California was projected to have 3% fewer local serving jobs relative to basic industry jobs than the nation following the historical trend.

**Individual local serving industry jobs were not projected directly as a share of the nation. CCSCE projected the composition of local serving jobs in the state by projecting the individual industry shares of total local serving jobs.**

Many industries have similar shares of local serving jobs as the nation. For example, California is projected to have 5.2% of local serving jobs in construction compared to 5.1% in the nation. Some industries have historically had different shares compared to the nation. For example, 7.2% of local serving jobs in the SCAG region are in individual and family services compared to just 3.2% in the nation.

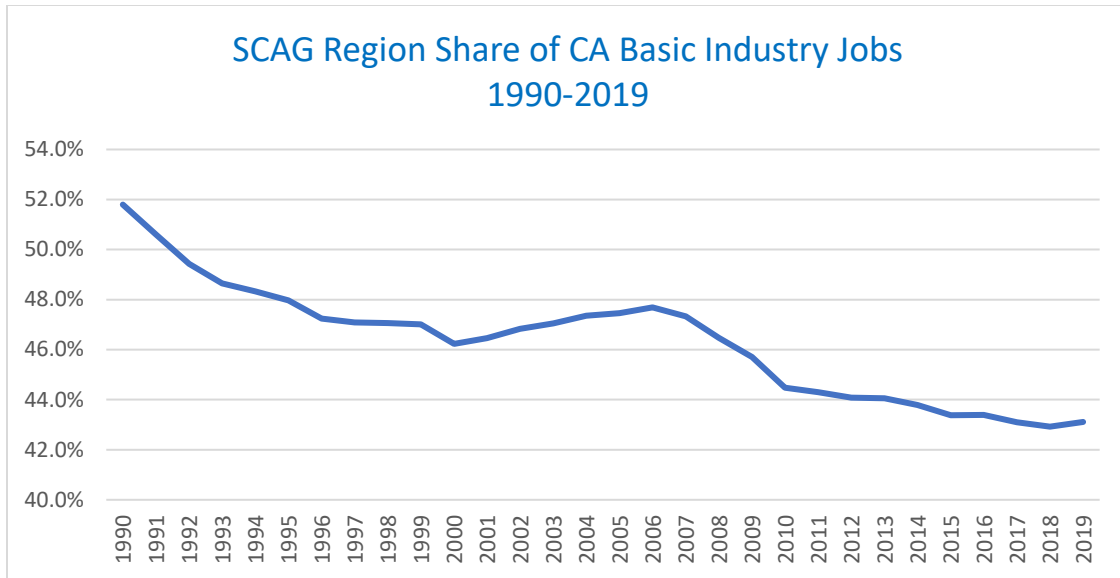
The one exception is that state and local government and education jobs are projected based on projections of relevant population and service level growth.

### **The SCAG Region Job Projections**

The region's industry job growth was projected in relation to state industry growth in the same manner as California was projected in relation to the nation.

### **Historical Trends**

The SCAG region's share of state basic industry jobs declined between 1990 and 2019. There was a sharp decline in the 1990s as a result of the large decrease in aerospace and defense jobs. Then the region's share rose for a few years, after which there was another decline during the 2008-2010 national recession. Since then, the share has declined slightly from 44% to 43% as the Bay Area share rose with the large tech job gains.



There were large changes in the structure of the region's economic base between 1990 and 2019. Losses in both high tech manufacturing (which includes aerospace and electronic instruments) and other manufacturing were offset by gains in Wholesale Trade and Transportation (which includes warehousing and port-related jobs), Professional, Business and Information Services and Tourism and Entertainment.



**Historical Trend in SCAG Region Basic Industry Jobs (Thousands)**

	1990	2007	2019	1990-2007	2007-2019
High Tech Manuf.	370.0	183.2	152.2	-186.8	-31.0
Divs. Manuf.	774.0	587.7	462.0	-186.3	-125.7
Whls Tr & Transp.	546.0	687.3	743.6	141.3	56.3
Prof, Bus & Info Serv.	690.3	884.9	951.4	194.6	66.5
Tourism & Ent	280.2	343.8	415.8	63.6	72.1
Basic Govt	241.5	234.4	245.1	-7.1	10.7
Resource-Based	107.3	83.0	73.8	-24.3	-9.2
<b>Total Basic Jobs</b>	<b>3,009.3</b>	<b>3,004.2</b>	<b>3,043.8</b>	<b>-5.0</b>	<b>39.6</b>

**Projections—Basic Industry Jobs**

The largest basic industry job gains to 2050 are in the professional, business, and information services cluster. The growth follows national and state trends. The growth in Wholesale Trade and Transportation jobs follow national and state trends, but we project that the SCAG region will enjoy a continued, small increase in the share of jobs in warehousing and port-related sectors because the region benefits from its Pacific Rim location. Tourism jobs also benefit from the Pacific Rim location, while Entertainment jobs benefit from the large creative labor force in the region.

**Projection of SCAG Region Basic Industry Jobs (Thousands)**

	2007	2019	2050	2007-2019	2019-2050
High Tech Manuf.	183.2	152.2	158.6	-31.0	6.4
Divs. Manuf.	587.7	462.0	419.6	-125.7	-42.4
Whls Trade & Transp.	687.3	743.6	897.6	56.3	154.0
Prof, Bus & Info Serv.	884.9	951.4	1,162.0	66.5	210.6
Tourism & Ent.	343.8	415.8	509.5	72.1	93.7
Basic Govt	234.4	245.1	273.0	10.7	27.9
Resource-Based	83.0	73.8	75.7	-9.2	1.9
<b>Total Basic Jobs</b>	<b>3,004.2</b>	<b>3,043.8</b>	<b>3,496.1</b>	<b>39.6</b>	<b>452.2</b>

The region is projected to have a small decline (43.1% to 41.9%) in the share of total state basic industry jobs between 2019 and 2050. At the same time, the region's share of U.S. basic industry jobs is projected to increase from 5.5% to 5.6%. Both shares are up from the 2000 levels that were still held down by the 1990s aerospace and defense job losses.

**SCAG Region Share of Basic Industry Clusters, 2000-2050**

	U.S.			California		
	2000	2019	2050	2000	2019	2050
High Tech Manuf.	6.3%	7.9%	7.9%	30.0%	37.4%	37.1%
Divs. Manuf.	3.7%	5.0%	5.0%	37.1%	53.1%	51.3%
Whls Trade & Transp.	5.6%	6.7%	7.5%	50.9%	55.5%	57.9%
Prof, Bus & Info Serv.	5.1%	5.4%	5.2%	36.8%	38.9%	35.7%
Tourism & Ent.	8.1%	8.4%	8.5%	56.2%	57.3%	57.0%
Basic Govt	3.2%	3.1%	3.2%	33.5%	31.4%	31.4%
Resource-Based	3.2%	2.5%	2.5%	16.1%	15.0%	14.2%
<b>Total Basic Jobs</b>	<b>4.8%</b>	<b>5.5%</b>	<b>5.6%</b>	<b>38.4%</b>	<b>43.1%</b>	<b>41.9%</b>

The region is projected to continue increasing its share of C.A. jobs in the Wholesale Trade and Transportation cluster led by share gains in port-related jobs and warehousing as the ports will benefit from growth in Pacific Rim trade. The Tourism and Entertainment cluster is projected to maintain a high share of this fast-growing cluster. Job losses in Manufacturing will ease following national and state trends.

The region is projected to get a large number of additional jobs in the Professional, Business, and Information services cluster despite a decline in the share of state jobs. As discussed below, the region has seen a surge in venture capital funding along with the nation, which could translate into additional job growth in this cluster.

**Projections—Local Serving Jobs**

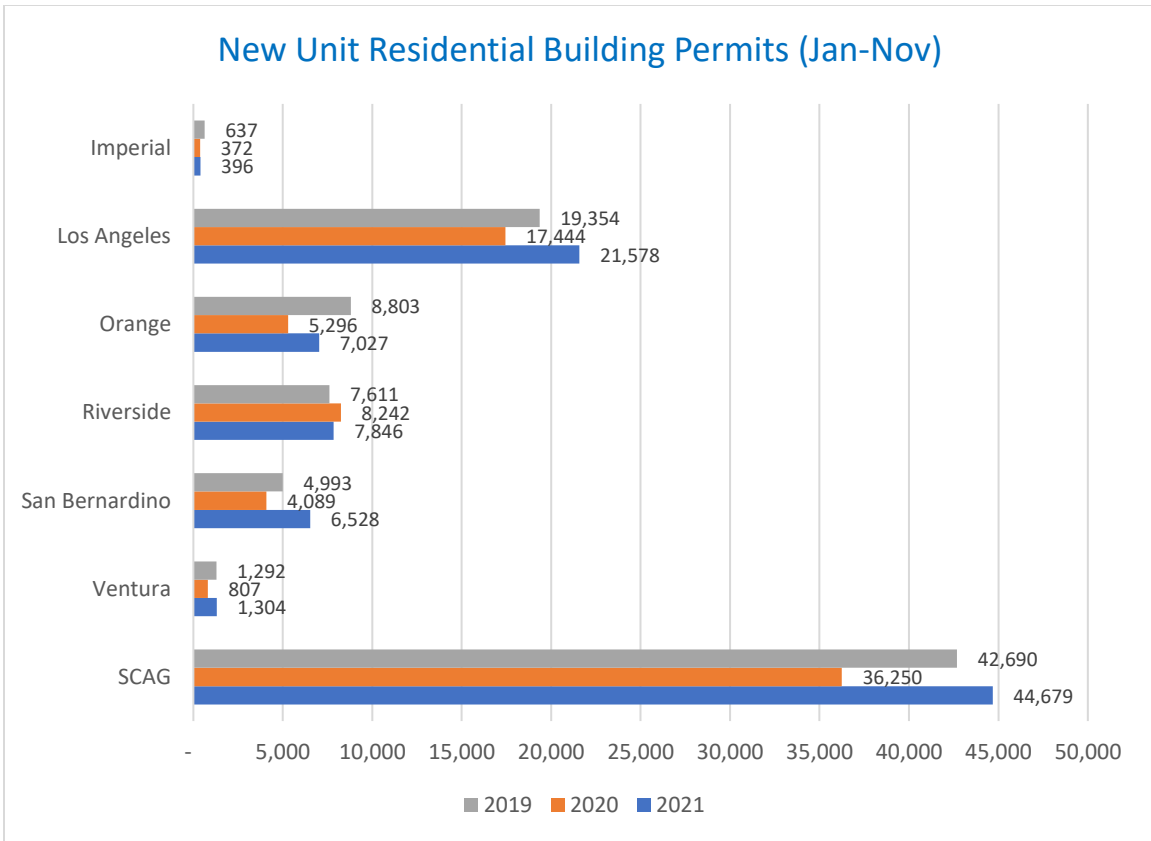
These are jobs that serve local residents and businesses in contrast to the basic industry jobs that serve state, national, and world markets.

Local serving jobs in the region were projected in two steps in the same manner as for the state—first looking at the ratio of local serving jobs to basic industry jobs in the region compared to the state and then projecting what share of the total of local serving jobs would be in each industry.

The region has historically had a slightly higher share of local serving jobs to basic industry jobs than the state though the difference is less than 3%. The pattern of local serving jobs in the region is similar to the state pattern. The largest growth in local serving jobs in the SCAG region is projected to be in health care, social services, food services, self-employment, and construction. Retail trade jobs are projected to decline following national and state trends.

**Recent Events And Relationship to These Projections**

- 1) SCAG staff made a technical adjustment to CCSCE's SCAG region job projection for 2050. Both the expert panel and CCSCE recommended using higher labor force participation rates for certain age and ethnic groups compared to what the REMI model used. Additionally, REMI's regional population projections suggested a heavy reliance on 2017-vintage Census projections which were conducted prior to recent fertility decreases and the release of 2020 Census data. Both of these factors—which are used by SCAG's population projection model—would indicate lower regional and national populations. When SCAG staff incorporated these into the SCAG demographic model, the result was fewer residents were needed to fill the projected jobs as higher rates resulting in more workers relative to population. As a result, the slightly lower population meant fewer local serving jobs were needed, and the overall 2050 regional job projection for 2050 was lowered from 10.45 to 10.17 million.
- 2) Congress passed, and the President signed a \$1.2 trillion infrastructure bill. Initial analysis shows that the bill will increase infrastructure funding for the SCAG region, including funding for affordable housing. These funds can strengthen SCAG's competitive position.
- 3) International travel expanded in November 2021 after some travel restrictions were removed. Airport travel has recovered though it is still approximately 1/3 below pre-pandemic levels.
- 4) Port activity in 2021 will set a record though volumes are temporarily lower than last year since September from the backup and delays in unloading cargo.
- 5) Housing permits are up substantially over 2020 levels and match 2019 permit levels. The state has adopted new housing approval and enforcement legislation.



Source: Construction Industry Research Board, New Units from Building Permits

- 6) Some immigration and refugee admission restrictions were ended though no major agreement on immigration reform has been reached.
- 7) 2020 and now 2021 will set records for the region in venture capital funding, and the region (Imperial County is not included) is the 4<sup>th</sup> largest V.C. market after the Bay Area, New York, and Boston regions.
- 8) In December, the UCLA Andersen Forecast forecast that the state and region (not including Imperial County) would outpace the nation in job growth in 2022 and 2023.

**UCLA Economic Forecast, Non-Farm Job Growth (Dec 2021)**

	<u>2022</u>	<u>2023</u>
Southern California	3.9%	1.7%
California	4.7%	2.5%
U.S.	3.3%	1.3%

- 9) Since July, the SCAG region job and unemployment recovery has continued though the sharp losses in 2020 still appear in the data. In November 2021, the region had recovered two-thirds of the payroll job losses, with the Inland Empire improving and Los Angeles County lagging.

**Recent Employment Trends (Non-Farm Wage and Salary Jobs in Thousands)**

	<u>Feb 20</u>	<u>April 20</u>	<u>Jan 21</u>	<u>Nov 21</u>	<u>% Recovered</u>
Imperial	54.2	48.2	48.6	52.1	65.0%
Los Angeles	4,622.8	3,850.3	4,046.9	4,317.2	60.4%
Orange	1,688.7	1,411.9	1,492.1	1,606.6	70.3%
Riv.-San Ber.	1,589.0	1,366.7	1,482.5	1,550.1	82.5%
Ventura	317.0	265.8	286.4	298.9	64.6%
Total SCAG	8,271.7	6,942.9	7,356.5	7,824.9	66.4%

*Seasonally adjusted EDD*

Unemployment rates have declined though not back to the historically low pre-pandemic rates. The SCAG region unemployment rate in November was 6.2%, with lower rates in Orange, Riverside, San Bernardino, and Ventura Counties.

**Unemployment Rates**

	<u>Feb 20</u>	<u>April 20</u>	<u>Jan 21</u>	<u>Nov 21</u>
Imperial	18.1%	28.6%	16.5%	15.5%
Los Angeles	4.7%	18.2%	12.7%	7.1%
Orange	2.8%	14.4%	7.3%	4.1%
Riv.-San Bern.	3.9%	15.2%	8.6%	5.4%
Ventura	3.7%	14.5%	7.4%	4.4%
Total SCAG	4.3%	16.8%	10.7%	6.2%

*EDD*

EDD's broader measure of employment that includes self-employment showed that 81.4% of the pre-pandemic level of employment had been recovered with nearly 100% in the Inland Empire. Self-employment includes some professional workers (e.g., lawyers, accountants, and real estate agents), small business proprietors, and a growing number of gig workers.

### Employed Residents (Thousands)

	<u>Feb 20</u>	<u>April 20</u>	<u>Jan 21</u>	<u>Nov 21</u>	<u>% Recovered</u>
Imperial	59.0	52.0	54.4	57.5	78.6%
Los Angeles	4,971.9	3,892.4	4,289.9	4,722.1	76.9%
Orange	1,572.1	1,305.8	1,407.1	1,528.6	83.7%
Riv.-San Bern.	2,019.7	1,716.5	1,897.6	2,008.8	96.4%
Ventura	408.0	346.0	372.6	394.0	77.4%
Total SCAG	9,030.7	7,312.7	8,021.6	8,711.0	81.4%

10) The Governor's budget released 1/10/22 includes a number of new funding proposals in support of housing. They will be discussed in the Legislature in the coming months.

### What Could Lead to Higher or Lower Job Growth

In November 2021, SCAG staff presented high, medium, and low projection ranges of population, households, and employment which are summarized in the accompanying staff report. High and low series were based on high and low scenarios of population growth, which adjusted population-serving, and therefore, total jobs. Additionally, the high scenario slightly increased the region's share of U.S. basic jobs.

As this report and discussion of recent trends indicate, many factors could affect the baseline job forecast for the region. Factors that could lead to the largest changes are discussed below.

At the national level, differences in the level of immigration will affect national job growth and spill over to the region's job growth rate. If current trends continue, job growth will be lower than projected in the baseline forecast, and if significant immigration reform is adopted, job growth will likely be larger than in the baseline forecast.

The level of success in addressing the region's housing, transportation, and infrastructure challenges will affect regional competitiveness and the share of national and state jobs likely to locate in the region.

The baseline job forecast for the region assumes some success in meeting the region's housing, transportation, and infrastructure challenges consistent with SCAG's adopted policy direction. If the region is able to produce more housing than in the baseline forecast, particularly in the lower- and moderate-income price range, that will improve the region's competitive position for job growth and vice versa.

### The Relationship of the Pandemic to the 2050 Regional Job Forecast

The pandemic has lasted longer than expected a few months back. During this time, the regional economy has added jobs and reduced unemployment, though less quickly than hoped for. The UCLA Andersen Forecast has forecasted growth in the next 2-3 years that take account of the pandemic. SCAG's December 2021 Economic Summit also provided a detailed outlook of each county and the regional economy over the short term.

The CCSCE job forecast for 2050 incorporated three trends that started before the pandemic but have been affected by it and have long-term implications:

- Retail trade jobs are projected to decline with the growing shift to online shopping
- Delivery service and warehouse jobs are projected to increase as a result of the growing shift to online shopping
- Self-employment jobs are projected to increase as a result of growth in these sectors related to gig work opportunities

Furthermore, it is worth reflecting how major disruptions throughout history have had no discernable effect 30 years later due to the number of events and changes during the intervening years:

- no impact of the Spanish flu pandemic in 1918 30 years later in 1948
- no impact of the Great Depression on the economy 30 years later in a period of major growth
- no impact of the dot com bust in 2000, 20 years later as the nation and region set venture capital and tech production and stock valuation records.

# 2024 Preliminary Regional & County Growth Projections

Kevin Kane, Ph.D.

Program Manager, Demographics & Growth Vision

Department of Sustainability

February 3, 2022

[www.scag.ca.gov](http://www.scag.ca.gov)



## Envisioning 2050

- Births & Deaths
- Economic Base  
*compared to other places*
- Technical Process
- Expert Informed
- Basis for Subsequent Policy  
& Strategy Development

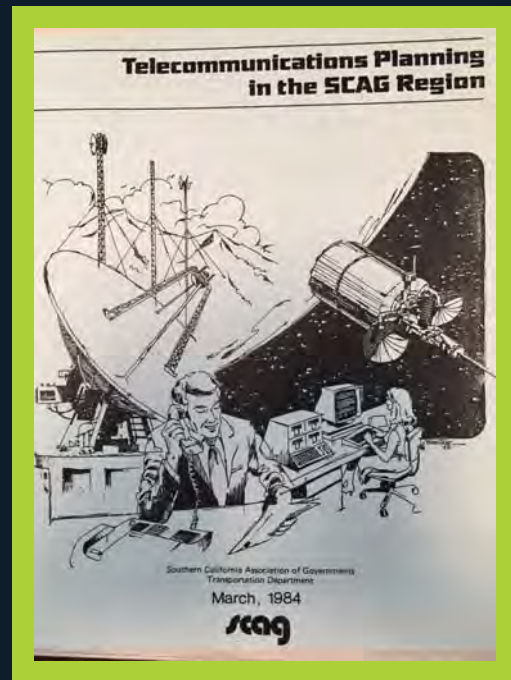
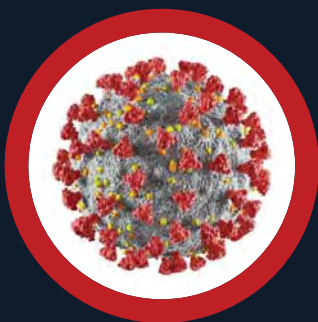




# Envisioning 2050: Panel of Experts

- **Billy Leung** *Regional Economic Models, Inc.*
- **Dan Hamilton** *California Lutheran University*
- **Deborah Diep** *CSU Fullerton, Center for Demographic Research*
- **Dowell Myers** *University of Southern California*
- **Jerry Nickelsburg** *UCLA Anderson Forecast*
- **John Husing** *Economics & Politics, Inc.*
- **John Weeks** *San Diego State University*
- **Mark Schniepp** *California Economic Forecast*
- **Michael Bracken** *Development Management Group, Inc.*
- **Richelle Winkler** *Michigan Technological University*
- **Simon Choi** *Chung-Ang University*
- **Somjita Mitra** *California Dep't of Finance, Economics Research Unit*
- **Wallace Walrod** *Orange County Business Council*
- **Walter Schwarm** *California Dep't of Finance, Demographic Research Unit*

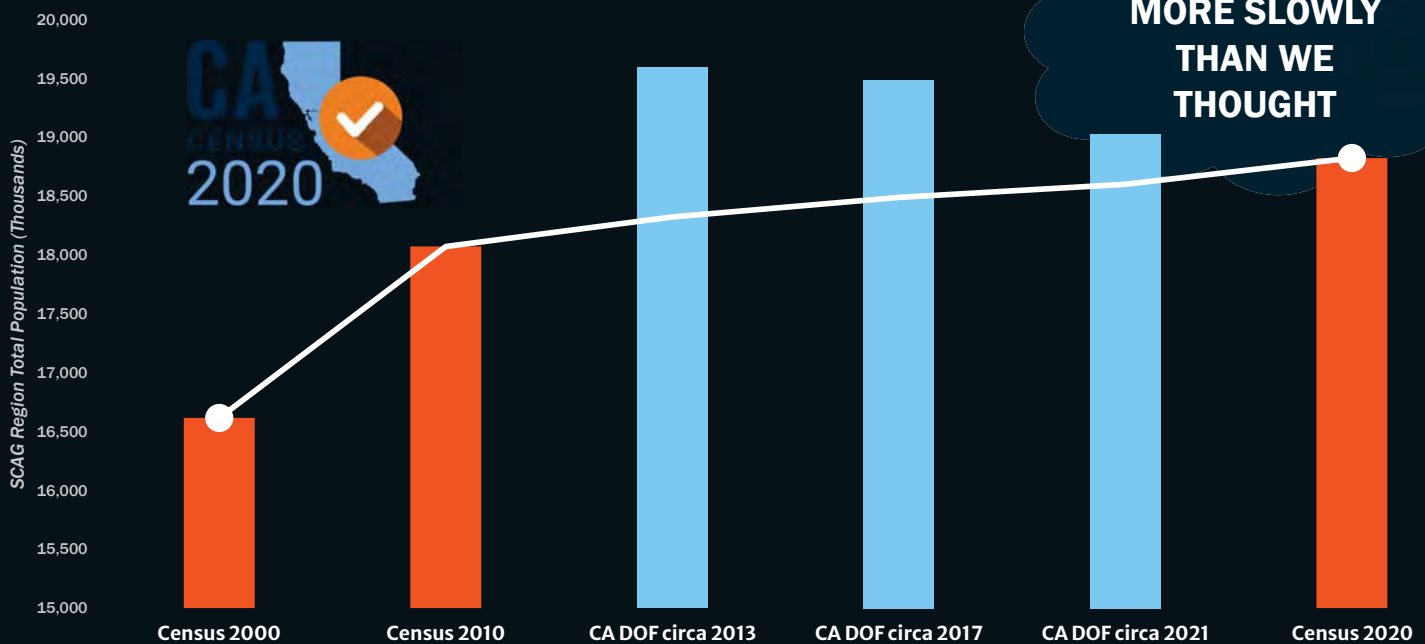
# But, Aren't These Uncertain Times?



# Outline

- What do we know today?
  - Births and Deaths
  - Economic Base
  - CalExit?
  - Housing
- Preliminary Projection: “Slower Growth, Steady Improvement”
  - Population and aging
  - Households
  - Economic base
- County-Level Projections
- Next Steps

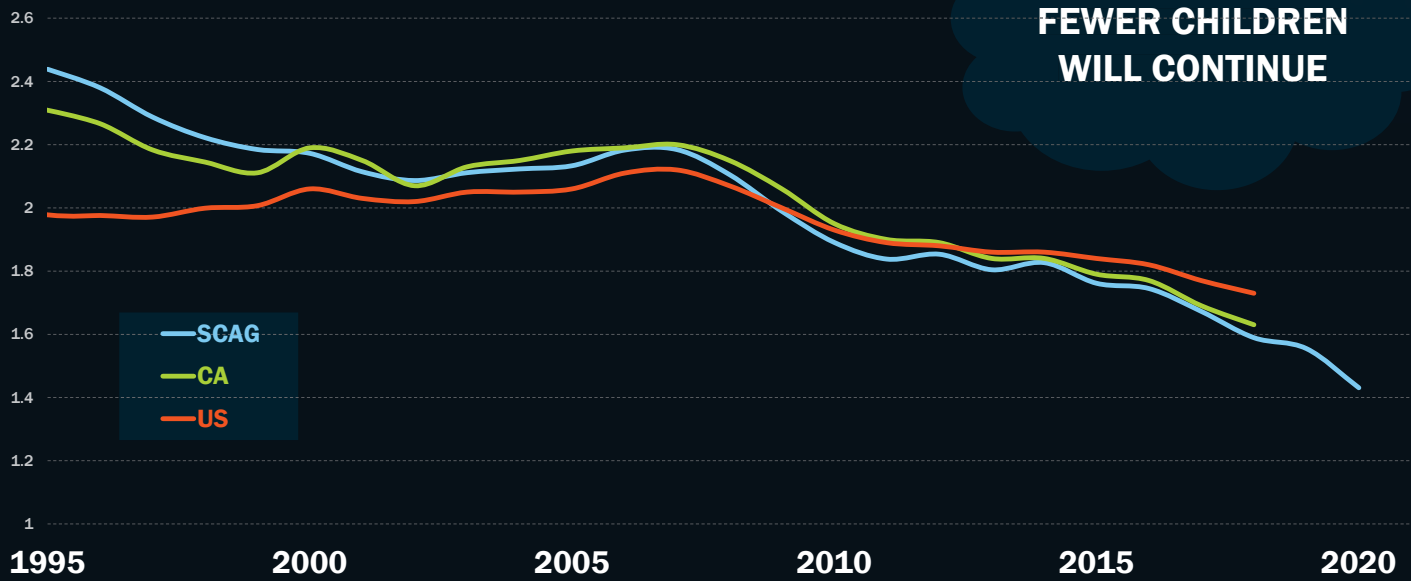
## What Do We Know Today? Census 2020



Sources: California Department of Finance (DOF) P3, US Census Bureau, PRB

# What Do We Know Today? The Facts of Life

## Total Fertility Rate (TFR)

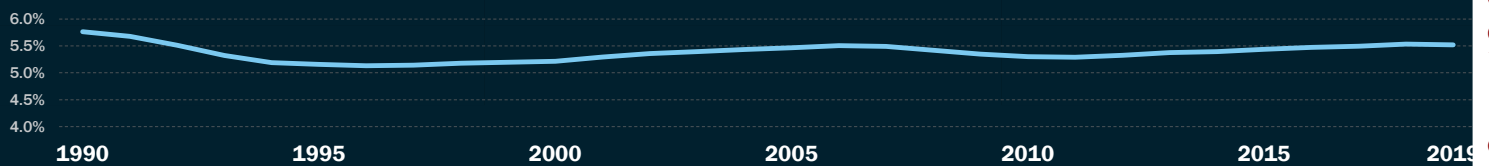


**TREND TOWARD FEWER CHILDREN WILL CONTINUE**

Sources: California Department of Public Health, PRB

# What Do We Know Today? Economy & Jobs

## SCAG Region Share of US Jobs Remarkably Consistent



## SCAG Region Jobs – Recovery Toward Previous Trend



Source: CCSCE calculation of BLS, EDD, and ACS data; ACS 2010, 2012, and 2019 1-year samples

Attachment: PowerPoint Presentation - Connect SoCal 2024 Preliminary Projection [Revision 1] (Connect SoCal 2024 Preliminary Regional and

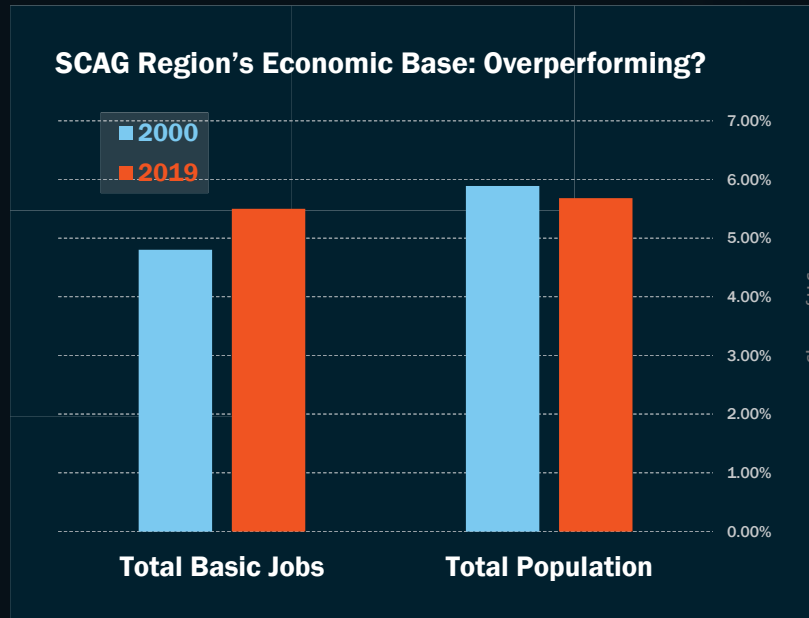
# What Do We Know Today? SCAG Economic Base



## “Economic Base”

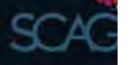
Sectors which sell goods and services to larger markets but concentrate in particular regions. Roughly 1/3 of total SCAG jobs.

- Professional, Business & Information Services
- Wholesale Trade & Transportation
- Tourism
- Entertainment

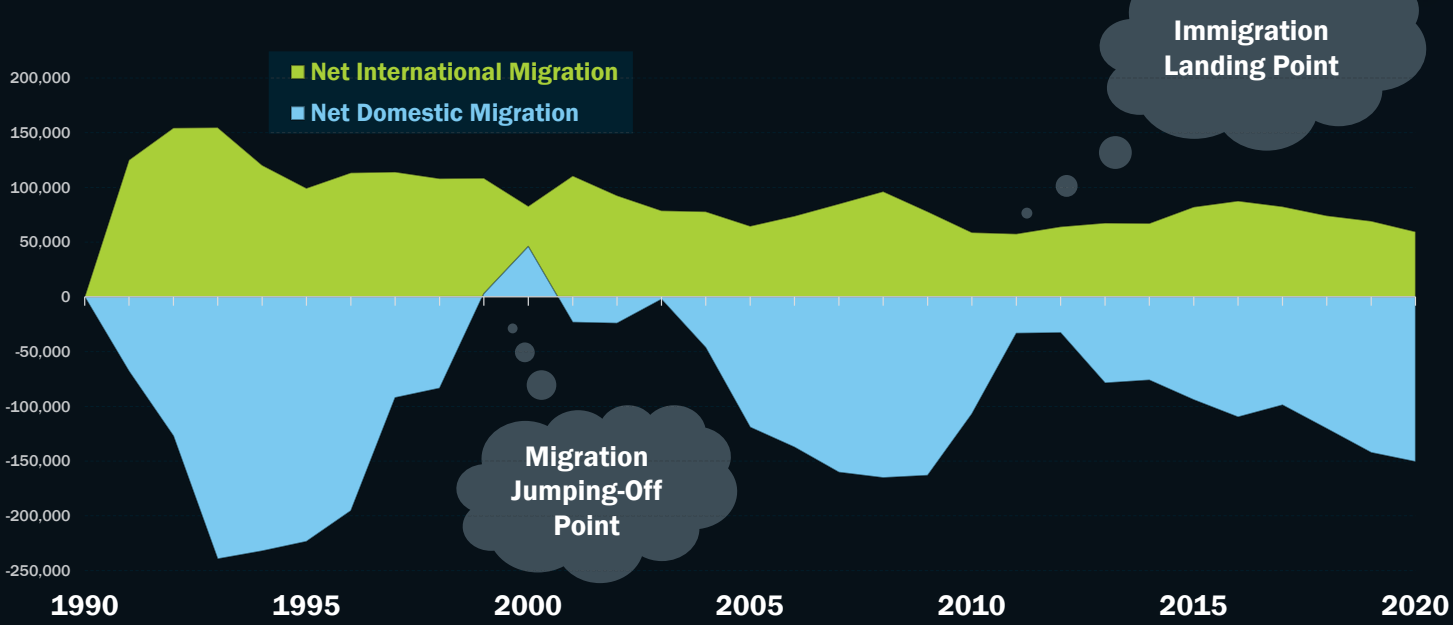


Source: CCSCE calculation of BLS, EDD, and ACS data; Census 2010 and ACS 2019 1-year samples. "Basic" industries may be used interchangeably with "traded" industries or clusters; industries listed are a sample of key basic sectors in Southern California.

# CalExit? Or, A Temporary Increase in a Longstanding Trend



## Number of Net Migrants (SCAG)



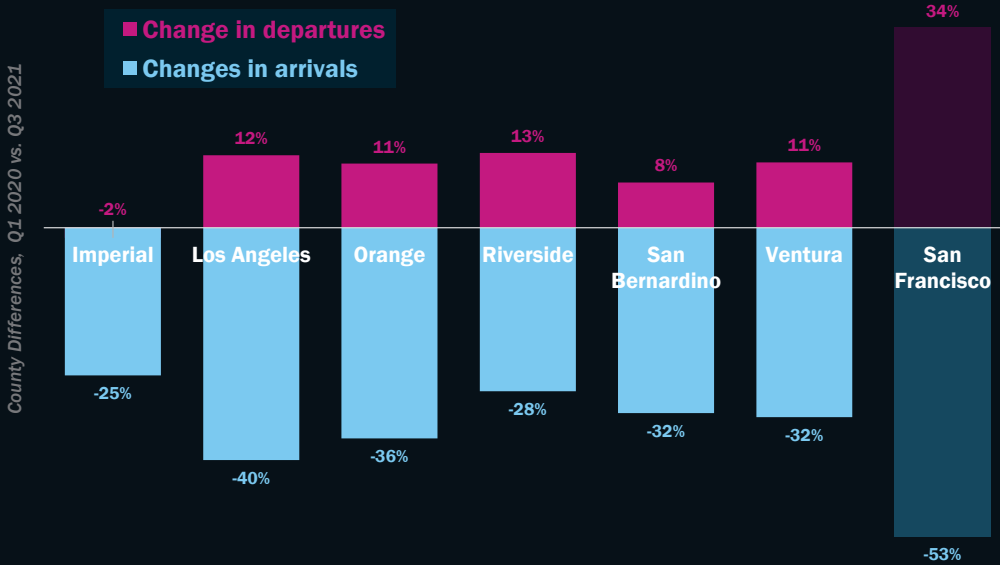
Sources: CA DOF

Attachment: PowerPoint Presentation - Connect SoCal 2024 Preliminary Projection [Revision 1] (Connect SoCal 2024 Preliminary Regional and

# CalExit? What's Happened Since COVID Began



## Changes in Migration Since the Pandemic Began



**SPOILER ALERT!**  
There are Fewer People Moving IN

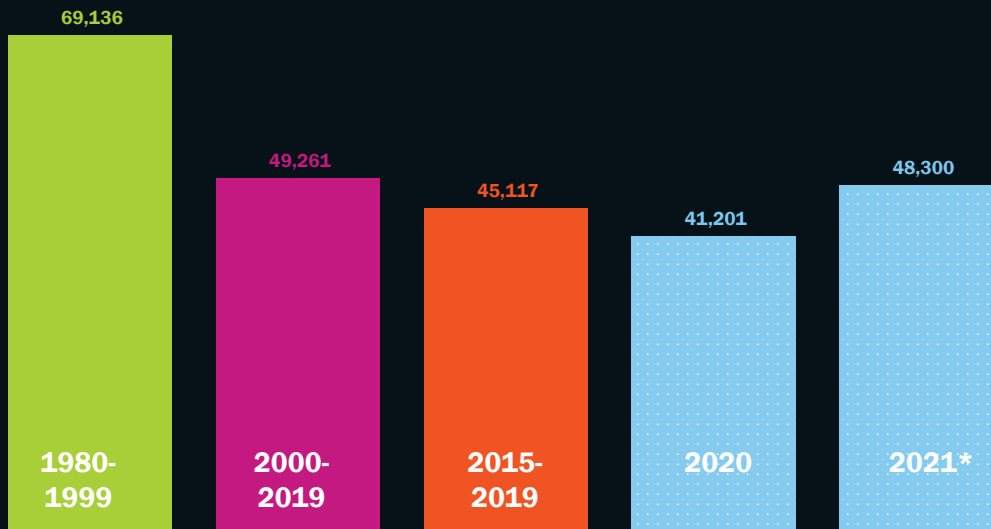


Source: California Policy Lab, see <https://www.capolitylab.org/wp-content/uploads/2021/12/Pandemic-Patterns.-California-is-Seeing-Fewer-Entrances-and-More-Exits.pdf>.

# What Do We Know Today? Housing & Households



## Annual New Units in the SCAG Region Comparing 2020 & 2021 to Previous Periods

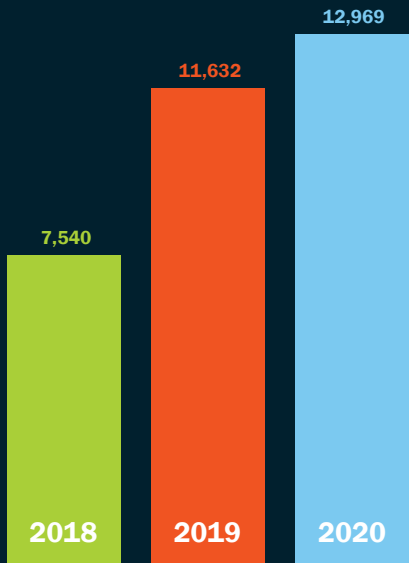


**UCLA CA Forecast:**  
Housing will Increase 17% from 2021 to 2023; Supportive Policy a Major Factor

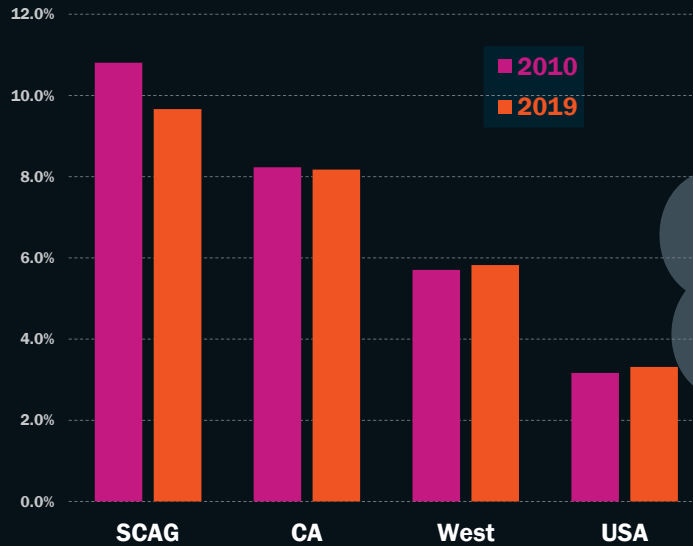
Sources: CIRB New Units from Permits, data available through 11/30/2021 and annualized; UCLA Anderson December 2021 California Forecast

# What Do We Know Today? Housing & Households

## Accessory Dwelling Units (HCD APR Data)



## Household Overcrowding Could Continue to Decrease



**During 2020:**  
 SCAG Region  
 Lost 103,000  
 People But  
 Added 41,000  
 Housing Units

Sources: DOF, CIRB, HCD Annual Progress data, ACS 1-year samples indicating > 1.0 person per room

# Preliminary Growth Projection: "Slower Growth, Steady Improvement"

## Seven Major Inputs

- 1 ▶ Employment Growth
- 2 ▶ Births
- 3 ▶ Deaths
- 4 ▶ Immigration
- 5 ▶ Domestic Migration
- 6 ▶ Labor Force Participation
- 7 ▶ Household Formation (*Headship*)



## Regional Growth Ranges

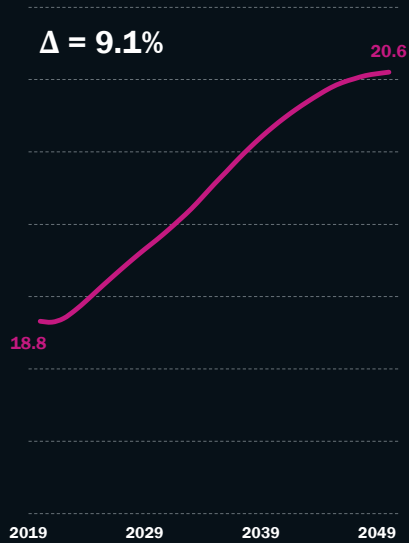
Baseline: Slower Growth, Steady Improvement  
 Low: "Secular Stagnation"  
 High: Robust and Equitable Future Growth Supported by Policy and Technology



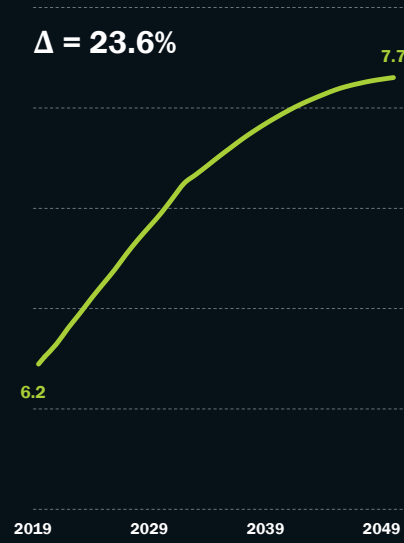
# Preliminary Regional Projections



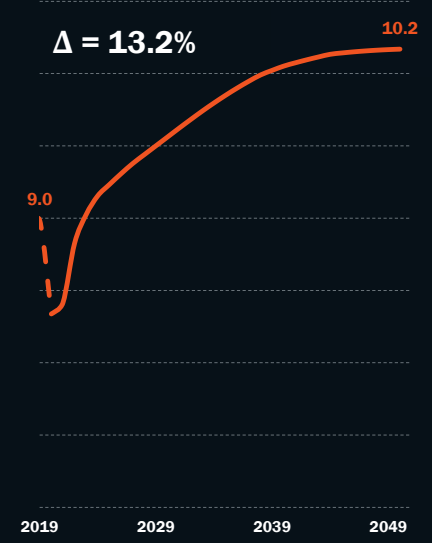
## Population (millions)



## Households (millions)



## Employment (millions)

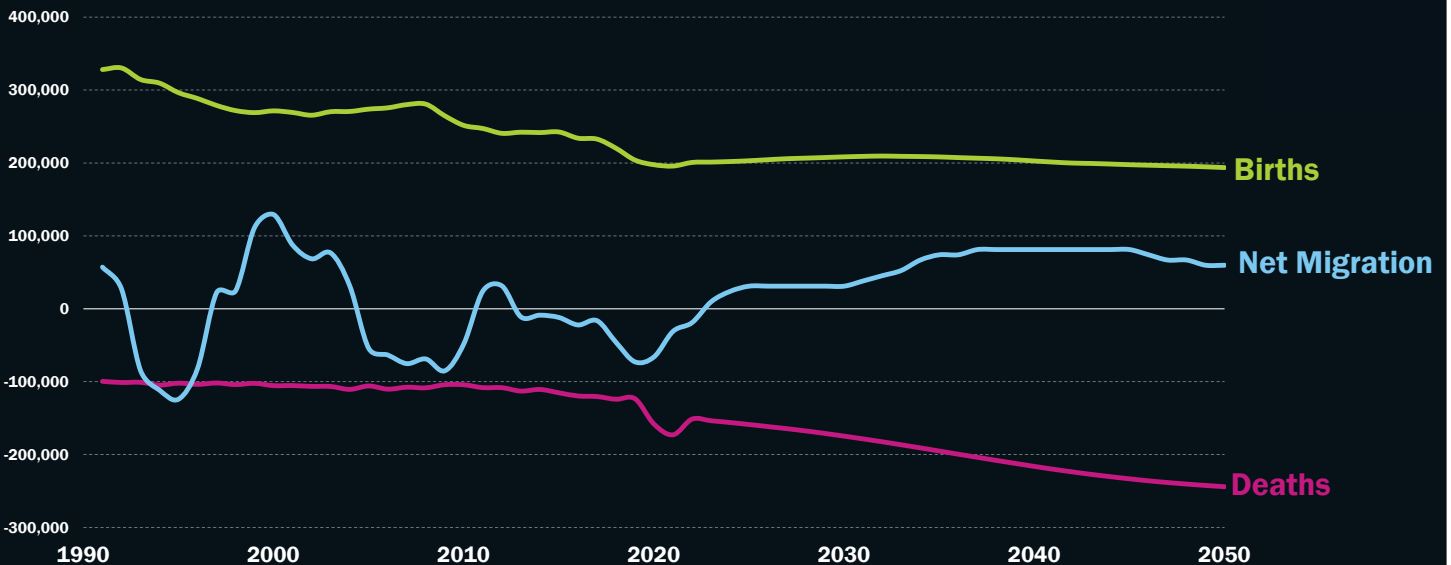


Note: Connect SoCal 2020 projected 19.5% population growth, 27.0% household growth, and 19.8% employment growth from 2016-2045.

# Population Change & Aging



## Components of SCAG Region Population Change

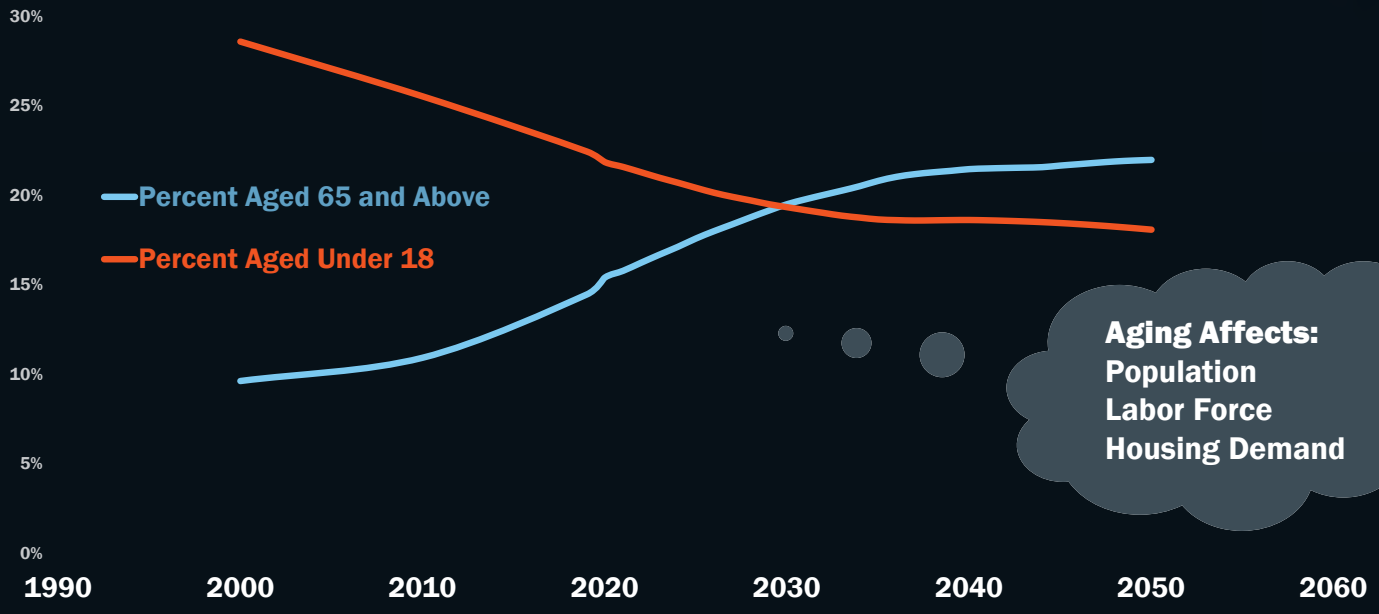


Source: CA DOF (historical) and SCAG (projection). Figures expressed represent total annual population change.

Attachment: PowerPoint Presentation - Connect SoCal 2024 Preliminary Projection [Revision 1] (Connect SoCal 2024 Preliminary Regional and



# Population Change & Aging



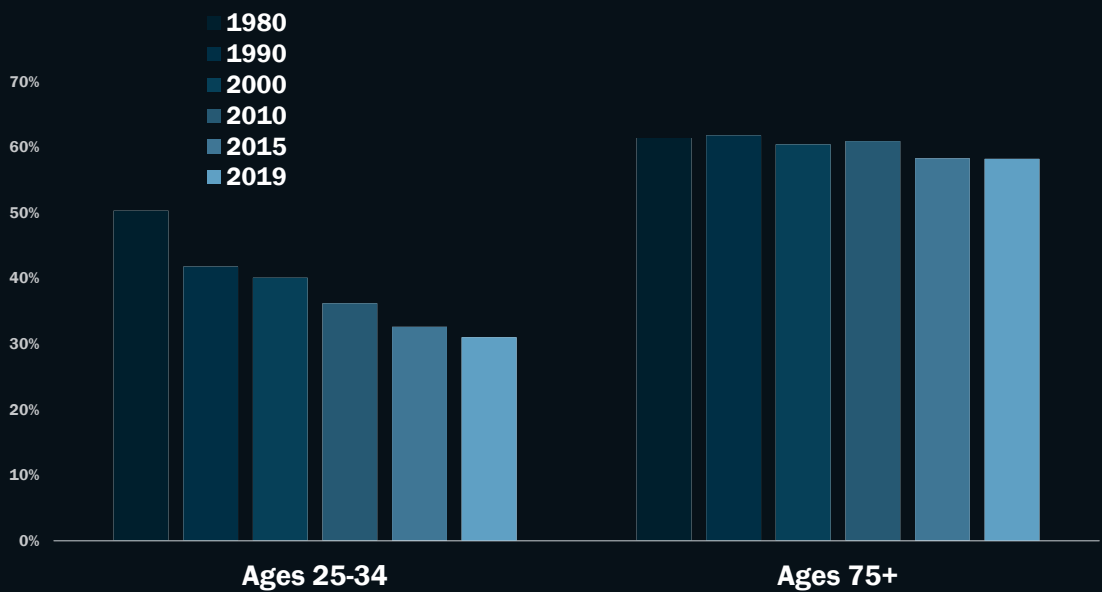
**Aging Affects:**  
Population  
Labor Force  
Housing Demand

Source: CA DOF (historical) and SCAG (projection).

# Generational Differences in Household Formation



Is the drop in household formation beginning to turn around?



**Household Forecast** reflects aging AND expectation that policy helps address *existing housing need*

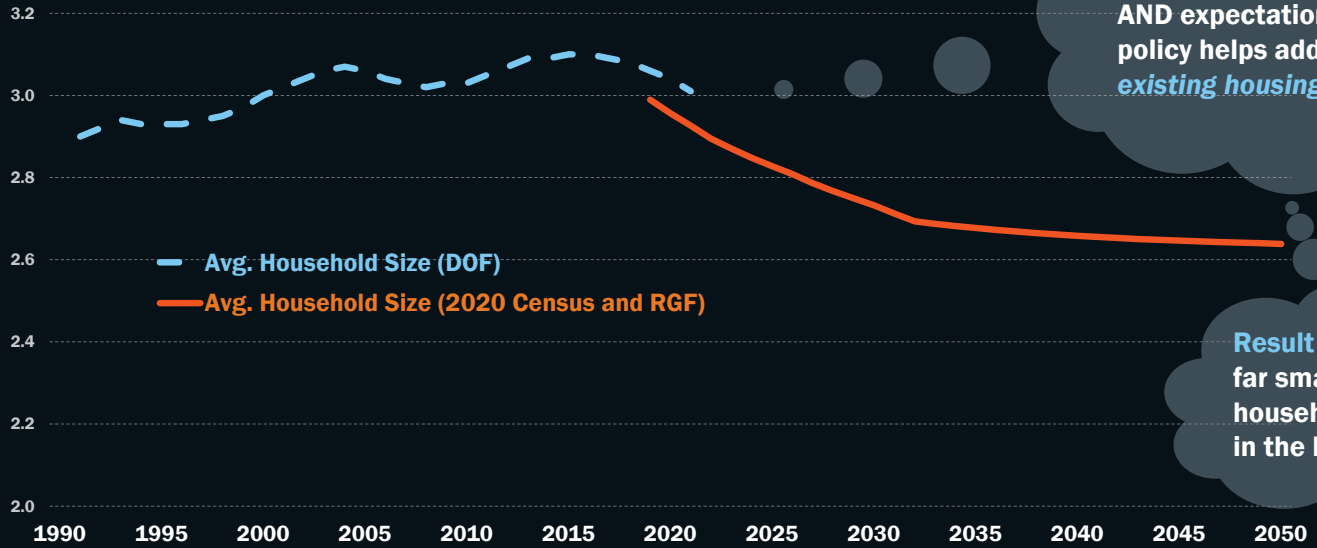
Source: CA DOF and SCAG.

Attachment: PowerPoint Presentation - Connect SoCal 2024 Preliminary Projection [Revision 1] (Connect SoCal 2024 Preliminary Regional and



# Household Formation & Household Size

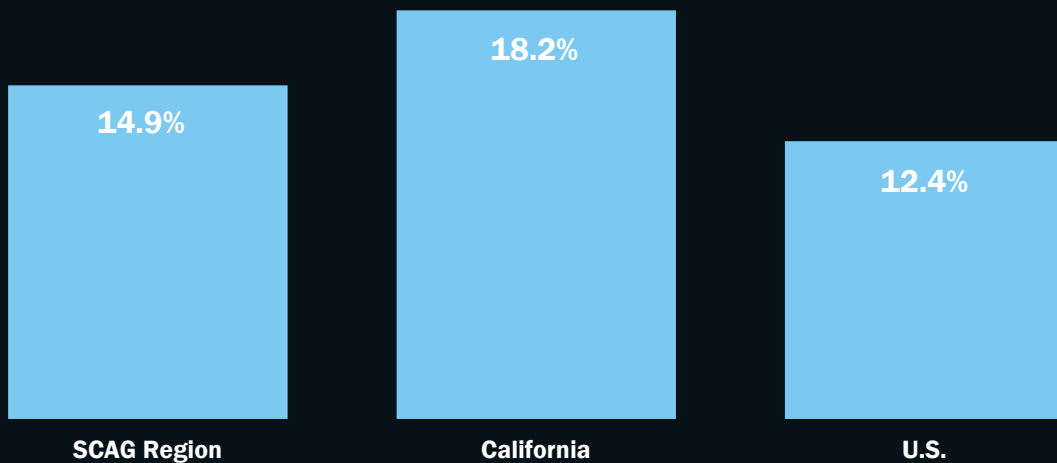
## SCAG Region Average Household Size



Source: CA DOF and SCAG.

# Job Projections– SCAG’s Economic Base

## Growth in Basic Industry Jobs 2019-2050



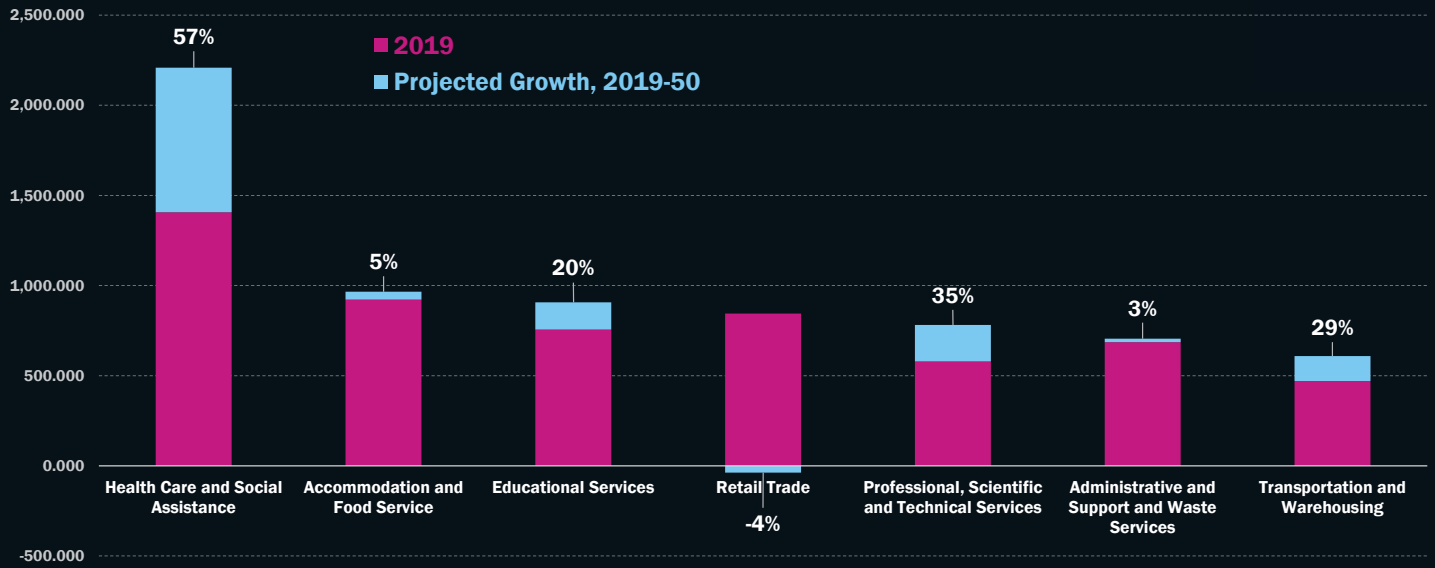
SCAG specializes in sectors which are expected to grow faster than the nation

Source: CCSCE and SCAG.

# Job Projections



## Top Industries in 2050 for the SCAG Region



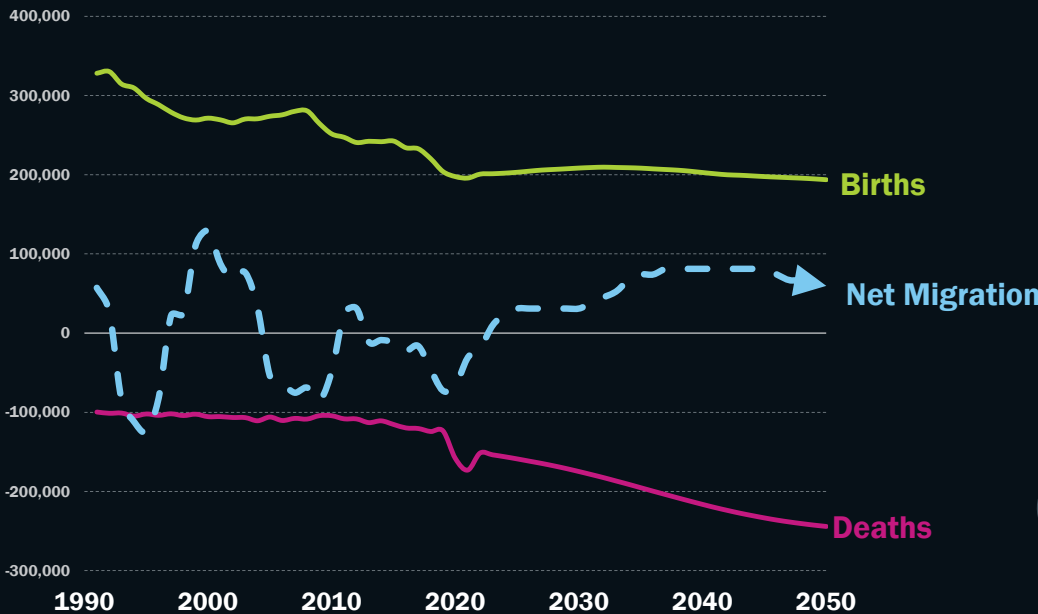
Source: CCSCE and SCAG.

21

# Labor Force: Linking Jobs and Population



## Components of SCAG Region Population Change



Planning for a Region where Southern Californians of all ages are able to live here if they want to

Source: CA DOF and SCAG.

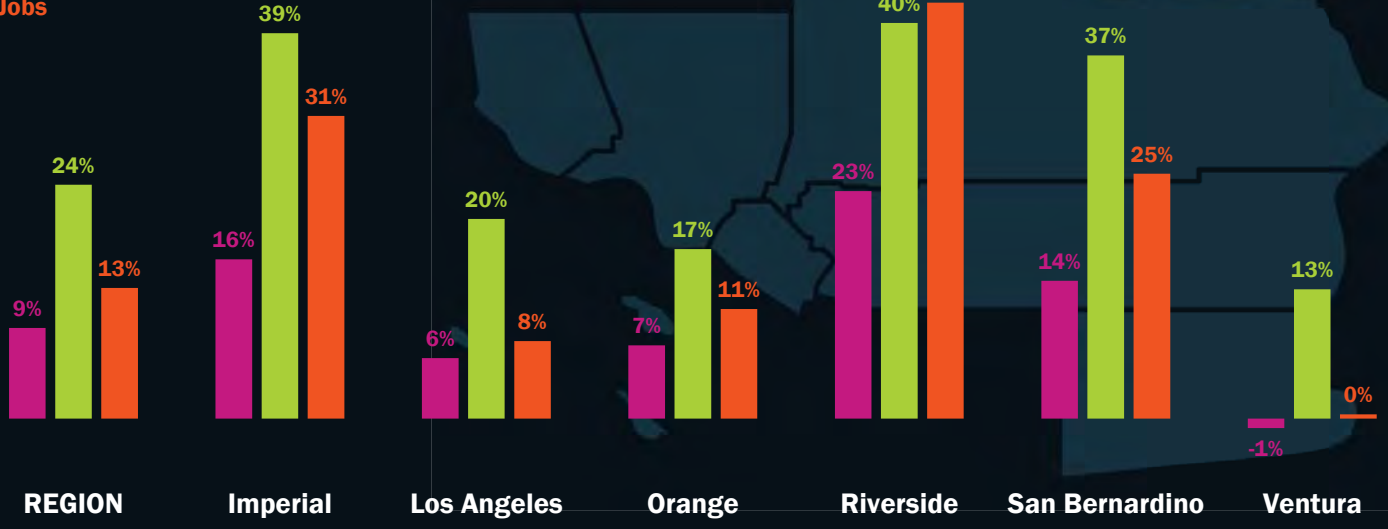
21

Attachment: PowerPoint Presentation - Connect SoCal 2024 Preliminary Projection [Revision 1] (Connect SoCal 2024 Preliminary Regional and

# County Projections

## Percent Change 2019-2050

- Population
- Households
- Jobs



# Next Step: Local Data Exchange

SCAG  
SUSTAINABLE COMMUNITIES AND GROWTH

CONNECT SOCIAL 2024  
The 2024 Regional Transportation Plan/Sustainable Communities Strategy

LOCAL DATA EXCHANGE (LDX) PROCESS  
DATA/MAP BOOK

for the City of  
**ALHAMBRA**

PRELIMINARY | FEBRUARY 2022



Attachment: PowerPoint Presentation - Connect SoCal 2024 Preliminary Projection [Revision 1] (Connect SoCal 2024 Preliminary Regional and

# Connect SoCal 2024 in the Year Ahead

