



# AGENDA ITEM 4 REPORT

Southern California Association of Governments  
Remote Participation Only  
November 4, 2021

**To:** Community Economic & Human Development Committee (CEHD)

EXECUTIVE DIRECTOR'S  
APPROVAL

**From:** Kevin Kane, Senior Regional Planner  
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**Subject:** Connect SoCal 2024: Preliminary Regional Growth Ranges for 2050

**RECOMMENDED ACTION:**

Information Only – No Action Required.

**STRATEGIC PLAN:**

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

**EXECUTIVE SUMMARY:**

*As SCAG develops a preliminary growth forecast for the 2024 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) horizon year of 2050, the region and nation face uncertainties including the COVID-19 pandemic, housing cost increases, climate change, and demographic shifts. New 2020 Census data indicate that the region has been growing more slowly than prior expectations, and while economic recovery is expected, the need for housing remains clear. Due to various federal and state planning requirements in addition to technical modeling requirements, the next RTP/SCS must demonstrate a single growth trajectory despite these uncertainties. To strengthen the basis for the upcoming preliminary regional forecast, SCAG staff has conducted a regional growth range exercise acknowledging and assessing the uncertainties in projecting population, households, and employment over a long-range horizon. Staff has concluded that the Mid/Baseline scenario ("Slower Growth, Steady Improvement") is the most reasonable outlook given currently available information and expert review. Staff will next refine the preliminary regional baseline projection to develop county-level projections and then allocate growth at the local level. Ultimately the preliminary regional forecast will be used for further plan development and policy discussions.*

**BACKGROUND:**

The regional growth forecast reflects recent and past trends, key demographic and economic assumptions, and local, regional, state, and national policy. The objective of the forecast is to project reasonably foreseeable future growth in population, households, and employment over a

long-range time horizon extending from 2019-2050. It is the technical underpinning of much of the policy work associated with development of the RTP/SCS.

Due to the various federal and state planning requirements that drive SCAG's regional planning and the technical requirements of the activity-based travel demand model (ABM), the forecast must ultimately demonstrate a single growth trajectory. In recent years the SCAG region has experienced several shocks including a pandemic, skyrocketing housing costs, and drought. These events reflect broader national and global uncertainties including climate change, demographic shifts, and technological innovation that could affect the direction of future growth in population, jobs, and households. Exploring regional growth ranges helps acknowledge and assess this uncertainty in order to provide a strong basis for the preliminary regional baseline projection which will then be allocated to the jurisdiction and Transportation Analysis Zone (TAZ) levels for further review and plan development.

SCAG held its Panel of Experts meetings on August 5<sup>th</sup> and 11<sup>th</sup>, 2021 to review trend predictions and assumptions for the regional growth forecast. Panelists were asked to consider the most likely, but also reasonable higher and lower levels of seven key inputs to SCAG's long-range forecast. These included **jobs, births, deaths, immigration, domestic migration, labor force participation, and household formation.**

Assumptions about the future level of each of these inputs involves a degree of uncertainty. Furthermore, there is an inherent difference between short-range forecasting and long-range forecasting, the latter of which focuses more on demographic trends and regional strengths versus the nation. Long-range forecasting can and must use the best available expert opinion to assess the impacts of existing and likely future policy and other conditions which can change the future level of population, households, and jobs. This includes, for example, the future of federal immigration policy, the likelihood and potential scope of future childcare supportive policy, changes in state housing policy, as well as technological and environmental change.

Effects can be greater in combination. For example, assuming low fertility and low immigration together may result in lower growth than the sum of either assumption individually. Additionally, some factors tend to balance each other out to a degree: the lowest reasonably foreseeable fertility rate is not likely to be seen alongside the lowest foreseeable immigration rate, since slightly higher immigration is a likely response to fewer native-born Southern Californians. Therefore, the purpose of the regional growth range exercise is not simply to add the low, medium, and high assumptions together. It is to develop a coherent baseline as well as an understanding of where low and high ranges might fall based on expert assessment of these demographic and economic factors.

This technical regional growth range exercise is limited in scope to the seven key inputs described above and is not intended as a comprehensive regional scenario planning exercise which assesses a wide range of drivers of regional growth. The regional growth projection ranges discussed herein

are intended to provide a strong basis for the preliminary regional baseline projection which will help guide plan development and subsequent regional policy discussions.

Developing Regional Projections

As described in further detail in the Regional Growth Forecast Framework presented to the CEHD committee in September 2021, SCAG projects population using a cohort-component model and employment using a shift-share model. Household formation rates are applied to the population to project households (Figure 1).

**Regional Economic-Demographic Forecast Process**

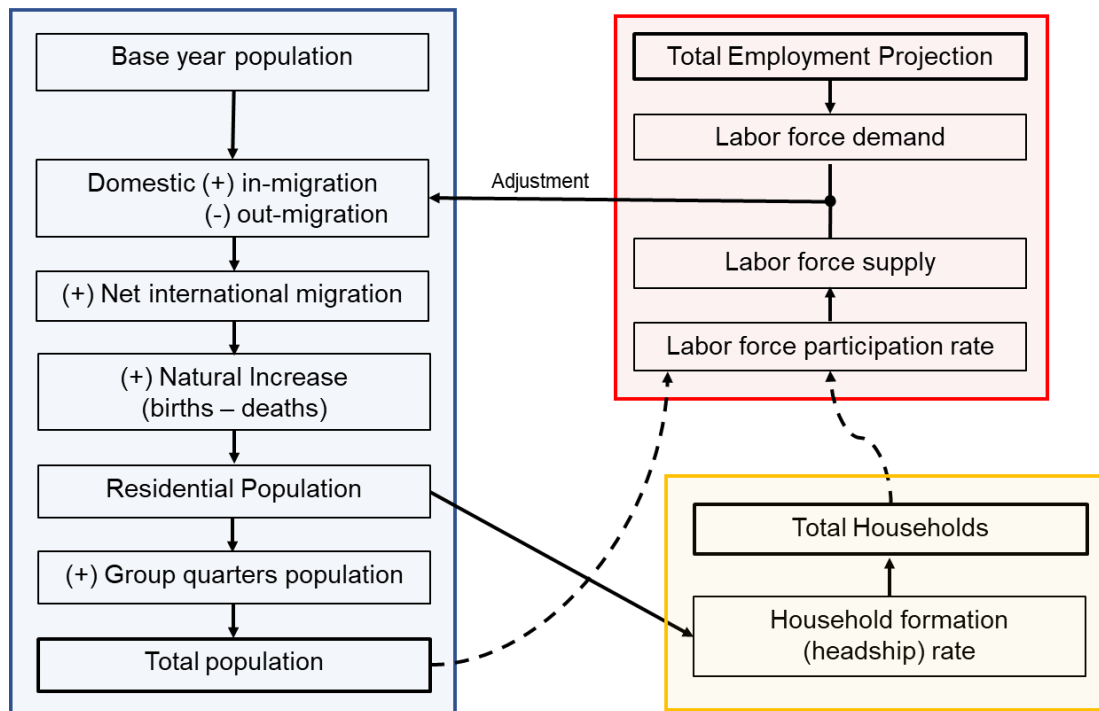


Figure 1

The development of regional projection ranges begins with a baseline employment projection produced by the Center for the Continuing Study of the California Economy (CCSCE) and three population projections developed by SCAG staff and the Population Reference Bureau (PRB) and utilizes inputs and insights from the Panel of Experts. Staff adopted CCSCE’s total jobs projection as the baseline employment projection and adjusted it in order to balance with population in SCAG’s cohort-component model.

Staff developed low and high employment projection scenarios using estimated differences in working-age population between high and low population projections. Additionally, the high jobs scenario assumed a slight increase in the SCAG region’s share of national employment. The result of this process are three distinct regional projection scenarios described further below.

Some key points relevant to all three projection scenarios:

- Census 2020 indicates that the current population is lower than previously projected. The 2020 Census showed a SCAG region population of 18,824,382, which is below the 2016 base year population estimate (18,832,000) for the 2020 RTP/SCS.
- Since the 2020 RTP/SCS regional forecast was produced in July 2017, fertility rates have declined sharply in the SCAG region, mirroring national and global trends. In addition, the final few years of the last decade saw slowing international immigration and more net domestic out-migration.
- Despite the lower base year population, the region’s number of households was far closer to expectations, largely due to the ageing population and smaller average household sizes.
- The region lost over 700,000 jobs in 2020. However, by September 2021, the region had recovered over half of the lost jobs. While this exercise focuses on a long-range forecast, expert assessment of short-term job growth suggests a continued steep recovery, a return to pre-pandemic levels by the late 2022, and continued strong growth through 2024.
- Other forecasts, such as the latest forecasts from the California Department of Finance and Caltrans, show substantial slowing in population growth for the SCAG region. Both forecasts predict that the region’s population will begin to shrink before 2050.
- Labor force participation rates by race, age, and gender are kept constant across the scenarios below and reflect the Panel of Expert’s insights that female and older-age labor force participation will increase in the long run. However, because population characteristics vary across the scenarios, total labor force participation may differ.

**Regional Projection Scenarios**

- Table 1 and Figures 2-5 summarize the preliminary projection scenarios. Each scenario is described further below.

**Preliminary Projection Scenarios**

	Population	Households	Employment
	----- (Thousands) -----		
<b>Baseline Projection</b>			
<b>2019 Actual</b>	18,832	6,191	8,949
<b>2050 Projection</b>	20,801	7,723	10,127
<b>Percent Change</b>	10.5%	24.7%	13.2%
<b>Ranges</b>			
2050 Low	19,519	7,103	9,544
2050 High	21,922	8,007	10,589

Table 1

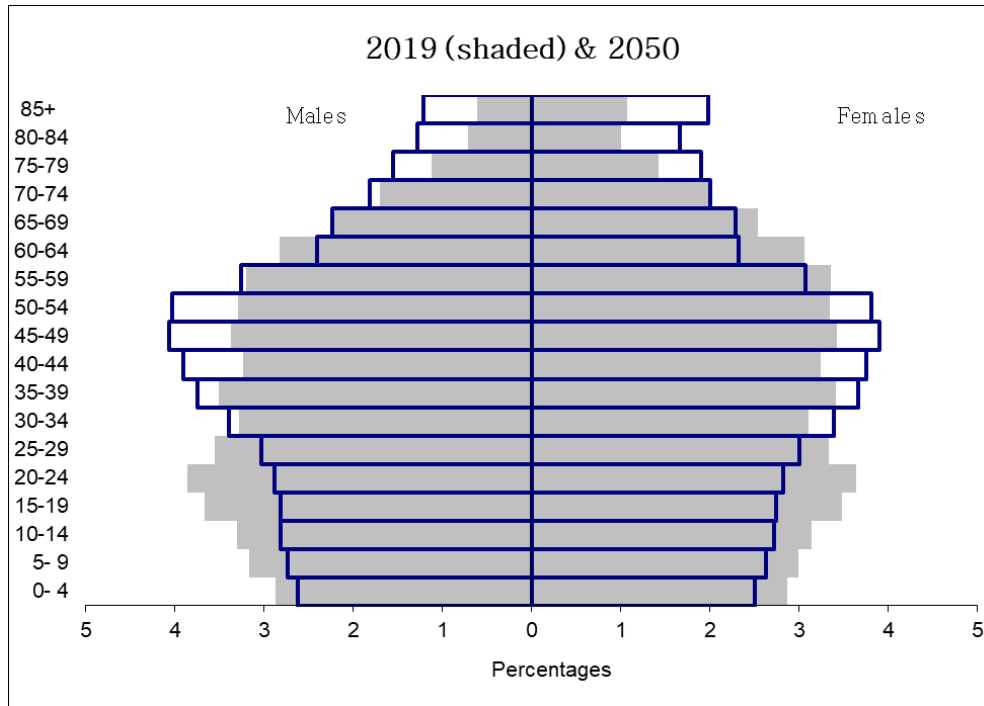


Figure 2: Population pyramid showing age structure, 2019 and 2050 Baseline (Mid) Projection

SCAG Region Population Projection Scenarios  
2019-2050

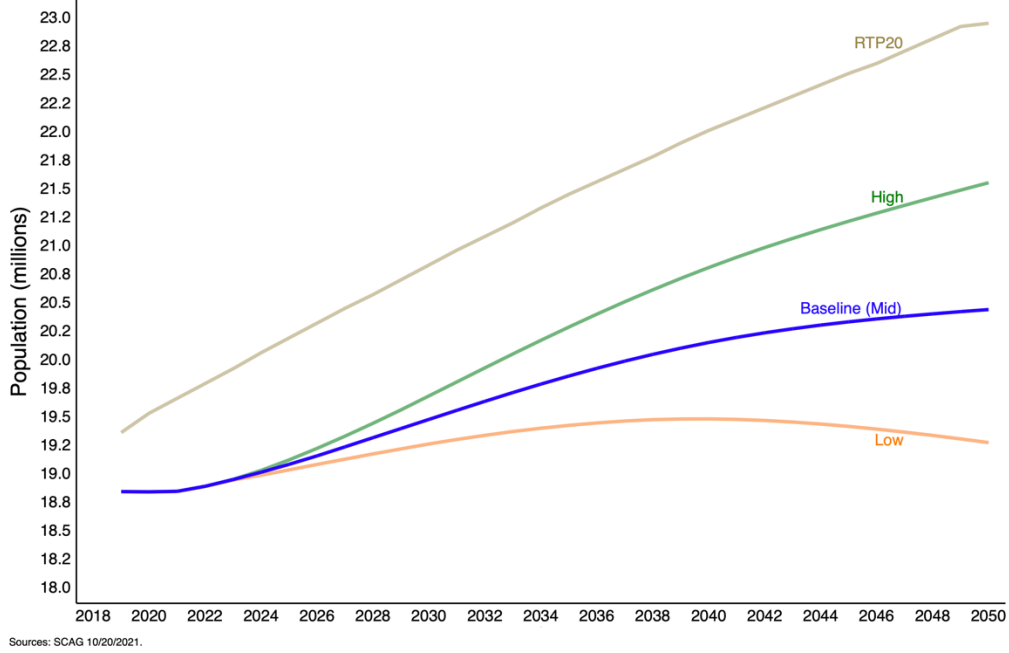


Figure 3

SCAG Region Household Projection Scenario  
2019-2050

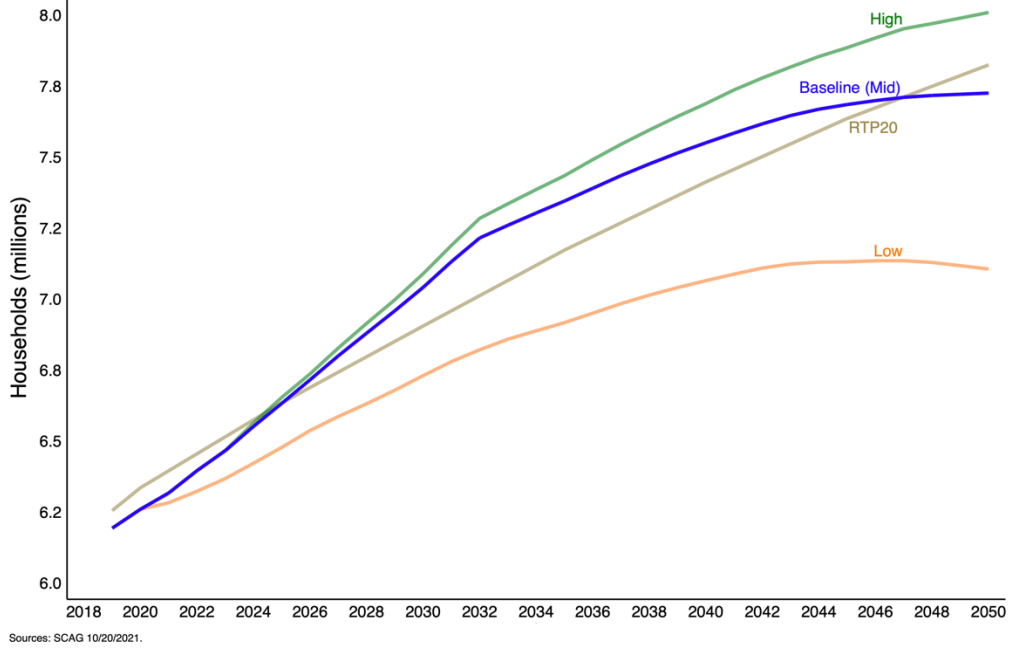


Figure 4

SCAG Region Actual Employment and Projection Scenarios  
All Industries, 2010-2050

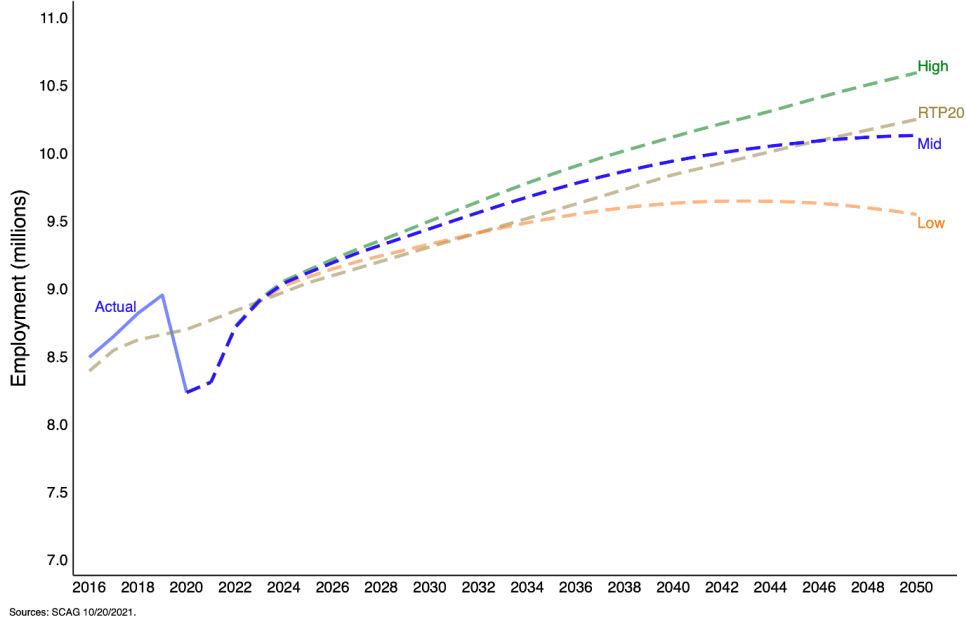


Figure 5

The following sections outline the assumptions relied upon for development of the baseline, low and high scenarios.

**Regional Baseline: Slower Growth, Steady Improvement**

**Birth Rates**

- Birth rates continue on the same trajectory they have been since their recent peak in the mid-2000s (falling for teens and young adults, rising at older ages), but stabilize early in the forecast at approximately 1.5 births per woman.
- Historically low rates, coupled with an aging population, lead to a declining number of births in later years of the forecast.

**Mortality Rates**

- Mortality rates remain stable throughout the forecast at 2019 levels—this reflects uncertainty and lack of consensus among the Panel of Experts about the direction of change.
- Some suggested that health care interventions could lead to improvements in life expectancy, while others suggested that climate change could raise mortality and that rising rates of “deaths of despair” (suicide, overdose) were “just beginning” in California.

**Household Formation (Headship)**



- Headship rates for most age groups trend back upward toward their 2005-2007 levels. This reflects an expectation that housing policies will successfully reverse the trend of increasing overcrowding and falling headship through increased housing production overall and innovations in housing production.
- Rates for teens and young adults are expected to stay low, reflecting nationwide shifts.
- Average household size is expected to decrease by roughly 0.3, yielding more small households. This reflects an ageing population as well as addressing past housing shortfalls.

#### Economic Competitiveness

- The region continues to have structural economic advantages, due to its 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.
- High labor force participation mitigates the slower population growth, allowing job growth in the region to slightly outpace the nation as a whole.
- The region becomes more attractive relative to Texas, Arizona, and other substitute regions, thus increasing demand for regional housing. However, due to labor constraints increased housing supply may not lead to substantial reductions in housing cost.
- While the cost of living remains high, two-worker households and more supportive childcare and healthcare policies mitigate the impact of higher costs on living standards.

#### Immigration and Domestic Migration

- Immigration to the SCAG region returns to higher levels seen in the past two decades (i.e. levels from the early 2000s) with the expectation that the need for workers will continue to drive immigration. U.S. immigration policy remains favorable and Southern California remains a key landing point for immigrants.
- The trend of net domestic out-migration continues in the short term, in part as family-seeking Millennials and middle-class workers consider out-of-region alternatives such as Texas, Arizona, and Nevada. However, increases in housing production combined with the continual draw of jobs, amenities, and a welcoming culture result in net losses of fewer residents to other regions and states throughout the duration of the forecast.
- The Panel of Experts also discussed the implications of climate change on migration. In the baseline scenario there is no net effect of climate on population growth. While environmental hazards and climate change affect the region, this remains a national and global issue and this scenario does not assume that migration to or from Southern California is impacted by the region faring better or more poorly than elsewhere.

#### **Low: "Secular Stagnation"**

#### Birth Rates

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- The low forecast reflects declining birth rates, with an average of approximately 1.4 births per woman. The number of births peaks in the early 2030s, and falls in later years, with the total number of births falling below 2019 levels in the 2040s. Falling birth rates reflect an expectation of high cost of living in this scenario.

#### Mortality Rates

- Mortality rates remain stable at 2019 levels throughout the forecast.

#### Household Formation (Headship)

- Headship rates remain stuck at current levels, which are at or near all-time lows. These levels are consistent with housing production levels over the last several years.
- In this scenario, neither housing policies nor market forces are able to measurably improve indicators of housing shortage – high cost and factors such as overcrowding prevent improvement of housing inequality and dissuade in-migration of workers.

#### Economic Competitiveness

- Policies to increase housing supply have had limited effect on production, and the high cost of housing has not been mitigated. Unmitigated increases in regional cost of living increases the net outflow of residents to other regions and states.
- Climate change takes significant toll on the region with more frequent droughts and wildfires.
- Automation in leisure, hospitality and food service sectors lowers regional employment as sector substitutes local employees with technology developed outside of the region.

#### Immigration and Domestic Migration

- Immigration levels remain at the average level from the past decade, and below that of the Baseline projection, with the expectation that the region continues to be a draw for highly-educated in-migrants seeking jobs and amenities, but increasingly challenging for middle-class families.
- Vacillations in federal immigration policy and the rise of other global regions prevent any increase in immigration to Southern California despite an economic need for workers.
- The net loss of residents to other states and regions is greater than in the Baseline projection due to high housing costs, living costs, and increasing drought and wildfire which outweigh the advantages of Southern California.

### **High: Robust and Equitable Future Growth Supported by Policy and Technology**

#### Birth Rates

- The high forecast reflects fertility rates of approximately 1.6 births per woman, based on an expectation of supportive childcare and healthcare policy and economic growth.

#### Mortality Rates

- Mortality rates fall slightly from 2019 levels in this scenario, particularly continuing a trend toward declining infant mortality and an expectation that policies begin to address racism and thus reduce health disparities.

#### Household Formation (Headship)

- Headship rates are unchanged from the Baseline forecast, but higher levels of natural population increase and migration result in a higher total number of households.

#### Economic Competitiveness

- Trade becomes more competitive as the region leverages resilience to attract trade from less climate resilient regions (e.g., reduced throughput of the Panama Canal, more intense hurricanes on the Atlantic coast).
- The region's share of national jobs increases slightly compared to the Baseline scenario reflecting even greater structural economic and amenity advantages; impacts from the worst climate scenarios are mitigated through adaptation and resilience-building policy.
- Innovation and success in housing development as well as technological change help ensure that the region's higher living costs do not severely limit job growth potential.

#### Immigration and Domestic Migration

- Immigration levels return to levels from the early 2000s, with the expectation that U.S. immigration policy remains favorable. The high scenario also includes robust job growth that would be a draw for immigrants as well as improvements in housing availability.
- Net domestic out-migration is lower than in the Baseline scenario, reflecting regional job growth, housing supply improvements, and climate-ready policies which make the Southern California more attractive than less resilient regions.

#### Conclusions and Next Steps

While long-range projection of population, households, and employment involves inherent uncertainty, the development of a regional forecast and ultimately an RTP/SCS begins with a technical process supported by expert review. This assessment of regional growth ranges is based on expert-derived assessments about regional jobs, births, deaths, immigration, domestic migration, labor force participation, and household formation. While these scenarios envision how input assumptions could result in higher or lower growth, the Mid/Baseline scenario ("Slower Growth, Steady Improvement") is the most reasonable outlook given currently available information and expert review.

Following this exercise SCAG will refine the preliminary regional baseline projection for 2019-2050 and develop county-level projections which match this baseline prior to allocating growth to jurisdictional and Transportation Analysis Zone (TAZ)-levels for further review and RTP/SCS development.



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**FISCAL IMPACT:**

This work is supported by OWP item 055.4856.01, Regional Growth and Policy Analysis.

**ATTACHMENT(S):**

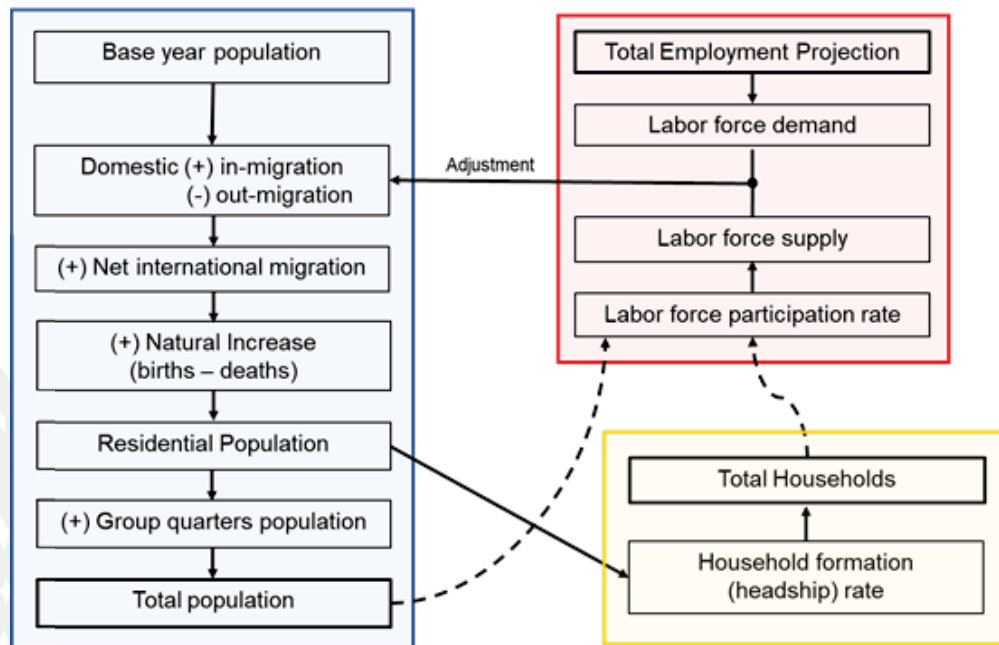
1. PowerPoint Presentation - SCAG Forecast Ranges Exercise

# Forecast Ranges for the SCAG Region in 2050

October 2021

www.prb.org

## Regional Economics-Demographic Forecast Process



# Regional Growth Ranges

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



Photo credit: Henning Witzel via UnSplash

PRB 3

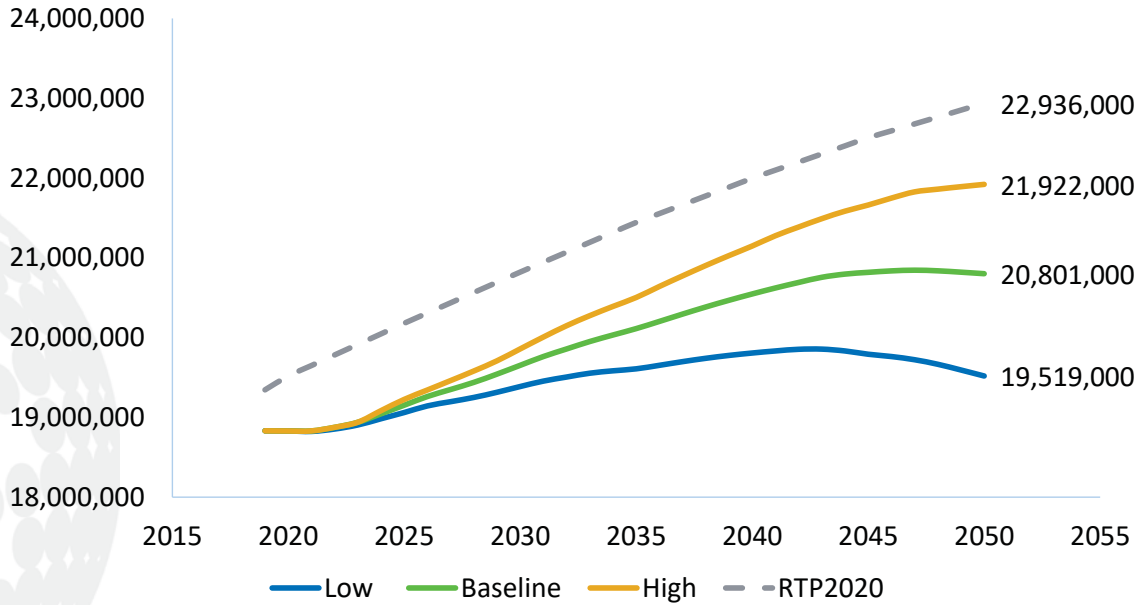
## Assumptions Driving Regional Baseline and Low/High Ranges

Lever we have to explore scenarios:

Factor	Baseline	Low	High
Births	1.5 births/woman	1.4 births/woman	1.6 births/woman
Deaths	Stable rates (2019)	Same	Rates decline through equity improvements
Net Migration	Net int'l is high, net out migration moderate	Net int'l is low, net out migration continues	Net int'l. Is high, net out is low
Labor Force	Slight increase, but close to 2019	Same	Same
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 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

# Population growth has been slower than predicted in the RTP2020

SCAG Region Population Growth Ranges

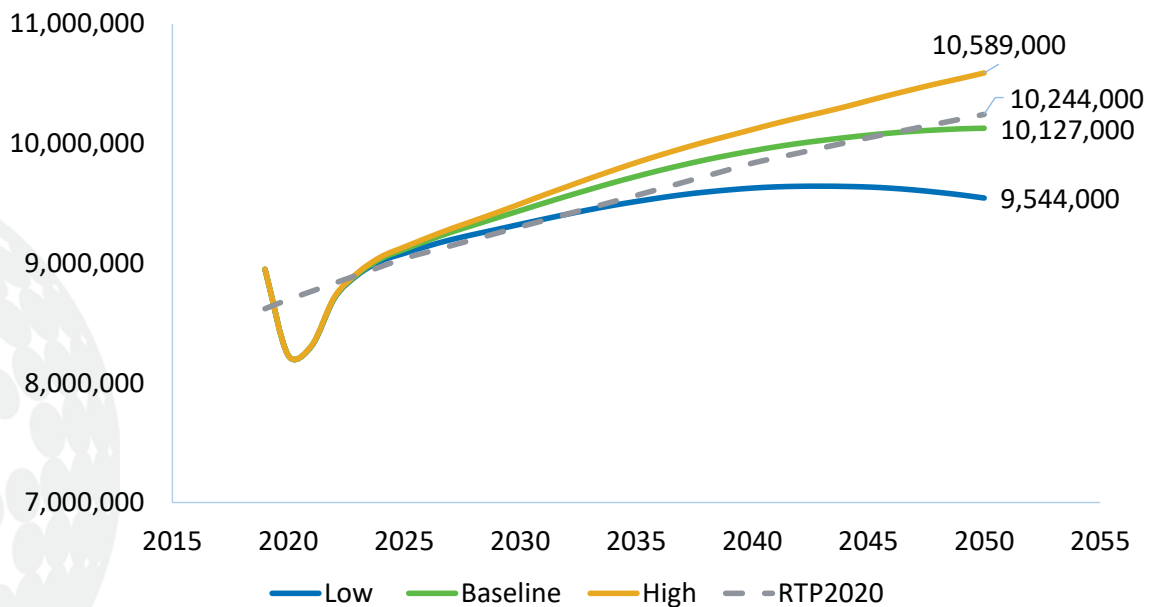


Source: SCAG 10/20/21

PRB 5

# Job growth is associated with population growth.

SCAG Region Job Growth Ranges

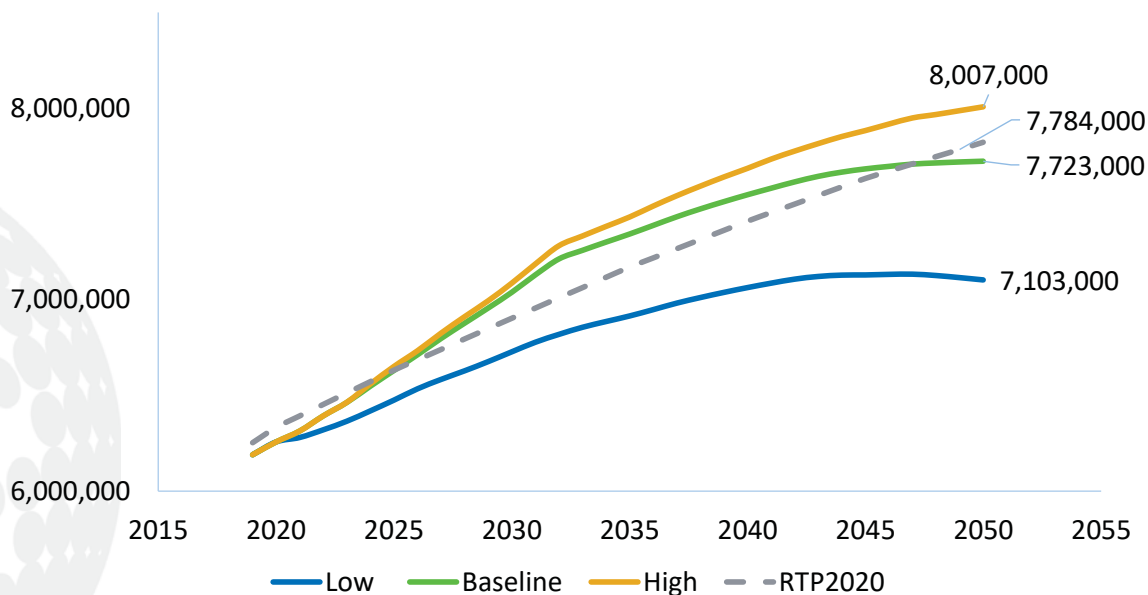


Source: SCAG 10/20/21

PRB 6

# Number of households is closer to the RTP2020

SCAG Region Household Growth Ranges

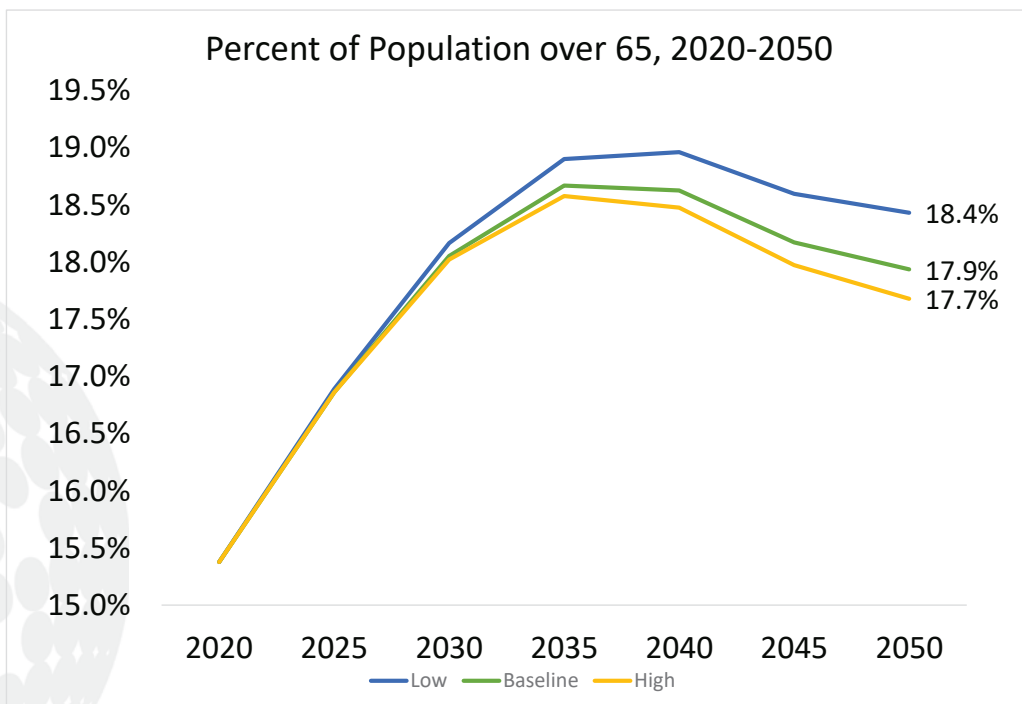


Source: SCAG 10/20/21

PRB 7

# Share of population age 65 or older will increase.

Percent of Population over 65, 2020-2050

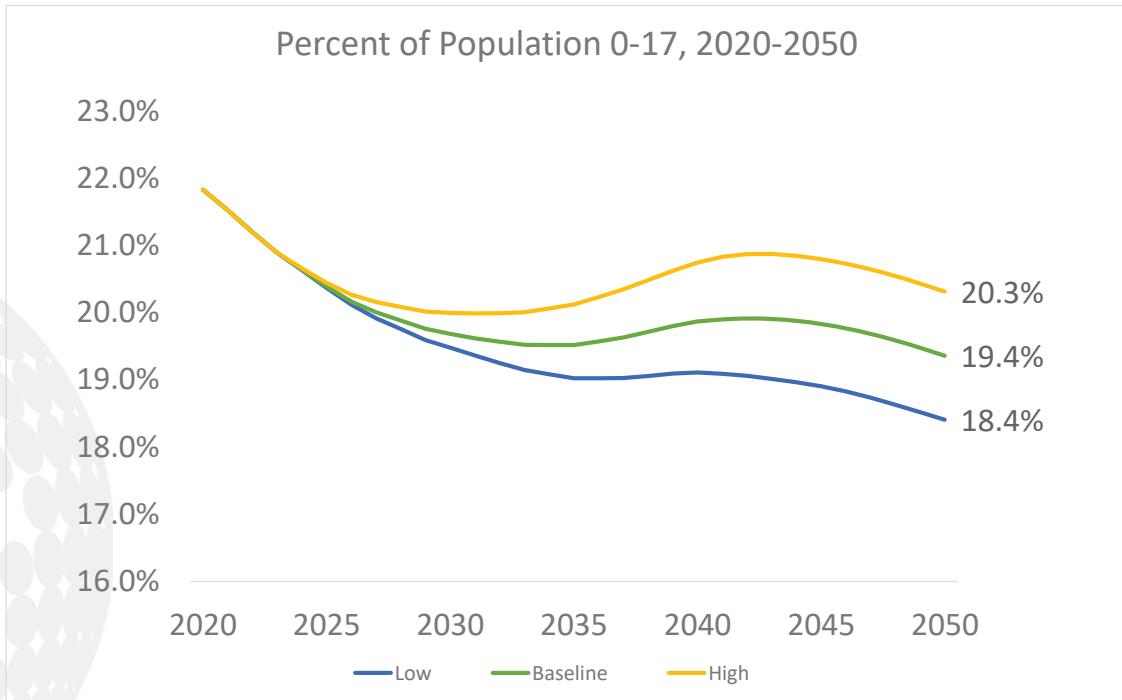


Source: SCAG 10/20/21

PRB 8



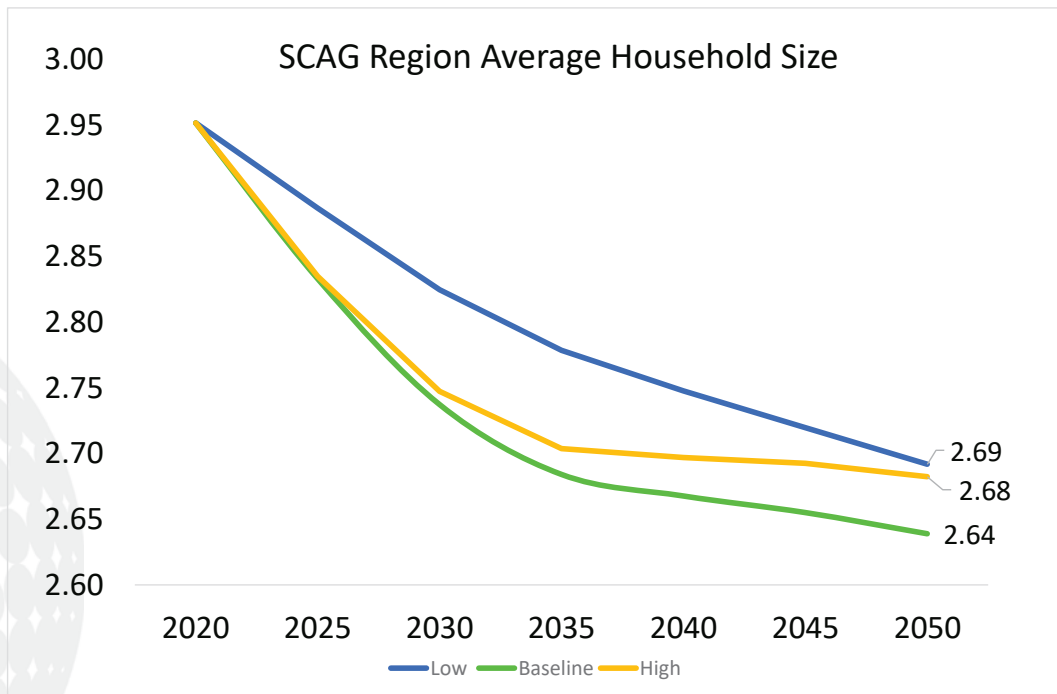
## Share of children (ages 0-17) will decrease, but level varies by projection scenario.



Source: SCAG 10/20/21

PRB 9

## Average household size is expected to shrink.



Source: SCAG 10/20/21

PRB 10