Demographic Future of the Southern California Region

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Southern California Association of Governments (SCAG)

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Metropolitan Water District of Southern California headquarters, Los Angeles,
September 23, 2015
About SCAG

- Nation’s largest Metropolitan Planning Organization (MPO) and Council of Governments (COG). Joint Powers Agency.
- Governed by a Regional Council of 86 local elected officials
- 6 counties and 191 cities in an area of 38,000 square miles
- 18.8 million residents and 8 million jobs
- 16th largest economy in the world
- Nation’s global gateway for trade
SCAG Deals with these Regional Issues

TRANSPORTATION
GOODS MOVEMENT
HOUSING
AIR QUALITY
SCS/LAND USE
FUNDING
LONG TERM GROWTH FORECAST
WATER
Population Projections are Basis for Developing Local and Regional Plans

- Transportation Planning (RTP)
- Sustainable Communities Strategy (SCS)
- Air Quality Planning (AQMD)
- Housing (RHNA)
- Airport Planning (Aviation)
- Water Planning (MWD & LA County Sanitation Districts)
- Education, Land Use and Local Planning
What Will Southern California Look Like in the Future?  
(LA Times, June 18, 2015)

<table>
<thead>
<tr>
<th></th>
<th>1980s ACTUAL</th>
<th>2010 PROJECTIONS</th>
<th>2010 ACTUAL</th>
<th>2040 PROJECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>POPULATION OF THE SIX-COUNTY AREA IN 1986</td>
<td>Los Angeles, Orange, Ventura, San Bernardino, Riverside and Imperial counties</td>
<td>12.8 million</td>
<td>18.3 million</td>
<td>18.1 million (18,003,534)</td>
</tr>
<tr>
<td>PORTION OF THE U.S. POPULATION LIVING IN REGION:</td>
<td>1 in 20</td>
<td>1 in 15</td>
<td>1 in 17</td>
<td>1 in 17</td>
</tr>
<tr>
<td>ETHNIC BREAKDOWN IN 1986</td>
<td>White 60% Black 9% Asian 6.2% Latino 24%</td>
<td>White 41% Black 10.2% Asian 9.3% Latino 39.5%</td>
<td>White 33.4% Black 6.5% Asian 14.8% Latino 45.3%</td>
<td>White 22.4% Black 5.4% Asian 19.1% Latino 53.1%</td>
</tr>
<tr>
<td>MEDIAN AGE IN 1986</td>
<td>Male 28.7 Female 30.6</td>
<td>Male 34.5 Female 37</td>
<td>Male 33.4 Female 35.7</td>
<td>Male 37.3 Female 39.2</td>
</tr>
<tr>
<td>JOBS</td>
<td>6 million</td>
<td>9 million</td>
<td>7.3 million</td>
<td>9.8 million</td>
</tr>
<tr>
<td>SCHOOL-AGE CHILDREN</td>
<td>2.4 million</td>
<td>3.2 million</td>
<td>3.4 million</td>
<td>3.6 million</td>
</tr>
<tr>
<td>POPULATION 65 AND OLDER IN 1986</td>
<td>1.1 million</td>
<td>2.3 million</td>
<td>1.97 million</td>
<td>4 million</td>
</tr>
</tbody>
</table>
# Accuracy and Bias of SCAG Region’s Population and Employment Projections (as of 2014)

<table>
<thead>
<tr>
<th>Forecast Accuracy*</th>
<th>Projection Horizon</th>
<th>5 year</th>
<th>10 year</th>
<th>15 year</th>
<th>20 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>3%</td>
<td>6%</td>
<td>9%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>6%</td>
<td>10%</td>
<td>15%</td>
<td>14%</td>
<td></td>
</tr>
</tbody>
</table>

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<th>Forecast Bias**</th>
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<th>5 year</th>
<th>10 year</th>
<th>15 year</th>
<th>20 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>0%</td>
<td>-2%</td>
<td>-4%</td>
<td>-5%</td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>-1%</td>
<td>0%</td>
<td>1%</td>
<td>6%</td>
<td></td>
</tr>
</tbody>
</table>

| Observations      | 11 | 10 | 9 | 8 |

Note: * Mean Absolute Percentage Errors = \( \text{Abs. (Projected - Estimated) / Estimated \times 100} \);  
** Mean Percentage Errors = \( \text{(Projected - Estimated) / Estimated \times 100} \);  
Compound growth rate was used to interpolate the intermediate years.

Source: CA DOF, SCAG
Future Demographic Trends of the SCAG Region

1. Slower population growth
2. Less share of children
3. Population aging
4. More new immigrants
5. Slower racial and ethnic change
6. Suburban growth and aging in place
SCAG Region Range of Preliminary Population Projections (2013) and Local Input (2014)

Source: CA DOF, SCAG
Annual Average Growth Rate of Population (1850-2040): Historical and Projected

Over the last 160 years (1850-2010), the regional growth went through 4 periods: (1) very rapid growth, (2) rapid growth, (3) average growth, (4) slow growth, using statewide growth as a reference. The new projection shows an extension of the “slower” growth in 2010-2015 than 4th period (1990-2010) with an annual average growth rate of less than 1% in the future.

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</tr>
</thead>
<tbody>
<tr>
<td>SCAG Region</td>
<td>310.8%</td>
<td>21.6%</td>
<td>2.9%</td>
<td>1.2%</td>
<td>0.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>California</td>
<td>41.1%</td>
<td>11.2%</td>
<td>3.0%</td>
<td>1.3%</td>
<td>1.0%</td>
<td>0.9%</td>
</tr>
<tr>
<td>US</td>
<td>5.0%</td>
<td>1.9%</td>
<td>1.3%</td>
<td>1.2%</td>
<td>0.8%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

SCAG Region Population Projections: Economic-Demographic Model

Census/DOF SCAG region

Domestic
(+) in-migration
(-) out-migration

(+Net international migration

(+Natural increase (births-deaths)

Residential population

(+Group quarters population

Total population

Regional job projections (shift share method)

Labor force demand (using double-jobbing rate & labor force participation rate)

Comparison of labor force demand to labor force supply (implied unemployment rate)

Labor force supply

Labor force participation rate

Adjustment
Regional Demographic Assumptions

Demographic Assumptions
- Fertility: Stable at 1.9
- Mortality: Declines (Life expectancy at birth increases by 7%-8%)
- Net Immigration: Increases until 2020 and remains constant during the remaining period.
- Net Domestic Migration: Fluctuates

Additional Regional Assumptions
- Jobs Per Worker: 1.0452
- Unemployment Rate: 5%-8%
- Total Labor Force Participation Rate: Declines with an increase of older age cohorts.
Components of Population Change (2000-2040): Historical and Projected

Source: CA DOF, SCAG
Births and Deaths (2000-2040): Historical and Projected

Source: CA DOF, SCAG
Net Immigration and Net Domestic Migration (2000-2040): Historical and Projected

Source: CA DOF, SCAG
Population Pyramid: 2015 & 2040

Source: US Census Bureau & SCAG
Population by Age: 2015 & 2040

Source: US Census Bureau & SCAG
Dependency Ratio: 2015 & 2040

Note: *The number of children per hundred people of working age. **The number of aged people per hundred people of working age. ***The number of children (age 0-15) and aged persons (age 65 and over) per hundred people of working age (age 16–64).

Source: US Census Bureau & SCAG
Population by Race/Ethnicity: 2015 & 2040

Source: US Census Bureau & SCAG
Percentage of Urban Population by State, 2010

Source: US Census Bureau
Percentage of Central Cities’ Population in US, California, SCAG Region, 1910-2010

Source: US Census Bureau


Thank you!

For more information please contact

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