Growth Projections to 2040—Results, Methodology and Assumptions

Stephen Levy, Center for Continuing Study of the California Economy (CCSCE)
December 16, 2015
Background

• In 2008, the City retained CCSCE to produce a forecast of demographics, population and jobs for San Jose through 2035
• The forecast was developed using a range of national, state, and local level data including ABAG
• The City retained CCSCE in 2015 to update the population and jobs forecast through 2040 using more recent data
Overview of CCSCE Projection Update

• Review of ABAG 2013 projections, development of new regional and city job projections
• Focus on jobs and jobs by industry
• Also used preliminary new ABAG projections to develop projections of San Jose population and employed residents
Regional Job Projections

• Reviewed three national projections to 2040
• Developed new CCSCE regional job by industry projections to 2025, 2035 and 2040
• First developed economic base (Driving industry) projections based on analysis of share trends and U.S. projections.
• Then added population serving industry projections. Total jobs are sum of economic base and population serving projections.
Key Regional Assumptions and Findings

• Small share increases in a few industries to 2025. Conservatively estimate no share increases after 2025.

• The Bay Area has a favorable industry composition meaning a high share of fast growing industries. That favorable industry composition pushes the overall regional share up even when industry shares are constant.

• In 2040 the regional share of U.S. jobs is projected slightly above 1990 and 2015 levels.
Sectors with High Shares of U.S. Jobs

1990 2000 2014 2025

- Comp & Elec Manuf
- Pharma
- Software
- Internet Services
- Computer Services
- Sci R&D

Diagram shows the percentage share of U.S. jobs in various sectors over different years.
Bay Area Share of U.S. Jobs—
Favorable Sector Composition Pushes Share Higher
Jobs Grow But Baby Boomer Retirement Slows the Growth Rate

Average Annual Growth Rate

- 2010-2015: 3.2%
- 2015-2025: 1.1%
- 2025-2040: 0.6%
Projections of Bay Area Total Jobs

<table>
<thead>
<tr>
<th>Year</th>
<th>CCSCE 2015</th>
<th>ABAG 2013</th>
<th>CCSCE 2012</th>
<th>CCSCE 2008</th>
<th>ABAG 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>4.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2040</td>
<td>4.96</td>
<td>4.51</td>
<td>4.64</td>
<td>4.88</td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.25</td>
</tr>
</tbody>
</table>
San Jose Metro Area Projections

- Santa Clara County accounts for more than 98% of metro area jobs. The rest are in San Benito County.
- A simplified methodology was used for metro area projections. In the first metro area alternative, the 2014 metro area/regional industry by industry job shares were extended to 2025 and 2040.
- In the second alternative, the metro area share was increased by 1% compared to ABAG 2013.
SJ Metro Area Share of Regional Jobs

Graph showing the share of regional jobs from 2007 to 2040. The graph includes two lines:
- ABAG 2013--Alt 1
- Plus 1%--Alt 2

The share of jobs increases from 2007 to 2015, with a significant rise after 2015.
City of San Jose Job Projections

• Three alternatives were developed.
• The first (lowest) used the 2013 city/metro area industry shares and metro area alt. 1. The 2013 shares were used as the 2014 San Jose job estimates were partial (not a full year) and seemed too low.
• The second alternative used the ABAG 2013 projection that the City would capture 42.7% of metro area jobs in 2040 along with the metro area alternative 1 projections.
Drivers of Job Growth for San Jose

• San Jose has a high share of metro area jobs in visitor services, business services, retail, construction, financial services, civic and infrastructure and logistics but NOT high tech

• The below average share of high tech job growth relative to the Metro Area has restrained overall job growth in recent years BUT IS NOW A FERTILE TARGET OF OPPORUNITY

• Announcements by Apple and others show that San Jose is well positioned to capture more tech jobs which will help long term job growth
City Share of Metro Area Jobs 2013

- Total
- Creative Services
- Prof, Tech Services
- Civic/Infrastructure
- Logistics
- Financial Services
- Construction
- Retail
- Business Services
- Visitor Services
City of San Jose Job Projections

• Note that ABAG 2013 projects an increasing share of metro area jobs locating in San Jose.
• The 42.0% share in 2025 and 42.7% share in 2040 are above the recent historical shares, which have been pretty steady at around 40.5%.
San Jose Share of Metro Area Jobs—ABAG 2013 Projections
City of San Jose Job Projections

• The third alternative (highest) combines the ABAG 2013 projected city/metro area shares with the higher (alt 2) metro area job projection.
San Jose Jobs in 2013 and Projected to 2040

Thousands of Jobs Possible Given New Interest in SJ

- SJ 2013: 413.5
- CCSCE 2008: 570.0
- SJ 2009: 677.2
- CCSCE Alt 1: 530.4
- CCSCE Alt 2: 571.6
- CCSCE Alt 3: 597.6

Conservative
Possible Given New Interest in SJ
Average Annual Job Growth Rate 2013-2040

Alt 1: 0.9% (Conservative), 1.0% (Optimistic)
Alt 2: 1.2% (Conservative), 1.0% (Optimistic)
Alt 3: 1.4% (Conservative), 1.0% (Optimistic)

City & Region
Discussion of Job Projections

• Questions?
• Comments?
Projection of Population and Employed Residents for San Jose

• Based on ABAG 2013 and preliminary ABAG demographic analysis. A very preliminary analysis was developed as ABAG is still finalizing their new 2040 regional projections.

• Based on ABAG preliminary demographic analysis and CCSCE’s regional job projection, a regional 2040 population of 9.6 million was selected.
Projection of Population and Employed Residents for San Jose

• The regional population projection does not increase as much as the job projection compared to ABAG 2013 for two reasons:
  – Lower birth rates are assumed based on Department of Finance (DOF) projections
  – Higher labor force participation in 2040 is projected compared to CCSCE’s projections for ABAG 2013
City of San Jose Population Projection

• In ABAG 2013 the San Jose share of the region’s population in 2040 was 14.4%.
• Using that share and the 9.6 million regional population projection, San Jose would have 1,379,108 residents in 2040.
City of San Jose Employed Residents

• The number of employed residents is determined by the population of working age (16+), the labor force participation rate and the unemployment rate.

• The CCSCE analysis used the DOF share of population 16+ in 2040 for Santa Clara County and an unemployment rate of 5.0%.

• The labor force participation rate was 0.5% higher than the ABAG projected county rate reflecting recent trends.
Projected Employed Residents per Job

<table>
<thead>
<tr>
<th>Year/Scenario</th>
<th>2010</th>
<th>2040 Alt 1</th>
<th>2040 Alt 2</th>
<th>2040 Alt 3</th>
<th>ABAG 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.12</td>
<td>1.25</td>
<td>1.16</td>
<td>1.11</td>
<td>1.19</td>
</tr>
</tbody>
</table>

2010: 1.12
2040 Alt 1: 1.25
2040 Alt 2: 1.16
2040 Alt 3: 1.11
ABAG 2013: 1.19
Projected Jobs per Employed Resident

- 2010: 0.89
- 2040 Alt 1: 0.80
- 2040 Alt 2: 0.86
- 2040 Alt 3: 0.90
- ABAG 2013: 0.84