

# CONNECT SOCAL 2024

The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy  
of the Southern California Association of Governments

# Demographics & Growth Forecast

TECHNICAL REPORT

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## TECHNICAL REPORT

EXECUTIVE SUMMARY	1
INTRODUCTION	1
GROWTH FORECASTING OVERVIEW	3
GROWTH TRENDS IN SOUTHERN CALIFORNIA	9
GROWTH FORECASTING PROCESS & ASSUMPTIONS	24
SCAG GROWTH FORECAST	33
CONCLUSIONS	48
REFERENCES AND ENDNOTES	56

## EXECUTIVE SUMMARY

SCAG's Connect SoCal growth forecast projects growth in population, households, and employment at the regional, county, jurisdictional, and sub-jurisdictional levels to 2050. The growth forecast sets the stage of plan development by asking "who are we planning for?"

The regional and county growth forecasts (TABLE 12) reflect recent and past trends and expert-derived demographic and economic assumptions. In contrast to short-range forecasts, which focus on business cycles and market trends, a 30-year time horizon relies more heavily on births, deaths, migration, and the strength of a region's economic base compared to the nation as a whole.

As part of forecast development, SCAG solicited one-on-one meetings with the region's 197 local jurisdictions to understand their plans for the future. The purpose of this exchange was to integrate local plans into a regional vision which achieves statutory targets and implements regional planning policies set forth by SCAG's Regional Council. This approach ensures the forecast reflects a balance between regional and local expertise as well as a balance between future population, households, and employment.

The forecast projects *Slower Growth, Steady Improvement*, reflecting a substantially lower population growth rate than in prior plans, but also reflecting recent strength in housing production following a shift in state and local policies. This forecast assumes the region is successful in alleviating much of the latent housing demand which has built up in past decades by projecting household growth in excess of the 6th cycle regional housing needs determination of 1,341,827 housing units and also projecting 30 percent higher household growth during the 2020s than the previous Connect SoCal plan. This is crucial for supporting the level of employment growth that is anticipated in Southern California.

In addition, the distribution of population, households, and jobs across the region's six counties projects an improved balance between home and work, and by extension other destinations (e.g., students travel to teachers' workplaces, patrons travel to restaurant servers' workplaces, etc.). The growth vision embedded sustainable growth policies and strategies into the small area forecast which, once reviewed and refined by local jurisdictions, helps achieve statutory targets. While there is inherent uncertainty in the degree and manner in which Southern California will grow by 2050, this data and expert-driven projection provides a foundation for achieving Connect SoCal's vision of a healthy, prosperous, accessible, and connected region for a more resilient and equitable future.

## 1. INTRODUCTION

The regional growth forecast is a foundation of the regional planning process that addresses federal and state statutory responsibilities (Title 23 Code of Federal Regulations (CFR) Part 450.306(b)(5) and California Government Code Section 65080(b)(2)(B)).

In its role as the federally designated Metropolitan Planning Organization (MPO) for Southern California, SCAG must project future (usually 25+ year) housing and transportation for a Regional Transportation Plan (RTP). Conformity with the federal Clean Air Act (42 U.S.C Section 7401 *et seq.*) requires that SCAG use the latest planning assumptions and most recent population and employment estimates. In its role as the Council of Governments (COG) for state planning purposes, SCAG must coordinate RTP development with a statutorily required Sustainable Communities Strategy (SCS). Discussions of population growth, demographic change, housing need, and the sub-regional location of growth are also found in many

other technical reports including Land Use and Communities, Economic Impacts Analysis, Equity, and Congestion Management.

## 1.1 REASONABLY FORESEEABLE FUTURE GROWTH

Beyond Connect SoCal, SCAG's regional growth forecast is used in connection with the Air Quality Management Plan (AQMP), the Federal Transportation Improvement Plan (FTIP), and serves as a component in developing the Regional Housing Needs Assessment (RHNA), which is required every eight years by state law. In addition, it is used by other agencies for long-range regional planning purposes such as the Metropolitan Water District of Southern California and local jurisdictions. As such the growth forecast is a key link between a number of related regional planning activities and answers the question of "who we're planning for."

The regional growth forecast is a balanced, long-term vision for future population, household, and employment growth. The required time horizon is far longer than economic and business cycles, longer than the eight-year RHNA cycle for housing planning, and longer than the time horizon envisioned by many local land use plans. Gauging future outcomes this far into the future is best served by foundational demographic indicators (i.e., births, deaths, and migration) as well as how Southern California compares to the rest of the nation economically.

The Connect SoCal regional growth forecast embraces the uncertainty inherent in long-range forecasting. This is especially relevant as the state's growth trajectory has changed in relation to and independently from the COVID-19 pandemic. The technical tools available for projecting growth are inherently limited; as such, SCAG's process begins by establishing low and high forecast estimates based on models and expert insights to evaluate a range of possible future outcomes. Within this range, the Connect SoCal regional growth forecast considers likely outcomes, local conditions, and SCAG's statutory roles as described above and delivers a single future estimate of growth as required for statutory and transportation modeling purposes.

## 1.2 STATUTE AND GUIDING PRINCIPLES

The statutory authority for the Connect SoCal regional growth forecast is found in the federal Clean Air Act, Section 176(c):

*"[t]he determination of conformity shall be based on the most recent estimates of emissions and such emissions shall be determined from the most recent population, employment, travel, and congestion estimates as determined by the MPO or other agency authorized to make such estimates." (42 USC Section 7506(c)(1)(B)(iii))*

and in California Government Code Section 65080(b)(vii)—also commonly referred to as SB 375—which established the SCS:

*"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 (viii) allow the regional transportation plan to comply with Section 176 of the federal Clean Air Act (42 U.S.C. Sec. 7506)."*

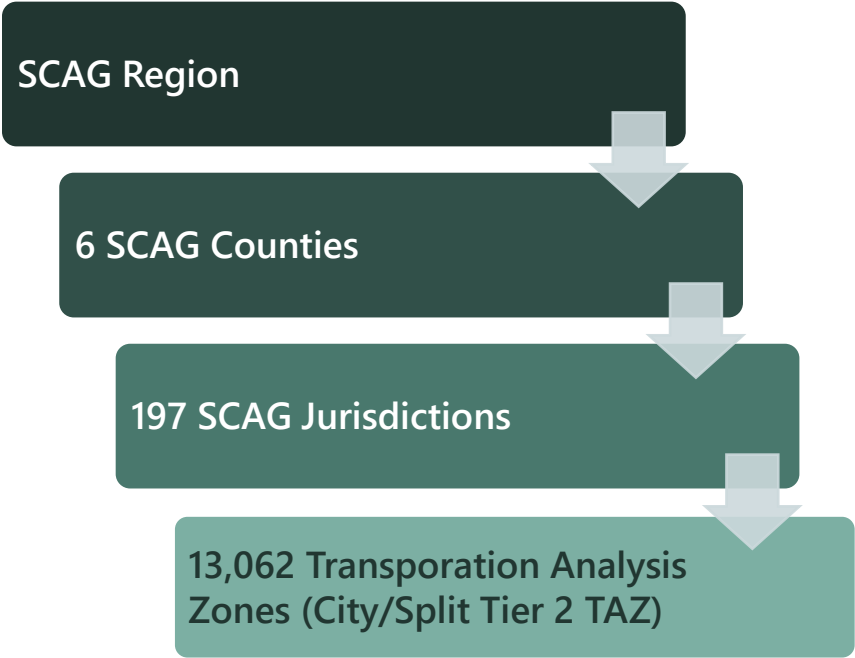
In consultation with the Technical Working Group (TWG), SCAG developed the following growth forecast guiding principles in order to ensure that the regional growth forecast yields a technically robust forecasted regional development pattern which meets its statutory objectives:

- Rooted in local planning policies,
- Steered by a regional growth vision, and
- Aligned with state policy.

## 2. GROWTH FORECASTING OVERVIEW

The regional growth forecast necessarily links regional, national, and global-scale demographic and economic trends with projects and developments taking place in the neighborhoods of local jurisdictions across Southern California.

Figure 1. Key Forecast Levels



Connect SoCal growth forecasting involves four distinct levels (FIGURE 1). Regional and county population, household, and employment forecast totals are used as controls for the smaller areas – meaning that jurisdiction and Transportation Analysis Zone (TAZ-level) projections will sum up to the county and regional levels.

The regional growth forecast generally refers to the population, household, and employment projection for the SCAG Region and its six counties. This begins with a top-down, data and expert-driven process to develop region and county-level projections. These are disaggregated into jurisdiction and TAZ-level projections through the regional growth vision and local review during the Local Data Exchange (LDX) process. Following LDX, updated county and regional totals are assessed to ensure technical robustness and their contribution toward meeting the objectives of the regional growth forecast generally.

The word *forecast* is typically used to imply a likely or expected future outcome. The word *projection* implies an expected or desired outcome given a set of assumptions, or under a given scenario. However, in the regional planning context scenario exercises (projections) are often referred to as forecasts or forecast scenarios. For that reason, throughout this report the terms *forecast* and *projection* will be used interchangeably.

## 2.1 TIMELINE

Table 1. Forecasting timeline and milestones

	Milestone	Date/Period
1	Adopt final 2016-2045 RTP/SCS (“Connect SoCal 2020”).	September 2020
2	Meet with demographic panel of experts to review outside projections and to discuss demographic trends and assumptions.	August 2021
3	Develop the preliminary set of regional and county forecasts for population, household, and employment growth.	February 2022
4	Develop the preliminary set of small area forecasts at the jurisdiction and TAZ-level and release to local jurisdictions for review and comment.	May 2022
5	Meet one-on-one with local jurisdictions to review the preliminary growth forecast at the jurisdiction and TAZ-levels.	March - November 2022
6	Receive final input from local jurisdictions on the preliminary growth forecast and adjust county and regional totals with updated local data.	December 2022
7	Release locally reviewed growth forecast to the Technical Working Group for comment and additional input.	April 2023
8	Release of the draft 2024-2050 RTP/SCS (“Connect SoCal 2024”).	November 2023
9	Scheduled adoption of the final 2024-2050 RTP/SCS (“Connect SoCal 2024”).	April 2024

## 2.2 DEMOGRAPHIC PANEL OF EXPERTS

Producing any long-range projection requires making assumptions in the face of future uncertainty and necessitates using the best available expert opinion to assess the effects of conditions and policies which can change future growth levels. The first major milestone for growth forecast development was the convening of a demographic panel of experts. Over two days in August 2021, fourteen academic scholars and leading practitioners in demographics and economics were invited to review key input assumptions for the regional growth forecast. The panel, SCAG staff, the Population Reference Bureau (PRB), and the Center for the Continuing Study for the California Economy (CCSCE) jointly developed a projection of population, households, and employment for the SCAG Region and its six counties from 2019-2050 for use as Connect SoCal 2024’s preliminary forecast.

## 2.3 REGIONAL-LEVEL PROJECTION SCENARIOS

In addition to a regional baseline, SCAG also developed high and low projection scenarios with input from the expert panel. The purpose of developing projection scenarios is to acknowledge and assess the uncertainties inherent in long-range projection. This provides a strong basis for the allocation of growth to jurisdiction and TAZ-levels and for further Connect SoCal 2024 policy and strategy development.

Panelists were asked to consider the most likely, but also reasonable higher and lower levels of seven key inputs: births, deaths, immigration, domestic migration, labor force participation, household formation, and employment. Those inputs were combined into three balanced future scenarios based on assumptions found in TABLE 8.

- Regional Baseline: *Slower growth, steady improvement*
- Low: *Secular stagnation*
- High: *Robust and equitable future growth supported by policy and technology*

The regional baseline scenario was considered to be the most reasonable outlook. Based on the latest available data and expert panel input, the regional baseline features far slower population growth than Connect SoCal 2020 but includes higher household formation rates and higher per-capita job growth.

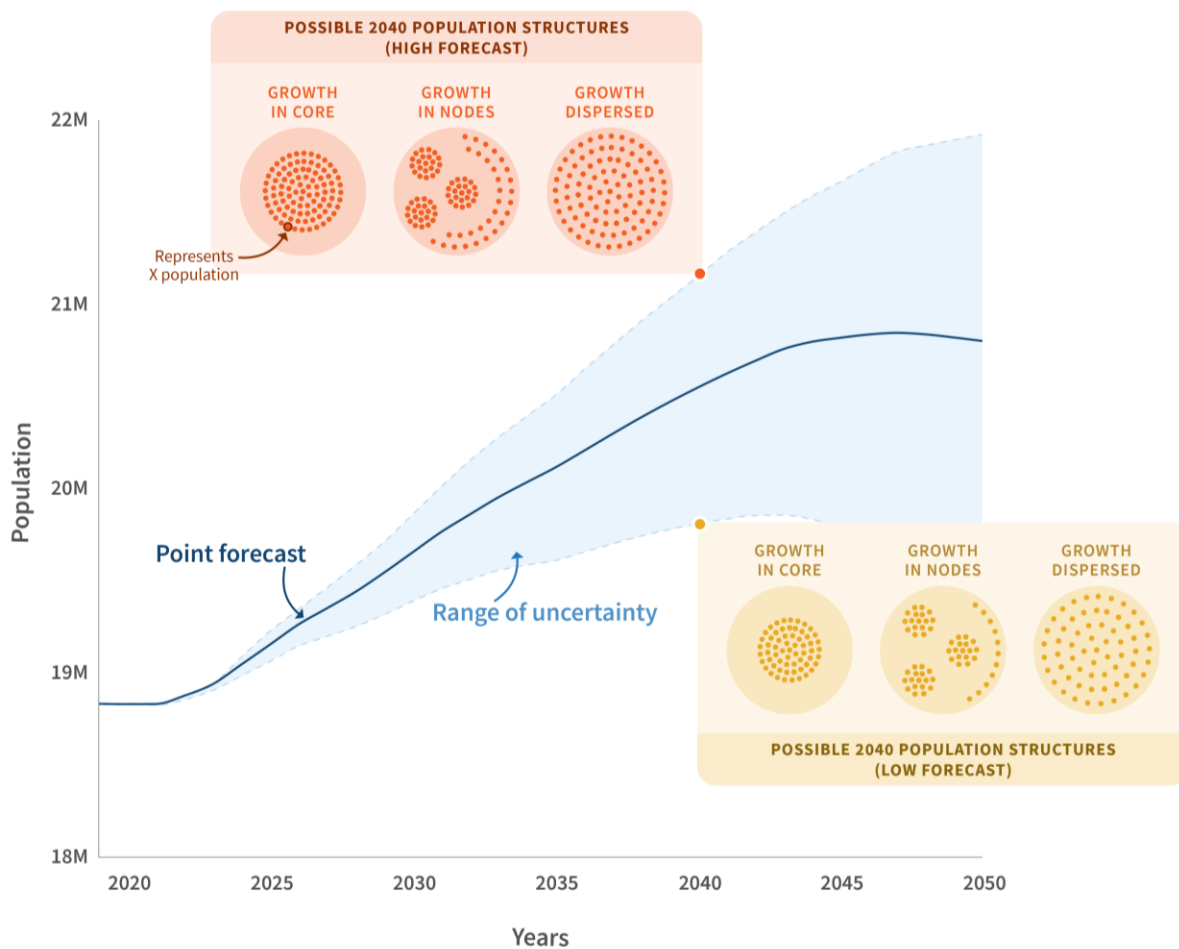
This contrasts with a low scenario characterized by an inability to improve housing supply and affordability which in turn affects migration and results in the region's inability to fulfill the demand for workers, thus weakening the economy. A high scenario with robust economic growth is the result of supportive childcare and healthcare policy, technological improvements, and regional investments that build resilience.

These projection ranges help to understand the plausible range of future growth based on a technical consideration of key model inputs by experts. Long-range growth in an entire region, or within individual neighborhoods, cannot be predicted; however, probabilistically it is usually more likely to be nearer to the middle of a range than to the extremes. Furthermore, this projection is limited in scope to seven key inputs and is not intended as a comprehensive regional scenario planning exercise.

## 2.4 GROWTH PROJECTION AND THE SCS

Connect SoCal's forecasted regional development pattern at the jurisdictional and TAZ-levels reflects both a robust technical projection process and regional policy pursuant to SB 375 targets. Forecasts at smaller, sub-county geographies have all of the uncertainties discussed above, plus an additional source of uncertainty – space. Assessing the likely future pattern of development at a sub-county scale requires even greater consideration of social and technological trends which may yield more compact or fringe development patterns, transportation mode changes, and the complex way in which communities evolve over time. In other words, subregional forecasting has a higher degree of uncertainty than regional forecasting (see Figure 2).

Figure 2. Subregional forecasts include uncertainties over both time and space.



Note: Values in the line graph correspond to the low, baseline, and high regional population projections.

The SCS requires that the regional development pattern include a policy dimension. Forecast uncertainty provides a range within which it is possible to envision sub-county growth patterns which are more reflective of regional plan goals and targets. The Connect SoCal 2024 growth vision, which is built on the technically robust range of future growth, reflects this policy dimension, and also engages local jurisdictions, providing a path toward realizing desired outcomes.

Specifically, a focus of Connect SoCal 2024 is resilience, defined as “the capacity of the SCAG Region’s built, social, economic and natural systems to anticipate and effectively respond to changing conditions, acute shocks, and chronic stressors by creating multiple opportunities for a sustainable, thriving and equitable future”. For more detail, see the Land Use & Communities Technical Report.

## 2.5 LOCAL DATA EXCHANGE

On May 23, 2022, the preliminary small area (i.e., jurisdiction and TAZ) growth forecasts were released to local jurisdictions for their comments and input. This kicked off SCAG’s Local Data Exchange, or LDX process, which provided each local jurisdiction with their growth forecast information as well as several



other data elements both produced by SCAG and other agencies which are related to the development of Connect SoCal 2024. Data/Map Books were generated which included detailed parcel-level land use data, information on growth strategies from Connect SoCal 2020, resource areas, farmland, transportation, geographical boundaries, and the preliminary small area growth forecast. Complete information on the Data/Map Books and the Local Data Exchange process can be found at [scag.ca.gov/local-data-exchange](http://scag.ca.gov/local-data-exchange). All data, including growth forecasts and land use, were also integrated into SCAG's Regional Data Platform (RDP) which provided a credentialed online portal for all local jurisdictions to review and edit data layers.

Between March and November 2022, SCAG staff initiated and completed one-on-one meetings with 164 of the region's 197 local jurisdictions to explain the methods and assumptions behind the preliminary small area growth forecast, as well as to provide an opportunity to review, edit and approve data and provide jurisdiction and TAZ totals for households and employment in 2019, 2035, and 2050. 132 jurisdictions provided input on the growth forecast, while 148 provided input on other data elements such as GIS maps or surveys. For local jurisdictions not providing input, SCAG's preliminary small area forecast for those jurisdictions was used for subsequent Plan development.

## 2.6 A BALANCED FORECAST OF POPULATION, HOUSING, AND JOBS

A chief objective of the Connect SoCal regional growth forecast is to ensure a future balance of population, households, and employment. Southern California has one of the nation's highest household overcrowding rates (defined as more than one person per room), the most people experiencing homelessness, and a generally understood housing shortage. However, the region also has desirable natural amenities and a strong economic base. These contribute to retention of existing population and are a draw for educated, working age in-migrants, both foreign and domestic. As such, Connect SoCal's growth forecast reflects a balanced future.

County-level growth projections provide an underpinning to Connect SoCal development. In order to meet the statutory targets described in Section 1.2 and implement the policies of Connect SoCal, these projections must be regionally balanced. Generally, the forecast anticipates higher rates of household growth in counties with a historical job surplus, recognizing that, like at the regional scale, a county experiences practical limits to employment growth without being able to house the working population. Notably, Riverside County, which has historically provided space to house workers whose jobs are elsewhere, is expected to have a slightly higher rate of job growth than household growth.

The Hoover Index of Concentration (HIOC) (Long and Nucci 1997) provides a simple measure of the relative concentration of population versus employment across subregional geographies. In this instance, a region-level measure is generated for how balanced the resident labor force of each county is with its employment. A value of 0 indicates that everyone lives in the same county they work, while a value of 100 indicates that everyone is a cross-county commuter (TABLE 2).

Table 2. Comparison of growth balance across counties

<b>Resident Labor Force</b>	<b>2000</b>	<b>2019</b>	<b>2050</b>
Imperial	59,000	86,000	110,000
Los Angeles	4,432,000	5,008,000	5,518,000
Orange	1,378,000	1,585,000	1,721,000
Riverside	671,000	1,135,000	1,530,000
San Bernardino	754,000	1,055,000	1,339,000
Ventura	356,000	415,000	435,000
<i>SCAG Region</i>	<i>7,651,000</i>	<i>9,284,000</i>	<i>10,652,000</i>
<b>Total Employment</b>	<b>2000</b>	<b>2019</b>	<b>2050</b>
Imperial	55,000	69,000	91,000
Los Angeles	4,504,000	5,031,000	5,461,000
Orange	1,522,000	1,805,000	2,019,000
Riverside	520,000	847,000	1,185,000
San Bernardino	588,000	860,000	1,145,000
Ventura	325,000	363,000	376,000
<i>SCAG Region</i>	<i>7,515,000</i>	<i>8,976,000</i>	<i>10,276,000</i>
<b>Ratio</b>	<b>2000</b>	<b>2019</b>	<b>2050</b>
Imperial	1.07	1.24	1.21
Los Angeles	0.98	1.00	1.01
Orange	0.91	0.88	0.85
Riverside	1.29	1.34	1.29
San Bernardino	1.28	1.23	1.17
Ventura	1.09	1.15	1.16
<i>SCAG Region</i>	<i>1.02</i>	<i>1.03</i>	<i>1.04</i>
<b>Hoover Index of Concentration (HIOC)</b>			
SCAG Region	4.24	5.16	4.83

Source: 2000 Census, Connect SoCal 2024 Regional Growth Forecast

Note: Figures are rounded to the nearest thousand.

SCAG's HIOC increased from 4.24 in 2000 to 5.16 in 2019 due to the disproportionate growth patterns referenced above. However, by 2050 the SCAG Region's HIOC is expected to drop to 4.83. This indicates that at the county level, a substantial improvement can be expected in terms of jobs-housing balance. While the landscape of working-at-home following the COVID-19 pandemic continues to evolve, the vast majority of work still takes place at a fixed workplace (Figure 10). Additionally, since workplaces are also travel destinations for others (e.g., students going to schools, patrons going to restaurants, etc.), better jobs-housing balance in the region can shorten other types of trips. These county-level projections provide a starting point for an even better-balanced vision of 2050 which will require Regional Planning Policies, Implementation Strategies, and investments in order to achieve.

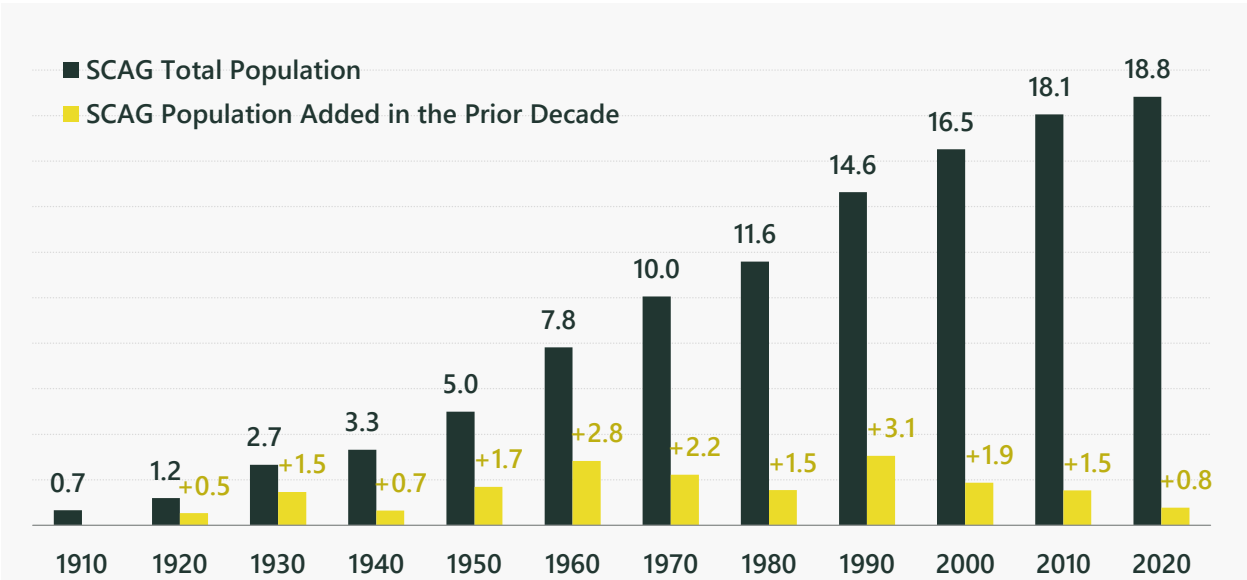
### 3. GROWTH TRENDS IN SOUTHERN CALIFORNIA

#### 3.1 POPULATION

According to Census 2020, which is the most recent official count of record, the population of the SCAG Region as of April 1, 2020, was 18,824,382. This represents 47.6 percent of the 39.5 million people in California and 5.7 percent of the 331 million people in the United States. If the SCAG Region were its own state, it would rank fifth in population just behind New York (20.2 million) and well ahead of Pennsylvania (13.0 million).

Historically, the SCAG Region’s population growth has been rapid, but the annual growth rate has decreased every decade since the 1980s. Nonetheless the region still added 773,000 residents in the last decade – nearly as much as the entire population of Ventura County (FIGURE 3).

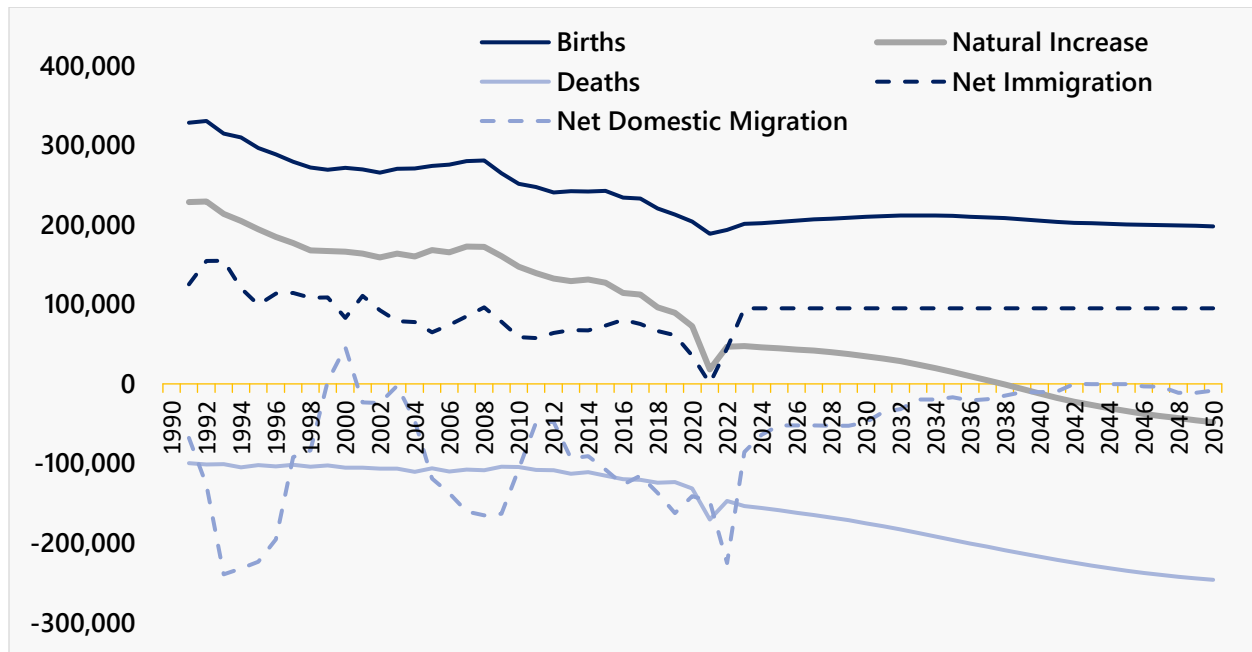
Figure 3: SCAG Region Population and Population Growth (Millions)



Source: 2020 Census P.L.-94 171 and IPUMS NHGIS, University of Minnesota

According to the January 1, 2023, population estimates from the California Department of Finance (DOF) which are the most recently available at the time of this writing, the population of the region has decreased to 18,524,793. This downward trend since 2020 reflects the long-term trend toward slower growth as well as disruptions to growth components related to the COVID-19 pandemic.

Figure 4. Components of Population Change, SCAG Region, 1990-2050



Source: CA DOF E2, SCAG Growth Forecast

The region’s population has declined since its estimated peak of 18,966,261 based on January 2019 DOF estimates. The decrease reflects both the long-term trend toward slower growth as well as three principal factors related to COVID-19, in descending order of magnitude: a near-zero level of net immigration, excess deaths from the pandemic, and increasingly negative net domestic migration. Discontinuities in each of these growth components can be seen in FIGURE 4 in the years immediately following 2020.

The largest impact in terms of magnitude was the near-zero level of foreign immigration to the SCAG Region in 2021—historically, immigration has been nearly as large a growth source as the natural increase of the population (births minus deaths). Over 2016-2019, the SCAG region gained an average of 68,000 residents per year from net immigration.

While the ageing of the population over recent decades has gradually increased the annual number of deaths, mortality spiked in 2020. Between July 2020 and July 2021 there were roughly 48,000 more annual deaths in the region than in the average of the three full years preceding the pandemic. This provides a rudimentary indicator of excess deaths from COVID-19. Births also decreased in excess of their decade-long decline, further lowering any population gains from natural increase.

The final explanation for population decline is based on the net domestic migration trend. Net domestic migration – in-migrants coming to the region minus out-migrants who leave for other places – decreased further during the pandemic. While Southern California has lost more people to other states and counties than it’s gained for 30 of the last 32 years, the population loss from net domestic migration accelerated especially over 2021-2022 and nearly reached the all-time record set in the early 1990s.

At the time of this writing, immigration and domestic migration trends have rebounded substantially and excess deaths from COVID-19 have receded. This can be seen in the rebound in immigration and decrease

in deaths in 2021-2022 in FIGURE 4. Additionally, full-year 2022 data from the U.S. Postal Service Change of Address database show that the level of outflow from the SCAG Region returned to about 70 percent of its pre-pandemic levels, meaning that the region is losing more residents than it was in 2019, but it is consistent with the trend seen since about 2013<sup>1</sup>.

### 3.1.1 NET DOMESTIC MIGRATION

Table 3. Migration in the SCAG Region

SCAG Movers	2017	2021	
SCAG Population who moved	2,292,756	1,822,590	
Moved out-of-region	449,268	382,563	
Moved within region	1,843,488	1,440,027	
Same county	1,576,656	1,034,530	
Different SCAG county	266,832	405,497	
Interregional movers	2017	2021	
Other CA counties - arrivals	122,534	135,633	
Other CA counties - departures	156,679	163,219	
Net exchange w/other CA counties	-34,145	-27,586	
Other US States & Territories - arrivals	198,141	174,149	
Other US States & Territories - departures	272,185	363,100	
Net exchange w/other states and territories	-74,044	-188,951	
Top SCAG county-to-county population flows (2021)	Movers	Movers (Reverse)	Net Flow
Los Angeles → Riverside	32,280	8,189	24,091
Los Angeles → Orange	47,660	23,892	23,768
Los Angeles → San Bernardino	34,150	13,824	20,326
Orange → Riverside	21,127	11,189	9,938
Orange → San Bernardino	6,965	5,373	1,592

Top States for SCAG arrivals (2021)	Persons	Top States for SCAG departures (2021)	Persons
Washington	16,163	Texas	50,067
New York	15,756	Arizona	40,172
Texas	15,409	Nevada	31,094
Arizona	12,451	Washington	27,487
Florida	9,183	Florida	15,937
Illinois	8,698	Oregon	15,384
Oregon	7,359	Idaho	14,862
Colorado	6,518	Colorado	12,511
Nevada	6,515	Georgia	12,137
Massachusetts	6,361	Tennessee	10,504

Source: 2017 and 2021 ACS PUMS 1-Year Estimates

While the near-zero level of immigration in 2020-2021 had the greatest impact on the region’s recent population drop, net domestic migration is a unique indicator in regional planning since it reflects who’s coming and who’s going. Migration is highly correlated with life stage, with the highest levels experienced during young adulthood and the second highest amongst younger senior citizens. People may move across regional boundaries for job opportunities or to find better housing, or may stay due to family connections (Duncombe, Robbins, and Wolf 2001).

TABLE 3 shows SCAG Region migration data from the American Community Survey (ACS) in 2017 and 2021 to help distinguish between the long-term trends and shorter-term aberrations. The number of residents who moved dropped from 2.3 million in 2017 to 1.8 million in 2021. However, it is local moves which appear to be dropping more: the number of out-of-region movers declined modestly, but the number of residents who moved to a different SCAG county increased by more than 50 percent.

Net domestic migration is also bi-directional—despite a net outflow, a large number of people move to Southern California every year. In 2021, 363,000 residents left the SCAG Region for another state, but another 174,000 arrived here from out-of-state. This represents a substantial increase in departures since 2017 (from 272,000) and a modest drop in out-of-state arrivals (198,000). The composition of in-migrants and out-migrants can also differ in terms of age, race, education, and other factors which reflects different reasons for moving (Johnson, Bohn, and Mejia 2017).

Within the SCAG Region, the largest net flows are departures from Los Angeles and Orange counties to Riverside and San Bernardino counties. Also notable is the flow between the two most populous coastal counties in the region: in 2021, 48,000 Angelinos (0.5 percent of LA County’s population) moved to Orange County, but 24,000 residents of Orange County (0.8 percent of Orange County’s total) moved to Los Angeles County.

Discussions of population loss frequently invoke net domestic migration, focusing on those who leave California or the SCAG Region. But the bidirectionality of domestic migration also reflects its role as a community bellwether. Domestic out-migration can reflect the inability of Southern Californians to stay in the communities they call home. It is one economic response to too small of a housing supply, alongside overcrowding, cost burden, and the suppression of life cycle ambitions (including, e.g., family formation and homeownership). The ability to foster resilient social and economic systems within the region’s communities may be at risk depending on the directionality and composition of domestic migration (see, e.g., Myers 2022).

**3.1.2 IMMIGRATION AND RACE**

Table 4. Demographic characteristics of the SCAG Region population, 1990-2050

	1990	2000	2010	2019	2050
Total Population	14,672,000	16,574,000	18,076,000	18,827,000	20,909,000
Annual Natural Increase	217,000	166,000	147,000	89,000	-48,000
Annual Births	318,000	272,000	252,000	213,000	198,000
Annual Deaths	101,000	105,000	104,000	124,000	246,000
Annual Net Migration*	57,000	129,000	-48,000	-101,000	86,000
Annual Net Domestic Migration*	-68,000	46,000	-107,000	-162,000	-9,000

	1990	2000	2010	2019	2050
Annual Net Immigration*	125,000	83,000	59,000	61,000	95,000
<b>Age Composition of Population</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2019</b>	<b>2050</b>
Median Age	30.5	32.3	34.7	37.7	43.8
Life expectancy at birth**	76.5	78.2	80.3	79.9	81.2
Persons Under 16 Years Old (%)	24.2	25.6	22.4	19.7	15.9
Persons 16-64 Years Old (%)	66.1	64.4	66.6	65.9	62.3
Persons 65 Years Old And Over (%)	9.7	9.9	11.0	14.4	21.8
Ratio: Working Age per Senior	6.8	6.5	6.1	4.6	2.9
<b>Race/Ethnicity of Population</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2019</b>	<b>2050</b>
American Indian, non-Hispanic (%)	0.4%	0.4%	0.3%	0.3%	0.3%
Asian, non-Hispanic (%)	8.8%	10.4%	12.0%	13.8%	18.0%
Black, non-Hispanic (%)	8.0%	7.4%	6.5%	6.1%	4.9%
Hispanic (%)	33.1%	40.6%	45.3%	46.6%	48.6%
Two+ races or other race, NH (%)^		1.5%	2.3%	3.3%	4.2%
Pacific Islander, non-Hispanic (%)^		0.3%	0.2%	0.2%	0.3%
White, non-Hispanic (%)	49.7%	39.6%	33.4%	29.8%	23.6%
	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2019</b>	<b>2050</b>
Average Household Size	2.91	3.01	3.03	2.99	2.63

Source: CA DOF E2, SCAG Growth Forecast, NHGIS, IHME, Census 2020 P.L.-94-171.

Note: Values may not sum due to rounding.

\* 1990 migration data unavailable, 1991 reported.

\*\*2019 life expectancy not available, 2020 reported. 1990 SCAG Region life expectancy not available, California (statewide) reported.

^ Race/ethnicity category not reported separately in 1990.

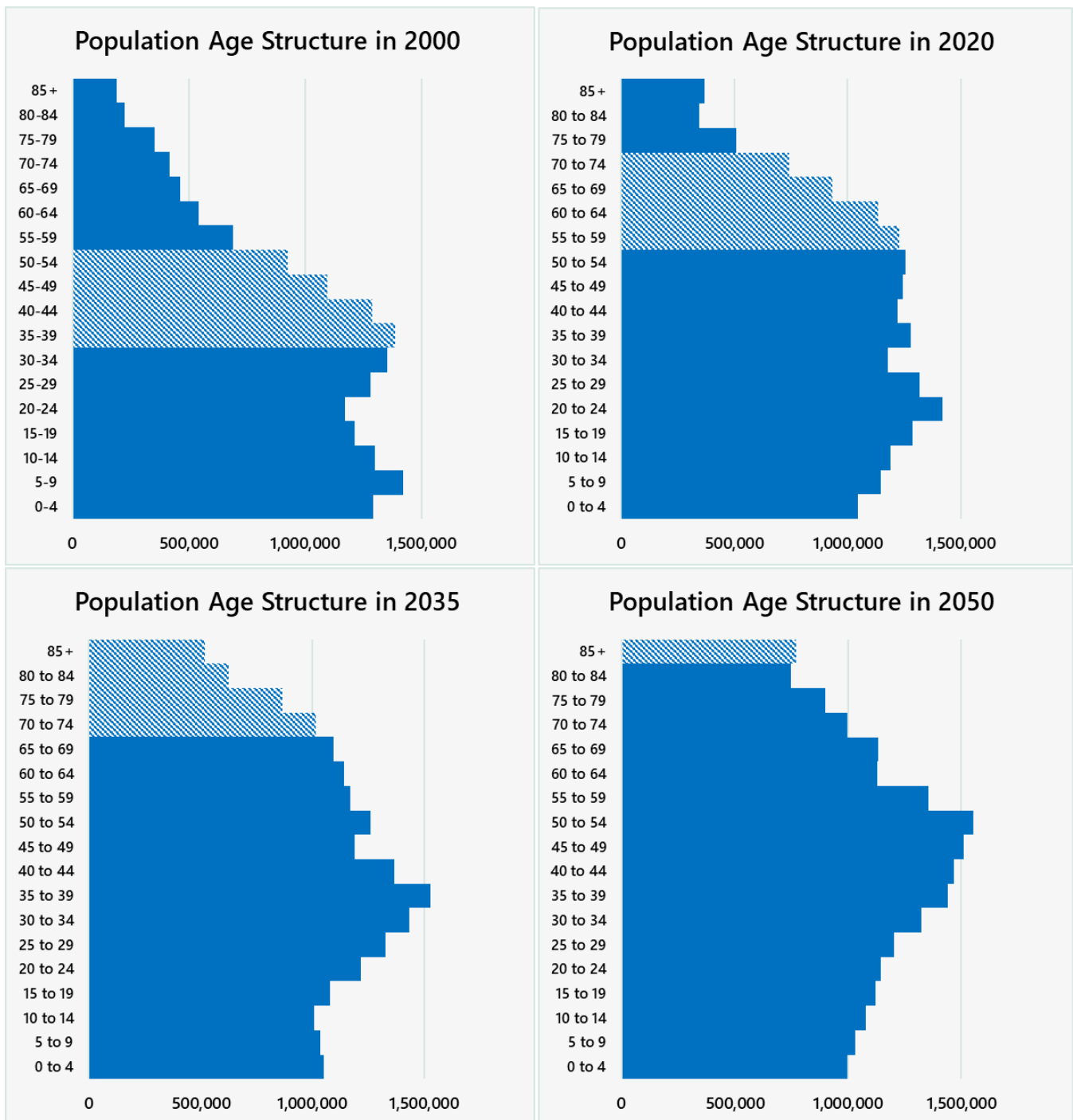
Southern California is among the most racially diverse regions in the country. Disparate access to opportunities such as affordable housing, education, and healthcare has been a historically embedded and for many, a currently experienced, inequity in the region. Additional discussion can be found in the Equity Analysis and Housing Technical Reports.

Of particular note related to demographic projection is the region's age structure by race/ethnicity: the median age in 2019 of the White, non-Hispanic population was 48.0 compared to 33.9 for all other categories (i.e., people of color, see Section 2.3 of the Equity Technical Report). Rooted in historically and spatially embedded inequities, indicators such as household overcrowding and exposure to pollutants are typically higher for people of color; because of the markedly younger age structure for people of color, more children will also be disproportionately impacted by this regional inequity.

Given the younger non-White population and continued slow but steady levels of international migration, the region is expected to continue to be a home to a wide range of racial/ethnic groups. The groups whose share of the region are projected to grow by 2050 are (in descending order) non-Hispanic Asian, non-Hispanic two or more races or other race, non-Hispanic Native Hawaiian/Pacific Islander, and Hispanic/Latino (TABLE 4).

### 3.1.3 AN AGING POPULATION

Figure 5. SCAG Region population by age, 2000-2050



Source: 2000 Census, SCAG Growth Forecast. Baby Boomer generation (born 1946-1964) hatched.

As a result of long-term local, national, and global trends toward declining birth rates and longer life expectancy (excluding the COVID-19 pandemic years), population aging is not a new issue for Southern California. However, the pace of aging is faster in this forecast than in Connect SoCal 2020. The current



age structure, coupled with low fertility rates and moderate net migration, leads to dramatic population ageing by 2050. This has implications for population growth, labor force composition, and housing demand.

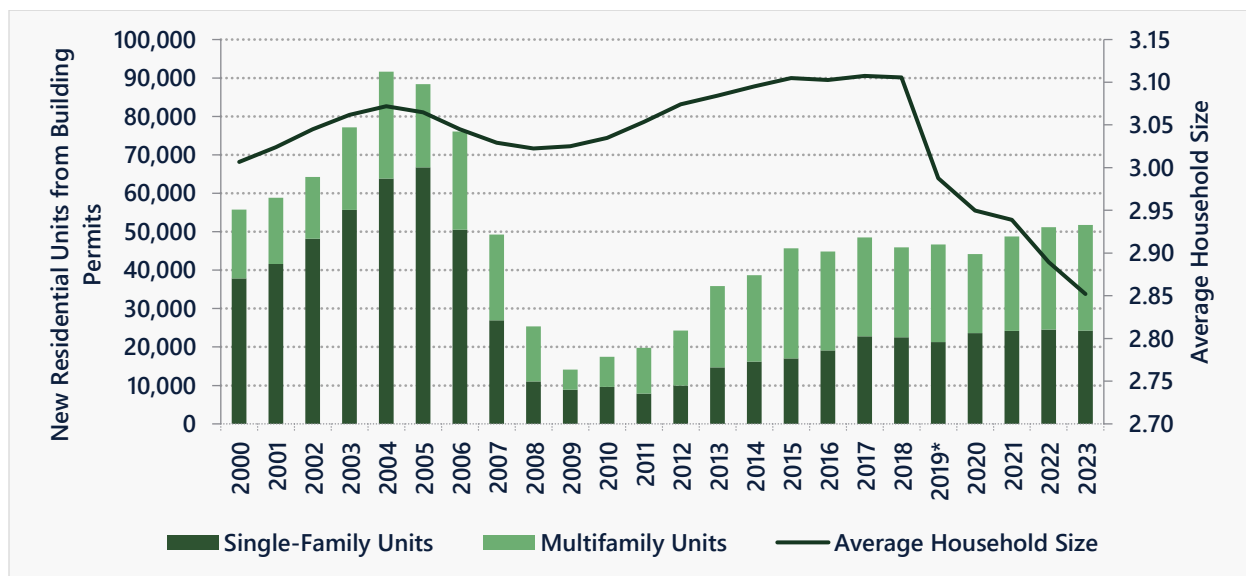
The child population, ages 0-17, in the SCAG Region is expected to decrease between 2019 and 2050—both as a share of the total population (22.5 percent to 18.1 percent) and in absolute number (4.2 million to 3.8 million). This decline will be driven, largely, by low birth rates. The population, ages 18-64, is expected to grow slightly (11.9 million to 12.6 million) but decline in share (63.1 percent to 60.1 percent), and the population ages 65 and older is expected to grow rapidly both in number (2.7 million to 4.5 million) and share (14.4 percent to 21.7 percent). Within the oldest age groups, the population ages 85 and older is expected to more than double between 2019 and 2050.

This trend is nonlinear over the projection horizon. By 2035, all but the youngest Baby Boomers will be over age 75, Generation X will be at or approaching conventional retirement age, and most Millennials and Gen Zs will be in prime working age (16-64), but both will have aged out of prime childbearing age (20-44). Between 2035 and 2050, mortality begins to be a drag on population growth, and with most population change coming from in-migration of people of working age, the age structure actually gets slightly younger on the whole.

Despite recent slowdowns in population growth, SCAG’s population projection considers long-range growth in the context of housing and employment growth, too. Over the same three years where the region’s population declined (2021-2023), 152,000 new housing units were built in Southern California—slightly exceeding every three-year period since 2005-2007 (FIGURE 6). By 2022 regional employment had also matched its 2019 pre-COVID peak—which was 447,000 jobs greater than at the 2016 base year of the last Connect SoCal plan (FIGURE 7).

### 3.2 HOUSEHOLDS

Figure 6. New Residential Units and Average Household Size, SCAG Region, 2000-2023



Source: CA DOF E-5 Household Size and US Census Building Permit Survey New Residential Units from Permits. \*2019 household size uses SCAG Growth Forecast in lieu of DOF to benchmark to Census 2020.

Household growth is affected by a variety of factors, but some basic patterns of household formation vary throughout the life course. Household formation rates, the percent of members of an age group who are the head of a household, tend to be lowest at youngest ages as youth and young adults stay with their families or live with roommates. Younger age household formation rates have been falling for decades as the traditional markers of 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, and more stable at older ages. In the SCAG Region, household formation rates for most groups and overall hit a low point in the late 2010s and rose slightly in 2021, the most recent year for which data are available.

Table 5. Household Formation (Headship) Rates in the SCAG Region, 1990-2050

Headship by Age	1990	2000	2010	2015	2019	2021	2035	2050	Past Change (1990-2019)	Future Change (2019-2050)
15-24	11.0%	9.9%	7.1%	6.4%	6.1%	6.3%	6.3%	6.1%	-4.9%	0.0%
25-34	41.8%	40.1%	36.6%	32.6%	32.2%	33.8%	38.6%	39.1%	-9.5%	6.8%
35-44	52.7%	50.4%	49.3%	46.5%	47.5%	47.4%	49.7%	49.9%	-5.2%	2.3%
45-54	56.9%	54.6%	53.4%	51.1%	51.9%	51.5%	52.9%	53.0%	-5.0%	1.2%
55-64	58.3%	56.3%	54.9%	53.0%	53.7%	53.4%	52.9%	53.2%	-4.6%	-0.6%
65-74	61.1%	58.5%	56.8%	54.8%	56.4%	55.5%	53.9%	52.9%	-4.7%	-3.4%
75+	61.8%	60.4%	61.6%	58.3%	58.5%	58.4%	56.1%	53.3%	-3.3%	-5.2%
Total	43.7%	43.1%	41.8%	40.2%	41.2%	41.7%	44.4%	44.8%	-2.5%	3.6%

Source: Decennial Census, ACS PUMS 1-Year Estimates, and SCAG Growth Forecast

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, the number of total households would be expected to increase by more than 26 percent, compared with 11 percent total 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 demand exceeds supply. Children are more likely to continue living with their parents into adulthood. Housing construction dropped considerably in the wake of the Great Recession, and the region experienced housing shortages that pushed household formation rates down. Nevertheless, recent changes in state housing policy are aimed at increasing housing supply.

Household sizes tend to increase in the years following low housing production. Housing production was especially low over 2008-2013 as a result of the Great Recession—household sizes plateaued at around 3.1 and began to decline substantially thereafter. This is related to the population growth slowdown coupled with relatively robust housing production, in addition to new Census 2020 data indicating more housing units in the region than were previously known to exist. The Census' increase in housing unit count is thought to be due at least in part to improved identification of new or non-permitted structures and housing conversions such as accessory dwelling units (ADUs).

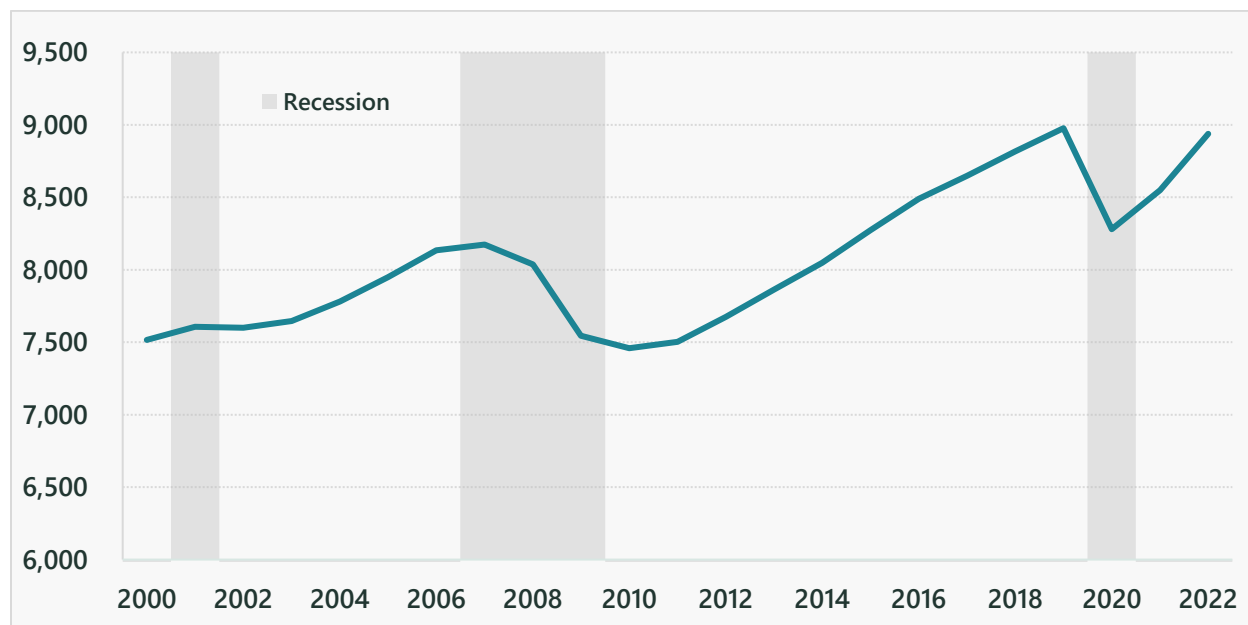
Households, which this forecast projects alongside population and employment, are also commonly referred to as occupied housing units (see, e.g., State of California Department of Finance 2019).

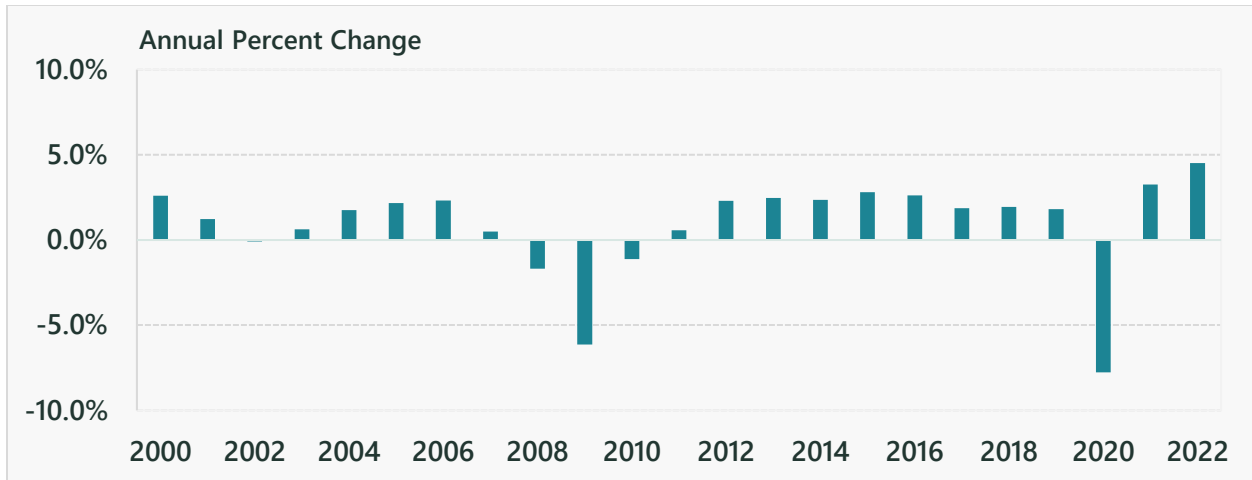
Permit data indicate a relatively consistent increase in new housing units since the region’s low point of 2009. The 51,770 new units permitted in the region in 2023 reflect a higher number of new units than at any single year since 2006. This data source is thought to undercount ADU production since ADUs may be classified as an addition or alteration rather than a new housing unit. A newly available data series from the Department of Housing and Community Development show a rapid rise in the region in recent years and over 11,000 ADUs in 2021. This suggests that total new unit construction in recent years is likely even higher than shown in FIGURE 6.

### 3.3 EMPLOYMENT

Since 2000, the SCAG Region has faced three recessions: The eight-month “dot-com bubble” recession in 2001, the Great Recession of 2008, and the COVID recession. During the recovery from the Great Recession (2010-2019), Southern California experienced over 20 percent job growth, adding 1.5 million jobs (FIGURE 7). During this time, the unemployment rate dropped from 12.5 percent to 4.2 percent (FIGURE 8). When the COVID-19 pandemic struck in 2020, these job gains evaporated in a matter of months. Between February and May 2020, the region lost 1.9 million jobs, and the unemployment rate reached an historic high of 17.3 percent. However, by 2022 regional employment returned to its pre-pandemic level of 8.9 million and the unemployment rate dropped to 4.0 percent, a testament to the resilience of the SCAG Region economy.

Figure 7. Employment (in Thousands) and Annual Change in the SCAG Region, 1990-2022

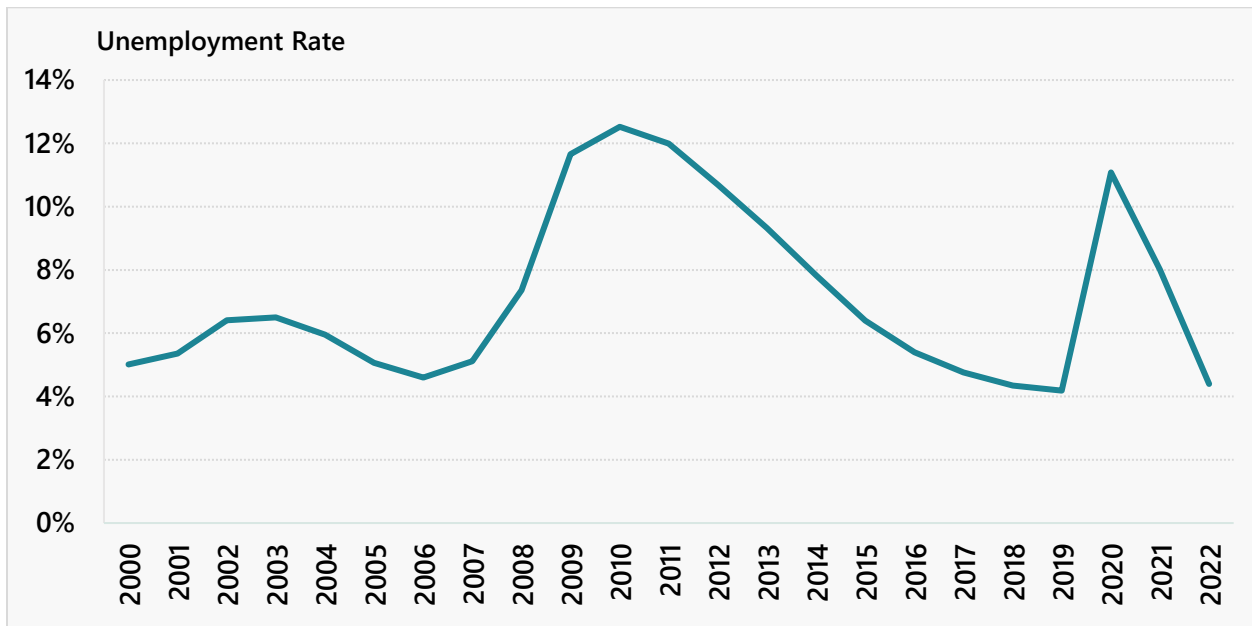


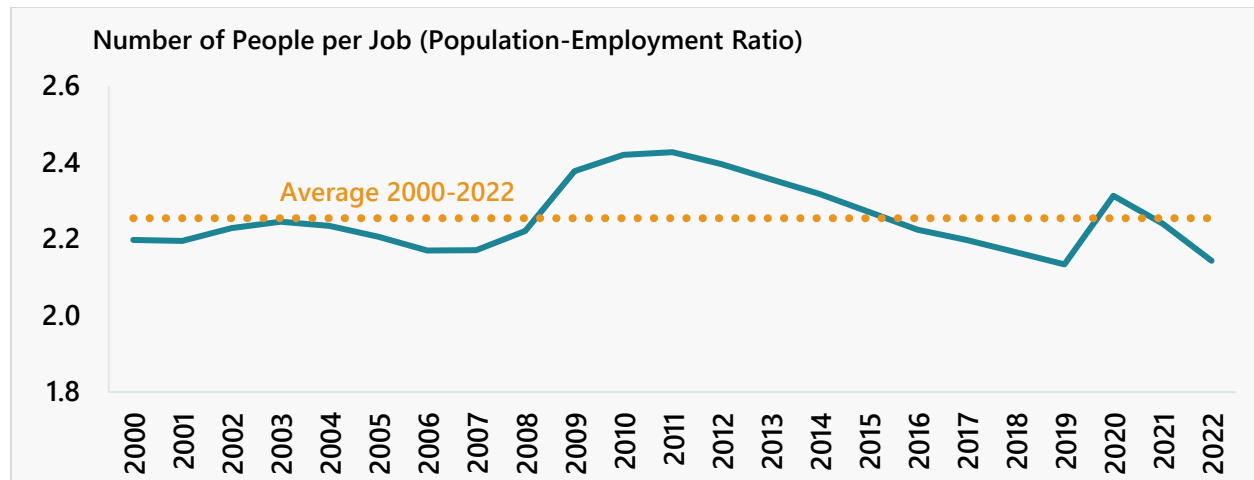


Source: CA EDD and SCAG Growth Forecast

The population-employment (P:E) ratio measures the relationship between the number of people of all ages in the population and the number of jobs available. A smaller P:E ratio reflects a tighter labor market while a higher P:E ratio reflects more people per job, or fewer jobs providing for more people. The P:E ratio fluctuates around business cycles and its long-term level is considered in developing a balanced regional forecast because it reflects a balance between population and jobs. FIGURE 8 plots the annual P:E ratio since 2000 and its historic average (since 2000). Between 2016 and 2019, employment was growing and the P:E ratio declined. The P:E ratio increased dramatically during the pandemic with the sudden and significant loss of jobs. The 2022 P:E ratio of 2.14 nearly reached its pre-pandemic low of 2.13 and suggests that in a high-cost region like Southern California, labor force participation is expected to stay relatively high even through economic disruptions.

Figure 8. Unemployment Rate and Population-Employment Ratio in SCAG Region, 1990-2022





Source: CA EDD and SCAG Growth Forecast

High labor force participation has mitigated the impact of the population slowdown of recent years, which may allow job growth in the region to slightly outpace the nation as a whole. However, given that labor force participation drops precipitously for older seniors, even delayed retirement will not maintain the region’s home-grown labor force, particularly into the later years of the forecast. There can be a degree of job growth without population growth, but at a certain point birth, migration, and immigration become a significant constraint.

### 3.3.1 INDUSTRIAL CHANGE

While short and medium-term employment forecasts reflect business cycles, long-range employment projections such as Connect SoCal’s reflect broader shifts in the nature of the economy—specifically which industries are expected to grow overall and in which industries the SCAG Region has a comparative advantage.

Table 6. Regional employment by industry sector, 2000-2050

SCAG	NAICS	2000		2022		2050		Past Change (2000-2022)	Future Change (2022-2050)	Average Wage
		Jobs (1000s)	Pct. Of Total	Jobs (1000s)	Pct. Of Total	Jobs (1000s)	Pct. Of Total			
Total Farm	11	74	1.0%	59	0.7%	66	0.6%	-20.6%	11.3%	\$35,683
Natural Resources and Mining	21	5	0.1%	5	0.1%	7	0.1%	-0.5%	48.8%	\$92,002
Utilities	22	42	0.6%	47	0.5%	48	0.5%	12.2%	1.7%	\$126,972
Construction	23	366	4.9%	473	5.3%	621	6.0%	29.2%	31.2%	\$73,729
Manufacturing	31	1,019	13.6%	612	6.8%	706	6.9%	-39.9%	153%	\$89,043
Wholesale Trade	42	367	4.9%	383	4.3%	480	4.7%	4.3%	25.3%	\$85,719
Retail Trade	44	763	10.1%	842	9.4%	844	8.2%	10.5%	0.1%	\$51,590
Transportation and Warehousing	48	322	4.3%	528	5.9%	590	5.7%	63.9%	11.8%	\$60,705
Information	51	327	4.4%	284	3.2%	381	3.7%	-13.1%	34.0%	\$75,648
Finance and Insurance	52	271	3.6%	252	2.8%	220	2.1%	-7.2%	-12.5%	\$128,455
Real Estate and Rental and Leasing	53	149	2.0%	180	2.0%	184	1.8%	21.4%	2.0%	\$74,949
Professional, Scientific & Tech Svcs	54	427	5.7%	627	7.0%	732	7.1%	46.8%	16.7%	\$104,045
Mgmt of Companies & Enterprises	55	150	2.0%	119	1.3%	125	1.2%	-20.9%	4.9%	\$108,824
Admin and Support; Waste Svcs	56	578	7.7%	679	7.6%	665	6.5%	17.6%	-2.2%	\$52,280
Educational Services	61	635	8.5%	737	8.2%	775	7.5%	16.0%	5.2%	\$63,508
Health Care and Social Assistance	62	836	11.1%	1,498	16.8%	1,914	18.6%	79.1%	27.8%	\$57,291
Arts, Entertainment, and Recreation	71	130	1.7%	188	2.1%	255	2.5%	44.5%	35.8%	\$65,607
Accommodation and Food Service	72	545	7.2%	832	9.3%	938	9.1%	52.7%	12.8%	\$32,002
Other Services	81	293	3.9%	329	3.7%	373	3.6%	12.3%	13.4%	\$48,530
Public Administration	92	215	2.9%	269	3.0%	355	3.5%	24.6%	32.2%	\$92,390
<b>Total, All Industries</b>	<b>10</b>	<b>7,515</b>		<b>8,937</b>		<b>10,276</b>		<b>0.79% (ann.)</b>	<b>0.50% (ann.)</b>	<b>\$67,919</b>
Entropy Index			0.91		0.90		0.89			

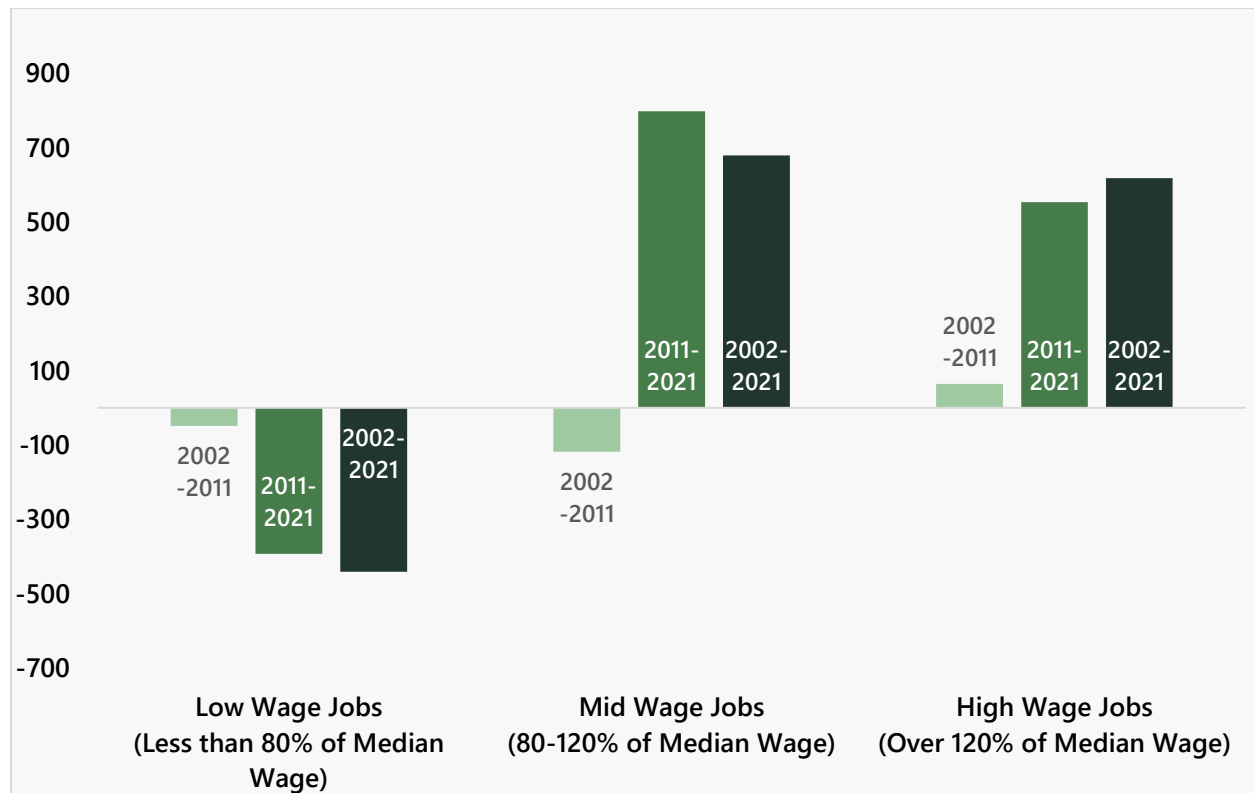
Source: CA EDD, SCAG Growth Forecast. Notes: \*Average wage is Bureau of Labor Statistics (BLS) QW1 2022, 3rd quarter

Since 2000, SCAG Region employment in the following four sectors has grown by 45 percent or more:

- Health Care and Social Assistance (+ 79 percent),
- Transportation and Warehousing (+ 64 percent),
- Accommodation and Food Service (+ 53 percent), and
- Professional, Scientific, and Technical Services (+ 47 percent).

These four sectors alone added 1.35 million jobs between 2000 and 2022, representing nearly 95 percent of the 1.43 million jobs added during this time.

Figure 9. Change in employment by wage level in the SCAG Region, 2002-2021 (Thousands of Jobs)



Source: OEWS 2022, 2012, and 2003. Median wage computed for all occupation categories across all SCAG counties. Wage categories based on Vital Signs, Metropolitan Transportation Commission, <https://www.vitalsigns.mtc.ca.gov/jobs-wage-level>

Table 7. Wage categories based on hourly wages in the SCAG Region

	2002		2012		2022	
	Min	Max	Min	Max	Min	Max
<b>Nominal Values</b>						
Low Wage	\$7.22	\$11.41	\$8.88	\$14.31	\$15.12	\$18.29
Mid Wage	\$11.50	\$17.14	\$14.38	\$21.48	\$18.32	\$27.44

	2002		2012		2022	
	Min	Max	Min	Max	Min	Max
High Wage	\$17.18	\$66.95	\$21.55	\$88.68	\$27.46	\$96.23
Median Wage	\$14.28		\$17.95		\$22.87	
<b>Constant 2022\$</b>						
Low Wage	\$11.75	\$18.56	\$11.32	\$18.24	\$15.12	\$18.29
Mid Wage	\$18.71	\$27.89	\$18.33	\$27.38	\$18.32	\$27.44
High Wage	\$27.95	\$108.93	\$27.47	\$113.05	\$27.46	\$96.23
Median Wage	\$23.24		\$22.88		\$22.87	

Source: OEWS 2003, 2012, 2023. Consumer price index (CPI) data from the Federal Reserve Bank of Minneapolis used to generate constant 2022\$. Note: Median wage is the employment-weighted average median wage across the six SCAG counties.

The structure of the regional economy has transitioned since 2002 in terms of the types of occupations in the region. Compared to 2002 –the low point of the dot-com bubble recession –the share of mid- and high- wage jobs has grown, while the share of low-wage jobs has decreased. FIGURE 9 compares job growth among low-, mid-, and high-wage occupations. Wage categories are defined as follows:

- Low-wage occupations are jobs earning wages below 80 percent of the regional median wage, for example, retail salespersons, cashiers, waiters and waitresses, and home health care aids.
- Mid-wage occupations are jobs earning wages between 80 and 120 percent of the regional median wage, and include occupations such as truck drivers, office and administrative assistants, and maintenance and repair workers.
- High wage occupations are jobs with wages exceeding 120 percent of the regional median wage.

In constant 2022 dollars, the median wage in the SCAG Region was \$23.23 in 2002, \$22.88 in 2012, and \$22.87 in 2022. TABLE 7 summarizes the wage ranges for each category.

The greatest change in the mix of jobs in the region occurred between 2011 and 2021—between the Great Recession and the Pandemic Recession. Mid-wage jobs increased by 56 percent (798,000) and high wage jobs increased by over 25 percent (553,000 jobs), while the number of low-wage jobs decreased by 16 percent (393,000 jobs). These observations are consistent with increased automation in lower-skilled, lower-pay jobs and consistent with the observation that in-migrants to the region historically tended to have higher education levels (Johnson, Perez, and Mejia 2021). As artificial intelligence (AI) materializes in the workforce, these trends are likely to continue. Economists see AI disrupting the workforce and “uplifting for the middle class” through drastic increases in productivity (World Economic Forum 2023).

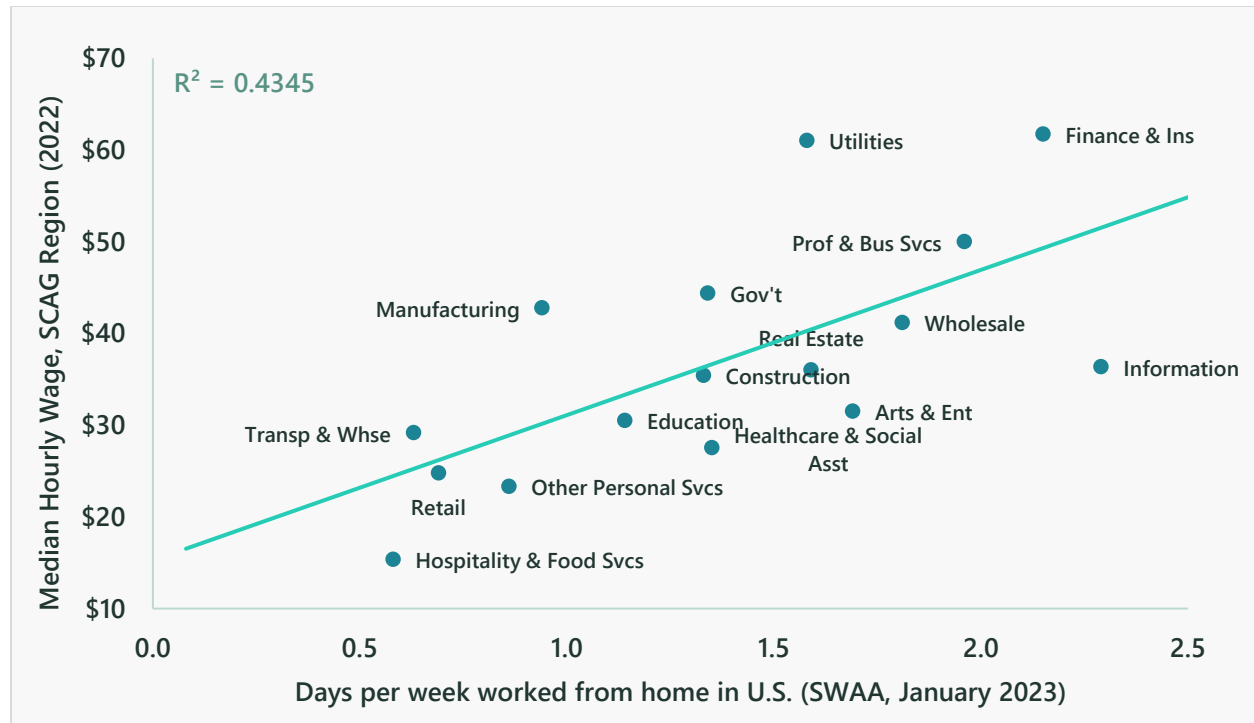
### 3.3.2 COVID-19 AND WORKING FROM HOME

Although the region’s economy recovered quickly from the COVID recession, COVID-19 has changed the way a significant portion of the labor force works. In 2019, approximately 6 percent of SCAG-region workers worked remotely. In 2021, the share of workers for whom working from home was their primary commute mode shot up to over 19 percent (see Kane, Moreno, and Myers 2022). This trend has stabilized nationally, with approximately 44 percent of full-time U.S. workers reporting that they work from home for all or a portion of their work hours (see Barrero, Bloom, and Davis 2023)



The ability to work from home varies with industry and occupation, which is reflected in the relationship between remote work and wages. FIGURE 10 shows a strong positive relationship between wages and average days worked from home by industry: the number of days worked from home increases as average wage increases. Workers in Finance, Information, and Professional & Business Service sectors had the highest wages and more days working from home. Workers in sectors with lower average wages worked the fewest hours from home, including Retail, Hospitality & Food Service and Transportation & Warehousing.

Figure 10. Relationship between Wage Rate and Days Worked from Home in Industry Sectors



Source: Wage data from BLS QWI LED work from home data from Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, 2021. "Why working from home will stick," National Bureau of Economic Research Working Paper 28731.

The Survey of Work Attitudes and Attributes (SWAA), conducted monthly since the beginning of COVID, show roughly 27 percent of workdays take place remotely across all workers. This statistic accounts for hybrid work, in addition to jobs which are primarily in-person only. FIGURE 10 shows a strong relationship between wage and the ability to work remotely, with the industries with the highest wages and days worked from home being Finance and Insurance (\$61 per hour and 2.15 remote days per week) and Professional and Business Services (\$50/hr. and 1.96 remote days/week). The lowest wage to remote work relationships are in Retail (\$24.80/hr. and 0.68 remote days per week), Transportation and Warehousing (\$29.19 per hour and 0.58 remote days per week), and Hospitality and Food Service (\$15.39 and .58 remote days per week). While these relationships are driven by the nature of the work in each of these sectors, a regional plan necessarily must consider the needs of remote workers, who are largely in higher wage occupations, but especially the needs of on-site workers, who are more likely to be in low-wage occupations.

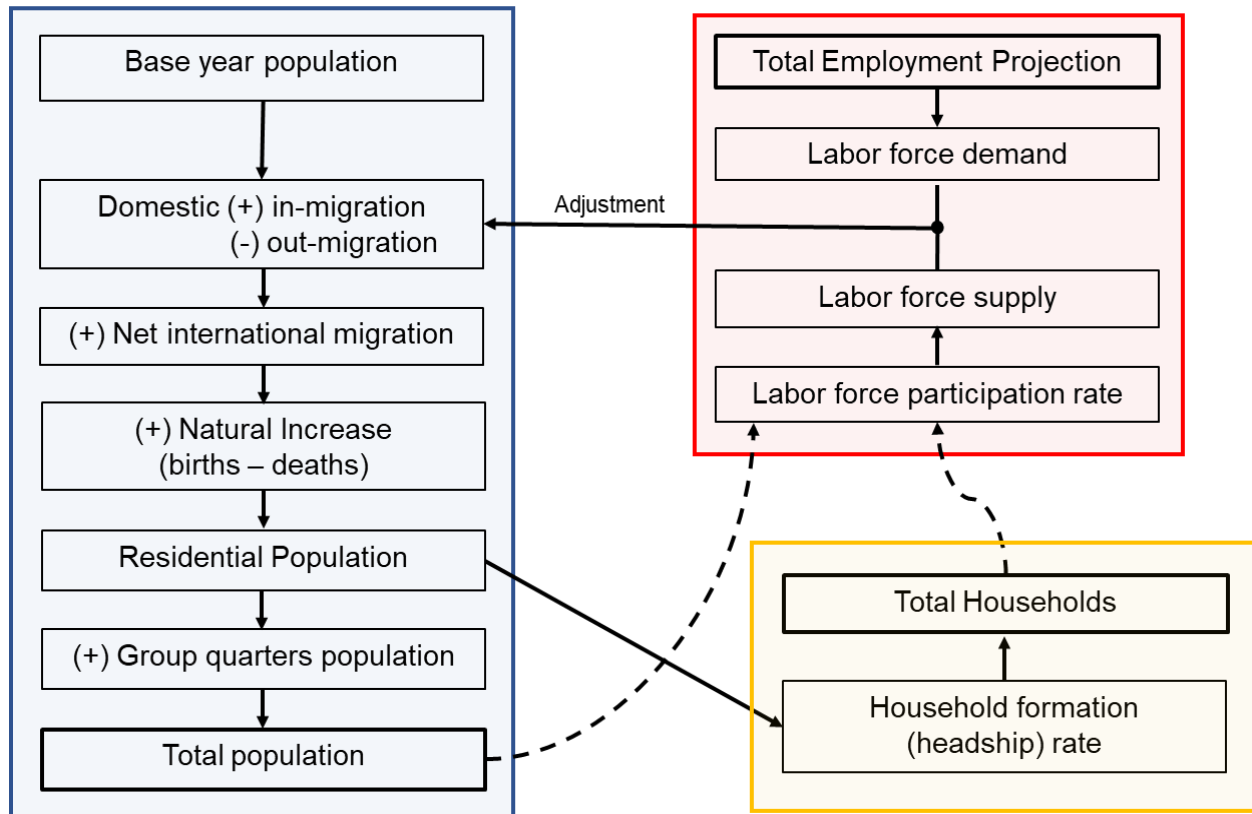
## 4. GROWTH FORECASTING PROCESS AND ASSUMPTIONS

SCAG’s county and regional growth forecasts are developed by a comprehensive review of demographic and socioeconomic data and trends, which feeds into and matches the sum totals of growth at the jurisdiction and TAZ-level. SCAG’s jurisdiction and TAZ-level projections are a joint effort which combines mathematical simulation and allocation processes with collaboration and review by local jurisdictions. This combination of expert analysis, advanced mathematical approaches and bottom-up community engagement ensures that SCAG’s growth forecasting process is as robust as possible.

### 4.1 REGION-LEVEL INPUTS AND ASSUMPTIONS

SCAG’s coupled regional economic-demographic forecast process is shown in FIGURE 11. SCAG projects regional population growth using a cohort-component model. This model computes population at a future point in time by adding to the existing residential population to the number of group quarters population, births, and in-migrants during a projection period and subtracting the number of deaths and out-migrants. Fertility, mortality, and migration are computed by single years of age, sex, and seven race/ethnicity categories used by the California Department of Finance. Age, sex, and race/ethnicity-specific population forecasts are multiplied by a set of household formation (headship) rate assumptions to generate a disaggregated forecast of households.

Figure 11. Regional and County Forecasting Process



SCAG projects regional employment using a shift-share model. This model computes employment by industry sector at a future time using a region’s share of the nation’s employment. The regional

employment forecasts are based on a set of national employment forecasts that provide total job projections and projections by sector. Regional jobs depend on national jobs as well as their distribution across various industries. The number of forecasted jobs and the labor force participation rate determine the pattern of migration into and out of the region, yielding a combined forecast of population, households, and employment.

SCAG’s regional growth forecast relies heavily on regional and local expertise rather than national demographic assumptions or model-based predictors of land use change. Key forecast assumptions made for the low, baseline, and high growth scenarios discussed in Section 2.3 are shown in TABLE 9. The regional forecast process does not directly utilize an equilibrium-based input-output model such as the Regional Economic Models, Inc. (REMI) model; however, REMI forecasts and expert knowledge are consulted. Additionally, the LDX process ensures the most up-to-date local plan and development information are assessed and reflected in the region-level forecast rather than relying upon a comprehensive land use modeling software such as UrbanSim to integrate regional forecasts with small area data.

Table 8. Forecast Assumptions Overview

Factor	Baseline	Low	High
Births	1.5 births/woman	1.4 births/woman	1.6 births/woman
Deaths	Stable rates (2019)	Stable rates (2019)	Rates decline through equity improvements
Net Migration	Net int'l is high, net domestic out migration moderate	Net int'l is low, net domestic out migration continues	Net int'l. is high, net domestic out is low
Labor Force	Slight increase, but close to 2019	Slight increase, but close to 2019	Slight increase, but close to 2019
Household Formation	Most groups return to 2005-07 levels	No improvement (2015-19 levels)	Most groups return to 2005-07 levels
Economic Competitiveness	Region remains competitive and innovative; climate change has no net effect on total growth	Climate change & high relative cost of living are challenges	Region captures a larger share of U.S. jobs; climate resilience and easing cost of living encourage growth

Table 9. Regional Demographic-Economic Assumptions

	2000	2020	2050
<b>Total Fertility Rate</b>	<b>2.17</b>	<b>1.59</b>	<b>1.56</b>
Ages 15 to 19	49.16	11.81	6.59
Ages 20 to 24	106.99	48.28	44.29
Ages 25 to 29	118.80	74.56	74.45
Ages 30 to 34	96.49	97.91	100.42
Ages 35 to 39	50.56	67.32	67.52
Ages 40 to 44	11.87	16.98	17.06

	2000	2020	2050
Ages 45 to 49	0.62	1.80	1.84
<b>Crude Death Rate</b>			
Under 35	0.71	0.56	0.55
Over 65	51.10	41.96	46.58
Over 85	123.79	154.06	156.08
16+ Labor Force Participation	0.63	0.61	0.61
65+ Labor Force Participation	0.19	0.20	0.23

Source: CA Department of Public Health, Decennial Census, and SCAG Growth Forecast

## 4.2 COUNTY-LEVEL INPUTS AND ASSUMPTIONS

The structure of the county models is the same as the regional model. Each of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties use the same set of underlying data and input assumptions and are aggregated and controlled to the SCAG regional total. The panel of experts' projection of immigration is allocated to the counties based on their share in observed historical data. Similarly, domestic migration is adjusted to maintain a similar balance between labor force demand and labor force supply in a county. In this manner, the county-level projection includes a consideration of jobs-housing balance at the county level (TABLE 2).

While the primary focus of the growth forecast is 2050, projections are reported for county total population, total households, and total employment at 5-year intervals from 2019-2050. Regional totals by 2-digit NAICS sector are provided at the SCAG Region level for 2019 and 2050 (TABLE 6).

## 4.3 SUB-COUNTY INPUTS AND ASSUMPTIONS

The regional and county-level growth forecast establishes controls for further disaggregation to jurisdictions and TAZs for use in SCAG's activity-based travel demand model (ABM). A growth forecast is developed for total households and total employment for the region's 197 jurisdictions and 13,062 (city-split Tier2) TAZs in 2019, 2035, and 2050.

### 4.3.1 DATA

The following major data sources are considered and used in the development of the growth forecast below the county level:

- California Department of Finance (DOF) population and household estimates
- California Employment Development Department (EDD) jobs report by industry
- 2019 existing land use and General Plans from local jurisdictions
- 2020 Decennial Census P.L.-94 171 Redistricting Data
- American Community Survey (2015-2019 5-Year Estimates)
- County assessor parcel databases
- 2019 business establishment data from InfoGroup
- SCAG Connect SoCal 2020 growth forecast
- Latest available entitlement agreements as articulated by local jurisdictions

- 6th cycle housing element update data, if available (see Section 4.6)
- Adopted Connect SoCal 2020 policies and growth vision
- Jurisdictional review through the Local Data Exchange (LDX) process

After determining county-level growth, these figures serve as controls for disaggregating the growth into city-split TAZ zones, which are divided by city and TAZ boundaries. Figures at city-split TAZ level can be summarized to either city or TAZ levels. For the base year (2019), firm-based data from Infogroup and EDD are used to establish baseline employment figures at the city-split TAZ level. County-level employment growth is distributed using employment growth shares from the Connect SoCal 2020 forecast. This ensures that the preliminary employment projection has a similar distribution to the previous forecast to facilitate local review. Following local updates to total employment growth is reallocated across industries accordingly. This iterative process allows for the incorporation of input and finalization of the employment growth forecast at the jurisdiction and TAZ levels.

#### 4.3.2 ALLOCATION PROCESS

The latest jurisdictional existing land use, general plan land use, entitlements, and housing element data serve as the basis for future year population and household allocation in that they reflect **supply**. These measures of capacity are matched with county and regional growth - **demand** – using a mathematical approach. As such, the projection does not reflect a build-out scenario of all general plans throughout the region. Combining the general plan, existing land use, and 2020 Census data above indicate that in the aggregate, local plans in the SCAG Region currently have a remaining physical capacity of roughly 8.2 million housing units. While this statistic assumes that housing unit density could be increased to the maximum allowable level even on existing residential sites, it is several times higher than anticipated household growth. Population projections are calculated based on household growth and household size. Future jurisdiction-level employment is estimated according to the share of the county's employment by sector and TAZ-level employment is estimated according to the share of the jurisdiction's employment by sector.

#### 4.3.3 BUILDING A REGIONAL GROWTH VISION

As shown in FIGURE 2, long-range forecasts at sub-county geographies have an additional degree of uncertainty compared with larger area forecasts in that the precise location of growth is difficult to know. Additionally, Connect SoCal's development pattern must put forth land use strategies which are consistent with the latest data and expert insights—and also fulfill SCS targets while being meaningfully implementable.

The regional growth vision combines an allocation process rooted in Connect SoCal 2020 policies and sustainable growth strategies with a Local Data Exchange process to integrate local information and improve accuracy. Based on the latest available and finest-scaled data listed above, demand and supply were matched using a growth prioritization scale which allocates growth to available sites based on four Priority Development Areas (PDAs) and thirteen Green Region Resource Areas (GRRAs).

For the purposes of the growth vision, PDAs are areas within the SCAG Region where future growth can be located in order to help the region reach mobility or environmental goals. Generally, this means that people in these areas have access to multiple modes of transportation or that trip origins and destinations

are closer together, allowing for shorter trips. In Connect SoCal 2020, PDAs were referred to as Priority Growth Areas (PGAs). GRRAs are a set of place-specific indicators of hazard and sensitivity in which growth would normally not advance SB 375 objectives. Generally – but not exclusively – these areas reflect the urban-rural fringe away from existing developed areas thus reducing growth there has the co-benefit of reducing growth far from jobs and destinations. As such, the regional growth vision aims to increase resilience within the region’s built systems by taking advantage of existing infrastructure, social systems by promoting complete communities, economic systems by promoting proximity to jobs, and natural systems by mitigating growth in hazardous or sensitive areas.

In the preliminary development pattern provided to local jurisdictions for review, growth is increased in PDAs and reduced in GRRAs. However, no growth projections exceed the development capacity as understood from local general plans, there remains substantial growth outside of PDAs, and growth is not precluded in GRRAs. Areas with multiple overlapping PDAs are further prioritized, while areas with multiple overlapping GRRAs are further deprioritized. For more detail and definitions of individual PDAs and GRRAs, see the Land Use and Communities Technical Report.

The second part of the growth vision is the Local Data Exchange (see Section 2.5). Jurisdictions were given the opportunity to review and refine their preliminary projections, including providing edits to certain PDAs and providing local policy details surrounding any potential GRRAs. This step improved forecast accuracy by linking it to entitlements and likely development sites while also providing an avenue to consider regional strategies and targets in local plans.

#### 4.4 ASSESMENT OF LDX INPUT

In order to assess growth at the regional and county level, SCAG compared locally reviewed growth totals to the preliminary high and low scenarios developed with the expert panel and reviewed population-to-employment (P:E) and population-to-household (P:H) ratios.

Compared to the preliminary projection, by 2050 the locally reviewed version projected 2.3 percent higher household growth and 1.0 percent higher employment growth. Integrating this into the cohort-component model yields 1.8 percent higher population growth.

While the locally reviewed total for 2050 households, employment, and population are all higher than the preliminary projection, they are below the high scenario. Unlike prior regional plans in which the locally reviewed employment projection increased while the household projection decreased, local jurisdictions made larger upward revisions to households than the upward revisions made to employment. This reflects increased optimism about housing production as well as more pipeline and entitled projects. Since the panel of experts noted that higher growth could be possible if a combination of market and policy factors yielded increases in household formation, the upward revisions made by local jurisdictions appear to be supported.

The region’s P:E ratio in 2010 was 2.10 and was initially projected to decrease to 2.02 by 2050. A P:E ratio above 2, which is consistent with the region’s historic average, generally indicates sufficient population growth to fill the forecasted growth in jobs. Following local review, the region’s 2050 P:E ratio increased nominally to 2.04 which is consistent with expectations.

The preliminary projection sought to ensure relatively similar labor force demand (jobs) and labor force supply (working-age population) at the county level in order to increase the likelihood that additional

workers can be housed within the same county in which new jobs are anticipated. No county had a P:E ratio which was further from the 2050 regional value of 2.04—meaning that at the county-level, jobs-housing balance improves or stays the same across all six counties (TABLE 2).

P:H ratios largely reflect household size. The regional P:H ratio in 2050 decreased slightly from 2.69 to 2.63 after local review. This reflects both the aging of the population and the expectation that housing production will continue to exceed the housing need derived from population growth. This is the case for every county in the region. In particular, the anticipated household growth by 2050 in Los Angeles County increased by 62,000 and in San Bernardino County by 55,000 following local review. A reasonable expectation from this trend is that household overcrowding rates, an indicator of housing undersupply in past periods, are likely to decline over the projection period.

SCAG assessed growth at the sub-county levels by evaluating against sketch-planning sustainability measures. Specifically, regional, and county-level growth in PDAs and outside of GRRAs was compared to the outcomes of the adopted Connect SoCal 2020 to ensure that improvements are being made plan-over-plan. This comparison is detailed in the Land Use and Communities Technical Report.

## 4.5 DEVELOPMENT OF TRANSPORTATION MODEL INPUTS

In addition to employment, population, and households, SCAG develops additional attribute variables such as population by age, household by income and employment by sector. The 2010 Census SF1 (Summary File 1), 2020 Census P.L.-94 171 Redistricting Data, and 2015-2019 5-year Public Use Microdata Sample (PUMS) data are the basis for developing secondary variables at the TAZ-level. K-12 and college enrollment estimates were collected from California Department of Education for current public and private enrollment by school for students. These secondary variables at the TAZ-level are all controlled to the county-level forecasts. An iterative proportional fitting procedure is principally relied upon to develop a set of TAZ-level distributions which sum to county totals.

Table 10. Description of Socioeconomic Variables for TAZ-level forecast

TAZ-level controls for ABM	Variables
Population	Total Population Residential Population
Household	Total Households
Income	Median household income
School/College (by location)	K12 (public + private) K to 8th grade 9 to 12th grade College Enrollment
Employment	Agriculture & Mining jobs Construction jobs Manufacture jobs Wholesale Trade jobs Retail Trade jobs Transportation and Warehousing and Utility jobs Information jobs Financial Activity ("FIRE") jobs Professional and Business Services jobs Education and Health Services jobs Leisure and Hospitality (Art/Entertainment) jobs Other Services jobs Public/Administration jobs



Table 11. Development of person and household characteristics for PopSyn

Major Variable	Demographic or Socioeconomic Attribute
Household	Household type: residential, institutional group quarter, non-institutional group quarter
	Number of people per household (P-H ratio)
	Annual household income
	Housing type: single-family detached, single-family attached, multifamily, other
	Housing tenure: owned w/a mortgage or loan, owned free and clear, rented, occupied w/o pmt. of rent
Industry	Agriculture, Farming, Forestry, Fishing, Hunting (NAICS 11)
	Mining, Quarrying, Oil or Gas Drilling Company (NAICS 21)
	Utility Company, Sewage Treatment Facility, Utilities in General (NAICS 22)
	Construction (NAICS 23)
	Manufacturing, Including Bakery, Food Processor, Mill, Manufacturer, Machine Shop (NAICS 31)
	Wholesale Trade (NAICS 42)
	Retail Trade, Including Store, Shop, Dealer (E.G. Auto Dealer) (NAICS 44)
	Transportation, Bus or Train Company, Airline, Postal Service, Warehouse or Storage (NAICS 48)
	Information, Including Publisher, Phone Company, Movie Company, Internet Company (NAICS 51)
	Finance and Insurance such as Bank, Insurance Company, Credit Union, Finance Company (NAICS 52)
	Real Estate Company, Any Rental or Leasing Company Including Auto or Video Rental (NAICS 53)
	Professional Scientific or Technical Services, Including Law, Accounting, Design (NAICS 54)
	Management of Companies and Enterprises (NAICS 55)
	Administrative Support, Including Employment Agency, Travel Agency (NAICS 56)
	Educational Services, Including School, University, Training School (NAICS 61)
	Health Care & Social Asst. incl. Hospital, Doctors Office, Assisted Living Home, Day Care Center (NAICS 62)
	Arts, Entertainment and Recreation, incl. Art Gallery, Museum, Theatre, Bowling Alley, Casino (NAICS 71)
	Accommodation or Food Services, Including Hotel, Restaurant (NAICS 72)
	Other Services (Except Public Administration) such as Auto Repair, Hair, or Nail Salon (NAICS 81)
Public Administration, such as Government Agency, City or County Department, Military (NAICS 92)	

Table 11. Development of person and household characteristics for PopSyn (continued)

Major Variable	Demographic or Socioeconomic Attribute	Major Variable	Demographic or Socioeconomic Attribute
Occupations	Management	Person types	Full time worker
	Business Operations Specialists		Part time worker
	Financial Specialists		University student
	Computer and Mathematical		Non-worker
	Architecture and Engineering		Retiree
	Life, Physical, and Social Science		Driving-age school child
	Community and Social Science		Pre-driving school child
	Legal		Pre-school child
	Education, Training, and Library		Age
	Arts, Design, Entertainment, Sports, and Media	Population Attributes (Residential and group quarters)	Sex
	Healthcare Practitioners and Technical		Race/Ethnicity
	Healthcare Support		Employment Status
	Protective Service		Work by industry and occupation (see above)
	Food Preparation and Serving		Person type (see above)
	Building and Ground Cleaning and Maintenance		Educational attainment or student grade level
	Personal Care and Service		
	Sales		
	Office and Administrative Support		
	Farming, Fishing, and Forestry		
	Construction Trades		
	Extraction Workers		
	Installation, Maintenance, and Repair Workers		
	Production		
	Transportation and Material Moving		

Individual household and population-based data are specifically designed and developed for the ABM (TABLE 12). SCAG uses a population synthesizer (PopSyn) to generate individual person-level and household-level characteristics. Detailed information at this scale is derived from the ACS’ PUMS microsample data. This serves as seed data for PopSyn to select and generate simulated individual person characteristics for over 20 million people in the region. Household sample weights from the PUMS are adjusted to match the major variable controls provided externally and at the TAZ-level.

#### 4.6 RELATIONSHIP TO THE RHNA

The RHNA allocation process takes place every eight years, as required by state law, or every other RTP/SCS cycle. No RHNA allocation is being developed alongside Connect SoCal 2024 because the next RHNA cycle does not occur until 2029. The most recent (6th cycle) RHNA allocation was adopted by SCAG’s Regional Council in 2021 and relied on input data from Connect SoCal 2020.

In prior RTP/SCS cycles, SCAG produced what was called an integrated forecast with household growth totals matching the RHNA housing unit allocations. However, state legislative changes beginning in 2017 changed the relationship between long-range forecasts and the housing planning requirement in RHNA.

Most notably, the state Department of Housing and Community Development (HCD) now includes explicit measures of existing housing needs – specifically overcrowding and cost burden rates – in their determination of the SCAG Region’s housing need. These measures comprise the majority of HCD’s determination of the SCAG Region’s total 6th cycle housing need of 1,341,827 units. The RHNA process results in allocation of housing units to local jurisdictions and requires local jurisdictions to identify sites and zoning, pursuant to additional parameters, which can accommodate this number of units region wide. Put simply, the emphasis of RHNA shifted substantially toward addressing existing need whereas in prior cycles it had focused almost entirely on need due to anticipated population growth.

In contrast to RHNA’s state housing planning requirement, SCAG’s Connect SoCal regional growth forecast must be an expert-derived assessment of reasonably foreseeable future growth from 2019-2050 which must comply with state and federal statute. The growth forecast strives to incorporate the goals and policies of Connect SoCal while also achieving the greenhouse gas reduction targets set by the California Air Resources Board and U.S. Clean Air Act conformity. Despite a substantially reduced population projection compared to prior plans, it is expected that household growth over the Connect SoCal horizon will exceed the 6th cycle RHNA housing unit need. This is in part a reflection of changes to state and local housing-supportive policy and strong recent housing production described earlier.

The 6th cycle of RHNA has the potential to substantially increase the quantity of sites available for housing especially in jurisdictions with RHNA allocations in excess of their Connect SoCal 2020 household forecasts. As such, SCAG’s preliminary growth forecast at the jurisdiction and neighborhood levels, released in May 2022, sought to reflect any capacity changes from the 6th cycle of RHNA as this is an adopted policy with a potential impact on household growth by 2050.

However, at the time of preliminary forecast development (April 2022) only 12 of the region’s 197 jurisdictions had 6th cycle housing elements which had been adopted and certified by the state. While local jurisdictions were requested to consider housing element updates in their review of LDX growth data, only 87 had adopted and certified housing elements even by January 2023, immediately after the deadline for LDX input. Additionally, based on when they achieved compliance, some local jurisdictions are not required to complete rezonings associated with housing element updates until February 2025, rendering data on newly available sites inherently incomplete (or unavailable) for the purposes of Connect SoCal 2024.

In summary, it is not expected or required that every jurisdiction’s household forecast match or exceed their 6th cycle RHNA allocation, as this involves many factors. However, the expectation during LDX and the Connect SoCal 2024 plan development process is that SCAG and local jurisdictions account for the increase in available sites resulting from RHNA when developing the growth forecast.

## 5. SCAG GROWTH FORECAST

County-level forecasts of total population, households, and employment at 5-year increments can be found in TABLE 12 and FIGURE 12.

Table 12. Region and county forecast of population, households, and employment

Total Population	1990	2019	2020	2025	2030	2035	2040	2045	2050	1990-2019		2019-2050	
										Growth	Pct. Growth	Growth	Pct. Growth
Imperial	109,000	181,000	180,000	186,000	193,000	198,000	203,000	207,000	210,000	72,000	66.1%	29,000	16.0%
Los Angeles	8,863,000	10,046,000	10,018,000	10,040,000	10,214,000	10,449,000	10,640,000	10,757,000	10,793,000	1,183,000	13.3%	747,000	7.4%
Orange	2,411,000	3,191,000	3,188,000	3,208,000	3,247,000	3,299,000	3,356,000	3,401,000	3,439,000	780,000	32.4%	248,000	7.8%
Riverside	1,170,000	2,386,000	2,418,000	2,555,000	2,674,000	2,784,000	2,856,000	2,927,000	2,992,000	1,216,000	103.9%	606,000	25.4%
San Bernardino	1,418,000	2,175,000	2,182,000	2,237,000	2,298,000	2,357,000	2,430,000	2,534,000	2,623,000	757,000	53.4%	448,000	20.6%
Ventura	669,000	849,000	844,000	842,000	849,000	858,000	861,000	858,000	852,000	180,000	26.9%	3,000	0.4%
SCAG	14,641,000	18,827,000	18,830,000	19,068,000	19,476,000	19,946,000	20,346,000	20,684,000	20,909,000	4,186,000	28.6%	2,082,000	11.1%

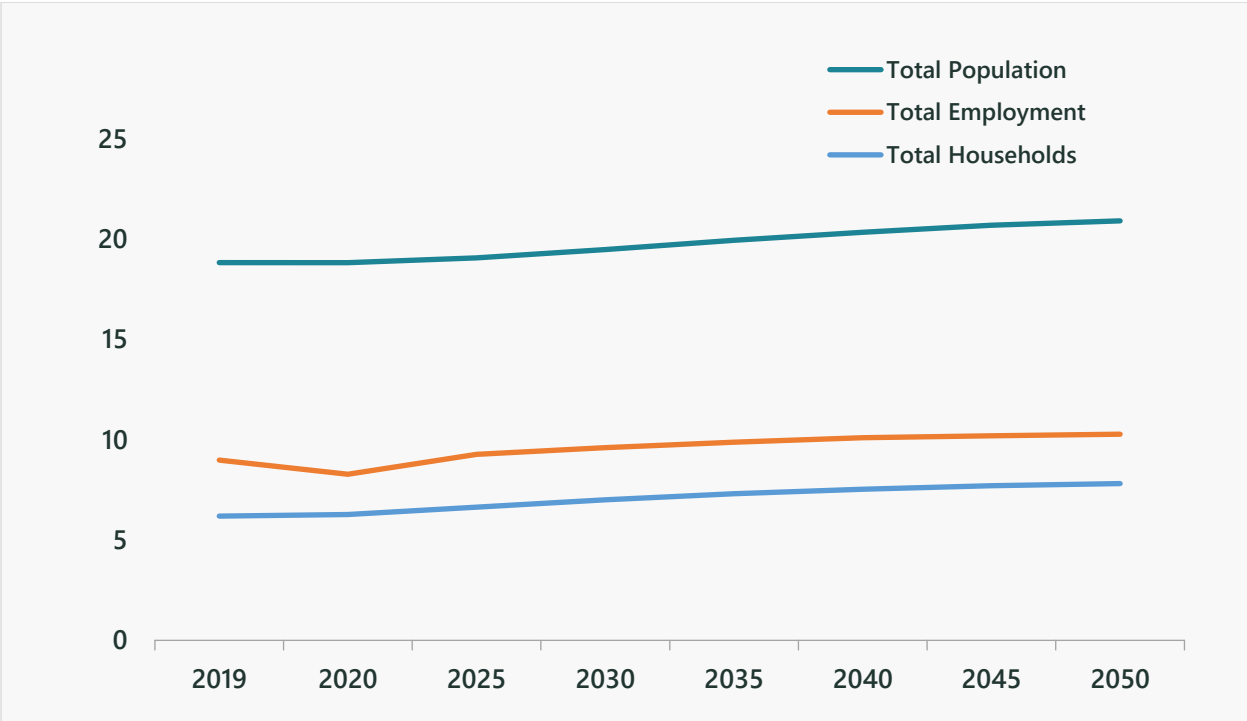
Total Households	1990	2019	2020	2025	2030	2035	2040	2045	2050	1990-2019		2019-2050	
										Growth	Pct. Growth	Growth	Pct. Growth
Imperial	33,000	52,000	52,000	56,000	61,000	65,000	68,000	70,000	72,000	19,000	57.6%	20,000	38.5%
Los Angeles	2,990,000	3,393,000	3,423,000	3,594,000	3,784,000	3,933,000	4,053,000	4,120,000	4,155,000	403,000	13.5%	762,000	22.5%
Orange	827,000	1,069,000	1,080,000	1,123,000	1,164,000	1,196,000	1,221,000	1,239,000	1,253,000	242,000	29.3%	184,000	17.2%
Riverside	402,000	744,000	763,000	836,000	903,000	965,000	1,000,000	1,033,000	1,062,000	342,000	85.1%	318,000	42.7%
San Bernardino	465,000	657,000	668,000	729,000	786,000	835,000	876,000	918,000	953,000	192,000	41.3%	296,000	45.1%
Ventura	217,000	278,000	280,000	294,000	307,000	318,000	321,000	321,000	318,000	61,000	28.1%	40,000	14.4%
SCAG	4,934,000	6,193,000	6,265,000	6,632,000	7,006,000	7,311,000	7,538,000	7,701,000	7,814,000	1,259,000	25.5%	1,621,000	26.2%

Total Employment	1990	2019	2022	2025	2030	2035	2040	2045	2050	1990-2019		2019-2050	
										Growth	Pct. Growth	Growth	Pct. Growth
Imperial	49,000	69,000	70,000	73,000	78,000	82,000	85,000	88,000	91,000	20,000	40.8%	22,000	31.9%
Los Angeles	4,562,000	5,031,000	4,942,000	5,131,000	5,277,000	5,386,000	5,485,000	5,497,000	5,461,000	469,000	10.3%	430,000	8.5%
Orange	1,288,000	1,805,000	1,806,000	1,857,000	1,903,000	1,942,000	1,977,000	1,998,000	2,019,000	517,000	40.1%	214,000	11.9%
Riverside	358,000	847,000	897,000	909,000	983,000	1,057,000	1,106,000	1,147,000	1,185,000	489,000	136.6%	338,000	39.9%
San Bernardino	450,000	860,000	856,000	895,000	962,000	1,035,000	1,061,000	1,079,000	1,145,000	410,000	91.1%	285,000	33.1%
Ventura	274,000	363,000	367,000	371,000	379,000	384,000	383,000	380,000	376,000	89,000	32.5%	13,000	3.6%
SCAG	6,980,000	8,976,000	8,937,000	9,235,000	9,581,000	9,885,000	10,097,000	10,190,000	10,276,000	1,996,000	28.6%	1,300,000	14.5%

Notes: Data reflect July 1. Projections rounded to the nearest 1000; totals may not sum due to rounding. Population projections based on SCAG modeling plus household totals provided by local jurisdictions.

Figure 12. SCAG Region Growth Forecast, 2019-2050 (in Millions)



### 5.1 POPULATION

While the population decline of recent years is expected to stabilize in the near term, SCAG projects natural increase to be a declining share of population growth (see FIGURE 4). By the late 2030s deaths are expected to outnumber births and by the end of the projection period all of the large Baby Boomer cohort (born 1946-1964) will be over 85 years old (FIGURE 5).

In the later years of the forecast, natural increase is expected to dip below zero meaning that the only source of population growth would be people entering from other regions, states, or countries. Domestic migration is expected to rebound in the later years of the forecast, consistent with an equilibrium across U.S. regions in job growth, housing price premiums, and other factors. The region’s natural amenities, economic base, and presence of family connections continue to be a factor in drawing or retaining population, and the price premium to live in Southern California is likely to drop as other regions experience faster growth and housing cost increases. While the region is expected to continue to lose more residents to other states and nations than it brings in through the entire forecast, retaining residents is important for both communities and economic growth. The panel of experts did not anticipate climate change impacts to have a major effect on net domestic migration. The reason is that the destinations of out-migrants from the region (e.g., Texas, Arizona, and Nevada—see TABLE 4) all have elevated levels of climate risk—especially extreme heat. Foreign immigration is expected to remain strong given the region’s role as an immigrant gateway and its openness to multiculturalism compared to other regions.

The population’s age structure and racial/ethnic makeup are expected to continue their current, gradual pattern of change seen in prior decades (TABLE 5). By 2050 the region’s median age is projected to increase to 43.8 years – up from 37.7 years in 2019 and 30.5 years in 1990 –leading to a substantial

change in the ratio of working-age individuals (16-64) to seniors (65+). In 1990 there were 6.8 working-age people per senior and by 2050 there are projected to only be 2.9. While people of color on average are younger, the slower projected rate of total population growth means that most racial/ethnic groups would not see as dramatic share changes as they did in the last thirty years. The groups with the largest expected population increases are non-Hispanic Asian and non-Hispanic two or more races or other race.

## 5.2 HOUSEHOLDS

In addition to population aging, the household projections are based on an assumption that household formation (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. Headship rate assumptions in this forecast are similar to those used by the California Department of Finance when projecting household growth for 2030.

As more small households form and existing overcrowding pressures ease, the average household size is projected to decrease by roughly 0.36. This shift 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.

This forecast also assumes that household growth, and by extension housing unit growth, will be higher during the first half of the plan horizon. Over 2020-2035 SCAG projects 69,700 new households per year compared to 32,500 per year over 2035-2050 reflecting a gradual catch-up to past housing undersupply and much lower demand from population growth in the later years of the forecast. In contrast, Connect SoCal 2020 projected 55,800 new households per year over 2020-2035 despite 73 percent lower population growth<sup>2</sup>.

For more information on housing plans and policies related to Connect SoCal 2024, see the Housing Technical Report.

## 5.3 EMPLOYMENT

The region has been recovering from the pandemic recession and is expected to continue growing in jobs. 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.

Between 2022 and 2050, employment in the SCAG Region is projected to grow at a compounded annual growth rate of 0.49 percent. The top three growth sectors during this time period, in terms of jobs added, are Health Care and Social Assistance sector adding 416,000 jobs, Construction sector adding 148,000 jobs, and Accommodation and Food Service adding 106,000 jobs. Job growth in these three sectors make up half of the projected overall job growth for the region. Sectors where a decrease in jobs is projected between 2022 and 2050 are Finance and Insurance sector of 31,000 jobs and a decrease of 15,000 jobs in the Administrative and Support and Waste Services sectors.

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 expert panel’s perspective that the composition of migration flows may be a balancing factor between robust growth and an aging population.

While the SCAG Region can leverage its structural advantages and investment in regional human capital, the employment projections for this plan rely on the assumption that the region effectively increases the housing supply and stabilizes housing costs.

## 5.4 JURISDICTION GROWTH FORECAST

TABLE 14 contains the jurisdiction-level projection of households and employment which was derived from the Local Data Exchange process described above. Population in the 2019 plan base year, benchmarked to the 2020 Census, is also provided. For Connect SoCal 2024, SCAG population projections below the county-level are developed for required modeling purposes only. A rough estimate of the future jurisdiction-level population based on Connect SoCal’s household forecast can be derived using a county-level P:H ratio from TABLE 12 and applying it to a jurisdiction’s future household growth.

Table 13. Jurisdiction-level growth forecast

County	Jurisdiction	Population	Households			Employment		
		2019	2019	2035	2050	2019	2035	2050
Imperial	Brawley city	26,600	8,200	9,900	11,000	8,300	9,400	10,100
Imperial	Calexico city	38,800	10,400	14,100	15,800	10,800	12,900	14,100
Imperial	Calipatria city	6,600	1,000	1,300	1,400	1,900	2,200	2,300
Imperial	El Centro city	44,600	14,000	16,600	18,700	25,300	30,000	33,800
Imperial	Holtville city	5,700	1,700	1,900	2,100	1,800	2,000	2,100
Imperial	Imperial city	20,400	6,000	7,900	8,800	5,800	7,200	8,200
Imperial	Westmorland city	2,000	600	600	600	300	300	300
Imperial	Unincorporated	36,000	9,700	12,300	13,100	15,200	17,900	19,700
Los Angeles	Agoura Hills city	20,400	7,400	7,500	7,500	14,900	15,800	15,900
Los Angeles	Alhambra city	83,200	29,900	31,800	32,600	34,700	36,200	36,500
Los Angeles	Arcadia city	56,900	19,200	23,800	24,300	35,400	36,800	37,900
Los Angeles	Artesia city	16,400	4,600	4,900	5,000	6,800	7,100	7,100
Los Angeles	Avalon city	3,500	1,400	1,400	1,400	2,700	2,800	2,800
Los Angeles	Azusa city	49,800	14,600	16,500	17,100	19,600	20,800	21,000
Los Angeles	Baldwin Park city	72,500	17,700	19,100	19,400	27,600	28,400	28,600
Los Angeles	Bell city	33,800	9,200	9,600	9,700	9,500	9,900	10,000
Los Angeles	Bellflower city	79,500	24,400	25,100	25,400	17,600	17,900	18,000
Los Angeles	Bell Gardens city	39,700	9,900	10,300	10,500	12,300	12,600	12,600
Los Angeles	Beverly Hills city	32,900	14,400	15,300	15,700	82,700	85,900	86,500
Los Angeles	Bradbury city	900	300	300	400	200	200	200
Los Angeles	Burbank city	107,800	43,300	48,600	50,300	127,800	144,600	145,500
Los Angeles	Calabasas city	23,500	8,800	9,300	9,600	25,100	25,800	26,200
Los Angeles	Carson city	95,700	26,900	30,500	31,400	58,500	61,700	62,300
Los Angeles	Cerritos city	49,800	15,900	15,900	16,000	39,000	39,000	39,100
Los Angeles	Claremont city	36,800	11,900	13,300	13,600	20,000	20,700	20,800
Los Angeles	Commerce city	12,400	3,400	3,600	3,700	52,800	54,100	54,300



County	Jurisdiction	Population	Households			Employment		
		2019	2019	2035	2050	2019	2035	2050
Los Angeles	Compton city	96,600	24,000	25,200	25,500	30,300	31,000	31,200
Los Angeles	Covina city	51,500	16,800	17,600	17,900	28,500	29,700	29,900
Los Angeles	Cudahy city	22,900	5,700	6,200	6,300	2,700	2,800	2,800
Los Angeles	Culver City city	40,900	16,800	17,700	18,100	63,200	65,700	66,100
Los Angeles	Diamond Bar city	55,400	18,000	20,900	21,700	20,000	22,600	23,000
Los Angeles	Downey city	114,900	34,700	35,100	35,300	50,900	52,300	52,600
Los Angeles	Duarte city	22,100	7,400	8,200	8,400	12,300	15,000	17,700
Los Angeles	El Monte city	109,900	28,900	33,500	34,700	33,300	36,100	36,700
Los Angeles	El Segundo city	17,400	7,100	7,300	7,300	60,100	62,000	62,400
Los Angeles	Gardena city	61,300	21,400	23,300	24,100	29,700	31,000	31,300
Los Angeles	Glendale city	197,400	76,200	82,500	84,800	118,000	122,200	123,000
Los Angeles	Glendora city	52,800	18,000	19,600	20,000	21,100	21,800	21,900
Los Angeles	Hawaiian Gardens city	14,200	3,700	4,000	4,100	9,000	9,200	9,300
Los Angeles	Hawthorne city	88,500	30,300	32,000	32,300	29,900	31,500	31,800
Los Angeles	Hermosa Beach city	19,800	9,200	9,400	9,500	8,200	9,700	9,900
Los Angeles	Hidden Hills city	1,800	600	600	600	300	300	300
Los Angeles	Huntington Park city	55,100	15,000	16,500	16,900	15,900	16,800	17,000
Los Angeles	Industry city	300	100	100	100	73,800	73,800	73,800
Los Angeles	Inglewood city	108,200	37,500	43,800	61,600	35,500	44,700	45,900
Los Angeles	Irwindale city	1,500	400	500	500	18,900	19,600	19,700
Los Angeles	La Cañada Flintridge city	20,700	6,800	6,900	6,900	16,300	16,700	16,800
Los Angeles	La Habra Heights city	5,700	1,900	1,900	1,900	1,000	1,000	1,000
Los Angeles	Lakewood city	82,900	27,100	28,700	29,200	21,700	22,400	22,600
Los Angeles	La Mirada city	48,000	15,000	15,900	16,100	19,900	20,700	20,800
Los Angeles	Lancaster city	174,100	52,900	61,500	64,400	60,100	64,500	65,400
Los Angeles	La Puente city	38,200	9,600	10,000	10,100	6,200	6,900	7,100
Los Angeles	La Verne city	31,500	11,700	12,500	12,700	16,000	16,600	16,700

County	Jurisdiction	Population	Households			Employment		
		2019	2019	2035	2050	2019	2035	2050
Los Angeles	Lawndale city	32,000	9,900	10,400	10,600	7,600	8,100	8,200
Los Angeles	Lomita city	21,000	8,200	8,500	8,600	5,900	6,100	6,200
Los Angeles	Long Beach city	467,900	169,300	192,400	197,300	195,300	210,900	213,400
Los Angeles	Los Angeles city	3,907,200	1,398,600	1,699,400	1,828,200	1,954,000	2,119,800	2,137,700
Los Angeles	Lynwood city	67,400	15,400	16,700	17,000	13,800	14,300	14,400
Los Angeles	Malibu city	10,700	4,500	4,500	4,500	10,100	10,600	10,700
Los Angeles	Manhattan Beach city	35,700	13,700	13,900	13,900	23,500	24,500	24,500
Los Angeles	Maywood city	25,300	6,500	6,800	6,900	4,200	4,300	4,300
Los Angeles	Monrovia city	38,100	14,400	16,200	16,700	23,700	24,800	24,900
Los Angeles	Montebello city	63,000	19,600	21,000	21,600	29,600	30,500	30,700
Los Angeles	Monterey Park city	61,600	20,500	22,000	22,600	26,800	28,100	28,300
Los Angeles	Norwalk city	103,200	27,600	28,100	28,400	27,100	28,500	28,600
Los Angeles	Palmdale city	170,400	48,000	52,800	54,000	45,200	50,400	51,000
Los Angeles	Palos Verdes Estates city	13,400	5,000	5,000	5,100	2,700	2,900	2,900
Los Angeles	Paramount city	54,000	14,400	14,800	14,900	22,500	23,300	23,400
Los Angeles	Pasadena city	139,100	57,500	65,100	66,900	129,200	142,500	144,200
Los Angeles	Pico Rivera city	62,400	16,800	17,900	18,200	24,300	25,300	25,500
Los Angeles	Pomona city	152,100	41,700	52,300	55,200	56,800	60,400	61,100
Los Angeles	Rancho Palos Verdes city	42,500	15,600	15,700	15,700	10,000	10,200	10,200
Los Angeles	Redondo Beach city	71,800	29,200	30,500	30,900	27,500	34,800	31,100
Los Angeles	Rolling Hills city	1,700	600	700	700	200	200	200
Los Angeles	Rolling Hills Estates city	8,300	3,000	3,400	3,400	6,800	7,100	7,100
Los Angeles	Rosemead city	51,400	14,300	15,600	16,100	19,200	20,000	20,100
Los Angeles	San Dimas city	35,000	12,400	12,600	12,700	20,700	21,600	21,700
Los Angeles	San Fernando city	24,000	6,300	7,100	7,400	13,400	13,900	14,000
Los Angeles	San Gabriel city	39,700	12,800	14,700	15,200	16,300	17,200	17,300
Los Angeles	San Marino city	12,600	4,200	4,200	4,300	5,400	5,600	5,600

County	Jurisdiction	Population	Households			Employment		
		2019	2019	2035	2050	2019	2035	2050
Los Angeles	Santa Clarita city	229,900	76,100	90,300	92,500	92,900	99,500	100,800
Los Angeles	Santa Fe Springs city	19,200	5,800	6,300	6,400	57,200	59,200	59,500
Los Angeles	Santa Monica city	93,300	47,000	50,500	51,800	109,300	109,300	109,300
Los Angeles	Sierra Madre city	11,300	4,800	4,900	5,000	3,000	3,100	3,100
Los Angeles	Signal Hill city	11,900	4,500	5,000	5,100	16,300	17,100	17,200
Los Angeles	South El Monte city	19,700	4,900	5,300	5,400	16,900	17,400	17,400
Los Angeles	South Gate city	93,200	24,400	26,300	27,100	23,200	24,300	24,500
Los Angeles	South Pasadena city	27,100	10,500	11,100	11,300	12,000	12,400	12,400
Los Angeles	Temple City city	36,700	11,600	12,400	12,900	7,900	9,000	9,200
Los Angeles	Torrance city	147,700	56,200	58,800	60,000	129,000	132,600	133,200
Los Angeles	Vernon city	200	100	100	100	41,100	41,700	41,800
Los Angeles	Walnut city	28,600	8,800	9,300	9,500	11,700	12,100	12,200
Los Angeles	West Covina city	109,800	33,200	35,500	36,300	31,800	33,200	33,400
Los Angeles	West Hollywood city	35,900	23,400	27,700	28,700	34,400	43,100	44,300
Los Angeles	Westlake Village city	8,100	3,200	4,000	4,100	19,300	19,800	19,900
Los Angeles	Whittier city	87,700	28,700	31,400	32,000	37,400	38,800	39,100
Los Angeles	Unincorporated	1,025,200	298,900	373,900	405,500	276,300	301,300	333,800
Orange	Aliso Viejo city	52,200	19,300	20,200	20,400	23,000	24,500	24,600
Orange	Anaheim city	347,200	105,600	120,200	130,200	212,300	226,500	256,200
Orange	Brea city	46,900	17,100	18,700	19,900	54,600	57,100	57,400
Orange	Buena Park city	84,400	24,900	29,400	31,500	37,400	37,300	39,300
Orange	Costa Mesa city	112,300	42,100	50,000	54,400	101,600	103,600	104,900
Orange	Cypress city	50,200	16,400	18,400	20,300	26,100	27,700	28,100
Orange	Dana Point city	33,200	14,400	15,100	15,600	13,100	13,600	14,000
Orange	Fountain Valley city	57,200	19,100	24,800	25,400	31,800	34,700	34,900
Orange	Fullerton city	144,300	48,300	54,600	60,300	66,500	77,300	79,800
Orange	Garden Grove city	172,400	47,100	53,600	57,700	60,700	65,000	70,500

County	Jurisdiction	Population	Households			Employment		
		2019	2019	2035	2050	2019	2035	2050
Orange	Huntington Beach city	199,400	78,800	81,400	83,300	85,300	87,300	87,800
Orange	Irvine city	306,900	108,600	123,100	135,000	282,600	322,500	338,700
Orange	Laguna Beach city	23,200	10,600	11,100	11,400	13,100	13,000	13,100
Orange	Laguna Hills city	31,500	11,000	12,700	13,000	19,200	21,200	22,100
Orange	Laguna Niguel city	64,400	25,400	27,600	28,500	20,800	22,200	22,400
Orange	Laguna Woods city	17,700	12,000	12,000	12,100	4,800	5,600	5,700
Orange	La Habra city	63,200	20,200	21,700	22,200	19,200	20,900	21,000
Orange	Lake Forest city	85,800	29,200	31,700	31,800	44,700	45,800	45,900
Orange	La Palma city	15,700	5,200	5,300	5,500	5,800	6,500	6,600
Orange	Los Alamitos city	11,800	4,300	5,100	5,100	15,900	16,800	16,900
Orange	Mission Viejo city	94,100	34,000	34,800	35,100	37,700	39,200	39,300
Orange	Newport Beach city	84,100	38,000	40,700	41,200	89,400	90,300	90,300
Orange	Orange city	140,700	45,300	49,400	50,300	127,000	132,100	134,700
Orange	Placentia city	52,000	17,000	20,000	21,000	21,400	21,700	21,900
Orange	Rancho Santa Margarita city	48,200	17,300	18,100	18,100	18,300	22,200	24,300
Orange	San Clemente city	64,400	24,500	25,300	25,800	27,000	27,800	28,100
Orange	San Juan Capistrano city	35,300	11,600	13,600	14,400	17,000	25,800	26,500
Orange	Santa Ana city	310,700	76,600	85,300	88,600	167,400	169,700	172,100
Orange	Seal Beach city	25,300	13,300	13,800	13,900	13,000	13,100	13,500
Orange	Stanton city	37,800	11,000	13,300	13,600	10,100	10,600	10,700
Orange	Tustin city	80,400	27,000	33,800	34,000	51,700	66,300	71,300
Orange	Villa Park city	5,900	1,900	2,100	2,300	1,800	2,200	2,300
Orange	Westminster city	91,100	26,900	28,400	29,300	28,300	29,700	29,900
Orange	Yorba Linda city	68,400	22,800	24,500	25,100	28,900	29,100	29,300
Orange	Unincorporated	132,700	42,300	56,000	57,300	27,900	33,200	34,800
Riverside	Banning city	29,200	11,000	12,300	13,200	7,900	10,100	12,000
Riverside	Beaumont city	45,100	14,100	18,500	19,900	7,800	10,700	12,300

County	Jurisdiction	Population	Households			Employment		
		2019	2019	2035	2050	2019	2035	2050
Riverside	Blythe city	17,600	4,400	5,200	5,800	6,300	7,300	7,800
Riverside	Calimesa city	9,900	3,800	4,700	5,400	2,100	3,600	4,400
Riverside	Canyon Lake city	11,000	4,100	4,200	4,300	2,200	2,700	2,900
Riverside	Cathedral City city	51,000	17,800	21,300	23,900	13,300	16,700	18,700
Riverside	Coachella city	41,600	9,600	22,600	35,600	8,900	17,200	23,200
Riverside	Corona city	155,600	47,100	49,900	52,900	86,300	89,800	89,800
Riverside	Desert Hot Springs city	32,200	10,400	17,900	24,600	4,700	7,700	9,400
Riverside	Eastvale City	69,100	17,300	19,500	19,500	16,500	26,600	28,500
Riverside	Hemet city	89,100	32,300	43,700	51,800	24,700	31,900	48,200
Riverside	Indian Wells city	4,700	2,600	3,100	3,400	5,200	6,200	6,700
Riverside	Indio city	88,300	28,100	41,000	47,400	28,300	35,300	38,500
Riverside	Lake Elsinore city	69,800	20,000	26,000	29,300	16,700	20,900	22,700
Riverside	La Quinta city	37,200	15,400	18,000	19,800	18,200	19,300	20,200
Riverside	Menifee city	101,600	34,000	44,300	49,100	17,300	25,800	31,300
Riverside	Moreno Valley city	206,800	54,700	69,500	76,600	44,500	75,400	83,200
Riverside	Murrieta city	110,000	34,800	40,200	40,700	39,700	51,000	59,200
Riverside	Norco city	25,700	6,900	7,800	8,000	16,200	21,400	22,500
Riverside	Palm Desert city	50,600	24,000	30,000	30,000	47,600	50,200	51,500
Riverside	Palm Springs city	44,100	23,700	27,700	30,500	34,900	41,200	44,600
Riverside	Perris city	78,000	18,600	28,700	34,600	18,300	29,600	33,300
Riverside	Rancho Mirage city	16,800	8,600	14,700	15,000	18,900	22,000	23,600
Riverside	Riverside city	311,100	94,200	126,300	137,200	158,600	190,800	204,500
Riverside	San Jacinto city	53,400	14,900	20,500	24,500	9,700	12,200	17,400
Riverside	Temecula city	109,100	35,100	44,700	45,400	66,000	72,000	73,100
Riverside	Wildomar city	36,500	11,000	15,500	16,900	8,800	11,700	12,400
Riverside	Jurupa Valley City	104,100	27,300	33,900	36,000	30,500	33,100	34,200
Riverside	Unincorporated	386,900	119,000	153,500	161,400	87,100	114,200	148,800

County	Jurisdiction	Population	Households			Employment		
		2019	2019	2035	2050	2019	2035	2050
San Bernardino	Adelanto city	37,800	9,000	21,000	30,100	6,200	16,800	24,300
San Bernardino	Apple Valley town	75,600	25,500	33,500	38,700	20,700	26,500	30,100
San Bernardino	Barstow city	25,300	8,600	10,700	12,100	11,700	15,000	17,000
San Bernardino	Big Bear Lake city	5,000	2,300	2,300	2,300	4,700	5,200	5,500
San Bernardino	Chino city	90,800	25,900	34,600	40,100	51,300	58,100	62,400
San Bernardino	Chino Hills city	78,200	24,900	28,300	30,500	17,700	18,100	18,300
San Bernardino	Colton city	53,800	15,800	18,900	20,800	26,000	28,800	30,500
San Bernardino	Fontana city	207,900	53,700	67,100	75,900	65,100	74,600	80,600
San Bernardino	Grand Terrace city	13,100	4,600	5,200	5,700	3,500	4,700	5,500
San Bernardino	Hesperia city	99,600	28,700	41,700	51,200	23,200	38,100	47,500
San Bernardino	Highland city	56,900	16,400	20,400	23,200	7,400	10,000	11,600
San Bernardino	Loma Linda city	24,800	9,300	10,700	11,700	28,600	30,100	31,100
San Bernardino	Montclair city	37,800	10,400	18,600	23,500	17,700	18,800	19,300
San Bernardino	Needles city	5,000	2,000	3,200	4,100	1,800	2,700	3,200
San Bernardino	Ontario city	174,800	50,500	76,700	95,500	122,000	164,100	187,700
San Bernardino	Rancho Cucamonga city	173,900	57,300	73,600	83,000	95,100	108,000	116,700
San Bernardino	Redlands city	72,800	25,600	28,900	31,200	49,400	55,900	60,100
San Bernardino	Rialto city	103,700	26,800	32,900	36,600	32,000	36,300	39,900
San Bernardino	San Bernardino city	221,200	62,500	75,900	84,800	109,600	128,300	140,900
San Bernardino	Twentynine Palms city	27,600	8,200	10,300	11,700	4,600	6,600	7,900
San Bernardino	Upland city	78,800	27,500	30,900	33,200	39,300	42,300	44,200
San Bernardino	Victorville city	134,300	36,400	53,800	65,700	46,400	56,000	62,100
San Bernardino	Yucaipa city	54,500	19,200	23,900	26,700	11,900	16,100	18,300
San Bernardino	Yucca Valley town	21,700	8,700	9,900	10,700	7,800	9,700	10,900
San Bernardino	Unincorporated	299,800	97,300	101,500	104,200	56,300	64,100	69,000
Ventura	Camarillo city	74,000	27,500	29,100	29,500	33,700	36,700	38,000
Ventura	Fillmore city	16,500	4,500	5,700	5,700	3,000	3,400	2,800

County	Jurisdiction	Population	Households			Employment		
		2019	2019	2035	2050	2019	2035	2050
Ventura	Moorpark city	36,500	11,500	12,900	12,900	12,000	12,800	11,600
Ventura	Ojai city	7,700	3,200	3,300	3,300	6,200	6,300	6,200
Ventura	Oxnard city	202,700	53,300	70,500	70,600	63,100	72,800	72,900
Ventura	Port Hueneme city	21,900	7,200	7,500	7,500	4,400	4,500	4,500
Ventura	San Buenaventura city	110,900	41,800	47,300	47,300	67,600	68,400	67,200
Ventura	Santa Paula city	30,800	8,800	10,500	10,600	7,100	7,600	6,300
Ventura	Simi Valley city	126,800	42,600	47,400	47,400	48,400	50,000	47,900
Ventura	Thousand Oaks city	127,300	46,200	50,600	50,600	85,700	88,600	88,000
Ventura	Unincorporated	93,700	31,500	33,200	33,200	31,500	32,400	30,500
		<b>18,827,000</b>	<b>6,193,000</b>	<b>7,311,000</b>	<b>7,814,000</b>	<b>8,976,000</b>	<b>9,885,000</b>	<b>10,276,000</b>

## 5.5 TAZ-LEVEL GROWTH FORECAST, GROWTH VISION, AND SCS CONSISTENCY

In order to assess the ability of Connect SoCal 2024 to meet federal air quality standards and achieve the state greenhouse gas reduction target, SCAG develops small-area growth projection data for households and employment, which are known as Transportation Analysis Zone (TAZ) data. Although the data reflects all edits provided by local jurisdiction staff during the Connect SoCal 2024 Local Data Exchange (LDX) process between May and December 2022, it represents a snapshot in time and does not reflect subsequently available information or any entitled and pending project information not provided to SCAG during the LDX process (except for follow-up adjustments requested by local jurisdictions, e.g., County of Los Angeles in 2023). Additionally, the TAZ data does not project the full build-out or realization of localities' general plans and may not fully reflect jurisdictions' most recent housing elements (see Section 4.6). As local plans and approvals continue to evolve (driven by market forces influencing potential timing, location, and type of development), the applicable jurisdiction(s) should be contacted for the most up-to-date data.

Projections at the jurisdiction level or smaller geographies, including TAZ, are utilized to conduct required modeling and generally illustrate how regional policies and strategies may be reflected at the neighborhood level. They are advisory and non-binding. No jurisdiction has an obligation to change or conform its land use policies, general plan, housing element, zoning, regulations, or approvals of projects or plans, or consider or require mitigation measures or alternatives based on any numbers within or aggregates of Connect SoCal 2024 projections at any geographic level.

The Forecasted Regional Development Pattern is not solely based on TAZ-level household and employment projections. It is utilized to estimate the overall effect of the many policies, goals, and strategies of Connect SoCal. While TAZ-level projections enable the modeling of future conditions in order to evaluate conformity with federal air quality standards and achievement of the state greenhouse gas emissions reduction target; they do not reflect the only set of growth assumptions that may meet these standards and the target.

Therefore, insofar as housing and other laws or grants may require comparisons of projects or plans to Connect SoCal 2024, SCAG's projections that are illustrated in TAZ data and maps—along with any related documents or modeling outputs—may not be used to determine the inconsistency of any plan or project in the region with Connect SoCal 2024. Local jurisdictions and other lead agencies shall have the sole discretion to determine a local project's or plan's consistency and/or alignment with Connect SoCal<sup>3</sup> (except where SCAG is required to make a consistency or alignment finding for grant purposes).

For example, local jurisdictions' plans and approvals may be found to align with Connect SoCal 2024 if they directionally support a number of its objectives, such as by encouraging a mix of housing types that includes more affordable and multi-family housing rather than solely single-family, for-sale housing; providing for more housing located proximate to destinations or vice versa; or encouraging increased use of transit, ridesharing, biking, walking or micro-mobility, or hybrid and remote work to reduce commuting trips. (See Chapter 3 for additional examples). Such considerations may constitute an appropriate basis for

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<sup>3</sup> Consistency and alignment are used interchangeably for the purpose of this document. Neither consistency nor alignment shall be understood to require the analysis of numbers within or aggregates of Connect SoCal 2024 projections at any geographic level.



a local jurisdiction to determine that a plan or project is consistent with Connect SoCal. Connect SoCal 2024 includes dozens of policies, goals, objectives, and measurements, any number of which may not be individually applicable to any given plan, project, or development. Such determinations could be evaluated based on (i) the totality of the goals, policies, and objectives of Connect SoCal 2024 and its associated Program Environmental Impact Report (PEIR), and (ii) the attributes of the local project or plan in overall relation to Connect SoCal. Consistency with Connect SoCal 2024 should not be evaluated in a prescriptive manner by applying SCAG's TAZ-level data, any aggregate thereof, or any particular one or more goals, policies, or objectives of Connect SoCal 2024 and its associated PEIR.

Household or employment growth included in the Connect SoCal 2024 TAZ-level data and maps may assist in determining consistency with the SCS for purposes of determining a project's eligibility for CEQA streamlining under SB 375 (Cal. Govt. Code § 21155(a)). TAZ-level data and maps may not otherwise be used or applied prescriptively to determine that a project is inconsistent with Connect SoCal 2024 for any purpose, given that they do not reflect the only set of growth assumptions that would be consistent with the SCS. Specifically, the TAZ-level data and maps do not supersede or otherwise affect locally approved housing elements, including those adopted in compliance with the 6th Cycle of the Regional Housing Needs Assessment (RHNA).

## 6. CONCLUSIONS

SCAG's 2024 regional growth forecast sets the stage for a wide range of SCAG planning activities as well as the long-range planning of other agencies and local jurisdictions in the region. This technical report principally addresses "who we're planning for."

This forecast was developed by integrating the latest demographic and economic trend information from expert sources at the regional level to develop a balanced view of future population, households, and employment. In addition to the Plan's forecast, SCAG conducted analysis of growth ranges—projecting both high and low growth potential for the region—to help understand the variety of future outcomes that might be possible for the region. This forecast also incorporates extensive input and data from local jurisdictions at the small area level. The Local Data Exchange process allowed SCAG to harmonize high-level trends with bottom-up community visions and entitled projects. This simultaneous and collaborative process ensures as accurate and realistic a forecast as possible while accounting for inherent uncertainties in the region's future.

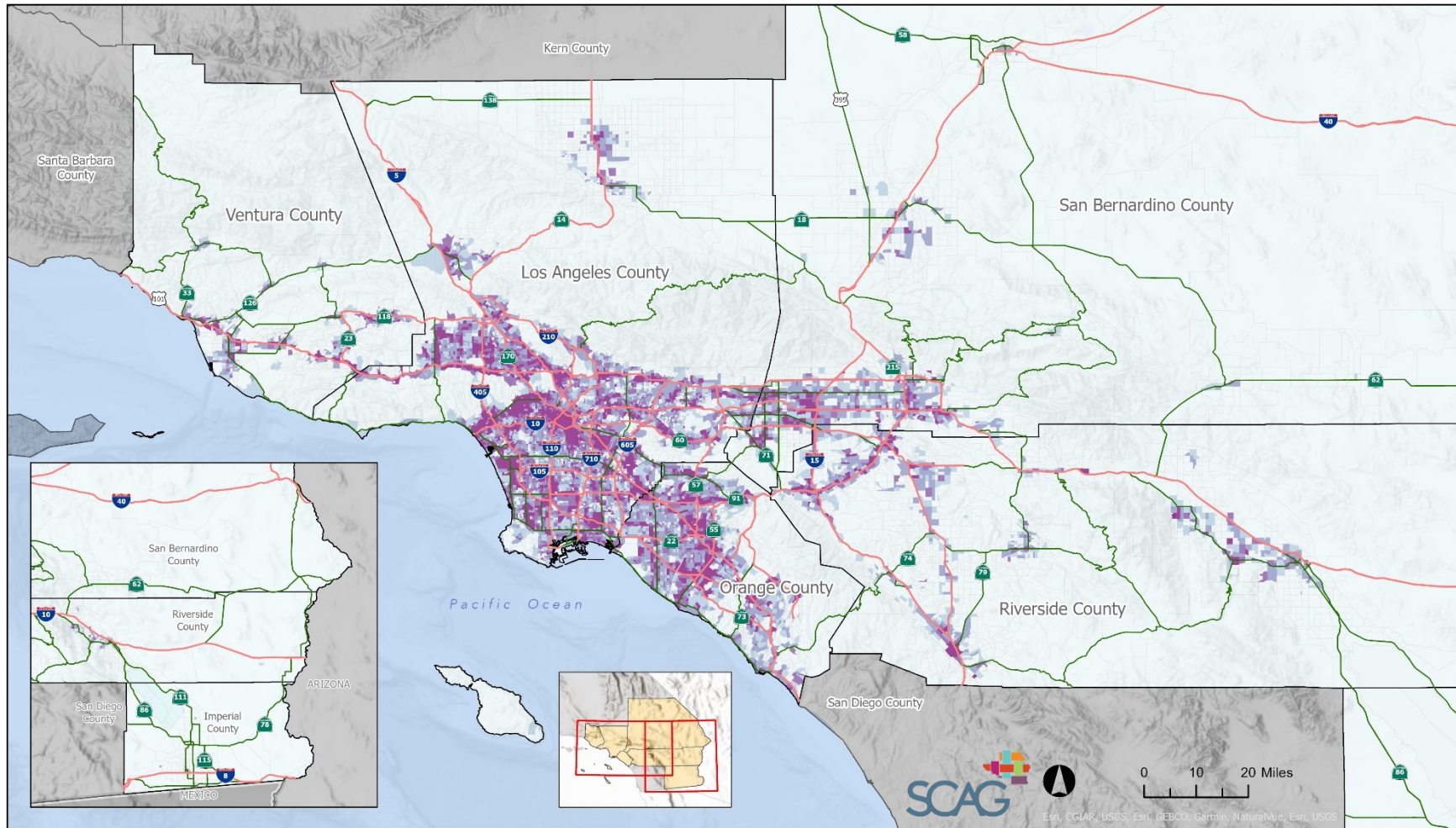
While growth is expected to be slower than past periods, the SCAG Region is still expected to add 2 million people by 2050. However, the population will be older, which can pose several challenges such as healthcare and social assistance needs and ensuring tax revenues with fewer workers. While the region will continue lose population to other regions and states, natural population increases (more births than deaths), and foreign immigration will keep population growing somewhat. Because in-migrants tend to be of working age, migration is expected to alleviate some of the challenges of an aging population.

Household formation rates are expected to continue their increase of the past few years and housing growth in the region is continued to accelerate to fill existing need—despite slow population growth. More small households will form as overcrowding pressures ease, particularly during the first half of the Plan horizon. By 2050, household growth is expected to continue outpacing population growth, resulting in a more balanced future overall.

After recovering from the Great Recession, employment in the SCAG Region was devastated by the COVID-19 pandemic in early 2020, losing 1.9 million jobs in two months. However, employment in the region recovered rapidly. By 2022, employment in the region was nearly at the 2019 peak and unemployment at historical lows. Going forward, this Plan projects slow, stable growth, assuming the region addresses worker housing needs. While the region showed resilience in the recent recovery from the pandemic-related economic downturn, the pandemic hastened the acceptance of remote work and adoption of technologies that minimize human interaction or that automate work. This presents both challenges and opportunities to leverage the region's innovative, creative work culture.

SCAG projects household growth in excess of the 6th cycle regional housing needs determination of 1,341,827 housing units. The distribution of population, households, and jobs across the region's six counties projects an improved balance between home locations and destinations, as reflected by job locations. The growth vision embedded sustainable growth policies and strategies into the small area forecast which, once reviewed and refined by local jurisdictions, helps achieve statutory targets. While there is inherent uncertainty in the degree and manner in which Southern California will grow by 2050, this data and expert-driven projection provides a foundation for achieving Connect SoCal's vision of a healthy, prosperous, accessible, and connected region for a more resilient and equitable future.

Map 1. 2019 TAZ Employment Density (Jobs per Square Mile)

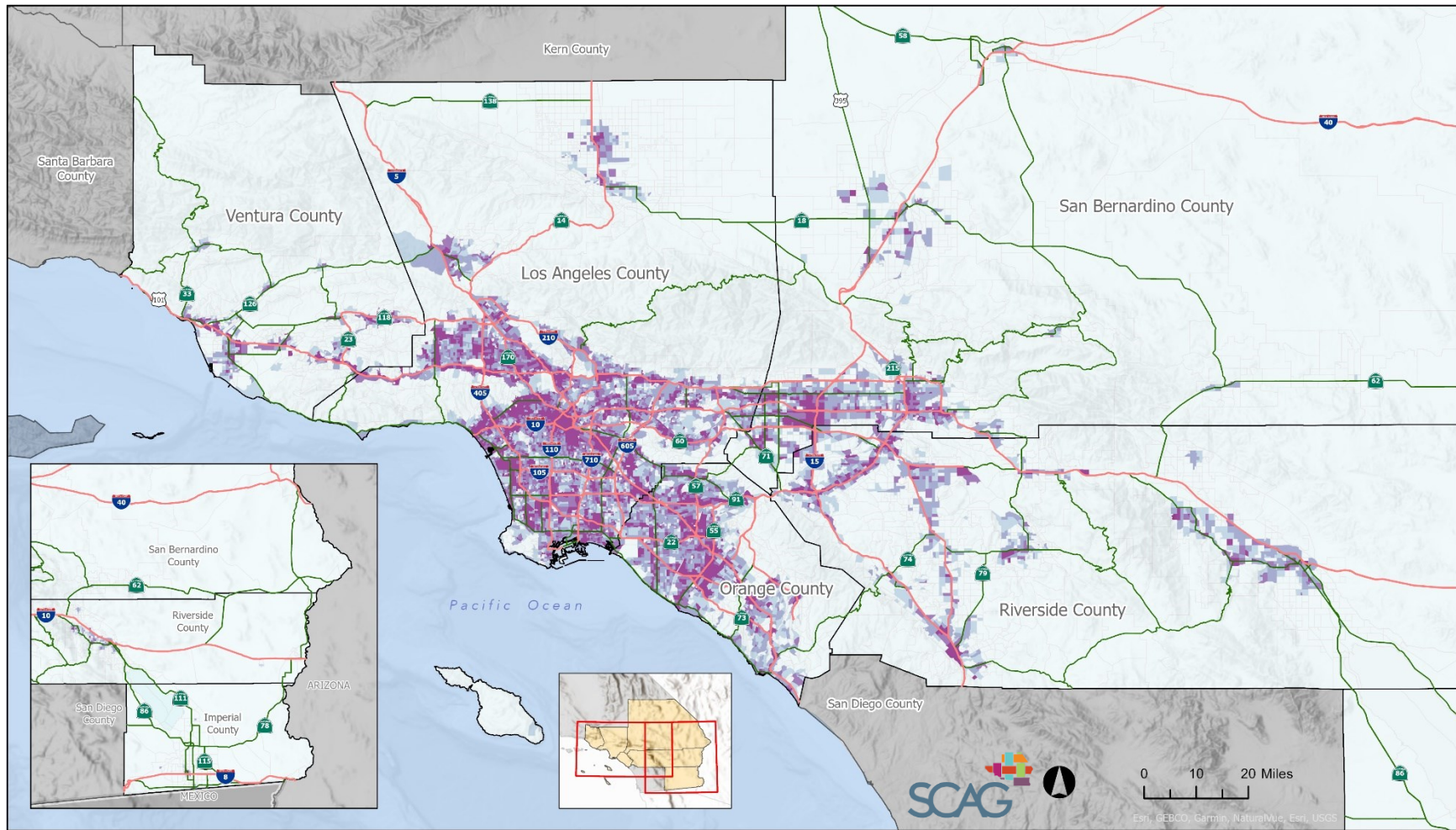


Tier2 TAZ Employment Density in 2019 (Jobs per Square Mile)

Less than or Equal to 500
  501 to 1,000
  1,000 to 2,500
  2,500 to 5,000
  Greater than 5,000
  SCAG Counties
  Freeway/Toll Roads
  Other State Highway

Source: SCAG 2023

Map 2. 2050 TAZ Employment Density (Density per Square Mile)

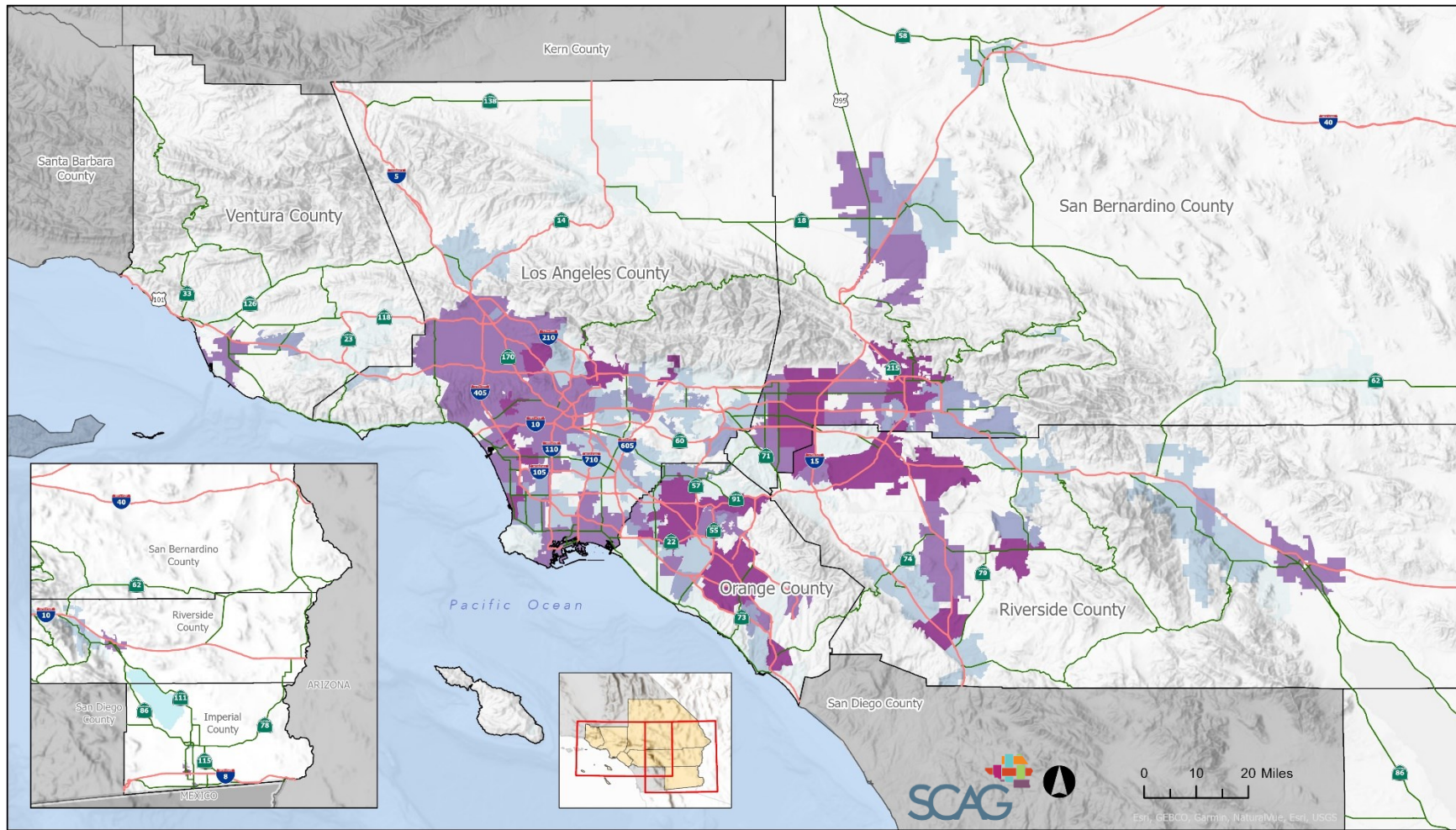


Tier2 TAZ Employment Density in 2050 (Jobs per Square Mile)

- Less than or Equal to 500
- 501 to 1,000
- 1,001 to 2,500
- 2,501 to 5,000
- Greater than 5,000
- SCAG Counties
- Freeway/Toll Roads
- Other State Highway

Source: SCAG 2023. Development patterns shown are based on Transportation Analysis Zone (TAZ) level data. Household and employment growth projection data at the jurisdiction level or smaller geography, including TAZ, are utilized (i) to conduct required modeling analysis and (ii) to generally illustrate how regional policies and strategies may be reflected at the neighborhood level. As such these data and maps are advisory and non-binding.

Map 3. 2019-2050 Employment Jurisdictional Density Change

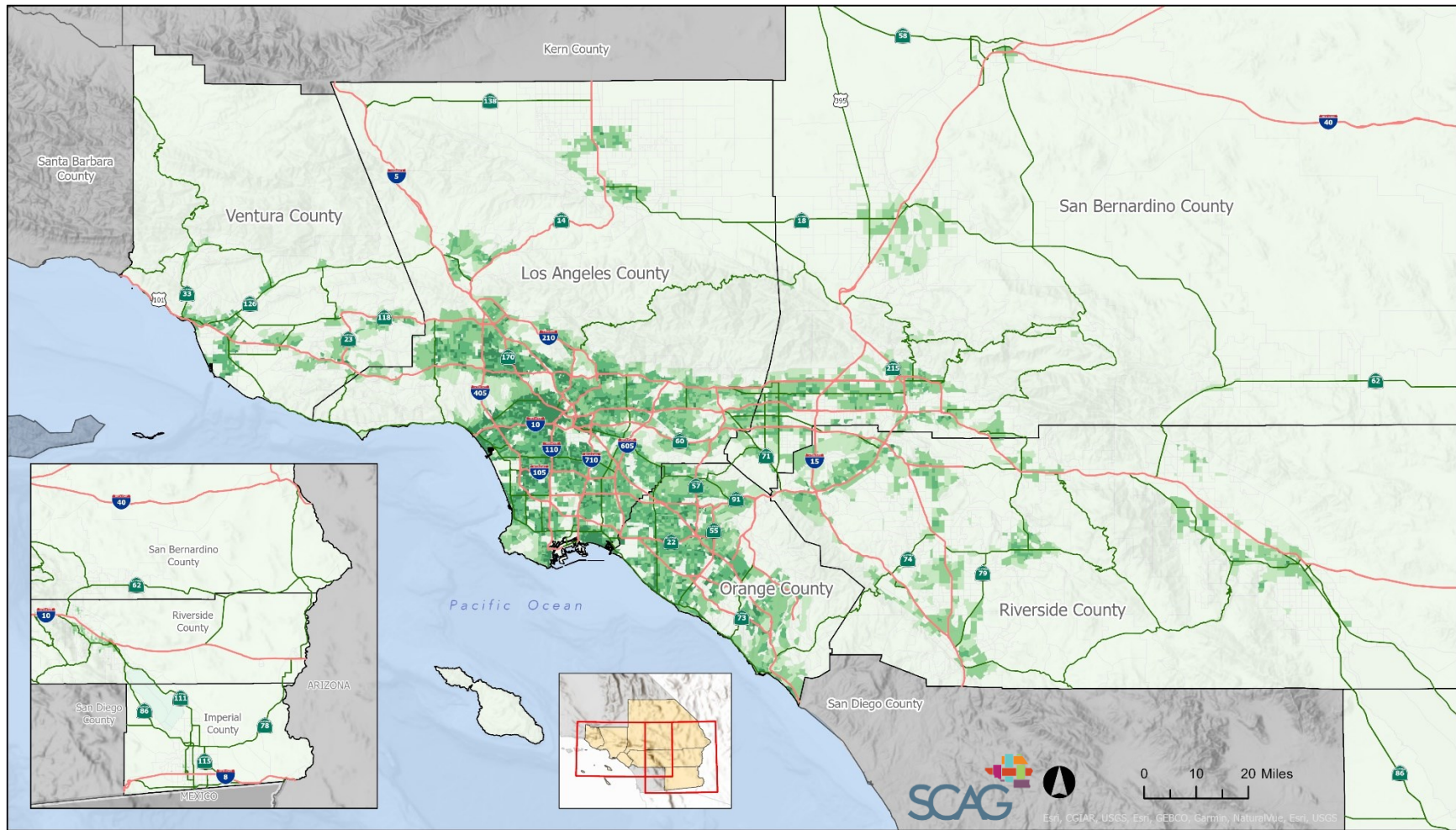


Jurisdiction Employment Growth, 2019-2050 (Jobs per Square Mile)

Less than 100	201 to 300	Greater than 500	SCAG Counties	Freeway/Toll Roads	Other State Highway
101 to 200	301 to 500				

Source: SCAG 2023. County unincorporated areas excluded from map to improve cartographic display. Household and employment growth projection data at the jurisdiction level or smaller geography, including TAZ, are utilized (i) to conduct required modeling analysis and (ii) to generally illustrate how regional policies and strategies may be reflected at the neighborhood level. As such these data and maps are advisory and non-binding.

Map 4. 2019 TAZ Household Density (Households per Square Mile)

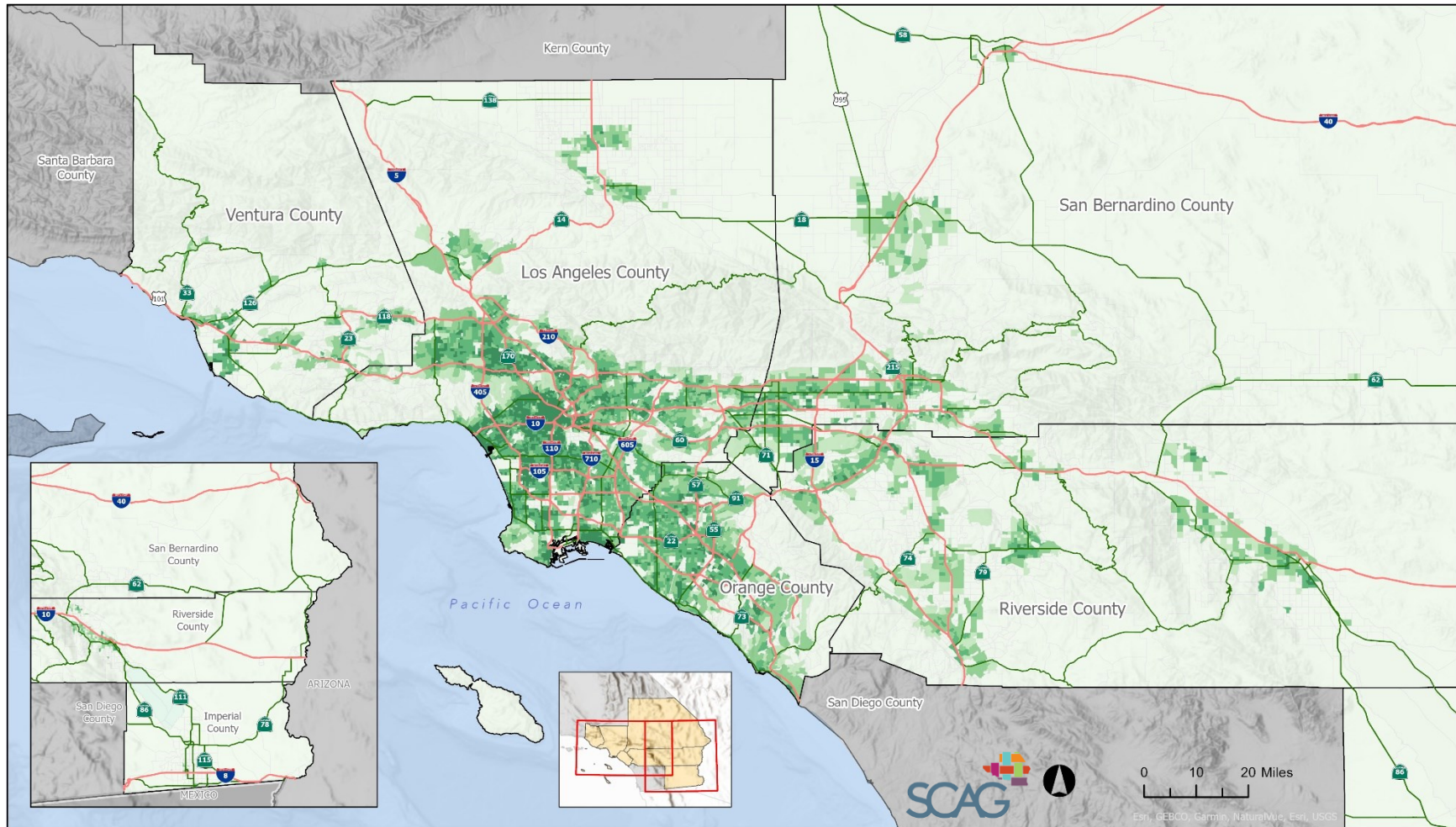


Tier2 TAZ Household Density in 2019 (Households per Square Mile)

- |   |  |  |  |   |   |
|---|--|--|--|---|---|
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #e0f0e0; border: 1px solid black;"></span> Less than or Equal to 500 | <span style="display: inline-block; width: 15px; height: 10px; background-color: #c0e0c0; border: 1px solid black;"></span> 1,001 to 2,500 | <span style="display: inline-block; width: 15px; height: 10px; background-color: #80c080; border: 1px solid black;"></span> Greater than 5,000 | <span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black;"></span> SCAG Counties | <span style="display: inline-block; width: 15px; border-bottom: 1px solid red;"></span> Freeway/Toll Road | <span style="display: inline-block; width: 15px; border-bottom: 1px solid green;"></span> Other State Highway |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #a0d0a0; border: 1px solid black;"></span> 501 to 1,000              | <span style="display: inline-block; width: 15px; height: 10px; background-color: #60a060; border: 1px solid black;"></span> 2,501 to 5,000 |  |  |   |   |

Source: SCAG 2023

Map 5. 2050 TAZ Household Density (Households per Square Mile)

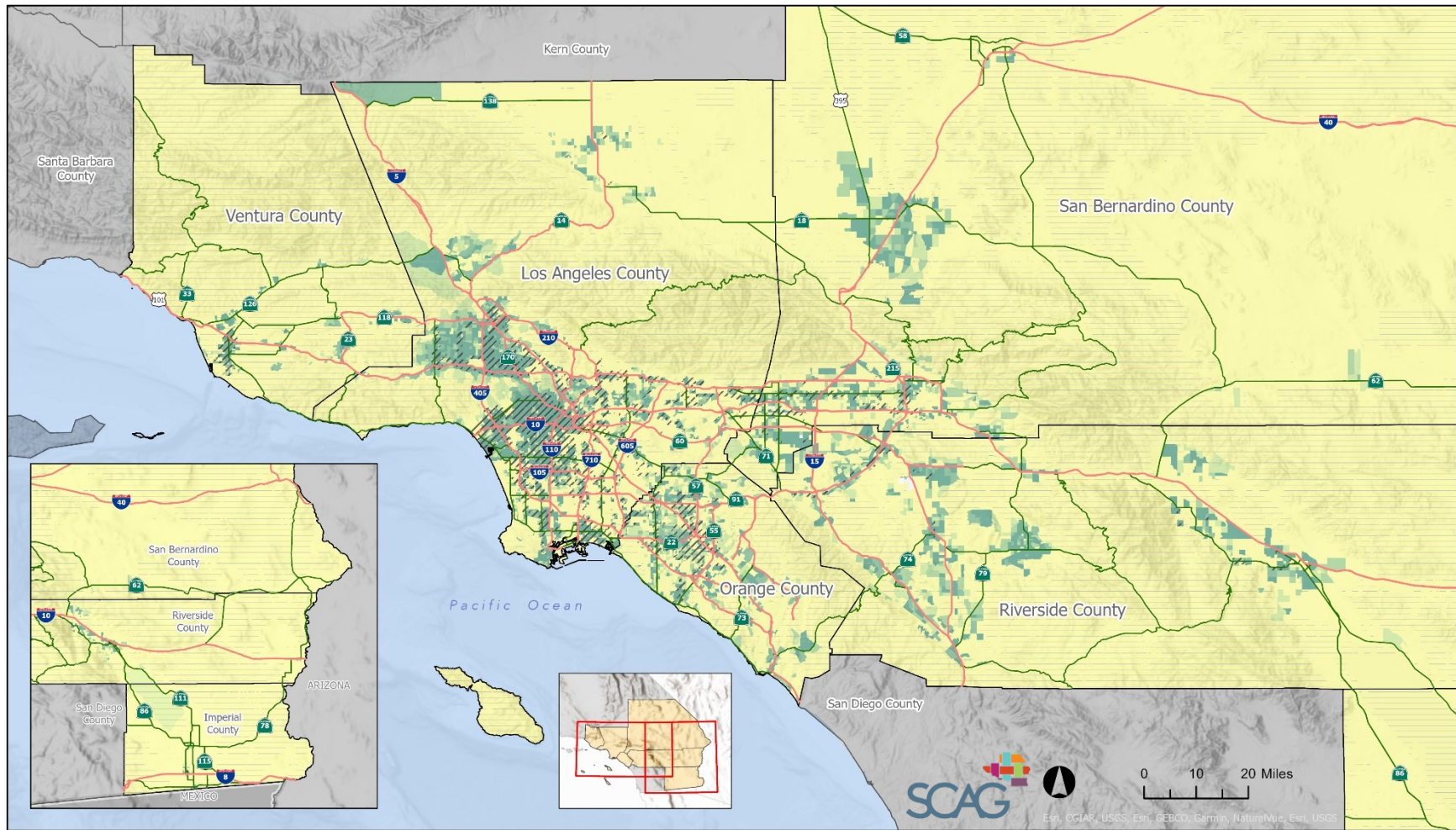


Tier2 TAZ Household Density in 2050 (Households per Square Mile)

- |   |  |   |   |   |  |
|---|--|---|---|---|--|
| <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 20px; height: 10px; background-color: #e0f2f1; border: 1px solid black; margin-right: 5px;"></span> Less than or Equal to 500</li> <li><span style="display: inline-block; width: 20px; height: 10px; background-color: #c8e6c9; border: 1px solid black; margin-right: 5px;"></span> 501 to 1,000</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 20px; height: 10px; background-color: #a1887f; border: 1px solid black; margin-right: 5px;"></span> 1,001 to 2,500</li> <li><span style="display: inline-block; width: 20px; height: 10px; background-color: #8d6e63; border: 1px solid black; margin-right: 5px;"></span> 2,501 to 5,000</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 20px; height: 10px; background-color: #4393c8; border: 1px solid black; margin-right: 5px;"></span> Greater than 5,000</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; border: 1px solid black; width: 20px; height: 10px; margin-right: 5px;"></span> SCAG Counties</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; border-bottom: 2px solid red; width: 20px; margin-right: 5px;"></span> Freeway/Toll Roads</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; border-bottom: 2px solid green; width: 20px; margin-right: 5px;"></span> Other State Highway</li> </ul> |
|---|--|---|---|---|--|

Source: SCAG 2023 Development patterns shown are based on Transportation Analysis Zone (TAZ) level data. Household and employment growth projection data at the jurisdiction level or smaller geography, including TAZ, are utilized (i) to conduct required modeling analysis and (ii) to generally illustrate how regional policies and strategies may be reflected at the neighborhood level. As such these data and maps are advisory and non-binding.

Map 6. Forecasted Regional Development Pattern (TAZ Household Density Growth, 2019-2050)



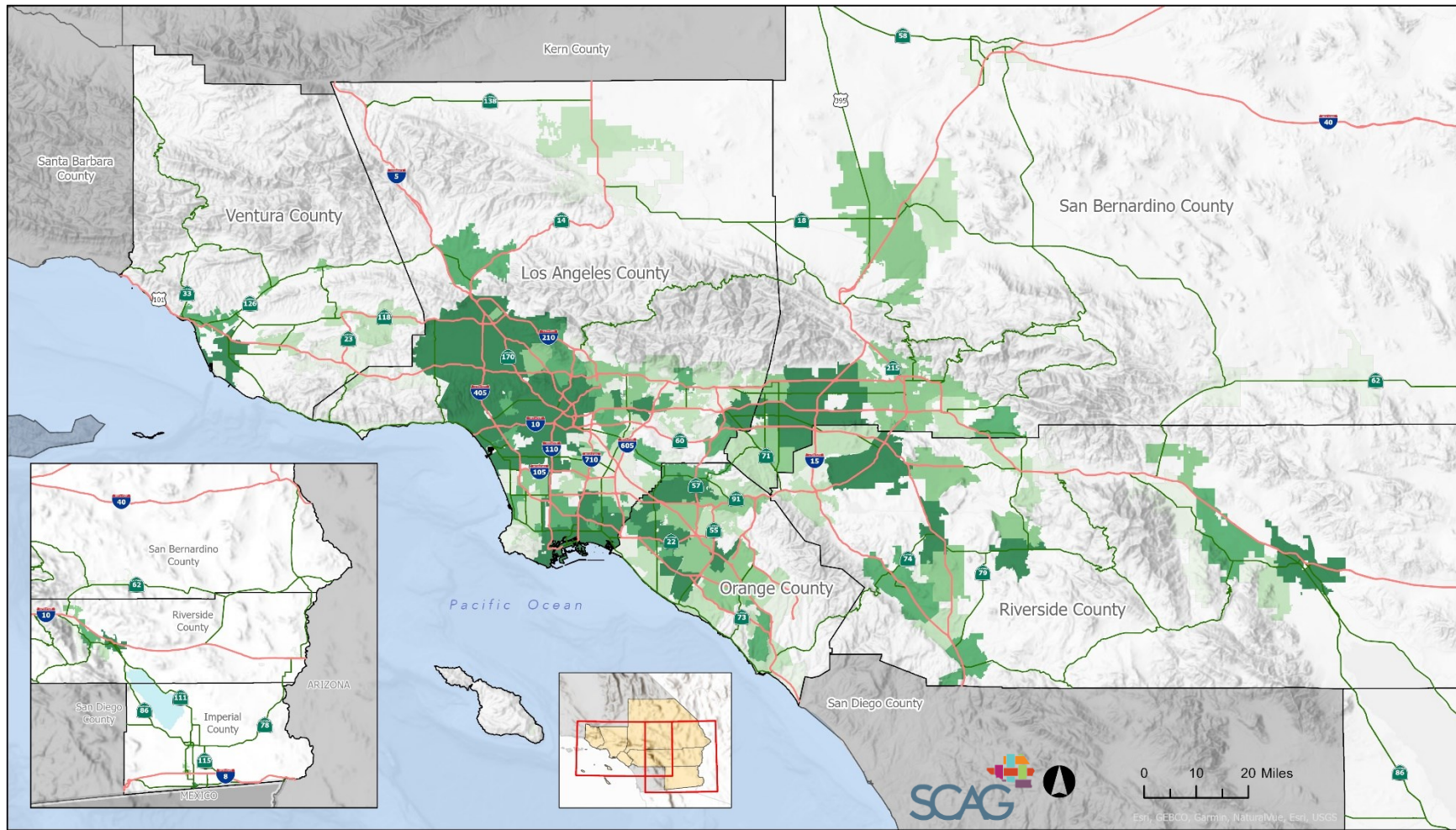
Tier2 TAZ Household Density Growth in 2019-2050 (Households per Square Mile)

- |  |   |   |  |   |   |
|--|---|---|--|---|---|
| <span style="display:inline-block; width:15px; height:15px; background-color:#ffff00; border:1px solid black;"></span> Less than or Equal to 100 | <span style="display:inline-block; width:15px; height:15px; background-color:#90ee90; border:1px solid black;"></span> 201 to 300 | <span style="display:inline-block; width:15px; height:15px; background-color:#3cb371; border:1px solid black;"></span> Greater than 500 | <span style="display:inline-block; width:15px; height:15px; border-bottom: 1px dashed black;"></span> Priority Areas | <span style="display:inline-block; width:15px; height:15px; border: 1px solid black;"></span> SCAG Counties | <span style="display:inline-block; width:15px; border-bottom: 2px solid red;"></span> Freeway/Toll Roads    |
| <span style="display:inline-block; width:15px; height:15px; background-color:#90ee90; border:1px solid black;"></span> 101 to 200                | <span style="display:inline-block; width:15px; height:15px; background-color:#3cb371; border:1px solid black;"></span> 301 to 500 |   | <span style="display:inline-block; width:15px; height:15px; border-bottom: 1px dotted black;"></span> Resource Areas |   | <span style="display:inline-block; width:15px; border-bottom: 2px solid green;"></span> Other State Highway |

Source: SCAG 2023. Priority areas refer to 2+ PDAs and no GRRAs. Resource areas refer to more than 1 GRRAs. More information is available in the Land Use and Communities Technical Report. Development patterns shown are based on TAZ level data. Household and employment growth projection data at the jurisdiction level or smaller geography, including TAZ, are utilized (i) to conduct required modeling analysis and (ii) to generally illustrate how regional policies and strategies may be reflected at the neighborhood level. As such these data and maps are advisory and non-binding.



Map 7. 2019-2050 Household Change (Jurisdiction)



Jurisdiction Household Growth, 2019-2050 (Households per Square Mile)

Less than 100   
  201 to 200   
  201 to 300   
  301 to 500   
  Greater than 500   
  SCAG Counties   
  Freeway/Toll Road   
  Other State Highway

Source: SCAG 2023. Note: County unincorporated areas excluded from map to improve cartographic display. Household and employment growth projection data at the jurisdiction level or smaller geography, including TAZ, are utilized (i) to conduct required modeling analysis and (ii) to generally illustrate how regional policies and strategies may be reflected at the neighborhood level. As such these data and maps are advisory and non-binding.

## 7. REFERENCES AND ENDNOTES

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<sup>1</sup> See <https://scag.ca.gov/sites/main/files/file-attachments/twg042023fullagn.pdf#page=18>.

<sup>2</sup> Connect SoCal 2020 projected a population increase of 1.9 million residents in the SCAG Region from 2020-2035.





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