Demand for highly educated workers will exceed supply by 2030

- Less than high school: Supply 10%, Demand 5%
- High school graduate: Supply 20%, Demand 20%
- Some college: Supply 25%, Demand 30%
- Associate's degree: Supply 15%, Demand 15%
- Bachelor's degree or more: Supply 33%, Demand 38.4%
Our economic projections are consistent with long-term trends.

Historic and projected share with at least a bachelor’s degree:

- 1960: 11.4%
- 1970: 15.0%
- 1980: 20.9%
- 1990: 25.4%
- 2000: 29.7%
- 2010: 32.6%
- 2020 projection: 35.3%
- 2030 projection: 38.0%
Job growth has been strongest for occupations that rely on college graduates.
College graduates have relatively high wages

Average annual wages for full-time year-round workers by education

- Graduate degree: $121,942
- Bachelor's degree: [VALUE]
- Associate's degree: $58,776
- Some college: $52,791
- High school graduate: [VALUE]
- Not a high school graduate: $31,574
In each of 51 occupational groupings, college graduates earn more.

College graduate wage premium by occupation (SOC 3 digit)

Wage premium (% relative to high school graduates)

Percent of workers in the occupation with a college degree
Net lifetime payoff of college is enormous, regardless of major

Lifetime wage difference between college graduates and high school graduates

<table>
<thead>
<tr>
<th>Major</th>
<th>Lifetime Wage Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>$1,150,000</td>
</tr>
<tr>
<td>Computer science</td>
<td>$1,090,000</td>
</tr>
<tr>
<td>Business</td>
<td>$840,000</td>
</tr>
<tr>
<td>Social sciences, law</td>
<td>$740,000</td>
</tr>
<tr>
<td>Science, medicine</td>
<td>$720,000</td>
</tr>
<tr>
<td>Liberal arts</td>
<td>$560,000</td>
</tr>
<tr>
<td>Other</td>
<td>$480,000</td>
</tr>
<tr>
<td>Education</td>
<td>$240,000</td>
</tr>
</tbody>
</table>
California’s population is aging

Change in California population by age group (2015 to 2030)
Generational progress in higher education has stalled in California

Percent of younger and older adults with at least a bachelor’s degree
OECD Countries and California, 2014

25-34 year olds  55-64 year olds
Generational progress in higher education has stalled in California

Percent of younger and older adults with at least a bachelor’s degree
OECD Countries and California, 2014

- 25-34 year olds
- 55-64 year olds

- Switzerland
- Korea
- Belgium
- Luxembourg
- Poland
- Netherlands
- United Kingdom
- Finland
- Ireland
- Estonia
- Australia
- Denmark
- Iceland
- Greece
- Japan
- New Zealand
- Sweden
- United States
- Norway
- Israel
- EU21 average
- OECD average
- Canada
- California
- Slovenia
- Portugal
- Czech Republic
- Hungary
- Spain
- Germany
- France
- Mexico
- Austria
- Chile
- Turkey
Too few students complete college

The education pipeline in California: 9th grade to a bachelor’s degree

Out of 1,000 9th graders, 823 graduate from high school. 282 attend a four-year college as freshmen, 362 attend a community college, and 145 transfer. 305 earn a bachelor’s degree.
To close the gap, California will have to increase the number of bachelor’s degrees awarded each year.

Annual bachelor’s degrees awarded

- Baseline scenario
- Closing the gap scenario
Notes on the use of these slides

These slides were created to accompany a presentation. They do not include full documentation of sources, data samples, methods, and interpretations. To avoid misinterpretations, please contact:

Hans Johnson 415-291-4460

Thank you for your interest in this work.
The Need for College Graduates in California’s Future Economy

Testimony to the Assembly Select Committee on the Master Plan for Higher Education in California
Marc Berman, Chair
November 1, 2017

Hans Johnson, Director, PPIC Higher Education Center
Extra slides follow
College graduates have fared best through the recession and recovery

Statewide, employment gains have been strong for highly educated workers

- Not a high school graduate
- High school graduate
- Some college
- Associate degree
- Bachelor's degree
- Graduate degree

Percent change in employment

- 2007-10
- 2010-15
Eligibility levels have not changed in 50 years, but the economy is very different.