

CALIFORNIA STATE UNIVERSITY, SACRAMENTO



ACADEMIC PROGRAM NEEDS ASSESSMENT OF THE GREATER SACRAMENTO AREA OF CALIFORNIA

Fall 2023

Submitted by: Office of Institutional Research, Effectiveness, and Planning

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ACADEMIC PROGRAM NEEDS ASSESSMENT OF THE GREATER SACRAMENTO AREA

I. Introduction

Founded in 1947 as Sacramento State College, California State University, Sacramento (Sacramento State) serves the educational needs of a rapidly growing, diverse population. The University has a paramount role in advancing the economic interests of the region and throughout the state. Within the seven different academic colleges, the University offers baccalaureate, master's and doctoral degrees with a high level of rigor that prepares students to become leaders in our communities. The economic impact of Sacramento State is more than \$900 million yearly to the Sacramento region.

According to the California Department of Finance, this metro area is expected to be one of the fastest growing areas in the country. The Greater Sacramento Area's economic outlook is positive with the recent addition of the Golden One Center, Downtown Commons (DOCO), Wide Open Walls Festival, and the continued development of infrastructure throughout the city.

Planning for the Future at Sacramento State

Sacramento State is a fast-growing campus setting the blueprint for other universities in the CSU system. With the recent completion of the 29,000 square foot expansion of The WELL, Sacramento State continues to invest in the health and well-being of students. Most recently, Sacramento State completed the Hornet Commons, a new student housing project that houses 1,100 students. Sacramento State continues to make strides to meet the growing housing needs. Additionally, the campus recently opened its new "Hornet Beach", a 26,000 square foot volleyball facility that features four NCAA regulation beach volleyball courts with seating for 250 spectators.

Purpose

The purpose of this report is to highlight important characteristics within the GSA (Greater Sacramento Area) that are useful for administrators and other stakeholders. This report examines important areas including population characteristics, employment characteristics, education characteristics, income and poverty characteristics, information on local education providers and current and future needs within education. This report can be utilized as a guide in assessing the needs of services and academic programs provided by Sacramento State to future populations.

Study Area

The GSA is the focus of the report and encompasses Sacramento County, Yolo County, Placer County, and San Joaquin County. These counties are high feeder areas that make up approximately 60% of enrolled undergraduate students during the fall 2020 semester. For this reason, data reported reflects the GSA.

For the purpose of this report, we include the following higher education institutions: Sacramento State, UC Davis, Sierra College, Los Rios Community Colleges (Sacramento City, American River, Cosumnes River, and Folsom Lake), San Joaquin Delta College and Woodland Community College.

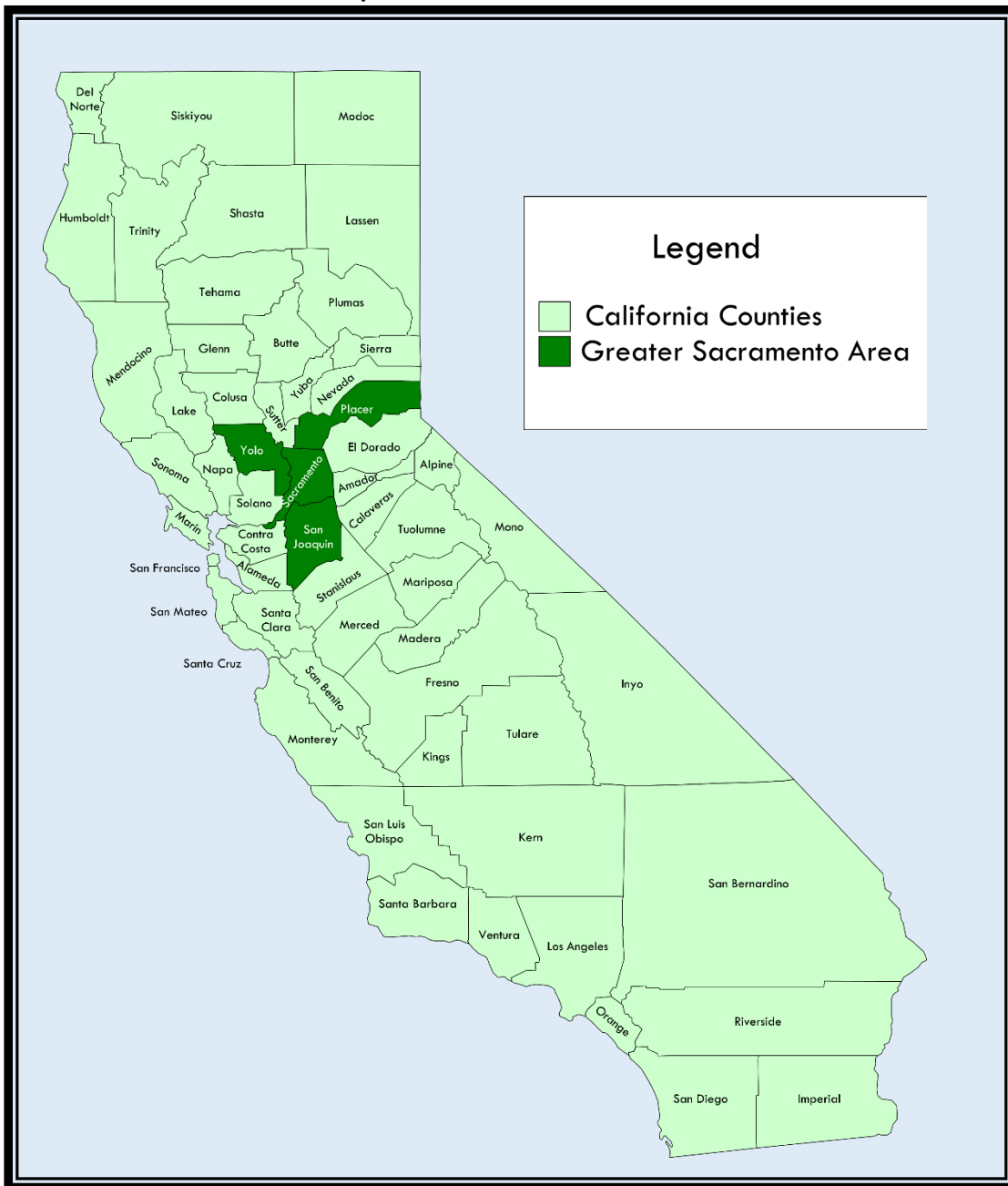
II. Market Analysis

This section presents population, employment, income and poverty characteristics of the Greater Sacramento Area. Additionally, it provides data concerning enrollment, high school students, and postsecondary education. This data highlights the important economic factors related to the area.

Map 1 shows the location of the Greater Sacramento Area in relation to the state of California. Placer County stretches out to the Nevada border as the rest of the counties remain centrally located in California. The total land area of the GSA is approximately 5,540 square miles.

There are two metropolitan statistical areas (MSAs) in the GSA: Sacramento-Roseville-Arden-Arcade MSA which is comprised of El Dorado, Placer, Sacramento, and Yolo Counties, and Stockton-Lodi MSA which is comprised of San Joaquin County. (<http://www.labormarketinfo.edd.ca.gov/definitions/metropolitan-areas.html>)

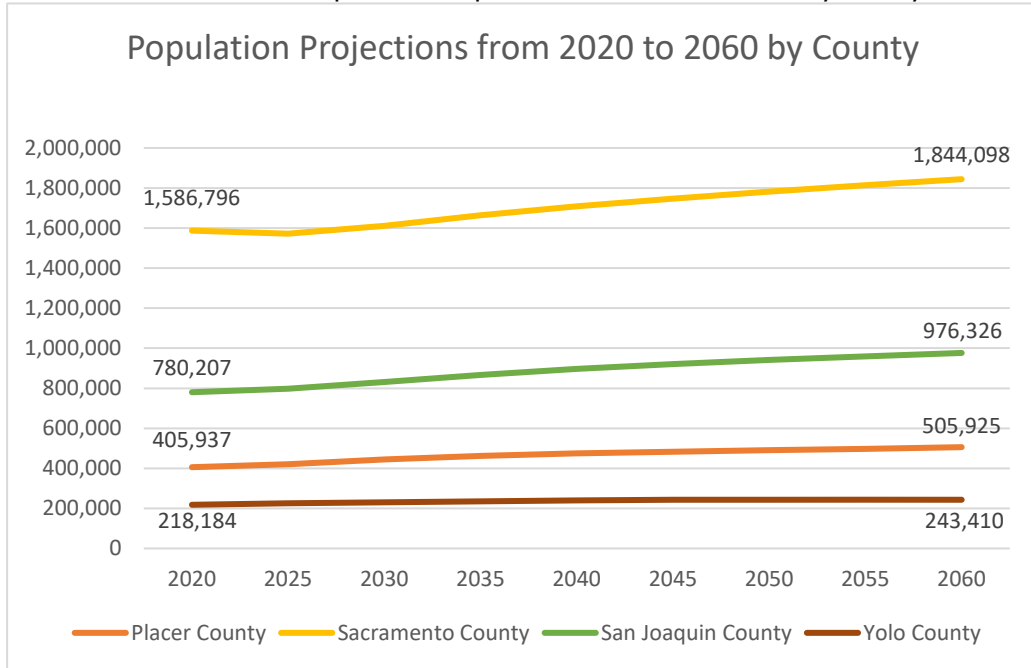
Map 1: The Greater Sacramento Area



A. Population Characteristics
i. Trends and Projections

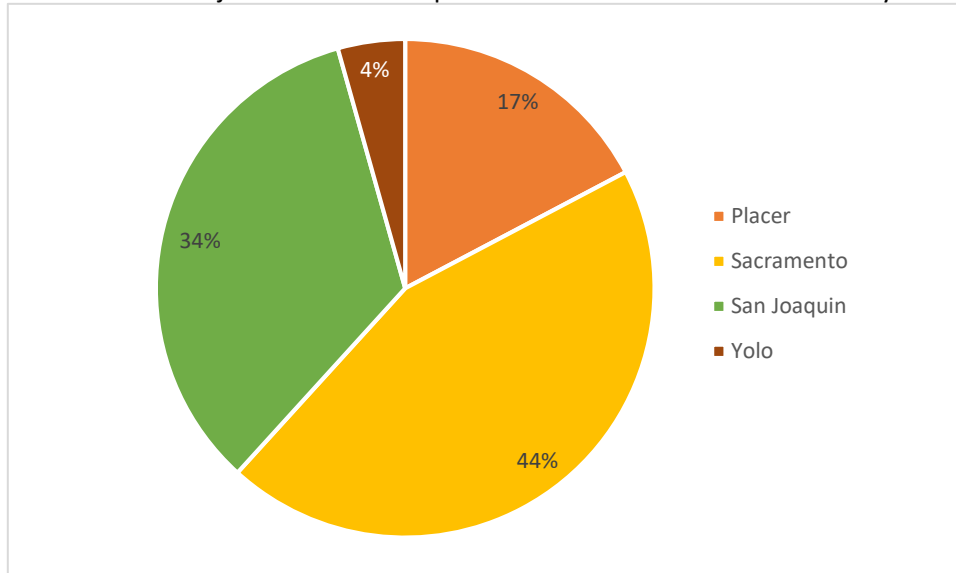
According to charts 1 and 2 below, the population of Sacramento County is growing at a fast pace. Projections from 2020 to 2060 reveal that Sacramento County will reach 1.84 million by 2060. San Joaquin County is projected to increase to 976,326 by 2060. Placer County is expected to grow to 505,925 and Yolo County is expected to grow to 243,410 by 2060.

Chart 1: Future Population Projections from 2020 to 2060 by County



Source: Projections Prepared by Demographic Research Unit, California Department of Finance, July 2023

Chart 2: Future Projected Share of Population Growth from 2020 to 2060 by County

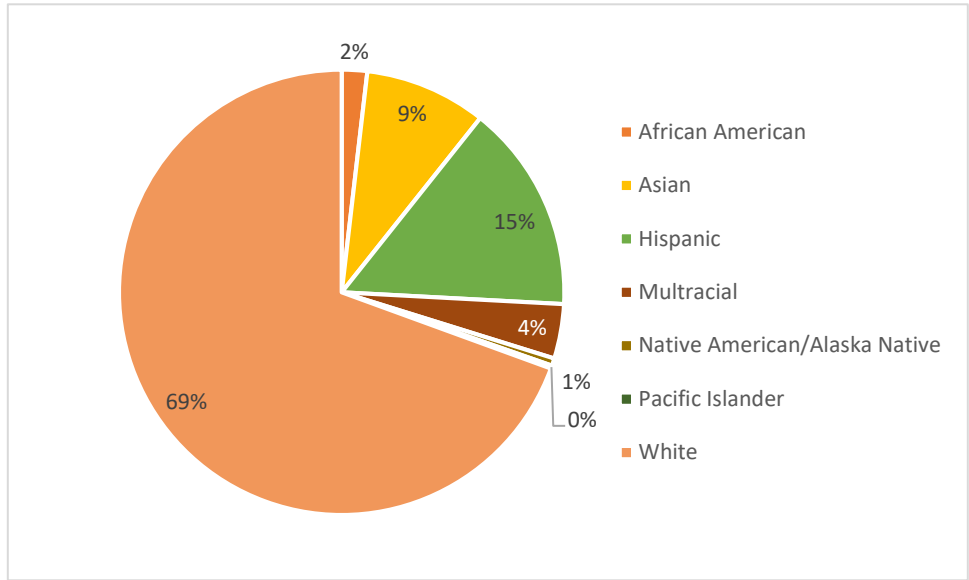


Source: Projections Prepared by Demographic Research Unit, California Department of Finance, July 2023

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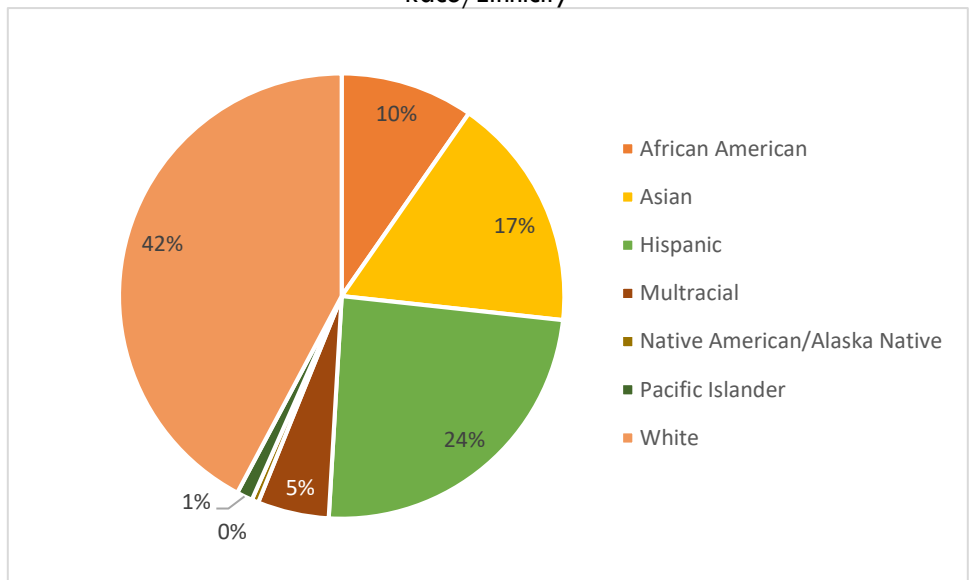
According to charts 3 through 6, we see a population breakdown of demographics in the Greater Sacramento Area by Race/Ethnicity. Projection highlights the percentage of people in each designated county. Future projections include an increase in the Hispanic population, which will reach 446,488 by 2060 in Sacramento County.

Chart 3: Future Projected Share of Population Growth for Placer County from 2020 to 2060 by Race/Ethnicity



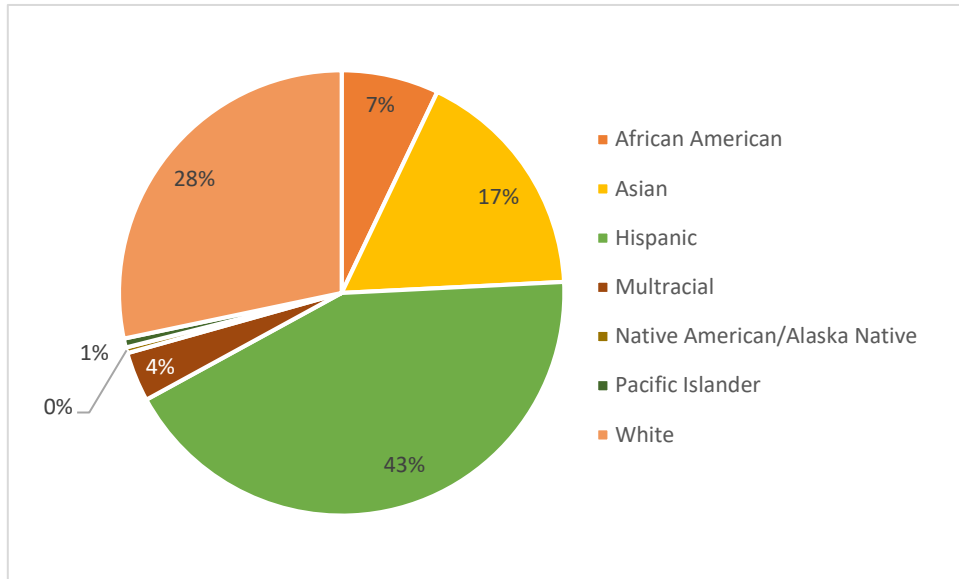
Source: Projections Prepared by Demographic Research Unit, California Department of Finance, July 2023

Chart 4: Future Projected Share of Population Growth for Sacramento County from 2020 to 2060 by Race/Ethnicity



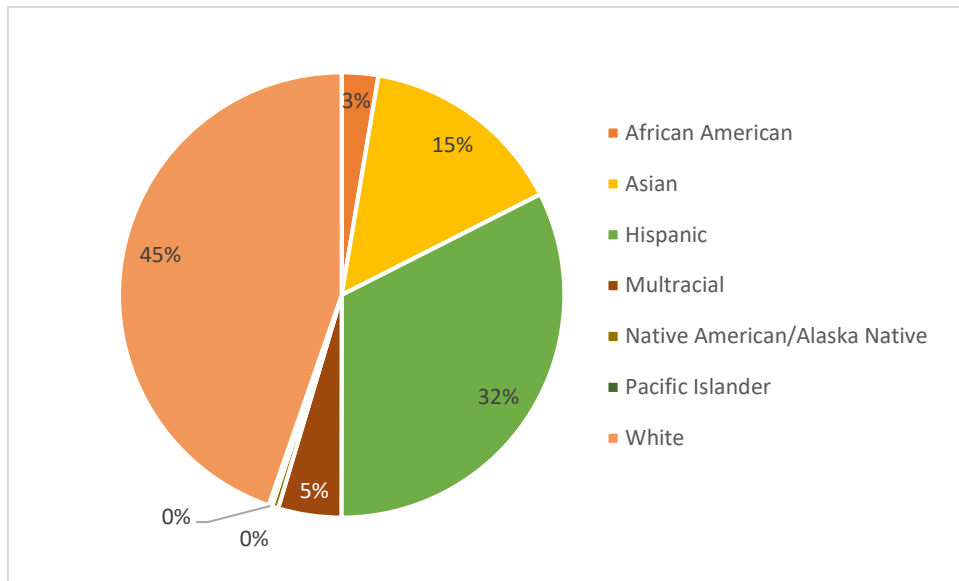
Source: Projections Prepared by Demographic Research Unit, California Department of Finance, July 2023

Chart 5: Future Projected Share of Population Growth for San Joaquin County from 2020 to 2060 by Race/Ethnicity



Source: Projections Prepared by Demographic Research Unit, California Department of Finance, July 2023

Chart 6: Future Projected Share of Population Growth for Yolo County from 2020 to 2060 by Race/Ethnicity



Source: Projections Prepared by Demographic Research Unit, California Department of Finance, July 2023

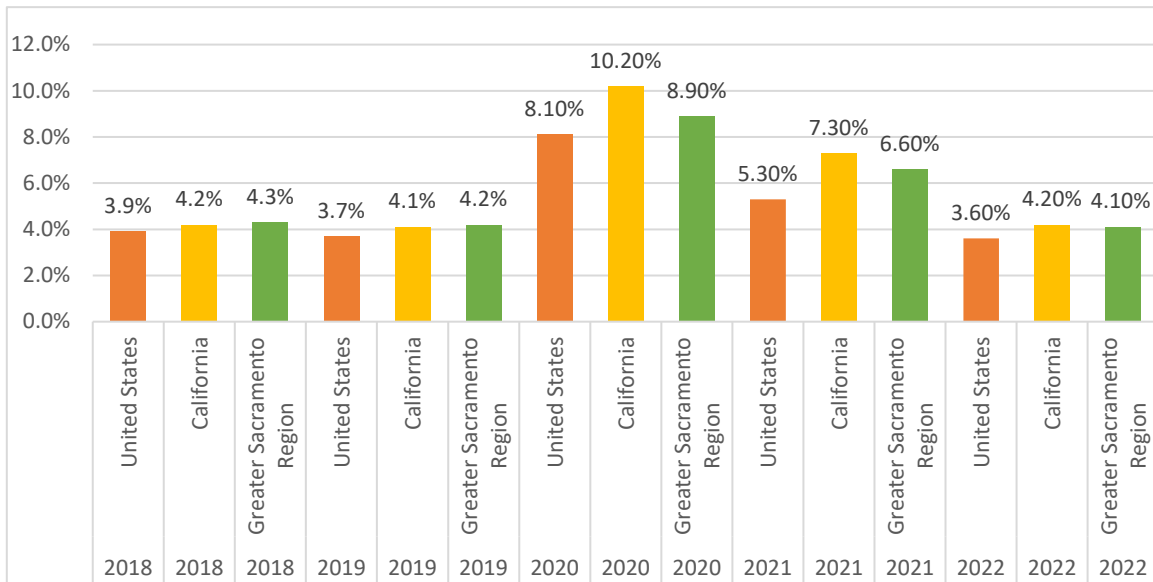
B. Employment Characteristics

i. Unemployment Trends

The unemployment rate had been persisting in a downward trend until it took a sharp turn upward in 2020. A look at unemployment rate patterns reveals higher unemployment rates in California compared to the U.S. national average. The Greater Sacramento Region also has a higher unemployment rate than the U.S. National average.

Chart 7 shows a snapshot of the unemployment rates in relation to the United States, California, and the Greater Sacramento Area.

Chart 7: Unemployment Rates in the U.S., California, and Greater Sacramento Area

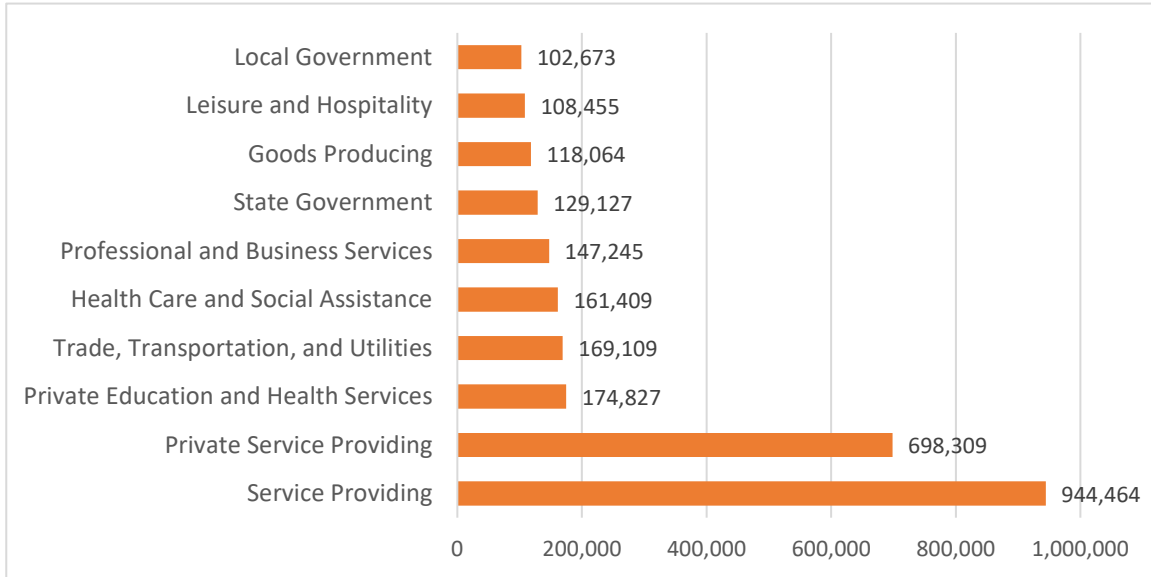


Source: Bureau of Labor Statistics

ii. Employment by Major Industry Sector in the Greater Sacramento Area

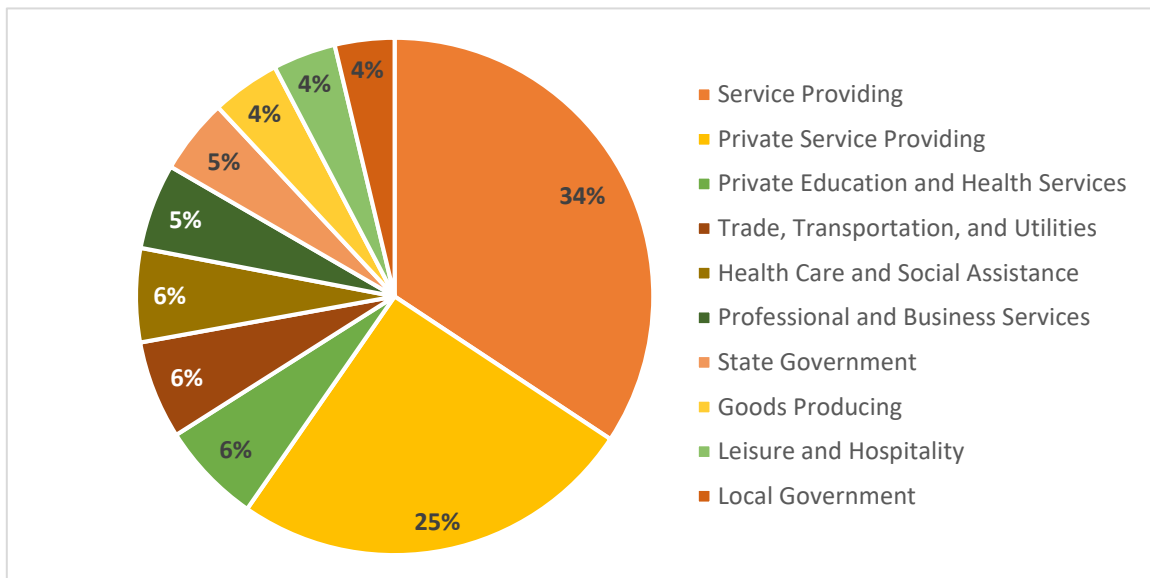
Chart 8 reveals the employment quantum by industry in the Greater Sacramento Area. The State of California Employment Development Department show the top three employment by industry to be Service Providing, Private Service Providing and Government for the Greater Sacramento Area. Chart 9 highlights the share in employment by industry in the Greater Sacramento Area showing a visual representation of the employment sector.

Chart 8: Employment by Industry in the Greater Sacramento Area, 4th Quarter 2022



Source: State of California-Employment Development Department

Chart 9: Share of Employment by Industry in the Greater Sacramento Area

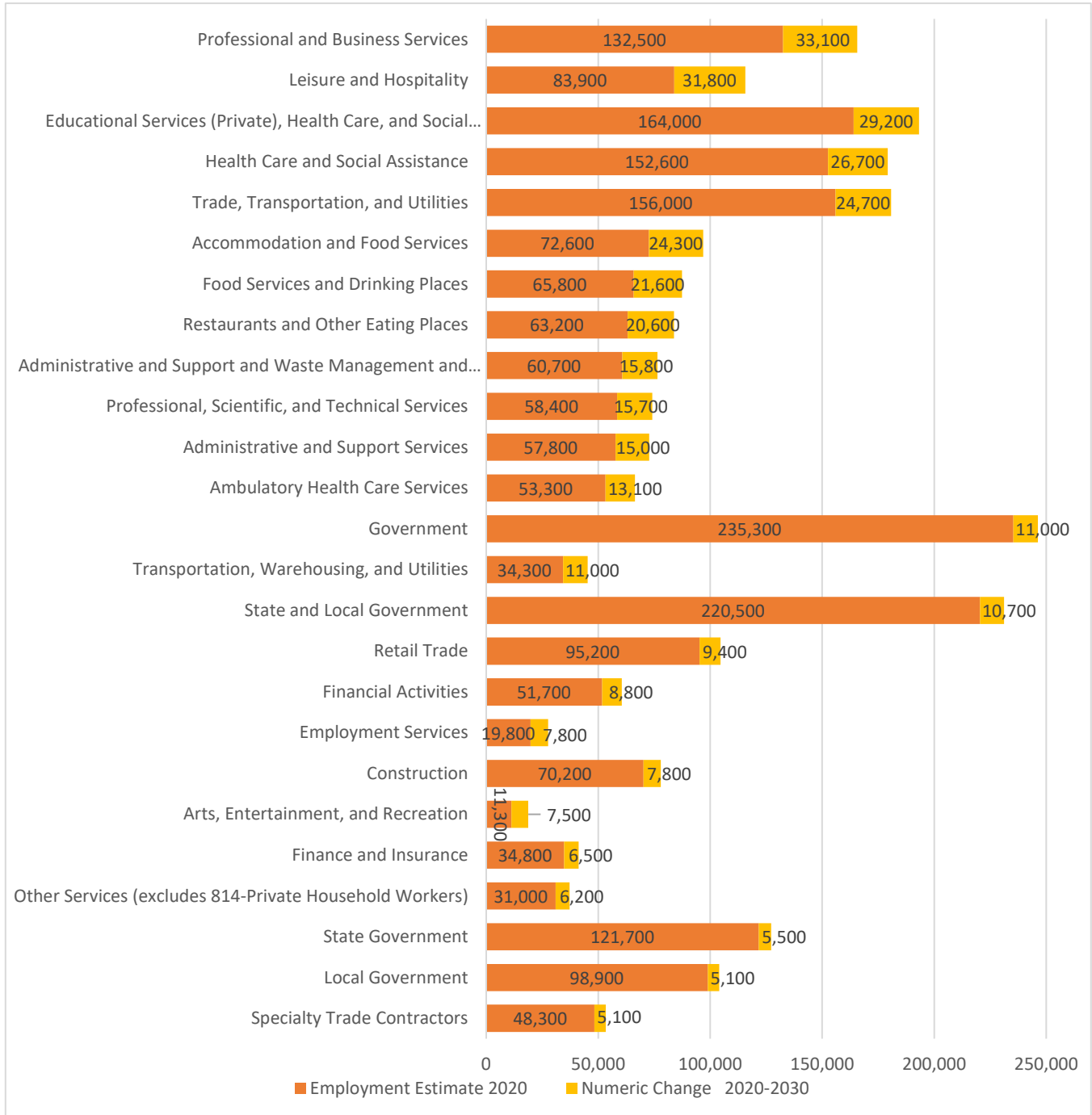


Source: State of California-Employment Development Department

iii. Industry and Occupational Projections

According to the California Employment Development Department, Professional and Business Services will add the highest number of new jobs by adding 33,100 jobs by 2030. Additionally, Leisure and Hospitality, and Educational Service (Private), Health Care, and Social Assistance are the other leading industries of employment for the Greater Sacramento Area.

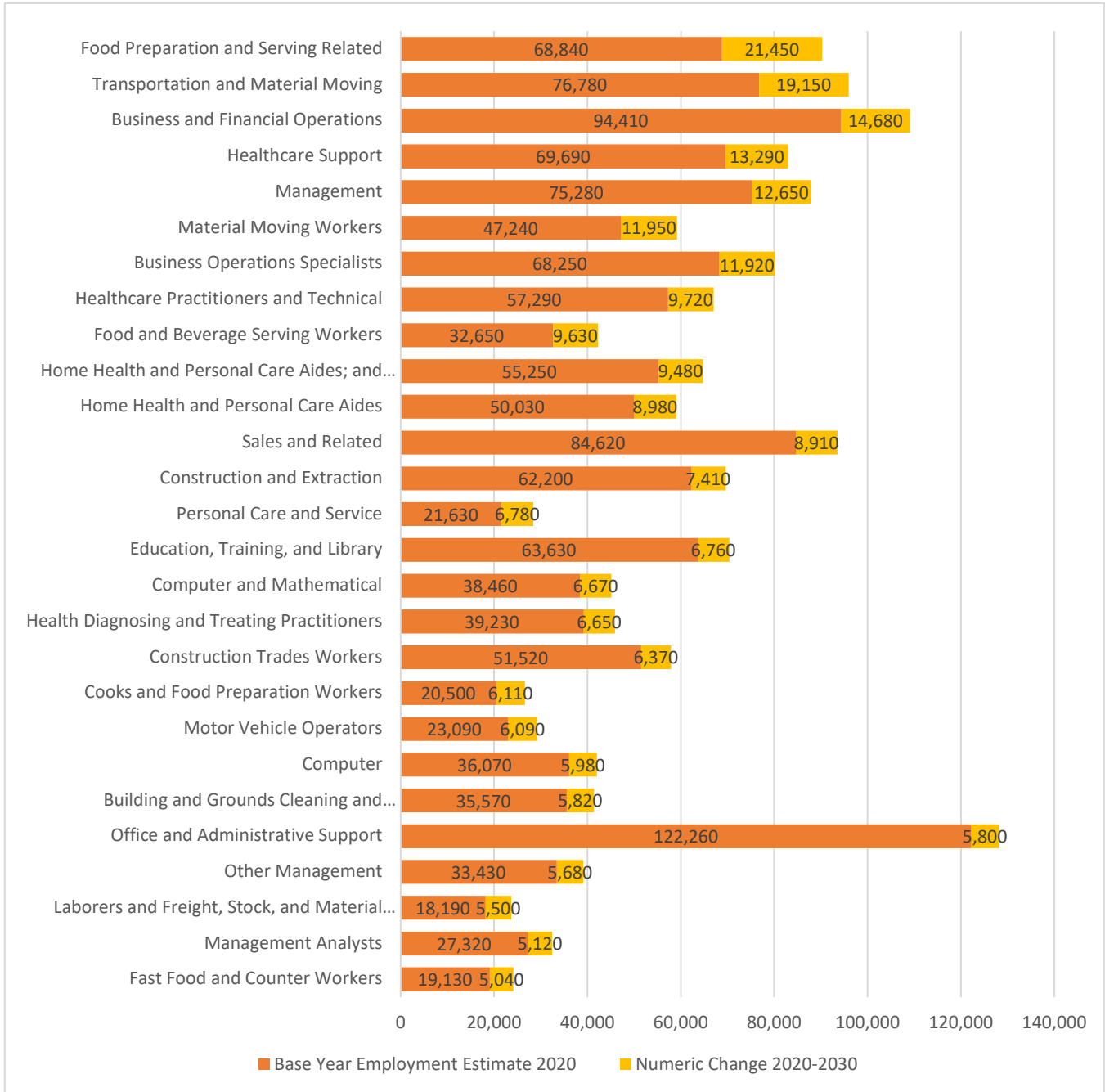
Chart 10: Projected Growth by Industry in the Greater Sacramento Area 2020-2030



Source: State of California-Employment Development Department

The top three occupational categories that will add the largest number of jobs by 2030 are Food Preparation and Serving Related, Transportation and Material Moving, Business and Financial Operations, Healthcare Support, and Management (Chart 11).

Chart 11: Projected Growth by Occupational Categories in the Greater Sacramento Area 2020-2030



Source: State of California-Employment Development Department

Table 1: 2020-2030 Fastest Growing Occupations Projected in the Greater Sacramento Area

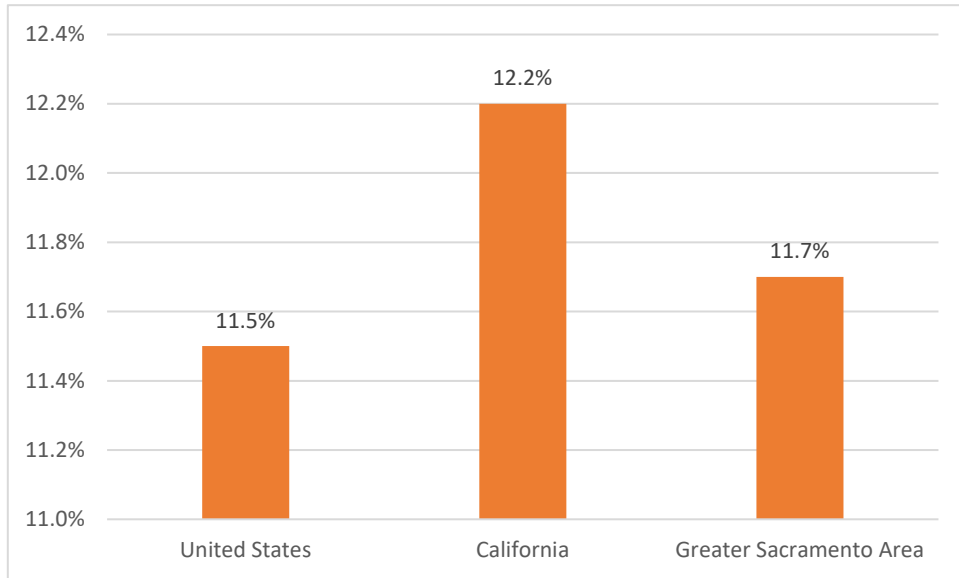
Occupational Title	Estimated Employment 2020	Projected Employment 2030	Percentage Change 2020-2030	Annual Average Percent Change
Ushers, Lobby Attendants, and Ticket Takers	330	650	96.97%	9.70%
Fitness Trainers and Aerobics Instructors	1,830	3,060	67.21%	6.72%
Cooks, Restaurant	6,360	10,540	65.72%	6.57%
Solar Photovoltaic Installers	400	660	65.00%	6.50%
Nurse Practitioners	900	1,480	64.44%	6.44%
Interpreters and Translators	790	1,210	53.16%	5.32%
Information Security Analysts	530	800	50.94%	5.09%
Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	2,250	3,310	47.11%	4.71%
Logisticians	850	1,250	47.06%	4.71%
Computer and Information Research Scientists	150	220	46.67%	4.67%
Coaches and Scouts	980	1,430	45.92%	4.59%
Entertainment Attendants and Related Workers	3,740	5,440	45.45%	4.55%
Reservation and Transportation Ticket Agents and Travel Clerks	330	480	45.45%	4.55%
Amusement and Recreation Attendants	2,110	3,060	45.02%	4.50%
Physical Therapist Assistants	380	550	44.74%	4.47%
Bartenders	2,830	4,090	44.52%	4.45%
Veterinarians	660	950	43.94%	4.39%
Veterinary Technologists and Technicians	650	930	43.08%	4.31%
Occupational Therapy Assistants	140	200	42.86%	4.29%
Aircraft Mechanics and Service Technicians	420	600	42.86%	4.29%
Dining Room and Cafeteria Attendants and Bartender Helpers	2,830	4,040	42.76%	4.28%
Veterinary Assistants and Laboratory Animal Caretakers	1,040	1,480	42.31%	4.23%
First-Line Supervisors of Personal Service & Entertainment and Recreation Workers, Exc Gambling Services	1,140	1,620	42.11%	4.21%
Physician Assistants	600	850	41.67%	4.17%
Chefs and Head Cooks	1,010	1,430	41.58%	4.16%
Epidemiologists	170	240	41.18%	4.12%
Statisticians	220	310	40.91%	4.09%
Nonfarm Animal Caretakers	1,750	2,460	40.57%	4.06%
Supervisors of Personal Care and Service Workers	1,420	1,990	40.14%	4.01%
Medical and Health Services Managers	3,340	4,680	40.12%	4.01%

Source: State of California-Employment Development Department

C. Income and Poverty Characteristics

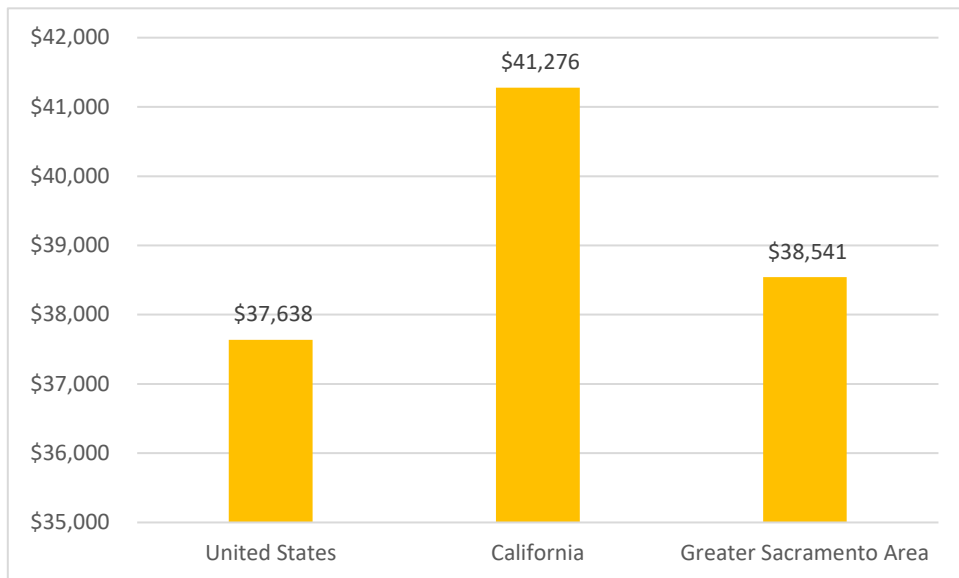
According to the U.S. Census Bureau, Chart 12 shows the Greater Sacramento Area’s percentage of population in poverty at 11.7%. This percent is slightly lower than the state of California by 0.5%. Chart 13 highlights per capita income. Income in California is slightly higher than the Greater Sacramento Area and the United States.

Chart 12: Percent of Population in Poverty – the U.S., California, and Greater Sacramento Area



Source: U.S. Census Bureau 2022

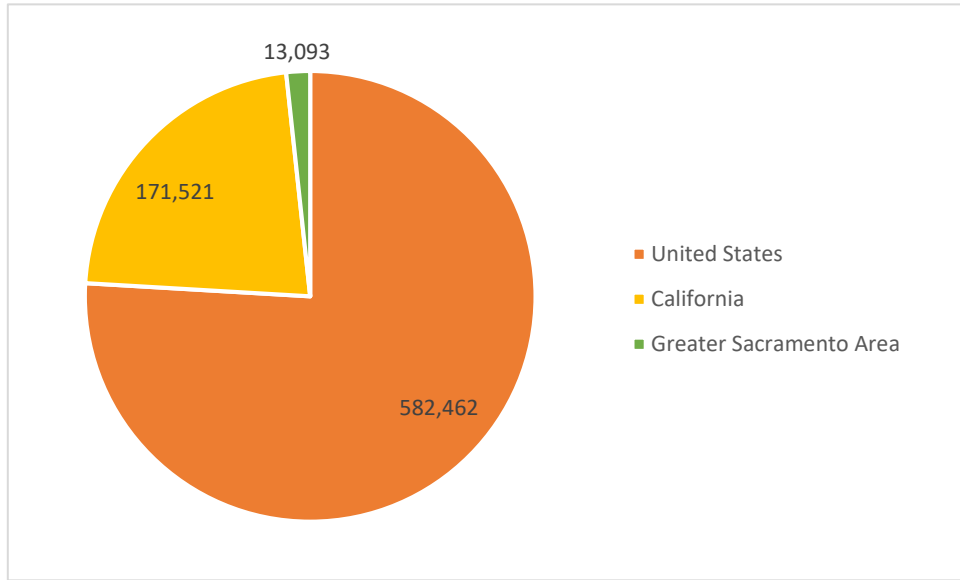
Chart 13: Per Capita Income – the U.S., California and Greater Sacramento Area



Source: U.S. Census Bureau 2022

Chart 14 shows the homeless population in the United States, California, and the Greater Sacramento Area. 0.43% of people that live in the Greater Sacramento Area are considered homeless which is slightly lower than 0.44% for the state of California and significantly higher than the United States at 0.17%.

Chart 14: Homeless Count Estimate by Population – the U.S., California and Greater Sacramento Area



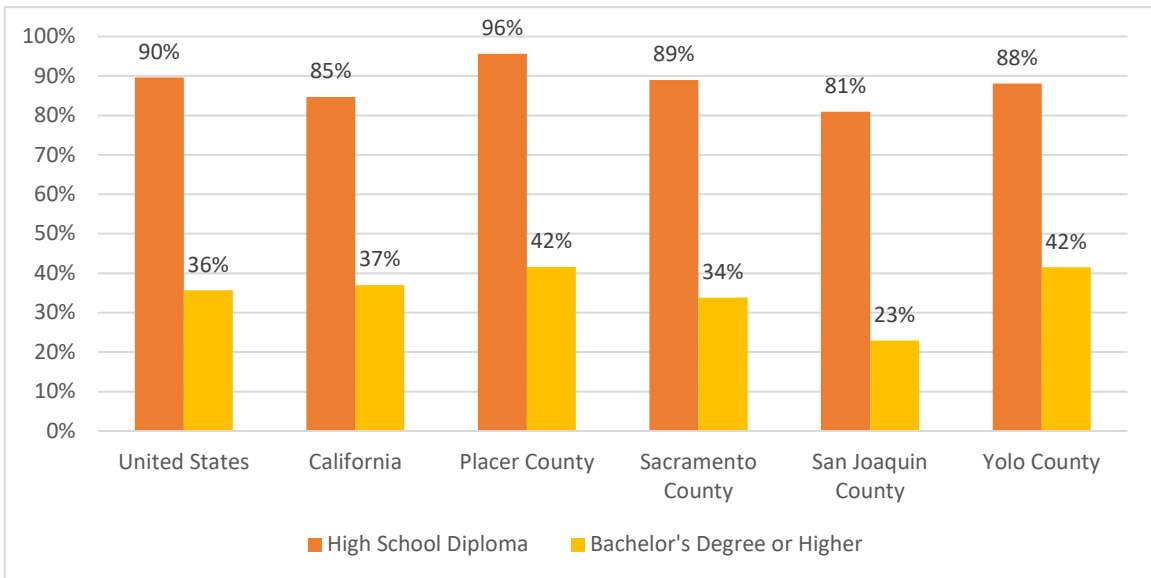
Source: U.S. Census Bureau 2022, US Department of Housing and Urban Development 2023

D. Educational Profile

i. Educational Attainment Status

According to Chart 15, Placer County has the highest high school graduation rate, while both Placer and Yolo Counties have the highest percentage of people with a Bachelor’s Degree or higher in the Greater Sacramento Area.

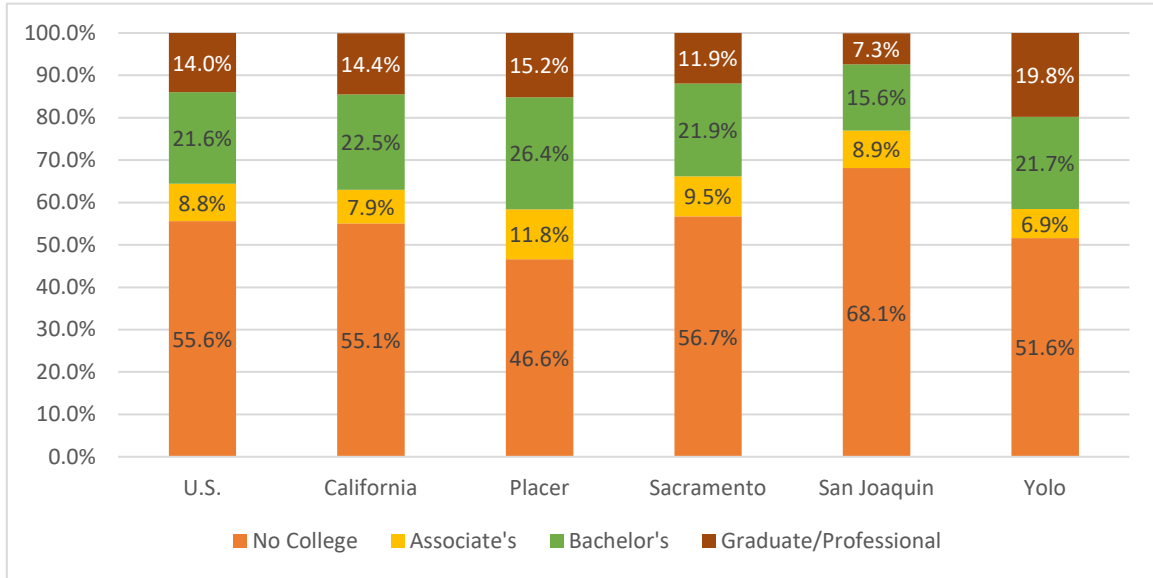
Chart 15: Percent of High School and College Graduates (Bachelor’s Degree or Higher) U.S., California and Greater Sacramento Area



Source: 2022 American Community Survey, U.S. Census Bureau

A closer examination of educational attainment is provided in Chart 16. When examining the Greater Sacramento Area, San Joaquin County has the highest percentage of the population with no college education and is higher than the national and state percentages. Placer County has the highest percentage with an Associate's degree, Bachelor's degree and a Graduate/Professional degree combined.

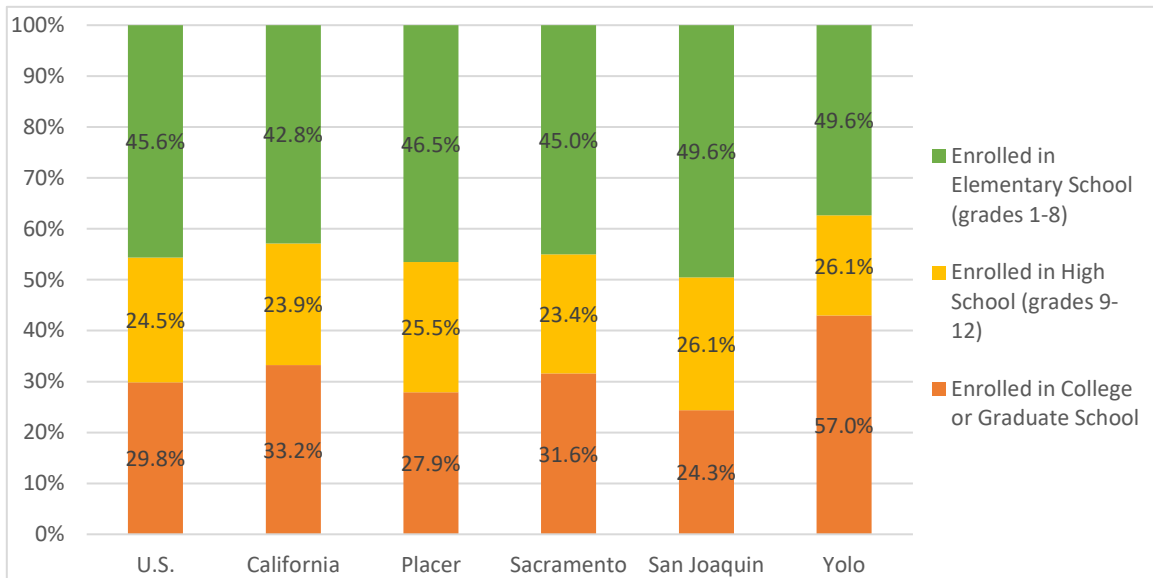
Chart 16: Educational Attainment by level of College Degree U.S., California and Greater Sacramento Area



Source: 2022 American Community Survey, U.S Census Bureau

Chart 17 shows the enrollment status by location and educational level. The percentage enrolled in college is 57% for Yolo County compared to 33.2% for the state of California. The lowest college enrollment in the Greater Sacramento Area is 24.3% in San Joaquin County. Enrollment in elementary school is similar between the U.S., California and the Greater Sacramento Area.

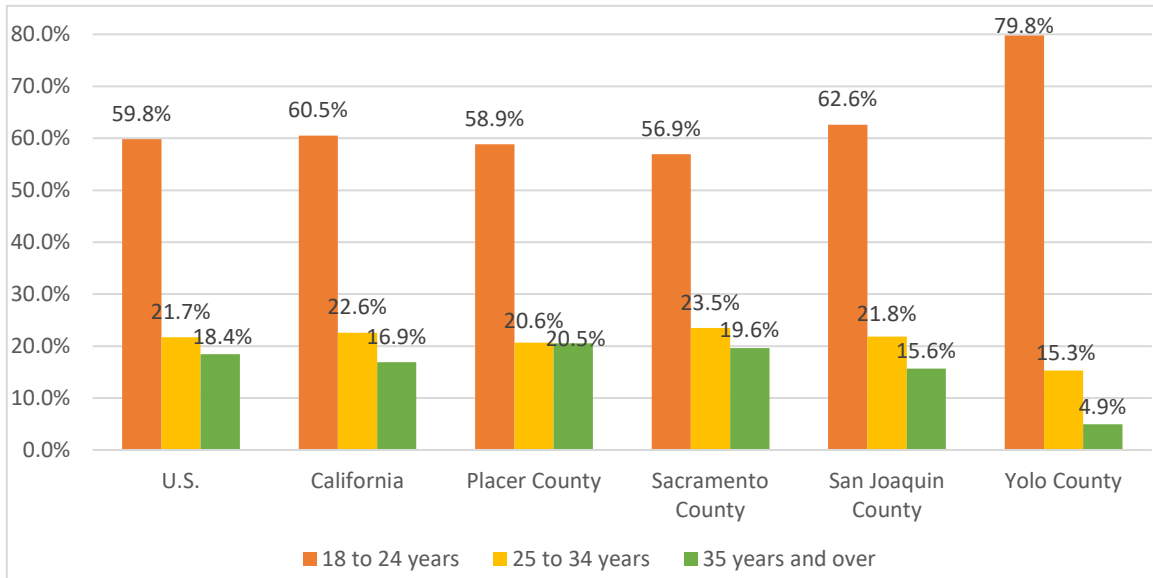
Chart 17: Percentage of Population Enrolled in School-U.S., California, Greater Sacramento Area



Source: 2022 American Community Survey, U.S Census Bureau

Chart 18 examines enrollment in college by age group. According to the chart, Sacramento County is behind the U.S and state of California in college enrollment for 18-24 year-olds. Yolo County has the highest percentage in college in the 18-24 age group and the lowest percentage for the 35 years and over age group.

Chart 18: Enrollment in College by Age Group-U.S., California and Greater Sacramento Area



Source: Source: 2022 American Community Survey, U.S Census Bureau

ii. High School Data

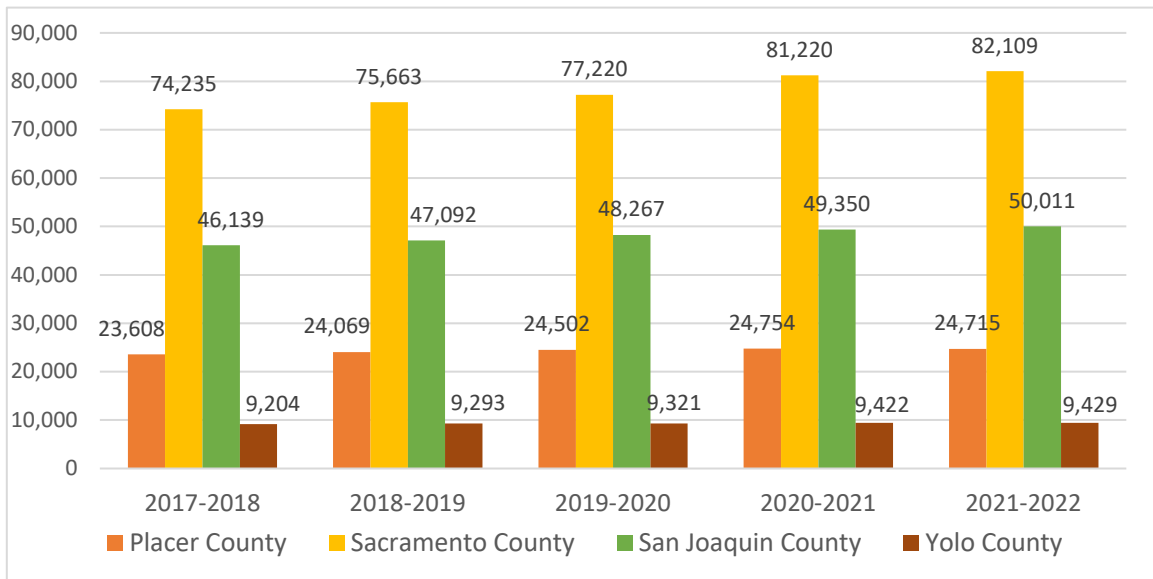
This section presents data on high school enrollment and graduation in public high schools. Table 2 and Chart 19 show enrollments by county in the Greater Sacramento Area. According to the California Department of Education, public high school enrollment has slowly increased from 2017 to 2021. Specifically, high school enrollment has been slowly increasing for all counties with Sacramento County showing the largest increase.

Table 2: Public High School Enrollment in Greater Sacramento Area 2017-18 to 2021-2022

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	Change 2017-2022
Placer County	23,608	24,069	24,502	24,754	24,715	4.7%
Sacramento County	74,235	75,663	77,220	81,220	82,109	10.6%
San Joaquin County	46,139	47,092	48,267	49,350	50,011	8.4%
Yolo County	9,204	9,293	9,321	9,422	9,429	2.4%
Total Greater Sacramento Area	153,186	156,117	159,310	164,746	166,264	8.5%
California	1,943,939	1,951,086	1,963,189	1,970,620	1,955,895	0.6%

Source: California Department of Education

Chart 19: Public High School Enrollment in Greater Sacramento Area 2017-18 to 2021-22



Source: California Department of Education

ACADEMIC PROGRAM NEEDS ASSESSMENT OF THE GREATER SACRAMENTO AREA

According to Tables 3 and 4, over a 5-year period San Joaquin County had a 9.8% increase in 12th grade enrollment while Yolo County had the lowest increase at 3.7%. The counties in the Greater Sacramento Area are surpassing the state increase of 1.2%. Additionally, during the same period of time, Both Sacramento and San Joaquin counties had the highest increase in graduation rate of 10% from 2018 to 2022. Yolo County had the lowest increase in graduation rates at 0.7%.

Table 3: Enrollment in 12th Grade in the Greater Sacramento Area-2017-18 to 2021-22

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	Change 2017-2022
Placer County	5,861	5,931	6,072	6,103	6,264	6.9%
Sacramento County	19,318	19,540	19,832	20,176	21,011	8.8%
San Joaquin County	11,864	11,778	12,889	12,679	13,031	9.8%
Yolo County	2,271	2,299	2,296	2,364	2,354	3.7%
Total Greater Sacramento Area	39,314	39,548	41,089	41,322	42,660	8.5%
California	489,221	489,650	486,592	491,750	495,327	1.2%

Source: California Department of Education

Table 4: Students Graduating from Public High Schools in the Greater Sacramento Area-2017-18 to 2021-22

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	Change 2017-2022
Placer County	5,291	5,345	5,443	5,469	5,706	7.8%
Sacramento County	15,441	15,472	15,924	15,841	16,978	10.0%
San Joaquin County	9,710	10,066	9,916	9,879	10,678	10.0%
Yolo County	2,109	2,086	2,114	2,154	2,123	0.7%
Total Greater Sacramento Area	32,551	32,969	33,397	33,343	35,485	9.0%
California	418,205	417,496	414,193	417,919	433,339	3.6%

Source: California Department of Education

The percentage of 12th graders graduating from high school was 86% for the class of 2022 in the Greater Sacramento Area which was slightly less than the State of California. Yolo County had the biggest change from 2018 to 2022 with a 5.3% increase.

Table 5: Students Graduating from Public High Schools in the Greater Sacramento Area, 2017-18 to 2021-22

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	Change 2017 to 2022
Placer County	90.5%	89.9%	91.0%	89.5%	91.6%	1.3%
Sacramento County	81.0%	82.0%	83.7%	80.6%	84.0%	3.7%
San Joaquin County	81.7%	83.7%	79.6%	81.4%	85.6%	4.7%
Yolo County	86.9%	89.1%	88.6%	91.2%	91.5%	5.3%
Total Greater Sacramento Area	83.0%	84.1%	83.8%	82.8%	86.0%	3.7%
California	83.0%	84.5%	84.3%	83.6%	87.0%	4.9%

Source: California Department of Education

III. Local Higher Education Providers

A. Postsecondary Education Providers in the Sacramento Area

There are nine major postsecondary education providers in the Greater Sacramento Area. They are:

- California State University, Sacramento
- University of California, Davis
- Sierra College
- American River College
- Cosumnes River College
- Folsom Lake College
- Sacramento City College
- Woodland Community College
- San Joaquin Delta College

In addition to these postsecondary institutions there are several licensed career schools and colleges in the Greater Sacramento Area. These schools provide training in a variety of fields.

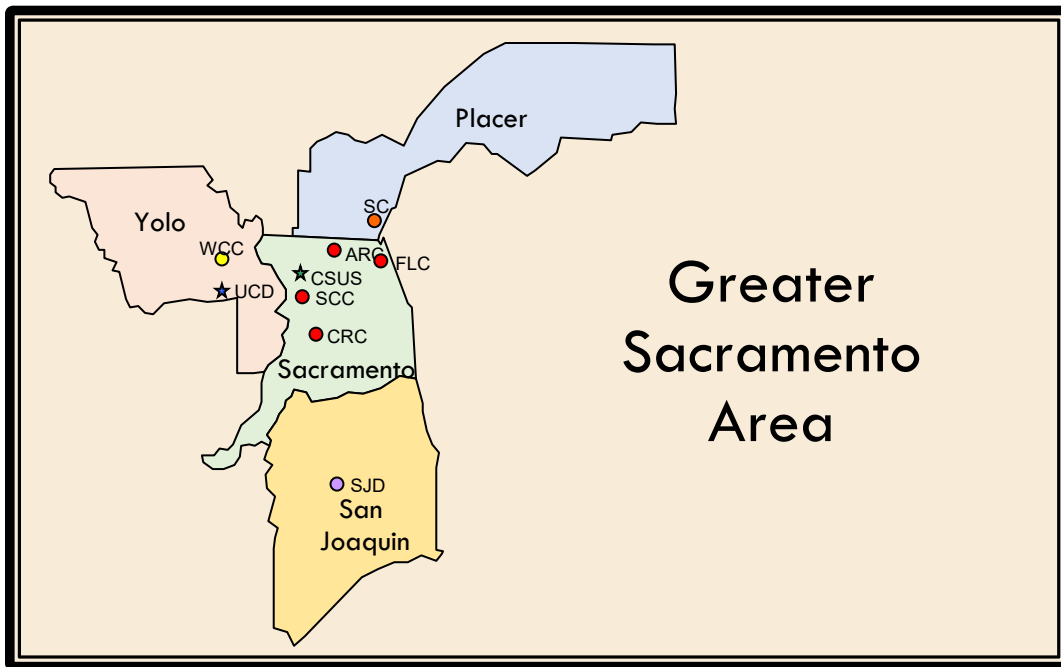
- | | |
|--|---|
| <ul style="list-style-type: none"> • San Joaquin Valley College • Universal Technical Institute • Carrington College • University of the Pacific • Epic Bible College & Graduate School | <ul style="list-style-type: none"> • Unitek College • Humphreys University • InterCoast College • William Jessup University • University of Phoenix Sacramento Valley Campus |
|--|---|

B. Description of Major Postsecondary Providers

The Map below shows the location of each of the following postsecondary education providers which is followed by a brief description of each.

- California State University, Sacramento
- University of California, Davis
- Sierra College in Rocklin
- American River College in Sacramento
- Cosumnes River College in Sacramento
- Folsom Lake College in Folsom
- Sacramento City College in Sacramento
- Woodland Community College in Woodland
- San Joaquin Delta College in Stockton

Map 2: Location of Major Postsecondary Providers in the Greater Sacramento Area



California State University, Sacramento

- Sacramento State’s mission is that as California’s capital university, it will transform lives by preparing students for leadership, service, and success. The vision for the future is that Sacramento State will be a recognized leader in education, innovation, and engagement. Sacramento State’s value are Student Success; Scholarship, Research, and Creative Activity; Diversity and Inclusion; Community Engagement; Innovation; Integrity; and Accountability
- Strategic Goals - Enhance student learning and success; Foster innovative teaching, scholarship, and research; Commit to engaging the community by building enduring partnerships that strengthen and enrich the region; Engage students in a comprehensive university experience; Excel as a place to learn, work, live, and visit; Promote a strong University identity
- Founded: 1947 as Sacramento State College
- Academic colleges: Seven, offering 124 undergraduate majors
- An engaged campus: Honored by the Carnegie Foundation for community engagement
- The campus: 300 acres with 3,500 trees; designated as a Tree Campus USA
- Economic impact: More than \$900 million yearly to the Sacramento region
- Carnegie Classification is: Master's Colleges & Universities: Larger Programs
- Fall 2022 enrollment was 30,883. 36% of students were Latino, 23% White, 20% Asian, with the remaining students being African American, American Indian, Pacific Islander, and multiracial.
- For more information on Sacramento State visit their website at: www.csus.edu

UC Davis

- UC Davis’s goal in the 2020 Initiative is to increase financial stability by reducing our reliance on the state for funding. UC Davis is doing this by adding 5,000 new undergraduates — Californian, national and international students — between 2011 and 2020. This initiative has allowed us to provide more international experiences for our campus community. At the same time, we’re creating a more diverse educational climate as we educate future global leaders.

- The Strategic Plan for Diversity and Inclusion will reflect the campus' continuing commitment to creating an environment in which all members of the campus community are welcomed, respected and valued. Through conversations and engagement with faculty, staff, students and alumni, the Diversity and Inclusion Planning Committee is developing goals and strategies for moving the university toward its goal of inclusive excellence.
- UC Davis first opened its doors in 1908 as the University Farm, the research and science-based instruction extension of UC Berkeley.
- Offering 109 undergraduate majors, 99 graduate programs
- Carnegie Classification is: Doctoral Universities: Highest Research Activity
- Fall 2022 enrollment was 39,679.
- For more information on UC Davis visit their website at: www.ucdavis.edu

Sierra College

- Sierra College was officially established in 1936, although earlier colleges that are historically linked to Sierra College were in existence from 1882 onward. The college's rich history is preserved in The Archives of Sierra College History in room LRC 442 of the Rocklin campus Learning Resources Center/Library.
- Mission Statement: Sierra College provides a challenging and supportive learning environment for students having diverse goals, abilities, and needs interested in transfer, career and technical training, and lifelong learning. The College's programs and services encourage students to identify and to expand their potential. Sierra College students will develop the knowledge, skills and abilities to become engaged and contributing members of the community.
- Offers approximately 118 degree and certificate programs, career/technical training, and classes for upgrading job skills.
- Carnegie Classification is: Associate's Colleges: High Transfer-High Traditional
- Fall 2022 enrollment was 16,504.
- For more information on Sierra College visit their website at: www.sierracollege.edu

Los Rios Community College District – includes American River College, Cosumnes River College, Folsom Lake College, Sacramento City College

- Mission: The Los Rios Colleges provide a vibrant learning environment that empowers all students to achieve their educational and career goals.
- Vision: To transform the lives of students and enhance the vitality of our region.
- Goals: Establish effective pathways that optimize student access and success; Ensure equitable academic achievement across all racial, ethnic, socioeconomic and gender groups; Provide exemplary teaching and learning opportunities; Lead the region in workforce development; Foster an outstanding working and learning environment.
- The colleges offer AA/AS degrees, certificates and transfer education opportunities - students complete freshman and sophomore years and transfer to a four-year college or university - in more than 70 career fields.
- 67,137 students were enrolled in the colleges for Fall 2022.
- The Committee on Awards for Innovation in Higher Education recently announced that Los Rios Community College District (LRCCD), in partnership with Sacramento State, was awarded \$2 million to develop a new collaborative to increase student completion rates between community college and their pursuit of a four-year degree. Through this partnership, Los Rios and Sacramento State will work together on new student-focused technologies and curriculum, as well as alignment in student counseling.
- Carnegie Classification is: ARC - Associate's Colleges: High Transfer-High Traditional, CRC- Associate's Colleges: Mixed Transfer/Career & Technical-High Traditional, FLC - Associate's Colleges: High Transfer-High Traditional, SCC - Associate's Colleges: High Transfer-High Traditional Associate's Colleges: High Transfer-High Traditional
- For more information on Los Rios Community College District visit their website at: www.losrios.edu

San Joaquin Delta College

- Mission: San Joaquin Delta Community College District serves the needs of students and the District community by providing excellent post-secondary education to the associate degree level, general education and preparation for transfer to other post-secondary institutions, career and technical education, economic development, and the development of intellectual autonomy. To achieve this objective, the faculty and staff are committed to offering high quality instructional programs, student services, and efforts to enhance the public good.
- Vision: The faculty, staff, and students of San Joaquin Delta Community College District envision a community of lifelong learners, passionately pursuing and achieving ever-higher educational goals, and fully appreciating the diverse and dynamic world around them.
- San Joaquin Delta Community College District was originally founded in 1935 as Stockton Junior College, a part of the Stockton City School system. The College of the Pacific, now University of the Pacific (Pacific), helped form the original Stockton Junior College. As an accredited community college, Delta has collaborated with Pacific to serve the higher educational needs of the area for more than 50 years.
- Carnegie Classification is: Associate's Colleges: High Transfer-High Traditional
- For more information on San Joaquin Delta College visit their website at: www.deltacollege.edu

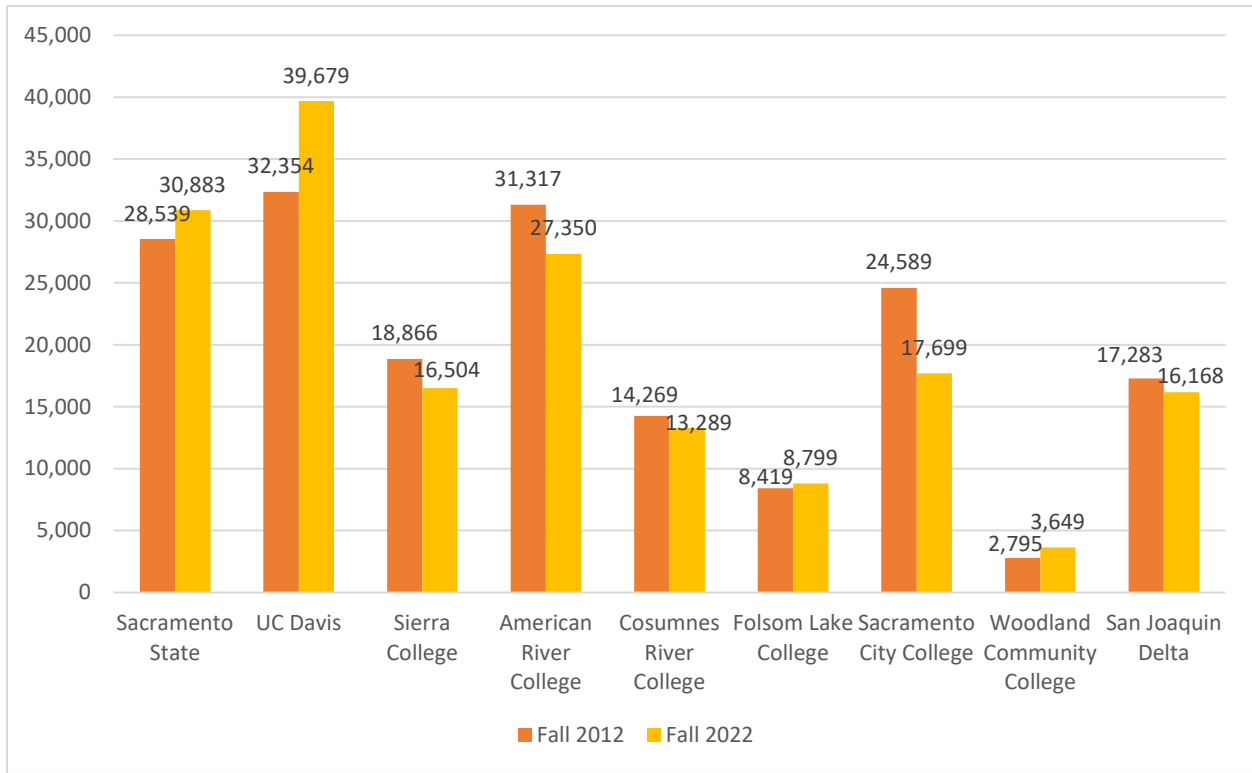
Woodland Community College

- The mission of Woodland Community College is to provide high quality, student-centered education and lifelong learning opportunities for the communities we serve. At WCC, students pursue their educational goals in an environment that values diversity, individuality, mutual respect, civic responsibility, and the free exchange of ideas.
- In the fall of 1975 Woodland offered courses in an outreach program. In 1981 the California Postsecondary Education Commission labeled Woodland as an official education center. In 1990, Woodland Center (now Woodland Community College) relocated to its current 120 acres (49 ha) parcel of land. In 1999 Yuba Community College District notified its intent for Woodland Center to become a self-sufficient community college, the same year that a Child Development center was opened on campus. The next year the district received the approval from the State Chancellor's office to begin Woodland Center's process of being a comprehensive college.
- Combined UC and CSU transfer rates consistently place the college among the top 10 percent of all community colleges statewide
- Federally Designated Hispanic Serving Institute
- Carnegie Classification is: Associate's Colleges: High Transfer-High Traditional
- For more information on Woodland Community College visit their website at: www.wcc.yccd.edu

C. Postsecondary Enrollment Data

This section reflects enrollment and graduation data for nine higher education institutions. The institutions include: Sacramento State, UC Davis, Sierra College, American River College, Cosumnes River College, Folsom Lake College, Sacramento City College, San Joaquin Delta, and Woodland Community College. According to Chart 20, UC Davis and Sacramento State have the highest total enrollment for fall 2022. When examining community colleges, only Woodland Community College and Folsom Lake College have higher enrollment for fall 2022 compared to fall 2012. Other community colleges show a decline of student enrollment from Fall 2012 to Fall 2022.

Chart 20: Total Fall Enrollment by Education Provider Fall 2012 and Fall 2022



Sources: <http://tableau.calstate.edu>, <http://datamart.cccco.edu>, <https://www.universityofcalifornia.edu>

The change in fall enrollment figures are presented in Table 6. Woodland Community College had the greatest percent change followed by UC Davis, while Sacramento City College showing the biggest decrease.

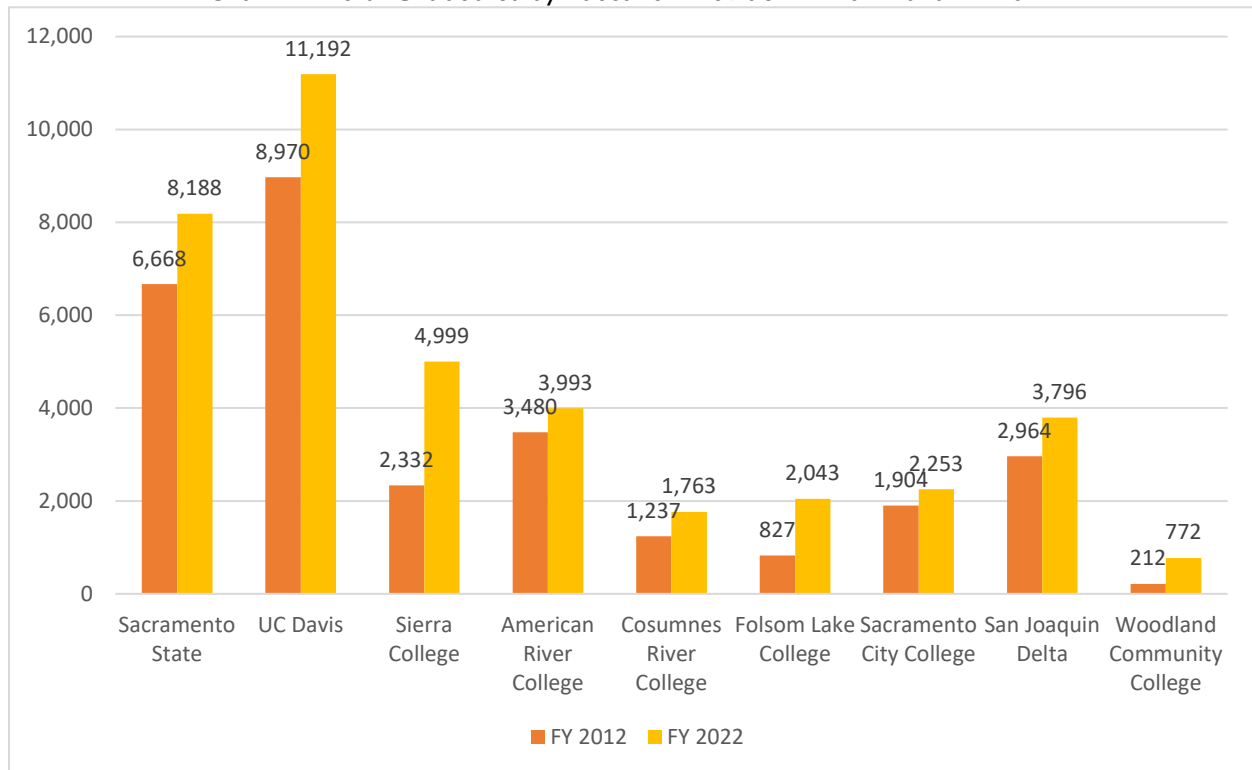
Table 6: Change in Fall Enrollment by Education Provider Fall 2012 to Fall 2022

Education Provider	Fall 2012	Fall 2022	Numeric Change	Percent Change
Sacramento State	28,539	30,883	2,344	8.2%
UC Davis	32,354	39,679	7,325	22.6%
Sierra College	18,866	16,504	-2,362	-12.5%
American River College	31,317	27,350	-3,967	-12.7%
Cosumnes River College	14,269	13,289	-980	-6.9%
Folsom Lake College	8,419	8,799	380	4.5%
Sacramento City College	24,589	17,699	-6,890	-28.0%
San Joaquin Delta	17,283	16,168	-1,115	-6.5%
Woodland Community College	2,795	3,649	854	30.6%
Total	178,431	174,020	-4,411	-2.5%

Sources: <http://tableau.calstate.edu>, <http://datamart.cccco.edu>, <https://www.universityofcalifornia.edu>

The number of graduates is provided for FY 2012 and FY 2022. UC Davis had the highest number of graduates with 11,192 in FY 2022. Sacramento State increased from 6,668 in FY 2011 to 8,188 in FY 2022.

Chart 21: Total Graduates by Education Provider FY 2012 and FY 2022



Sources: <http://www.csus/oir>, <http://datamart.cccco.edu>, <https://www.universityofcalifornia.edu>

Table 7 highlights the change in number of graduates. The percent change was drastic for Woodland Community College between FY 2012 and FY 2022. Sierra College and Folsom Lake College also had triple digit increases. An important thing to point out is that all colleges had an increase.

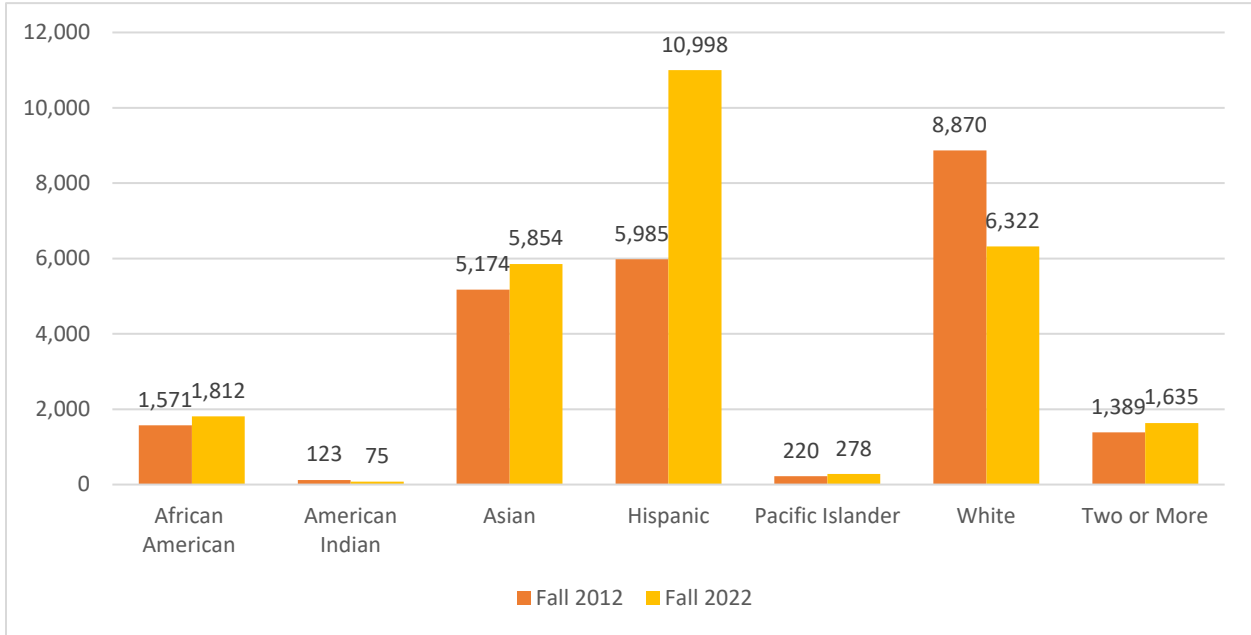
Table 7: Change in Number of Graduates by Education Provider FY 2012 and FY 2022

Education Provider	FY 2012	FY 2022	Numeric Change	Percent Change
Sacramento State	6,668	8,188	1,520	22.8%
UC Davis	8,970	11,192	2,222	24.8%
Sierra College	2,332	4,999	2,667	114.4%
American River College	3,480	3,993	513	14.7%
Cosumnes River College	1,237	1,763	526	42.5%
Folsom Lake College	827	2,043	1,216	147.0%
Sacramento City College	1,904	2,253	349	18.3%
San Joaquin Delta	2,964	3,796	832	28.1%
Woodland Community College	212	772	560	264.2%
Total	28,594	38,999	10,405	36.4%

Sources: <http://www.calstate.edu>, <http://datamart.cccco.edu>, <https://www.universityofcalifornia.edu>

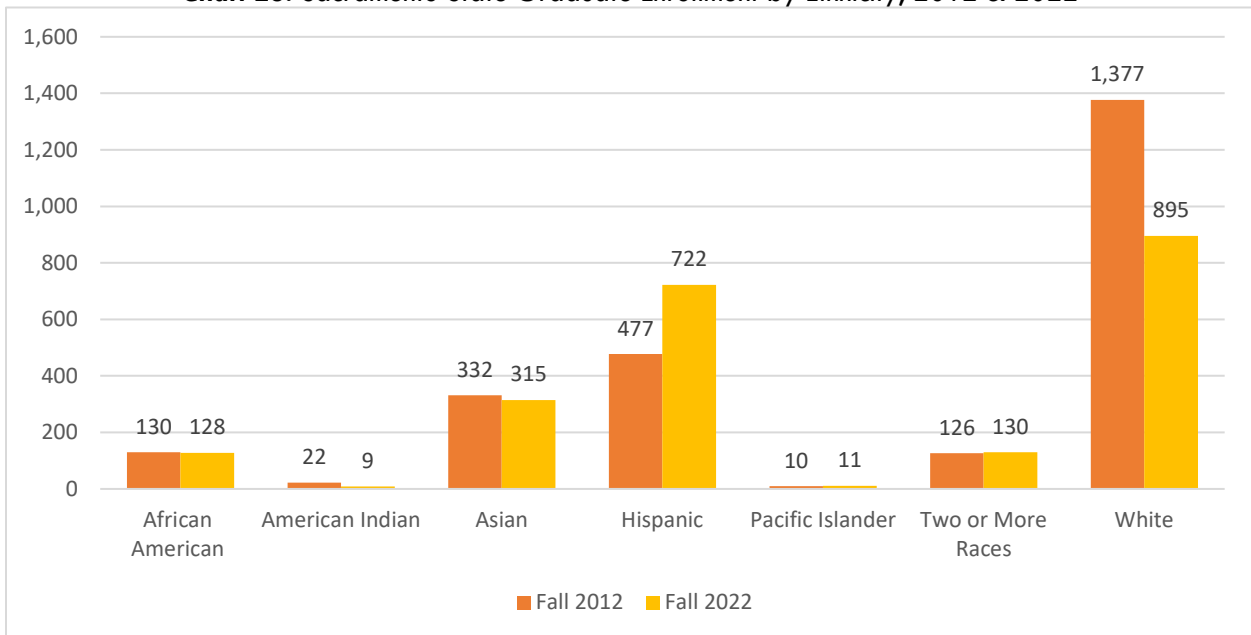
Charts 22 through 41 highlight the demographics of Enrollment by ethnicity. These charts also include student enrollment demographics by gender. All data tables are measured for fall 2012 & fall 2022. Chart 22 shows a significant increase in the Hispanic student population from fall 2012 to fall 2022. This is an ongoing trend in the colleges and Universities across the Greater Sacramento Area (community colleges and undergraduates). Additionally, we see a decline in the American Indian and White student enrollment population. Graduate student demographics for fall 2012 and fall 2022 include a White majority enrollment with an increase in Hispanic enrollment (Chart 23).

Chart 22: Sacramento State Undergraduate Enrollment by Ethnicity, 2012 & 2022



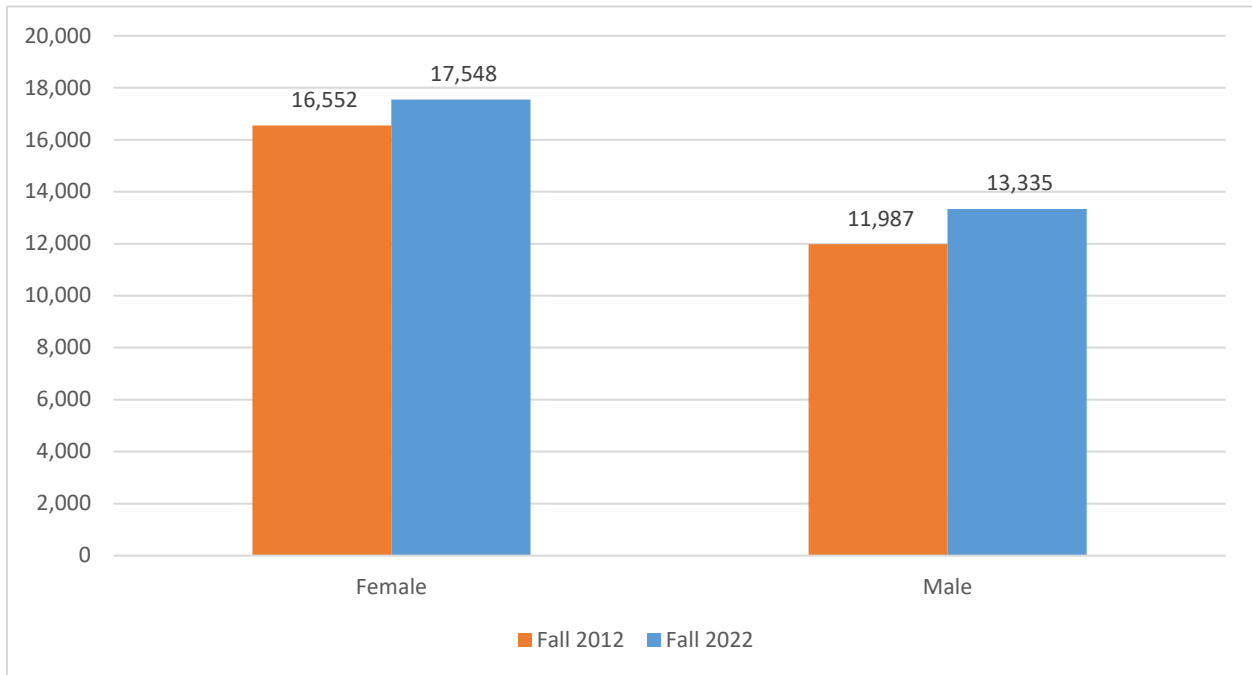
Source: <https://tableau.calstate.edu/views/SelfEnrollmentDashboard/EnrollmentSummary>

Chart 23: Sacramento State Graduate Enrollment by Ethnicity, 2012 & 2022



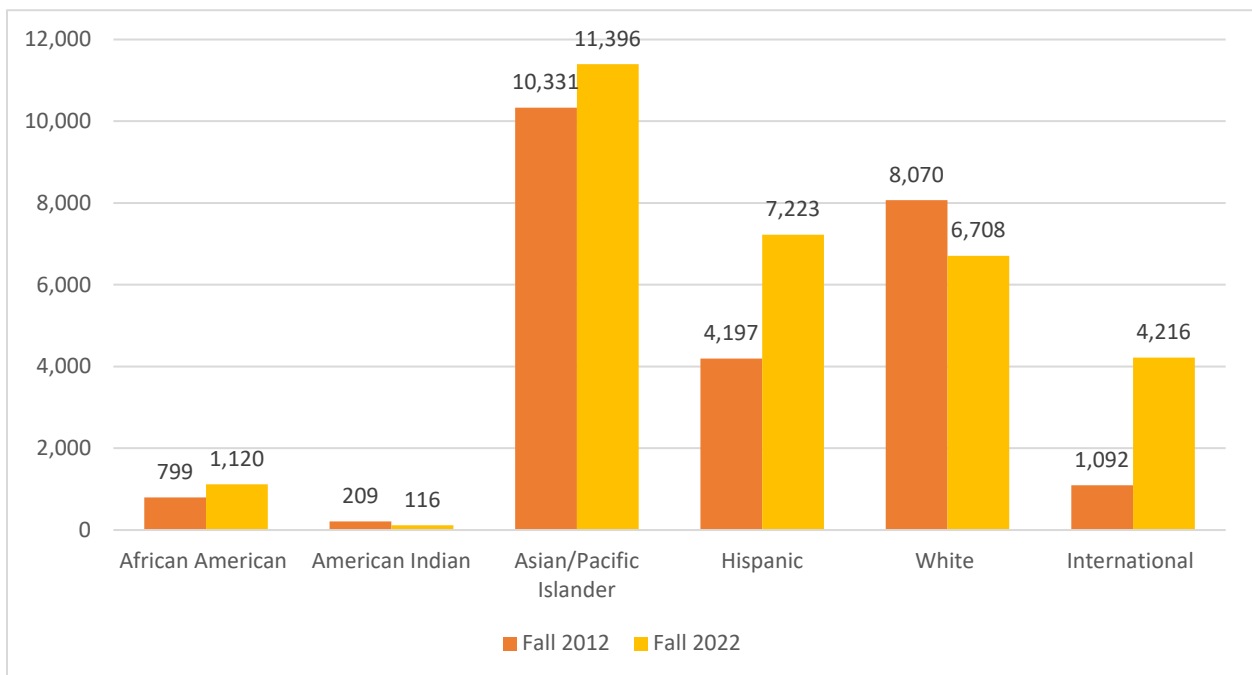
Source: <https://tableau.calstate.edu/views/SelfEnrollmentDashboard/EnrollmentSummary>

Chart 24: Sacramento State Student Enrollment by Gender, 2012 & 2022



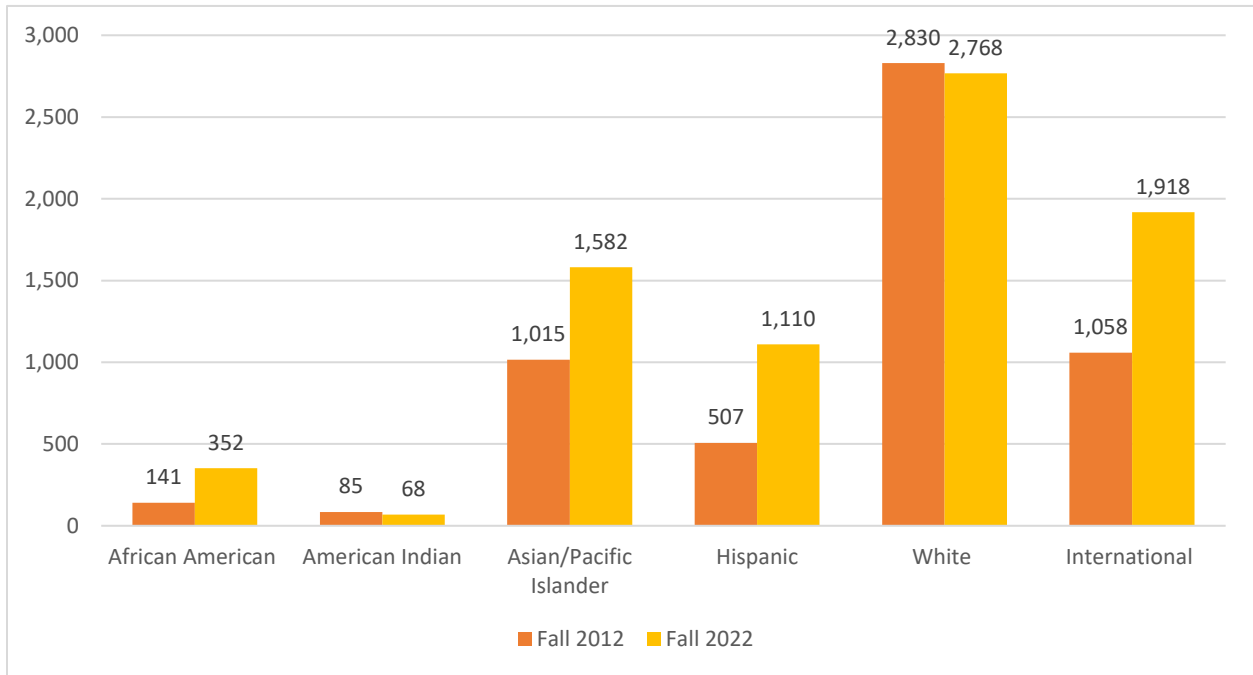
Source: <https://tableau.calstate.edu/views/SelfEnrollmentDashboard/EnrollmentSummary>

Chart 25: UC Davis Undergraduate Enrollment by Ethnicity, 2012 & 2022



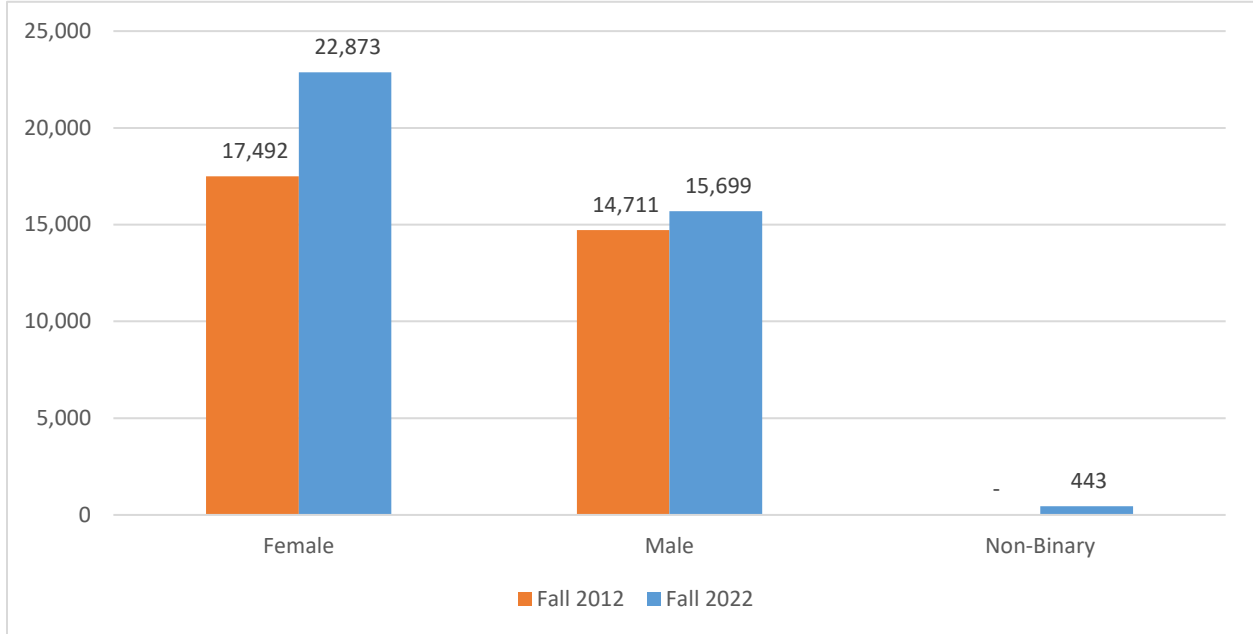
Source: <https://www.universityofcalifornia.edu/infocenter>

Chart 26: UC Davis Graduate Enrollment by Ethnicity, 2012 & 2022



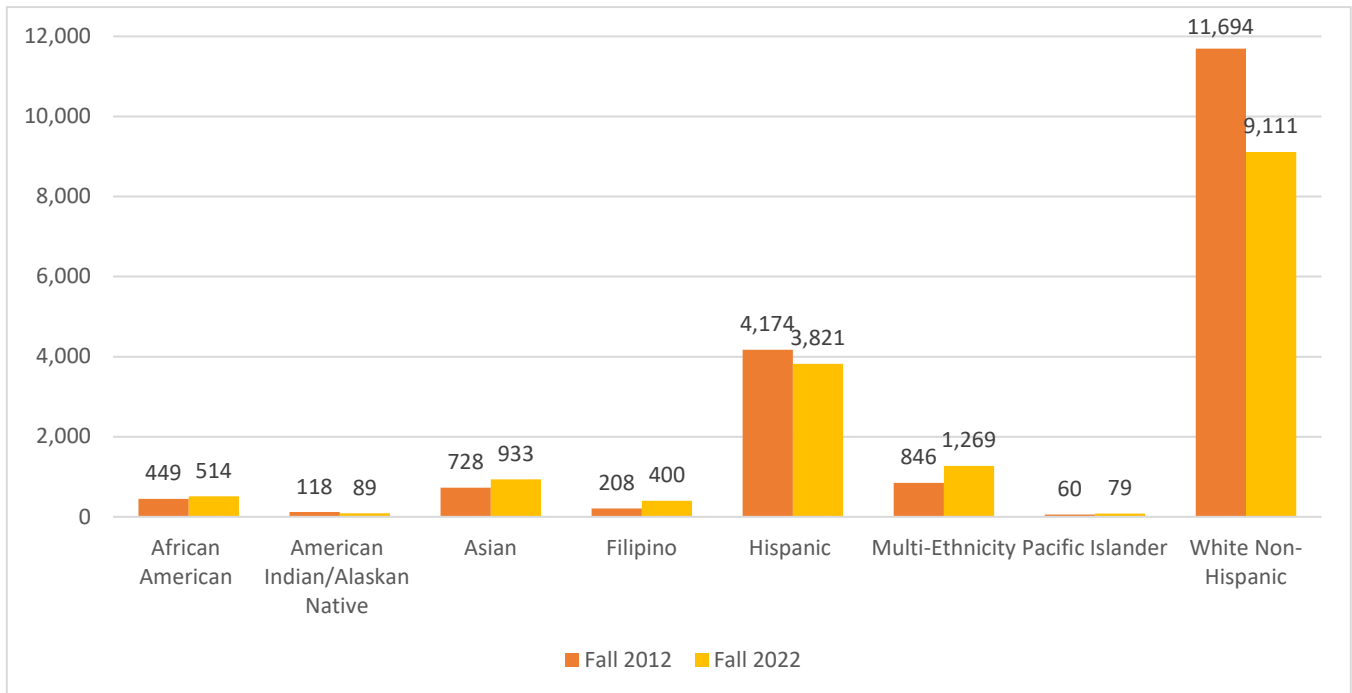
Source: <https://www.universityofcalifornia.edu/infocenter>

Chart 27: UC Davis Enrollment by Gender, 2012 & 2022



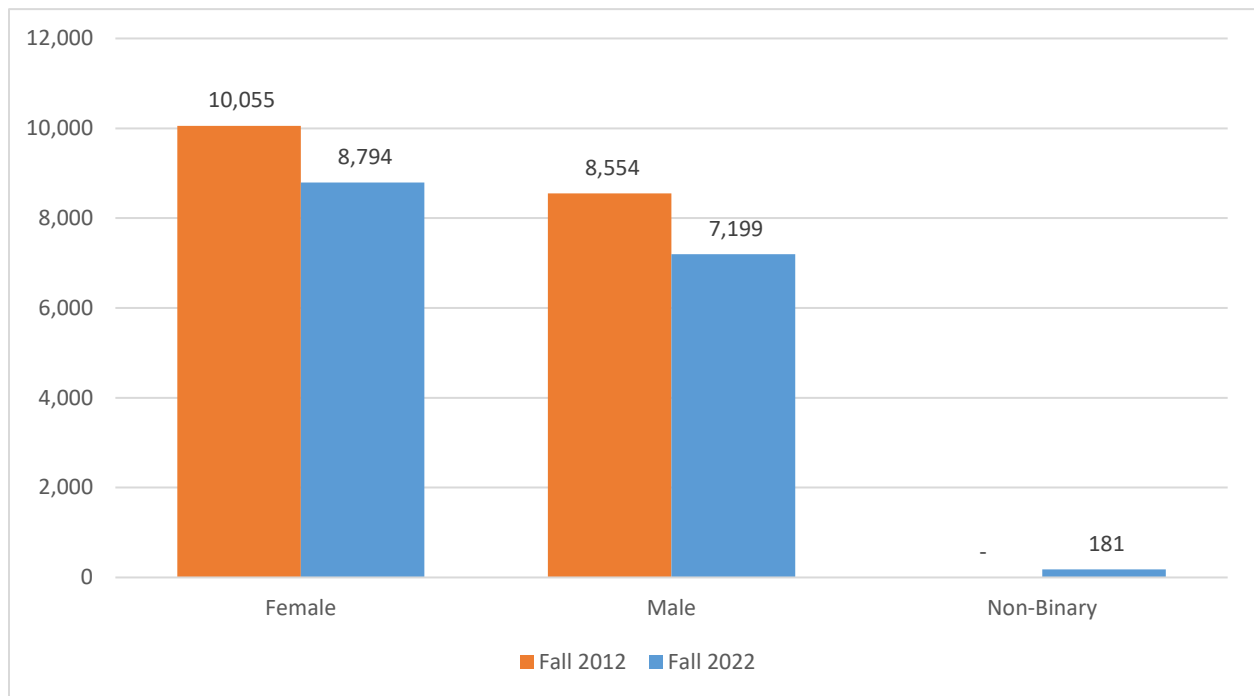
Source: <https://www.universityofcalifornia.edu>

Chart 28: Sierra College Enrollment by Ethnicity, 2012 & 2022



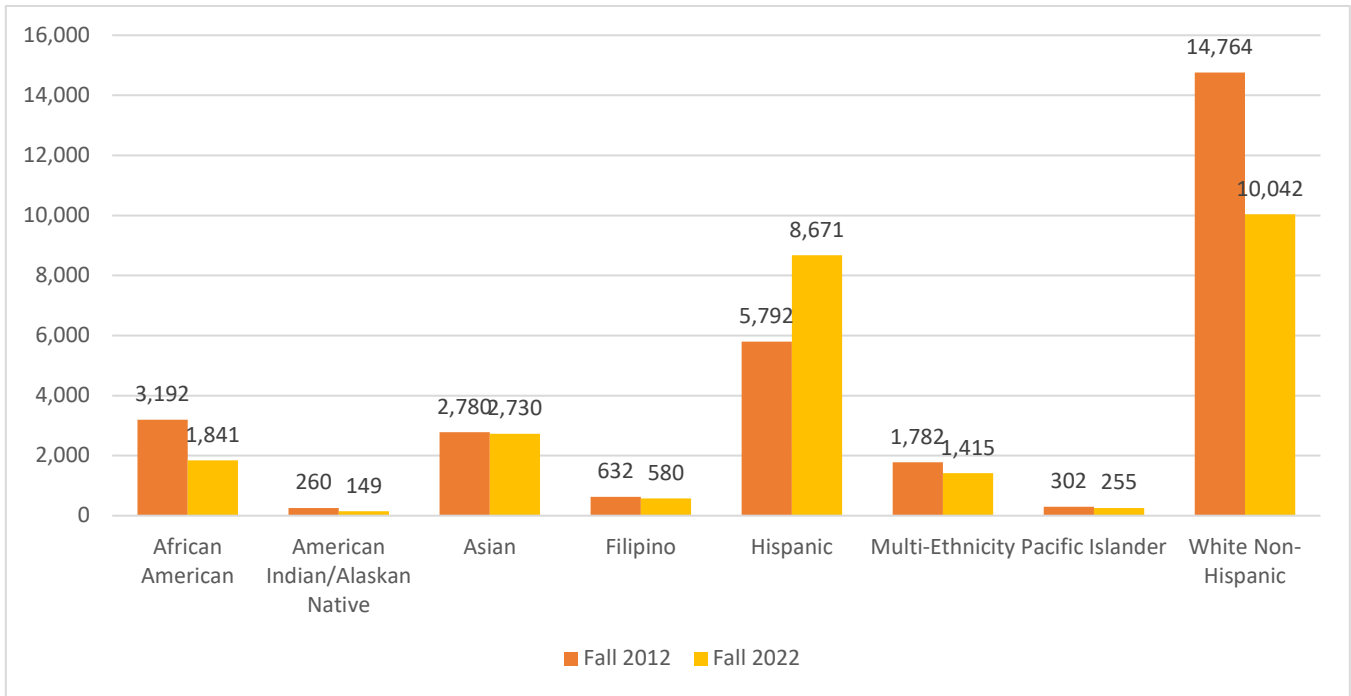
Source: <https://datamart.cccco.edu/Students>

Chart 29: Sierra College Enrollment by Gender, 2012 & 2022



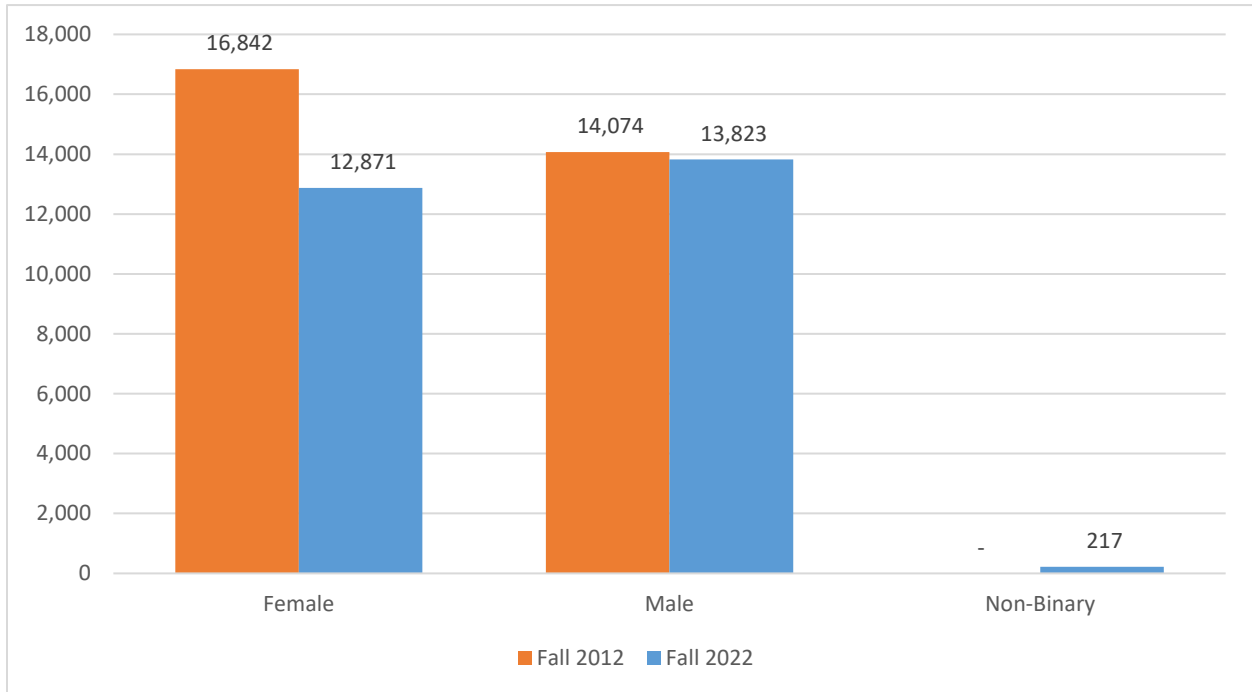
Source: <https://datamart.cccco.edu/Students>

Chart 30: American River College Enrollment by Ethnicity, 2012 & 2022



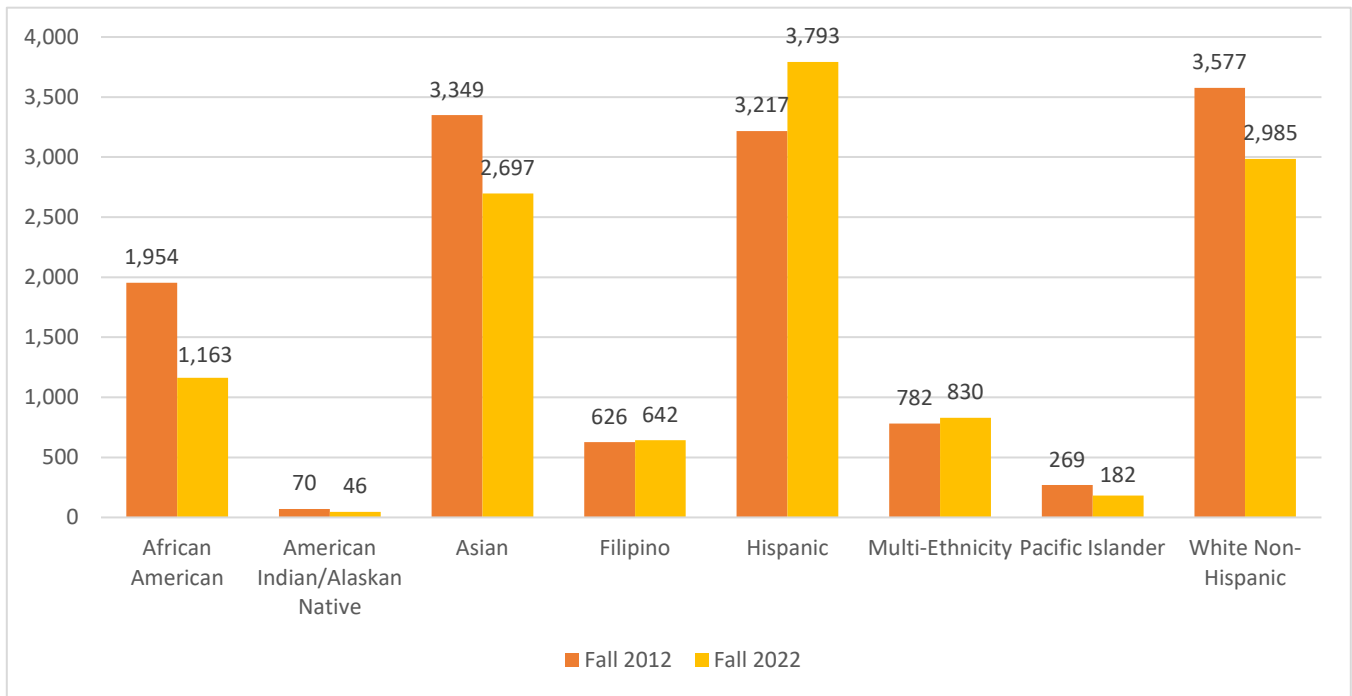
Source: <https://datamart.cccco.edu/Students>

Chart 31: American River College Enrollment by Gender, 2012 & 2022



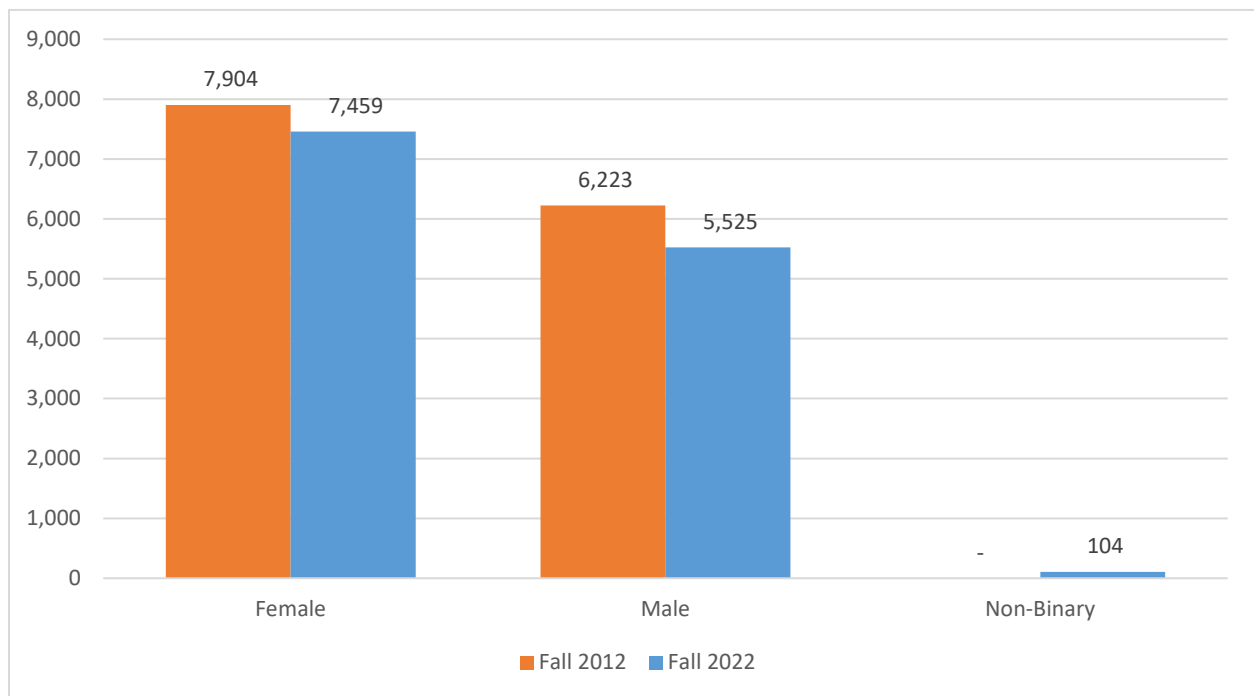
Source: <https://datamart.cccco.edu/Students>

Chart 32: Cosumnes River College Enrollment by Ethnicity, 2012 & 2022



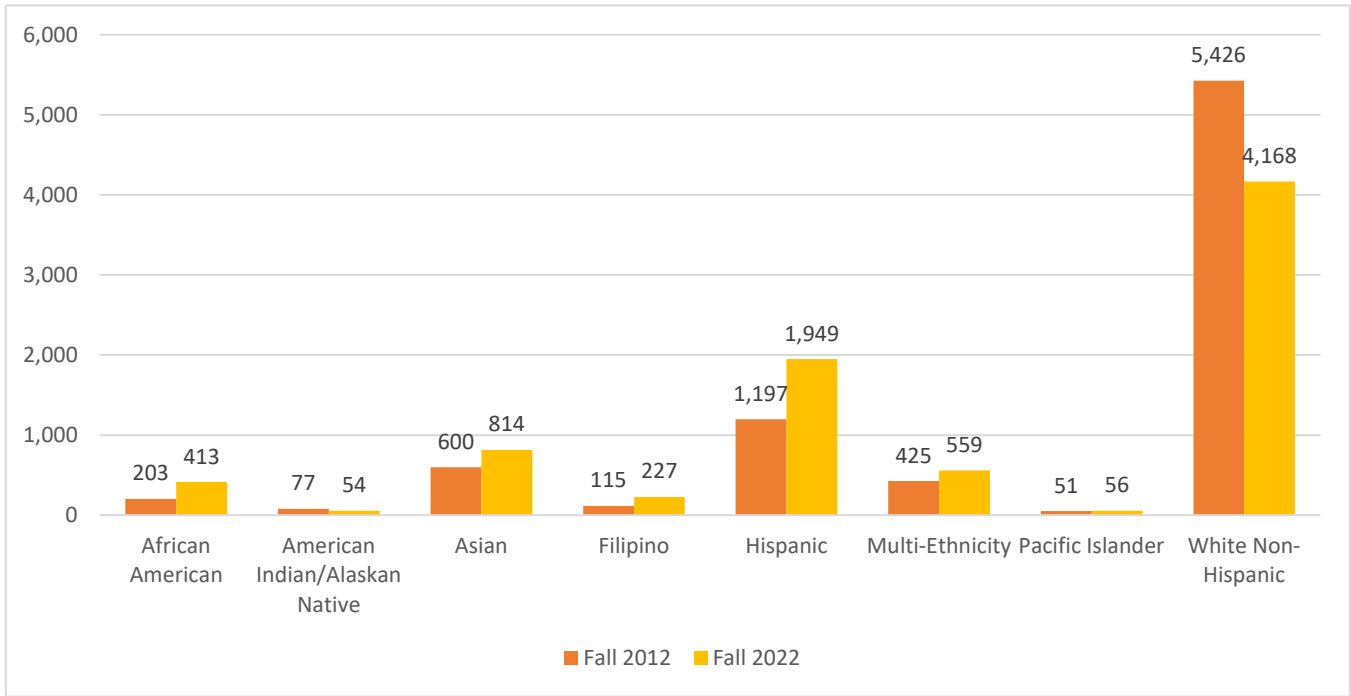
Source: <https://datamart.cccco.edu/Students>

Chart 33: Cosumnes River College Enrollment by Gender, 2012 & 2022



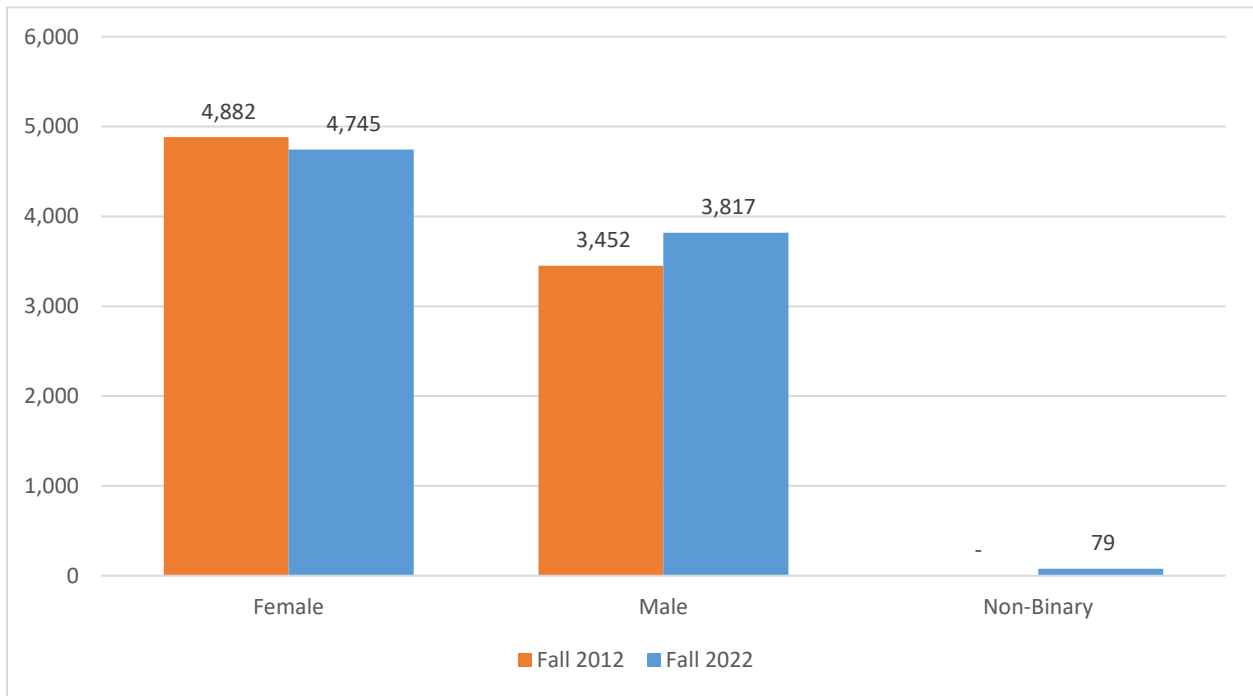
Source: <https://datamart.cccco.edu/Students>

Chart 34: Folsom Lake College Enrollment by Ethnicity, 2012 & 2022



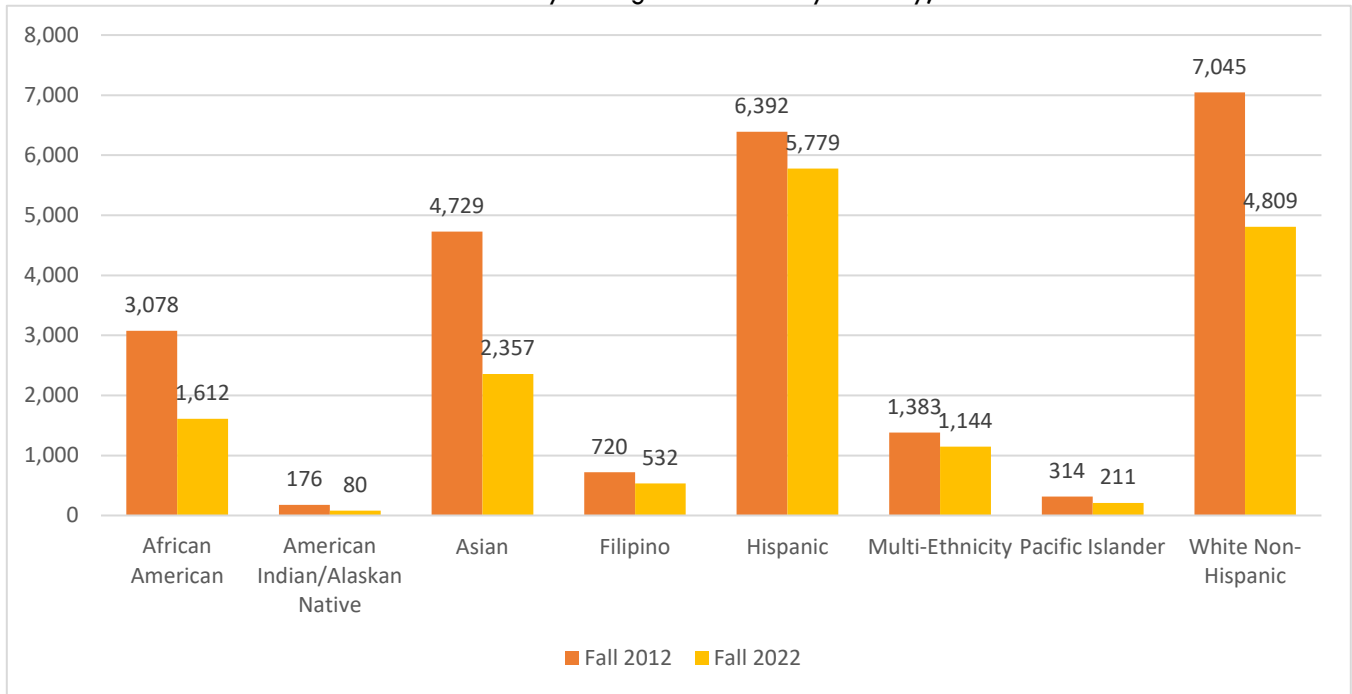
Source: <https://datamart.cccco.edu/Students>

Chart 35: Folsom Lake College Enrollment by Gender, 2012 & 2022



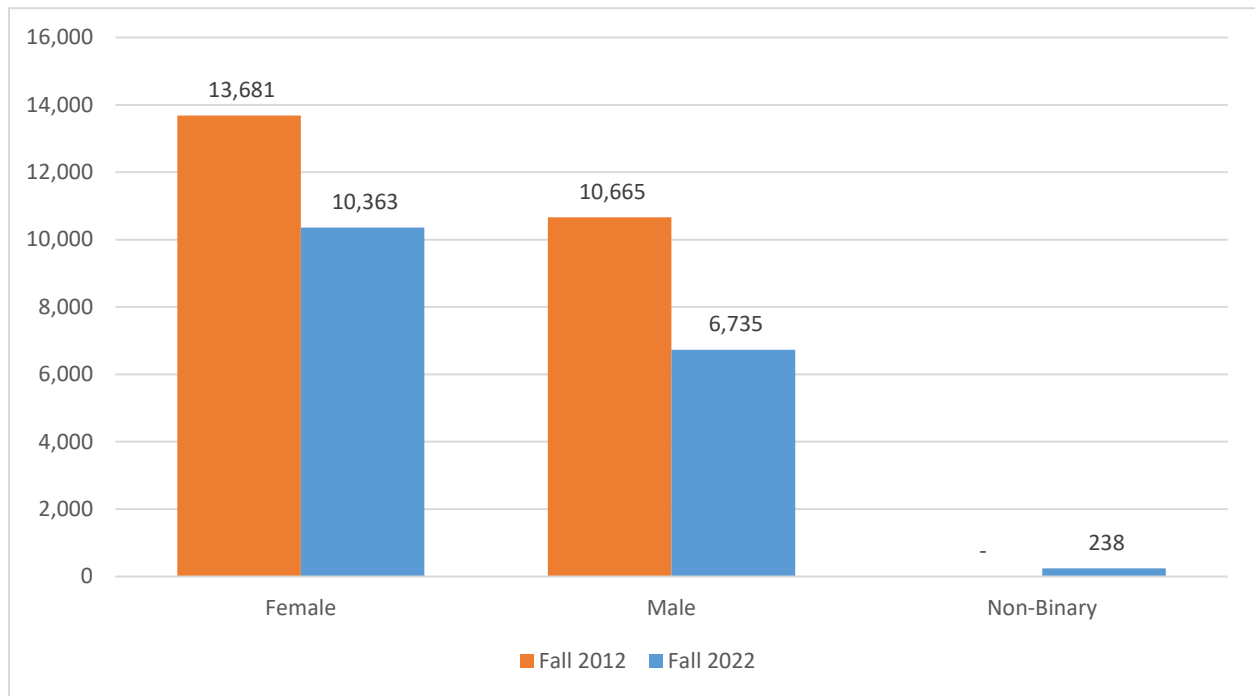
Source: <https://datamart.cccco.edu/Students>

Chart 36: Sacramento City College Enrollment by Ethnicity, 2012 & 2022



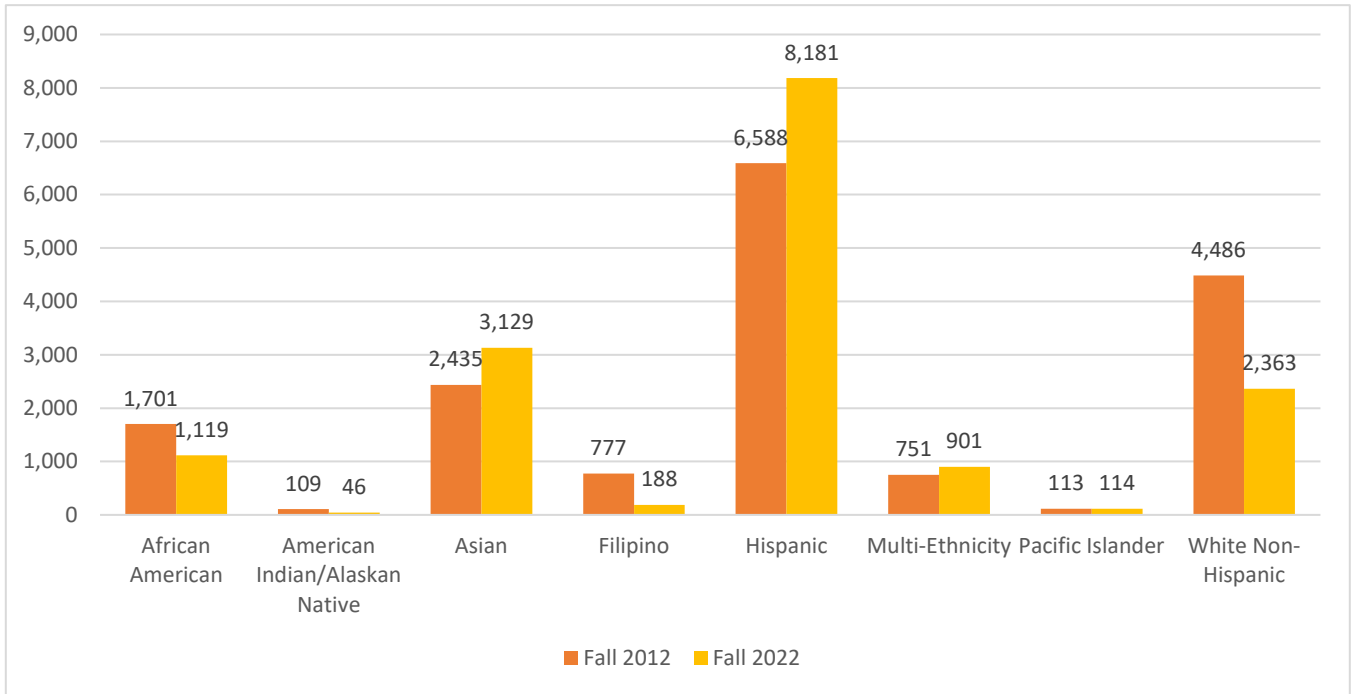
Source: <https://datamart.cccco.edu/Students>

Chart 37: Sacramento City College Enrollment by Gender, 2012 & 2022



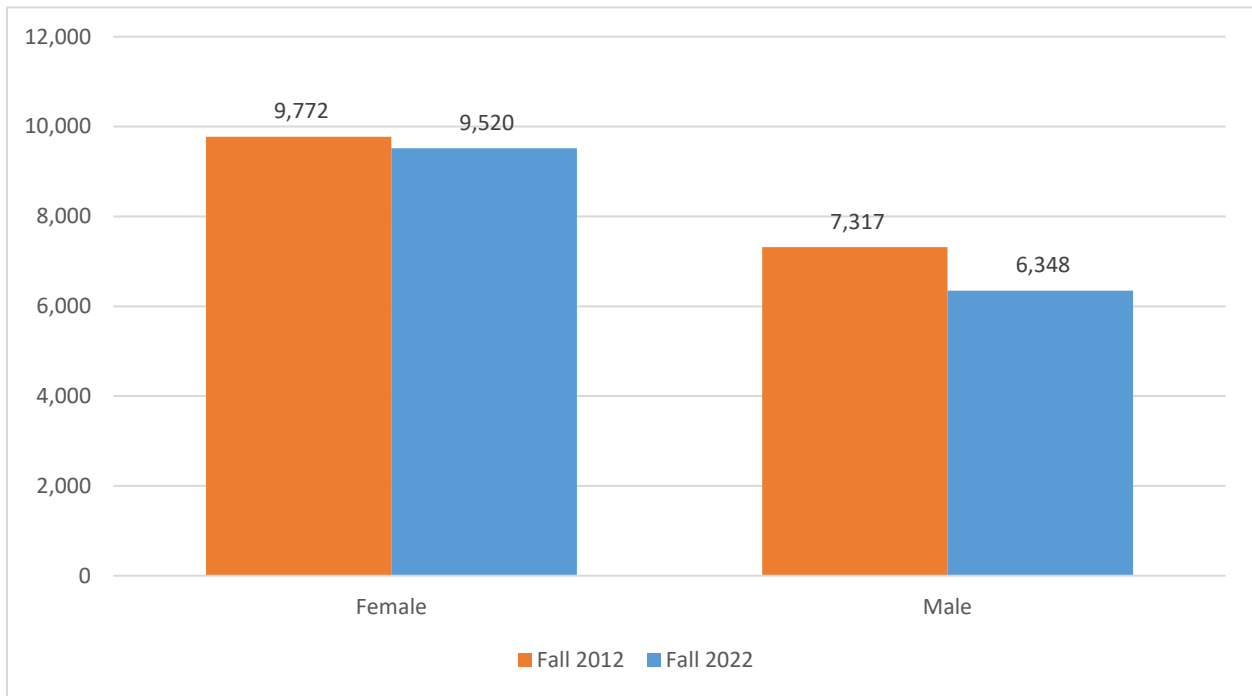
Source: <https://datamart.cccco.edu/Students>

Chart 38: San Joaquin Delta College Enrollment by Ethnicity, 2012 & 2022



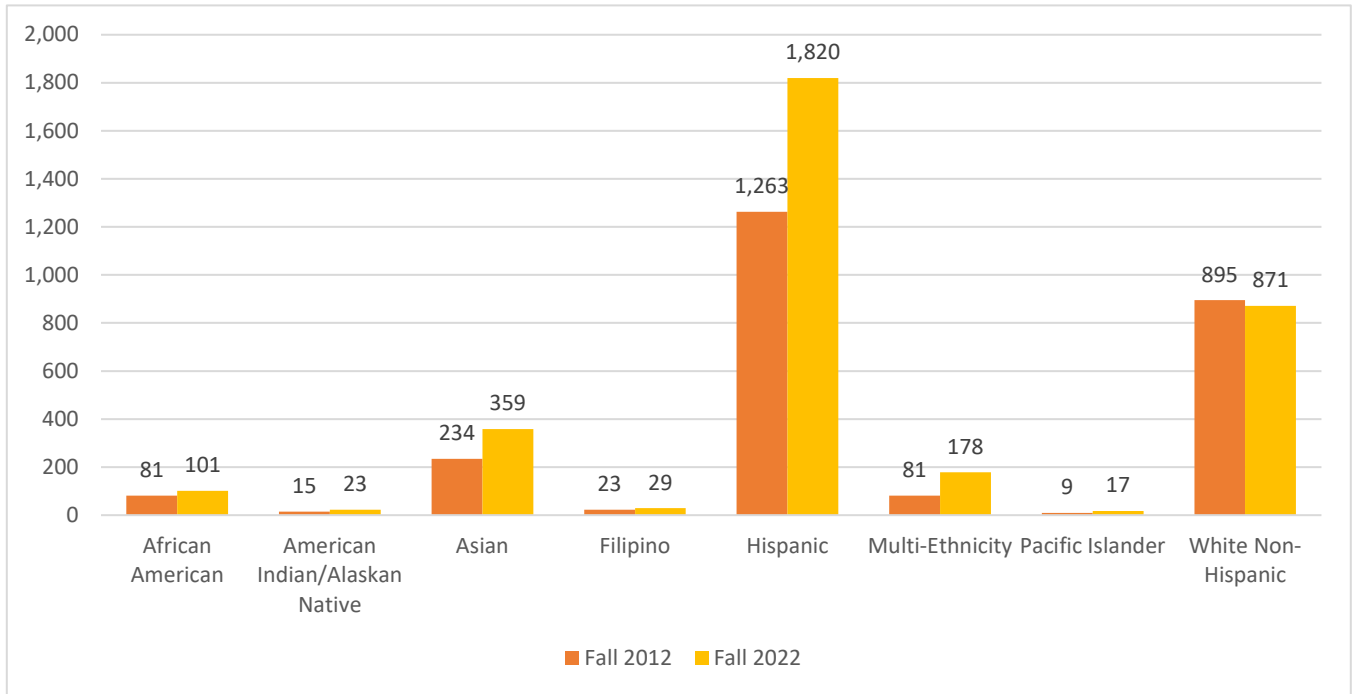
Source: <https://datamart.cccco.edu/Students>

Chart 39: San Joaquin Delta College Enrollment by Gender, 2012 & 2022



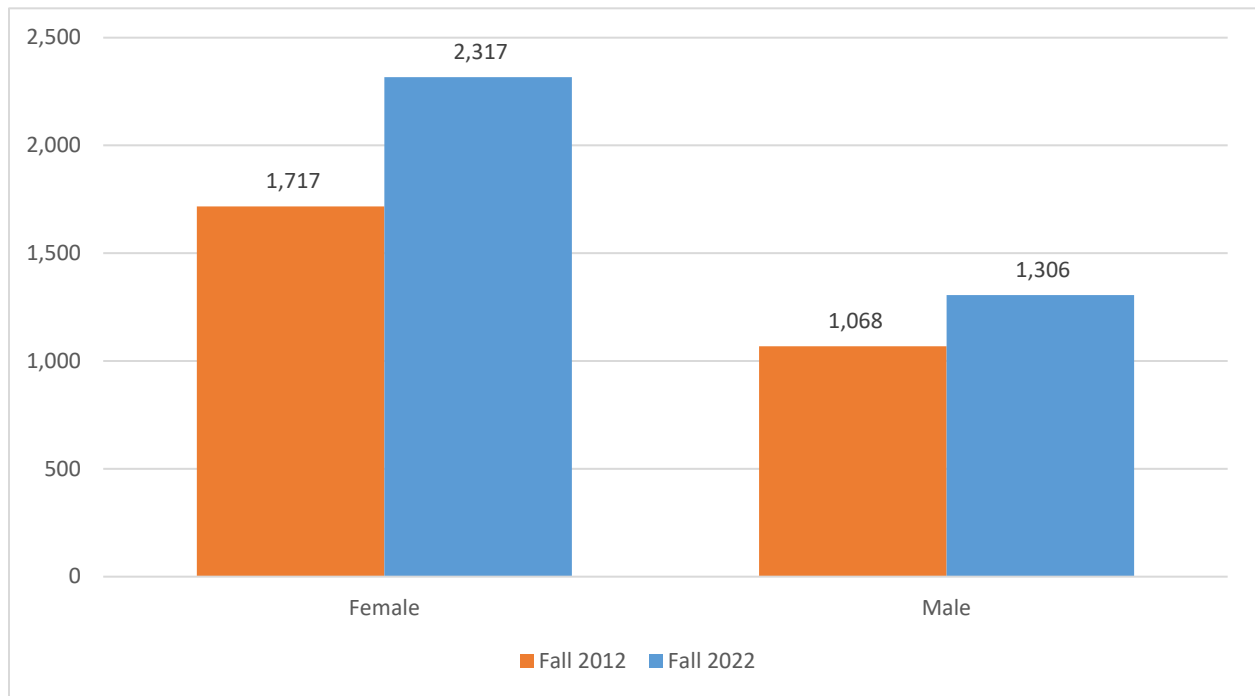
Source: <https://datamart.cccco.edu/Students>

Chart 40: Woodland Community College Enrollment by Ethnicity, 2012 & 2022



Source: <https://datamart.cccco.edu/Students>

Chart 41: Woodland Community College Enrollment by Gender, 2012 & 2022



Source: <https://datamart.cccco.edu/Students>

D. Degrees Awarded by Local Education Providers

This section focuses on the degrees/certificates awarded by the nine major local postsecondary education providers. This data will show the number of graduates being produced each year and from which fields. It will help identify gaps in the demand for jobs in the GSA not being met by the graduates from local postsecondary institutions. It will also help identify programs that should be enhanced or developed to meet the needs of the area.

Just over 40,000 degrees and certificates were awarded by the nine major local postsecondary education providers for 2022-2023 academic year. Table 8 shows a breakdown of level of degree by education provider.

Table 8: Breakdown of Awards by Level for Education Providers in the Sacramento Area Fall 2022-Spring 2023

Degree Level	Sac State	UCD	Sierra	ARC	CRC	FLC	SCC	WCC	SJD	Grand Total	%
Certificate	--	--	791	1,388	476	696	396	1,124	598	5,469	13.6%
Associate's	--	--	3,433	2,428	1,486	1,285	1,589	1,163	3,198	14,582	36.3%
Bachelor's	7,566	9,011	--	--	--	--	--	--	--	16,577	41.3%
Master's	934	1,134	--	--	--	--	--	--	--	2,068	5.1%
Doctoral	51	624	--	--	--	--	--	--	--	675	1.7%
Professional	--	813	--	--	--	--	--	--	--	813	2.0%
Total	8,551	11,582	4,224	3,816	1,962	1,981	1,985	2,287	3,796	40,184	100%

Sources: <http://datamart.ccco.edu>, <http://www.csus.edu/oir>, <https://aggiedata.ucdavis.edu/>

- The largest number of degrees/certificates were awarded at the Bachelor’s level (41%), followed by Associate’s (36%), Certificates (14%), Master’s (5%), Professional (2%), and Doctoral (2%).
- UC Davis awarded the most degrees followed by Sacramento State, Sierra College, American River College, San Joaquin Delta, Woodland Community College, Sacramento City College, Folsom Lake College, and Cosumnes River College respectively.

Sacramento State

Sacramento State awarded 8,551 degrees in AY 2022-23. These included 7,566 Bachelor’s degrees in 124 programs, 934 Master’s degrees in 88 programs, and 51 Doctoral degrees in 5 programs.

Table 9: Summary of Programs/Concentrations and Degrees by Level
California State University, Sacramento: Fall 2022-Spring 2023

Degree Level	Programs	Degrees	% of Total
Bachelor's	124	7,566	88%
Master's	88	934	10.9%
Doctoral	5	51	1%
Total	217	8,551	100%

Source: <https://catalog.csus.edu/>, <http://www.csus.edu/oir>

Tables 10-12 present the number of degrees awarded by level and by college. The tables are sorted to show the colleges with the highest to lowest number of degrees for AY 2022-23.

- The area of study with the largest number of bachelor’s degrees awarded was Health and Human Services with 1,978 degrees.
- Social Sciences & Interdisciplinary Studies followed Health and Human Services with 1,735 degrees awarded. Followed by Arts & Letters (1,122), Business Administration (955), Engineering & Computer Science (850), Education (476), Natural Sciences & Mathematics (444), and Special Programs (6).
- The area of study with the largest number of Master’s degrees awarded was Education with 288 degrees. Other areas with over 100 Master’s Degrees awarded were Business Administration Health & Human Services.

- Sacramento State awarded 51 Doctorate degrees. 29 in Health & Human Services and 22 in Education.

Table 10: Bachelor's Degrees Awarded
California State University, Sacramento: Fall 2022-Spring 2023

College	Degrees	% of Total
Health and Human Services	1,978	26.1%
Social Sciences and Interdisciplinary Studies	1,735	22.9%
Arts and Letters	1,122	14.8%
Business Administration	955	12.6%
Engineering and Computer Science	850	11.2%
Education	476	6.3%
Natural Sciences and Mathematics	444	5.9%
Special Programs	6	0.1%
Total	7,566	100%

Source: <http://www.csus.edu/oir>

Table 11: Master's Degrees Awarded
California State University, Sacramento: Fall 2022-Spring 2023

College	Degrees	% of Total
Education	288	30.8%
Business Administration	213	22.8%
Health and Human Services	201	21.5%
Arts and Letters	81	8.7%
Engineering and Computer Science	79	8.5%
Social Sciences and Interdisciplinary Studies	53	5.7%
Natural Sciences and Mathematics	19	2.0%
Special Programs	0	0.0%
Total	934	100%

Source: <http://www.csus.edu/oir>

Table 12: Doctorate's Degrees Awarded
California State University, Sacramento: Fall 2022-Spring 2023

College	Degrees	% of Total
Health and Human Services	29	56.9%
Education	22	43.1%
Arts and Letters	-	0.0%
Business Administration	-	0.0%
Engineering and Computer Science	-	0.0%
Natural Sciences and Mathematics	-	0.0%
Social Sciences and Interdisciplinary Studies	-	0.0%
Special Programs	-	0.0%
Total	51	100%

Source: <http://www.csus.edu/oir>

UC Davis

UC Davis awarded 11,582 degrees in AY 2022-23. These included 9,011 Bachelor’s degrees in 109 programs, 1,134 Master’s degrees in 99 programs, 624 Doctoral degrees in 48 programs, and 813 Professional degrees in 7 programs.

Table 13: Summary of Programs and Degrees by Level
UC Davis: Fall 2022-Spring 2023

Degree Level	Programs	Degrees	% of Total
Bachelor's	109	9,011	78%
Master's	99	1,134	9.8%
Doctoral	48	624	5%
Professional	7	813	7.0%
Total	263	11,582	100%

Source: <https://www.ucdavis.edu/majors>

Tables 14-17 present the number of degrees awarded by level and by college. The tables are sorted to show the colleges with the highest to lowest number of degrees for AY 2022-23.

- The area of study with the largest number of Bachelor’s degrees awarded was the College of Letters & Sciences with 4,464 degrees.
- The College of Agriculture & Environmental Sciences followed with 2,062 degrees awarded. Third was the College of Biological Sciences (1,257) and last was the College of Engineering (1,228).
- The area of study with the largest number of Master’s degrees awarded was the College of Engineering with 276 degrees. Other areas to award Master’s Degrees were Letters and Sciences (204), Agricultural & Environmental Sciences (184), Nursing (123), Management (101), Education (99), Medicine (43), Law (43), Veterinary Medicine (25), Biological Sciences (20), and Graduate Studies (16).
- UC Davis awarded 624 Doctorate degrees. 215 in the College of Letters and Sciences, followed by Agricultural & Environmental Sciences (138), Engineering (127), Biological Sciences (77), Veterinary Medicine (27), Education (22), Medicine (12), and Nursing (5), and Graduate Studies (1).
- There were also 813 Professional Degrees awarded. The highest number awarded was 389 in the Graduate School of Management. Other areas where degrees were awarded were Law (178), Veterinary Medicine (138), and Medicine (108).

Table 14: Bachelor's Degrees Awarded
UC Davis: Fall 2022-Spring 2023

College	Degrees	% of Total
College of Letters and Sciences	4,464	49.5%
College of Agricultural & Environmental Sciences	2,062	22.9%
College of Biological Sciences	1,257	13.9%
College of Engineering	1,228	13.6%
Total	9,011	100%

Source: <https://aggiedata.ucdavis.edu/>

Table 15: Master's Degrees Awarded
UC Davis: Fall 2022-Spring 2023

College	Degrees	% of Total
College of Engineering	276	24.3%
College of Letters and Sciences	204	18.0%
College of Agricultural & Environmental Sciences	184	16.2%
School of Nursing	123	10.8%
School of Management	101	8.9%
School of Education	99	8.7%
School of Medicine	43	3.8%
School of Law	43	3.8%
School of Veterinary Medicine	25	2.2%
College of Biological Sciences	20	1.8%
Graduate Studies	16	1.4%
Total	1,134	100%

Source: <https://aggiedata.ucdavis.edu/>

Table 16: Doctorate's Degrees Awarded
UC Davis: Fall 2022-Spring 2023

College	Degrees	% of Total
College of Letters and Sciences	215	34.5%
College of Agricultural & Environmental Sciences	138	22.1%
College of Engineering	127	20.4%
College of Biological Sciences	77	12.3%
School of Veterinary Medicine	27	4.3%
School of Education	22	3.5%
School of Medicine	12	1.9%
School of Nursing	5	0.8%
Graduate Studies	1	0.2%
Total	624	100%

Source: <https://aggiedata.ucdavis.edu/>

Table 17: Professional Degrees Awarded
UC Davis: Fall 2022-Spring 2023

College	Degrees	% of Total
Graduate School of Management	389	47.8%
School of Law	178	21.9%
School of Veterinary Medicine	138	17.0%
School of Medicine	108	13.3%
Total	813	100%

Source: <https://aggiedata.ucdavis.edu/>

Sierra College

Sierra College awarded 4,224 degrees in AY 2022-23. These included 3,433 Associate’s degrees in 72 programs, and 791 Certificates in 46 programs.

Table 18: Summary of Programs and Degrees by Level
Sierra College: Fall 2022-Spring 2023

Degree Level	Programs	Degrees	% of Total
Associate's	72	3,433	81.3%
Certificates	46	791	18.7%
Total	118	4,224	100%

Source: <http://datamart.cccco.edu>

Tables 19 and 20 present the number of degrees and certificates awarded by level and by program. The tables are sorted to show the programs with the highest to lowest number of degrees for AY 2022-23.

- The area of study with the largest number of certificates awarded was Health with 304 certificates.
- Other areas with more than 100 certificates awarded was Business and Management (134).
- The area of study with the largest number of Associate’s degrees awarded was Social Sciences with 736 degrees awarded.
- Other areas with more than 100 Associate’s degrees awarded were Interdisciplinary Studies (621), Health (592), Business and Management (395), Psychology (330), Public and Protective Services (154), and Fine and Applied Arts (112).

Table 19: Certificates Awarded
Sierra College: Fall 2022-Spring 2023

Program	Certificates	% of Total
Health	304	38.4%
Business and Management	134	16.9%
Public and Protective Services	93	11.8%
Engineering and Industrial Technologies	72	9.1%
Fine and Applied Arts	59	7.5%
Family and Consumer Sciences	47	5.9%
Information Technology	33	4.2%
Media and Communications	15	1.9%
Agriculture and Natural Resources	13	1.6%
Interdisciplinary Studies	10	1.3%
Education	8	1.0%
Social Sciences	3	0.4%
Environmental Sciences and Technologies	0	0.0%
Total	791	100%

Source: <http://datamart.cccco.edu>

Table 20: Associate's Degrees Awarded
Sierra College: Fall 2022-Spring 2023

Program	Degrees	% of Total
Social Sciences	736	21.4%
Interdisciplinary Studies	621	18.1%
Health	592	17.2%
Business and Management	395	11.5%
Psychology	330	9.6%
Public and Protective Services	154	4.5%
Fine and Applied Arts	112	3.3%
Information Technology	78	2.3%
Humanities	76	2.2%
Biological Sciences	76	2.2%
Mathematics	50	1.5%
Engineering and Industrial Technologies	50	1.5%
Family and Consumer Sciences	47	1.4%
Media and Communications	42	1.2%
Physical Sciences	29	0.8%
Education	18	0.5%
Agriculture and Natural Resources	10	0.3%
Foreign Language	9	0.3%
Environmental Sciences and Technologies	8	0.2%
Total	3,433	100%

Source: <http://datamart.cccco.edu>

American River College

American River College awarded 3,816 degrees in AY 2022-23. These included 2,428 Associate’s degrees in 85 programs, and 1,388 Certificates in 62 programs.

Table 21: Summary of Programs and Degrees by Level
American River College: Fall 2022-Spring 2023

Degree Level	Programs	Degrees	% of Total
Associate's	85	2,428	63.6%
Certificates	62	1,388	36.4%
Total	147	3,816	100%

Source: <http://datamart.cccco.edu>

Tables 22 and 23 present the number of degrees and certificates awarded by level and by program. The tables are sorted to show the programs with the highest to lowest number of degrees for AY 2022-23.

- The area of study with the largest number of certificates awarded was Interdisciplinary Studies with 802 certificates.
- Other areas with more than 100 certificates awarded were Engineering and Industrial Technologies (239) and Family and Consumer Sciences (100).
- The area of study with the largest number of Associate’s degrees awarded was Social Sciences with 632 degrees awarded.
- Other areas with more than 100 Associate’s degrees awarded were Social Sciences (572), Business and Management (335), Interdisciplinary Studies (295), Psychology (177), Health (150), Public and Protective Services (131), Physical Sciences (125), and Information Technology (110).

Table 22: Certificates Awarded
American River College: Fall 2022-Spring 2023

Program	Certificates	% of Total
Interdisciplinary Studies	802	57.8%
Engineering and Industrial Technologies	239	17.2%
Family and Consumer Sciences	100	7.2%
Business and Management	60	4.3%
Information Technology	37	2.7%
Law	34	2.4%
Agriculture and Natural Resources	33	2.4%
Public and Protective Services	26	1.9%
Health	23	1.7%
Fine and Applied Arts	13	0.9%
Media and Communications	9	0.6%
Education	6	0.4%
Social Sciences	4	0.3%
Biological Sciences	2	0.1%
Total	1,388	100%

Source: <http://datamart.cccco.edu>

Table 23: Associate’s Degrees Awarded
American River College: Fall 2022-Spring 2023

Program	Degrees	% of Total
Social Sciences	572	23.6%
Business and Management	335	13.8%
Interdisciplinary Studies	295	12.1%
Psychology	177	7.3%
Health	150	6.2%
Public and Protective Services	131	5.4%
Physical Sciences	125	5.1%
Information Technology	110	4.5%
Family and Consumer Sciences	97	4.0%
Law	79	3.3%
Engineering and Industrial Technologies	74	3.0%
Humanities	58	2.4%
Fine and Applied Arts	54	2.2%
Foreign Language	48	2.0%
Mathematics	36	1.5%
Biological Sciences	24	1.0%
Media and Communications	24	1.0%
Education	22	0.9%
Agriculture and Natural Resources	17	0.7%
Total	2,428	100%

Source: <http://datamart.cccco.edu>

Cosumnes River College

Cosumnes River College awarded 1,962 degrees in AY 2022-23. These included 1,486 Associate’s degrees in 73 programs, and 476 Certificates in 40 programs.

Table 24: Summary of Programs and Degrees by Level
Cosumnes River College: Fall 2022-Spring 2023

Degree Level	Programs	Degrees	% of Total
Associate's	73	1,486	75.7%
Certificates	40	476	24.3%
Total	113	1,962	100%

Source: <http://datamart.cccco.edu>

Tables 25 and 26 present the number of degrees and certificates awarded by level and by program. The tables are sorted to show the programs with the highest to lowest number of degrees for AY 2022-23.

- The area of study with the largest number of certificates awarded was Engineering and Industrial Technologies with 196 certificates.
- Other areas with more than 25 certificates awarded were Business and Management (81), Information Technology (63), Family and Consumer Sciences (47), and Health (33).
- The area of study with the largest number of Associate’s degrees awarded was Interdisciplinary Studies with 376 degrees awarded.
- Other areas with more than 50 Associate’s degrees awarded were Business and Management (326), Social Sciences (129), Biological Sciences (121), Psychology (90), Health (86), and Information Technology (81).

Table 25: Certificates Awarded
Cosumnes River College: Fall 2022-Spring 2023

Program	Certificates	% of Total
Engineering and Industrial Technologies	196	41.2%
Business and Management	81	17.0%
Information Technology	63	13.2%
Family and Consumer Sciences	47	9.9%
Health	33	6.9%
Interdisciplinary Studies	17	3.6%
Agriculture and Natural Resources	16	3.4%
Media and Communications	9	1.9%
Architecture and Related Technologies	5	1.1%
Public and Protective Services	3	0.6%
Fine and Applied Arts	3	0.6%
Humanities	2	0.4%
Social Sciences	1	0.2%
Total	476	100%

Source: <http://datamart.cccco.edu>

Table 26: Associate’s Degrees Awarded
Cosumnes River College: Fall 2022-Spring 2023

Program	Degrees	% of Total
Interdisciplinary Studies	376	25.3%
Business and Management	326	21.9%
Social Sciences	129	8.7%
Biological Sciences	121	8.1%
Psychology	90	6.1%
Health	86	5.8%
Information Technology	81	5.5%
Humanities	46	3.1%
Media and Communications	43	2.9%
Engineering and Industrial Technologies	43	2.9%
Family and Consumer Sciences	40	2.7%
Fine and Applied Arts	26	1.7%
Mathematics	25	1.7%
Agriculture and Natural Resources	13	0.9%
Architecture and Related Technologies	12	0.8%
Education	10	0.7%
Public and Protective Services	7	0.5%
Physical Sciences	7	0.5%
Foreign Language	4	0.3%
Environmental Sciences and Technologies	1	0.1%
Total	1,486	100%

Source: <http://datamart.cccco.edu>

Folsom Lake College

Folsom Lake College awarded 1,981 degrees in AY 2022-23. These included 1,285 Associate’s degrees in 41 programs, and 696 Certificates in 23 programs.

Table 27: Summary of Programs and Degrees by Level
Folsom Lake College: Fall 2022-Spring 2023

Degree Level	Programs	Degrees	% of Total
Associate's	41	1,285	64.9%
Certificates	23	696	35.1%
Total	64	1,981	100%

Source: <http://datamart.cccco.edu>

Tables 28 and 29 present the number of degrees and certificates awarded by level and by program. The tables are sorted to show the programs with the highest to lowest number of degrees for AY 2022-23.

- The area of study with the largest number of certificates awarded was Interdisciplinary Studies (540).
- The area of study with the largest number of Associate’s degrees awarded was Social Sciences with 365 degrees awarded.
- Other areas with more than 50 Associate’s degrees awarded were Interdisciplinary Studies (253), Business and Management (165), Health (130), Psychology (103), Humanities (53), and Public and Protective Services (51).

Table 28: Certificates Awarded
Folsom Lake College: Fall 2022-Spring 2023

Program	Certificates	% of Total
Interdisciplinary Studies	540	77.6%
Business and Management	45	6.5%
Family and Consumer Sciences	43	6.2%
Mathematics	16	2.3%
Humanities	15	2.2%
Public and Protective Services	13	1.9%
Information Technology	12	1.7%
Fine and Applied Arts	4	0.6%
Health	3	0.4%
Engineering and Industrial Technologies	3	0.4%
Environmental Sciences and Technologies	1	0.1%
Biological Sciences	1	0.1%
Total	696	100%

Source: <http://datamart.cccco.edu>

Table 29: Associate's Degrees Awarded
Folsom Lake College: Fall 2022-Spring 2023

Program	Degrees	% of Total
Social Sciences	365	28.4%
Interdisciplinary Studies	253	19.7%
Business and Management	165	12.8%
Health	130	10.1%
Psychology	103	8.0%
Humanities	53	4.1%
Public and Protective Services	51	4.0%
Information Technology	44	3.4%
Mathematics	31	2.4%
Biological Sciences	25	1.9%
Fine and Applied Arts	18	1.4%
Physical Sciences	17	1.3%
Family and Consumer Sciences	16	1.2%
Law	5	0.4%
Engineering and Industrial Technologies	4	0.3%
Agriculture and Natural Resources	3	0.2%
Environmental Sciences and Technologies	2	0.2%
Total	1,285	100%

Source: <http://datamart.cccco.edu>

Sacramento City College

Sacramento City College awarded 1,985 degrees in AY 2022-23. These included 1,589 Associate's degrees in 72 programs and 396 Certificates in 42 programs.

Table 30: Summary of Programs and Degrees by Level
Sacramento City College: Fall 2022-Spring 2023

Degree Level	Programs	Degrees	% of Total
Associate's	72	1,589	80.1%
Certificates	42	396	19.9%
Total	114	1,985	100%

Source: <https://datamart.cccco.edu/>

Tables 31 and 32 present the number of degrees and certificates awarded by level and by program. The tables are sorted to show the programs with the highest to lowest number of degrees for AY 2022-23.

- The area of study with the largest number of certificates awarded was Engineering and Industrial Technologies with 114 certificates.
- Other areas with more than 25 certificates awarded were Information Technology (60), Media and Communications (57), Business and Management (35), Health (30), and Interdisciplinary Studies (30).
- The area of study with the largest number of Associate's degrees awarded was Interdisciplinary Studies with 363 degrees awarded.
- Other areas with more than 100 Associate's degrees awarded were Business and Management (251), Social Sciences (186), Psychology (143), Health (130), and Public and Protective Services (130).

Table 31: Certificates Awarded
Sacramento City College: Fall 2022-Spring 2023

Program	Certificates	% of Total
Engineering and Industrial Technologies	114	28.8%
Information Technology	60	15.2%
Media and Communications	57	14.4%
Business and Management	35	8.8%
Health	30	7.6%
Interdisciplinary Studies	30	7.6%
Law	23	5.8%
Commercial Services	18	4.5%
Library Science	10	2.5%
Fine and Applied Arts	8	2.0%
Environmental Sciences and Technologies	8	2.0%
Family and Consumer Sciences	2	0.5%
Humanities	1	0.3%
Total	396	100%

Source: <http://datamart.cccco.edu>

Table 32: Associate's Degrees Awarded

Sacramento City College: Fall 2022-Spring 2023

Program	Degrees	% of Total
Interdisciplinary Studies	363	22.8%
Business and Management	251	15.8%
Social Sciences	186	11.7%
Psychology	143	9.0%
Health	130	8.2%
Public and Protective Services	130	8.2%
Information Technology	67	4.2%
Humanities	51	3.2%
Biological Sciences	49	3.1%
Family and Consumer Sciences	38	2.4%
Engineering and Industrial Technologies	35	2.2%
Fine and Applied Arts	34	2.1%
Mathematics	31	2.0%
Media and Communications	31	2.0%
Commercial Services	17	1.1%
Physical Sciences	12	0.8%
Law	9	0.6%
Foreign Language	6	0.4%
Library Science	5	0.3%
Environmental Sciences and Technologies	1	0.1%
Total	1,589	100%

Source: <http://datamart.cccco.edu>

San Joaquin Delta College

San Joaquin Delta College awarded 3,796 degrees in AY 2022-23. These included 3,198 Associate’s degrees in 64 programs, and 598 Certificates in 55 programs.

Table 36: Summary of Programs and Degrees by Level
San Joaquin Delta College: Fall 2022-Spring 2023

Degree Level	Programs	Degrees	% of Total
Associate's	64	3,198	84.2%
Certificates	55	598	15.8%
Total	119	3,796	100%

Source: <http://datamart.cccco.edu>

Tables 37 and 38 present the number of degrees and certificates awarded by level and by program. The tables are sorted to show the program with the highest to lowest number of degrees for AY 2022-23.

- The area of study with the largest number of certificates awarded was Engineering and Industrial Technologies with 209 degrees.
- Other areas with more than 50 certificates awarded were Business and Management (100), Public and Protective Services (68), Interdisciplinary Studies (59), Family and Consumer Studies (55), and Health (53).
- The area of study with the largest number of Associate’s degrees awarded was Interdisciplinary Studies with 1,671 degrees awarded.
- Other areas with more than 100 Associate’s degrees awarded were Business and Management (352), Health (306), Psychology (231), and Public and Protective Services (101).

Table 37: Certificates Awarded
San Joaquin Delta College: Fall 2022-Spring 2023

Program	Certificates	% of Total
Engineering and Industrial Technologies	209	34.9%
Business and Management	100	16.7%
Public and Protective Services	68	11.4%
Interdisciplinary Studies	59	9.9%
Family and Consumer Sciences	55	9.2%
Health	53	8.9%
Information Technology	21	3.5%
Law	13	2.2%
Media and Communications	6	1.0%
Education	5	0.8%
Agriculture and Natural Resources	5	0.8%
Fine and Applied Arts	3	0.5%
Architecture and Related Technologies	1	0.2%
Total	598	100%

Source: <http://datamart.cccco.edu>

Table 38: Associate’s Degrees Awarded
San Joaquin Delta College: Fall 2022-Spring 2023

Program	Degrees	% of Total
Interdisciplinary Studies	1,671	52.3%
Business and Management	352	11.0%
Health	306	9.6%
Psychology	231	7.2%
Public and Protective Services	101	3.2%
Family and Consumer Sciences	99	3.1%
Engineering and Industrial Technologies	94	2.9%
Foreign Language	75	2.3%
Humanities	68	2.1%
Fine and Applied Arts	51	1.6%
Social Sciences	48	1.5%
Information Technology	32	1.0%
Mathematics	23	0.7%
Physical Sciences	15	0.5%
Law	12	0.4%
Agriculture and Natural Resources	8	0.3%
Media and Communications	7	0.2%
Education	5	0.2%
Architecture and Related Technologies	0	0.0%
Total	3,198	100%

Source: <http://datamart.cccco.edu>

Woodland Community College

Woodland Community College awarded 2,287 degrees in AY 2022-23. These included 1,163 Associate’s degrees in 36 programs, and 1,124 Certificates in 15 programs.

Table 33: Summary of Programs and Degrees by Level
Woodland Community College: Fall 2022-Spring 2023

Degree Level	Programs	Degrees	% of Total
Associate's	36	1,163	50.9%
Certificates	15	1,124	49.1%
Total	51	2,287	100%

Source: <http://datamart.cccco.edu>

Tables 34 and 35 present the number of degrees and certificates awarded by level and by program. The tables are sorted to show the programs with the highest to lowest number of degrees for AY 2022-23.

- The area of study with the largest number of certificates awarded was Interdisciplinary Studies with 754 certificates.
- Other areas that certificates were awarded were Family and Consumer Sciences (321), Environmental Sciences and Technologies (19), Business and Management (16), Agriculture and Natural Resources (9), Public and Protective Services (3), and Education (2).
- The area of study with the largest number of Associate’s degrees awarded was Social Sciences with 473 degrees awarded.
- Other areas with more than 50 Associate’s degrees awarded were Interdisciplinary Studies (315), Family and Consumer Sciences (88), Business and Management (86), Public and Protective Services (84), and Psychology (58).

Table 34: Certificates Awarded
Woodland Community College: Fall 2022-Spring 2023

Program	Certificates	% of Total
Interdisciplinary Studies	754	67.1%
Family and Consumer Sciences	321	28.6%
Environmental Sciences and Technologies	19	1.7%
Business and Management	16	1.4%
Agriculture and Natural Resources	9	0.8%
Public and Protective Services	3	0.3%
Education	2	0.2%
Total	1,124	100%

Source: <http://datamart.cccco.edu>

Table 35: Associate’s Degrees Awarded
Woodland Community College: Fall 2022-Spring 2023

Program	Degrees	% of Total
Social Sciences	473	40.7%
Interdisciplinary Studies	315	27.1%
Family and Consumer Sciences	88	7.6%
Business and Management	86	7.4%
Public and Protective Services	84	7.2%
Psychology	58	5.0%
Mathematics	20	1.7%
Humanities	16	1.4%
Agriculture and Natural Resources	9	0.8%
Engineering and Industrial Technologies	5	0.4%
Biological Sciences	3	0.3%
Physical Sciences	3	0.3%
Law	2	0.2%
Foreign Language	1	0.1%
Total	1,163	100%

Source: <http://datamart.cccco.edu>

E. Programs Offered at Sacramento State

Sacramento State offers 124 programs at the Bachelor’s level, 88 at the Master’s level, and 5 at the Doctoral level. Table 39 shows the program listing by college.

Table 39: List of Programs offered at Sacramento State

Program	College	Bachelor's	Master's	Doctoral
Art	Arts and Letters		X	
Art History	Arts and Letters	X		
Art Subject Matter Program: Pre-Credential Preparation	Arts and Letters	X		
Arts and Letters	Arts and Letters	X		
Communication Studies	Arts and Letters	X	X	
Composition, Rhetoric, and Professional Writing	Arts and Letters		X	
Dance	Arts and Letters	X		
Design Studies	Arts and Letters	X		
English	Arts and Letters	X		
English (Creative Writing)	Arts and Letters		X	
English (Literature)	Arts and Letters		X	
Film (Digital Film/Video Production)	Arts and Letters	X		
Film (Film Studies)	Arts and Letters	X		
French	Arts and Letters	X		
Graphic Design	Arts and Letters	X		
History	Arts and Letters	X		
History Standard Program (Comprehensive Option)	Arts and Letters		X	
History Standard Program (Specialized Option)	Arts and Letters		X	
Humanities	Arts and Letters	X	X	
Humanities (Religious Studies)	Arts and Letters	X		
Interior Architecture	Arts and Letters	X		
Journalism	Arts and Letters	X		
Music	Arts and Letters	X		
Music (Composition)	Arts and Letters		X	
Music (Conducting)	Arts and Letters		X	
Music (Instrumental)	Arts and Letters	X		
Music (Jazz)	Arts and Letters	X		
Music (Keyboard)	Arts and Letters	X		
Music (Music Education)	Arts and Letters	X		
Music (Performance)	Arts and Letters		X	
Music (Theory/Composition)	Arts and Letters	X		
Music (Voice)	Arts and Letters	X		
Philosophy	Arts and Letters	X		
Philosophy (Ethics, Politics, and Law)	Arts and Letters	X		
Philosophy (Logic and Philosophy of Science)	Arts and Letters	X		
Philosophy with Honors	Arts and Letters	X		
Photography	Arts and Letters	X		
Public History	Arts and Letters		X	X
Public Relations	Arts and Letters	X		
Spanish	Arts and Letters	X	X	
Studio Art	Arts and Letters	X	X	
Teaching English to Speakers of Other Languages(TESOL)	Arts and Letters		X	
Theatre	Arts and Letters	X		
Accountancy	Business Administration	X	X	
Analytics in Healthcare	Business Administration		X	
Business Administration	Business Administration	X	X	
Business Analytics	Business Administration	X	X	
Concurrent Masters Program ₂	Business Administration		X	
Entrepreneurship	Business Administration	X		

Source: Sacramento State 2022-2023 Course Catalog (Continued on next page)

Table 39: List of Programs offered at Sacramento State

Program	College	Bachelor's	Master's	Doctoral
Entrepreneurship & Global Business	Business Administration		X	
Executive MBA	Business Administration		X	
Finance	Business Administration	X	X	
General Management	Business Administration	X		
International Business	Business Administration		X	
Management Information Systems	Business Administration	X		
Management of Human Resources and Organizational Behavior	Business Administration	X		
Marketing	Business Administration	X		
Masters and Juris Doctoral Program ₁	Business Administration		X	X
Supply Chain Management	Business Administration	X		
Behavioral Sciences Gender Equality	Education		X	
Career and Technical Studies	Education	X		
Child and Adolescent Development	Education		X	
Child and Adolescent Development (Educational Contexts)	Education	X		
Child and Adolescent Development (Social and Community Conte	Education	X		
Counseling - Career Counseling	Education		X	
Counseling - Concentration in School Counseling with Embedded	Education		X	
Counseling - Marriage in Family & Child Counseling	Education		X	
Curriculum and Instruction	Education		X	
Deaf Studies	Education	X		
Education (Language and Literacy)	Education		X	
Education Leadership	Education		X	X
Educational Leadership & Policy Studies (Higher Education Leader	Education		X	
Educational Leadership & Policy Studies (TK-12 Educational Leadership)	Education		X	
Educational Leadership & Policy Studies (Workforce Developmen	Education		X	
Educational Technology	Education		X	
Gender Equity Studies in Education	Education		X	
Higher Education Leadership	Education		X	
Rehabilitation Counseling	Education		X	
School Psychology	Education		X	
Special Education Teaching (Education Specialist Early Childhood)	Education		X	
Special Education Teaching (Extensive Support Needs)	Education		X	
Special Education Teaching (Extensive Support Needs) with Multi	Education		X	
Special Education Teaching (Mild to Moderate Support Needs)	Education		X	
Special Education Teaching (Mild to Moderate Support Needs) wit	Education		X	
Teaching (Multiple Subject)	Education		X	
Teaching (Single Subject)	Education		X	
Workforce Development Advocacy	Education		X	
Civil Engineering	Engineering and Computer Science	X		
Civil Engineering (Environmental/Water Quality Engineering)	Engineering and Computer Science		X	
Civil Engineering (Geotechnical Engineering)	Engineering and Computer Science		X	
Civil Engineering (Structutal Engineering)	Engineering and Computer Science		X	
Civil Engineering (Transportation Engineering)	Engineering and Computer Science		X	
Civil Engineering (Water Resources Engineering)	Engineering and Computer Science		X	
Computer Engineering	Engineering and Computer Science	X	X	
Computer Science	Engineering and Computer Science	X	X	
Construction Management	Engineering and Computer Science	X		
Electrical and Electric Engineering	Engineering and Computer Science	X	X	
Mechanical Engineering	Engineering and Computer Science	X	X	
Software Engineering	Engineering and Computer Science		X	
Audiology	Health & Human Services			X
Communication Sciences and Disorders	Health & Human Services	X	X	
Criminal Justice	Health & Human Services	X	X	

Source: Sacramento State 2022-2023 Course Catalog

(Continued on next page)

Table 39: List of Programs offered at Sacramento State

Program	College	Bachelor's	Master's	Doctoral
Exercise Science (Clinical Exercise & Rehabilitation Specialist)	Health & Human Services	X		
Exercise Science (Health Fitness/Strength Conditioning)	Health & Human Services	X		
Health Science	Health & Human Services	X		
Hospitality and Tourism Management	Health & Human Services	X		
Kinesiology (Athletic Administration)	Health & Human Services	X		
Kinesiology (Athletic Care)	Health & Human Services	X		
Kinesiology (Athletic Coaching Education)	Health & Human Services	X		
Kinesiology (Exercise Science)	Health & Human Services		X	
Kinesiology (Movement Studies)	Health & Human Services		X	
Kinesiology (Physical Activity & Wellness)	Health & Human Services	X		
Kinesiology (Physical Education)	Health & Human Services	X		
Nursing	Health & Human Services	X	X	
Physical Therapy	Health & Human Services			X
Public Health	Health & Human Services		X	
Public Health (Community Health Education)	Health & Human Services	X		
Public Health (Healthcare Administration)	Health & Human Services	X		
Public Health (Occupational Health & Safety)	Health & Human Services	X		
Recreation Administration	Health & Human Services	X	X	
Recreation Therapy	Health & Human Services	X		
RN to BSN and AND-BSN Collaborative Track (Nursing)	Health & Human Services	X		
Social Work	Health & Human Services	X	X	
Biochemistry	Natural Science and Mathematics	X	X	
Biological Sciences	Natural Science and Mathematics	X	X	
Biological Sciences (Biomedical Sciences)	Natural Science and Mathematics	X		
Biological Sciences (Cell & Molecular Biology)	Natural Science and Mathematics	X		
Biological Sciences (Clinical Laboratory Sciences)	Natural Science and Mathematics	X		
Biological Sciences (Ecology, Evolution, and Conservation)	Natural Science and Mathematics	X	X	
Biological Sciences (Microbiology)	Natural Science and Mathematics	X		
Biological Sciences (Molecular & Cellular Biology)	Natural Science and Mathematics		X	
Biological Sciences (Stem Cell)	Natural Science and Mathematics		X	
Biological Sciences Honors Program	Natural Science and Mathematics	X		
Biological Sciences Subject Matter Program(Pre-Credential)	Natural Science and Mathematics	X		
Chemistry	Natural Science and Mathematics	X	X	
Earth Science	Natural Science and Mathematics	X		
Forensics Chemistry	Natural Science and Mathematics	X		
Geography (Geographic Information Systems and Analysis)	Natural Science and Mathematics	X		
Geography (Human Geography)	Natural Science and Mathematics	X		
Geography (Metropolitan Area Planning)	Natural Science and Mathematics	X		
Geography (Physical Geography)	Natural Science and Mathematics	X		
Geology	Natural Science and Mathematics	X	X	
Geology (Hydrogeology)	Natural Science and Mathematics	X		
Integrated Mathematics Major/Single Subject Credential	Natural Science and Mathematics	X		
Marine Sciences	Natural Science and Mathematics		X	
Mathematics	Natural Science and Mathematics	X	X	
Physics	Natural Science and Mathematics	X		
Physics (Applied Physics)	Natural Science and Mathematics	X		
Physics (Teacher Preparation)	Natural Science and Mathematics	X		
Anthropology	Social Science and Interdisciplinary Studies	X	X	
Anthropology (Archeology and Biological Anthropology)	Social Science and Interdisciplinary Studies	X		
Anthropology (Culture, Language and Society)	Social Science and Interdisciplinary Studies	X		
Applied Behavior Analysis	Social Science and Interdisciplinary Studies		X	
Asian Studies	Social Science and Interdisciplinary Studies	X		
Asian Studies (Chinese Studies)	Social Science and Interdisciplinary Studies	X		

Source: Sacramento State 2022-2023 Course Catalog

(Continued on next page)

Table 39: List of Programs offered at Sacramento State

Program	College	Bachelor's	Master's	Doctoral
Asian Studies (Japanese Studies)	Social Science and Interdisciplinary Studies	X		
Asian Studies (Korean Studies)	Social Science and Interdisciplinary Studies	X		
Economics	Social Science and Interdisciplinary Studies	X	X	
Environmental Studies	Social Science and Interdisciplinary Studies	X		
Ethnic Studies	Social Science and Interdisciplinary Studies	X		
Ethnic Studies (Asian American Studies)	Social Science and Interdisciplinary Studies	X		
Ethnic Studies (Chicanx and Latinx Studies)	Social Science and Interdisciplinary Studies	X		
Ethnic Studies (Native American Studies)	Social Science and Interdisciplinary Studies	X		
Ethnic Studies (Pan African Studies)	Social Science and Interdisciplinary Studies	X		
Ethnic Studies (Teachers in Bilingual Education)	Social Science and Interdisciplinary Studies	X		
Ethnic Studies (Teachers in Urban Settings)	Social Science and Interdisciplinary Studies	X		
Family Studies and Human Development	Social Science and Interdisciplinary Studies	X		
Fashion Merchandising and Management	Social Science and Interdisciplinary Studies	X		
Gerontology	Social Science and Interdisciplinary Studies	X		
International Relations	Social Science and Interdisciplinary Studies	X		
Liberal Studies	Social Science and Interdisciplinary Studies	X		
Nutrition and Food	Social Science and Interdisciplinary Studies	X	X	
Nutrition and Food (Dietetics)	Social Science and Interdisciplinary Studies	X		
Political Science	Social Science and Interdisciplinary Studies	X		
Political Science (California and its Political Environment)	Social Science and Interdisciplinary Studies		X	
Political Science (International Relations/Comparative Government)	Social Science and Interdisciplinary Studies		X	
Political Science (Political Theory)	Social Science and Interdisciplinary Studies		X	
Political Science and Journalism	Social Science and Interdisciplinary Studies	X		
Psychology	Social Science and Interdisciplinary Studies	X	X	
Psychology (Industrial/Organizational Psychology)	Social Science and Interdisciplinary Studies		X	
Public Policy and Administration	Social Science and Interdisciplinary Studies		X	
Social Science	Social Science and Interdisciplinary Studies	X		
Sociology	Social Science and Interdisciplinary Studies	X	X	
Women's and Gender Studies	Social Science and Interdisciplinary Studies	X		
Special Major	Office of Academic Affairs	X	X	

¹ An arrangement between the College of Business Administration & the University of the Pacific McGeorge School of Law allows a student to earn credits toward an MBA degree and a juris doctor (JD) degree concurrently.

² A student may concurrently earn the MS/ACCY from Sacramento State and the MBA from Sacramento State.

IV. Program Areas at Sacramento State and Local Demand in the Greater Sacramento Area

This section builds on the employment and occupation data reported in earlier sections. The following tables present data concerning annual average job openings by preferred education. The data is first broken down by annual job openings by preferred education from 2020-2030 for the GSA, followed by tables revealing occupations requiring a doctoral, master, bachelor, associate, or professional degree along with occupations requiring a high school diploma.

A. Occupational Demand by Preferred Education

According to the State of California Employment Development Department, over 134,000 annual job openings will be available from 2020-2030. Of these jobs, 23% require a Bachelor’s Degree or higher.

Table 40: Annual Average Job Openings by Preferred Education
El Dorado, Placer, Sacramento, and Yolo Counties 2020-2030

Preferred Education	# of Annual Avg. Job Openings	% of Total
Doctoral or Professional Degree	1,377	1%
Master's Degree	1,984	1%
Bachelor's Degree	28,698	21%
Associate's Degree	2,440	2%
Postsecondary Non-Degree Award	6,940	5%
Some College, No Degree	3,097	2%
High School Diploma or Equivalent	50,457	38%
No Formal Education Credential	39,536	29%
Total	134,529	100%

Source: State of California Employment Development Department

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Table 41 shows the average number of positions requiring a doctoral degree. Lawyers will have 456 openings annually from 2020-2030. Additionally, Physical Therapists and Pharmacists also have higher average job openings.

Table 41: Occupations Requiring Doctoral Degree by Annual Average Job Openings in El Dorado, Placer, Sacramento, and Yolo Counties 2020-2030

SOC Code	Occupational Title	Preferred Education	Total Annual Avg. Job Openings
23-1011	Lawyers	Doctoral or professional degree	456
29-1123	Physical Therapists	Doctoral or professional degree	108
29-1051	Pharmacists	Doctoral or professional degree	103
19-3031	Clinical, Counseling, and School Psychologists	Doctoral or professional degree	92
19-1042	Medical Scientists, Except Epidemiologists	Doctoral or professional degree	89
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	Doctoral or professional degree	65
25-1071	Health Specialties Teachers, Postsecondary	Doctoral or professional degree	64
29-1131	Veterinarians	Doctoral or professional degree	55
29-1021	Dentists, General	Doctoral or professional degree	46
29-1215	Family Medicine Physicians	Doctoral or professional degree	42
25-1123	English Language and Literature Teachers, Postsecondary	Doctoral or professional degree	29
25-1022	Mathematical Science Teachers, Postsecondary	Doctoral or professional degree	25
25-1042	Biological Science Teachers, Postsecondary	Doctoral or professional degree	25
25-1032	Engineering Teachers, Postsecondary	Doctoral or professional degree	24
19-1021	Biochemists and Biophysicists	Doctoral or professional degree	22
25-1011	Business Teachers, Postsecondary	Doctoral or professional degree	20
29-1041	Optometrists	Doctoral or professional degree	19
25-1066	Psychology Teachers, Postsecondary	Doctoral or professional degree	17
23-1021	Administrative Law Judges, Adjudicators, and Hearing Officers	Doctoral or professional degree	13
25-1021	Computer Science Teachers, Postsecondary	Doctoral or professional degree	13
25-1072	Nursing Instructors and Teachers, Postsecondary	Doctoral or professional degree	13
29-1223	Psychiatrists	Doctoral or professional degree	13
25-1052	Chemistry Teachers, Postsecondary	Doctoral or professional degree	10
29-1011	Chiropractors	Doctoral or professional degree	10
23-1023	Judges, Magistrate Judges, and Magistrates	Doctoral or professional degree	4
Total			1,377

Source: State of California Employment Development Department

According to Table 42, Educational, Guidance, School, and Vocational Counselors will have the highest average annual job openings from 2020-2030. Sacramento State has degrees within the College of Education that will be paramount in helping to fill these positions.

Table 42: Occupations Requiring Master's Degree by Annual Average Job Openings in El Dorado, Placer, Sacramento, and Yolo Counties 2020-2030

SOC Code	Occupational Title	Preferred Education	Total Annual Avg. Job Openings
21-1012	Educational, Guidance, School, and Vocational Counselors	Master's degree	233
21-1013	Marriage and Family Therapists	Master's degree	177
21-1019	Counselors, All Other	Master's degree	170
25-9031	Instructional Coordinators	Master's degree	156
21-1015	Rehabilitation Counselors	Master's degree	132
11-9032	Education Administrators, Elementary and Secondary School	Master's degree	122
29-1171	Nurse Practitioners	Master's degree	120
21-1022	Healthcare Social Workers	Master's degree	104
21-1023	Mental Health and Substance Abuse Social Workers	Master's degree	100
11-9033	Education Administrators, Postsecondary	Master's degree	91
29-1127	Speech-Language Pathologists	Master's degree	84
19-3051	Urban and Regional Planners	Master's degree	79
25-4022	Librarians and Media Collections Specialists	Master's degree	68
29-1071	Physician Assistants	Master's degree	65
29-1122	Occupational Therapists	Master's degree	50
25-1121	Art, Drama, and Music Teachers, Postsecondary	Master's degree	35
19-3039	Psychologists, All Other	Master's degree	31
15-2041	Statisticians	Master's degree	28
29-1298	Acupuncturists and Healthcare Diagnosing or Treating Practitioners, All Other	Master's degree	26
19-3091	Anthropologists and Archeologists	Master's degree	24
19-1041	Epidemiologists	Master's degree	22
15-1221	Computer and Information Research Scientists	Master's degree	20
19-3032	Industrial-Organizational Psychologists	Master's degree	19
19-3011	Economists	Master's degree	16
19-3041	Sociologists	Master's degree	12
Total			1,984

Source: State of California Employment Development Department

According to Table 43, Management Analysts, General and Operations Managers, and Project Management Specialists and Business Operations Specialists are the top three occupations in the Greater Sacramento Area 2018-2028. The college of Business Administration degrees will be essential to filling these occupations.

Table 43: Occupations Requiring Bachelor's Degree by Annual Average Job Openings in El Dorado, Placer, Sacramento, and Yolo Counties 2020-2030

SOC Code	Occupational Title	Preferred Education	Total Annual Avg. Job Openings
13-1111	Management Analysts	Bachelor's degree	3,192
11-1021	General and Operations Managers	Bachelor's degree	1,664
13-1198	Project Management Specialists and Business Operations Specialists, All Other	Bachelor's degree	1,571
29-1141	Registered Nurses	Bachelor's degree	1,506
13-2011	Accountants and Auditors	Bachelor's degree	1,228
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	Bachelor's degree	1,153
25-3097	Teachers and Instructors, All Other, Except Substitute Teachers	Bachelor's degree	768
13-1161	Market Research Analysts and Marketing Specialists	Bachelor's degree	641
25-2021	Elementary School Teachers, Except Special Education	Bachelor's degree	639
13-1071	Human Resources Specialists	Bachelor's degree	591
25-9099	Education, Training, and Library Workers, All Other	Bachelor's degree	577
25-3031	Substitute Teachers, Short-Term	Bachelor's degree	567
11-9198	Personal Service Managers; Entertainment & Recreation Managers, Except Gambling; and Managers, All Other	Bachelor's degree	530
11-3031	Financial Managers	Bachelor's degree	528
17-2051	Civil Engineers	Bachelor's degree	465
11-9111	Medical and Health Services Managers	Bachelor's degree	438
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's degree	432
11-2022	Sales Managers	Bachelor's degree	427
15-1299	Computer Occupations, All Other	Bachelor's degree	427
11-3021	Computer and Information Systems Managers	Bachelor's degree	382
11-9021	Construction Managers	Bachelor's degree	372
21-1021	Child, Family, and School Social Workers	Bachelor's degree	326
19-2041	Environmental Scientists and Specialists, Including Health	Bachelor's degree	308
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other	Bachelor's degree	300
11-3010	Administrative Services and Facilities Managers	Bachelor's degree	296

(Continued on next page)

Table 43: Occupations Requiring Bachelor's Degree by Annual Average Job Openings in El Dorado, Placer, Sacramento, and Yolo Counties 2020-2030

SOC Code	Occupational Title	Preferred Education	Total Annual Avg. Job Openings
41-3031	Securities, Commodities, and Financial Services Sales Agents	Bachelor's degree	296
13-2081	Tax Examiners and Collectors, and Revenue Agents	Bachelor's degree	288
11-1011	Chief Executives	Bachelor's degree	276
15-1211	Computer Systems Analysts	Bachelor's degree	261
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	Bachelor's degree	240
27-3031	Public Relations Specialists	Bachelor's degree	239
13-1041	Compliance Officers	Bachelor's degree	228
13-2072	Loan Officers	Bachelor's degree	226
25-9044	Teaching Assistants, Postsecondary	Bachelor's degree	221
25-2022	Middle School Teachers, Except Special and Career/Technical Education	Bachelor's degree	216
13-2052	Personal Financial Advisors	Bachelor's degree	210
27-2022	Coaches and Scouts	Bachelor's degree	210
13-1151	Training and Development Specialists	Bachelor's degree	207
13-1020	Buyers and Purchasing Agents	Bachelor's degree	206
13-1051	Cost Estimators	Bachelor's degree	184
15-2098	Data Scientists and Mathematical Science Occupations, All Other	Bachelor's degree	177
11-9041	Architectural and Engineering Managers	Bachelor's degree	176
11-2021	Marketing Managers	Bachelor's degree	165
29-2010	Clinical Laboratory Technologists and Technicians	Bachelor's degree	151
27-1024	Graphic Designers	Bachelor's degree	147
11-9151	Social and Community Service Managers	Bachelor's degree	139
27-3091	Interpreters and Translators	Bachelor's degree	136
13-1141	Compensation, Benefits, and Job Analysis Specialists	Bachelor's degree	133
19-4061	Social Science Research Assistants	Bachelor's degree	132
13-1081	Logisticians	Bachelor's degree	130
15-1244	Network and Computer Systems Administrators	Bachelor's degree	124
13-1121	Meeting, Convention, and Event Planners	Bachelor's degree	121
21-1092	Probation Officers and Correctional Treatment Specialists	Bachelor's degree	119
11-3121	Human Resources Managers	Bachelor's degree	118
15-1251	Computer Programmers	Bachelor's degree	117
17-2071	Electrical Engineers	Bachelor's degree	113
21-2011	Clergy	Bachelor's degree	109

(Continued on next page)

Table 43: Occupations Requiring Bachelor's Degree by Annual Average Job Openings in El Dorado, Placer, Sacramento, and Yolo Counties 2020-2030

SOC Code	Occupational Title	Preferred Education	Total Annual Avg. Job Openings
17-2081	Environmental Engineers	Bachelor's degree	107
15-1257	Web Developers and Digital Interface Designers	Bachelor's degree	106
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	Bachelor's degree	105
17-2061	Computer Hardware Engineers	Bachelor's degree	102
21-1099	Community and Social Service Specialists, All Other	Bachelor's degree	102
21-2021	Directors, Religious Activities and Education	Bachelor's degree	96
17-2199	Engineers, All Other	Bachelor's degree	88
17-2141	Mechanical Engineers	Bachelor's degree	86
21-1091	Health Educators	Bachelor's degree	86
17-1011	Architects, Except Landscape and Naval	Bachelor's degree	81
19-1029	Biological Scientists, All Other	Bachelor's degree	81
25-2012	Kindergarten Teachers, Except Special Education	Bachelor's degree	77
11-9039	Education Administrators, All Other	Bachelor's degree	74
15-1212	Information Security Analysts	Bachelor's degree	74
11-2030	Public Relations and Fundraising Managers	Bachelor's degree	71
27-3043	Writers and Authors	Bachelor's degree	71
27-2012	Producers and Directors	Bachelor's degree	69
13-2053	Insurance Underwriters	Bachelor's degree	67
11-3051	Industrial Production Managers	Bachelor's degree	66
13-1075	Labor Relations Specialists	Bachelor's degree	65
15-1241	Computer Network Architects	Bachelor's degree	65
17-2072	Electronics Engineers, Except Computer	Bachelor's degree	65
15-1245	Database Administrators and Architects	Bachelor's degree	64
19-4021	Biological Technicians	Bachelor's degree	61
25-1194	Vocational Education Teachers, Postsecondary	Bachelor's degree	61
13-1131	Fundraisers	Bachelor's degree	57
19-5011	Occupational Health and Safety Specialists	Bachelor's degree	56
27-1025	Interior Designers	Bachelor's degree	51
19-2042	Geoscientists, Except Hydrologists and Geographers	Bachelor's degree	50
11-9121	Natural Sciences Managers	Bachelor's degree	49
11-9031	Education Administrators, Preschool and Childcare Center/Program	Bachelor's degree	48
17-2112	Industrial Engineers	Bachelor's degree	47
25-2052	Special Education Teachers, Kindergarten and Elementary School	Bachelor's degree	46

(Continued on next page)

Table 43: Occupations Requiring Bachelor's Degree by Annual Average Job Openings in El Dorado, Placer, Sacramento, and Yolo Counties 2020-2030

SOC Code	Occupational Title	Preferred Education	Total Annual Avg. Job Openings
13-2031	Budget Analysts	Bachelor's degree	45
27-1011	Art Directors	Bachelor's degree	45
29-1031	Dietitians and Nutritionists	Bachelor's degree	45
25-2058	Special Education Teachers, Secondary School	Bachelor's degree	43
27-3041	Editors	Bachelor's degree	43
15-2031	Operations Research Analysts	Bachelor's degree	38
19-2031	Chemists	Bachelor's degree	38
27-1029	Designers, All Other	Bachelor's degree	37
19-3099	Social Scientists and Related Workers, All Other	Bachelor's degree	36
45-2011	Agricultural Inspectors	Bachelor's degree	36
11-3131	Training and Development Managers	Bachelor's degree	34
13-2020	Property Appraisers and Assessors	Bachelor's degree	33
17-1022	Surveyors	Bachelor's degree	32
41-9031	Sales Engineers	Bachelor's degree	32
11-3061	Purchasing Managers	Bachelor's degree	30
13-2061	Financial Examiners	Bachelor's degree	30
13-2041	Credit Analysts	Bachelor's degree	29
27-3011	Radio and Television Announcers	Bachelor's degree	28
21-1029	Social Workers, All Other	Bachelor's degree	26
27-1014	Multimedia Artists and Animators	Bachelor's degree	26
27-3042	Technical Writers	Bachelor's degree	26
19-4092	Forensic Science Technicians	Bachelor's degree	25
25-2059	Special Education Teachers, All Other	Bachelor's degree	25
27-2041	Music Directors and Composers	Bachelor's degree	25
27-3023	News Analysts, Reporters, and Journalists	Bachelor's degree	23
11-1031	Legislators	Bachelor's degree	22
19-1013	Soil and Plant Scientists	Bachelor's degree	22
17-1012	Landscape Architects	Bachelor's degree	21
27-4032	Film and Video Editors	Bachelor's degree	20
25-2057	Special Education Teachers, Middle School	Bachelor's degree	19
11-9161	Emergency Management Directors	Bachelor's degree	18
25-3011	Adult Basic and Secondary Education and Literacy Teachers and Instructors	Bachelor's degree	18
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	Bachelor's degree	17
19-2043	Hydrologists	Bachelor's degree	17
27-1021	Commercial and Industrial Designers	Bachelor's degree	17
19-1031	Conservation Scientists	Bachelor's degree	14
11-2011	Advertising and Promotions Managers	Bachelor's degree	13
15-2011	Actuaries	Bachelor's degree	13
19-1022	Microbiologists	Bachelor's degree	12
11-3111	Compensation and Benefits Managers	Bachelor's degree	11

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Table 43: Occupations Requiring Bachelor's Degree by Annual Average Job Openings in El Dorado, Placer, Sacramento, and Yolo Counties 2020-2030

SOC Code	Occupational Title	Preferred Education	Total Annual Avg. Job Openings
27-4031	Camera Operators, Television, Video, and Motion Picture	Bachelor's degree	11
17-1021	Cartographers and Photogrammetrists	Bachelor's degree	10
19-1099	Life Scientists, All Other	Bachelor's degree	10
19-2099	Physical Scientists, All Other	Bachelor's degree	10
29-1125	Recreational Therapists	Bachelor's degree	10
17-2131	Materials Engineers	Bachelor's degree	9
17-2171	Petroleum Engineers	Bachelor's degree	9
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	Bachelor's degree	8
	Total		28,698

Source: State of California Employment Development Department

According to Table 44, Preschool teachers, Except Special Education, Paralegals & Legal Assistants, and Dental Hygienists will have the highest average annual job openings from 2020-2030 that require an Associate's Degree.

Table 44: Occupations Requiring Associate's Degree by Annual Average Job Openings in El Dorado, Placer, Sacramento, and Yolo Counties 2020-2030

SOC Code	Occupational Title	Preferred Education	Total Annual Avg. Job Openings
25-2011	Preschool Teachers, Except Special Education	Associate's degree	480
23-2011	Paralegals and Legal Assistants	Associate's degree	300
29-1292	Dental Hygienists	Associate's degree	161
17-3011	Architectural and Civil Drafters	Associate's degree	103
29-2034	Radiologic Technologists	Associate's degree	103
19-4099	Life, Physical, and Social Science Technicians, All Other	Associate's degree	98
29-1126	Respiratory Therapists	Associate's degree	96
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	Associate's degree	95
19-4042	Environmental Science and Protection Technicians, Including Health	Associate's degree	89
29-2056	Veterinary Technologists and Technicians	Associate's degree	84
15-1231	Computer Network Support Specialists	Associate's degree	73
31-2021	Physical Therapist Assistants	Associate's degree	72
49-9062	Medical Equipment Repairers	Associate's degree	69
17-3023	Electrical and Electronics Engineering Technicians	Associate's degree	68
19-4071	Forest and Conservation Technicians	Associate's degree	67
17-3022	Civil Engineering Technicians	Associate's degree	62

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Table 44: Occupations Requiring Associate's Degree by Annual Average Job Openings in El Dorado, Placer, Sacramento, and Yolo Counties 2020-2030

SOC Code	Occupational Title	Preferred Education	Total Annual Avg. Job Openings
29-2032	Diagnostic Medical Sonographers	Associate's degree	50
17-3098	Calibration and Engineering Technologists and Technicians, Except Drafters, All Other	Associate's degree	44
17-3012	Electrical and Electronics Drafters	Associate's degree	30
19-4031	Chemical Technicians	Associate's degree	28
29-2031	Cardiovascular Technologists and Technicians	Associate's degree	28
19-4045	Geological and Hydrologic Technicians	Associate's degree	26
31-2011	Occupational Therapy Assistants	Associate's degree	26
17-3013	Mechanical Drafters	Associate's degree	25
53-2021	Air Traffic Controllers	Associate's degree	24
27-4012	Broadcast Technicians	Associate's degree	22
19-4010	Agricultural and Food Science Technicians	Associate's degree	19
17-3025	Environmental Engineering Technicians	Associate's degree	18
29-2051	Dietetic Technicians	Associate's degree	17
39-4031	Morticians, Undertakers, and Funeral Directors	Associate's degree	16
17-3027	Mechanical Engineering Technicians	Associate's degree	15
29-2035	Magnetic Resonance Imaging Technologists	Associate's degree	12
17-3019	Drafters, All Other	Associate's degree	11
29-2033	Nuclear Medicine Technologists	Associate's degree	9
	Total		2,440

Source: State of California Employment Development Department

Table 45 shows that Heavy and Tractor-Trailer Truck Drivers and Medical Assistants will have the highest average annual job openings from 2020-2030 that require a Postsecondary, non-degree education.

Table 45: Occupations Requiring Postsecondary, non-degree Award by Annual Average Job Openings in El Dorado, Placer, Sacramento, and Yolo Counties 2020-2030

SOC Code	Occupational Title	Preferred Education	Total Annual Avg. Job Openings
53-3032	Heavy and Tractor-Trailer Truck Drivers	Postsecondary non-degree award	1,390
31-9092	Medical Assistants	Postsecondary non-degree award	966
31-1131	Nursing Assistants	Postsecondary non-degree award	659
49-3023	Automotive Service Technicians and Mechanics	Postsecondary non-degree award	559
31-9091	Dental Assistants	Postsecondary non-degree award	454
39-5092	Manicurists and Pedicurists	Postsecondary non-degree award	435
29-2061	Licensed Practical and Licensed Vocational Nurses	Postsecondary non-degree award	385
39-5012	Hairdressers, Hairstylists, and Cosmetologists	Postsecondary non-degree award	357
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Postsecondary non-degree award	313

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Table 45: Occupations Requiring Postsecondary, non-degree Award by Annual Average Job Openings in El Dorado, Placer, Sacramento, and Yolo Counties 2020-2030

SOC Code	Occupational Title	Preferred Education	Total Annual Avg. Job Openings
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	Postsecondary non-degree award	223
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	Postsecondary non-degree award	158
31-9011	Massage Therapists	Postsecondary non-degree award	147
33-2011	Firefighters	Postsecondary non-degree award	144
29-2040	Emergency Medical Technicians and Paramedics	Postsecondary non-degree award	119
31-9097	Phlebotomists	Postsecondary non-degree award	90
49-3011	Aircraft Mechanics and Service Technicians	Postsecondary non-degree award	60
39-5094	Skincare Specialists	Postsecondary non-degree award	57
29-2055	Surgical Technologists	Postsecondary non-degree award	55
25-4031	Library Technicians	Postsecondary non-degree award	50
29-2053	Psychiatric Technicians	Postsecondary non-degree award	47
29-9098	Health Information Technologists, Medical Registrars, Surgical Assistants, & Healthcare Practitioners, AO	Postsecondary non-degree award	43
27-4011	Audio and Video Equipment Technicians	Postsecondary non-degree award	41
29-2057	Ophthalmic Medical Technicians	Postsecondary non-degree award	31
31-9094	Medical Transcriptionists	Postsecondary non-degree award	28
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	Postsecondary non-degree award	25
33-1021	First-Line Supervisors of Fire Fighting and Prevention Workers	Postsecondary non-degree award	23
27-3092	Court Reporters and Simultaneous Captioners	Postsecondary non-degree award	16
49-3052	Motorcycle Mechanics	Postsecondary non-degree award	16
51-5111	Prepress Technicians and Workers	Postsecondary non-degree award	15
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	Postsecondary non-degree award	14
39-5011	Barbers	Postsecondary non-degree award	12
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment	Postsecondary non-degree award	8
	Total		6,940

Source: State of California Employment Development Department

A. Crosswalk of Program Areas and Associated Demand for Occupations

This section examines a crosswalk between program areas offered at Sacramento State and the occupational demand of the Greater Sacramento Area. Only those program areas where demand is present are reported.

Table 46 shows the program area, level of education available at Sac State, number of graduates from Sac State in AY 2022-2023, associated professions, preferred education and the average annual job openings.

Table 46: Crosswalk of Program Areas and Associated Demand for Occupations

Program Name	Degrees Offered	2022-2023 Graduates	Associated Profession(s)	Preferred Education	Avg. Annual Job Openings
Arts and Letters					
Art					
Art Education	Bachelors	8	Secondary School Teachers, Except Special and Career/Technical Education Art, Drama, and Music Teachers, Postsecondary	Bachelor's Master's	432 35
Art History BA	Bachelors	9	Art, Drama, and Music Teachers, Postsecondary	Master's	35
Art Studio	Bachelors Masters	6 4	Secondary School Teachers, Except Special and Career/Technical Education Art, Drama, and Music Teachers, Postsecondary	Bachelor's Master's	432 35
Studio Art	Bachelors	28	Art, Drama, and Music Teachers, Postsecondary	Master's	35
Studio Art Methods	Bachelors	36	Secondary School Teachers, Except Special and Career/Technical Education Art, Drama, and Music Teachers, Postsecondary	Bachelor's Master's	432 35
Communication Studies					
Film	Bachelors	66	Producers and Directors Art, Drama, and Music Teachers, Postsecondary	Bachelor's Master's	69 35
Journalism BA	Bachelors	34	Writers and Authors Editors News Analysts, Reporters, and Journalists	Bachelor's Bachelor's Bachelor's	71 43 23
Design					
Graphic Design	Bachelors	41	Graphic Designers Art Directors Art, Drama, and Music Teachers, Postsecondary Special Effects Artists and Animators	Bachelor's Bachelor's Master's Bachelor's	147 45 35 26
Interior Architecture	Bachelors	45	Architectural and Engineering Managers Interior Designers	Bachelor's Bachelor's	176 51
Interior Design (Architect)	Bachelors	2	Architectural and Engineering Managers Interior Designers	Bachelor's Bachelor's	176 51
Photography	Bachelors	22	Art, Drama, and Music Teachers, Postsecondary	Master's	35
English					
Composition, Rhetoric, and Professional Writing	Masters	4	Writers and Authors Editors English Language and Literature Teachers, Postsecondary Technical Writers	Bachelor's Bachelor's Doctoral Bachelor's	71 43 29 26
Creative Writing	Masters	6	Secondary School Teachers, Except Special and Career/Technical Education English Language and Literature Teachers, Postsecondary	Bachelor's Doctoral	432 29
English	Bachelors	101	Secondary School Teachers, Except Special and Career/Technical Education English Language and Literature Teachers, Postsecondary	Bachelor's Doctoral	432 29
Literature	Masters	13	Secondary School Teachers, Except Special and Career/Technical Education English Language and Literature Teachers, Postsecondary	Bachelor's Doctoral	432 29
Pre-Credential	Bachelors	37	Secondary School Teachers, Except Special and Career/Technical Education English Language and Literature Teachers, Postsecondary	Bachelor's Doctoral	432 29
Teaching English to Speakers of Other Languages	Masters	8	Elementary School Teachers, Except Special Education Secondary School Teachers, Except Special and Career/Technical Education Middle School Teachers, Except Special and Career/Technical Education Kindergarten Teachers, Except Special Education Adult Basic Education, Adult Secondary Education, and English as a Second Lan	Bachelor's Bachelor's Bachelor's Bachelor's Bachelor's	639 432 216 77 18
History					
History	Bachelors Masters	109 10	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
Pre-Credential	Bachelors	23	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432

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Table 46: Crosswalk of Program Areas and Associated Demand for Occupations

Program Name	Degrees Offered	2022-2023 Graduates	Associated Profession(s)	Preferred Education	Avg. Annual Job Openings	
Music						
Composition	Masters	3	Art, Drama, and Music Teachers, Postsecondary	Master's	35	
			Music Directors and Composers	Bachelor's	25	
Instrumental	Bachelors	10	Art, Drama, and Music Teachers, Postsecondary	Master's	35	
			Music Directors and Composers	Bachelor's	25	
Jazz Emphasis: Music Education	Bachelors	3	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432	
Jazz Studies	Bachelors	3	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432	
Keyboard	Bachelors	4	Art, Drama, and Music Teachers, Postsecondary	Master's	35	
			Music Directors and Composers	Bachelor's	25	
Music Education	Bachelors	15	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432	
Performance	Masters	7	Art, Drama, and Music Teachers, Postsecondary	Master's	35	
			Music Directors and Composers	Bachelor's	25	
Voice	Bachelors	3	Art, Drama, and Music Teachers, Postsecondary	Master's	35	
			Music Directors and Composers	Bachelor's	25	
Music	Bachelors	12	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432	
Theatre and Dance						
Dance	Bachelors	7	Art, Drama, and Music Teachers, Postsecondary	Master's	35	
Theatre	Bachelors	23	Producers and Directors	Bachelor's	69	
			Art, Drama, and Music Teachers, Postsecondary	Master's	35	
World Languages & Literatures						
French	Bachelors	2	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432	
			Interpreters and Translators	Bachelor's	136	
Spanish	Bachelors	37	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432	
			Masters	8	Interpreters and Translators	Bachelor's
Business						
Accountancy	Bachelors	219	Management Analysts	Bachelor's	3,192	
			Masters	37	General and Operations Managers	Bachelor's
				Human Resources Specialists	Bachelor's	591
				Sales Managers	Bachelor's	427
				Construction Managers	Bachelor's	372
				Chief Executives	Bachelor's	276
				Cost Estimators	Bachelor's	184
				Social and Community Service Managers	Bachelor's	139
				Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
				Logisticians	Bachelor's	130
				Human Resources Managers	Bachelor's	118
				Industrial Production Managers	Bachelor's	66
				Training and Development Managers	Bachelor's	34
				Business Teachers, Postsecondary	Doctoral	20
				Compensation and Benefits Managers	Bachelor's	11
Analytics	Bachelors	23	Management Analysts	Bachelor's	3,192	
					General and Operations Managers	Bachelor's
				Human Resources Specialists	Bachelor's	591
				Sales Managers	Bachelor's	427
				Construction Managers	Bachelor's	372
				Chief Executives	Bachelor's	276
				Cost Estimators	Bachelor's	184
				Social and Community Service Managers	Bachelor's	139
				Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
				Logisticians	Bachelor's	130
				Human Resources Managers	Bachelor's	118
				Industrial Production Managers	Bachelor's	66
				Training and Development Managers	Bachelor's	34
				Business Teachers, Postsecondary	Doctoral	20
				Compensation and Benefits Managers	Bachelor's	11

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Table 46: Crosswalk of Program Areas and Associated Demand for Occupations

Program Name	Degrees Offered	2022-2023 Graduates	Associated Profession(s)	Preferred Education	Avg. Annual Job Openings
Analytics in Healthcare	Masters	8	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
			Business Teachers, Postsecondary	Doctoral	20
Compensation and Benefits Managers	Bachelor's	11			
Business Administration	Masters	3	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
			Business Teachers, Postsecondary	Doctoral	20
Compensation and Benefits Managers	Bachelor's	11			
Business Analytics	Masters	26	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
			Business Teachers, Postsecondary	Doctoral	20
Compensation and Benefits Managers	Bachelor's	11			
Entrepreneurship	Bachelors	43	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
			Business Teachers, Postsecondary	Doctoral	20
Compensation and Benefits Managers	Bachelor's	11			

(Continued on next page)

Table 46: Crosswalk of Program Areas and Associated Demand for Occupations

Program Name	Degrees Offered	2022-2023 Graduates	Associated Profession(s)	Preferred Education	Avg. Annual Job Openings
Entrepreneurship & Global Business	Masters	36	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
Business Teachers, Postsecondary	Doctoral	20			
Compensation and Benefits Managers	Bachelor's	11			
Executive MBA	Masters	42	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
Business Teachers, Postsecondary	Doctoral	20			
Compensation and Benefits Managers	Bachelor's	11			
Finance	Bachelors	212	Management Analysts	Bachelor's	3,192
	Masters	36	General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Financial Managers	Bachelor's	528
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Loan Officers	Bachelor's	226
			Personal Financial Advisors	Bachelor's	210
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Budget Analysts	Bachelor's	45
			Training and Development Managers	Bachelor's	34
			Credit Analysts	Bachelor's	29
			Business Teachers, Postsecondary	Doctoral	20
			Compensation and Benefits Managers	Bachelor's	11

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Table 46: Crosswalk of Program Areas and Associated Demand for Occupations

Program Name	Degrees Offered	2022-2023 Graduates	Associated Profession(s)	Preferred Education	Avg. Annual Job Openings
General Management	Bachelors	135	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
			Business Teachers, Postsecondary	Doctoral	20
Compensation and Benefits Managers	Bachelor's	11			
Human Resource Management	Bachelors	75	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
			Business Teachers, Postsecondary	Doctoral	20
Compensation and Benefits Managers	Bachelor's	11			
International MBA	Masters	34	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
			Business Teachers, Postsecondary	Doctoral	20
Compensation and Benefits Managers	Bachelor's	11			
International Business	Bachelors	44	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
			Business Teachers, Postsecondary	Doctoral	20
Compensation and Benefits Managers	Bachelor's	11			

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Table 46: Crosswalk of Program Areas and Associated Demand for Occupations

Program Name	Degrees Offered	2022-2023 Graduates	Associated Profession(s)	Preferred Education	Avg. Annual Job Openings
Marketing	Bachelors	147	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
Business Teachers, Postsecondary	Doctoral	20			
			Compensation and Benefits Managers	Bachelor's	11
Management Information Systems	Bachelors	96	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
Business Teachers, Postsecondary	Doctoral	20			
			Compensation and Benefits Managers	Bachelor's	11
Supply Chain Management	Bachelors	10	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
Business Teachers, Postsecondary	Doctoral	20			
			Compensation and Benefits Managers	Bachelor's	11

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Table 46: Crosswalk of Program Areas and Associated Demand for Occupations

Program Name	Degrees Offered	2022-2023 Graduates	Associated Profession(s)	Preferred Education	Avg. Annual Job Openings
Education					
Graduate Professional Studies					
Career Counseling	Masters	22	Educational, Guidance, and Career Counselors and Advisors	Master's	233
Counseling: Rehabilitation	Masters	15	Educational, Guidance, and Career Counselors and Advisors	Master's	233
Curriculum & Instruction	Masters	28	Instructional Coordinators	Master's	156
Educational Leadership (TK-12)	Masters	9	Education Administrators, Kindergarten through Secondary	Master's	122
			Education Administrators, Postsecondary	Master's	91
			Education Administrators, All Other	Bachelor's	74
			Education and Childcare Administrators, Preschool and Daycare	Bachelor's	48
Educational Leadership (P-12)	Doctorate	12	Education Administrators, Kindergarten through Secondary	Master's	122
			Education Administrators, Postsecondary	Master's	91
			Education Administrators, All Other	Bachelor's	74
			Education and Childcare Administrators, Preschool and Daycare	Bachelor's	48
Educational Leadership Community College	Doctorate	11	Education Administrators, Kindergarten through Secondary	Master's	122
			Education Administrators, Postsecondary	Master's	91
			Education Administrators, All Other	Bachelor's	74
			Education and Childcare Administrators, Preschool and Daycare	Bachelor's	48
Educational Leadership Policy Studies	Masters	1	Education Administrators, Kindergarten through Secondary	Master's	122
			Education Administrators, Postsecondary	Master's	91
			Education Administrators, All Other	Bachelor's	74
			Education and Childcare Administrators, Preschool and Daycare	Bachelor's	48
Educational Leadership Policy Studies Higher Ed	Masters	18	Education Administrators, Kindergarten through Secondary	Master's	122
			Education Administrators, Postsecondary	Master's	91
			Education Administrators, All Other	Bachelor's	74
			Education and Childcare Administrators, Preschool and Daycare	Bachelor's	48
Educational Technology	Masters	4	Training and Development Specialists	Bachelor's	207
			Instructional Coordinators	Master's	156
			Librarians and Media Collections Specialists	Master's	68
Marriage, Couple, and Family Counseling	Masters	21	Educational, Guidance, and Career Counselors and Advisors	Master's	233
School Counseling	Masters	20	Educational, Guidance, and Career Counselors and Advisors	Master's	233
School Psychology	Masters	18	Educational, Guidance, and Career Counselors and Advisors	Master's	233
Special Education	Masters	4	Special Education Teachers, Secondary School	Bachelor's	43
			Special Education Teachers, All Other	Bachelor's	25
			Special Education Teachers, Middle School	Bachelor's	19
Universal Design for eLearning	Masters	12	Training and Development Specialists	Bachelor's	207
			Instructional Coordinators	Master's	156
			Librarians and Media Collections Specialists	Master's	68
Work Development Leadership	Masters	13	Education Administrators, Kindergarten through Secondary	Master's	122
			Education Administrators, Postsecondary	Master's	91
			Education Administrators, All Other	Bachelor's	74
			Education and Childcare Administrators, Preschool and Daycare	Bachelor's	48
Teaching Credentials					
Early Child Special Education	Masters	5	Special Education Teachers, Secondary School	Bachelor's	43
			Special Education Teachers, All Other	Bachelor's	25
			Special Education Teachers, Middle School	Bachelor's	19
Extensive Support Need	Masters	3	Special Education Teachers, Secondary School	Bachelor's	43
			Special Education Teachers, All Other	Bachelor's	25
			Special Education Teachers, Middle School	Bachelor's	19
Mild/Moderate Support	Masters	2	Special Education Teachers, Secondary School	Bachelor's	43
			Special Education Teachers, All Other	Bachelor's	25
			Special Education Teachers, Middle School	Bachelor's	19
Special Education Mild Moderate	Masters	1	Special Education Teachers, Secondary School	Bachelor's	43
		1	Special Education Teachers, All Other	Bachelor's	25
		1	Special Education Teachers, Middle School	Bachelor's	19
Special Education Teaching Moderate Severe	Masters	1	Special Education Teachers, Secondary School	Bachelor's	43
		1	Special Education Teachers, All Other	Bachelor's	25
		1	Special Education Teachers, Middle School	Bachelor's	19

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Table 46: Crosswalk of Program Areas and Associated Demand for Occupations

Program Name	Degrees Offered	2022-2023 Graduates	Associated Profession(s)	Preferred Education	Avg. Annual Job Openings
Undergraduate Studies in Education					
American Sign Language & Deaf Studies	Bachelors	29	Special Education Teachers, Secondary School	Bachelor's	43
			Special Education Teachers, All Other	Bachelor's	25
			Special Education Teachers, Middle School	Bachelor's	19
Career & Technical Studies	Bachelors	34	Career/Technical Education Teachers, Postsecondary	Bachelor's	61
Child and Adolescent Development	Masters	2	Psychologists, All Other	Master's	31
Child Development	Masters	6	Psychologists, All Other	Master's	31
Child Development (Individual)	Bachelors	46	Psychologists, All Other	Master's	31
Child Development (Plan B)	Bachelors	11	Psychologists, All Other	Master's	31
Early Development Care & Education	Bachelors	72	Psychologists, All Other	Master's	31
Educational Contexts	Bachelors	97	Psychologists, All Other	Master's	31
Elementary Pre-Credential	Bachelors	83	Psychologists, All Other	Master's	31
Social & Community Contexts	Bachelors	43	Psychologists, All Other	Master's	31
Social & Community Settings	Bachelors	69	Psychologists, All Other	Master's	31
Engineering and Computer Science					
Civil Engineering					
Civil Engineering	Bachelors	155	Civil Engineers	Bachelor's	465
	Masters	14	Architectural and Engineering Managers Engineering Teachers, Postsecondary	Bachelor's Doctoral	176 24
Computer Science					
Computer Science	Bachelors	283	Computer Occupations, All Other	Bachelor's	427
	Masters	16	Computer and Information Systems Managers	Bachelor's	382
			Computer Programmers	Bachelor's	117
			Information Security Analysts	Bachelor's	74
			Computer and Information Research Scientists Computer Science Teachers, Postsecondary	Master's Doctoral	20 13
Construction Management					
Construction Management	Bachelors	77	Civil Engineers	Bachelor's	465
			Cost Estimators	Bachelor's	184
			Architectural and Engineering Managers	Bachelor's	176
			Engineers, All Other Engineering Teachers, Postsecondary	Bachelor's Doctoral	88 24
Electrical & Electronic Engineering					
Computer Engineering	Bachelors	64	Architectural and Engineering Managers	Bachelor's	176
			Computer Hardware Engineers	Bachelor's	102
			Computer Network Architects Engineering Teachers, Postsecondary	Bachelor's Doctoral	65 24
Electrical & Electronic Engineering	Bachelors	99	Architectural and Engineering Managers	Bachelor's	176
			Electrical Engineers	Bachelor's	113
			Computer Hardware Engineers	Bachelor's	102
			Electronics Engineers, Except Computer Engineering Teachers, Postsecondary	Bachelor's Doctoral	65 24
Mechanical Engineering					
Mechanical Engineering, Blended	Bachelors	6	Cost Estimators	Bachelor's	184
			Architectural and Engineering Managers	Bachelor's	176
			Mechanical Engineers Engineering Teachers, Postsecondary	Bachelor's Doctoral	86 24
Mechanical Engineering	Bachelors	169	Cost Estimators	Bachelor's	184
			Architectural and Engineering Managers Mechanical Engineers Engineering Teachers, Postsecondary	Bachelor's Bachelor's Doctoral	176 86 24
Health and Human Services					
Communication Sciences and Disorders					
Communication Sciences and Disorder	Bachelors	94	Speech-Language Pathologists	Master's	84
	Masters	39	Health Specialties Teachers, Postsecondary	Doctoral	64
Nursing					
Nursing Degree Completion	Bachelors	21	Registered Nurses	Bachelor's	1,506
			Nursing Instructors and Teachers, Postsecondary	Doctoral	13
Nursing, Pre-Licensure	Bachelors	118	Registered Nurses	Bachelor's	1,506
			Nursing Instructors and Teachers, Postsecondary	Doctoral	13
Nursing - with RN license	Bachelors	43	Registered Nurses	Bachelor's	1,506
	Masters	60	Nursing Instructors and Teachers, Postsecondary	Doctoral	13

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Table 46: Crosswalk of Program Areas and Associated Demand for Occupations

Program Name	Degrees Offered	2022-2023 Graduates	Associated Profession(s)	Preferred Education	Avg. Annual Job Openings
Physical Therapy					
Physical Therapy	Doctorate	29	Physical Therapists	Doctoral	108
			Health Specialties Teachers, Postsecondary	Doctoral	64
Public Health					
Community Health Education	Bachelors	48	Medical and Health Services Managers	Bachelor's	438
			Health Education Specialists	Bachelor's	86
			Health Specialties Teachers, Postsecondary	Doctoral	64
Health Care Administration	Bachelors	93	Medical and Health Services Managers	Bachelor's	438
			Health Education Specialists	Bachelor's	86
			Health Specialties Teachers, Postsecondary	Doctoral	64
Master of Public Health	Masters	29	Medical and Health Services Managers	Bachelor's	438
			Health Education Specialists	Bachelor's	86
			Health Specialties Teachers, Postsecondary	Doctoral	64
Occupational Health & Safety	Bachelors	21	Medical and Health Services Managers	Bachelor's	438
		21	Health Education Specialists	Bachelor's	86
		21	Health Specialties Teachers, Postsecondary	Doctoral	64
Recreation, Parks, & Tourism Administration					
Hospitality and Tour Management	Bachelors	8	Market Research Analysts and Marketing Specialists	Bachelor's	641
			Marketing Managers	Bachelor's	165
Social Work					
Social Work	Bachelors	198	Child, Family, and School Social Workers	Bachelor's	326
	Masters	54	Marriage and Family Therapists	Master's	177
			Counselors, All Other	Master's	170
			Social and Community Service Managers	Bachelor's	139
			Probation Officers and Correctional Treatment Specialists	Bachelor's	119
			Healthcare Social Workers	Master's	104
			Mental Health and Substance Abuse Social Workers	Master's	100
			Social Workers, All Other	Bachelor's	26
Natural Sciences and Mathematics					
Biological Sciences					
Biological Sciences	Bachelors	105	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Biological Scientists, All Other	Bachelor's	81
			Biological Technicians	Bachelor's	61
			Natural Sciences Managers	Bachelor's	49
			Biological Science Teachers, Postsecondary	Doctoral	25
			Forensic Science Technicians	Bachelor's	25
			Life Scientists, All Other	Bachelor's	10
Biomedical Science	Bachelors	125	Medical Scientists, Except Epidemiologists	Doctoral	89
			Biological Technicians	Bachelor's	61
			Biological Science Teachers, Postsecondary	Doctoral	25
Cell & Molecular Biology	Bachelors	17	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
	Masters	3	Biological Scientists, All Other	Bachelor's	81
			Biological Technicians	Bachelor's	61
			Natural Sciences Managers	Bachelor's	49
			Biological Science Teachers, Postsecondary	Doctoral	25
			Forensic Science Technicians	Bachelor's	25
			Life Scientists, All Other	Bachelor's	10
Clinical Lab	Bachelors	22	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Biological Scientists, All Other	Bachelor's	81
			Biological Technicians	Bachelor's	61
			Natural Sciences Managers	Bachelor's	49
			Biological Science Teachers, Postsecondary	Doctoral	25
			Forensic Science Technicians	Bachelor's	25
			Life Scientists, All Other	Bachelor's	10
Ecology & Evolution	Bachelors	20	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
	Masters	5	Biological Scientists, All Other	Bachelor's	81
			Biological Technicians	Bachelor's	61
			Natural Sciences Managers	Bachelor's	49
			Biological Science Teachers, Postsecondary	Doctoral	25
			Forensic Science Technicians	Bachelor's	25
			Life Scientists, All Other	Bachelor's	10

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ACADEMIC PROGRAM NEEDS ASSESSMENT OF THE GREATER SACRAMENTO AREA

Table 46: Crosswalk of Program Areas and Associated Demand for Occupations

Program Name	Degrees Offered	2022-2023 Graduates	Associated Profession(s)	Preferred Education	Avg. Annual Job Openings
Forensic Biology	Bachelors	5	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Biological Scientists, All Other	Bachelor's	81
			Biological Technicians	Bachelor's	61
			Natural Sciences Managers	Bachelor's	49
			Biological Science Teachers, Postsecondary	Doctoral	25
			Forensic Science Technicians	Bachelor's	25
Microbiology	Bachelors	14	Life Scientists, All Other	Bachelor's	10
			Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Biological Scientists, All Other	Bachelor's	81
			Biological Technicians	Bachelor's	61
			Natural Sciences Managers	Bachelor's	49
			Biological Science Teachers, Postsecondary	Doctoral	25
Chemistry					
Biochemistry	Bachelors Masters	33 1	Secondary School Teachers, Except Special and Career/Technical Education	Doctoral	89
			Biological Technicians	Bachelor's	61
			Natural Sciences Managers	Bachelor's	49
			Biological Science Teachers, Postsecondary	Doctoral	25
			Biochemists and Biophysicists	Doctoral	22
Chemistry	Bachelors Masters	9 3	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Natural Sciences Managers	Bachelor's	49
			Chemists	Bachelor's	38
			Forensic Science Technicians	Bachelor's	25
			Chemistry Teachers, Postsecondary	Doctoral	10
Forensic Chemistry	Bachelors	3 3 3 3 3	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Natural Sciences Managers	Bachelor's	49
			Chemists	Bachelor's	38
			Forensic Science Technicians	Bachelor's	25
			Chemistry Teachers, Postsecondary	Doctoral	10
Geology					
Geology	Bachelors Masters	13 3	Geoscientists, Except Hydrologists and Geographers	Bachelor's	50
			Natural Sciences Managers	Bachelor's	49
			Hydrologists	Bachelor's	17
Hydrogeology	Bachelors	3 3 3	Geoscientists, Except Hydrologists and Geographers	Bachelor's	50
			Natural Sciences Managers	Bachelor's	49
			Hydrologists	Bachelor's	17
Mathematics					
Mathematics	Bachelors Masters	48 4	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Natural Sciences Managers	Bachelor's	49
			Statisticians	Master's	28
			Mathematical Science Teachers, Postsecondary	Doctoral	25
Physics					
Applied Physics	Bachelors	3 3	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Natural Sciences Managers	Bachelor's	49
Physics	Bachelors	7 2	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Natural Sciences Managers	Bachelor's	49
Teacher Preparation	Bachelors	1 1	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Natural Sciences Managers	Bachelor's	49
Social Sciences and Interdisciplinary Studies					
Anthropology					
Anthropology	Bachelors Masters	10 6	Anthropologists and Archeologists	Master's	24
Archaeology & Biological Anthropology	Bachelors	24	Anthropologists and Archeologists	Master's	24
Culture, Language & Society	Bachelors	17	Anthropologists and Archeologists	Master's	24
Economics					
Economics	Bachelors Masters	163 3	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Social Science Research Assistants	Bachelor's	132
			Economists	Master's	16
Environmental Studies					
Environmental Studies	Bachelors	62	Environmental Scientists and Specialists, Including Health	Bachelor's	308
			Compliance Officers	Bachelor's	228

(Continued on next page)

Table 46: Crosswalk of Program Areas and Associated Demand for Occupations

Program Name	Degrees Offered	2022-2023 Graduates	Associated Profession(s)	Preferred Education	Avg. Annual Job Openings
Family & Consumer Sciences					
FACS (Education)	Bachelors	2	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
Family Studies	Bachelors	1	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
Nutrition and Food	Bachelors	70	Biological Scientists, All Other	Bachelor's	81
			Health Specialties Teachers, Postsecondary	Doctoral	64
			Natural Sciences Managers	Bachelor's	49
			Dietitians and Nutritionists	Bachelor's	45
			Biological Science Teachers, Postsecondary	Doctoral	25
Nutrition and Food (Dietetics)	Bachelors	18	Life Scientists, All Other	Bachelor's	10
			Biological Scientists, All Other	Bachelor's	81
			Health Specialties Teachers, Postsecondary	Doctoral	64
			Natural Sciences Managers	Bachelor's	49
			Dietitians and Nutritionists	Bachelor's	45
Biological Science Teachers, Postsecondary			Biological Science Teachers, Postsecondary	Doctoral	25
			Life Scientists, All Other	Bachelor's	10
Gerontology					
Gerontology	Bachelors	18	Medical Scientists, Except Epidemiologists	Doctoral	89
			Health Specialties Teachers, Postsecondary	Doctoral	64
			Social Scientists and Related Workers, All Other	Bachelor's	36
Political Science					
Government	Bachelors	1	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Social Science Research Assistants	Bachelor's	132
International Relations	Bachelors	29	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Social Science Research Assistants	Bachelor's	132
Political Science	Bachelors	142	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
	Masters	9	Social Science Research Assistants	Bachelor's	132
Psychology					
Applied Behavior Analysis	Masters	5	Psychologists, All Other	Master's	31
		5	Psychology Teachers, Postsecondary	Doctoral	17
Industrial & Organizational Psychology	Masters	1	Social Science Research Assistants	Bachelor's	132
			Psychologists, All Other	Master's	31
			Industrial-Organizational Psychologists	Master's	19
			Psychology Teachers, Postsecondary	Doctoral	17
Psychology	Bachelors	641	Social Science Research Assistants	Bachelor's	132
	Masters	1	Psychologists, All Other	Master's	31
			Industrial-Organizational Psychologists	Master's	19
			Psychology Teachers, Postsecondary	Doctoral	17
Public Policy & Administration					
Public Policy & Administration	Masters	17	General and Operations Managers	Bachelor's	1,664
			Chief Executives	Bachelor's	276
			Social and Community Service Managers	Bachelor's	139
			Legislators	Bachelor's	22
Urban Land Development	Masters	2	Management Analysts	Bachelor's	3,192
			General and Operations Managers	Bachelor's	1,664
			Human Resources Specialists	Bachelor's	591
			Sales Managers	Bachelor's	427
			Construction Managers	Bachelor's	372
			Chief Executives	Bachelor's	276
			Cost Estimators	Bachelor's	184
			Social and Community Service Managers	Bachelor's	139
			Compensation, Benefits, and Job Analysis Specialists	Bachelor's	133
			Logisticians	Bachelor's	130
			Human Resources Managers	Bachelor's	118
			Industrial Production Managers	Bachelor's	66
			Training and Development Managers	Bachelor's	34
			Business Teachers, Postsecondary	Doctoral	20
			Compensation and Benefits Managers	Bachelor's	11
Social Science					
Social Science	Bachelors	19	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's	432
			Social Science Research Assistants	Bachelor's	132
			Social Scientists and Related Workers, All Other	Bachelor's	36
Sociology					
Sociology	Bachelors	294	Social Science Research Assistants	Bachelor's	132
	Masters	7	Sociologists	Master's	12

(Continued on next page)

Regional reports from the Office of Institutional Research, Effectiveness & Planning at Sacramento State, Public Policy Institute of California (PPIC) and the Economic Development Department (EDD) all echo that the industry forecast needs to keep up with the economic demands of business and commerce.

The occupational trade and skill labor sector present a large gap between what is offered at the CSU's and UC's, and do not meet the needs of the local economy. The fastest growing occupational categories projected from 2020-2030 for the Greater Sacramento Area include trade and skill labor and service; Transportation Workers, Personal Care Aids, Physical Therapist Assistants, and Personal Care and Service Workers. These top employment needs pose a major gap in industry needs and must be addressed by either certificate's, coursework or apprenticeship programs.

Sacramento State, which is part of the CSU system, along with the UC system offers educational programs to prepare graduates in most career areas. Highlighted are the top three programs with job opportunities; Business, Nursing, and Education. This was determined by examining the number of graduates compared to the average annual job openings. These are the three program areas we will need more graduates from in order to fulfill the demands of the Greater Sacramento Area labor market.

Sacramento State along with the other local colleges and universities will need to come up with technological, innovative and fresh ideas on how to meet the present and future employment gaps.

V. Conclusions

This report has been assembled with important data to help the leaders at Sacramento State make informed decisions for the institution. This section reflects on the key findings of the report. The following bullet points discuss highlights from each section. First, the market situation will be summarized followed by program areas and demand and other areas for consideration.

B. Market Situation

This section provides an overview of the population, employment, income and poverty, and education characteristics of the Greater Sacramento Area.

Population Characteristics

- The population of Sacramento County is growing at a fast pace. Projections from 2020 to 2060 reveal that Sacramento County will continue to grow and will reach 1,844,098 by 2060. Placer County is projected to increase to 505,925 by 2060. San Joaquin County is expected to grow to 976,326 and Yolo County is expected to grow to 243,410 by 2060.

Employment and Industry Characteristics

- The unemployment rate had been persisting in a downward trend until 2020 when it more than doubled. A look at unemployment rate patterns reveals higher unemployment rates in California and the Greater Sacramento Region compared to the U.S national average. The rates for the State of California had been lower than the rates in the Greater Sacramento Region until 2020. The Greater Sacramento Region is now lower than California.

The list below shows the educational level required for occupations that have 50 or more job openings in the Greater Sacramento Area.

Jobs requiring a Doctoral or Professional degree (# of average annual job openings, 50 or more)

- Lawyers (456)
- Physical Therapists (108)
- Pharmacists (103)
- Clinical, Counseling, and School Psychologist (92)
- Medical Scientists, Except Epidemiologists (89)
- Physicians, All Other; and Ophthalmologists, Except Pediatric (65)
- Health Specialties Teachers, Postsecondary (64)
- Veterinarians (55)

Jobs requiring a Master's degree (# of average annual job openings, 50 or more)

- Educational, Guidance, School, and Vocational Counselors (233)
- Marriage and Family Therapists (177)
- Counselors, All Other (170)
- Instructional Coordinators (156)
- Rehabilitation Counselors (132)
- Education Administrators, Elementary and Secondary School (122)
- Nurse Practitioners (120)
- Healthcare Social Workers (104)
- Mental Health and Substance Abuse Social Workers (100)
- Education Administrators, Postsecondary (91)
- Speech-Language Pathologists (84)
- Urban and Regional Planners (79)
- Librarians and Media Collections Specialists (68)
- Physician Assistants (65)
- Occupational Therapists (50)

Jobs requiring a Bachelor's Degree (# of annual average job openings, 100 or more)

- Management Analysts (3,192)
- General and Operations Managers (1,664)
- Project Management Specialists and Business Operations Specialists, All Other (1,571)
- Registered Nurses (1,506)
- Accountants and Auditors (1,228)
- Software Developers and Software Quality Assurance Analysts and Testers (1,153)
- Teachers and Instructors, All Other, Except Substitute Teachers (768)
- Market Research Analysts and Marketing Specialists (641)
- Elementary School Teachers, Except Special Education (639)
- Human Resources Specialists (591)
- Education, Training, and Library Workers, All Other (577)
- Substitute Teachers, Short Term (567)
- Personal Service Managers; Entertainment & Recreation Managers, Except Gambling; and Managers, All Other (530)
- Financial Managers (528)
- Civil Engineers (465)
- Medical and Health Services Managers (438)
- Secondary School Teachers, Except Special Education and Career/Technical Education (432)

- Sales Managers (427)
- Computer Occupations, All other (427)
- Computer and Information Systems Managers (382)
- Construction Managers (372)
- Child, Family, and School Social Workers (326)
- Environmental Scientists and Specialists, Including Health (308)
- Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other (300)
- Administrative Services and Facilities Managers (296)
- Securities, Commodities, and Financial Services Sales Agents (296)
- Tax Examiners and collectors and Revenue Agents (288)
- Chief Executives (276)
- Computer Systems Analysts (261)
- Substance Abuse, Behavioral Disorder, and Mental Health Counselors (240)
- Public Relations Specialists (239)
- Compliance Officers (228)
- Loan Officers (226)
- Teaching Assistants, Postsecondary (221)
- Middle School Teachers, Except Special and Career/Technical Education (216)
- Personal Financial Advisors (210)
- Coaches and Scouts (210)
- Training and Development Specialists (207)
- Buyers and Purchasing Agents (206)
- Cost Estimators (184)
- Data Scientists and Mathematical Science Occupations, All Other (177)
- Architectural and Engineering Managers (176)
- Marketing Managers (165)
- Clinical Laboratory Technologists and Technicians (151)
- Graphic Designers (147)
- Social and Community Service Managers (139)
- Interpreters and Translators (136)
- Compensation, Benefits, and Job Analysis Specialists (133)
- Social Science Research Assistants (132)
- Logisticians (130)
- Network and Computer Systems Administrators (124)
- Meeting, Convention, and Event Planners (121)
- Probation Officers and Correctional Treatment Specialists (119)
- Human Resources Managers (118)
- Computer Programmers (117)
- Electrical Engineers (113)
- Clergy (109)
- Environmental Engineers (107)
- Web Developers and Digital Interface Designers (106)
- Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (105)
- Computer Hardware Engineers (102)
- Community and Social Service Specialists, All Other (102)

Jobs Requiring an Associate’s Degree (# of average annual job openings, 50 or higher)

- Preschool Teachers, Except Special Education (480)
- Paralegals and Legal Assistants (300)
- Dental Hygienists (161)
- Architectural and Civil Drafters (103)
- Radiologic Technologists (103)
- Life, Physical, and Social Science Technicians, All Other (98)
- Respiratory Therapists (96)
- Human Resources Assistants, Except Payroll and Timekeeping (95)
- Environmental Science and Protection Technicians, Including Health (89)
- Veterinary Technologists and Technicians (84)
- Computer Network Support Specialists (73)
- Physical Therapist Assistants (72)
- Medical Equipment Repairers (69)
- Electrical and Electronics Engineering Technicians (68)
- Forest and Conservation Technicians (67)
- Civil Engineering Technicians (62)
- Diagnostic Medical Sonographers (50)

Jobs requiring a Postsecondary, Non-Degree Award (# of average job openings, 50 or more)

- Heavy and Tractor-Trailer Truck Drivers (1,390)
- Medical Assistants (966)
- Nursing Assistants (659)
- Automotive Service Technicians and Mechanics (559)
- Dental Assistants (454)
- Manicurists and Pedicurists (435)
- Licensed Practical and Licensed Vocational Nurses (385)
- Hairdressers, Hairstylists, and Cosmetologists (357)
- Heating, Air Conditioning, and Refrigeration Mechanics and Installers (313)
- Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other (223)
- Telecommunications Equipment Installers and Repairers, Except Line Installers (158)
- Massage Therapists (147)
- Firefighters (144)
- Emergency Medical Technicians and Paramedics (119)
- Phlebotomists (90)
- Aircraft Mechanics and Service Technicians (60)
- Skincare Specialists (57)
- Surgical Technologists (55)
- Library Technicians (50)

Income and Poverty Characteristics

- In 2022, the Greater Sacramento Area had a lower poverty rate compared to the state of California. Also, in 2022 per capita income was higher for California when compared to the Greater Sacramento Area and the United States. Both the Greater Sacramento Area and the state of California had a significantly higher homeless population compared to the United States.

Educational Characteristics

- When examining the Greater Sacramento Area, San Joaquin County has the highest percentage of the population with no college and is higher than the U.S and the state of California. Sacramento County has a higher percentage than the state of California and the U.S. Placer County has the highest percentage with an Associate or Bachelor's degree, and a Graduate/Professional degree.
- The percentage of 12th graders graduating from public high schools was 86% for the class of 2021-22 in the Greater Sacramento Area which was slightly below the State of California (Table 5). Yolo County had the biggest change from 2018 to 2022 with a 5.3% increase.
- UC Davis had the highest number of graduates with 11,192 in FY 2022. Sacramento State increased from 6,668 in FY 2012 to 8,188 in FY 2022.
- Almost 39,000 degrees and certificates were awarded by the nine major local postsecondary education providers for 2022-2023 Academic Year. The institutions include: Sacramento State, UC Davis, Sierra College, American River College, Cosumnes River College, Folsom Lake College, Sacramento City College, San Joaquin Delta, and Woodland Community College.
- Sacramento State awarded 8,551 degrees in AY 2022-23. These included 7,566 Bachelor's degrees in 124 programs, 934 Master's degrees in 88 programs, and 51 Doctoral degrees in 5 programs.
 - The area of study with the largest number of bachelor's degrees awarded was Health & Human Services with 1,978 degrees. The College of Health & Human Services encompasses 8 different departments.
 - Social Sciences & Interdisciplinary Studies followed Health & Human Services with 1,735 degrees awarded. Followed by Arts & Letters (1,122), Business Administration (955), Engineering & Computer Science (850), Education (476), Natural Sciences & Mathematics (444), and Special Majors (6).
 - The area of study with the largest number of Master's degrees awarded was Education with 288 degrees. Other areas with over 100 Master's Degrees awarded were Business Administration and Health & Human Services.
 - Sacramento State awarded 51 Doctorate degrees. 29 in Health & Human Services and 22 in Education.

C. Program Areas and Local Demand

- According to the State of California Employment Development Department, over 134,000 annual job openings will be available from 2020-2030. Of these jobs, 23% require a Bachelor's Degree or higher.
- When examining positions requiring a doctoral degree, Lawyers will have 456 annual openings from 2020-2030. Additionally, Physical Therapists and Pharmacists also have high average job openings.
- For positions requiring a Master's, Educational, Guidance, School, and Vocational Counselors will have the highest average annual job openings from 2020-2030. Sacramento State has degrees within the College of Education that will be paramount in helping to fill these positions.
- For positions requiring a Bachelor's, Management Analysts, General and Operations Managers, and Project Management Specialists and Business Operations Specialists, All Other are the top three occupations in the Greater Sacramento Area 2020-2030. The College of Business Administration degrees will be essential to filling in these occupations.
- Sacramento State offers educational programs to prepare graduates in most areas. A few of the largest job openings include areas within business such as managers and accountants. Additional occupations include teachers, registered nurses, environmental scientists, and computer systems analysts. Areas of need include occupations such as lawyers, judges and judicial law clerks. Sacramento State offers undergraduate and graduate degrees in political science that can help students prepare for these fields. Other areas include physicians, dentists, nurse practitioners and substitute teachers. The nursing program at Sacramento State can help prepare nurses to become nurse practitioners.



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