In the following report, Hanover provides a broad analysis of the higher education landscape in Southern California. Hanover examines factors such as demographics trends and projections, K-12 enrollment projections, college admissions testing, higher education enrollment trends, and regional labor market outlook.
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**Landscape of the Higher Education Market in Southern California**

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EXECUTIVE SUMMARY

In this section, Hanover Research outlines key findings based on a review of trends that impact the higher education market in Southern California.
Executive Summary

Landscape of the Higher Education Market in Southern California

Introduction

To assist higher education institutions in academic program planning, Hanover Research conducted a broad analysis of the landscape of higher education in Southern California. For this analysis, Hanover defines Southern California as the eight-county area including Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, and Ventura Counties. The analysis is based on a review of publicly available data from government websites, the Integrated Postsecondary Education Data System (IPEDS), and job postings data obtained through Hanover’s partnership with Chmura’s JobsEQ.

The report provides a broad overview of the higher education landscape in Southern California and this information speaks to a broad range of factors that could impact higher education in Southern California.

Research Questions

Demographics and Social Trends

- What demographic trends and projections may influence future enrollment in higher education institutions?
- What K-12 enrollment and high school graduation trends and projections may influence future enrollment in higher education?

Higher Education System Trends

- What are enrollment trends among higher education institutions in Southern California?
- What funding, policy, and admission trends may impact the overall higher education landscape?

Labor Market Trends

- What regional labor market and industry trends may impact the types of training that students will need and pursue?

Insights

- How should higher education institutions respond to the trends of the higher education market landscape in Southern California?
Executive Summary
Landscape of the Higher Education Market in Southern California

Key Findings

Long-term K-12 enrollment and high school graduations are projected to decline across Southern California. Total K-12 enrollment, high school (Grades 9-12) enrollment, and the number of high school graduates are all projected to decrease by 2026. Only two counties in Southern California—Imperial and Riverside—project increases in both K-12 enrollment and number of high school graduates. Similarly, the college-age population in Southern California is projected to decrease by 2026. San Diego is the only county with projected increases in the college-age population. These trends may pose challenges for institutions’ long-term enrollment initiatives.

The University of California (UC) and California State University (CSU) systems are strong competitors for students and faculty. However, some negative admissions and enrollment trends may serve as opportunities for other institutions to market themselves as an alternative. Although both systems have launched initiatives to improve California resident enrollment, resident applicants are still being wait-listed or rejected as increasing numbers of students meet admissions requirements. UC has also adopted a non-resident enrollment cap limiting the number of non-resident students these institutions can accept, potentially providing a market opportunity for other institutions.

Statistics and secondary research indicate that students are increasingly leaving the state to attend college elsewhere, which may further aggravate California’s projected workforce skills gap. The college-age population in Southern California is projected to decrease overall by 0.8 percent by 2026. In 2016, about 40,000 California high school graduates left the state to attend college elsewhere, nearly double the number that left in 2006.

Enrollment Trends in Southern California
- 441,631 students enrolled in distance education courses
- More women than men enrolled in higher education

Most Promising County: San Diego
- Highest increase college-age population
- Third highest median income ($66,529)
- Second highest enrollments

Fastest-Growing Occupations
- Web Developers (40.0%)
- Operations Research Analysts (39.2%)
- Nurse Practitioners (35.5%)

High-Growth, High Volume Occupations
- Market Research Analysts
- Software Developers, Applications
- Computer Systems Analysts
DEMOGRAPHICS AND SOCIAL TRENDS

Demographic Trends and Projections
K-12 Enrollment and High School Graduation Trends and Projections
Additional Trends Related to Higher Education
Demographic Trends and Projections
Landscape of the Higher Education Market in Southern California

- The population is expected increase in Southern California, but the college-age population is projected to decrease by 0.8 percent by 2026. A projected decrease in the college-age population could negatively impact institutions’ enrollment initiatives as the pool of local prospective applicants decreases.
- College-age population projections vary at the county level. San Diego County is projected to have the largest increase in the college-age population (7.4 percent), while Los Angeles County is projected to have the largest decrease (-5.9 percent).

Southern California Total Population and College-Age Population Projections (2015-2026)

Source: State of California Department of Finance
Note: College-age population includes California residents ages 18 through 24.
Demographic Trends and Projections
Landscape of the Higher Education Market in Southern California

• **Median county-level income is highest in Ventura, Orange, and San Diego Counties.** The average median income throughout the Southern California region ($62,673) is slightly lower than median income for the entire state of California ($63,783).

• **Los Angeles, San Diego, Ventura, and San Bernardino Counties have the highest percentages of individuals with a bachelor’s degree or higher attainment.** San Diego has the highest percentage of graduate or professional degree attainment (14 percent), followed closely by Los Angeles and Orange (13 percent).

• **Based on these demographic trends, higher education recruitment initiatives are likely to be most successful in San Diego and Ventura Counties.** Both counties have high median incomes and high college education attainment, broadly suggesting that populations in both counties are more likely to attend college.

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<table>
<thead>
<tr>
<th>Median Income (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ventura</td>
</tr>
<tr>
<td>$78,593</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Educational Attainment (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles</td>
</tr>
<tr>
<td>8.7%</td>
</tr>
<tr>
<td>6.8%</td>
</tr>
<tr>
<td>17.4%</td>
</tr>
<tr>
<td>20.9%</td>
</tr>
<tr>
<td>7.8%</td>
</tr>
<tr>
<td>24.8%</td>
</tr>
<tr>
<td>13.7%</td>
</tr>
</tbody>
</table>

Source: [State of California Department of Finance](http://example.com)
• Total K-12 enrollment, high school (Grade 9-12) enrollment, and the number of high school graduates are all projected to decline between 2015 and 2026. Decreasing K-12 student populations, especially high school graduates, could negatively impact institutions’ enrollment initiatives.

• Imperial and Riverside are the only counties in Southern California to project increases in both K-12 enrollment and high school graduates. In Imperial County, total K-12 enrollment is projected to increase by 4.2 percent (to nearly 39,000 in 2026) and high school graduates by 1.9 percent. In Riverside County, total K-12 enrollment is projected to increase by 1.7 percent (to 434,000 in 2026) and high school graduates by 1.1 percent.
The volume of Southern California students taking college admissions tests increased over the three-year period between 2013 and 2015. The volume of students taking college admissions tests increased across all admissions tests and almost all counties (though Orange County reported a decrease in the number of students taking the SAT). Region-wide increases in the volume of students taking college admissions tests suggests an increasing pool of prospective undergraduate students.

**College Admissions Test Volume (2013-2015)**

- SAT Test Taking
- ACT Test Taking
- AP Test Taking

Source: Ed-Data
Note: Ventura County did not report data on ACT test taking in 2013.
• Average SAT scores decreased while ACT scores showed little to no change over the three-year period. Average Math, Reading, and Writing SAT scores declined across Southern California, suggesting an overall decline in the academic preparation of prospective college students in the region.
• The percentages of Southern California students that scored high AP scores (three and above) declined slightly while those scoring low AP scores (two and below) increased slightly.

Southern California College Admissions Testing Results (2013-2015)

Source: Ed-Data
Note: Ventura County did not report data on ACT test taking in 2013 and is thus not incorporated in the ACT Results figure.
• The English Language Learner (ELL) population in Southern California declined slightly over the five-year period. While the decrease is small (1 percent), it could suggest that there may be slightly less demand for English as a Second Language instructors in Southern California.

• There is little change in ELL population at the county level. Between 2012 and 2016, Imperial County had greatest increase (1.1 percent) while Los Angeles County had greatest decrease (-1.8 percent).

Source: Ed-Data
Increasing numbers of California students are attending college out-of-state, which may exacerbate the projected workforce skills gap in Southern California. Secondary sources indicate that public institutions in California are increasingly wait-listing or rejecting qualified students, who consequently move out-of-state to attend college.

An aging population also contributes to the decline of highly educated workers in California. The Public Policy Institute of California (PPIC) reports that the mass retirement of highly educated baby boomer workers will increase the workforce skills gap.

Declining government investment in higher education

- HE spending in state budget declined from 18 percent in 1976 to 12 percent in 2016.

Increase in qualified college applicants

- Total undergraduate applications to UC up by 5.7 percent.
- See page 18 for UC/CSU readiness among Southern California students.

Public institutions unable to accommodate qualified students. For example:

- In 2017, UC Irvine underestimated capacity for accepting students and attempted to revoke acceptances for 500 students.
- Several CSU campuses institute higher admission standards for certain majors (e.g., STEM), and all undergraduate programs, pre-professional programs, and undeclared programs are impacted at six CSU campuses in 2018-2019.

Departing students contribute to California’s workforce skills gap

- California is projected to have a shortage of 1.1 million workers with bachelor’s degrees in 2030.
- Thirty-eight percent of all jobs will depend on workers with at least a bachelor’s degree, but only 33 percent of workers will have one.
- Arrival of highly-educated immigrants will not be enough to close the gap.

California students moving out-of-state for college

- In 2016, about 40,000 high school graduates left the state for four-year college, nearly double the number in 2006 (22,000 graduates).
- Four-year Arizona colleges enrolled over 5,300 California freshmen; four-year New York colleges enrolled nearly 3,500.

Source: Jaschik, PPIC, Rancano, Reese, and CSU
HIGHER EDUCATION SYSTEM TRENDS

Enrollment Trends Among Higher Education Institutions
Funding, Policy, and Admission Trends
Enrollment Trends Among Higher Education Institutions

Landscape of the Higher Education Market in Southern California

- **Southern California degree conferrals have increased while certificate conferrals have declined overall.** Bachelor’s degree conferrals increased at the highest rate among the examined award levels, suggesting a steady demand for traditional undergraduate programs in Southern California. However, graduate-level degree conferrals also increased. Notably, while only representing a small percentage of certificate completions, post-master’s certificate conferrals increased dramatically (18%), while declines in post-baccalaureate certificates (-12.4%) resulted in the overall decline in certificates.

- **Among four-year or above institutions, most undergraduate students in Southern California are enrolled full-time at public institutions.** However, more graduate students are enrolled in private institutions than public institutions.

### Completions Trends for Select Award Levels

<table>
<thead>
<tr>
<th>Award Level</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's degree</td>
<td>+5.3%</td>
<td>+4.5%</td>
<td>+4.5%</td>
<td>-7.9%</td>
<td></td>
</tr>
<tr>
<td>Master's degree</td>
<td>+4.5%</td>
<td>+4.5%</td>
<td>+4.5%</td>
<td>+4.5%</td>
<td></td>
</tr>
<tr>
<td>Doctor's degree</td>
<td>+4.5%</td>
<td>+4.5%</td>
<td>+4.5%</td>
<td>+4.5%</td>
<td></td>
</tr>
<tr>
<td>Post-Bach/Post-Master's Certificate</td>
<td>-7.9%</td>
<td>-7.9%</td>
<td>-7.9%</td>
<td>-7.9%</td>
<td></td>
</tr>
</tbody>
</table>

### Enrollment in Four-Year Institutions (2016)

**Graduate enrollment**
- Private for-profit, 4-year or above: 27,526
- Private not-for-profit, 4-year or above: 84,348
- Public, 4-year or above: 61,232

**Undergraduate enrollment**
- Private for-profit, 4-year or above: 66,862
- Private not-for-profit, 4-year or above: 122,462
- Public, 4-year or above: 358,131

**Part-time enrollment**
- Private for-profit, 4-year or above: 17,468
- Private not-for-profit, 4-year or above: 48,724
- Public, 4-year or above: 54,385

**Full-time enrollment**
- Private for-profit, 4-year or above: 76,920
- Private not-for-profit, 4-year or above: 158,086
- Public, 4-year or above: 364,978

**Total enrollment**
- Private for-profit, 4-year or above: 94,388
- Private not-for-profit, 4-year or above: 206,810
- Public, 4-year or above: 419,363

*Note: Percentages represent Compound Annual Growth Rate (CAGR)*

*Source: IPEDS*
A significant portion of higher education students in Southern California take some form of distance education courses, especially at the graduate level. The proportion of students enrolled exclusively in distance education courses is highest at the graduate level, suggesting that this is where demand for online programs is greatest. However, in terms of volume, more undergraduates are enrolled in some form of distance education.

There are more women than men and more Hispanic than white students enrolled in higher education institutions. There is also a high volume of Asian students enrolled in higher education institutions in Southern California.
Greater education enrollment correlates with larger population. Los Angeles reported a total of 767,358 higher education enrollments in 2016, a far larger volume than other Southern California counties. Other high-enrollment counties include San Diego (326,278), Orange (292,844), and Riverside (108,148).
The percentage of Southern California students who fulfill University of California (UC) and California State University (CSU) admission requirements is increasing. The percentage of UC/CSU-ready Southern California students increased from 36.5 percent in 2012 to 40.1 percent in 2014. Percentages also increased at the county level with Orange County having the highest percentage of UC/CSU-ready students.

Although more students are meeting admissions requirements, the enrollment framework at UC and CSU has not expanded. UCs and CSUs have admitted about the same proportion of students as in the past. In the CSU system, 17 of the 23 campuses are unable to accept all qualified applicants (PPIC). The CSU system has adopted a policy that redirects students rejected from one campus to another, but the effectiveness of the policy remains to be seen (Deruy).

### Percentage of HS Graduates Meeting UC/CSU Course Requirements (2012-2014)

<table>
<thead>
<tr>
<th>County</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperial</td>
<td>26.6%</td>
<td>27.3%</td>
<td>28.4%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>39.2%</td>
<td>42.4%</td>
<td>46.6%</td>
</tr>
<tr>
<td>Orange</td>
<td>46.6%</td>
<td>48.9%</td>
<td>50.4%</td>
</tr>
<tr>
<td>Riverside</td>
<td>35.1%</td>
<td>38.0%</td>
<td>39.9%</td>
</tr>
<tr>
<td>San Bernardino</td>
<td>27.6%</td>
<td>32.8%</td>
<td>33.8%</td>
</tr>
<tr>
<td>San Diego</td>
<td>45.7%</td>
<td>47.8%</td>
<td>47.5%</td>
</tr>
<tr>
<td>Santa Barbara</td>
<td>35.2%</td>
<td>36.1%</td>
<td>37.4%</td>
</tr>
<tr>
<td>Ventura</td>
<td>36.2%</td>
<td>36.9%</td>
<td>36.6%</td>
</tr>
</tbody>
</table>

Source: Ed-Data
Budget Trends (2018-2019)

- $10.4 billion (Total Budget)
- $3.9 billion (General Fund Support)
- $92 million (Base Increase from Governor)
- $47.1 million (Earmarked funding to support increased pension costs and higher retiree health benefit costs)


- Enrollment and Graduation Trends
  - CSU is seeking to improve student graduation rates; historically, six-year graduation rates for incoming freshmen have been below 50 percent and four-year rates have been below 15 percent.
  - While graduation rates have been increasing steadily over time, CSU still has persistent achievement gaps among low-income students.

- Assessment and Remedial Policies
  - CSU’s college readiness tests historically place students in remedial math and English courses when they could be succeeding in college-level coursework.
  - CSU’s trustees are required to adopt new assessment policies that places more weight on incoming high school grades in math and English.
  - CSU also has issues with reduction of excess course-taking among students.

Source: California Legislative Analyst’s Office
• **UC’s 2018-2019 budget may prompt UC to compete with other institutions in soliciting funding and donations.** According to the Legislative Analyst Office’s (LAO) 2018-19 higher education report, UC’s current budget places more responsibility of finding alternative revenue source on the university system than in previous years.

• **UC’s non-resident enrollment cap and focus on increasing transfer enrollment may provide other institutions an opportunity to target marketing and recruitment efforts toward non-resident students.** More students qualifying for admission into the UC and CSU schools may draw potential applicants away from other schools in California.

### Budget Trends (2018-2019)

- **$35.6 billion (Total Budget)**
- **$300 million (Available for Ongoing Spending)**
- **$92 million (Base Increase from Governor)**
- **$120 million (from Tuition and Fees)**
- **$88 million (from Anticipated Fees and Other Revenue Sources)**

### Enrollment Policy Plans and Changes (2018-2019)

#### Non-Resident Enrollment Policy

- UC required to adopt policy limiting non-resident enrollment as condition of receiving enrollment growth funding in 2016-17 budget.
- 18 percent cap for non-resident undergraduate enrollment at five campuses and higher caps for remaining four campuses.

#### Transfer Enrollment Increases

- UC has historically aimed to enroll at least one new transfer student for every two new freshmen; over past 10 year UC has only had transfer-freshman ratio of 1 to 2.3.
- UC currently prioritizing transfer enrollment at Santa Cruz and Riverside campuses.
- UC also planning systemwide efforts to streamline transfer process. Efforts include: establishing agreement with the California Community College system to share contact information of transfer-ready students and increasing outreach efforts to community college counselors and students.

Source: [California Legislative Analyst’s Office](#)
LABOR MARKET TRENDS

Southern California Labor Market Projections
Southern California Job Postings Data
Regional Labor Market Projections
Landscape of the Higher Education Market in Southern California

- High-growth and high-volume occupations include: market research analysts, application software developers, and computer systems analysts.
- Occupations projected to grow the fastest in Southern California include: web developers and operations research analysts. Several healthcare-related occupations are also projected to see high growth between 2014 and 2024.
- Occupations with the largest projected volume in 2024 include: registered nurses and accountants and auditors. Several software and computer-related occupations are also projected to be among the largest in the region.

**Highest Demand Occupations in Southern California (2014-2024)**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>High Growth (2014-24)</th>
<th>High Volume (2024)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Developers</td>
<td>(17,190, 40.0%)</td>
<td></td>
</tr>
<tr>
<td>Registered Nurses</td>
<td></td>
<td>(167,970, 16.8%)</td>
</tr>
<tr>
<td>Market Research Analysts and Marketing Specialists</td>
<td>(53,610, 27.5%)</td>
<td></td>
</tr>
<tr>
<td>Software Developers, Applications</td>
<td>(47,590, 25.1%)</td>
<td></td>
</tr>
<tr>
<td>Computer Systems Analysts</td>
<td>(33,380, 26.3%)</td>
<td></td>
</tr>
<tr>
<td>Health Specialties Teachers, Postsecondary</td>
<td>(11,710, 26.3%)</td>
<td></td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>(8,550, 35.5%)</td>
<td></td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>(7,340, 31.1%)</td>
<td></td>
</tr>
<tr>
<td>Interpreters and Translators</td>
<td>(5,200, 28.1%)</td>
<td></td>
</tr>
<tr>
<td>Operations Research Analysts</td>
<td>(6,890, 39.2%)</td>
<td></td>
</tr>
<tr>
<td>Accountants and Auditors</td>
<td>(98,100, 15.7%)</td>
<td></td>
</tr>
<tr>
<td>Management Analysts</td>
<td>(63,540, 21.7%)</td>
<td></td>
</tr>
<tr>
<td>Teachers and Instructors, All Other, Except Substitute Teachers</td>
<td>(37,060, 20.1%)</td>
<td></td>
</tr>
<tr>
<td>Software Developers, Systems Software</td>
<td>(32,610, 18.3%)</td>
<td></td>
</tr>
<tr>
<td>Producers and Directors</td>
<td>(30,500, 15.1%)</td>
<td></td>
</tr>
<tr>
<td>Computer and Information Systems Managers</td>
<td>(22,480, 20.5%)</td>
<td></td>
</tr>
</tbody>
</table>

Source: State of California Employment Development Department
Note: The average projected growth rate of all occupations in Southern California is 14.3 percent while the median volume of job openings available in 2024 is 4,000 openings. Hanover limited analysis to occupations where a majority of workers attain a bachelor’s degree or higher.
Regional Job Postings Data
Landscape of the Higher Education Market in Southern California

- **Registered nurses and application software developers had the highest volume of job postings in the last 180 days.** Other occupations with high volumes of job postings were primarily managerial positions across occupational fields, such as marketing managers, financial managers, and medical and health services managers.
- **Employers in Southern California are most interested in employees with healthcare certifications, common office skills, and Spanish language proficiencies.** While in-demand certifications are specific to the healthcare sector, skills such as Microsoft Office and Spanish proficiency are in-demand across occupational fields.

### Job Postings Trends in Southern California (2018)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Nurses</td>
<td>17,162</td>
</tr>
<tr>
<td>Software Developers, Applications</td>
<td>16,156</td>
</tr>
<tr>
<td>Human Resources Specialists</td>
<td>10,740</td>
</tr>
<tr>
<td>Marketing Managers</td>
<td>9,721</td>
</tr>
<tr>
<td>Network and Computer Systems Administrators</td>
<td>9,558</td>
</tr>
<tr>
<td>Management Analysts</td>
<td>9,126</td>
</tr>
<tr>
<td>Financial Managers, Branch or Department</td>
<td>8,674</td>
</tr>
<tr>
<td>Business Operations Specialists, All Other</td>
<td>7,367</td>
</tr>
<tr>
<td>Medical and Health Services Managers</td>
<td>7,203</td>
</tr>
<tr>
<td>Sales Managers</td>
<td>7,045</td>
</tr>
</tbody>
</table>

**Certifications**
- Registered Nurse (RN)
- Advanced Cardiac Life Support Certification (ACLS)
- Certified Public Accountant (CPA)
- Secret Clearance
- Pediatric Advanced Life Support (PALS)
- Project Management Professional (PMP)
- Licensed Clinical Social Worker (LCSW)
- Certified Information Systems Security Professional (CISSP)
- Certified Financial Planner (CFP)

**Hard Skills**
- Microsoft Office
- Microsoft Excel
- Bilingual
- Spanish
- Sales
- Retail Sales
- Microsoft Word
- Computer Programming/Coding
- Mathematics
- Presentation

Source: JobsEQ
Note: Hanover analyzes job postings reported by JobsEQ during the past 180 days as of June 2018.