

TO: Board of Trustees

FROM: Kathleen F. Burke, Chancellor

RE: Irvine Valley College Education Master Plan 2020-2030 and
Saddleback College Education Master Plan 2020-2030

ACTION: Approval

BACKGROUND

SOCCCD engaged expert consultants to support the creation of the District-wide Strategic Plan 2020-2025 and facilitate the review of college-specific data and priorities for the next decade to create the Irvine Valley College Education Master Plan and Saddleback College Education Master Plan. MIG, a consulting firm focused on community visioning, strategic planning, landscape architecture, and urban planning and design, was selected through a competitive process to engage the community and provide expert consultation in developing the education master plans.

STATUS

The colleges' education master plans (EMP) leverage the planning work of the district-wide strategic plan, which included a comprehensive environmental scan and the collaborative and inclusive development of district-wide goals and objectives. The education master plans contain detailed information specific to each college's community, and academic and student support services. Developing the district-wide strategic plan and the colleges' education master plan brought together our most valued stakeholders and will guide future development in the colleges and district.

The development of the college's ten-year EMP was particularly focused on having robust participation and contributions by all stakeholder groups: faculty, staff, administrators, students, and community members. The EMP was vetted and edited not only by the units of the college it describes, but by shared governance groups that transcend those units, including Academic and Classified Senates and our college's broadest participatory governance group.

The process of creating the Irvine Valley College Education Master Plan and Saddleback College Education Master Plan sought to balance all of the elements that have been essential to making the district and colleges exceptional, while anticipating changes to programs and practices to sustain a level of excellence and achievement at higher levels.

As we neared the completion of the plans, the pandemic hit our nation. While it is important to see our EMP as a ten-year plan, the unexpected and drastic changes from the Covid-19 crisis has made the colleges re-examine the plans for potential

Item Submitted by: Kathleen F. Burke, Chancellor

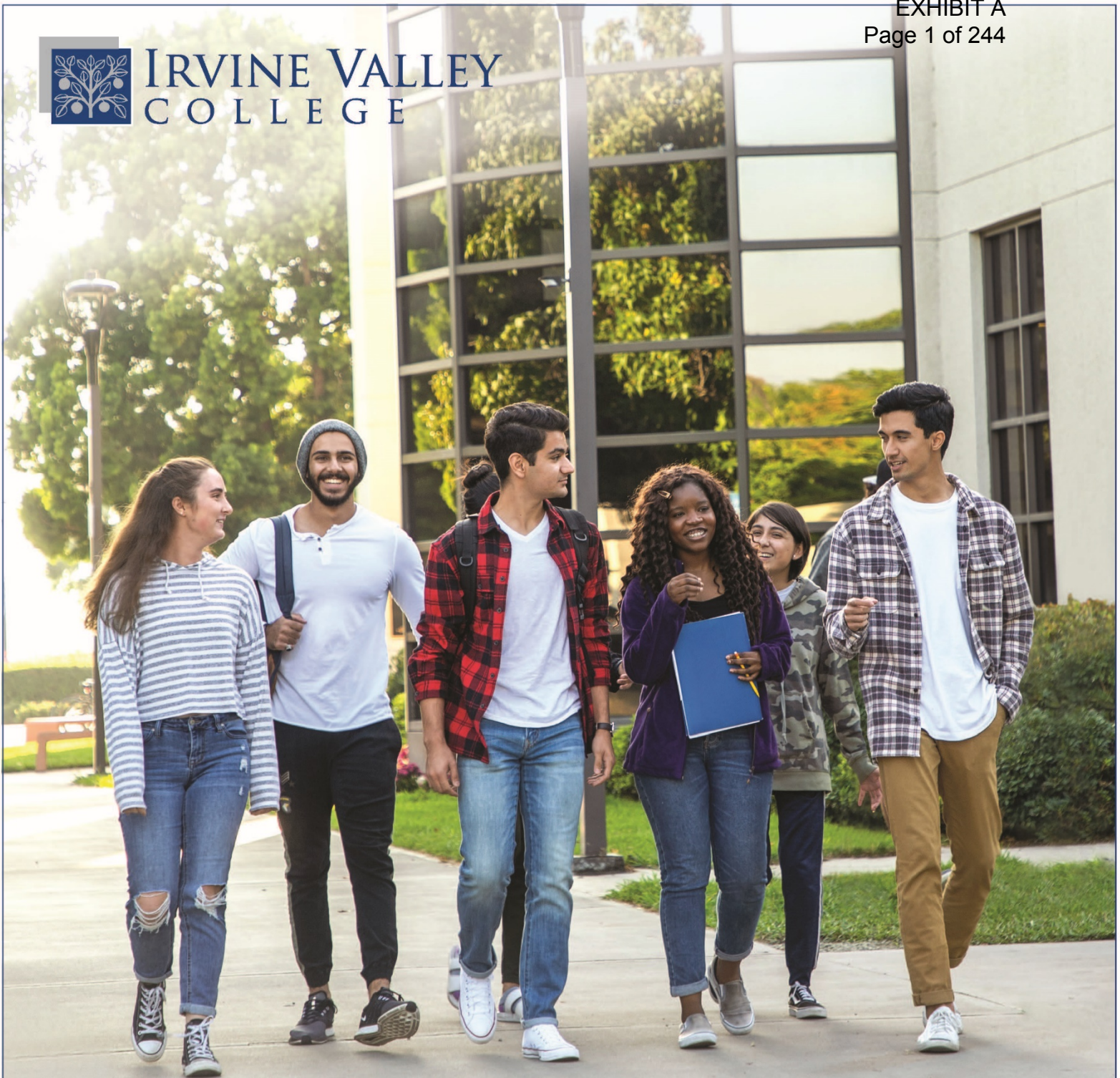
areas of concern. The colleges will examine and adjust their ongoing planning based on their areas of significant strengths in the education master plan and examine areas of concern that are emerging due to the pandemic.

RECOMMENDATION

The Chancellor recommends that the Board of Trustees approve the Irvine Valley College Education Master Plan (Exhibit A) and the Saddleback Valley College Education Master Plan (Exhibit B).



IRVINE VALLEY
COLLEGE



2020–2030

EDUCATION MASTER PLAN

ACKNOWLEDGEMENTS

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Grace Garcia, District Director, Office of the Chancellor and Board Operations
Mayra Arias*, Senior Administrative Assistant

* Asterisks indicate members who belong to both the DWPC and DWIPC.

MIG Planning Consultants

Daniel Iacofano
Mark Sillings
Stephanie Lane Pavón

LETTER FROM THE PRESIDENT

At Irvine Valley College (IVC), we remain committed to providing high-quality instruction and services to meet the needs of our diverse student population. Each semester, IVC welcomes more than 15,000 students from the surrounding communities and over 40 foreign countries to our campus. Whether students are looking to pursue an associate degree, career education certificate, transfer preparation, lifelong learning, or career enhancement, they find that IVC offers a wide range of academic programs in addition to distinguished faculty and staff concerned with promoting their academic development and success.

The purpose of the Irvine Valley College Education Master Plan (EMP) is to update planning assumptions in light of the college's mission and provide data and the philosophical foundation for decisions involving instruction, student services, and facilities planning. In short, the master plan provides context by synthesizing demographic trends, internal data, and identified student needs with emerging educational developments and more recent developments stemming from the impact of the COVID-19 pandemic.

To be clear, COVID-19 has not changed our commitment to the Vision for Success goals or the college's mission and values related to equity and inclusion. In the broadest sense, the pandemic has not changed what we intend to do but has instead accelerated changes in delivery of services to the community and modified how we will ultimately accomplish our goals.

As of this writing, the true impact of the COVID-19 pandemic on the college and the community is unknown and will most likely not be known for some time. Uncertainty is a dominant theme, but the college's governance, crisis management, and organizational structures are synchronized, so we are in as good a position as any to weather the storm. For long- and medium-term education planning, environmental scans are used to provide context and metrics for decision making. The COVID-19 pandemic has reorganized some priorities and planning assumptions, and requires that increased attention be paid to: epidemiological studies, political and social constructs that may affect federal or state regulations, shifts in public opinion, mental health concerns, disaggregated unemployment data, state and local government budgets, the ramifications for transfer institutions, and bleak three- to five-year economic forecasts.

This plan is a living document that will be used as the foundation for planning our future over the next ten years. Ultimately, it will be used as a roadmap to guide the development of instructional programs, student services, and facilities planning in an environment where we expect decreased revenue and an increased demand for our services. The challenges will be daunting, but the collegial process that leads to the development of the EMP is indicative of the fact that we are up to the task.

I would like to take this opportunity to thank all who participated for their hard work and the invaluable contributions they have made to this planning process. I know we are all committed to serving the needs of our students and the community. The Irvine Valley College Education Master Plan will enable us to achieve this goal and shape the future of the college thoughtfully, diligently, and collectively. We are IVC!

A handwritten signature in black ink, appearing to read 'Cindy'.

Cindy Vyskocil, Ed.D.
Acting President
Irvine Valley College

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CHAPTER 1 INTRODUCTION AND BACKGROUND

PURPOSE OF THE EDUCATION MASTER PLAN

The Irvine Valley College Education Master Plan (EMP) supports the college's mission, vision, and values and serves as a long-range roadmap for the future. The EMP does this by identifying the educational needs of students at Irvine Valley College and the greater community it serves and aligning its efforts to target these needs. To satisfy this purpose the EMP is grounded in an analysis of demographic, enrollment and labor market trends that provides data to support informed decision making.

Notably, the EMP was developed as one of the three interrelated components of a broader Education Master and Strategic Plan (EMSP). This EMSP consists of a South Orange County Community College District (SOCCCD) District-wide Strategic Plan, the Education Master Plan for Irvine Valley College, and another EMP for its sister college, Saddleback College. As both colleges serve the same District community, their respective EMPs complement and reinforce each other while reflecting the individual strengths and unique qualities of each institution.

Development of the overall EMSP, including the Irvine Valley College EMP, was also an opportunity to fully align SOCCCD and Irvine Valley College with critical statewide initiatives to improve student success outcomes. These initiatives include the goals articulated in the Vision for Success launched by the California Community Colleges system in 2017 and a new Student Centered Funding Formula introduced in the 2018-19 budget, among others.

The Irvine Valley College EMP is the result of an extensive planning process that began in the fall of 2018 when SOCCCD embarked on obtaining a consultancy to assess the external and internal environment of SOCCCD and its two colleges as the foundation to create the overall EMSP for all three institutions.

Critical to that process was the identification of both current and potential future programs of instruction and support services (including the expansion of existing programs and distribution of courses, programs, and services among the District's two colleges), and the development of a distinct identity and direction for each institution as a whole.

SOCCCD's district-wide and college planning processes and established collegial governance and decision-making processes were essential factors in the selection of the consultancy and the subsequent development of the EMSP. This foundational master plan will also support the direction and development of other essential planning documents for both the District and Irvine Valley College such as facilities and technology master plans.

The Irvine Valley College EMP and the other two components of the SOCCCD EMSP are derived from robust input that faculty, students, staff, and community members provided during the planning process and data received from SOCCCD Research, Planning and Data Management and other external sources. Having drawn upon this quantitative and qualitative information, the resulting 2020-2030 EMP will

enable Irvine Valley College to adapt to the challenges and opportunities the college will face in the coming years to continue successfully meeting the educational needs of its diverse and evolving student body.

ABOUT IRVINE VALLEY COLLEGE

Formerly a satellite campus to Saddleback College, Irvine Valley College became an independent institution in 1985. Located in the City of Irvine, it is one of two accredited colleges in the South Orange County Community College District (SOCCCD). The SOCCCD covers 382 square miles, serving nearly one million residents across 26 cities and unincorporated communities in the southern portion of Orange County. In terms of square miles covered, the District is the largest of the four community college districts in Orange County (see Figure 1.1)¹.



Communities served include Aliso Viejo, Dana Point/Capistrano Beach, Irvine, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest (includes Foothill Ranch), Mission Viejo, Newport Beach, Rancho Santa Margarita, San Clemente, San Juan Capistrano, Tustin and parts of Santa Ana; and the unincorporated communities of Coto de Caza, Emerald Bay, Ladera Ranch, Las Flores, North Tustin, Trabuco Canyon, and Trabuco Highlands.

The Irvine Valley College campus serves a student body of over 15,000 students. The college is fully accredited, offering over 80 associate degree programs and over 70 career and technical education programs. IVC has the highest rate of students transferring to University of California schools out of all 115 community colleges in the state. IVC also opened the Advanced Technology and Education Park (ATEP) in the City of Tustin. ATEP focuses on advanced technology, career education, and workforce development training programs to support high demand industries.

There are three other community college districts in Orange County, served by seven community colleges. An additional 17 community colleges are located within a 50-mile radius of SOCCCD.²

¹ South Orange Community College District, About the District, accessed May 2019, www.socccd.edu/about/about.html

² California Community Colleges Chancellor's Office, Find a College Near You, accessed May 2019, <http://www.cccco.edu/Students/Find-a-College/Find-a-College-Near-You>

FIGURE 1.1: SOUTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT



IRVINE VALLEY COLLEGE MISSION AND VISION

MISSION

Irvine Valley College offers clear and guided pathways to transfer opportunities, certificates, associate degrees, employment, and further education to a diverse and dynamic local and global community. We support student access, success, and equity. IVC fosters economic and workforce development through strategic partnerships with business, government, and educational networks.

VISION

Irvine Valley College is a premier educational institution that provides students avenues for success through exceptional services and dynamic partnerships.

RELATED PLANS AND PROCESSES

The Irvine Valley College Education Master Plan is designed to work in conjunction with the District-wide Strategic Plan (DWSP) while driving the development of other Irvine Valley College plans. These will include its college-level Strategic Plan, Facilities Master Plan, Information Technology Master Plan, and other plans and processes to meet student needs through a long-range vision for planning of instructional and student support offerings, facilities, and technology.

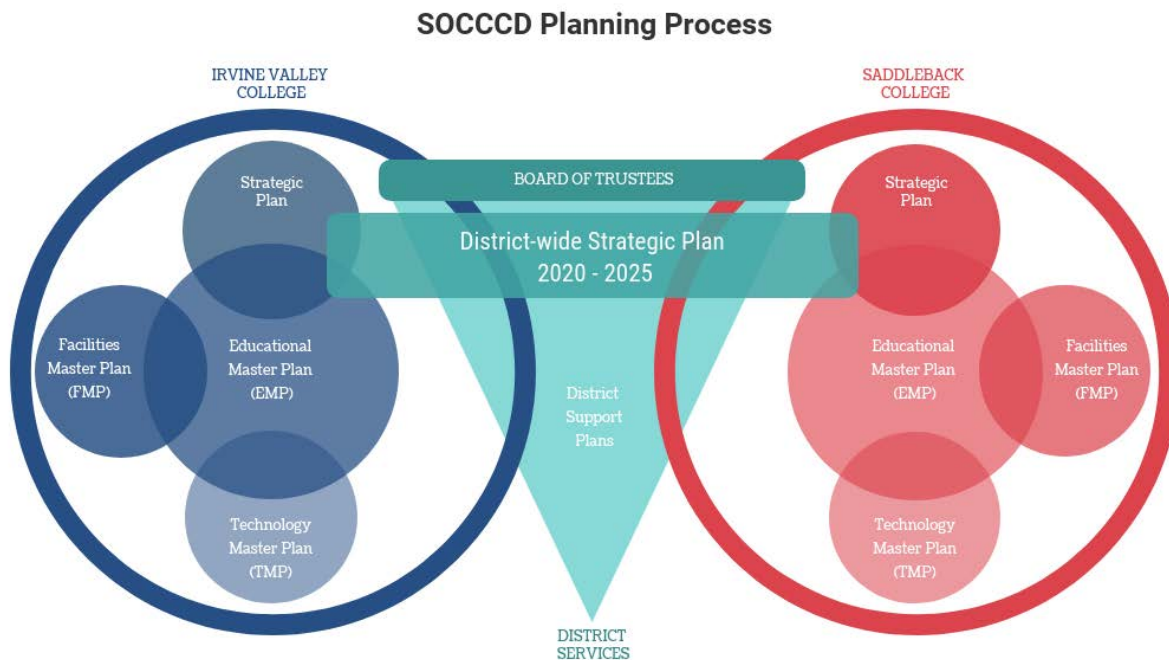
SOCCCD EDUCATION MASTER AND STRATEGIC PLAN (EMSP)

The Irvine Valley College Education Master Plan was developed concurrently with the SOCCCD District-wide Strategic Plan and the Education Master Plan of Saddleback College. Together, these three inter-related plans comprise the Education Master and Strategic Plan (EMSP) for the District. Community input collected at both colleges was applied to develop all three EMSP planning documents.

THE DISTRICT-WIDE STRATEGIC PLAN 2020-2025

The District-Wide Strategic Plan 2020-2025 articulates overarching institutional goals, desired outcomes, measurable objectives, and targets for the District as a whole. The role of the DWSP within the EMSP is to provide a framework for achieving the District's vision and mission and support for the college's educational goals. In turn, the EMSP will form the foundation for a new Facilities Master Plan and a Technology Master Plan to be developed for each of the two colleges, as well as other planning documents and processes (see Figure 1.2).

FIGURE 1.2: RELATION BETWEEN DISTRICT-WIDE EMSP AND COLLEGE EMSP



PLANNING TERMINOLOGY DEFINED

A common set of planning terminology was referenced when developing the SOCCCD District-wide Strategic Plan and the college education master plans.

- An **Education Master and Strategic Plan (EMSP)** is a long-range comprehensive planning document that defines overarching goals and objectives the District and colleges will pursue to carry out their mission and achieve their envisioned future. The current EMSP planning initiative will result in three distinct but wholly aligned planning documents: the SOCCCD District-Wide Strategic Plan, the Irvine Valley College Education Master Plan, and the Saddleback College Education Master Plan.
- An **Environmental Scan** is an assessment of current conditions and trends, including community and student demographics, economics, social conditions, and other factors that are likely to impact the future of the district/college.
- The **Mission** explains why the district/college exists. The Mission describes the overall purpose of the district/college.
- The **Vision** is an aspirational statement describing the district/college ideal future state. The vision statement describes what success will look and feel like.

- **Values** are the core principles by which the colleges and the District will carry out their mission. They define the primary attributes and beliefs that shape and guide district/college decision-making and provide ways of choosing among competing priorities.
- **Goals** are broad statements of direction that define what the district/college is trying to achieve.
- **Objectives** are detailed methods for attaining the goals. They should be specific, measurable, achievable, realistic, and time-based.
- **Action Steps** are detailed actions for making progress towards accomplishing the objectives.

IRVINE VALLEY COLLEGE STRATEGIC PLAN

In addition to the Saddleback College and Irvine Valley College Education Master Plans, the colleges are developing college-level strategic plans that respond to their respective vision, mission, and values. The goals and objectives of these two college-level strategic plans are aligned with the goals of the DWSP, but each of the colleges and District Services retains the flexibility to identify the strategies and actions they determine are needed to best support the priorities of the college and district. Annually, the colleges will review these strategies/actions, evaluate the progress that has been made over the past year, and adjust as needed.

FACILITIES MASTER PLANS (FMP)

Drawing upon quantitative and qualitative data collected for the District-wide Strategic Plan and the Education Master Plans for both colleges, new Facilities Master Plans (FMPs) will also be developed for the campus. The FMP will provide an inventory and an assessment of all campus facilities, determine space requirements based on educational program needs, identify facility and infrastructure opportunities, and offer a vision and plan for the future development of each campus.

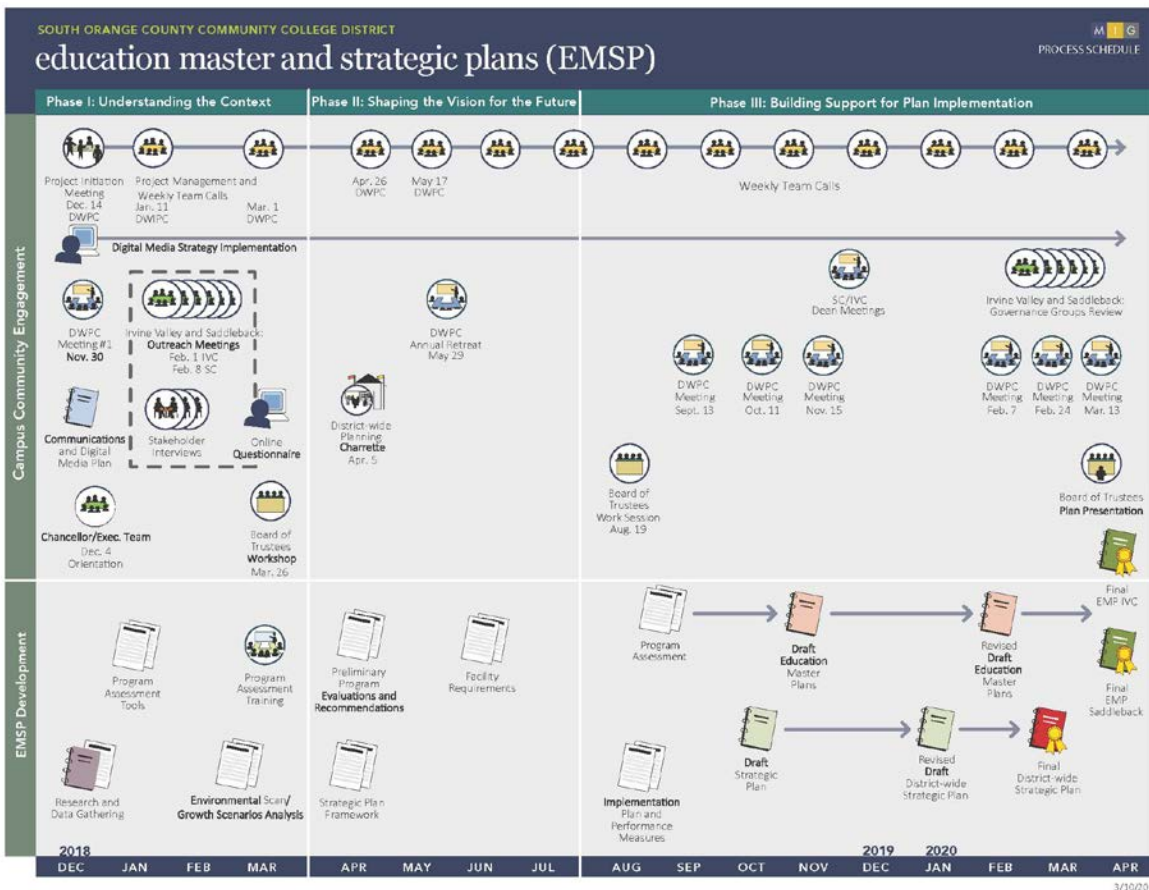
TECHNOLOGY MASTER PLANS (TMP)

Following the completion of the EMSP, a new Technology Master Plan (TMP) will be developed at each college. Each TMP ensures the colleges maintain currency and sufficiency with their evolving technological requirements and aligns with educational priorities. The TMP will be designed to improve technology decision-making processes and identify resources to support ongoing technology infrastructure and security needs.

PLAN DEVELOPMENT PROCESS

The planning process simultaneously encompassed the District and each college. It was divided into three phases, as is illustrated in Figure 1.3. The first phase identified trends, issues, and community preferences, and synthesized these findings into an Environmental Scan report. This analysis identified educational needs and priorities as well as future educational opportunities for the District and both Irvine Valley College and Saddleback College. Key themes identified during Phase I were summarized and presented to SOCCCD leadership and community members in Phase II for further consideration.

FIGURE 1.3. SOCCCD EMSP PLAN DEVELOPMENT PROCESS



Phase II defined a clear path forward for the District, Irvine Valley, and Saddleback based on a shared understanding of where the District was and where it wanted to be in the future. The District-Wide Planning Council (DWPC) and the project team utilized findings from Phase I and the District-Wide Planning Charrette to identify goals and objectives that will shape the future direction of the District and the two colleges. These goals and objectives constitute a framework that was further refined in a series of internal DWPC discussions.

During this same period, divisional and program assessment and growth projections data were developed to assist in the drafting of descriptive and analytical overviews of each academic school in Irvine Valley College and academic division at Saddleback College as well as student services at both colleges. These will form the core content for the Education Master Plans of both colleges, but were developed as part of the overall EMSP planning process that shaped this District-wide Strategic Plan.

Phase III built support for the plan through a careful, inclusive review of the draft plans. The draft versions of the Strategic Plan and college Education Master Plans were reviewed by staff, the DWPC, DWIPC, the community, and the Board of Trustees.

PLANNING PROCESS STAKEHOLDERS AND COMMUNITY

The Education Master Plans for Irvine Valley and Saddleback and the District-wide Strategic Plan were informed by SOCCCD community input solicited through a variety of public engagement activities. The project team initiated public engagement with the development of a communications plan to ensure that all stakeholders were reached, including staff, faculty, administrators, students, and community members. Phase I included two days of workshops on the campuses of Irvine Valley College and Saddleback College, an online questionnaire for all SOCCCD stakeholders, and a questionnaire for instructional program faculty chairs and services area managers.

SOCCCD BOARD OF TRUSTEES

At two key milestones, the project team met with the Board of Trustees to share findings from the EMSP planning process. Board members drew upon this information to identify key district-wide strategies that subsequently helped guide the work of the DWPC and DWIPC in developing the goals and objectives of the District-wide Strategic Plan.

DISTRICTWIDE PLANNING COUNCIL (DWPC) AND DISTRICT-WIDE INTEGRATED PLANNING COMMITTEE (DWIPC)

The MIG project team met regularly with the SOCCCD District-wide Planning Council (DWPC) and the District-wide Integrated Planning Committee (DWIPC), a sub-committee of the DWPC, to communicate and coordinate all of the development of the District-wide Strategic Plan. The DWPC and DWIPC represented the SOCCCD community throughout the project and provided guidance and oversight by participating in strategy sessions, providing input, reviewing findings and actively participating in the development of the Strategic Plan. In this way, members of the DWPC and DWIPC, representing both Irvine Valley College and Saddleback College as well as District Services, played a central role in the development of the District-wide Strategic Plan and the two Education Master Plans which together constitute the overall EMSP. This ensured that all three EMSP plans emerged from a district-wide collaborative planning process that reflected the views and perspectives of all three institutions.

DISTRICT-WIDE PLANNING COUNCIL (DWPC) AND DISTRICT-WIDE INTEGRATED PLANNING COMMITTEE (DWIPC) MEMBERS

District Services

Kathleen Burke, Chancellor, Chair

Denice Inciong*, Co-Chair, District Director of Research, Planning and Data Management

Robert Bramucci, Vice Chancellor, Technology and Learning Services

Ann-Marie Gabel, Vice Chancellor, Business Services

Kim Widdes, Acting Vice Chancellor, Human Resources

Medhanie Ephrem*, Classified Management Representative

Nicole Ortega*, Classified Senate Representative

Letitia Clark, Director of Governmental Affairs and Public Relations

Grace Garcia, District Director, Chancellor

Mayra Arias*, Senior Administrative Assistant

Irvine Valley College

Cindy Vyskocil, Acting President

Christopher McDonald, Vice President for Instruction

Linda Fontanilla, Vice President for Student Services

Davit Khachatryan, Vice President for Administrative Services

June McLaughlin*, Academic Senate President

Cheryl Bailey*, Faculty Representative

Robert Melendez*, Faculty Representative

Maria Nunez, Classified Senate Representative

Traci Fahimi*, Dean Representative

Loris Fagioli*, Director of Research, Planning and Accreditation

Feras Khatib, Student Representative

** Asterisks indicate members who belong to both the DWPC and DWIPC.*

ENVIRONMENTAL SCAN/RESEARCH

The consultant team developed an Environmental Scan as part of the planning process for the Strategic Plan. This Scan provides a report on the internal and external current conditions related to population and demographics, business growth, student enrollment, success factors, and competitive educational providers. Data analysis was incorporated through the Environmental Scan existing conditions report and in the development of goals and objectives for long-term planning.

A profile of the South Orange County community served by Irvine Valley College, derived from the Environmental Scan, is presented in Chapter II. An internal profile of the college similarly derived from the Environmental Scan follows in Chapter III.

IRVINE VALLEY COLLEGE ON-CAMPUS WORKSHOPS

On February 1st, 2019 MIG staff facilitated a series of 11 workshops on the campus of Irvine Valley College (IVC). The purpose of these sessions was to gather qualitative information from a broad spectrum of the campus community for the development of new Educational Master and Strategic Plans (EMSP) for Irvine Valley College and the South Orange County Community College District. During these workshops, the consultant team heard from representatives of college committees and other key stakeholder groups. Among these sessions was a midday open forum to which the entire campus community was invited. In addition to the open forum, the committees and key groups with which the MIG team met included the following:

- Academic Senate (AS)
- Associated Student Government (ASG)
- Classified Senate (CS)
- Classified Staff and Evening Employees
- Deans and Managers (DAM)
- Faculty
- Guided Pathways (GP)
- Institutional Effectiveness Committee (IEC)
- President's Executive Council (PEC)
- Strategic Planning and Accreditation Council (SPAC)

Similar sessions were held at Saddleback College a week later.

ON-CAMPUS WORKSHOP FINDINGS

A number of key issues and challenges were identified during the on-campus workshops. These issues along with findings from the online questionnaire (presented below) were used to help identify major themes that would shape the development of the District-wide Strategic Plan.

- Declining college-age population and changing demographics
- Responding effectively to the impact of social media and technology
- Aligning programs with ever-changing labor market needs
- Addressing aging facilities and infrastructure
- Overcoming misperceptions that a community college is a “lesser” education
- Improving organizational decision-making; desire for more transparency and collaboration
- Providing a sense of community for student commuters
- Integrating Guided Pathways and similar initiatives into the organizational culture and structure
- Meeting the many non-academic needs of today's students that impact learning
- Preparing faculty and staff for a more diverse student body
- Simplifying a complex enrollment process
- Improving full-time/part-time faculty ratio
- Moving beyond previous inter-college tension
- Ensuring consistent information delivery to students
- Reducing delivery time for new facilities
- Responding effectively to state mandates (e.g. equity, new funding formula)

ONLINE QUESTIONNAIRE

SOCCCD launched an online survey to collect input from stakeholders on the District's programs and facilities in February 2019. The survey remained open for approximately two months until April 2019, collecting a total of 1,062 responses from both campuses. The online survey provided stakeholders who might not participate in a traditional workshop or intercept event with an opportunity to share their experiences and needs on their own time. Key findings from the online questionnaire as expressed by participants included the following:

- **Response to Student Needs** – Participants indicated that classes and administrative, business, and student services need to be more responsive to students' needs, particularly those of low-income students, working students, and students with families.
- **Reputation** – Participants have generally had positive experiences with the colleges and District, noting that the colleges have excellent transfer rates, rigorous academic programs, and high-quality professors while still being relatively affordable.
- **High-Quality Professors** – Professors are generally well regarded and are described as knowledgeable and caring.
- **Unmet Facility Needs** – A variety of facility needs were identified, including additional classrooms, up-to-date technology, faster and more reliable internet, and wellness and athletic facilities, among others.
- **Affordability** – The colleges and District are perceived as affordable overall, but many participants indicated a need to reduce the cost of materials, programs, and amenities, including textbooks, parking, and online courses.
- **Communication** – There is a perceived need for improved communication between stakeholder groups, including departments, services, faculty and staff, the student body, and the community.
- **Additional Staff Members** – There is a need for more full-time professors and more staff members in the administrative, business, student services, and IT departments.

PROGRAM AND UNIT ASSESSMENTS

A core element of the EMSP development process is the evaluation and assessment of existing programs and the exploration of potential new programs. The initial step in the program assessment process took place while the on-campus workshops and online questionnaire were also engaging the overall community of both colleges. This was in the form of a program and unit assessment questionnaire distributed internally at both colleges and within District Services. The purpose of the questionnaire was to gather information from faculty, staff, managers, and administrators to assess the needs, issues, challenges, and opportunities associated with the programs/units in each college and District Services. This information, along with findings from the environmental scan, campus workshops, and online questionnaire, was used to help identify emerging themes presented at the District-wide charrette and to guide further development of the Education Master Plans.

DISTRICT-WIDE CHARRETTE

Following Phase I, the consultant team identified ten recurring themes across all engagement activities and presented these themes at a district-wide charrette on April 5, 2019. These ten themes are listed below. Approximately 80 stakeholders attended the event and participated in small group discussions to provide additional input on the ten recurring themes. The input collected at the charrette was summarized and incorporated into Phase II.

- Theme A: Teaching and Learning Approaches
- Theme B: Preparing Students
- Theme C: Aligning Programs
- Theme D: Ensuring Equity
- Theme E: Strategizing Enrollment
- Theme F: Modernizing Facilities and Technology
- Theme G: Improving Organizational Effectiveness
- Theme H: Expanding Partnerships
- Theme I: Marketing and Communication
- Theme J: Strengthening Relationships

DISTRICT-WIDE PLANNING COUNCIL AND STRATEGIC PLAN GOALS IDENTIFICATION

The ten themes and related results that emerged from the district-wide charrette were carefully reviewed and discussed in a series of DWIPC and DWPC meetings culminating in a May 2019 DWPC retreat. The consultant team initiated the process by sharing ideas and strategies for addressing each of the themes generated by breakout groups during the charrette. To further stimulate discussion, the project team presented a framework that showed a convergent relationship between the emerging themes with the goals of the current District-wide Strategic Plan (2014-2020) and the six statewide goals of the California Community Colleges Vision for Success. In addition, district-wide initiatives proposed by the Board of Trustees in response to findings from the Environmental Scan were presented. In response to this information, during the first of these meetings, DWIPC members suggested that the Guided Pathways structure could provide a further clarifying lens for translating the charrette themes into a set of meaningful goals for the strategic plan. Input from this initial DWIPC discussion was used to convert the ten charrette themes into a more compact set of five goals that reflected statewide priorities as conveyed in the Vision for Success and by Guided Pathways.

Subsequently, during a vigorous brainstorming discussion, these five draft goals were examined, analyzed, and reconfigured by the full DWPC to ensure these strategic goals were targeting the most critical educational and institutional priorities of the District and the two colleges. Later that same month, during a day-long retreat, DWPC members worked together to further clarify these strategic plan goals by identifying desired outcomes, objectives, measurable targets, and data sources for each goal. Goals and objectives were also reviewed to ensure alignment with District-wide initiatives previously identified by the Board of Trustees. In the weeks that followed, the DWPC continued to focus on the results of their retreat discussion to refine their proposed goals and objectives resulting in the four strategic goals and their objectives.

DISTRICT-WIDE STRATEGIC PLAN GOALS

ENSURE	GOAL 1: Ensure student equity in access and achievement
TRANSFORM	GOAL 2: Transform lives through learning and achievement
ENGAGE	GOAL 3: Engage with the community in economic prosperity, civic events and cultural activities
OPTIMIZE	GOAL 4: Optimize our institutional design and structure with a student-centered focus

EMP DIVISIONAL AND PROGRAM ASSESSMENT

Concurrent with the development and refinement of goals for the District-wide Strategic Plan, Irvine Valley College academic school deans and directors were asked to examine the current state and future direction of their programs. An essential element of the EMP is the evaluation and assessment of existing instructional service programs, student services, and college-wide initiatives and the exploration of potential new programs. This review helps provide an understanding of the strengths, opportunities, and needs for programs currently in place, and help set the foundation for developing new program areas.

Building on the earlier program and unit assessments conducted in phase I of the EMSP planning process, each division was provided with program assessment tables and growth projections developed by the EMSP consultant working with SOCCCD planning and research staff. The methodology for developing the data used in the divisional/program assessments and for college and academic school growth forecasts is described in the introduction to chapter IV.

This quantitative data, along with a set of questions, was used to provide an informed basis for thinking about the current state and future of their respective divisions. The leadership of each division provided descriptive and analytical overviews of their programs drawing upon this data as well as their own understanding and perspectives. This process generated an in-depth, up-to-date description of each division and an informed portrayal of the challenges and opportunities facing each division, as well as what was envisioned as the future direction of the division. These form the substance of the education programs and services presented in the final chapter of this EMP.

RELATION TO STATE INITIATIVES

In recent years, the California Community Colleges system has launched numerous statewide initiatives to improve successful outcomes for students in every community college across the state. The development of the Education Master Plan, along with the District-Wide Strategic Plan and the rest of the EMSP, was an opportunity for SOCCCD, Irvine Valley College, and Saddleback College to continue their ongoing efforts to fully align with both the goals and spirit of these initiatives profiled below.

VISION FOR SUCCESS

Released in September 2017, the Vision for Success established a vision for improving the performance of the California Community Colleges system. The purpose is to ensure the community college system is fulfilling its ultimate aim to help students complete their educational goals. It does this by adopting six student outcome goals that clearly define priorities and a focus for the system as a whole:

- Goal 1 – Completion: Increase the number of students earning credentials by at least 20 percent
- Goal 2 – Transfer: Increase the number of students who transfer by 35 percent
- Goal 3 – Unit Accumulation: Reduce average units accumulated by students who complete degrees to 79
- Goal 4 – Workforce: Increase the number of students who get jobs in their field of study to 69 percent
- Goal 5 – Equity: Reduce equity gaps among underrepresented students by 40 percent over 5 years and eliminate the gaps in 10 years -
- Goal 6 – Regional Equity: Fully close regional achievement gaps by 2026-27 through faster improvements among colleges located in regions with the lowest educational attainment of adults

Vision for Success is the foundational statewide initiative for ensuring positive outcomes for students entering the community college system. The other initiatives are aligned with the Vision for Success as they were designed to help make its goals a reality.

GUIDED PATHWAYS

Guided Pathways is the primary vehicle for achieving the Vision for Success goals. It is a framework designed to help students reach their goals by creating highly structured, crystal-clear roadmaps that lead to defined educational or career objectives. Guided Pathways also integrates support services in ways that make it easier for students to get the help they need during every step of their community college experience. The Guided Pathways framework consists of four major pillars:

- Create clear curricular pathways to employment and further education
- Help students choose and enter their pathway
- Help students stay on their path
- Ensure that learning is happening with intentional outcomes

AB 705

AB 705 is a bill signed by the Governor on October 13, 2017, that took effect on January 1, 2018. The bill requires that a community college district or college maximize the probability that a student will enter and complete transfer-level coursework in English and math within a one-year timeframe and use, in the placement of students into English and math courses, one or more of the following: high school coursework, high school grades, or high school grade point average.

AB 19: CALIFORNIA PROMISE PROGRAM

AB 19, the California Promise Program, authorizes colleges to waive enrollment fees for one year for all first-time, full-time students. Previously, only students who could meet certain criteria qualified for the enrollment waiver program, which was formerly known as the Board of Governors Fee Waiver.

STUDENT EQUITY AND ACHIEVEMENT (SEA) PROGRAM

The Student Equity and Achievement (SEA) program eliminated separate funding for three categorical programs: Student Success and Support Programs (SSSP), Basic Skills Initiative (BSI), and Student Equity (SE). It integrates the three programs into the single SEA program to advance the system-wide goal of achievement for all students with an emphasis on eliminating achievement gaps for students from traditionally underrepresented groups.

STUDENT CENTERED FUNDING METRICS (SCFF)

The Student Centered Funding Formula (SCFF) was introduced in the 2018-19 budget. In prior fiscal years, enrollment was the traditional driver of community college funding, but many students who entered community college never completed a degree or certificate or transfer, or it took them a long time to do so. The new SCFF is in part a performance-based funding formula that reflects the degree to which students in each college are successfully achieving their educational and career outcomes.

Discretionary funds are to be allocated to community college districts based on three calculations.

- A base allocation, which largely reflects enrollment.
- A supplemental allocation based on the numbers of students receiving a College Promise Grant, students receiving a Pell Grant and students covered by AB 540.
- A student success allocation based on outcomes that include the number of students earning associate degrees and credit certificates, the number of students transferring to four-year colleges and universities, the number of students who complete transfer-level math and English within their first year, the number of students who complete nine or more career education units and the number of student who have attained the regional living wage.

AB 288: DUAL ENROLLMENT

AB 288 establishes the College and Career Access Pathways (CCAP) partnerships to facilitate the development and promotion of K-12 and community college dual enrollment programs. It helps advanced high school students to begin college early; by doing so, it saves both students and the state time, money, and scarce educational resources. It also improves college readiness skills for those students who may be academically underprepared for college-level course work, and by doing so helps a broader range of students transition from high school to college, particularly students from backgrounds for which a college education was not a given.

CHAPTER 2 COMMUNITY AND REGIONAL CONTEXT

The Environmental Scan collected background information and qualitative and quantitative data to inform the development of the three interrelated components of the Education Master and Strategic Plan (EMSP), which include the South Orange County Community College District's District-wide Strategic Plan and the Education Master Plans for Irvine Valley and Saddleback Colleges. This section summarizes the external trends identified during the Environmental Scan—including changing population demographics and employment projections—which play a role in the development of the Education Master and Strategic Plan, and in determining the future direction of programs, facilities, faculty and staff, support services for students, communications and outreach, and financial resources. Certain district-wide internal trends, such as college enrollments and student outcomes, are discussed in this chapter. Internal trends and data specific to Irvine Valley College are presented in Chapter 3.

KEY FINDINGS AND IMPLICATIONS

DEMOGRAPHIC TRENDS

AN AGING WORKFORCE AND POPULATION

- The growth of adult residents in older age groups will drive most of Orange County's population growth over the next few decades, with substantial growth among seniors aged 75 and older.
- Increasing retirements among older adult workers will provide more job opportunities for younger workers.
- The number of adults of working age (25 to 64 years old) in the region is expected to be flat in the coming decades.

DECLINING SCHOOL-AGE ENROLLMENT

- Orange County's school-age enrollments are projected to decline sharply by 2025, mirroring larger statewide trends following declines in birthrates after the Great Recession.
- There will be 40,000 fewer K-12 enrollments in Orange County in 2027 than there were in 2017, a loss of nearly nine percent of school-age students.

GROWING ETHNIC DIVERSITY CONTINUES TO SHAPE THE REGION

- Southern California will be a majority Latinx/Hispanic region by 2025.³
- In Orange County, currently one-third of residents are Latinx/Hispanic, and 20 percent are of Asian descent. By 2060, 40 percent of the population will be Latinx/Hispanic, and 25 percent will be Asian.

HIGH COST OF LIVING

- Median home values and gross rents in the South Orange County Community College District Service Area are higher than the Orange County median values.
- Transportation costs amount to 25 percent of the average Orange County resident's monthly budget.

EMPLOYMENT

³ In this case, Southern California refers to the region governed by the Southern California Association of Governments, commonly referred to as SCAG. This includes Los Angeles, Orange, Riverside, San Bernardino and parts of Imperial and Ventura Counties.

- Employment in the SOCCCD Service Area is projected to grow by nearly 17 percent, with 100,000 new jobs expected by 2035.
- Health care services firms employ the most workers in Orange County; within the South Orange County Community College District, more people are employed in professional and technical services occupations.

DEMOGRAPHIC IMPLICATIONS FOR COMMUNITY COLLEGES

- Declines in regional school enrollments and high school graduation rates may lead to fewer college-age student enrollments at local institutions.
- Growing older adult populations may lead to an expansion in health care services and related fields.
- Retirements among older workers in middle-skill professions offer opportunities for community college students.
- SOCCCD and other districts will need to plan for a mix of academic programs and support services that appropriately meet the diverse needs of older and non-traditional students, such as adult learners in need of re-training for new career paths, or increased community education classes for seniors.

REGIONAL INDUSTRY AND EMPLOYMENT TRENDS

SIGNIFICANT INDUSTRIES IN SOUTHERN CALIFORNIA AND ORANGE COUNTY

- In Southern California, growth in the health care sector over the next decade is expected to create an additional 330,000 jobs in the region. The logistics sector (transportation and warehousing) is projected to grow by 22 percent, adding 81,000 jobs. Hospitality (accommodation and food services) will grow by 15 percent, or about 113,000 new jobs.
- Orange County employment growth projections mirror some of the broader regional trends, with health care, hospitality, and administrative support services sectors projected to grow the most over the next decade.
- Key industry clusters in Orange County and Southern California include information technology; digital media and data analytics; biotech, including bioscience research; biopharmaceuticals and medical device manufacturing; health care services; and professional and technical services.
- The region is also a hotbed for action sports companies and has large and growing tourism and hospitality industries.

EMERGING INDUSTRIES IN ORANGE COUNTY

- Emerging industries in the region include those connected to the green economy, and businesses involved in the integration of information technology and healthcare.

GROWING OPENINGS IN MIDDLE-SKILL JOBS

- Nearly a third of all new job openings in the coming years will require “middle skills,” education, and training beyond a high school diploma, such as associate degrees or certification awards, occupational licensing, or apprenticeship opportunities.
- By 2025, the state of California is likely to face a shortage of more than a million workers with some postsecondary training.
- Retirements will lead to increased numbers of openings in middle-skill jobs.

THE CHANGING NATURE OF WORK

- The advances of tech-infused workplaces require workers who understand how to use technology and data, and who are flexible and adaptable as industries and work tasks evolve.

SOUTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT DEMOGRAPHICS AND TRENDS

ENROLLMENT

- The number of students at SOCCCD (by headcount) has declined 11 percent since 2009.
- District-wide enrollments have declined by 8,000 (6.6 percent) between 2009 and 2017, and by 1,900 (1.7 percent) since 2013.
- SOCCCD total full-time equivalent students (FTES) has experienced slight increases in Fall 2016 and declines in Fall 2015 and Fall 2017, but remained relatively flat in the period between Fall 2009 and Fall 2017, averaging 12,490 FTES during this time.

STUDENT DEMOGRAPHICS

- Ninety percent of students live within the community college district; two percent of the student body qualify for AB 540 status.
- Both schools are experiencing an increase in enrollment among older adults and high-school-age students.
- There has been a rise in enrollments among students of Asian and mixed descent at both schools between 2013 and 2017. Both schools have seen declines among African American students.

EDUCATIONAL GOALS

- Most students who enroll at Saddleback College or Irvine Valley College have plans to transfer to four-year schools.
- Ten percent of South Orange County Community College District students say they are enrolled in career training; another twenty percent have personal development educational goals.

INSTRUCTION METHODS

- The number of SOCCCD students taking online classes has grown 26 percent since 2013.
- Twenty percent of students take classes via multiple methods of instruction.
- Rates of retention and success are improving among online students, though success rates still fall below traditional classroom outcomes.

STUDENT OUTCOMES

- Students across the District perform above the statewide average when looking at the completion rates of students, those who complete a degree or certificate, and/or those who transfer to another school within six years of their initial enrollment.
- Student cohort persistence rates have grown between 2008 and 2012 class cohorts, and completion rates are well above statewide averages.
- Among many students of color, those who enroll already prepared for college are more likely to complete their programs of study.

DEGREES AND AWARDS

- Saddleback College and Irvine Valley College collectively offer more than 220 associate degrees and nearly 200 certificate awards.
- Eighteen of the top 25 degrees among students who graduate from SOCCCD (nearly 75 percent) are offered by both colleges.
- In 2017, students at both schools needed an average of at least 8.5 semesters to complete their degree or certificate awards.

TRANSFERS

- Transfer rates have grown significantly at both schools, up more than 20 percent from 2013 to 2017.

- Nearly half of all SOCCCD students who transfer to four-year institutions attend University of California or California State University schools.

OUTREACH SUMMARY

Members of the South Orange County Community College District community, including students, administrators, faculty, staff, and residents of the SOCCCD Service Area, have shared ideas for the future directions of the District and the upcoming Educational Master and Strategic Plan through a series of focus groups, interviews, and an online questionnaire.

METHODOLOGY

This environmental scan makes extensive use of data collected from a variety of sources. We used current and historical demographic and economic data from the US Census American Community Survey and the Bureau of Labor Statistics to look at and compare the South Orange County Community College District Service Area, Orange County and the Southern California region. Both the Southern California Association of Governments (SCAG) and the California Department of Finance provide projection estimates of future population and employment growth. K-12 enrollment and graduation data and projections are provided by the California Department of Education and California Department of Finance. Industry and employment data were gathered through EMSI and BLS, and from the Orange County Business Council. Student and college-level data were provided by SOCCCD through the inForm data warehouse; some institution-level data and statewide community college data were collected through the California Community Colleges Chancellor's Office Data Mart, IPEDS and NCES.

It is important to note that the population and employment growth projections and trends will be impacted by ongoing changes in the economy and the reactions that employers, colleges, consumers, and others have over time to those changes. This information serves as a direction toward future planning but will need to be updated on an ongoing basis to remain relevant with evolving trends.

SERVICE AREA AND REGIONAL POPULATION TRENDS

The next section describes the cities within the South Orange County Community College District Service Area looks at the District's relationship to the region and examines projections for regional population growth through the coming decades.

SERVICE AREA POPULATIONS

- At least 83 percent of students enrolled in the South Orange County Community College District live within the District's Service Area (see Table 2.1).
- One in five students (20 percent) from the South Orange County Community College District live in the City of Irvine (see Figure 2.1).
- More than 11 percent of SOCCCD students are residents of Mission Viejo, the second-largest concentration of SOCCCD students among Orange County cities.

REGIONAL POPULATION TRENDS

The South Orange County Community College District population (975,000 people) represents about one-third of Orange County's total population of nearly 3.2 million people (see Table 2.2).

- Within the SOCCCD Service Area, more than one-fourth of residents live in the City of Irvine; the next largest cities include Mission Viejo (10 percent of service area residents), Newport Beach (9 percent), and Lake Forest and Tustin (8 percent each) (see Table 2.3).

REGIONAL POPULATION PROJECTIONS

- Orange County population projections by the Southern California Association of Governments (SCAG) estimate that an additional 150,000 people will be living in the county by 2035, or a growth of about five percent from 2020 to 2035 (see Table 2.4).
- The greater SCAG region, which encompasses Orange, Los Angeles, Riverside, and San Bernardino Counties and parts of Ventura and Imperial counties, is estimated to grow 12 percent, or 2.4 million people, between 2020 and 2035. Much of this growth will be in Riverside and San Bernardino Counties, where some city populations are projected to grow as much as 50 percent.⁴

SERVICE AREA POPULATION PROJECTIONS

- The South Orange County Community College District Service Area is projected to grow at a similar rate (four percent) over this period (2020 to 2035), with total growth approximately 39,000 new residents (see Table 2.4).
- Nearly all the SOCCCD Service Area's projected growth is estimated to take place in the City of Irvine, which may grow by 15 percent between 2020 and 2035, adding an estimated 38,600 people to its population (see Table 2.5).
- Most other cities in the South Orange County Community College District Service Area are projected to have only slight gains in population over this period.

⁴ Southern California Association of Governments, Socio Economic Library: Adopted 2012 RTP Growth Forecast, accessed April 2019 from <http://gisdata.scag.ca.gov/Pages/SocioEconomicLibrary.aspx>

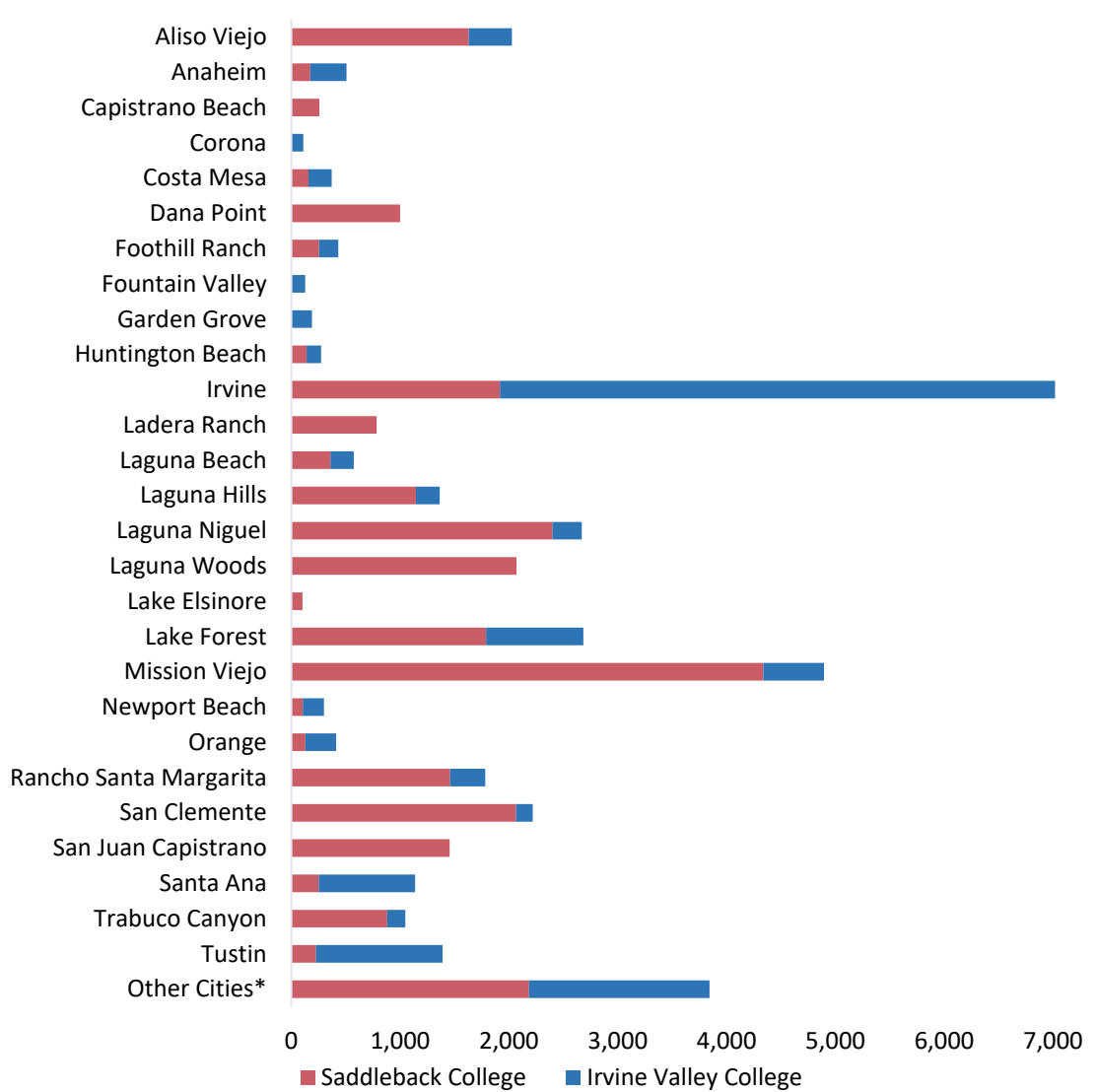
TABLE 2.1: SOCCCD AND COLLEGE ENROLLMENT BY CITY, FALL 2017

City	SOCCCD Total	
	Student Count	Student Percent
Aliso Viejo	2,026	5%
Anaheim	506	1%
Capistrano Beach	257	0.6%
Corona	109	0.3%
Costa Mesa	370	0.9%
Dana Point	999	2%
Foothill Ranch	432	1%
Fountain Valley	127	0.3%
Garden Grove	190	0.5%
Huntington Beach	274	0.6%
Irvine	8,615	20%
Ladera Ranch	783	2%
Laguna Beach	574	1%
Laguna Hills	1,363	3%
Laguna Niguel	2,668	6%
Laguna Woods	2,069	5%
Lake Elsinore	102	0.2%
Lake Forest	2,683	6%
Mission Viejo	4,894	11%
Newport Beach	299	0.7%
Orange	411	1%
Other Cities	3,843	9%
Rancho Santa Margarita	1,782	4%
San Clemente	2,218	5%
San Juan Capistrano	1,454	3%
Santa Ana	1,137	3%
Trabuco Canyon	1,047	2%
Tustin	1,389	3%
SOCCCD Service Area Total	35,552	83%
All Cities Served	42,621	100%

Note(s): "Other Cities" is a grouping of cities with under 100 students. Rows highlighted in blue represent cities that fall within SOCCCD's Service Area.

Source: SOCCCD inFORM Data Warehouse

FIGURE 2.1: SOCCCD ENROLLMENT BY CITY, FALL 2017



Note(s): "Other Cities" is a grouping of cities with under 100 students.

Source: SOCCCD inFORM Data Warehouse

TABLE 2.2: COUNTY AND SOCCCD POPULATIONS, 2017

Region	Population	Percent of County
SOCCCD	973,197	31%
Orange County	3,155,816	-

Note: SOCCCD population totals do not include unincorporated community population counts due to data unavailability.

Source: US Census ACS 5-Year Estimates, 2013-2017

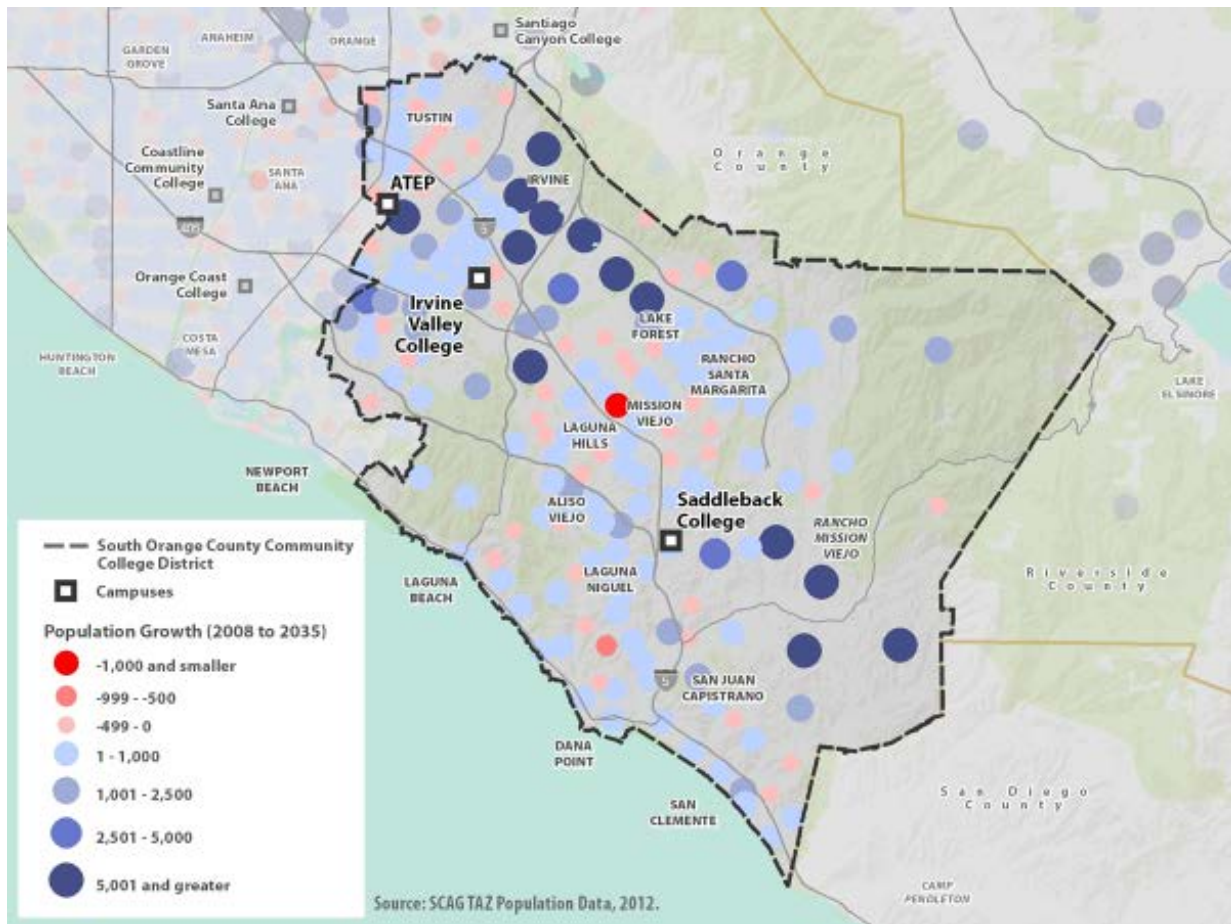
TABLE 2.3: SOCCCD SERVICE AREA POPULATION, 2017

City	Population	Percent of Service Area Population
Aliso Viejo	50,691	5%
Dana Point	34,028	4%
Irvine	256,877	26%
Laguna Beach	23,224	2%
Laguna Hills	31,235	3%
Laguna Niguel	65,429	7%
Laguna Woods	16,314	2%
Lake Forest	81,812	8%
Mission Viejo	96,535	10%
Newport Beach	86,793	9%
Rancho Santa Margarita	49,078	5%
San Clemente	65,226	7%
San Juan Capistrano	35,948	4%
Tustin	80,007	8%
SOCCCD Service Area	973,197	100%

Note: Does not include unincorporated areas due to data unavailability.

Source: US Census ACS 5-Year Estimates, 2013-2017

FIGURE 2.2: DISTRICT PROJECTED POPULATION GROWTH, 2008 TO 2035



Source: SCAG Socio Economic Library, Adopted 2012 Growth Forecast

TABLE 2.4: REGION, COUNTY AND DISTRICT POPULATION GROWTH PROJECTIONS, 2008 TO 2035

Region	2008	2020	2035	Percent Change, 2020 to 2035	Total Change, 2020 to 2035
SOCCCD	890,800	1,001,700	1,041,600	4%	39,900
Orange County	2,989,500	3,266,200	3,421,100	5%	154,900
Los Angeles County	9,778,000	10,404,000	11,353,000	9%	949,000
Riverside County	2,128,000	2,592,000	3,324,000	28%	732,000
San Bernardino County	2,016,000	2,268,000	2,750,000	21%	482,000
SCAG Region	17,895,000	19,663,000	22,091,000	12%	2,428,000

Source: SCAG Socio-Economic Library, Adopted 2012 Growth Forecast

TABLE 2.5: POPULATION GROWTH PROJECTIONS FOR CITIES IN SOCCCD, 2008 TO 2035

City	2008	2020	2035	Percent Change, 2020 to 2035	Total Change, 2020 to 2035
Aliso Viejo	47,200	51,500	51,000	-1%	-500
Dana Point	33,400	35,900	36,200	0.8%	300
Irvine	203,600	265,600	304,200	15%	38,600
Laguna Beach	22,700	23,500	23,400	-0.4%	-100
Laguna Hills	30,300	32,100	32,000	-0.3%	-100
Laguna Niguel	62,700	65,700	65,200	-0.8%	-500
Laguna Woods	16,200	17,000	16,900	-0.6%	-100
Lake Forest	77,200	88,100	87,400	-0.8%	-700
Mission Viejo	93,200	96,600	97,000	0.4%	400
Newport Beach	84,200	88,700	90,300	2%	1,600
Rancho Santa Margarita	47,800	49,500	49,000	-1%	-500
San Clemente	63,200	68,100	68,300	0.3%	200
San Juan Capistrano	34,400	38,100	37,800	-0.8%	-300
Tustin	74,700	81,300	82,900	2%	1,600
SOCCCD Total	890,800	1,001,700	1,041,600	4%	39,900

Source: SCAG Socio-Economic Library, Adopted 2012 Growth Forecast

REGIONAL DEMOGRAPHICS: AGE

This section looks at the age demographics of the population within Orange County and the South Orange County Community College District Service Area, as well as regional and service area projections for growth or decline by age cohort in the coming decades. Like most of Southern California, Orange County and the SOCCCD Service Area populations are growing older, and the number of school-age children is in decline. Families are leaving the area as well, as many are priced out of local housing opportunities.⁵ These changes have implications for college enrollments and the regional economy.

CURRENT POPULATION DEMOGRAPHICS

- School-age children (those from 5 to 17 years old) make up about 16 percent of the South Orange County Community College District Service Area population and the broader Orange County population as well (see Table 2.6 below).
- About nine percent of residents in the Service Area and Orange County are in the traditional college-age cohort (18 to 24 years old), while 54 percent are working-age adults.
- Seniors, those 65 and older, make up about 15 percent of the population in the SOCCCD Service Area, and approximately 14 percent of Orange County's population.

DECLINING K-12 ENROLLMENTS

- An approaching "cliff" in K-12 student enrollments projected in the next decade may lead to a similar decline in enrollments at community colleges among traditional college-age students, as Orange County loses more than 40,000 school-age children by 2027 (Figure 2.3).⁶

BY 2060 IN ORANGE COUNTY⁷

The population of school-age children is expected to continue to decline, a trend that will mirror similar declines across the region and the state (Figure 2.4).

- The proportion of college-age residents to the whole population will be like what it is today, decreasing by less than one percent.
- Growth in the working-age adult population, those between the ages of 25 and 64, will also be flat (two percent growth).
- Retirees and older adults will grow substantially, especially among those 75 years of age and older.
- Retirees and seniors will become nearly one-third of the county's population by 2060 (Figure 2.5).

ADDITIONAL AGE-RELATED IMPLICATIONS FOR THE REGION

- Demand for childcare and education occupations may wane with fewer young and school-age children.
- Growth can be anticipated in industries and occupations related to healthcare and others which cater to senior populations.
- Retirements will lead to increased numbers of openings, many in middle-skill jobs.

⁵ Orange County Business Council, Orange County Workforce Indicators Report, 2019, p.21, <https://www.ocbc.org/research/workforce-indicators-report/>

⁶ California Department of Finance, Projected California Public K-12 Graded Enrollment by County by Year, 2018 Series

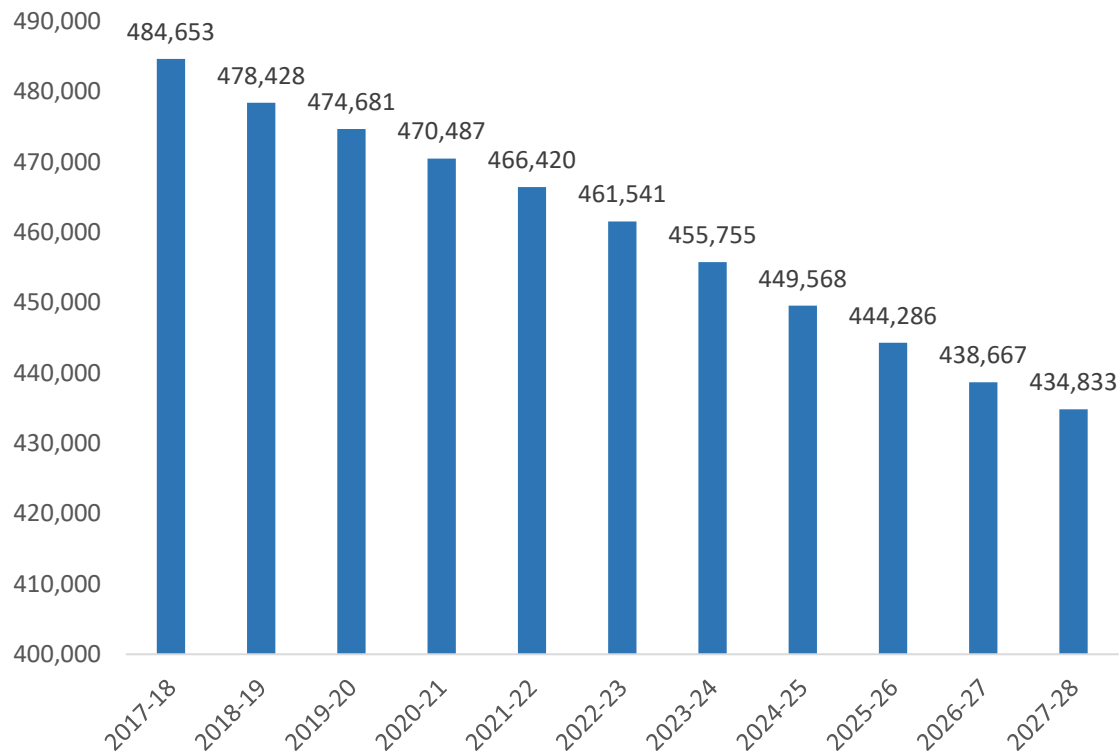
⁷ Southern California Association of Governments, Orange County Economic Report, 2018, p.9, http://economy.scag.ca.gov/Economy%20site%20document%20library/2018_EconomicReportOC.pdf

TABLE 2.6: DISTRICT AND COUNTY POPULATION BY AGE GROUP, 2017

Age Group	SOCCCD	Percent of SOCCCD	Orange County	Percent of Orange County
Under 5 years	54,808	6%	188,952	6%
5 to 17 years	153,280	16%	527,815	17%
18 to 24 years	87,874	9%	306,891	10%
25 to 64 years	530,871	55%	1,705,713	54%
65 years and older	146,364	15%	426,445	14%

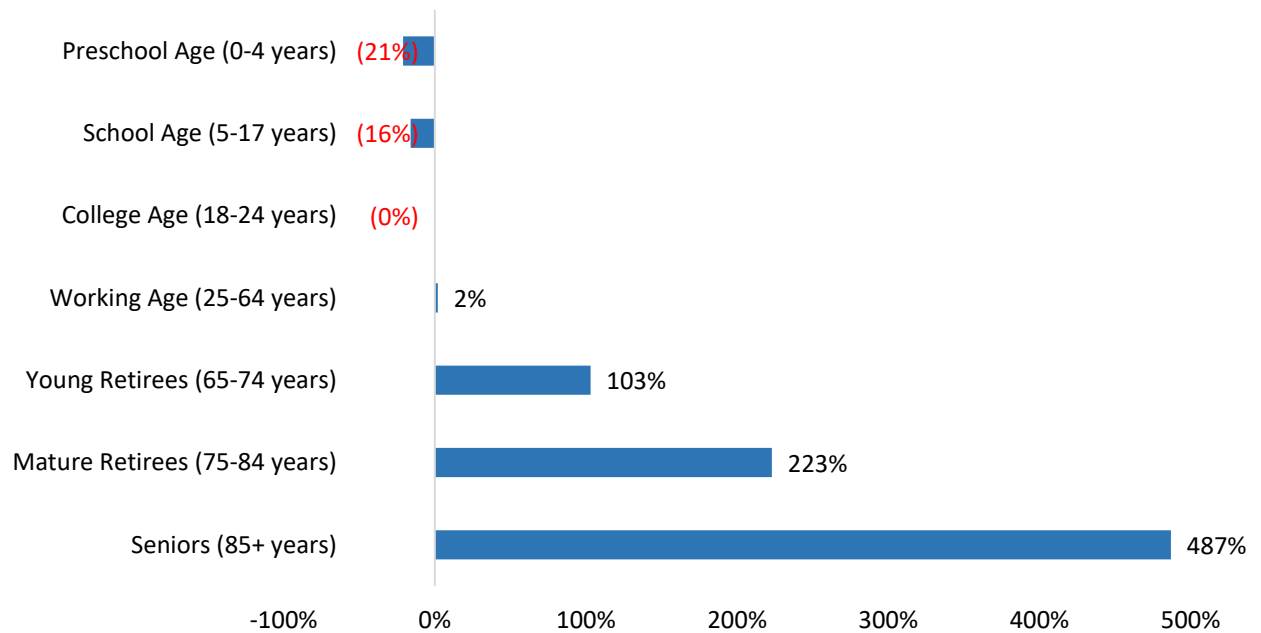
Source: US Census ACS 5-Year Estimates, 2013-2017

FIGURE 2.3: PROJECTED K-12 ENROLLMENT, ORANGE COUNTY, 2017-2027



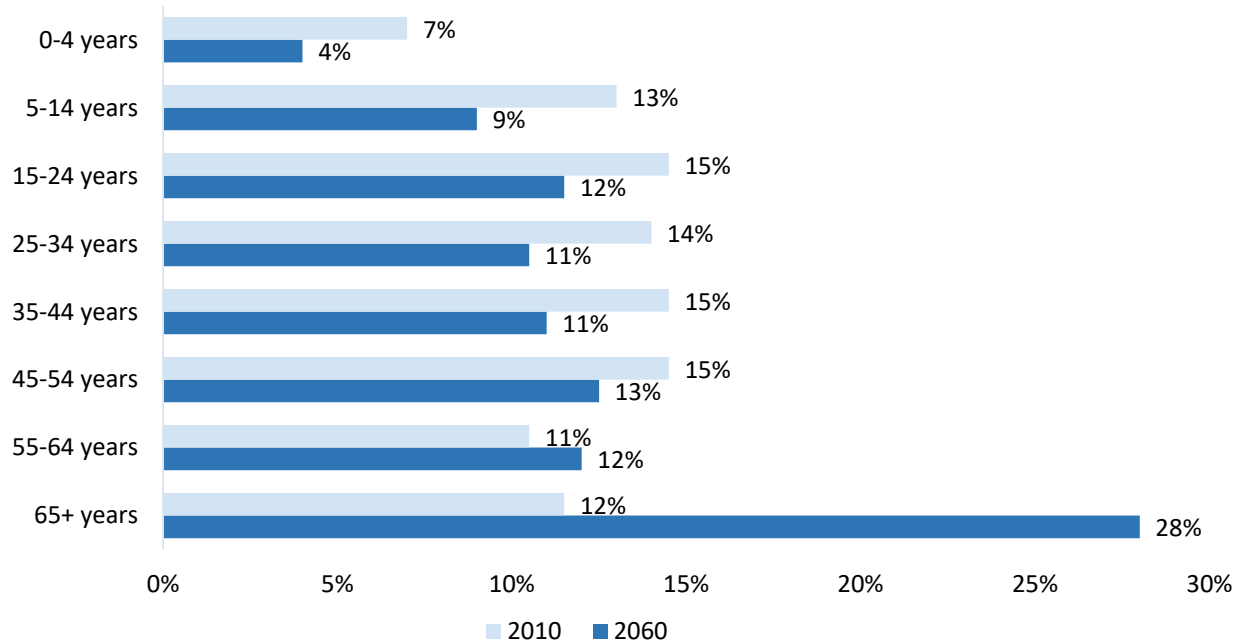
Source: California Department of Finance

FIGURE 2.4: ORANGE COUNTY PROJECTED POPULATION CHANGE BY AGE, 2010 TO 2060



Source: SCAG County Economic Report, 2018

FIGURE 2.5: ORANGE COUNTY PROJECTED POPULATION AGE GROUP, 2010 AND 2060



Source: Orange County Business Council Workforce Indicators Report, 2019

REGIONAL DEMOGRAPHICS: RACE AND ETHNICITY

Alongside changes in age, Orange County continues to grow in its ethnic diversity. Entrepreneurs and highly educated workers “with global connections” provide important economic advantages and cultural assets to the region, but many new immigrants and residents and their children need training programs and support.⁸ Expanding access to English language programs, for example, will help guarantee a steady supply of workers with basic skills in reading and writing to fill a growing number of job openings expected as older workers retire.

CURRENT POPULATION DEMOGRAPHICS

- More than half of Orange County residents are Asian or Latinx (of any race); only two in five identify as white (see Table 2.7).
- While the South Orange County Community College District Service Area holds a similar ratio of Asian residents as the county population, nearly 60 percent of its residents are white.
- The SOCCCD Service Area has only about half the rate of Latinx residents as the county as a whole.
- Asian residents constitute over 40 percent of the population in the city of Irvine; 41 percent of residents in Tustin and 36 percent in San Juan Capistrano are Latinx (Table 2.8).

REGIONAL PROJECTIONS BY RACE AND ETHNICITY

- In Orange County, the proportion of white residents will continue to decline over the coming decades; SCAG estimates project a ten-percentage point decrease from 2010 to 2060 (Figure 2.6).⁹
- By 2060, Latinx residents will represent nearly 40 percent of the population of Orange County, and almost one in four residents will be Asian.

TABLE 2.7: SERVICE AREA, DISTRICT AND COUNTY POPULATION BY RACE/ETHNICITY GROUP, 2017

Race	SOCCCD	Orange County
White (alone)	58%	41%
African American (alone)	2%	2%
Hispanic or Latinx (of any race)	18%	34%
Asian (alone)	19%	20%
American Indian / AK Native (alone)	0.2%	0.2%
Native HI / Pacific Islander (alone)	0.2%	0.3%
Some other race (alone)	0.2%	0.2%
Two or more races	4%	3%

Source: US Census ACS 5-Year Estimates, 2013-2017

⁸ Southern California Association of Governments, Orange County Economic Report, 2018, p.9, http://economy.scag.ca.gov/Economy%20site%20document%20library/2018_EconomicReportOC.pdf

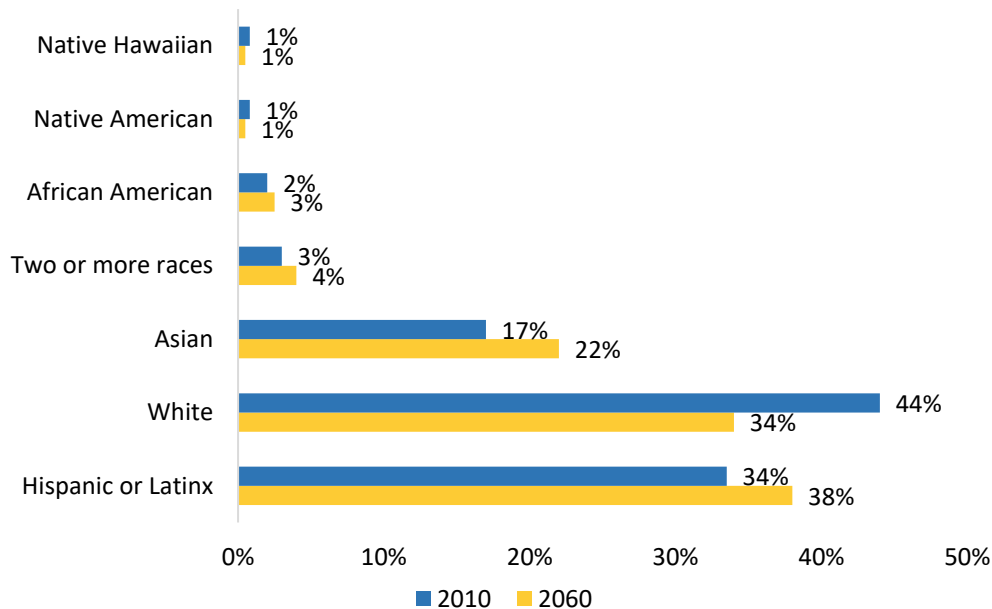
⁹ Southern California Association of Governments, Orange County Economic Report, 2018, p.10, http://economy.scag.ca.gov/Economy%20site%20document%20library/2018_EconomicReportOC.pdf

TABLE 2.8: SOCCCD CITIES POPULATION BY RACE/ETHNIC GROUP, 2017

City	White (alone)	African American (alone)	Hispanic or Latinx (of any race)	Asian (alone)	Am Indian/Alaska Native (alone)	Native Hawaiian /Pacific Islander (alone)	Some other race (alone)	Two or more races
Aliso Viejo	60%	2%	18%	15%	0.4%	0.1%	0.2%	4%
Dana Point	76%	2%	16%	3%	0.3%	0.0%	0.2%	2%
Irvine	42%	2%	10%	42%	0.1%	0.2%	0.2%	5%
Laguna Beach	82%	1%	8%	5%	0.1%	0.4%	0.4%	3%
Laguna Hills	59%	2%	21%	14%	1%	0.5%	0.0%	3%
Laguna Niguel	66%	2%	17%	10%	0.1%	0.2%	0.1%	4%
Laguna Woods	76%	0.4%	4%	18%	0.0%	0.0%	0.1%	1%
Lake Forest	54%	2%	25%	15%	0.4%	0.2%	0.2%	4%
Mission Viejo	67%	1%	17%	10%	0.2%	0.1%	0.1%	4%
Newport Beach	81%	1%	8%	8%	0.2%	0.1%	0.1%	2%
Rancho Santa Margarita	63%	2%	20%	10%	0.0%	0.1%	0.3%	4%
San Clemente	73%	1%	18%	4%	0.1%	1%	0.2%	3%
San Juan Capistrano	57%	0.1%	36%	3%	0.4%	0.2%	1%	2%
Tustin	30%	2%	41%	22%	1%	0.3%	0.1%	3%
SOCCCD Service Area	58%	2%	18%	19%	0.2%	0.2%	0.2%	4%

Source: US Census ACS 5-Year Estimates, 2013-2017

FIGURE 2.6: ORANGE COUNTY PROJECTED POPULATION BY RACE/ETHNIC GROUP, 2010 AND 2060



Source: SCAG County Economic Report, 2018

EDUCATIONAL ATTAINMENT AND COLLEGE PREPAREDNESS

The South Orange County Community College District Service Area and Orange County have high levels of advanced educational attainment, with the proportion of residents with bachelor's degrees or higher reaching 65 percent in several cities in the Service Area. And while SOCCCD's Service Area also has a greater proportion of residents who have completed high school than the county, there are parts of the region where residents have lower-than-average levels of basic educational attainment.

Lack of literacy and language proficiency are among the most serious barriers to entry into the labor market and career progression.¹⁰ Regardless of industry, English language and communication skills are essential factors for success in school and in the workplace. Employers want workers with soft skills, critical thinking capabilities, and an adaptable mindset—something that many students learn and get to practice in baccalaureate programs but may not access in high school or vocational training settings.

High school dropout rates, the number of students who are English Language Learners (ELLs), and the proportion of high school students who graduate prepared for college-level classes are all key outcome measures that can help determine whether a region is appropriately preparing its students for college study and work.¹¹

For students who do earn associate degrees or higher, there is a wage premium in many important and growing sectors of the economy. In an analysis of key Orange County industry sectors by the Orange County Business Council, community college graduates, on average, made nearly 60 percent more than their peers with only a high school degree. Five years later, they made 100 percent more than peers with just a high school education.¹²

The sections below look at the educational outcomes of residents in the Service Area and in Orange County, including high school graduation rates, college preparedness and eligibility, and postsecondary degree attainment.

EDUCATIONAL ATTAINMENT

- Residents of the South Orange County Community College District Service Area have higher rates of educational attainment than Orange County as a whole. Only 85 percent of residents in all of Orange County have completed high school, while 94 percent of SOCCCD Service Area residents have a high school degree (see Table 2.9 below).
- More than half of SOCCCD Service Area residents (55 percent) hold a bachelor's degree or higher, while less than 40 percent of Orange County residents have a bachelor's or advanced degrees.
- The cities of Irvine, Laguna Beach and Newport Beach have the highest rates of residents with bachelor's degrees or higher (65 to 67 percent), while Tustin and San Juan Capistrano have the lowest rates of bachelor's degree holders (41 percent and 37 percent, respectively) (Table 2.10).
- San Juan Capistrano, Aliso Viejo, and Mission Viejo have some of the highest levels of associate degree attainment with no additional education, from 12 to 17 percent (See Figure 2.8 below).

¹⁰ See for example Wrigley et al, *The Language of Opportunity: Expanding Employment Prospects for Adults with Limited English Skills*, The Center for Law and Social Policy, 2003, <https://www.clasp.org/sites/default/files/public/resources-and-publications/files/0150.pdf>

¹¹ Orange County Business Council, *Orange County Workforce Indicators Report*, 2019, p.28, <https://www.ocbc.org/research/workforce-indicators-report/>

¹² Orange County Business Council, *Orange County Workforce Indicators Report*, 2019, p.37, <https://www.ocbc.org/research/workforce-indicators-report/>

- There may be a high demand for community college education in areas north of Lake Forest and around ATEP, which have high levels of high school graduates and a low levels of residents with associate's degrees (See Figure 2.7 and 2.8 below).
- Parts of Irvine and Tustin that have the lowest rates of educational attainment beyond high school in the District may be key concentrations of potential students for associate's or other postsecondary degrees (See Figure 2.9).

HIGH SCHOOL DROPOUT RATES

- Orange County has some of the lowest dropout rates in California and has been consistently below the statewide average (see Figure 2.10 below).
- Among South Orange County Community College District Service Area high school feeder districts, dropout rates were below one percent in the 2016-2017 school year.¹³ In other parts of the county, more students struggle to complete high school.

ENGLISH LANGUAGE LEARNERS

- Nearly one in four students in Orange County is an English Language Learner (ELL), a rate higher than in other Southern California counties and higher than the California statewide average (Figure 2.11).
- At Irvine and Newport-Mesa Unified School Districts, one in five students is an ELL (Figure 2.12).
- The most common languages other than English spoken by students in Orange County schools include Spanish (32.6 percent), Vietnamese (5.3 percent), Korean, (1.9 percent), and Mandarin (1.5 percent).¹⁴

COLLEGE ELIGIBILITY

Among SOCCCD feeder schools, California Department of Education data shows that Laguna Beach, Capistrano, and Irvine Unified School Districts lead all Orange County districts in the percentage of high school students who meet English and math benchmarks in SAT scores. Most SOCCCD feeder districts have performance rates above 70 percent (Figure 2.13).

- More than half of all Orange County high school graduates were eligible for entrance into the University of California and California State University systems in 2016-2017.¹⁵
- In Orange County, nearly all ethnic groups outpace the statewide average among UC and CSU eligibility. However, Native American, Latinx, and African American students have the least college readiness among Orange County students—approximately 40 percent of students from these backgrounds are prepared upon graduation for college (Figure 2.14).

¹³ Orange County Business Council, Orange County Workforce Indicators Report, 2019, p. 30, <https://www.ocbc.org/research/workforce-indicators-report/>

¹⁴ California Department of Education, Orange County Language Group Data, 2018-19

¹⁵ California Department of Education, Graduates Meeting UC/CSU Entrance Requirements, 2009-17

TABLE 2.9: SERVICE AREA, DISTRICT AND COUNTY EDUCATIONAL ATTAINMENT BY PERCENT, 2017

Region	Less than a high school degree	High school degree or higher	Bachelor's degree or higher
SOCCCD	5%	94%	55%
Orange County	13%	85%	39%

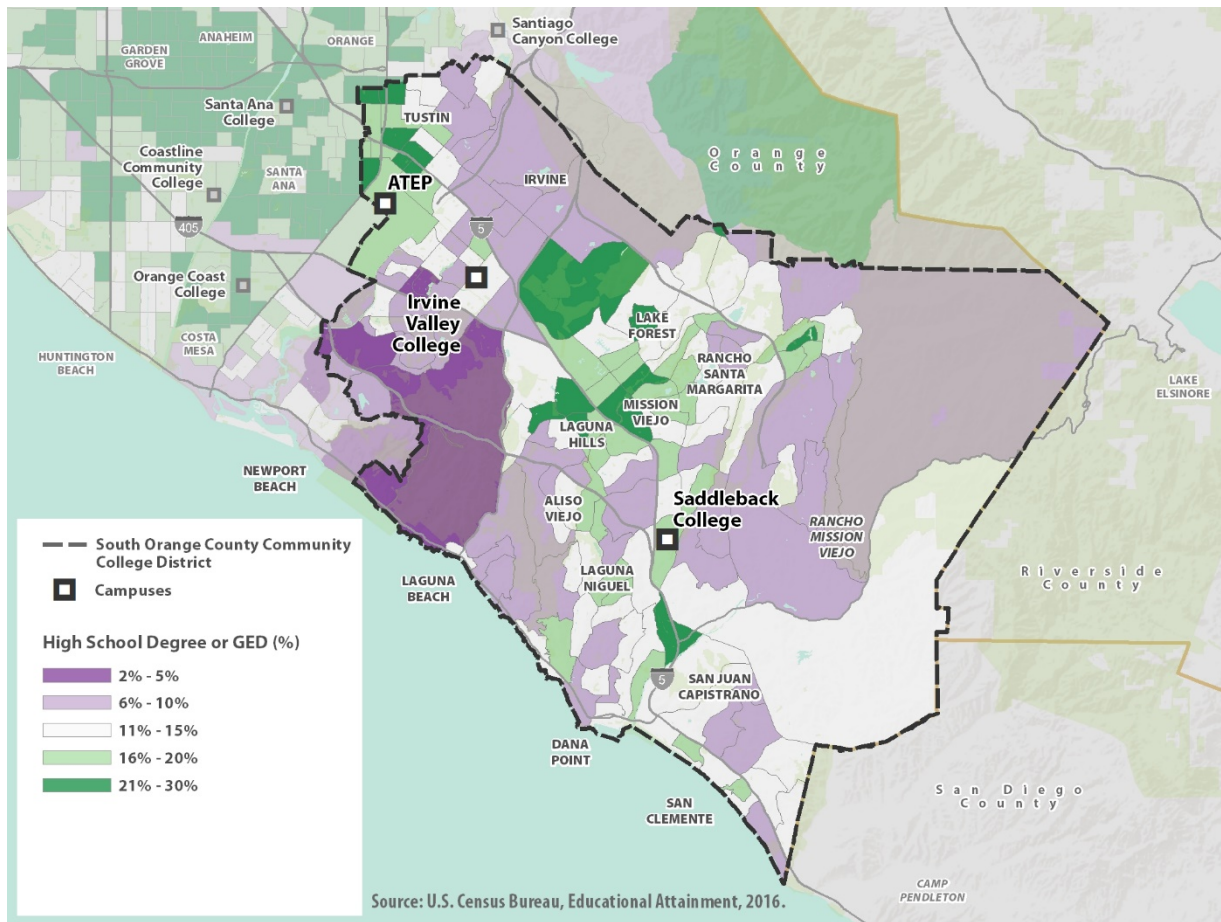
Source: US Census ACS 5-Year Estimates, 2013-2017

TABLE 2.10: EDUCATIONAL ATTAINMENT, CITIES IN SOCCCD, 2017

City	Less than a high school degree	High school degree or higher	Bachelor's degree or higher
Aliso Viejo	3%	96%	56%
Dana Point	5%	94%	49%
Irvine	3%	96%	67%
Laguna Beach	3%	97%	65%
Laguna Hills	7%	92%	49%
Laguna Niguel	4%	96%	53%
Laguna Woods	4%	95%	44%
Lake Forest	6%	92%	45%
Mission Viejo	4%	94%	47%
Newport Beach	2%	98%	66%
Rancho Santa Margarita	4%	96%	50%
San Clemente	5%	95%	49%
San Juan Capistrano	13%	84%	37%
Tustin	13%	85%	41%
SOCCCD Service Area	5%	94%	55%

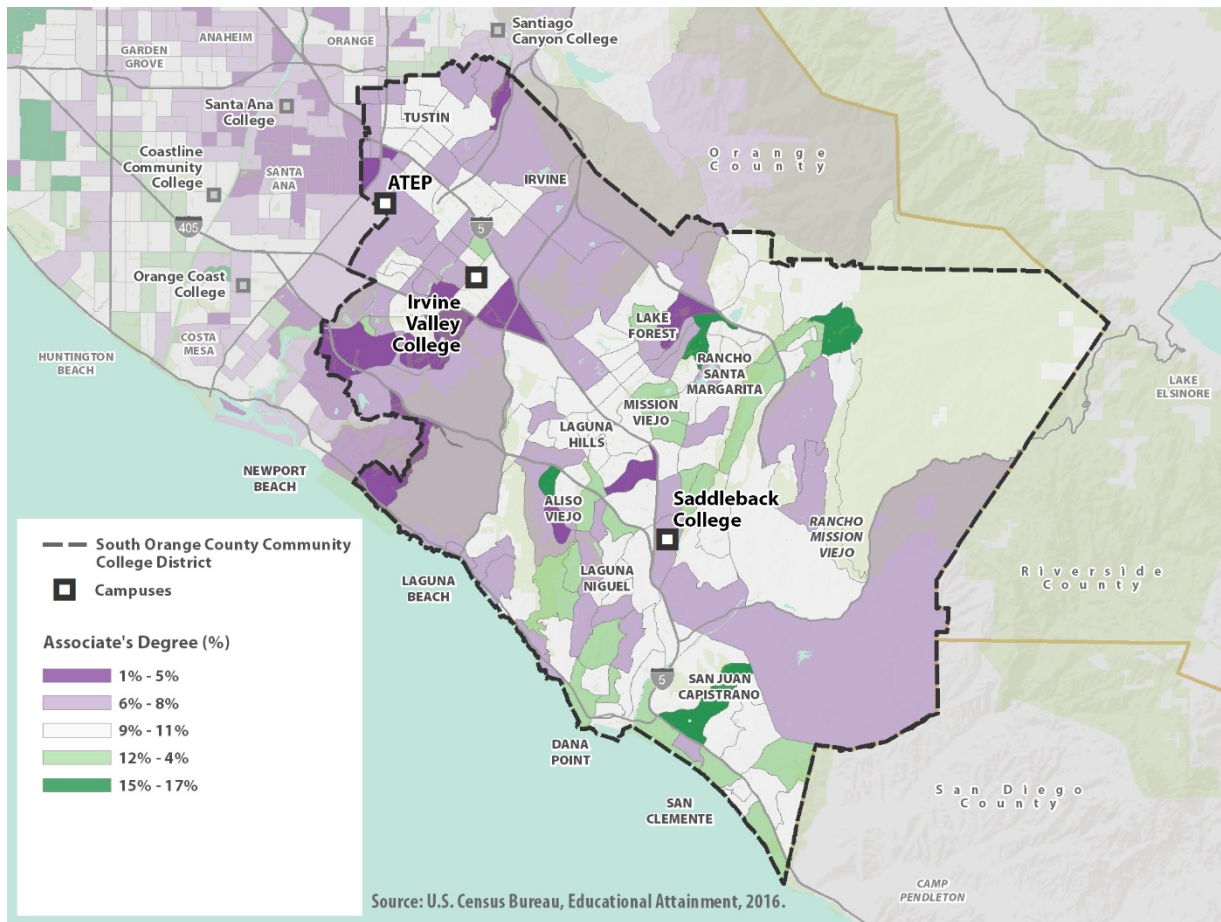
Source: US Census ACS 5-Year Estimates, 2013-2017

FIGURE 2.7: HIGH SCHOOL DEGREE OR GED ONLY, SOCCCD, 2016



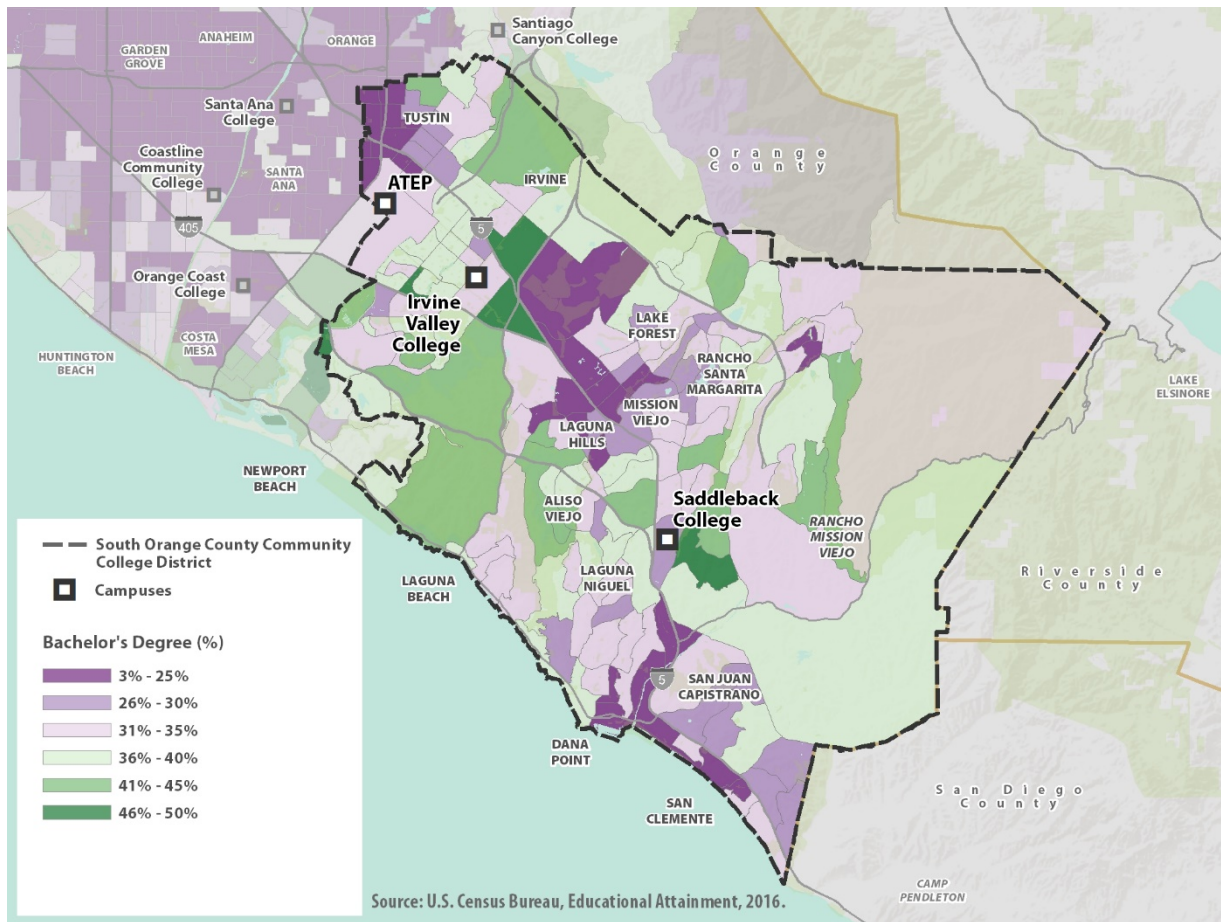
Source: US Census

FIGURE 2.8: ASSOCIATE DEGREE ONLY, SOCCCD, 2016



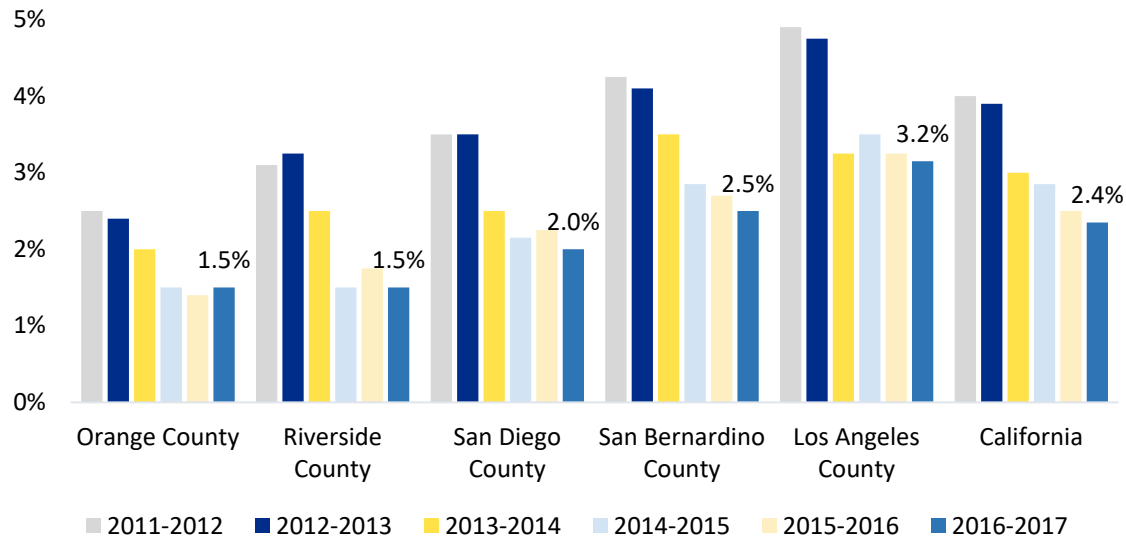
Source: US Census

FIGURE 2.9: BACHELOR'S DEGREE OR HIGHER, SOCCCD, 2016



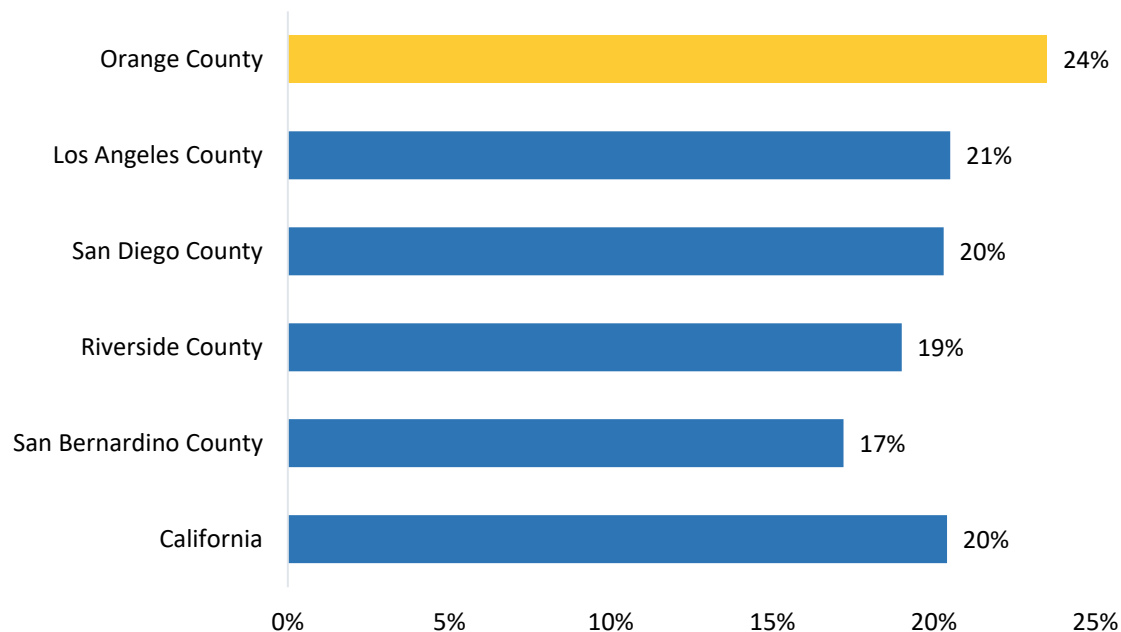
Source: US Census

FIGURE 2.10: HIGH SCHOOL DROPOUT RATES (GRADES 9-12), SOUTHERN CALIFORNIA COUNTIES, 2011-12 TO 2016-17 SCHOOL YEARS



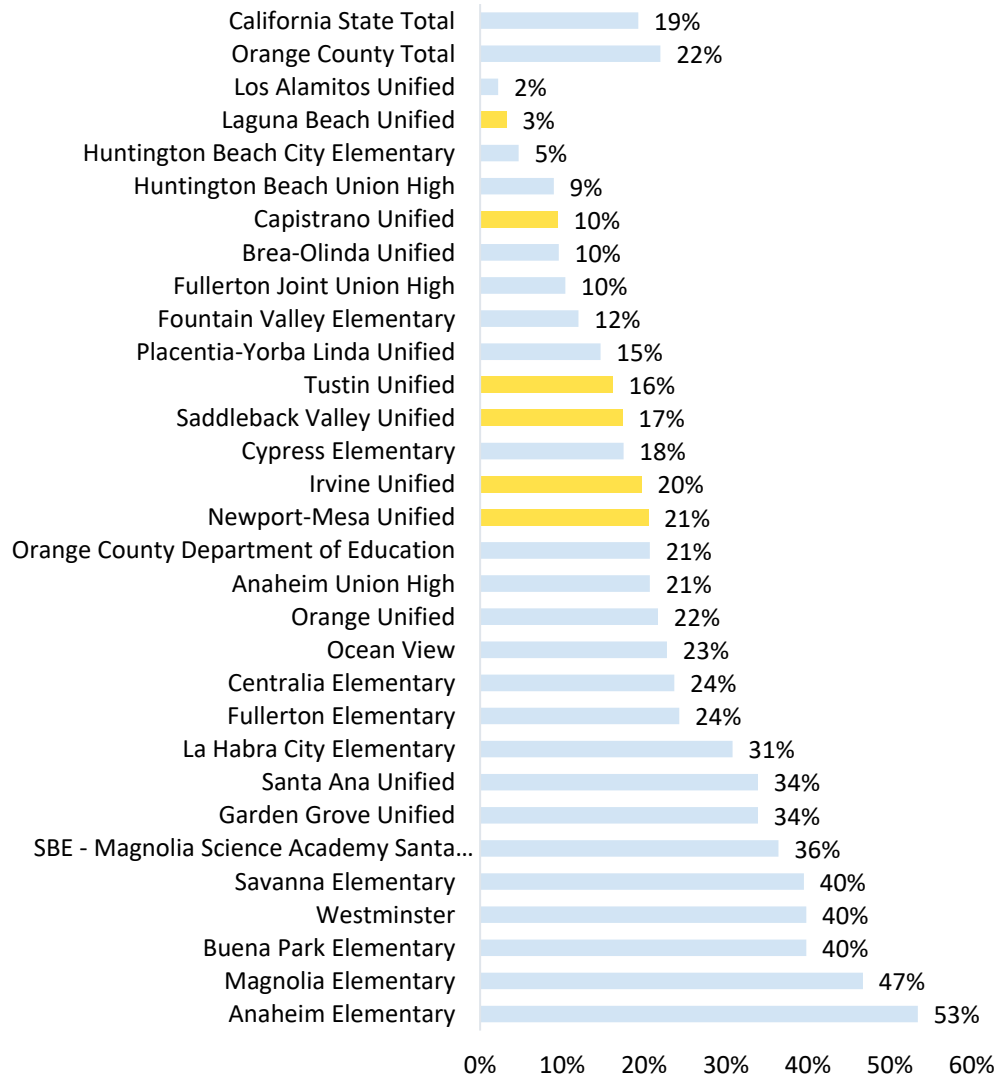
Source: California Department of Education and Orange County Business Council

FIGURE 2.11: ENGLISH LANGUAGE LEARNERS AS PERCENT OF TOTAL K-12 ENROLLMENT, SOUTHERN CALIFORNIA COUNTIES, 2018



Source: California Department of Education and Orange County Business Council

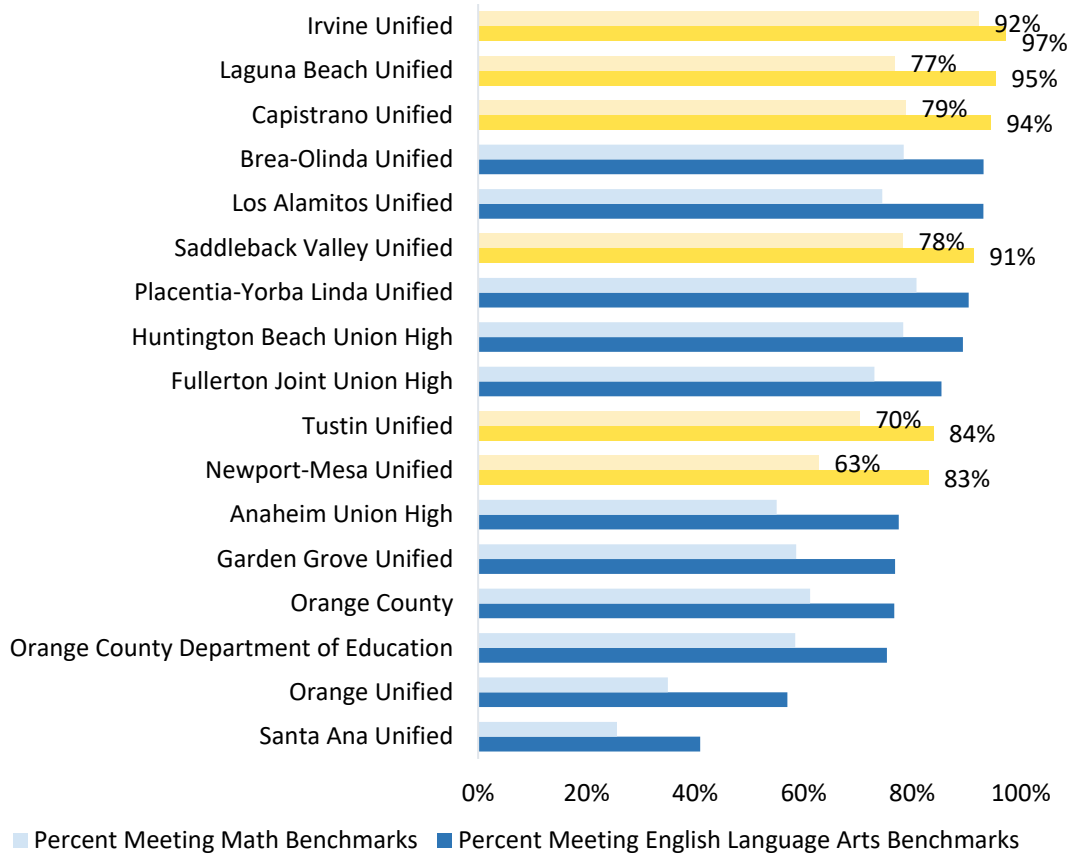
FIGURE 2.12: ENGLISH LANGUAGE LEARNERS AS PERCENT OF TOTAL K-12 ENROLLMENT, ORANGE COUNTY HIGH SCHOOL DISTRICTS, 2018-2019 SCHOOL YEAR



Note: Yellow highlights refer to SOCCCD feeder district schools.

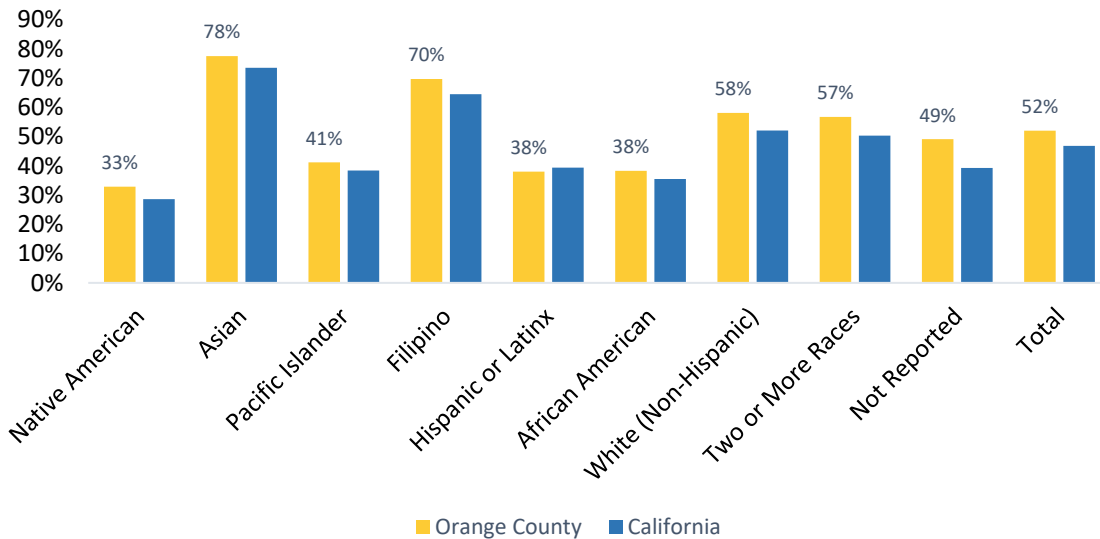
Source: California Department of Education

FIGURE 2.13: STUDENTS MEETING ENGLISH LANGUAGE ARTS AND MATH BENCHMARKS IN ORANGE COUNTY BY SCHOOL DISTRICT, 2016-2017 SCHOOL YEAR



Note: Yellow highlights refer to SOCCCD feeder district schools.
 Source: California Department of Education, DataQuest

FIGURE 2.14: UC/CSU ELIGIBLE HIGH SCHOOL GRADUATES IN ORANGE COUNTY AND CALIFORNIA, 2016-2017 SCHOOL YEAR



Source: California Department of Finance and Orange County Business Council

HOUSEHOLDS, INCOME, AND POVERTY

Income and poverty levels within communities often correlate with educational attainment rates, as these determine the capacity of families to afford the expense and time required to attend and complete high school, college, and other educational studies. This section describes income and related living characteristics of households in Orange County and the SOCCCD Service Area.

Residents in the South Orange County Community College District Service Area tend to pay more for housing, whether they rent or own their homes than in Orange County as a whole. Some cities with the highest rents, such as Irvine, also have some of the highest rates of residents living below poverty. Both median household incomes and home values in SOCCCD are higher than those across Orange County and statewide.

Connected to housing affordability are transportation costs, usually a household's second-largest expense. In Orange County, households spend nearly 25 percent of their incomes on transportation, an average annual cost of more than \$14,000.¹⁶

The rising costs of living in Orange County and the broader Southern California region are forcing many lower-income residents and families to look for more affordable housing opportunities farther away from metropolitan centers. This puts residents farther away from work and school and adds additional time and cost burdens on families experiencing increased transportation costs and longer commutes.

HOUSEHOLD CHARACTERISTICS

- The South Orange County Community College District Service Area has fewer average people per household (2.6) than Orange County (3.0 people per household) and the California statewide average (also 3.0 people per household) (see Table 2.11below).

¹⁶ The Center for Neighborhood Technology, Orange County H+T Fact Sheet, accessed March 2019 from htaindex.cnt.org

- Tustin, Laguna Hills, San Juan Capistrano and Lake Forest have an average household size (2.9 to 3.0 people per household) closest to the County and California average household size of 3.0 people (Table 2.12).

INCOME AND POVERTY

- The SOCCCD Service Area median household income of \$97,891 is considerably higher than the Orange County average of \$81,851 and much higher than the statewide average of \$67,169 (Table 2.11).
- The SOCCCD Service Area has a lower percentage of households living in poverty (9 percent) compared to all of Orange County (12 percent) and California statewide rates (15 percent).
- Tustin and Irvine have higher rates of residents living below the poverty line than Orange County rates (Table 2.12).
- Laguna Woods has the lowest median household income and the fewest people per household among cities in the South Orange County Community College District. It also has the lowest median home values and rents in the District (Table 2.12 and Table 2.14), but its residents are predominantly senior citizens living in a large senior community.

HOME VALUES AND RENTAL COSTS

- Median home values are six percent higher and rental costs 18 percent higher in South Orange County Community College District cities than in Orange County; SOCCCD Service Area median home values and rents are nearly 50 percent higher than statewide values and rents (Table 2.13).
- Median rent in the city of Irvine, which has some of the highest rates of renters in the District, is more than \$2,110 per month. This is on par with rents in SOCCCD communities with the highest median home values, such as Newport Beach and Laguna Beach (Table 2.14).

TABLE 2.11: DISTRICT HOUSEHOLD SIZE, MEDIAN INCOME AND PERCENT LIVING BELOW POVERTY, 2017

Region	Total Households	Average Persons Per Household	Median Household Income	Percent of Residents Living Below Poverty Level
SOCCCD	363,412	2.6	\$97,891	9%
Orange County	1,024,976	3.0	\$81,851	12%
California	12,888,128	3.0	\$67,169	15%

Source: US Census ACS 5-Year Estimates, 2013-2017

TABLE 2.12: SOCCCD SERVICE AREA HOUSEHOLD SIZE, MEDIAN INCOME AND PERCENT LIVING BELOW POVERTY, 2017

City	Total Households	Average Persons Per Household	Median Household Income	Percent of Residents Living Below Poverty Level
Aliso Viejo	18,661	2.7	\$106,353	5%
Dana Point	14,616	2.3	\$90,310	8%
Irvine	92,869	2.7	\$95,573	13%
Laguna Beach	10,485	2.2	\$117,586	7%
Laguna Hills	10,368	3.0	\$99,797	9%
Laguna Niguel	25,075	2.6	\$99,206	7%
Laguna Woods	11,251	1.5	\$40,837	11%
Lake Forest	27,965	2.9	\$96,963	7%
Mission Viejo	33,833	2.8	\$107,988	5%
Newport Beach	37,971	2.3	\$119,379	6%
Rancho Santa Margarita	17,339	2.8	\$106,939	4%
San Clemente	24,565	2.6	\$101,843	6%
San Juan Capistrano	12,229	2.9	\$81,730	11%
Tustin	26,185	3.0	\$73,567	14%
SOCCCD Service Area	363,412	2.6	\$97,891	9%

Source: US Census ACS 5-Year Estimates, 2013-7

TABLE 2.13: DISTRICT HOUSING TENURE, MEDIAN HOME VALUE AND GROSS RENT, 2017

Region	Owner-occupied Units	Renter-occupied Units	Median Home Value	Median Gross Rent
SOCCCD	61%	39%	\$825,100	\$1,998
Orange County	57%	43%	\$620,500	\$1,693
California	55%	46%	\$443,400	\$1,358

Source: US Census ACS 5-Year Estimates, 2013-2017

TABLE 2.14: SOCCCD SERVICE AREA HOUSING TENURE, MEDIAN HOME VALUE AND GROSS RENT, 2017

City	Owner-occupied Units	Renter-occupied Units	Median Home Value	Median Gross Rent
Aliso Viejo	60%	40%	\$582,300	\$2,092
Dana Point	60%	40%	\$833,800	\$1,941
Irvine	48%	52%	\$753,400	\$2,114
Laguna Beach	63%	38%	\$1,570,700	\$2,191
Laguna Hills	71%	29%	\$649,700	\$1,906
Laguna Niguel	71%	30%	\$737,400	\$2,004
Laguna Woods	76%	24%	\$246,600	\$1,656
Lake Forest	69%	31%	\$585,100	\$1,846
Mission Viejo	78%	23%	\$640,800	\$2,123
Newport Beach	57%	43%	\$1,695,700	\$2,118
Rancho Santa Margarita	71%	29%	\$619,200	\$1,812
San Clemente	66%	34%	\$849,300	\$1,775
San Juan Capistrano	74%	26%	\$635,100	\$1,886
Tustin	48%	52%	\$585,700	\$1,696
SOCCCD Service Area	61%	39%	\$825,100	\$1,998

Source: US Census ACS 5-Year Estimates, 2013- 2017

REGIONAL EMPLOYMENT TRENDS

Employment in Orange County and the South Orange County Community College District Service Area is projected to grow over the next decades. Much of the job growth in Orange County is expected to take place in key parts of the SOCCCD Service Area.

The section below describes these trends and provides details about which industries, like health care and professional services, serve as key employment centers for the SOCCCD Service Area and the region. Chapter 3, which follows below, presents regional employment and industry trends in Southern California, Orange County, and in the SOCCCD Service Area in more detail.

COUNTY AND DISTRICT EMPLOYMENT RATES AND PROJECTIONS

- Approximately two-thirds of residents in the South Orange County Community College District who are 16 years of age and older, or about 1.7 million people, are employed or looking for work (see Table 2.15 below).
- The rate of labor force participation in the SOCCCD Service Area, 66 percent, is the same as Orange County, and slightly higher than the statewide average of 63 percent of working-age adults.
- Among SOCCCD cities, labor force participation rates are highest in Aliso Viejo (76 percent) and Rancho Santa Margarita (75 percent), and lowest in Laguna Woods (22 percent) (Table 2.16).
- Orange County is projected to add 150,000 jobs between 2020 and 2035 (Table 2.17).
- Nearly half of those positions will be in the SOCCCD Service Area, which is projected to hold another 74,000 jobs by 2035.
- The cities of Irvine and Tustin, particularly the areas nearest ATEP, will account for most of the new growth (93,000 jobs) in the District (see areas with dark green circles in Figure 2.15 and Table 2.18).

EMPLOYMENT BY INDUSTRY AND OCCUPATION

- Health care services firms employ the most workers in Orange County at approximately 201,000 people. In the South Orange County Community College District Service Area, 73,000 people work in health care services fields (Figure 2.16 and Table 2.19).
- The professional and technical services (PTS) sector is the largest in the SOCCCD Service Area, at more than 12 percent of all workers, followed by health care services (11 percent).
- Related PTS and health services occupation groups with the most workers in the District service area include business operations and financial specialists, computer occupations, personal care services workers, and health practitioners (Figure 2.17).
- Other key industry sectors in the SOCCCD Service Area include hospitality, government, administrative and support services, retail, manufacturing, and insurance, and finance sectors, which employ seven percent or more of workers in the SOCCCD Service Area.

TABLE 2.15: EMPLOYMENT STATUS, 2017

Region	Population 16 years and over	Population 16 years and over in Civilian Labor Force	
		Population	Percent of Population
SOCCCD	790,152	519,450	66%
Orange County	2,524,230	1,657,036	66%
California	30,910,058	19,485,061	63%

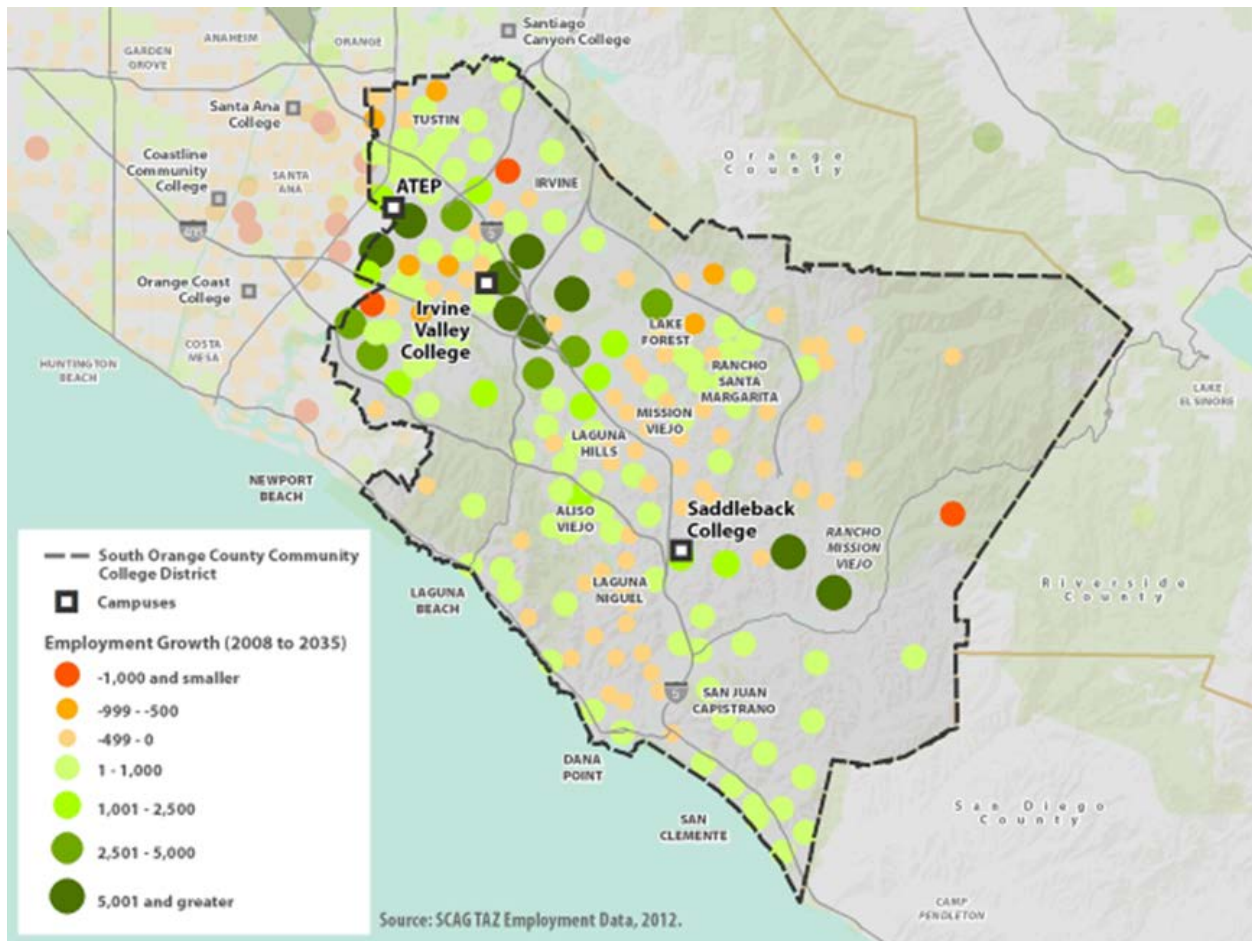
Source: US Census ACS 5-Year Estimates, 2013-2017

TABLE 2.16: EMPLOYMENT STATUS, SOCCCD SERVICE AREA, 2017

City	Population 16 years and over	Population 16 years and over in Civilian Labor Force	
		Population	Percent of Population
Aliso Viejo	39,000	29,766	76%
Dana Point	29,088	19,098	66%
Irvine	205,809	131,904	64%
Laguna Beach	19,753	12,557	64%
Laguna Hills	25,829	17,880	69%
Laguna Niguel	53,789	35,792	67%
Laguna Woods	16,303	3,545	22%
Lake Forest	65,982	47,031	71%
Mission Viejo	80,369	52,866	66%
Newport Beach	73,082	45,253	62%
Rancho Santa Margarita	37,774	28,388	75%
San Clemente	52,464	33,755	64%
San Juan Capistrano	28,720	17,390	61%
Tustin	62,190	44,225	71%
SOCCCD Service Area	790,152	519,450	66%

Source: US Census ACS 5-Year Estimates, 2013-2017

FIGURE 2.15: PROJECTED EMPLOYMENT GROWTH, 2008 TO 2035



Source: SCAG Socio Economic Library, Adopted 2012 Growth Forecast

TABLE 2.17: COUNTY, DISTRICT SERVICE AREA EMPLOYMENT GROWTH PROJECTIONS, 2008-2035

Region	2008	2020	2035	Percent Change, 2020 to 2035	Total Change, 2020 to 2035
SOCCCD	579,000	601,600	675,600	12%	74,000
Orange County	1,624,400	1,626,100	1,779,100	9%	153,000

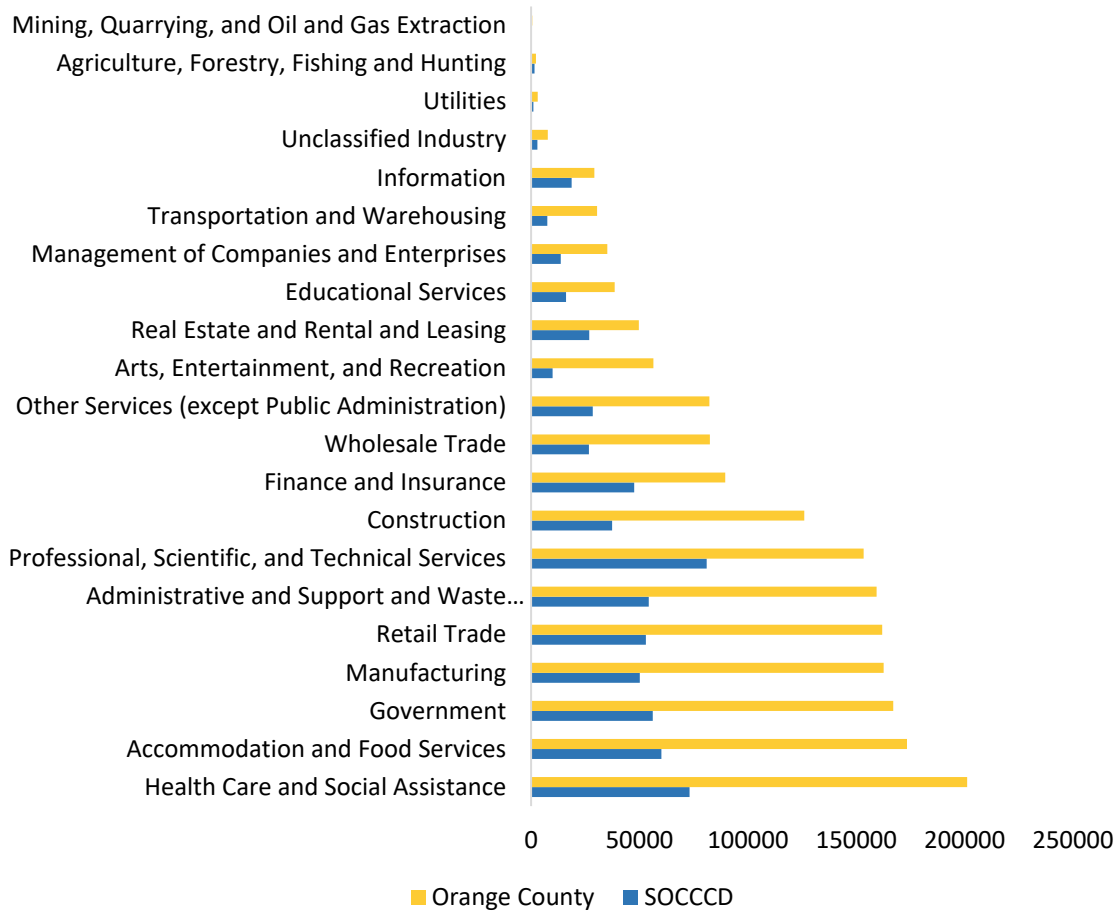
Source: SCAG Socio-Economic Library, Adopted 2012 Growth Forecast

TABLE 2.18: SOCCCD SERVICE AREA EMPLOYMENT GROWTH PROJECTIONS, 2008-2035

City	2008	2020	2035	Percent Change, 2020 to 2035	Total Change, 2020 to 2035
Aliso Viejo	17,200	19,600	19,700	0.5%	100
Dana Point	13,600	13,500	13,700	1%	200
Irvine	223,500	242,000	291,800	21%	49,800
Laguna Beach	14,000	14,000	14,100	0.7%	100
Laguna Hills	19,900	20,400	20,500	0.5%	100
Laguna Niguel	20,000	20,100	21,000	4%	900
Laguna Woods	5,500	6,200	6,700	8%	500
Lake Forest	44,500	40,600	45,800	13%	5,200
Mission Viejo	37,200	38,000	38,800	2%	800
Newport Beach	82,500	77,000	77,700	0.9%	700
Rancho Santa Margarita	17,700	16,300	16,600	2%	300
San Clemente	25,600	26,300	26,600	1%	300
San Juan Capistrano	15,700	15,700	15,800	0.6%	100
Tustin	42,100	51,900	66,800	29%	14,900
SOCCCD Service Area	579,000	601,600	675,600	12%	74,000

Source: SCAG Socio-Economic Library, Adopted 2012 Growth Forecast

FIGURE 2.16: EMPLOYMENT BY INDUSTRY, SOCCCD AND ORANGE COUNTY, 2018



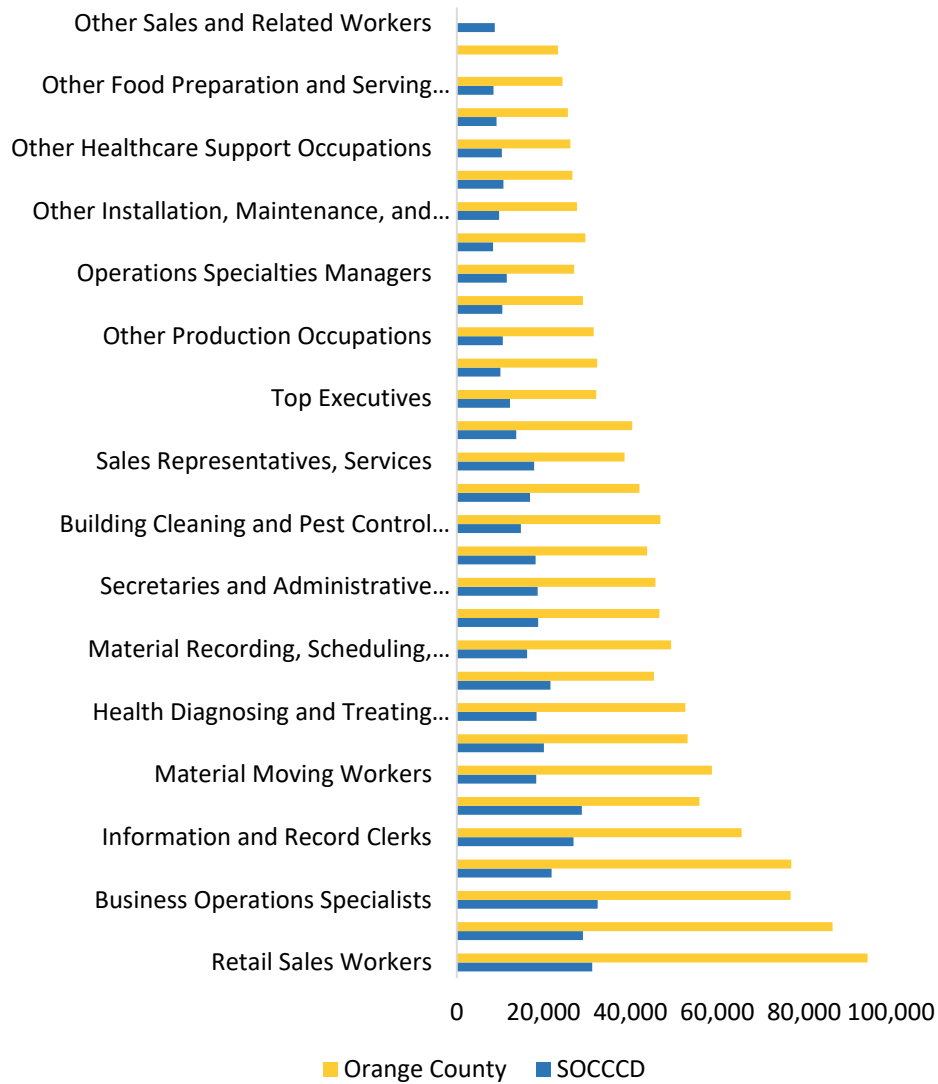
Source: EMSI, BLS QCEW

TABLE 2.19: EMPLOYMENT BY INDUSTRY, SOCCCD AND ORANGE COUNTY, 2018

Industry Sector	SOCCCD Employment	Percent of SOCCCD Employment	Orange County Employment	Percent of Orange County Employment
Professional, Scientific, and Technical Services	80,998	12%	153,362	9%
Health Care and Social Assistance	73,082	11%	201,108	11%
Accommodation and Food Services	60,097	9%	173,364	10%
Government	56,114	8%	167,055	9%
Administrative and Support and Waste Management and Remediation Services	54,281	8%	159,334	9%
Retail Trade	52,936	8%	161,951	9%
Manufacturing	50,147	8%	162,637	9%
Finance and Insurance	47,528	7%	89,545	5%
Construction	37,363	6%	125,979	7%
Other Services (except Public Administration)	28,410	4%	82,270	5%
Real Estate and Rental and Leasing	26,839	4%	49,678	3%
Wholesale Trade	26,663	4%	82,454	5%
Information	18,683	3%	29,182	2%
Educational Services	16,138	2%	38,562	2%
Management of Companies and Enterprises	13,674	2%	35,140	2%
Arts, Entertainment, and Recreation	9,893	2%	56,399	3%
Transportation and Warehousing	7,446	1%	30,415	2%
Unclassified Industry	2,928	0.4%	7,703	0.4%
Agriculture, Forestry, Fishing and Hunting	1,603	0.2%	2,274	0.1%
Utilities	1,070	0.2%	3,047	0.2%
Mining, Quarrying, and Oil and Gas Extraction	88	0.0%	557	0.0%

Source: EMSI, BLS QCEW

FIGURE 2.17: TOP 30 OCCUPATION GROUPS IN SOCCCD AND ORANGE COUNTY, 2018



Source: EMSI, BLS QCE

TABLE 2.20: TOP 30 OCCUPATION GROUPS IN SOCCCD SERVICE AREA, 2018

Occupation Groups	2018 Resident Workers	2018 Jobs	2018 Net Commuters
Business Operations Specialists	22,748	32,435	9,687
Retail Sales Workers	23,540	31,200	7,660
Food and Beverage Serving Workers	19,889	29,045	9,156
Computer Occupations	18,452	28,795	10,343
Information and Record Clerks	17,999	26,890	8,891
Construction Trades Workers	15,828	21,826	5,998
Financial Specialists	14,946	21,589	6,643
Other Personal Care and Service Workers	15,358	20,066	4,708
Other Office and Administrative Support Workers	13,623	18,728	5,105
Secretaries and Administrative Assistants	12,828	18,634	5,806
Health Diagnosing and Treating Practitioners	12,991	18,355	5,364
Material Moving Workers	13,277	18,308	5,031
Financial Clerks	12,248	18,132	5,884
Sales Representatives, Services	12,300	17,817	5,517
Other Management Occupations	12,799	16,839	4,040
Material Recording, Scheduling, Dispatching, and Distributing Workers	12,285	16,197	3,912
Building Cleaning and Pest Control Workers	11,291	14,761	3,470
Cooks and Food Preparation Workers	9,805	13,688	3,883
Top Executives	8,537	12,262	3,725
Operations Specialties Managers	7,796	11,512	3,716
Engineers	7,144	10,750	3,606
Other Production Occupations	6,767	10,580	3,813
Health Technologists and Technicians	7,202	10,469	3,267
Other Healthcare Support Occupations	6,762	10,357	3,595
Preschool, Primary, Secondary, and Special Education School Teachers	9,467	10,027	560
Other Installation, Maintenance, and Repair Occupations	7,290	9,761	2,471
Sales Representatives, Wholesale and Manufacturing	6,492	9,162	2,670
Other Sales and Related Workers	7,347	8,768	1,421
Other Food Preparation and Serving Related Workers	5,639	8,441	2,802
Motor Vehicle Operators	7,279	8,362	1,083

Source: EMSI, BLS QCE

TABLE 2.21: TOP 30 OCCUPATION GROUPS IN ORANGE COUNTY, 2018

Occupation Groups	2018 Resident Workers	2018 Jobs	2018 Net Commuters
Retail Sales Workers	86,021	94,585	8,564
Food and Beverage Serving Workers	76,654	86,530	9,876
Construction Trades Workers	62,958	77,007	14,049
Business Operations Specialists	68,164	76,896	8,732
Information and Record Clerks	58,167	65,607	7,440
Material Moving Workers	54,906	58,754	3,848
Computer Occupations	48,654	55,888	7,234
Other Personal Care and Service Workers	55,077	53,165	(1,912)
Health Diagnosing and Treating Practitioners	46,156	52,615	6,459
Material Recording, Scheduling, Dispatching, and Distributing Workers	46,166	49,346	3,180
Building Cleaning and Pest Control Workers	40,336	46,883	6,547
Other Office and Administrative Support Workers	44,652	46,674	2,022
Secretaries and Administrative Assistants	41,627	45,733	4,106
Financial Specialists	40,878	45,404	4,526
Financial Clerks	39,141	43,832	4,691
Other Management Occupations	38,861	42,051	3,190
Cooks and Food Preparation Workers	37,412	40,396	2,984
Sales Representatives, Services	34,618	38,649	4,031
Preschool, Primary, Secondary, and Special Education School Teachers	32,299	32,345	46
Top Executives	28,412	32,094	3,682
Other Production Occupations	27,967	31,537	3,570
Motor Vehicle Operators	30,369	29,611	(758)
Health Technologists and Technicians	25,443	29,065	3,622
Other Installation, Maintenance, and Repair Occupations	25,827	27,672	1,845
Operations Specialties Managers	23,910	27,032	3,122
Engineers	22,779	26,623	3,844
Other Healthcare Support Occupations	22,333	26,147	3,814
Sales Representatives, Wholesale and Manufacturing	22,509	25,570	3,061
Other Food Preparation and Serving Related Workers	21,601	24,352	2,751
Metal Workers and Plastic Workers	19,533	23,317	3,784

Source: EMSI, BLS QCE

REGIONAL INDUSTRY AND EMPLOYMENT TRENDS

This section builds upon the employment trends in the previous section, looking at the key industry sectors which drive the Orange County and regional economies, job growth projections in middle-skill occupations in these industries, and how these industries and occupations relate to programs of study at South Orange College Community College District.

Several industry sectors, including health care services, entertainment, professional and technical services, and logistics and transportation, provide large numbers of middle-skill jobs in Southern California (see Figure 2.18 below). Many of these same sectors are projected to see substantial growth over the coming decade, thanks to rising demand for services to support older adult populations, the ongoing integration of tech into the workplace and the digitization of our daily lives, and the need to address large-scale issues such as climate change and antibiotic-resistant viruses.

These trends present both challenges and opportunities for community colleges to build training programs and curriculums which offer students the skills they need to work in the challenging careers of the present and participate in shaping the regional economy of the near future.

KEY INDUSTRIES AND MIDDLE-SKILL JOBS

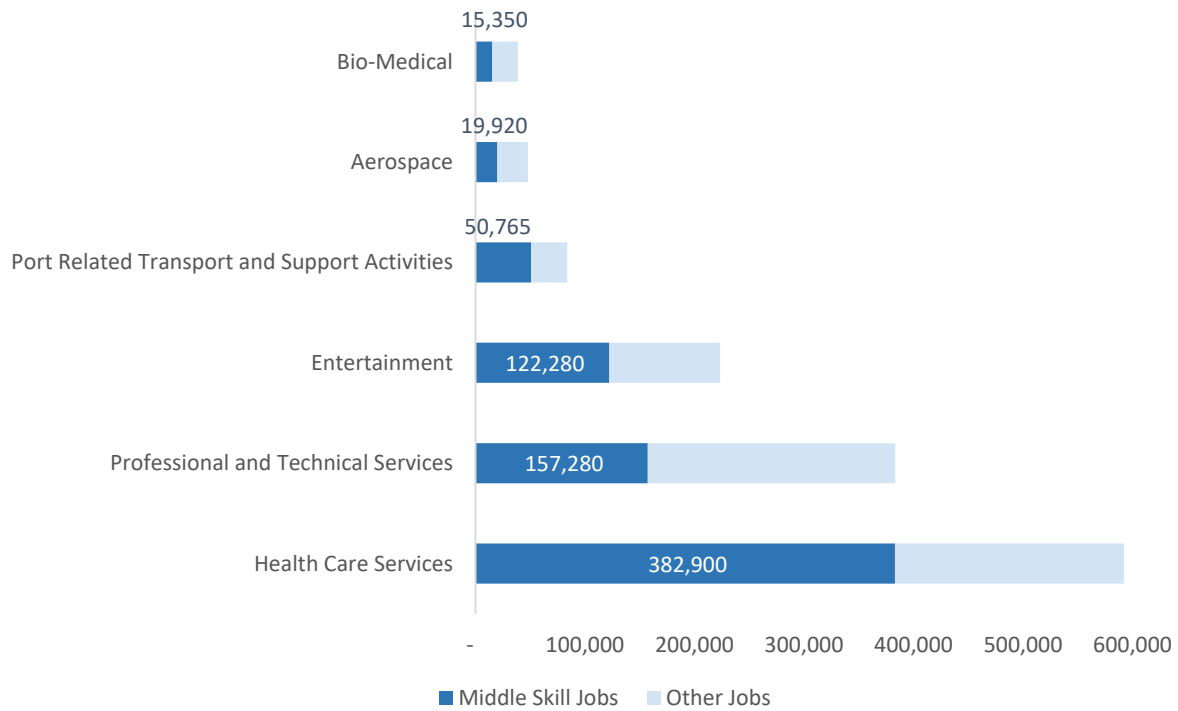
- In health care, the sector projected to grow the most over the next decade, two of every three jobs are middle-skill positions.¹⁷
- The professional services sector, which includes occupations that provide specialized knowledge-based services such as advertising, accounting, financial and legal services, engineers, real estate, and business consulting, provides more than 150,000 middle-skill jobs in the Southern California region.

REGIONAL JOB GROWTH PROJECTIONS

- In Southern California, growth in health care services over the next decade is expected to increase by nearly one third and provide an additional 330,000 jobs in the region (Figure 2.19 and Table 2.22). More than 200,000 of these may be middle-skill jobs.
- The logistics sector (transportation and warehousing) is projected to grow by 22 percent, adding 81,000 jobs, while hospitality (accommodation and food services) will grow by 15 percent, about 113,000 new jobs.
- Construction, educational services, and arts and entertainment are also projected to grow in Southern California by 10 percent or more by 2028.

¹⁷ Center for Competitive Workforce, Initial Findings Report: L.A. & Orange County Community Colleges: Powering Economic Opportunity, Target Industries, <https://competitiveworkforce.la/initial-findings/>

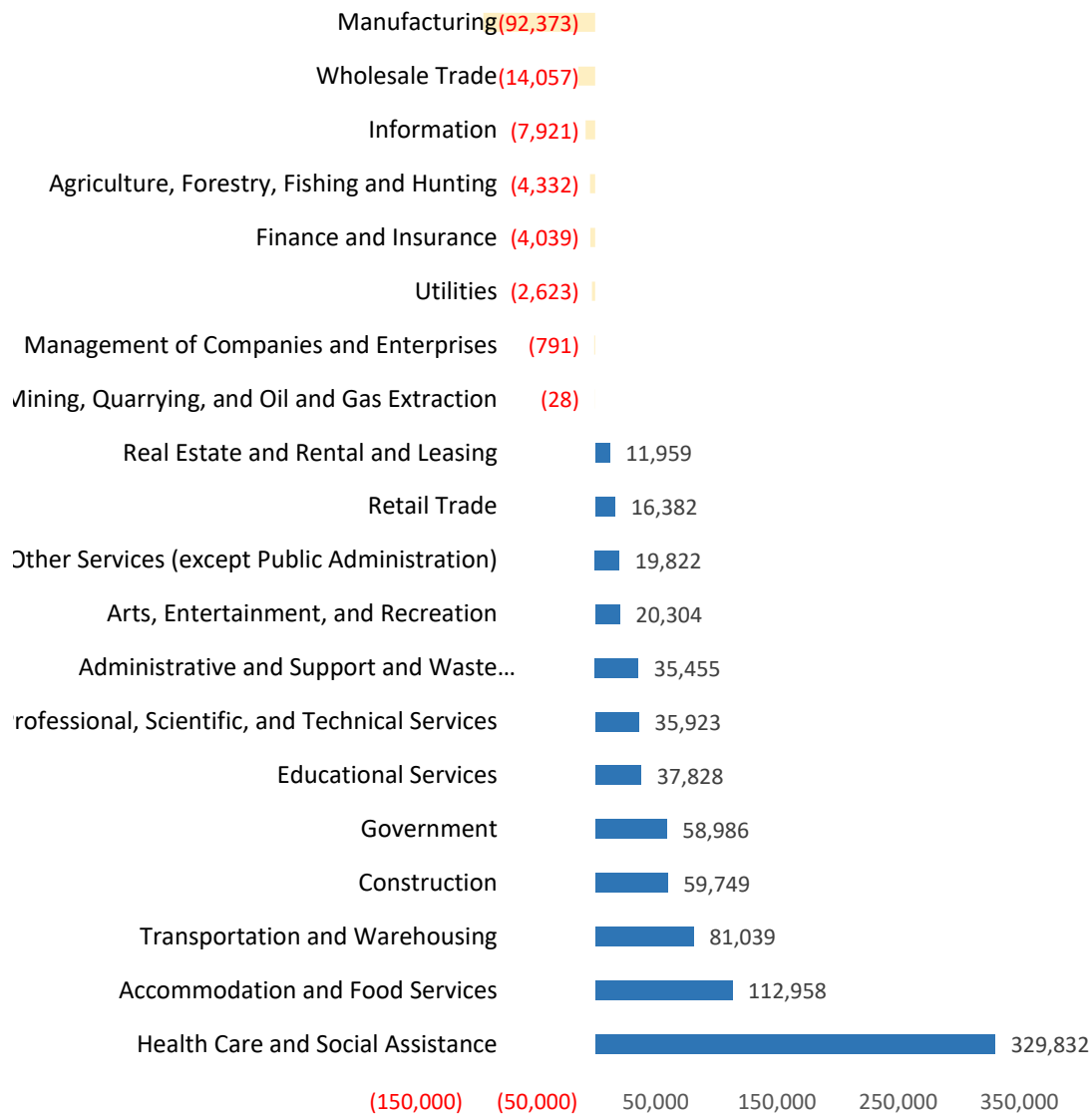
FIGURE 2.18: KEY INDUSTRY SECTORS AND TOTAL MIDDLE SKILL JOBS, SOUTHERN CALIFORNIA REGION, 2016



Note: Data for Southern California combines the four counties of Los Angeles, Orange, San Bernardino, and Riverside.

Source: Center for Competitive Workforce, 2019

FIGURE 2.19: SOUTHERN CALIFORNIA REGIONAL EMPLOYMENT GROWTH PROJECTIONS BY INDUSTRY SECTOR, 2018 TO 2028



Source: EMSI

TABLE 2.22: SOUTHERN CALIFORNIA REGIONAL EMPLOYMENT GROWTH PROJECTIONS BY INDUSTRY SECTOR, 2018 TO 2028

Industry Sector	2018 Jobs	2023 Jobs	2028 Jobs	Total Change, 2018 to 2028	Percent Change, 2018 to 2028
Health Care and Social Assistance	1,172,637	1,372,082	1,502,469	329,832	28%
Accommodation and Food Services	776,042	849,377	889,000	112,958	15%
Transportation and Warehousing	372,377	427,062	453,416	81,039	22%
Construction	471,830	509,297	531,579	59,749	13%
Government	1,066,519	1,102,240	1,125,505	58,986	6%
Educational Services	234,545	258,082	272,373	37,828	16%
Professional, Scientific, and Technical Services	566,929	589,901	602,852	35,923	6%
Administrative and Support and Waste Management and Remediation Services	592,584	616,321	628,039	35,455	6%
Arts, Entertainment, and Recreation	212,345	226,515	232,649	20,304	10%
Other Services (except Public Administration)	437,954	448,374	457,776	19,822	5%
Retail Trade	808,369	820,180	824,751	16,382	2%
Real Estate and Rental and Leasing	188,489	196,496	200,448	11,959	6%
Mining, Quarrying, and Oil and Gas Extraction	3,695	3,580	3,667	(28)	(1%)
Management of Companies and Enterprises	101,852	102,103	101,061	(791)	(1%)
Utilities	19,815	18,319	17,192	(2,623)	(13%)
Finance and Insurance	276,186	273,818	272,147	(4,039)	(1%)
Agriculture, Forestry, Fishing and Hunting	24,164	21,470	19,832	(4,332)	(18%)
Information	265,509	259,637	257,588	(7,921)	(3%)
Wholesale Trade	377,932	371,660	363,875	(14,057)	(4%)
Manufacturing	620,719	569,224	528,346	(92,373)	(15%)
Total Jobs	8,627,778	9,079,810	9,332,832	705,054	8%

Source: EMSI; Data for Southern California Region includes four counties of Los Angeles, Orange, San Bernardino, and Riverside

ORANGE COUNTY INDUSTRY AND JOB TRENDS

Orange County industry and employment growth projections mirror some of the broader regional trends, with health care, hospitality, and administrative support services sectors projected to grow the most over the next decade.

KEY AND EMERGING INDUSTRY CLUSTERS

- In Orange County, key industry clusters include health care and related services, IT, digital media and big data analytics, bioscience research, biopharmaceuticals, and medical device manufacturing, and business and professional services.¹⁸
- The region is also a prime location for many action sports companies and has large and growing tourism and hospitality sectors.
- Emerging industry clusters include those connected to the growing green economy and businesses involved in the integration of IT and healthcare.

Several manufacturing sub-sectors, including medical device manufacturing, apparel, electronics, computer, and aerospace manufacturing are highly concentrated in Orange County (see Table 2.23 below).

- Tourism and hospitality firms, especially those related to amusement parks, are also concentrated in Orange County, as are a host of professional and business-related firms, such as those who specialize in real estate and financial services.

INDUSTRY GROWTH

- Health care services employment is projected to grow the most in Orange County, with nearly 57,000 new positions needed by 2028 (Figure 2.20 and Table 2.24).
- Construction, educational services, management services and arts and entertainment are also projected to achieve double-digit growth in Orange County by 2028.

EMPLOYMENT GROWTH

- Overall, operations managers and Registered Nurses will have the most openings over the next decade (Figure 2.21 and Figure 2.22).
- In addition to nurses, those jobs which need community college education (either an associate degree or postsecondary certificate award) and are expected to have the most openings include accounting clerks, teachers, medical, nursing and dental assistants, vocational nurses, auto techs and mechanics, and preschool teachers (Figure 2.23 and Figure 2.24).
- Dental hygienists and paralegals are projected to have the most openings among jobs that require a terminal associate degree.

SOCCCD PROGRAMS AND GROWING OCCUPATIONS

- Both Colleges have programs to prepare students for some of the highest projected middle-skill occupations, including bookkeeping and accounting, teacher assistants, pre-school teachers, and electrical and electronics engineering technicians.

SKILLS GAP

- Employers in key industries are finding it hard to fill job openings due to the growing skills gap among available workers.

¹⁸ Center for a Competitive Workforce, L.A. & Orange County Community Colleges: Powering Economic Opportunity, October 2017, p.4; Orange County Workforce Indicators Report, Orange County Business Council, 2019, p.49

- Community colleges can continue to partner with businesses to expand career and technical training for key industry clusters, including IT, construction, hospitality and tourism, and healthcare, and help to prepare students to fill available and “hard to fill” middle-skill jobs.¹⁹
- Employers need a workforce that understands how to use technology and data. They need workers who are flexible and adaptable as industries evolve and have problem-solving skills to help businesses maintain competitive advantage and create value.²⁰ Community college programs need to prepare students for rapid changes in technology and provide students with skills they need to adapt to these changes.

¹⁹ Orange County Workforce Indicators Report, Orange County Business Council, 2019, p.35

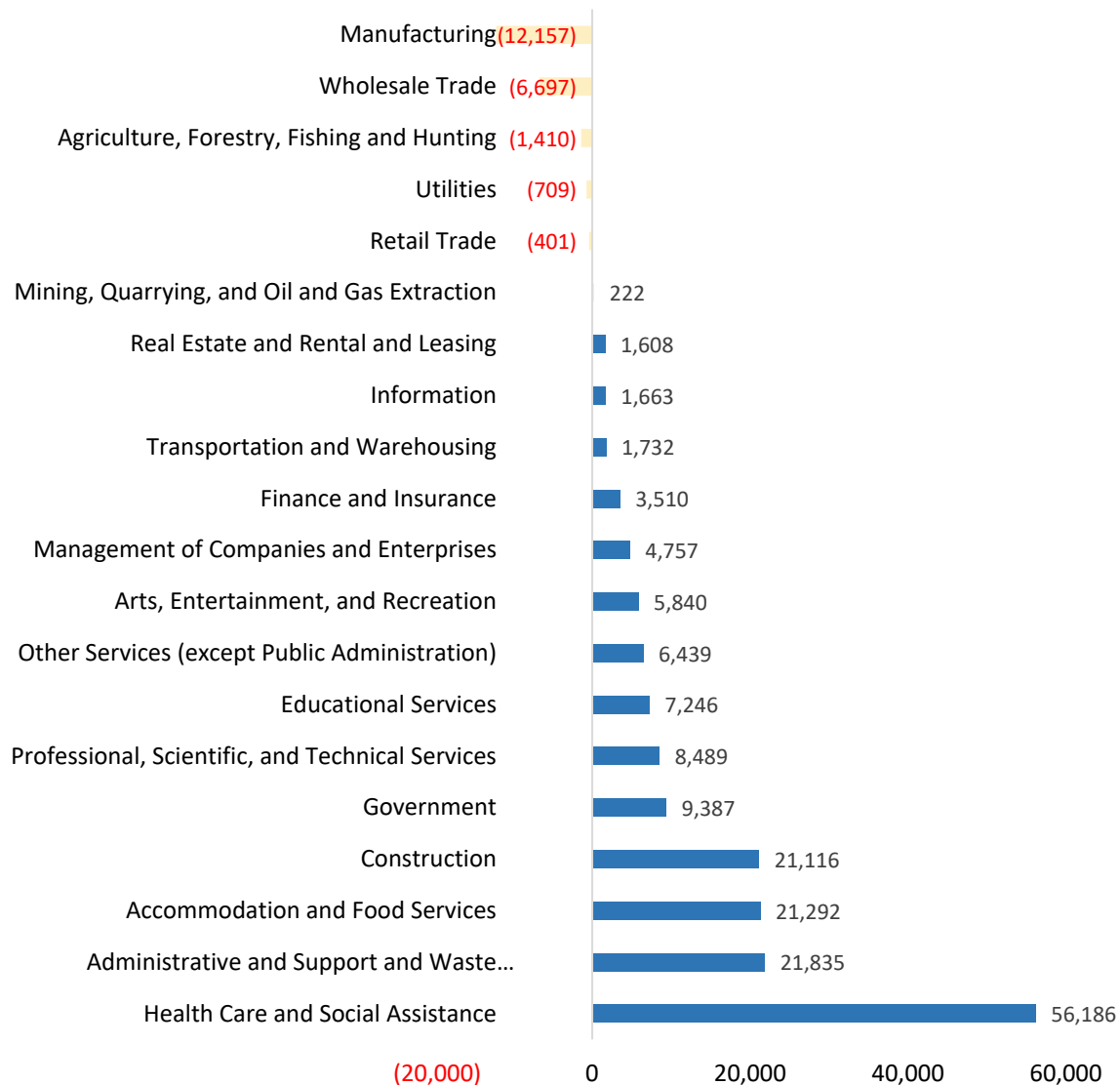
²⁰ Orange County Workforce Indicators Report, Orange County Business Council, 2019, p.9

TABLE 2.23: INDUSTRIES WITH THE HIGHEST CURRENT AND PROJECTED LOCATION QUOTIENTS, ORANGE COUNTY, 2018 AND 2028

Industry	2018 Jobs	2028 Jobs	Percent Change	2018 LQ	2028 LQ	2018 Earnings Per Worker
Amusement Parks and Arcades	29,076	31,817	9%	11.85	11.83	\$36,562
Medical Equipment and Supplies Manufacturing	18,923	20,809	10%	5.26	5.51	\$102,797
Apparel Knitting Mills	632	283	(55%)	5.20	3.76	\$77,109
Audio and Video Equipment Manufacturing	1,067	882	(17%)	4.73	4.14	\$88,046
Land Subdivision	2,215	2,207	(0%)	4.20	4.65	\$152,462
Cut and Sew Apparel Manufacturing	4,470	3,522	(21%)	3.78	4.03	\$68,989
Unclassified Industry	7,703	10,015	30%	3.16	3.65	\$57,615
Semiconductor and Other Electronic Component Manufacturing	12,392	10,280	(17%)	2.99	2.67	\$119,496
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	13,438	11,819	(12%)	2.96	2.73	\$145,804
Manufacturing and Reproducing Magnetic and Optical Media	429	577	34%	2.71	4.51	\$148,071
Non-depository Credit Intermediation	17,830	20,970	18%	2.56	2.71	\$111,887
Electric Lighting Equipment Manufacturing	1,356	1,327	(2%)	2.54	2.52	\$82,561
Computer and Peripheral Equipment Manufacturing	4,401	3,624	(18%)	2.50	2.27	\$174,564
Activities Related to Credit Intermediation	8,278	9,977	21%	2.34	2.33	\$95,032
Offices of Real Estate Agents and Brokers	12,368	11,463	(7%)	2.32	2.27	\$112,152
Aerospace Product and Parts Manufacturing	12,491	13,434	8%	2.25	2.40	\$144,837
Drugs and Druggists' Sundries Merchant Wholesalers	5,709	6,047	6%	2.23	2.41	\$128,669
Apparel, Piece Goods, and Notions Merchant Wholesalers	3,904	3,825	(2%)	2.21	2.07	\$70,958
Activities Related to Real Estate	20,988	23,035	10%	2.21	2.01	\$69,981
Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	8,752	8,365	(4%)	2.13	2.00	\$74,459

Source: EMSI

FIGURE 2.20: ORANGE COUNTY EMPLOYMENT GROWTH PROJECTIONS BY INDUSTRY SECTOR, 2018 TO 2028



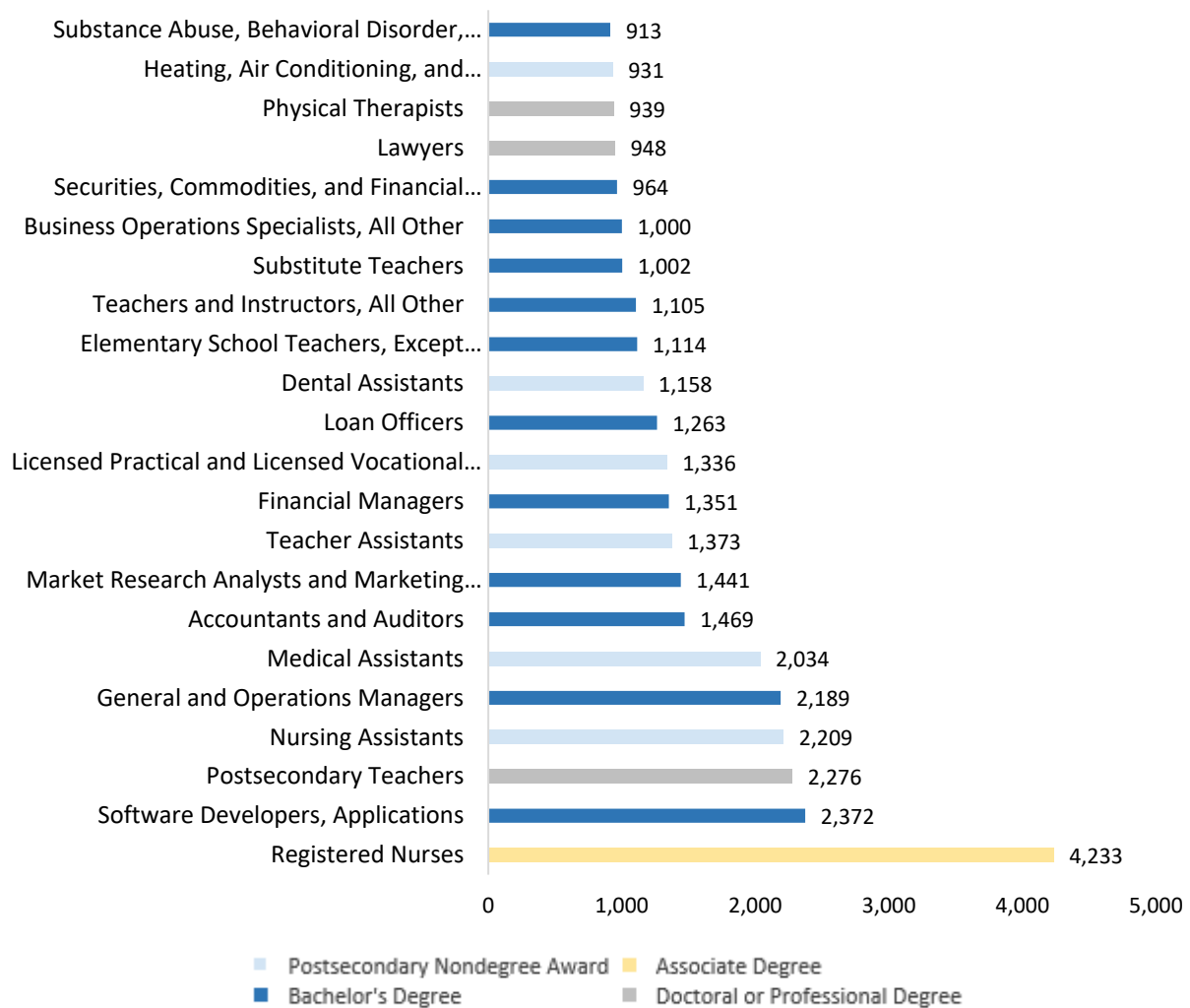
Source: EMSI

TABLE 2.24: ORANGE COUNTY EMPLOYMENT GROWTH PROJECTIONS BY INDUSTRY SECTOR, 2018 TO 2028

Industry Sector	2018 Jobs	2023 Jobs	2028 Jobs	Total Change, 2018 to 2028	Percent Change, 2018 to 2028
Health Care and Social Assistance	201,108	234,771	257,294	56,186	28%
Administrative and Support and Waste Management and Remediation Services	159,334	173,480	181,169	21,835	14%
Accommodation and Food Services	173,364	187,294	194,656	21,292	12%
Construction	125,979	139,220	147,095	21,116	17%
Government	167,055	172,743	176,442	9,387	6%
Professional, Science, and Technical Services	153,362	158,794	161,851	8,489	6%
Educational Services	38,562	43,088	45,808	7,246	19%
Other Services (except Public Administration)	82,270	86,190	88,709	6,439	8%
Arts, Entertainment, and Recreation	56,399	60,555	62,239	5,840	10%
Management of Companies and Enterprises	35,140	38,393	39,897	4,757	14%
Finance and Insurance	89,545	91,697	93,055	3,510	4%
Transportation and Warehousing	30,415	31,747	32,147	1,732	6%
Information	29,182	30,180	30,845	1,663	6%
Real Estate and Rental and Leasing	49,678	50,818	51,286	1,608	3%
Mining, Quarrying, and Oil and Gas Extraction	557	682	779	222	40%
Retail Trade	161,951	161,942	161,550	(401)	(0%)
Utilities	3,047	2,626	2,338	(709)	(23%)
Agriculture, Forestry, Fishing and Hunting	2,274	1,369	864	(1,410)	(62%)
Wholesale Trade	82,454	78,898	75,757	(6,697)	(8%)
Manufacturing	162,637	156,627	150,480	(12,157)	(7%)
Total Jobs	1,812,019	1,910,249	1,964,277	152,258	8%

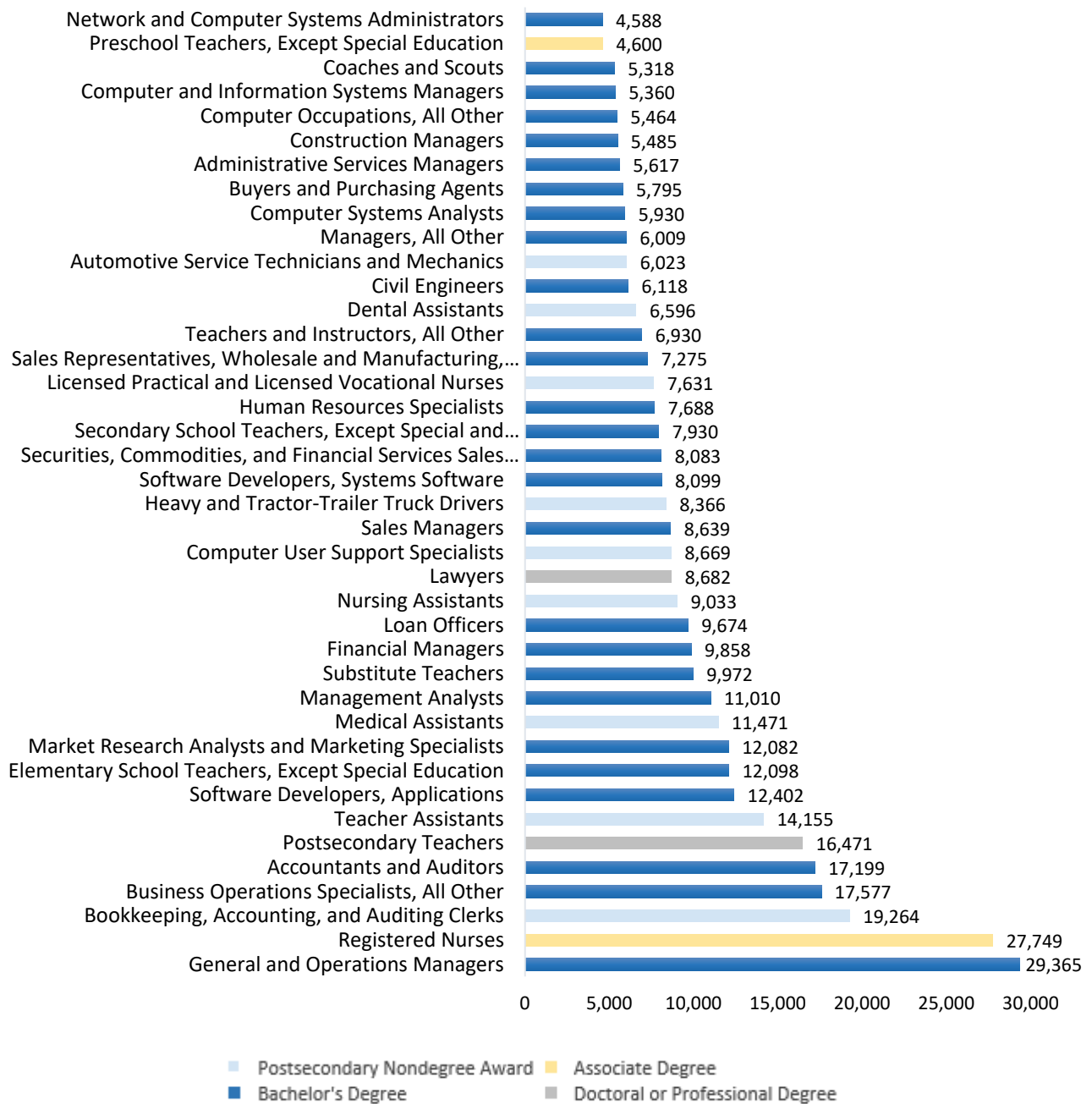
Source: EMSI

FIGURE 2.21: FASTEST GROWING JOBS BY EDUCATIONAL ATTAINMENT IN ORANGE COUNTY, 2018 TO 2028



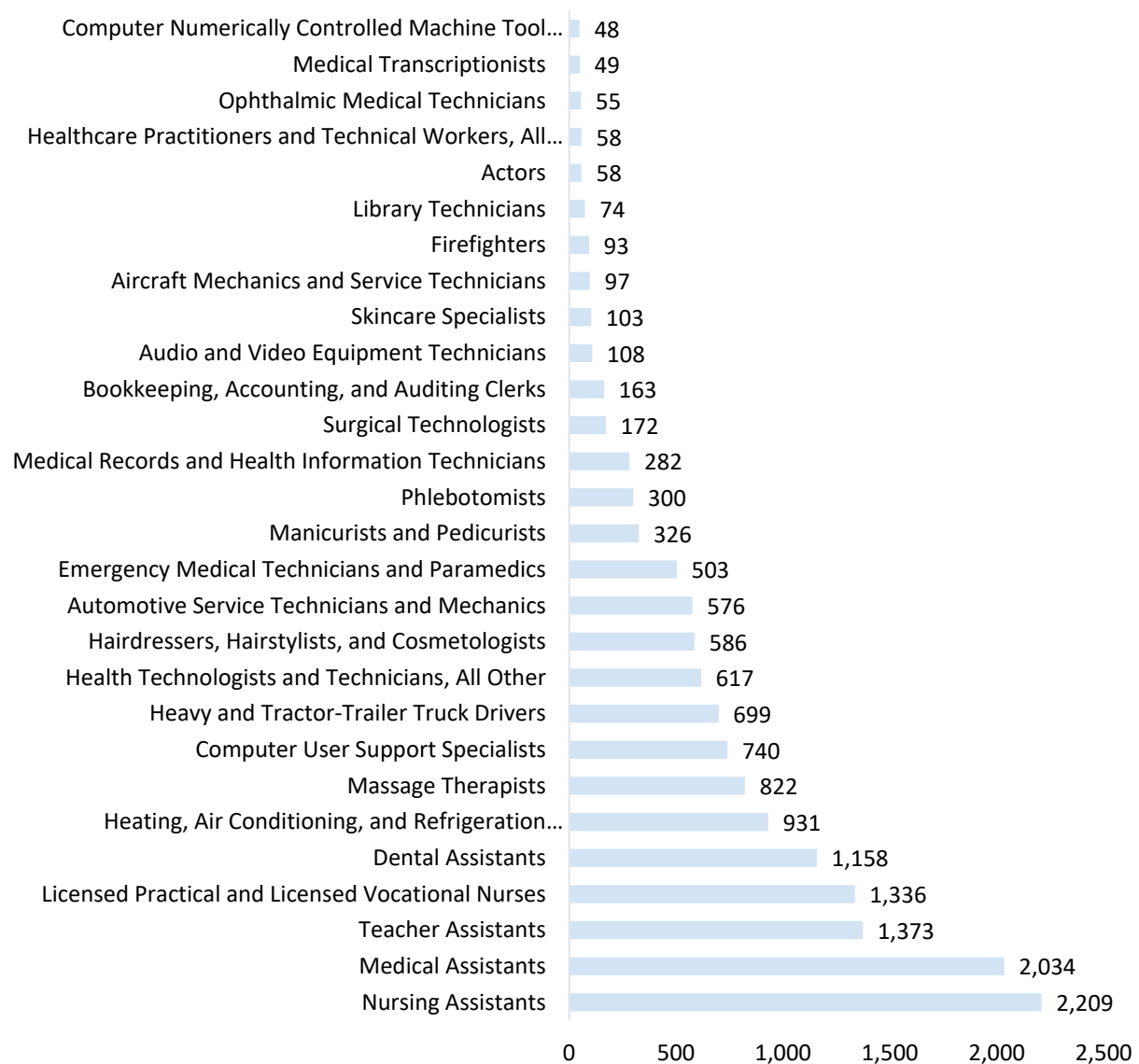
Source: QCEW Occupational Projections Data, EMSI

FIGURE 2.22: OCCUPATIONS WITH GREATEST EXPECTED NUMBER OF POSITIONS BY EDUCATIONAL ATTAINMENT IN ORANGE COUNTY, 2028



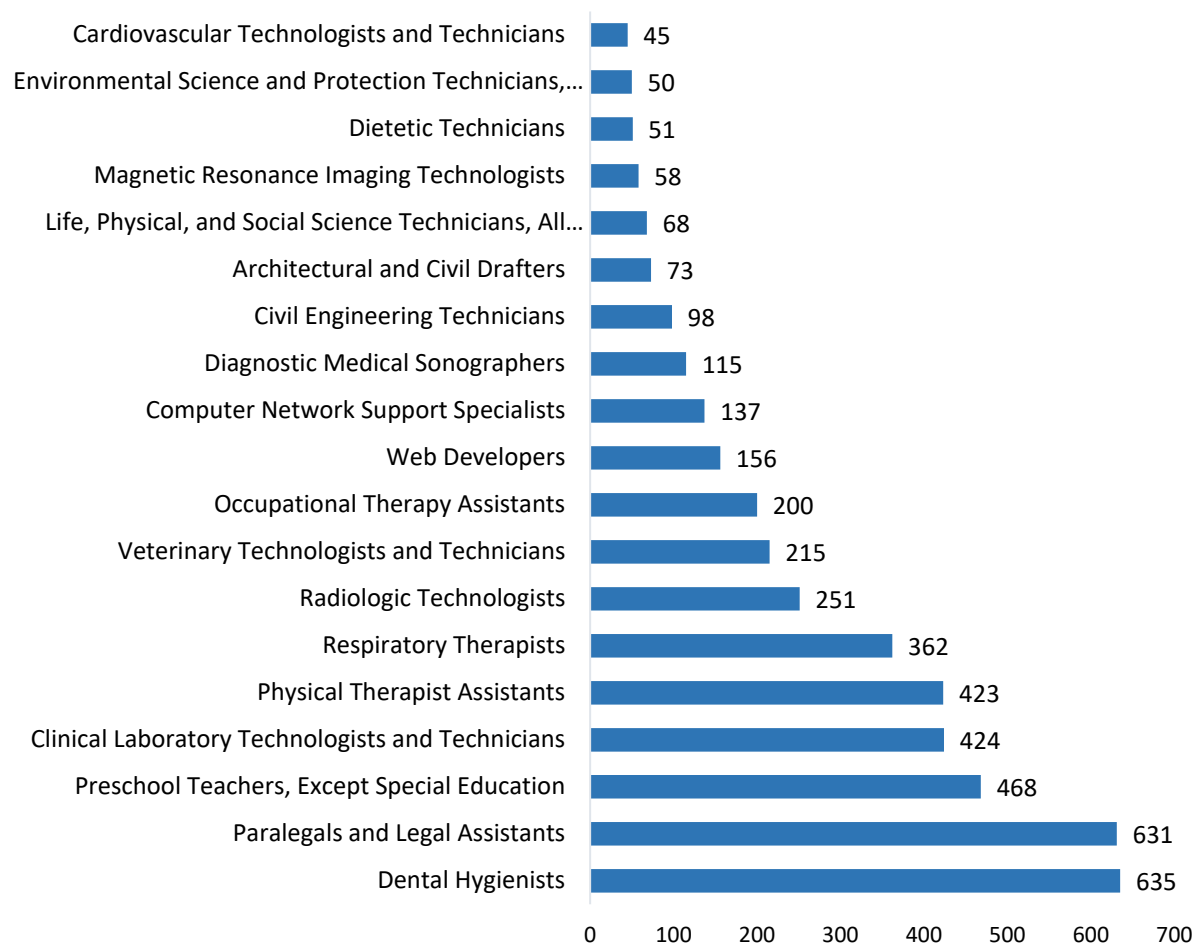
Source: QCEW Occupational Projections Data, EMSI

FIGURE 2.23: FASTEST GROWING JOBS IN ORANGE COUNTY REQUIRING POSTSECONDARY CERTIFICATION, 2018 TO 2028



Source: EMSI

FIGURE 2.24: FASTEST GROWING JOBS IN ORANGE COUNTY REQUIRING AA/AS DEGREE, 2018 TO 2028



Source: EMS

TABLE 2.25: TOP MIDDLE-SKILL JOBS BY PROJECTED OPENINGS RELATED TO IRVINE VALLEY PROGRAMS, 2018 TO 2028

Description	2018 - 2028 Change	2018 - 2028 % Change	2018 - 2028 Openings	Typical Entry-Level Education	2013 to 2017, Average Regional (Orange County) Program Completions
Paralegals and Legal Assistants	610	17%	4,454	Associate degree	248
Telecommunications Equipment Installers and Repairers, Except Line Installers	(254)	(8%)	3,281	Postsecondary nondegree award	0
Human Resources Assistants, Except Payroll and Timekeeping	21	1%	1,801	Associate degree	39
Civil Engineering Technicians	96	7%	1,237	Associate degree	44
Life, Physical, and Social Science Technicians, All Other	69	10%	918	Associate degree	0
Mechanical Drafters	30	5%	525	Associate degree	1
Prepress Technicians and Workers	(70)	(17%)	453	Postsecondary nondegree award	32
Electrical and Electronics Drafters	14	3%	425	Associate degree	0
Legal Support Workers, All Other	25	5%	412	Associate degree	227
Drafters, All Other	18	8%	219	Associate degree	61
Electronic Home Entertainment Equipment Installers and Repairers	3	2%	145	Postsecondary nondegree award	0
Court Reporters	7	22%	35	Postsecondary nondegree award	52

Source: EMSI

TABLE 2.26: TOP MIDDLE-SKILL JOBS BY PROJECTED OPENINGS RELATED TO PROGRAMS OFFERED AT BOTH SOCCCD COLLEGES, 2018 TO 2028

Description	2018 - 2028 Change	2018 - 2028 Percent Change	2018 - 2028 Openings	Typical Entry-Level Education	2013 to 2017, Average Regional (Orange County) Program Completions
Bookkeeping, Accounting, and Auditing Clerks	18	0%	21,334	Some college, no degree	489
Teacher Assistants	1,456	11%	15,333	Some college, no degree	22
Preschool Teachers, Except Special Education	456	11%	4,693	Associate degree	1,394
Electrical and Electronics Engineering Technicians	(120)	(5%)	1,921	Associate degree	53
Web Developers	147	7%	1,704	Associate degree	1,755
Architectural and Civil Drafters	63	3%	1,617	Associate degree	137
Computer Network Support Specialists	124	6%	1,574	Associate degree	1,139
Actors	62	7%	967	Some college, no degree	287
Chemical Technicians	(2)	(0%)	905	Associate degree	1
Electrical and Electronics Repairers, Commercial and Industrial Equipment	(30)	(3%)	861	Postsecondary nondegree award	40
Engineering Technicians, Except Drafters, All Other	27	3%	844	Associate degree	27
Industrial Engineering Technicians	14	3%	417	Associate degree	37
Mechanical Engineering Technicians	8	2%	394	Associate degree	18
Electro-Mechanical Technicians	(14)	(4%)	280	Associate degree	20
Desktop Publishers	(14)	(13%)	103	Associate degree	24

Source: EMSI

TABLE 2.27: TOP MIDDLE-SKILL JOBS BY PROJECTED OPENINGS WITH NO RELATED SOCCCD PROGRAMS, 2018 TO 2028

Description	2018 - 2028 Change	2018 - 2028 Percent Change	2018 - 2028 Openings	Typical Entry-Level Education	2013 to 2017, Average Regional (Orange County) Program Completions
Nursing Assistants	2,198	32%	11,102	Postsecondary nondegree award	956
Heavy and Tractor-Trailer Truck Drivers	634	8%	9,161	Postsecondary nondegree award	224
Dental Assistants	1,150	21%	7,689	Postsecondary nondegree award	1,249
Computer User Support Specialists	703	9%	6,735	Some college, no degree	1,139
Massage Therapists	818	29%	4,082	Postsecondary nondegree award	1,354
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	965	41%	3,702	Postsecondary nondegree award	160
Dental Hygienists	634	26%	2,282	Associate degree	1,054
Physical Therapist Assistants	436	57%	1,605	Associate degree	1,014
Respiratory Therapists	360	17%	1,413	Associate degree	1,075
Veterinary Technologists and Technicians	227	18%	1,292	Associate degree	955
Library Technicians	67	8%	1,273	Postsecondary nondegree award	15
Audio and Video Equipment Technicians	114	11%	1,141	Postsecondary nondegree award	99
Radiologic Technologists	251	19%	987	Associate degree	1,115
Surgical Technologists	173	23%	820	Postsecondary nondegree award	1,039
Occupational Therapy Assistants	205	52%	818	Associate degree	1,109
Firefighters	72	7%	777	Postsecondary nondegree award	0
Aircraft Mechanics and Service Technicians	76	9%	711	Postsecondary nondegree award	43
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	41	7%	601	Postsecondary nondegree award	120
Medical Equipment Repairers	(11)	(2%)	519	Associate degree	75
Tool and Die Makers	(19)	(4%)	472	Postsecondary nondegree award	0
Psychiatric Technicians	35	7%	420	Postsecondary nondegree award	987
Diagnostic Medical Sonographers	115	25%	377	Associate degree	1,029
Medical Transcriptionists	48	20%	355	Postsecondary nondegree award	943
Ophthalmic Medical Technicians	52	19%	282	Postsecondary nondegree award	0
Magnetic Resonance Imaging Technologists	59	16%	265	Associate degree	171
Radio, Cellular, and Tower Equipment Installers and Repairs	(6)	(2%)	254	Associate degree	0
Cardiovascular Technologists and Technicians	45	13%	228	Associate degree	987
Insurance Appraisers, Auto Damage	(76)	(25%)	218	Postsecondary nondegree award	0
Environmental Engineering Technicians	19	9%	207	Associate degree	3

TOP MIDDLE-SKILL JOBS BY PROJECTED OPENINGS WITH NO RELATED SOCCCD PROGRAMS, 2018 TO 2028, CONTINUED

Description	2018 - 2028 Change	2018 - 2028 Percent Change	2018 - 2028 Openings	Typical Entry-Level Education	2013 to 2017, Average Regional (Orange County) Program Completions
Geological and Petroleum Technicians	13	7%	199	Associate degree	0
Agricultural and Food Science Technicians	1	1%	156	Associate degree	0
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	(41)	(22%)	144	Postsecondary nondegree award	349
Morticians, Undertakers, and Funeral Directors	14	14%	142	Associate degree	35
Wind Turbine Service Technicians	39	46%	138	Postsecondary nondegree award	1
Motorcycle Mechanics	(9)	(7%)	126	Postsecondary nondegree award	0
Respiratory Therapy Technicians	(52)	(29%)	118	Associate degree	1,092
Aerospace Engineering and Operations Technicians	8	8%	95	Associate degree	3
Avionics Technicians	8	8%	85	Associate degree	34
Nuclear Medicine Technologists	17	15%	79	Associate degree	943
First-Line Supervisors of Fire Fighting and Prevention Workers	8	14%	48	Postsecondary nondegree award	293
Radiation Therapists	16	26%	48	Associate degree	943
Nuclear Technicians	(2)	(5%)	43	Associate degree	0
Electrical and Electronics Installers and Repairers, Transportation Equipment	1	2%	42	Postsecondary nondegree award	385
Fire Inspectors and Investigators	4	18%	28	Postsecondary nondegree award	293
Air Traffic Controllers	1	4%	25	Associate degree	0
Commercial Divers	4	36%	16	Postsecondary nondegree award	956

Source: EMSI

CHAPTER 3 INSIDE THE COLLEGE

This chapter focuses on demographic and related trends at Irvine Valley College. The sections which follow explore metrics such as enrollment trends, college preparedness, economic status, and completion rates to guide and inform future program and service development.

A note on terminology: Student enrollment is measured below in several ways.

- *Student headcount* refers to the actual number of students enrolled at each college.
- *Full-Time Equivalent Students (FTES)* is a calculation used by the State of California to determine college performance, productivity, and funding levels. It quantifies total student workload: one FTES is equivalent to approximately 525 hours of instruction over an academic term and can be generated from one full-time student or a combination of multiple part-time students.
- *Census enrollment (or duplicated headcount)* refers to student counts per every class section in each academic term. A count of all class enrollments is taken on the census day, often the last day students can drop or register for a class in that term period. Because students are counted in each class in which they are enrolled, a full-time student taking four classes will be counted four times, while a student enrolled in one class will be counted once.



ENROLLMENT TRENDS

STUDENT HEADCOUNT

- Irvine Valley College student headcounts have declined by about 1,700 students since 2009, or about 10 percent (see Figure 3.1 below).
- Student headcounts grew seven percent from 2013 to 2017, about 1000 students.

FULL-TIME EQUIVALENT STUDENTS (FTES)

- From 2013 to 2017, FTES at Irvine Valley has grown by 8.1 percent, or 370 FTES (Figure 3.2).
- Irvine Valley College experienced a ten percent spike in FTES growth between 2015 and 2016, with an additional 495 full-time equivalent students in 2016. This was mostly due to growth in the schools of Mathematics and Computer Science and Languages and Learning Resources, but there were declines in nearly all academic schools at Irvine Valley College in 2017.

CENSUS ENROLLMENT (DUPLICATED HEADCOUNT), TOTALS AND DIVISION/SCHOOL HIGHLIGHTS

- Irvine Valley College has seen a slight increase in class enrollments from 2009 to 2017, but enrollments have been relatively flat from 2013 to 2017 (Figure 3.3).
- Total enrollments in Irvine Valley College's School of Mathematics and Computer Science grew by 30 percent from 2013 to 2017, while the schools of Social and Behavioral Sciences; Humanities; and Kinesiology, Health and Athletics, along with the Emeritus Institute, experienced the largest enrollment declines (Figure 3.4).

STUDENT RESIDENCY AND HIGH SCHOOL HOME DISTRICTS

- Nearly three-fourths of students who attend Irvine Valley College are residents of communities within the South Orange County Community College District Service Area (Figure 3.6).
- 44 percent of Irvine Valley College students live in the city of Irvine.
- Three percent of students at Irvine Valley College qualify as AB 540 students, and six percent are international students (Figure 3.5).
- Irvine USD sends the most first-time college students of any one district (31 percent) to Irvine Valley College (Figure 3.7).

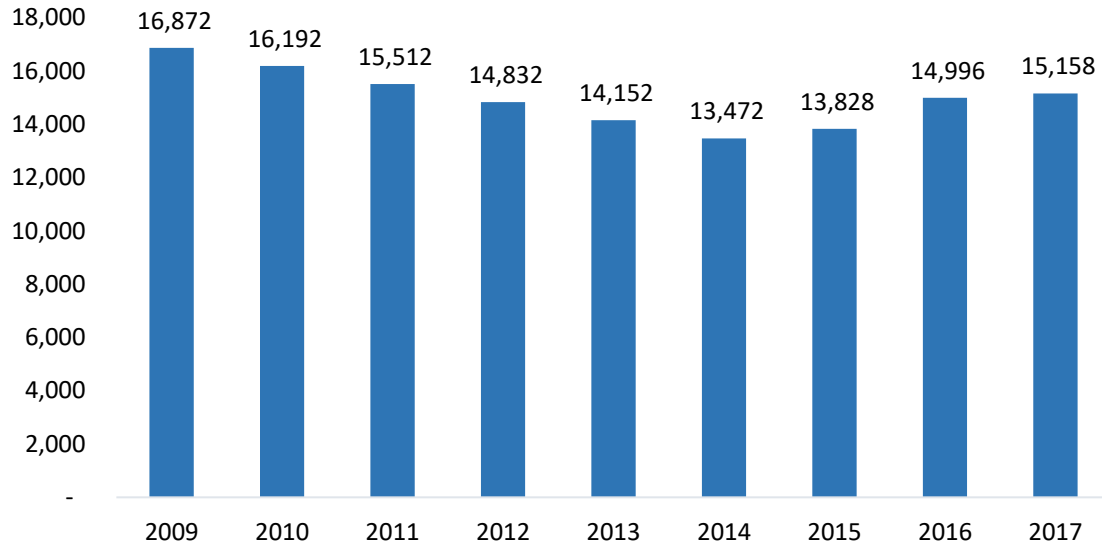
STUDENT EDUCATIONAL GOALS, STATUS AND CREDIT LOAD

- Two of every three students who enroll at Irvine Valley College expect to transfer to a four-year institution to complete their studies (Figure 3.8).
- Two-thirds of students at Irvine Valley are continuing students, enrolling for a second year or second semester of instruction (Figure 3.9).
- Fifteen percent of students indicate this is the first time they are attending college.
- At Irvine Valley, an additional 150 high school students are dual-enrolled in 2017 compared to 2013.
- Full-time students represent more than 40 percent of students at Irvine Valley (Figure 3.10). Part-time students constitute nearly half the student body.
- Only about ten percent of Irvine Valley's students are noncredit students.

STUDENT HEADCOUNT BY METHOD OF INSTRUCTION

- The number of enrollments in internet-based classes has increased at Irvine Valley, with 48 percent more enrollments in 2017 than in 2013 (Figure 3.11).
- At Irvine Valley College in 2017, 23 percent of students take classes via multiple methods of instruction, an increase from 15 percent in 2013.

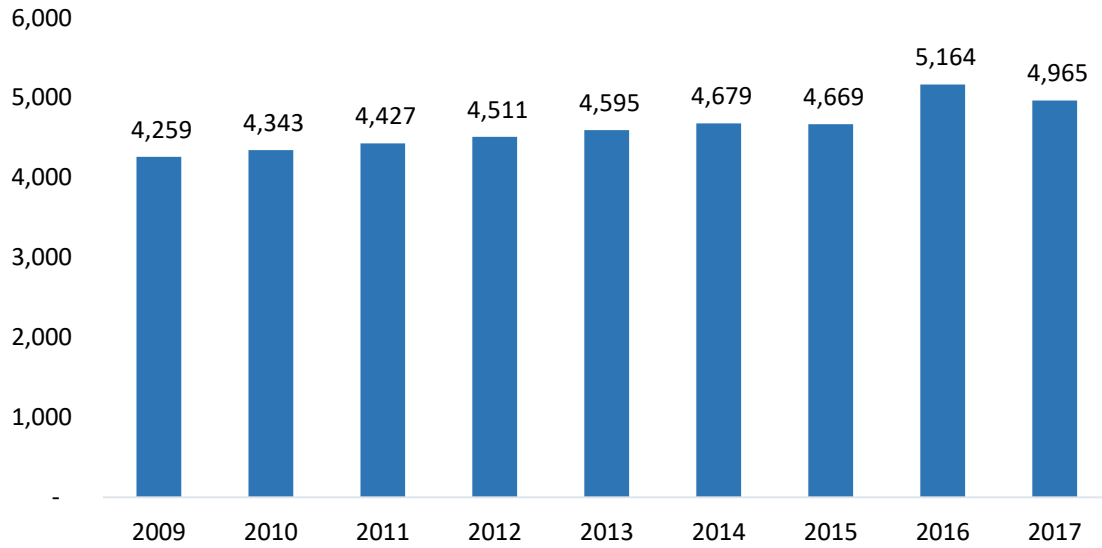
FIGURE 3.1: STUDENT HEADCOUNT, IRVINE VALLEY COLLEGE, FALL 2009 TO FALL 2017



Term	Irvine Valley
Fall 2009	16,872
Fall 2010	16,192
Fall 2011	15,512
Fall 2012	14,832
Fall 2013	14,152
Fall 2014	13,472
Fall 2015	13,828
Fall 2016	14,996
Fall 2017	15,158

Source: SOCCCD inFORM Data Warehouse

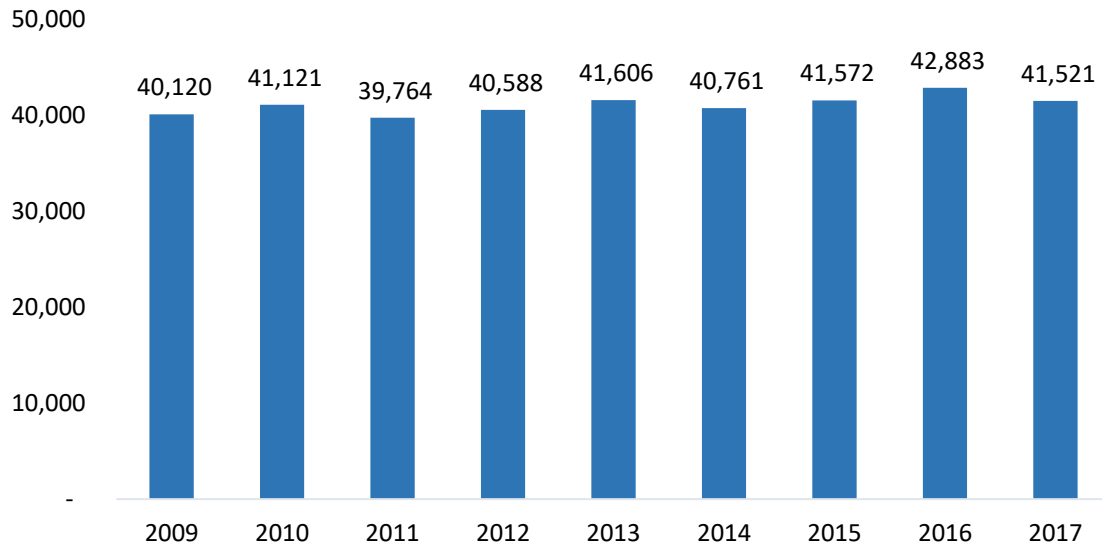
FIGURE 3.2: FULL-TIME EQUIVALENT STUDENTS (FTES), IRVINE VALLEY COLLEGE, FALL 2009 TO FALL 2017



Term	Irvine Valley
Fall 2009	4,259
Fall 2010	4,343
Fall 2011	4,427
Fall 2012	4,511
Fall 2013	4,595
Fall 2014	4,679
Fall 2015	4,669
Fall 2016	5,164
Fall 2017	4,965

Source: SOCCCD inFORM Data Warehouse, 2019

FIGURE 3.3: CENSUS ENROLLMENT (DUPLICATED HEADCOUNT), IRVINE VALLEY COLLEGE, FALL 2009 TO FALL 2017



Term	Irvine Valley
Fall 2009	40,120
Fall 2010	41,121
Fall 2011	39,764
Fall 2012	40,588
Fall 2013	41,606
Fall 2014	40,761
Fall 2015	41,572
Fall 2016	42,883
Fall 2017	41,521

Source: SOCCCD inFORM Data Warehouse, 2019

FIGURE 3.4: LARGEST ENROLLMENT GROWTH/DECLINES BY SCHOOL, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2017

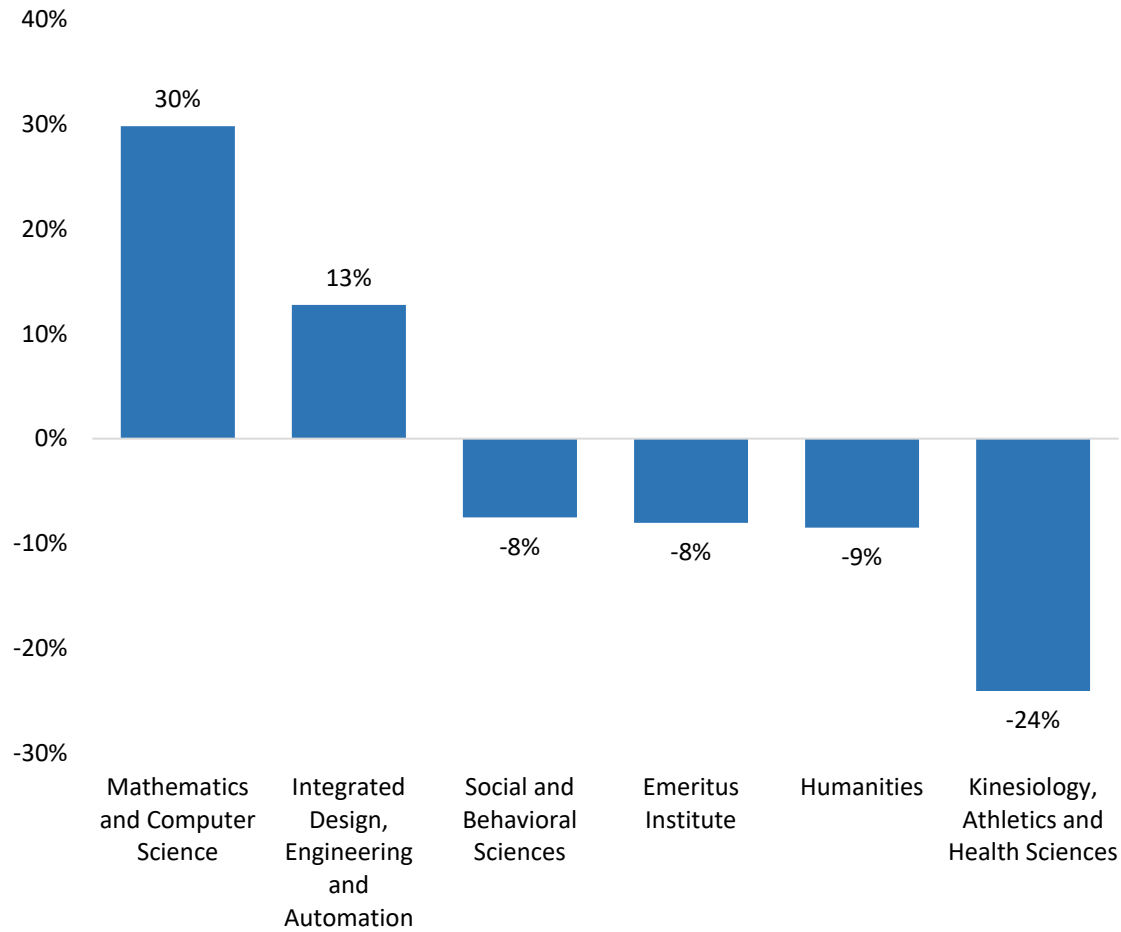
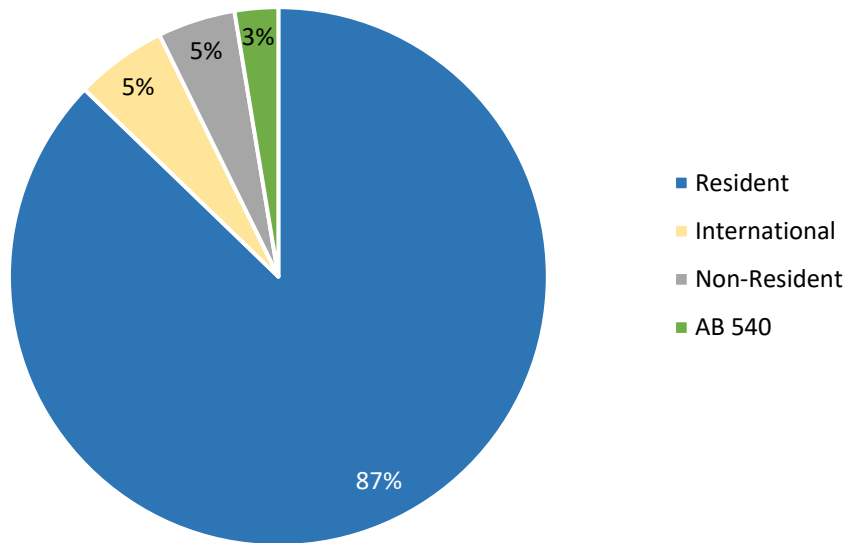


FIGURE 3.5: STUDENT HEADCOUNT BY RESIDENCY, IRVINE VALLEY COLLEGE, FALL 2017

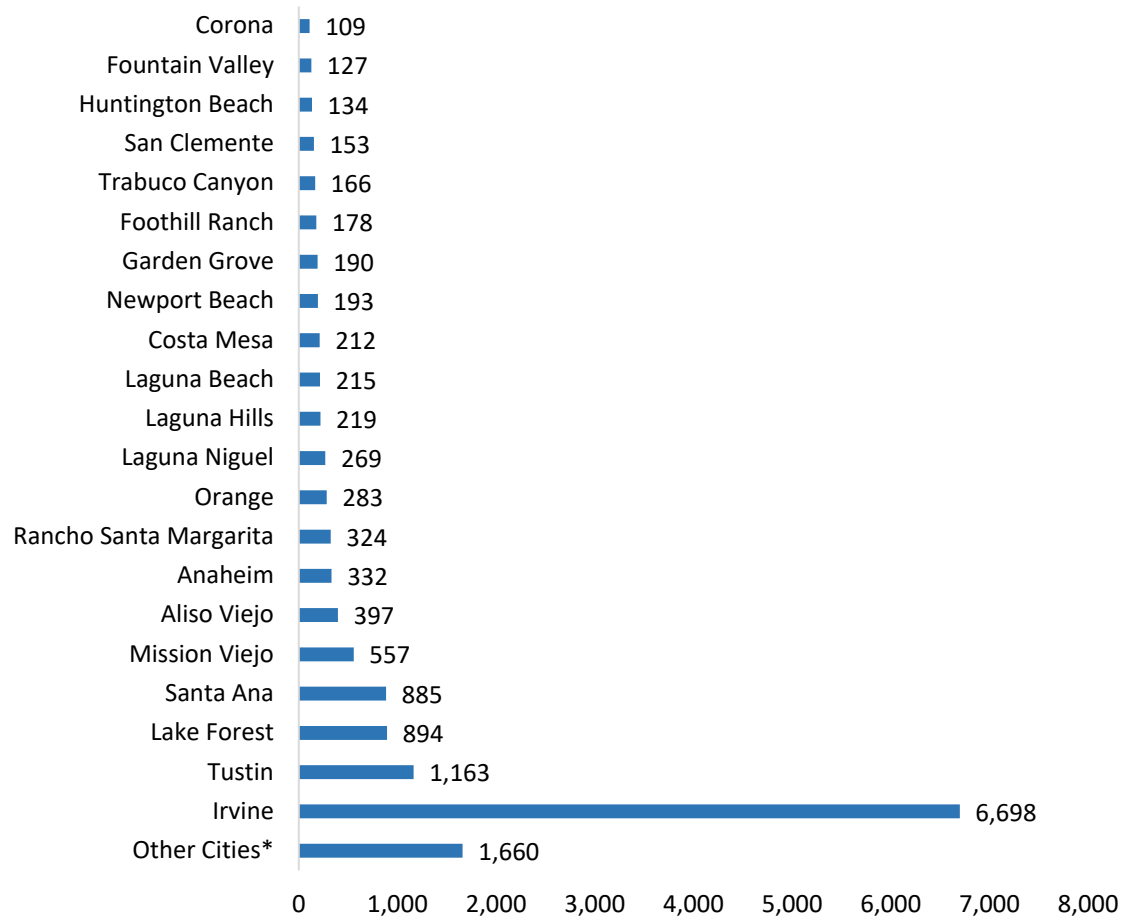


Residency	Irvine Valley	
	Fall 2017 Count	Fall 2017 Percent
AB 540	396	3%
International	834	6%
Non-Resident	707	5%
Resident	13,220	87%
Total*	15,157	100%

*Note: The IVC student total does not match headcount due to missing data for one student.

Source: SOCCCD inFORM Data Warehouse

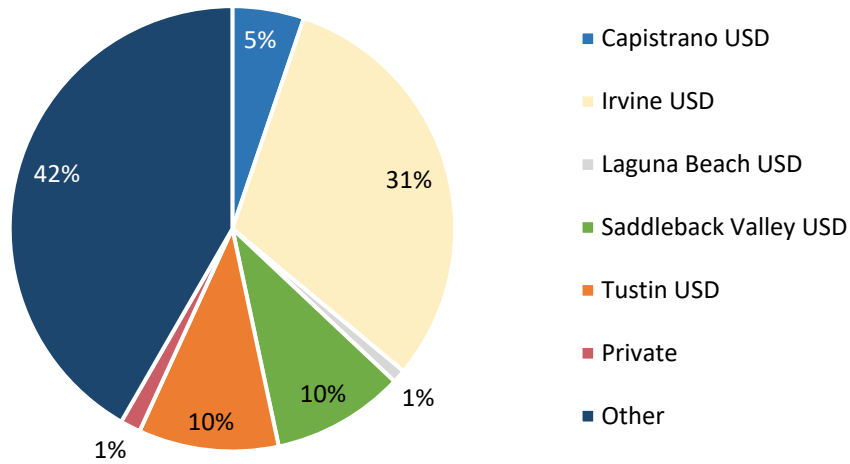
FIGURE 3.6: IRVINE VALLEY COLLEGE ENROLLMENT BY CITY, FALL 2017



Note(s): "Other Cities" is a grouping of cities with under 100 students.

Source: SOCCCD inFORM Data Warehouse

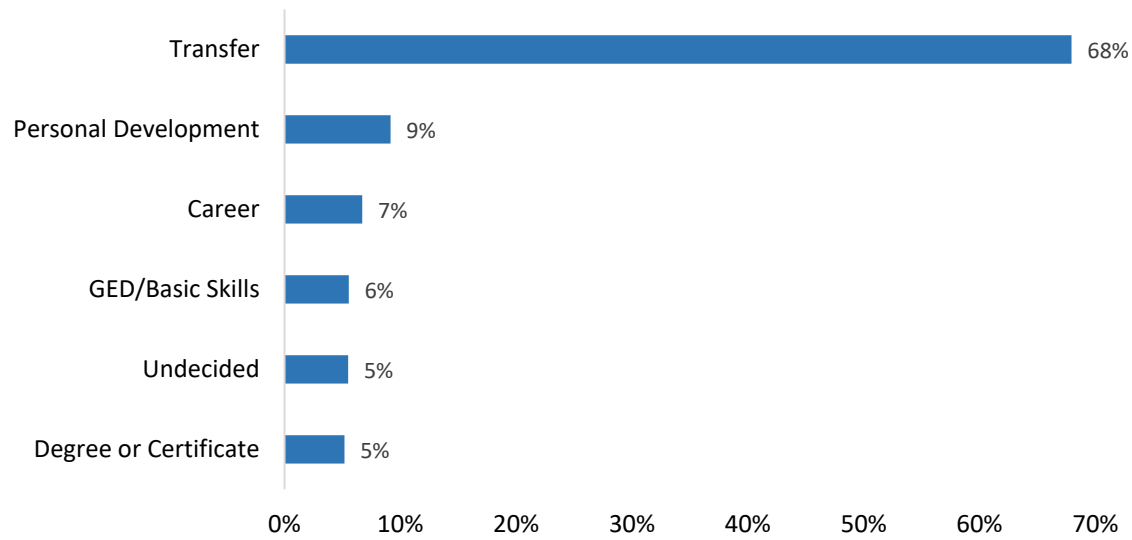
FIGURE 3.7: HIGH SCHOOL FEEDER DISTRICTS, IRVINE VALLEY COLLEGE, FALL 2017



High School District	Fall 2017 Count	Fall 2017 Percent
Capistrano USD	113	5%
Irvine USD	669	31%
Laguna Beach USD	21	1%
Saddleback Valley USD	209	10%
Tustin USD	221	10%
Private	32	2%
Other	904	42%
Total	2,169	100%

Source: SOCCCD inFORM Data Warehouse

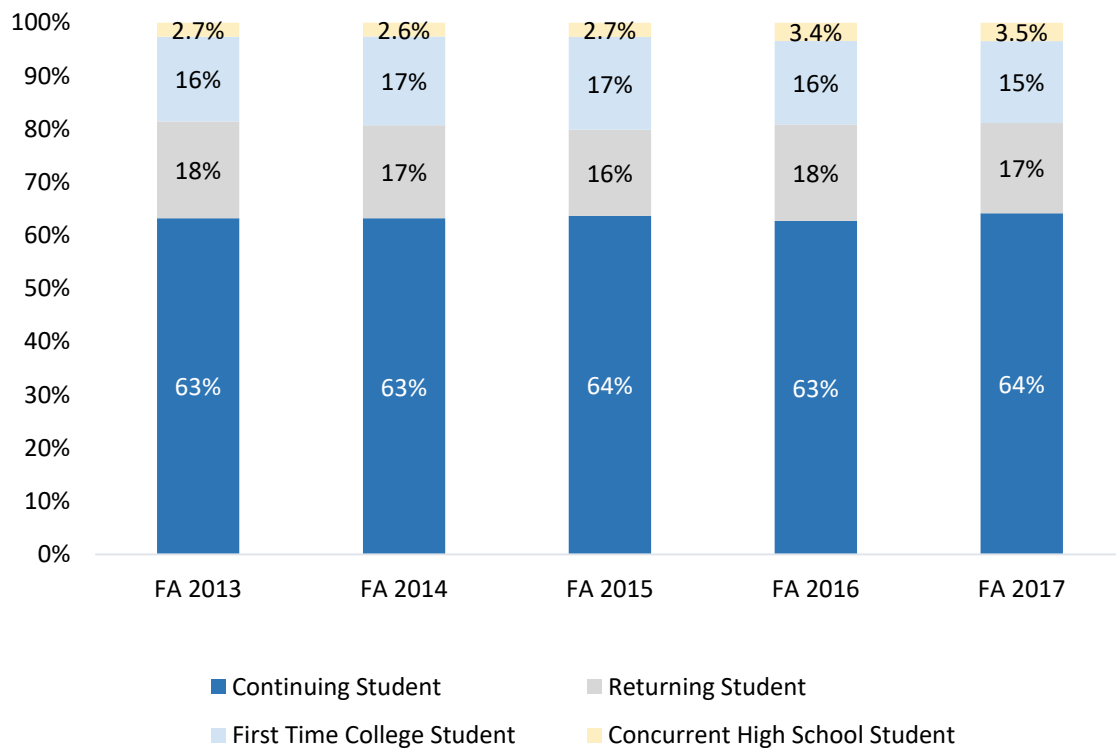
FIGURE 3.8: STUDENT HEADCOUNT BY EDUCATIONAL GOALS, IRVINE VALLEY COLLEGE, FALL 2017



Educational Goals	Irvine Valley	
	Fall 2017 Count	Fall 2017 Percent
Transfer	10,296	68%
Personal Development	1,388	9%
Career	1,017	7%
Undecided	832	5%
GED/Basic Skills	841	6%
Degree or Certificate	784	5%
Total	15,158	100%

Source: SOCCCD inFORM Data Warehouse

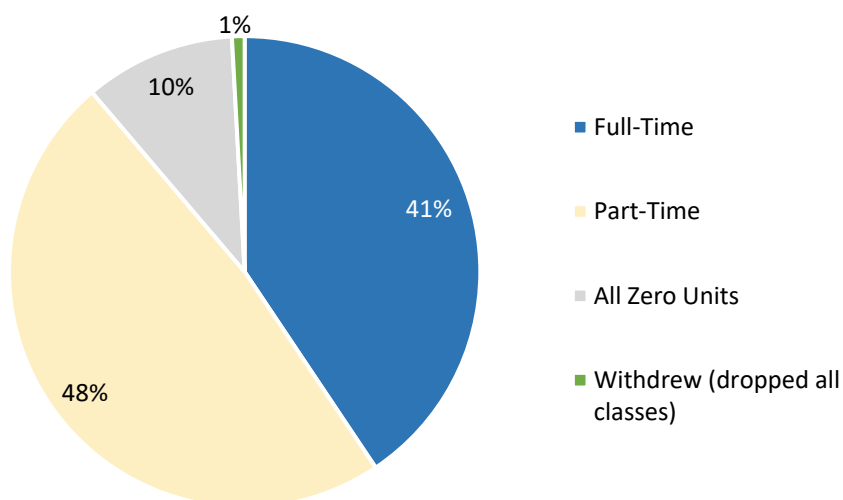
FIGURE 3.9: STUDENT HEADCOUNT BY STATUS, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2017



Enrollment Status	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
Continuing Student	8,947	8,516	8,803	9,405	9,726
Returning Student	2,578	2,355	2,241	2,722	2,572
First Time College Student	2,250	2,252	2,413	2,352	2,335
Concurrent High School Student	377	349	369	516	523
Other	-	-	2	1	2
Total	14,152	13,472	13,828	14,996	15,158

Source: SOCCCD inFORM Data Warehouse

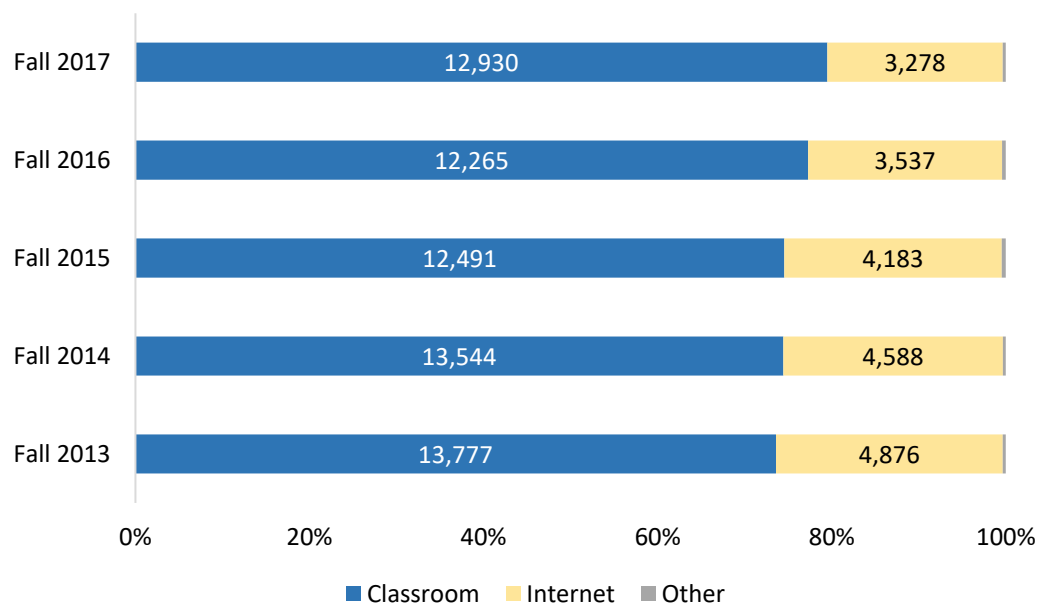
FIGURE 3.10: STUDENT HEADCOUNT BY CREDIT LOAD, IRVINE VALLEY COLLEGE, FALL 2017



Student Status	Fall 2013		Fall 2014		Fall 2015		Fall 2016		Fall 2017	
Full-Time	5,852	41%	5,951	44%	5,959	43%	6,487	43%	6,156	41%
Part-Time	7,437	53%	7,174	53%	7,328	53%	7,639	51%	7,302	48%
All Zero Units	802	6%	280	2%	482	4%	804	5%	1,569	10%
Withdrew	61	0.4%	67	0.5%	59	0.4%	66	0.4%	131	0.9%
Total	14,152	100%	13,472	100%	13,828	100%	14,996	100%	15,158	100%

Source: SOCCCD inFORM Data Warehouse

FIGURE 3.11: STUDENT HEADCOUNT BY INSTRUCTION METHOD, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2017



Instruction Method	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
Classroom	12,930	12,265	12,491	13,544	13,777
Internet	3,278	3,537	4,183	4,588	4,876
Other	56	67	79	62	65
Total	16,264	15,869	16,753	18,194	18,718

Source: SOCCCD inFORM Data Warehouse

AGE AND GENDER DEMOGRAPHICS OF STUDENTS

Irvine Valley College is experiencing similar trends in age as other community colleges in the region and across California, including slight declines among college-age students offset by growing numbers of high school age and older adult students. The next two sections describe the demographics of the Irvine Valley College student population, looking at age and gender below, and race, ethnicity, and first-generation status in the section which follows.

STUDENTS BY AGE

- Traditional college students (those ages 18 to 21 years old) make up about 45 percent of the student population at Irvine Valley College (see Figure 3.12 below).
- High school students (those under 18 years of age) represent seven percent of the Irvine Valley College student population.
- Eight percent of students are 60 years of age or older.

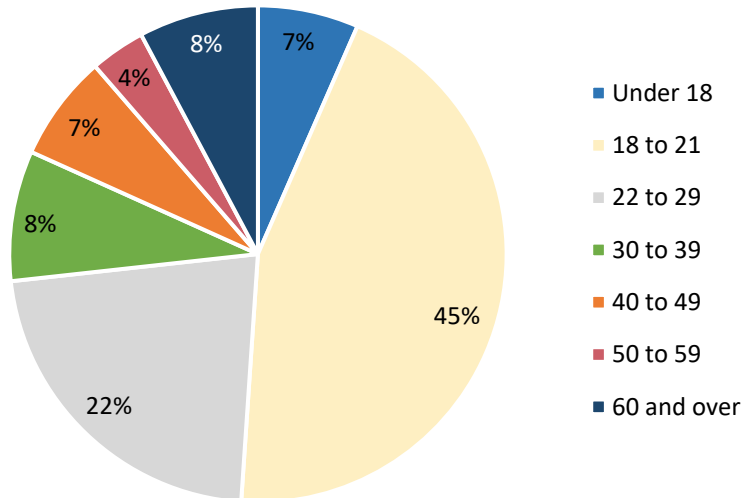
TRENDS AMONG AGE COHORT GROUPS

- Irvine Valley College is experiencing an increase in enrollments among older adults and high school students (Figure 3.13).
- Between 2013 to 2017, the number of students at Irvine Valley College over the age of 60 increased by 360 students; during this period, the college gained nearly 640 more students who are at least 40 years old.
- Irvine Valley College has experienced flat to slight growth in enrollments among younger age groups.

STUDENTS BY GENDER

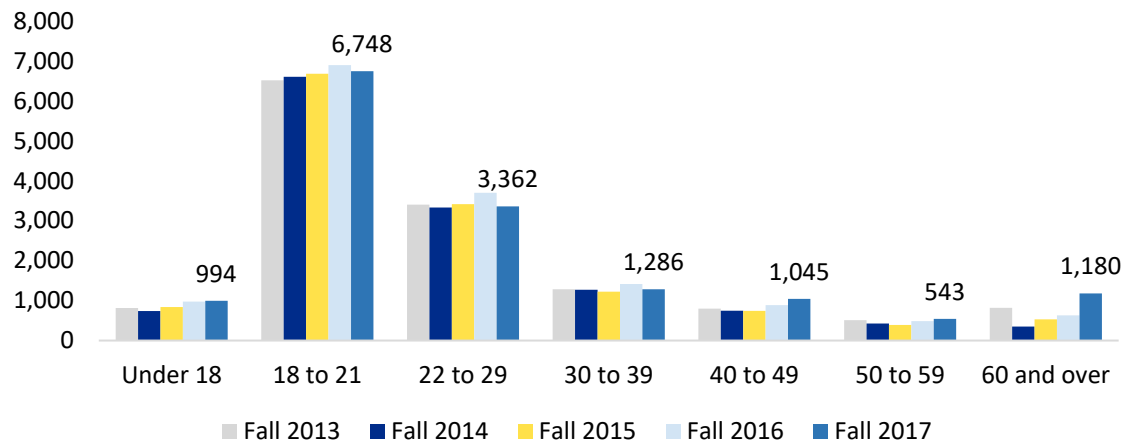
- The gender ratio at Irvine Valley has remained relatively steady over the five years from 2013 to 2017 (Figure 3.14).
- Women make up a little more than half of the student population.

FIGURE 3.12: AGE DISTRIBUTION AT IRVINE VALLEY COLLEGE, FALL 2017



Source: SOCCCD inFORM Data Warehouse

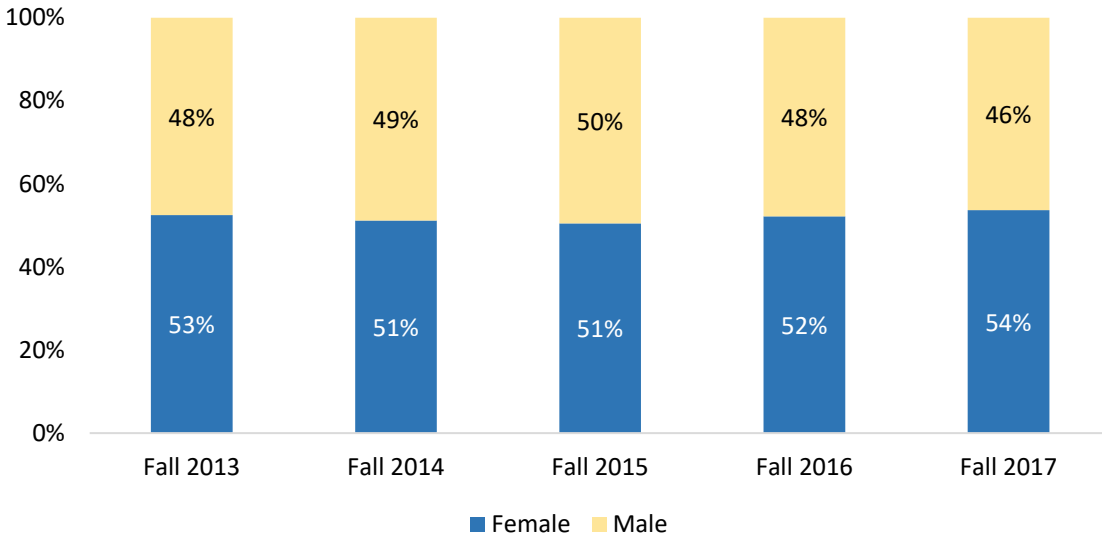
FIGURE 3.13: AGE DISTRIBUTION OF STUDENTS AT IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2017



Age Group	Fall 2013		Fall 2017	
	Number of Students	Percent of Student Body	Number of Students	Percent of Student Body
Under 18	816	6%	994	7%
18 to 21	6,517	46%	6,748	45%
22 to 29	3,405	24%	3,362	22%
30 to 39	1,286	9%	1,286	8%
40 to 49	798	6%	1,045	7%
50 to 59	512	4%	543	4%
60 and over	818	6%	1,180	8%
Total	14,152	100%	15,158	100%

Source: SOCCCD inFORM Data Warehouse

FIGURE 3.14: GENDER DISTRIBUTION OF STUDENTS AT IRVINE VALLEY COLLEGE, 2013 TO 2017



***Note:** Data excludes students who decline to state gender.

Source: SOCCCD inFORM Data Warehouse

RACE, ETHNICITY AND FIRST-GENERATION STUDENTS

Three-fourths of community college students in California are students of color. Nearly half are Hispanic/Latinx, and 14 percent are Asian. More than 40 percent of community college students statewide are in the first generation of their families to attend college. Irvine Valley student demographics are like those statewide and reflect the growing diversity of Orange County—Asian and Hispanic/Latinx student populations are growing at the college. One in five students at Irvine Valley is a first-generation student. Among major ethnic groups, about one-third of Latinx students and one-fourth of Native Hawaiian or Pacific Islander students are in the first generation of their families to go to college.

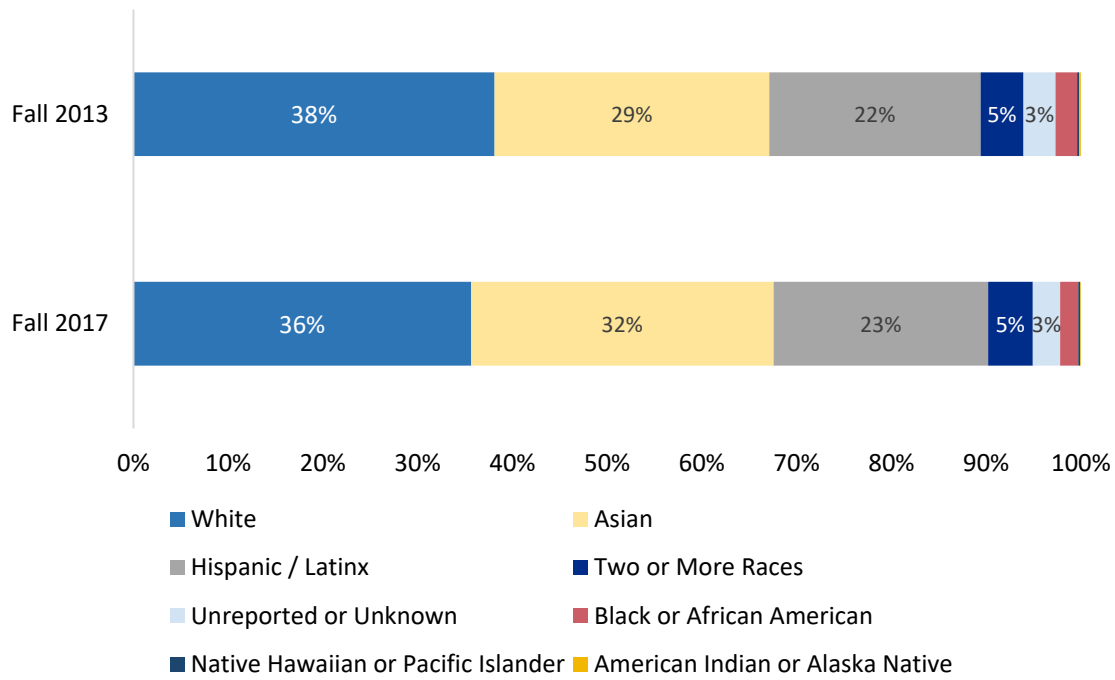
RACE AND ETHNICITY

- A little more than one-third of students (36 percent) at Irvine Valley College identify as White, and nearly one third are Asian (32 percent) (see Figure 3.15 below).
- One in four students (about 23 percent) at Irvine Valley identify as Hispanic/Latinx.
- There has been a rise in enrollments among students of Asian, Latinx, and mixed descent at the college between 2013 and 2017.
- Irvine Valley has experienced declines in African American enrollment (approximately 40 students, or nearly 11 percent).

FIRST-GENERATION STUDENTS

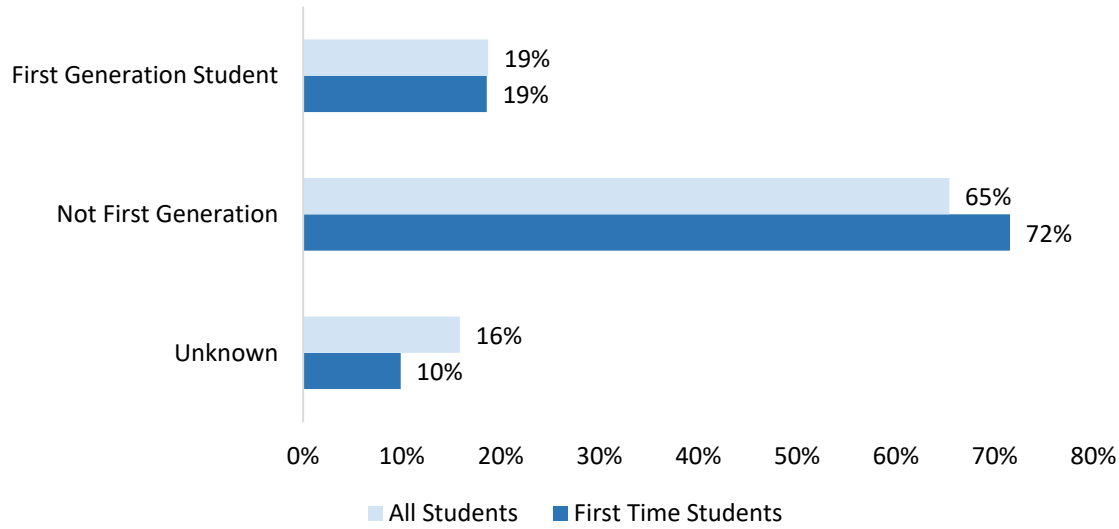
- One in five students at Irvine Valley College is a first-generation student (Figure 3.16).
- One-third of Hispanic/Latinx students at Irvine Valley College are first-generation college students (see Figure 3.17).
- Nearly one in five of both African American students and students of Native Hawaiian or Pacific Islander backgrounds at Irvine Valley are first-generation students.

FIGURE 3.15: RACE AND ETHNICITY, IRVINE VALLEY COLLEGE, FALL 2013 AND FALL 2017



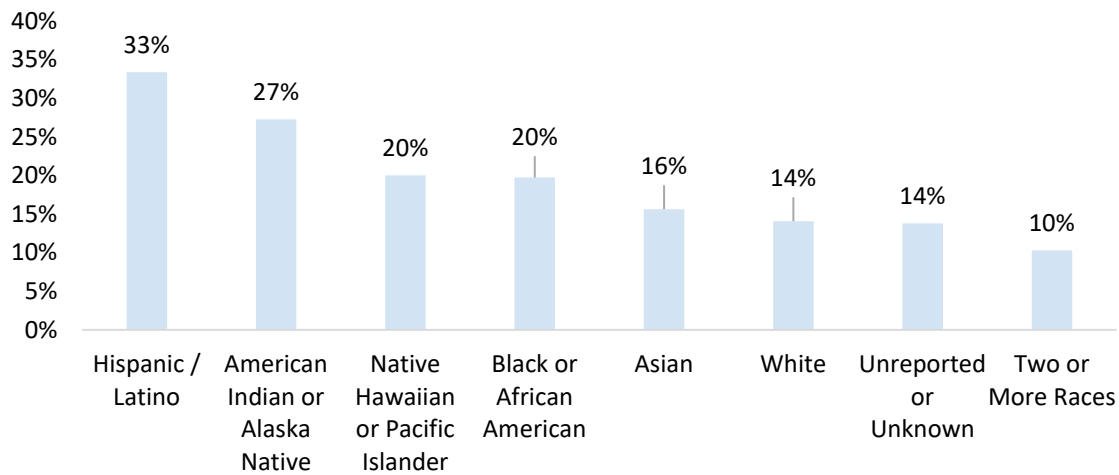
Source: SOCCCD inFORM Data Warehouse, IPEDS Ethnicity Categories

FIGURE 3.16: FIRST-GENERATION STUDENTS, IRVINE VALLEY COLLEGE, FALL 2017



Source: SOCCCD inFORM Data Warehouse

FIGURE 3.17: FIRST-GENERATION STUDENTS BY ETHNICITY, IRVINE VALLEY COLLEGE, FALL 2017



Source: SOCCCD inFORM Data Warehouse

ECONOMIC CHARACTERISTICS OF STUDENTS

Community colleges enroll students regardless of economic background and ability to pay. As an affordable and accessible option for education and training, community college creates opportunities for social mobility and improved prospects for increasing earnings over one's lifetime.

A recent report by the Century Foundation found that most community college students come from families that have less income and wealth than those of students who attend private four-year colleges and universities.²¹ Eighty percent of community college students in California work at least part-time.²² Nearly half of all students receive some level of financial aid, including grants, work-study funding, and scholarships.²³ More than half of California community college students are considered "economically disadvantaged," and many experience additional barriers as first-generation students, foster youth, veterans, and/or immigrants.²⁴

ECONOMICALLY DISADVANTAGED STUDENTS

- Among first-time college students, forty-one percent at Irvine Valley College qualify as economically disadvantaged (see Figure 3.18 below).

FINANCIAL AID

- The number of Irvine Valley students receiving Promise Grants and other awards has grown from 2013 to 2017 at both colleges, though as a percent of total students, the ratio has declined (see Figure 3.19).
- Nearly half of Irvine Valley College students (48 percent) received Promise Grants in 2017, which cover the cost of enrollment fees for community college classes.
- As a percentage, more students at Irvine Valley College received Promise Grants between the 2013 and 2017 school years than statewide (see Figure 3.20).
- The total aid amount of grant awards to students at Irvine Valley College has increased by \$5 million (38 percent) between 2013 and 2017 (Figure 3.21).
- Changes in grant aid totals make up most of the shift in financial aid amounts over this period.

STUDENT EMPLOYMENT

- More than 60 percent of students at Irvine Valley College work and attend classes (Figure 3.22).
- About one-third of students work at least 20 hours per week.
- At least one in five students at Irvine Valley work full or nearly full-time (30 or more hours a week) and 11 percent of students work more than 40 hours per week in addition to taking classes.

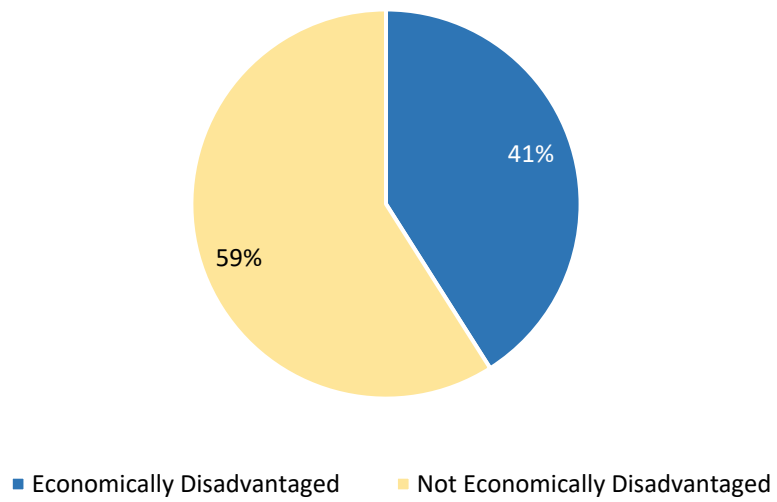
²¹ The Century Foundation, Recommendations for Providing Community Colleges the Resources They Need, April 2019, p.8, https://production-tcf.imgix.net/app/uploads/2019/04/25171942/recommendation_comcollege_2019.pdf

²² California Career Center, California Community Colleges system, accessed October 2019 from <https://www.calcareercenter.org/Home/Content?contentID=205>

²³ California Community Colleges Chancellor's Office, Student Financial Assistance, accessed October 2019 from <https://www.cccco.edu/About-Us/Chancellors-Office/Divisions/Educational-Services-and-Support/Special-Populations/What-we-do/Student-Financial-Assistance-Programs>

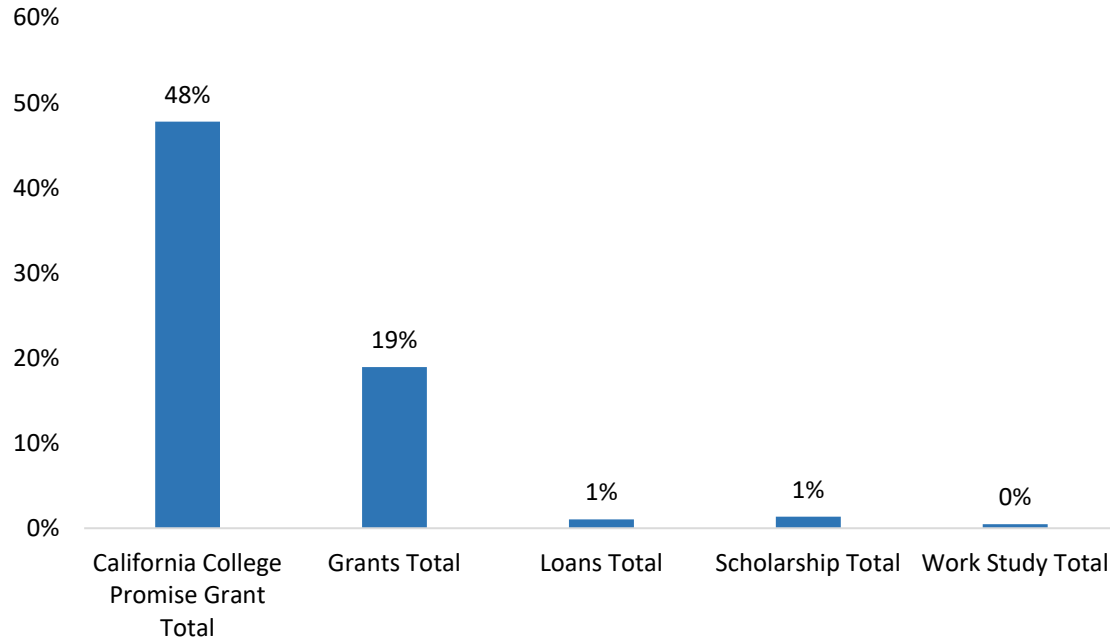
²⁴ Foundation for California Community Colleges, About the Colleges, <https://foundationccc.org/About-Us/About-the-Colleges>. The California Community Colleges Chancellor's Office defines students as "economically disadvantaged" if their personal or family income is below the poverty line, and/or they participate in at least one of the following public assistance programs including CalWORKS, SSI and General Assistance, or have received grants such as the Promise Grant or Pell Grants to pursue their education California Community Colleges, Specifications for the Carl D. Perkins Career and Technical Education Act of 2006, December 19, 2014, p.4.

FIGURE 3.18: ECONOMIC STATUS OF FIRST-TIME STUDENTS, IRVINE VALLEY COLLEGE, FALL 2016



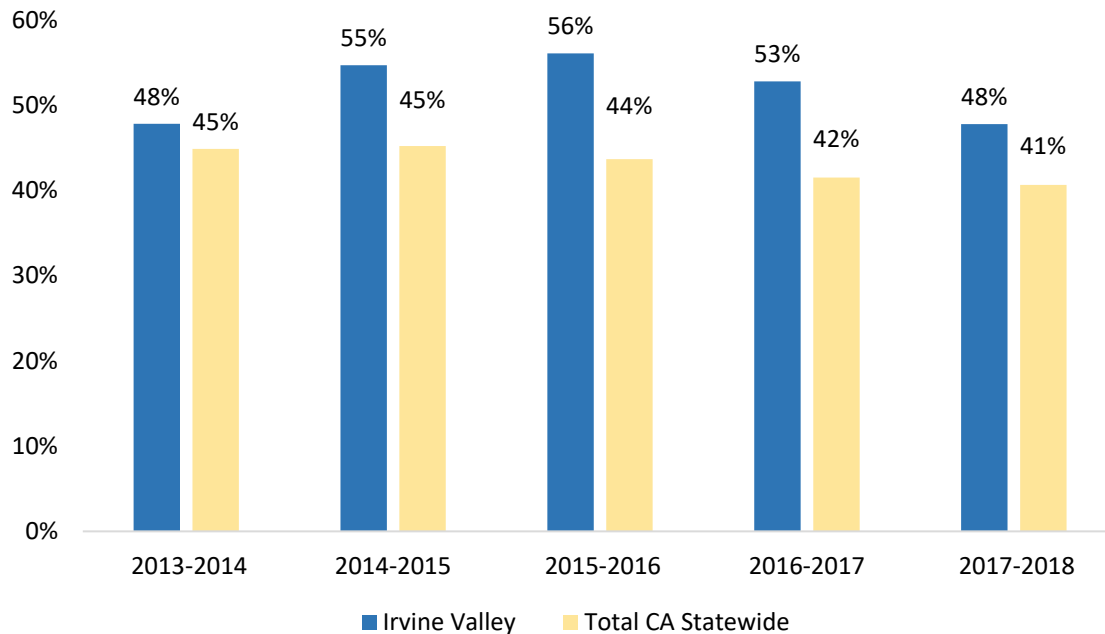
Source: SOCCCD inFORM Data Warehouse

FIGURE 3.19: PERCENT OF STUDENTS RECEIVING AID BY AWARD TYPE, IRVINE VALLEY COLLEGE, 2017-2018



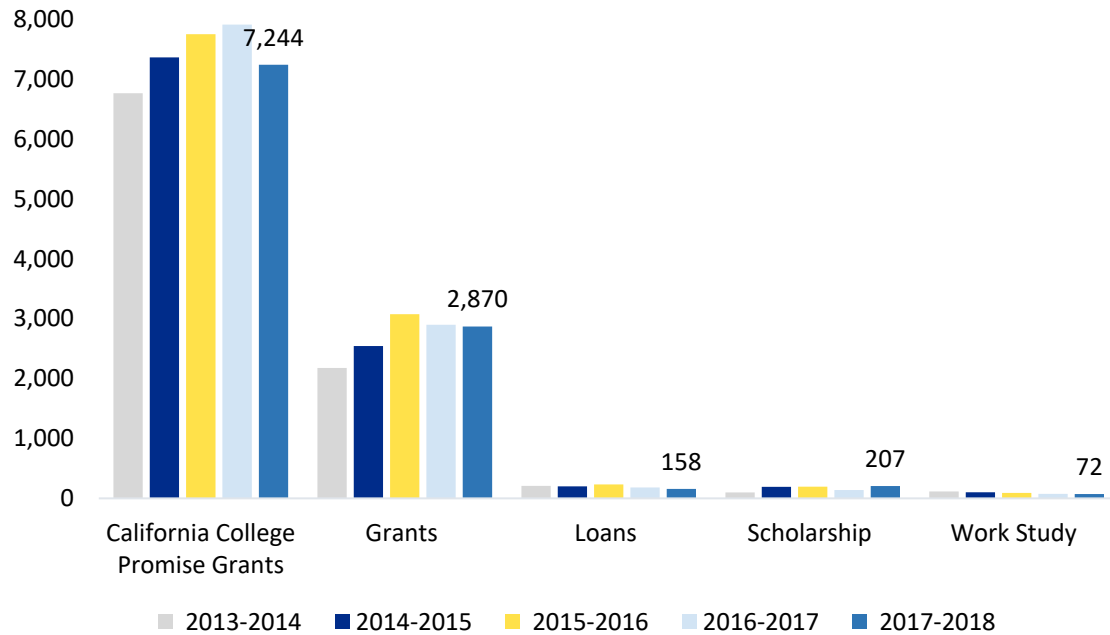
Source: California Community Colleges Chancellor's Office

FIGURE 3.20: PERCENT OF STUDENTS AWARDED PROMISE GRANTS, IRVINE VALLEY COLLEGE AND CALIFORNIA STATEWIDE, SCHOOL YEARS 2013-2014 TO 2017-2018



Source: California Community Colleges Chancellor's Office

FIGURE 3.21: STUDENTS RECEIVING FINANCIAL AID BY AWARD TYPE, IRVINE VALLEY COLLEGE, SCHOOL YEARS 2013-2014 TO 2017-2018



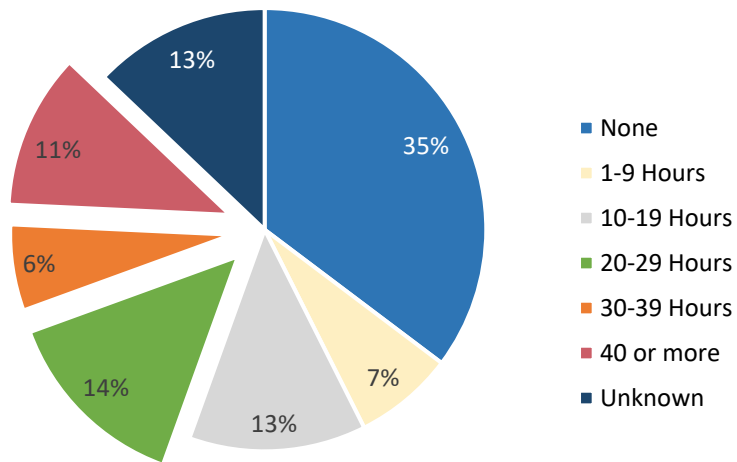
Award Type	2013-2014		2014-2015		2015-2016	
	Students Served	Aid Amount	Students Served	Aid Amount	Students Served	Aid Amount
CA College Promise Grants	6,768	\$4,861,429	7,369	\$5,453,334	7,756	\$5,768,451
Grants	2,179	\$8,621,918	2,545	\$10,198,679	3,078	\$11,918,646
Loans	209	\$1,208,386	201	\$1,142,304	232	\$1,240,856
Scholarship	98	\$104,381	193	\$165,055	195	\$236,965
Work Study	115	\$374,371	102	\$339,172	91	\$383,302
Irvine Valley Total*	6,878	\$15,170,485	7,558	\$17,298,544	7,953	\$19,548,220

Award Type	2016-2017		2017-2018	
	Students Served	Aid Amount	Students Served	Aid Amount
CA College Promise Grants	7,916	\$5,772,862	7,244	\$5,306,169
Grants	2,900	\$11,943,396	2,870	\$13,179,033
Loans	181	\$743,325	158	\$642,063
Scholarship	140	\$163,820	207	\$475,434
Work Study	76	\$306,751	72	\$540,976
Irvine Valley Total*	8,135	\$18,930,154	7,475	\$20,143,675

* Most students receive more than one type of aid award.

Source: California Community Colleges Chancellor's Office

FIGURE 3.22: WEEKLY STUDENT EMPLOYMENT HOURS, IRVINE VALLEY COLLEGE, FALL 2017



Source: SOCCCD inFORM Data Warehouse

COLLEGE READINESS

College readiness is a strong predictor of whether a new student will complete their educational program successfully. It refers to a set of skills, knowledge, and attributes a student should possess to be ready to succeed in entry-level college courses, but in practice, it has not always been easy to assess in individual students. Placement exams have been a primary method used to determine college readiness among incoming first-year college students. Sixty percent of community college students do not pass placement exams in math and English and are directed to remedial classes before they could begin regular course work in those subjects.²⁵ This delays and often ends a student's educational progress—studies show that for every remedial level course placement, a student's chances of completing college and transfer-level English and math classes decline.²⁶ Remedial placements exacerbate the achievement gap among low-income college students and students of color.

As a result of the passage of AB 705 in 2018, California community colleges are required to maximize the probability that all students will enter and complete-transfer level coursework in English and math within a one-year time frame. Instead of testing, students will be assessed for placement based upon high school coursework, grades, and grade point average, which are considered better predictors of college success.²⁷ Colleges are using co-requisite classes, tutoring, and other strategies to improve outcomes for students who may need additional assistance to advance in their studies. Early implementation at some colleges shows that success rates in transfer-level courses have remained stable and the share of students finishing these classes has risen. Outcomes have improved for students in every demographic group.²⁸

In the past, community colleges tracked first-time students assessed into basic skills English, math, and ESL classes and evaluated completion outcomes in these classes. Now, most students starting community college will begin their post-secondary careers in transfer-level English and math courses. The data we include below looks at the recent historical performance of transfer-level English and math completion among students before AB 705 was instituted—these data points will serve as the base from which to measure future English and math outcomes among students. We also include recent enrollments and sections counts for basic skills and transfer-level math and English classes, which show a decline in basic skills class sections and enrollments, and growth among transfer-level sections and enrollments.

BASIC SKILLS AND TRANSFER-LEVEL SECTION COUNTS

- At Irvine Valley, the number of math basic skills sections has declined from 56 in Fall 2016 to 35 in Fall 2019 (see Figure 3.23).
- Since Fall 2013, transfer-level math sections at Irvine Valley have grown by 80 percent (47 additional sections) and transfer-level English sections by 62 percent (27 additional sections) (see Figure 3.24).

²⁵ Community College Research Center, Toward Better Course Placements: A Guide to Launching a Multiple Measures Assessment System, Teacher's College, Columbia University, July 2018, https://ccrc.tc.columbia.edu/media/k2/attachments/2018_Multiple_Measures_Guide_1.pdf

²⁶ California Acceleration Project, Changing Placement Policies, accessed October 2019 from <https://accelerationproject.org/Placement>

²⁷ Community College Research Center, Toward Better Course Placements, July 2018

²⁸ Public Policy Institute of California, Remedial Education Reforms at California's Community Colleges: Early Evidence on Placement and Curricular Reforms, August 2018, p.3, <https://www.ppic.org/wp-content/uploads/remedial-education-reforms-at-californias-community-colleges-august-2018.pdf>

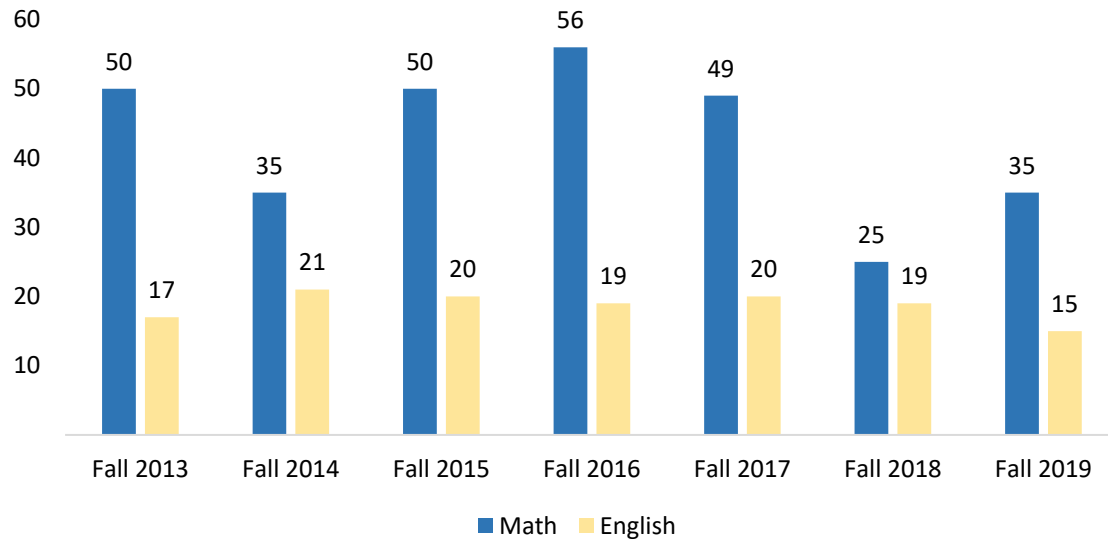
BASIC SKILLS AND TRANSFER-LEVEL ENROLLMENTS

- Enrollments in basic skills classes at Irvine Valley College have declined by 340 in basic skills math and 105 enrollments in basic skills English between Fall 2016 to Fall 2019 (see Figure 3.25).
- Transfer-level math enrollments have grown by 579 enrollments between Fall 2016 and Fall 2019, and by 276 in transfer-level English (see Figure 3.26).

TRANSFER-LEVEL COURSEWORK OUTCOMES

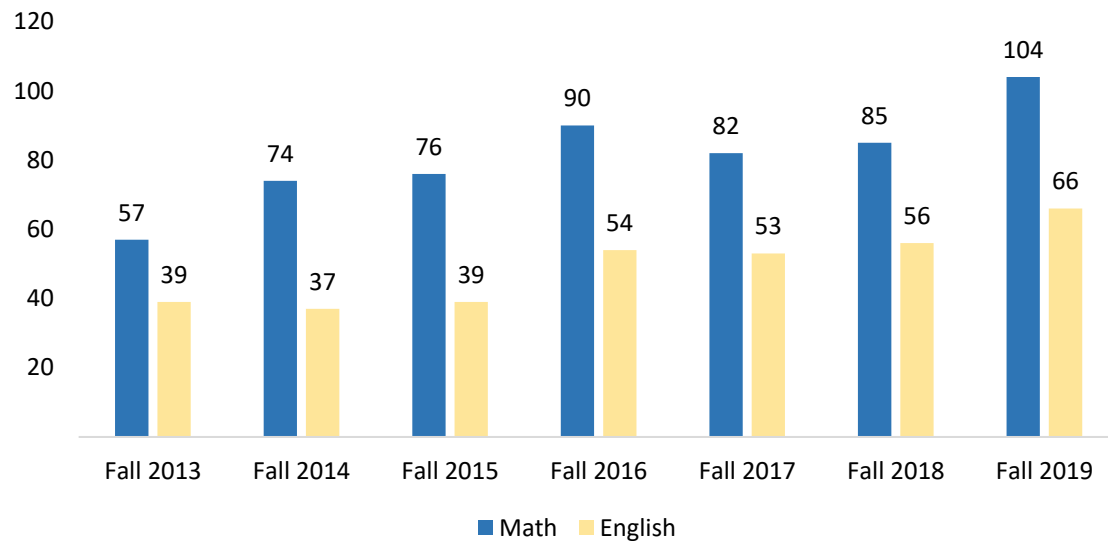
- At Irvine Valley College, retention rates among transfer-level English and math classes has been relatively flat; in 2017, 91 percent of students in English and 84 percent of students in math remained in their classes for the entire term (Figure 3.28).
- At Irvine Valley, 60 percent of transfer-level math students passed their classes in 2017, as did 80 percent of transfer-level English students.

FIGURE 3.23: BASIC SKILLS MATH AND ENGLISH SECTION COUNTS, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2019



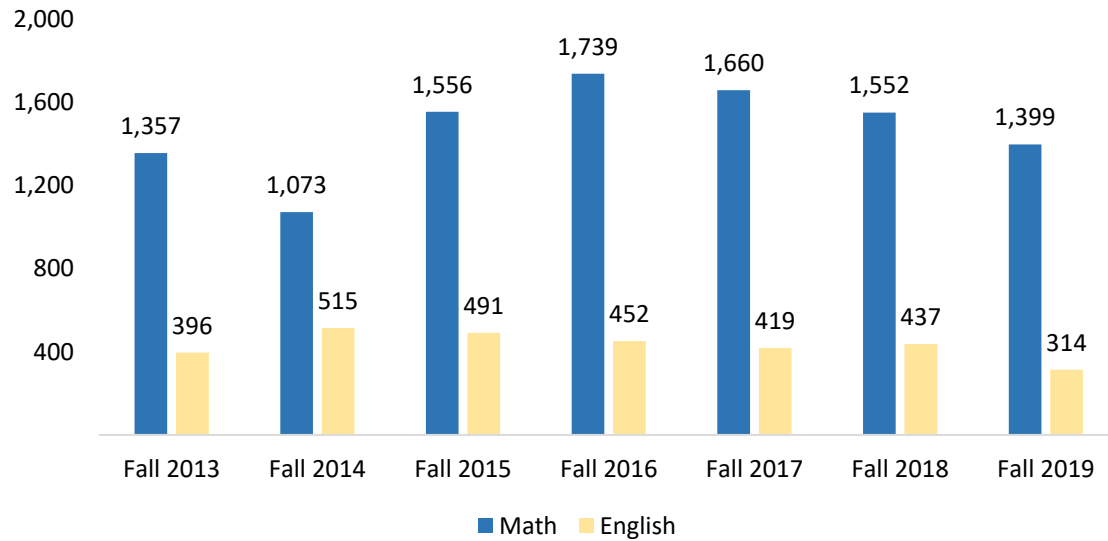
Source: SOCCCD inFORM Data Warehouse

FIGURE 3.24: TRANSFER-LEVEL MATH AND ENGLISH SECTION COUNTS, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2019



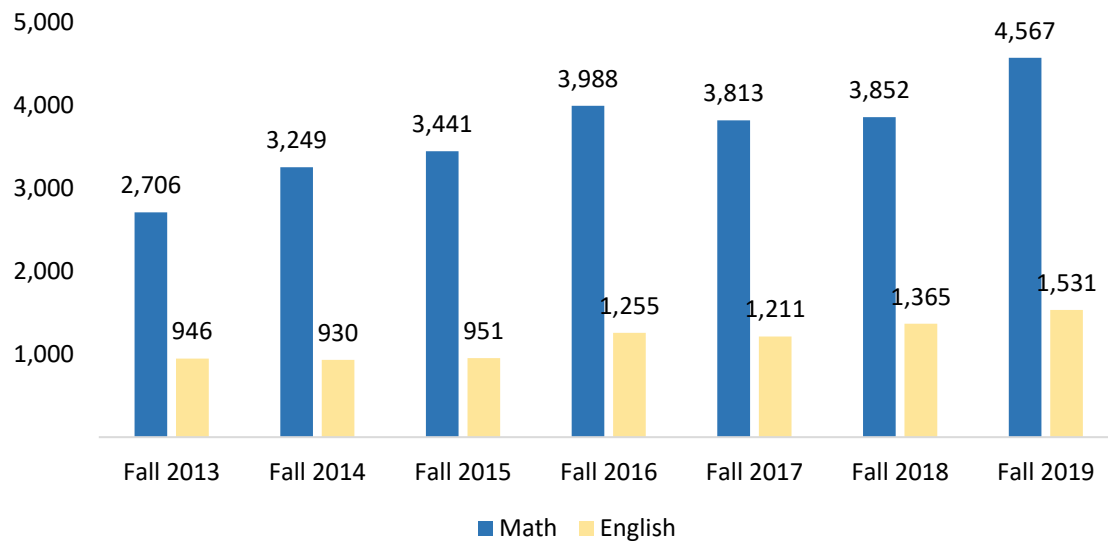
Source: SOCCCD inFORM Data Warehouse

FIGURE 3.25: BASIC SKILLS MATH AND ENGLISH CENSUS ENROLLMENT, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2019



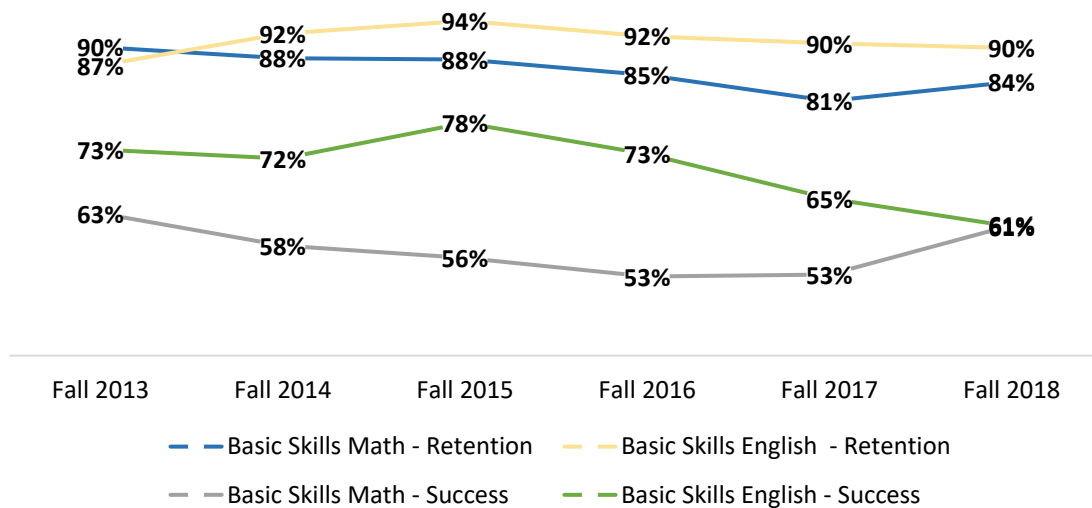
Source: SOCCCD inFORM Data Warehouse

FIGURE 3.26: TRANSFER-LEVEL MATH AND ENGLISH CENSUS ENROLLMENT, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2019



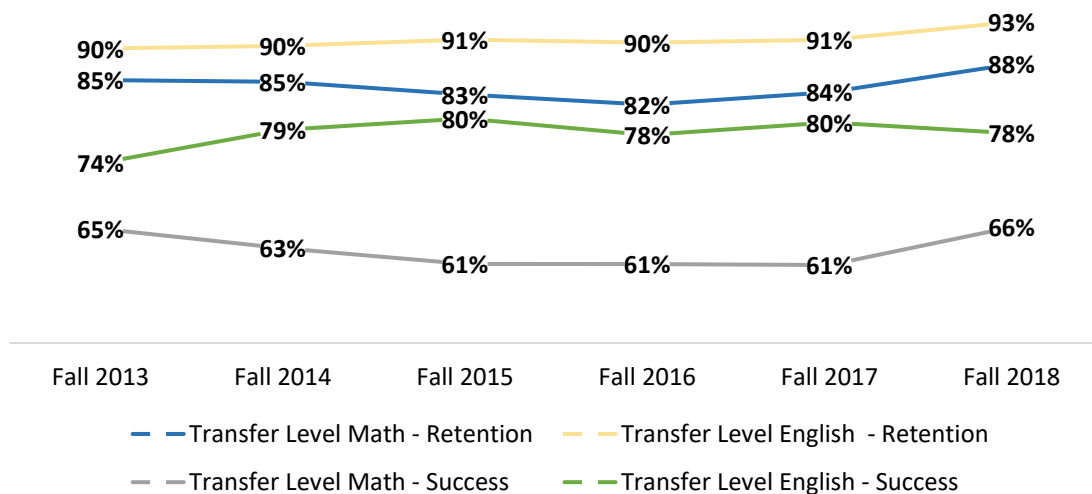
Source: SOCCCD inFORM Data Warehouse

FIGURE 3.27: RETENTION AND SUCCESS RATES IN BASIC SKILLS MATH AND ENGLISH, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2018



Source: SOCCCD inFORM Data Warehouse

FIGURE 3.28: RETENTION AND SUCCESS RATES IN TRANSFER-LEVEL COURSEWORK, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2018



Source: SOCCCD inFORM Data Warehouse

STUDENT SUCCESS

Only about 40 percent of students who begin their postsecondary education at a community college complete a certificate or degree program within six years.²⁹ While a majority of students who enter community college have as their goal to transfer to a four-year institution, only about one-third transfer, and of these students, less than half graduate with a bachelor's degree in a six-year timeframe.³⁰

These low completion rates are due to a variety of factors, including the preparedness of entering students for college coursework; family and/or work obligations; the financial need of students and the lack of resources at community colleges to fully support students with adequate aid; and imbalanced support for students who need help to navigate college.³¹ As mentioned in the previous section, the California Community Colleges system is undergoing significant changes to help improve student outcomes and meet goals regarding equity and access for students from marginalized backgrounds.



The California Community Colleges Chancellor's Office provides a set of metrics that measure student success from enrollment through graduation and beyond into the workforce. These measures "pinpoint critical milestones and accomplishments" related to the College system's "Vision for Success" goals to improve student outcomes.³² They provide data for recent changes to the state's funding formula, which allocates some funds to community college districts based upon student outcomes, including how many students transfer or earn degrees or certificates; complete transfer-level math or English classes in their first year of study; complete at least nine Career Education units; or how many students earn the regional living wage post-graduation.³³

This section provides a look at South Orange County Community College District's Student Success Metrics, including student retention and success rates, first-time student outcomes, the number of terms students need to earn a degree, transfer rates to four-year institutions, and award outcomes.

FIRST-TIME STUDENT OUTCOMES

- Retention rates among first-time college students are above 90 percent at Irvine Valley, while success rates among these students are at about 70 percent (see Figure 3.29).
- Units attempted among first-time college students have risen slightly between 2013 and 2017 (Figure 3.30).

²⁹ National Student Clearinghouse Research Center, Completing College: A National View of Student Completion Rates—Fall 2012 Cohort, December 2018, p.19, <https://nscresearchcenter.org/wp-content/uploads/SignatureReport16.pdf>

³⁰ Elizabeth Mann Levesque, Improving Community College Completion Rates by Addressing Structural and Motivational Barriers, Brookings Institution, October 2018, <https://www.brookings.edu/research/community-college-completion-rates-structural-and-motivational-barriers/>

³¹ Camile Esch, Pathway to the Baccalaureate: How One Community College is Helping Underprepared Students Succeed, New America Foundation, 2010, <https://www.newamerica.org/education-policy/policy-papers/pathway-to-the-baccalaureate/>

³² California Community Colleges Chancellor's Office, Data: Student Success Metrics, Accessed October 2019 from <https://www.cccco.edu/College-Professionals/Data>

³³ California Community Colleges Chancellor's Office, Student Centered Funding Formula, Accessed October 2019 from <https://www.cccco.edu/About-Us/Chancellors-Office/Divisions/College-Finance-and-Facilities-Planning/Student-Centered-Funding-Formula>

RETENTION AND SUCCESS BY INSTRUCTION METHOD

- Retention rates among online students at Irvine Valley have improved between 2013 and 2017 to nearly match classroom retention levels (Figure 3.31).
- Success rates for online students lag in-person student outcomes by three percentage points (Figure 3.32).

COMPLETION AND PERSISTENCE RATES

- Irvine Valley College students have higher rates of completion than the statewide average—the completion rate includes all students who complete a degree or certificate and/or transfer to another school within six years of their initial enrollment (see Figure 3.33).
- Over the last five tracked student cohort years (2007-2008 to 2011-2012), Irvine Valley's completion rates averaged around 63 percent. This is a 15-percentage-point difference above the California statewide average rate of 48 percent.
- During these cohort years, persistence rates among students have improved by 11 percentage points at Irvine Valley College (Figure 3.34).
- Students who enroll at Irvine Valley College ready for college are more likely to complete their programs than students at other California community colleges.

DEGREE AND CERTIFICATE AWARD RATES

- The number of certificates and degrees awarded has increased more than 75 percent at Irvine Valley College, between 2013 and 2017 (Figure 3.35).
- The number of associate degrees for transfer awarded at Irvine Valley College is up almost 280 percent over this five-year period.
- The number of full-transfer certifications awarded at Irvine Valley College has almost doubled during this period.

TIME TO DEGREE

- In 2017-18, it took an average of 12 semesters at Irvine Valley College to earn an associate degree in science (Figure 3.36).
- Students earning transfer degrees are, on average, able to graduate faster than students earning terminal degrees.
- To earn a certificate of achievement award in 2017-18, the average student needed nine class semesters at Irvine Valley (see Figure 3.37).
- Students earning proficiency certificates at Irvine Valley College needed an average of 8.4 semesters to complete their programs.

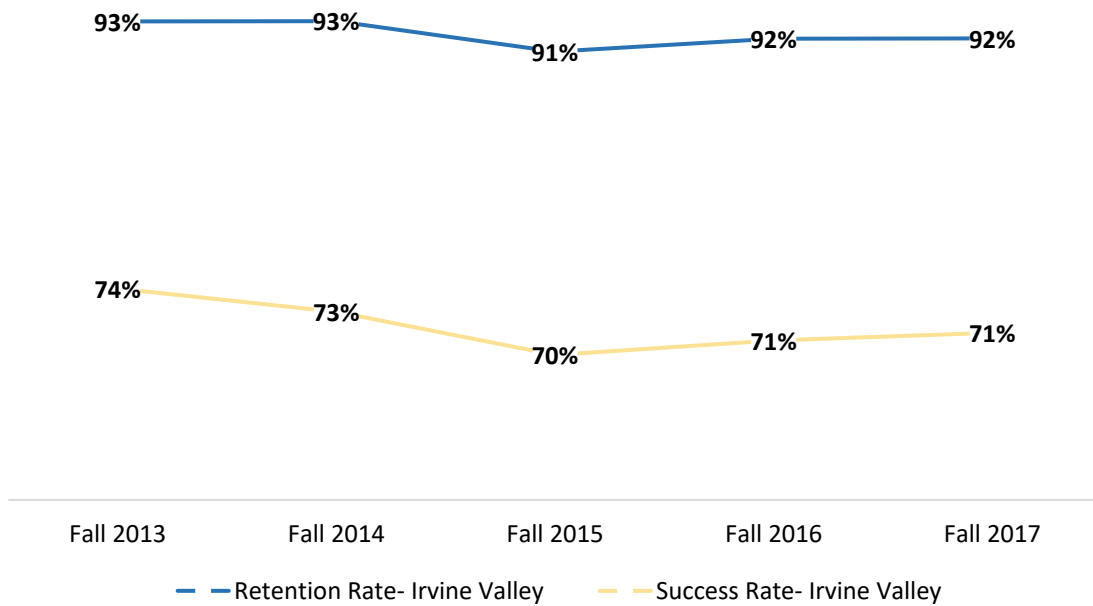
STUDENT TRANSFER RATES

- An increasing number of Irvine Valley students are earning transfer degrees, and more are choosing to attend UC and CSU schools (Figure 3.38).

TRANSFERS TO FOUR YEAR INSTITUTIONS

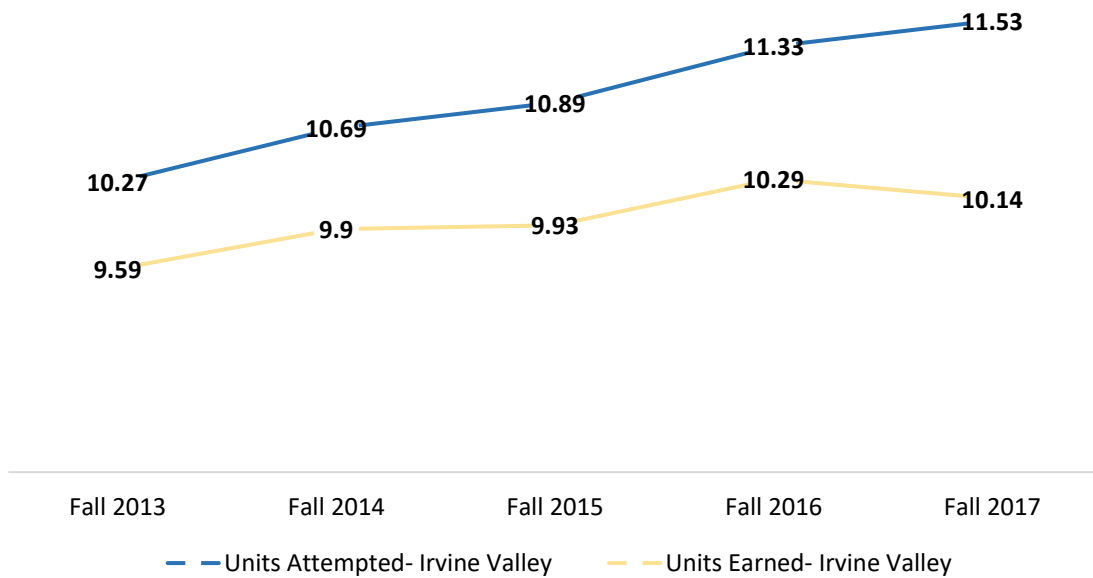
- In 2017, 55 percent of transfer students from Irvine Valley College enrolled at a University of California or California State University school (Figure 3.39)
- Nearly 50 percent of Irvine Valley College transfer students to UC and CSUs attend Cal State Fullerton or UC-Irvine (Figure 3.41).
- Transfers by Irvine Valley students to all types of four-year institutions have grown between the 2013-14 to 2017-18 academic years.
- Other public institutions that draw the most students include Cal State Long Beach, UCLA, and UC Berkeley.

FIGURE 3.29: RETENTION AND SUCCESS RATES AMONG FIRST-TIME STUDENTS, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2017



Source: SOCCCD inFORM Data Warehouse

FIGURE 3.30: AVERAGE UNITS ATTEMPTED AND EARNED AMONG FIRST-TIME STUDENTS, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2017



Source SOCCCD inFORM Data Warehouse

FIGURE 3.31: RETENTION BY INSTRUCTION METHOD, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2017

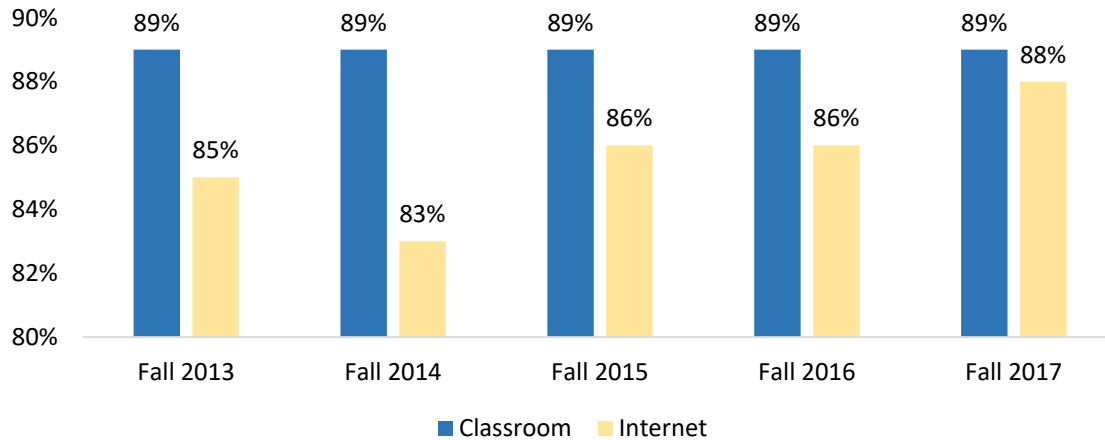
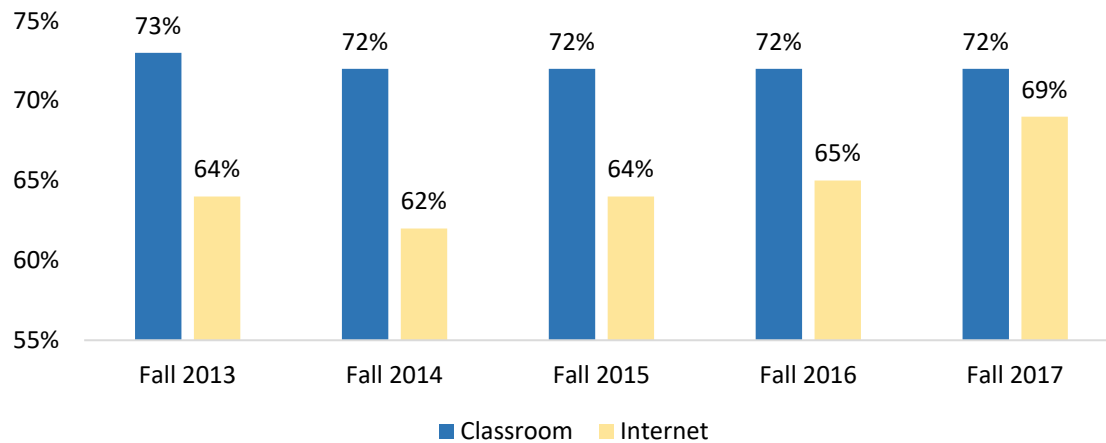


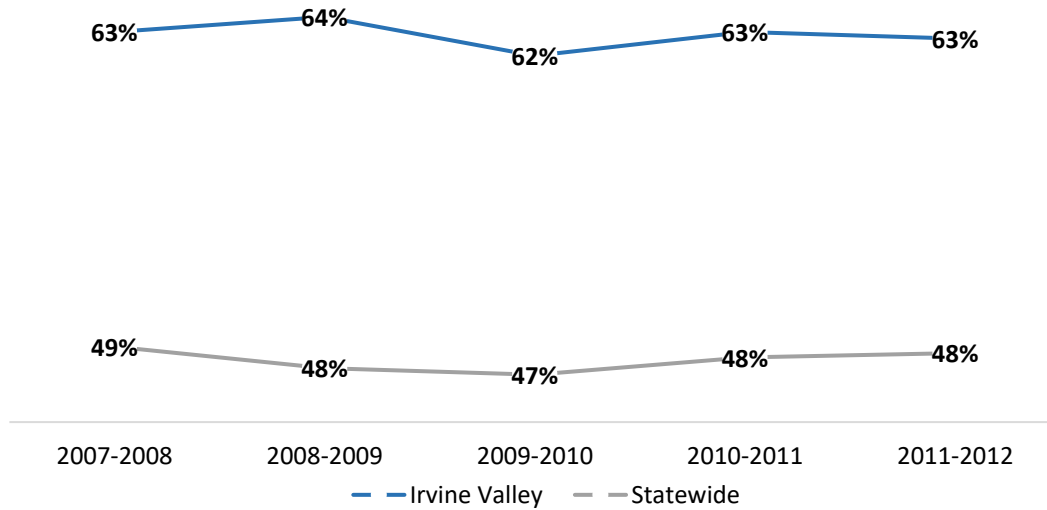
FIGURE 3.32: SUCCESS BY INSTRUCTION METHOD, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2017



Instruction Method Retention	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
Classroom	89%	89%	89%	89%	89%
Internet	85%	83%	86%	86%	88%
Other	94%	90%	90%	96%	98%
Instruction Method Success	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
Classroom	73%	72%	72%	72%	72%
Internet	64%	62%	64%	65%	69%
Other	85%	84%	85%	92%	93%

Source: SOCCCD inFORM Data Warehouse

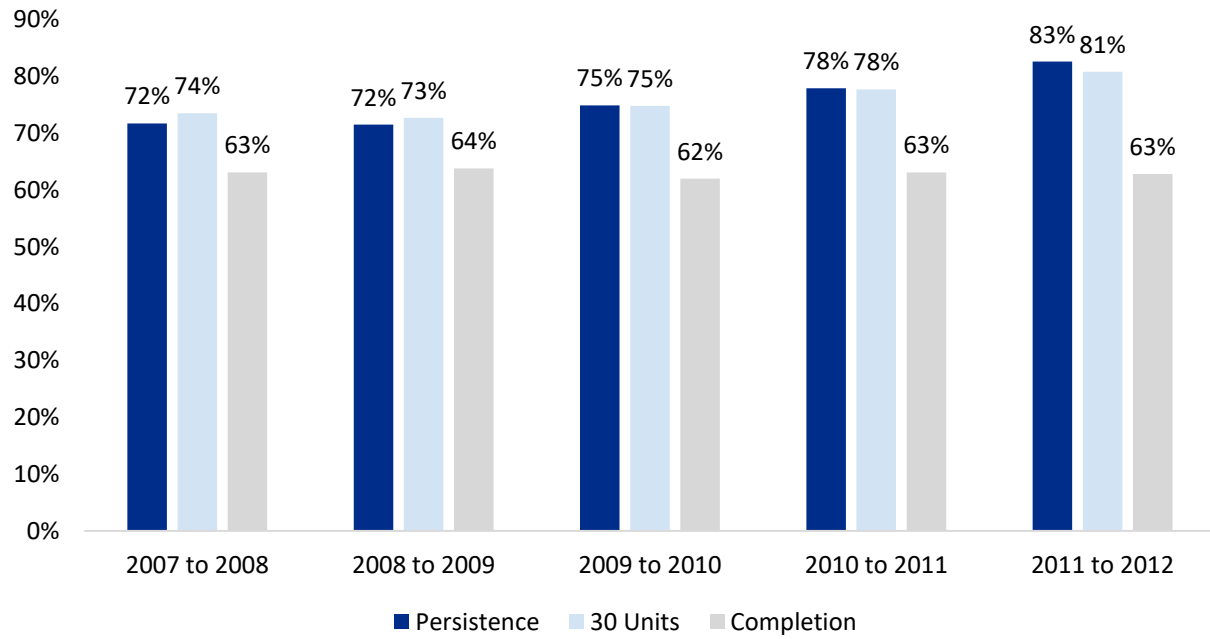
FIGURE 3.33: COMPLETION RATES BY COHORT YEAR, IRVINE VALLEY COLLEGE AND STATEWIDE, 2007-08 TO 2011-12



Cohort Year	Irvine Valley		California Statewide	
	Cohort Size	Cohort Rate	Cohort Size	Cohort Rate
2007-2008	1,415	63%	196,424	49%
2008-2009	1,631	64%	211,810	48%
2009-2010	1,804	62%	204,472	47%
2010-2011	1,854	63%	198,012	48%
2011-2012	1,834	63%	188,597	48%

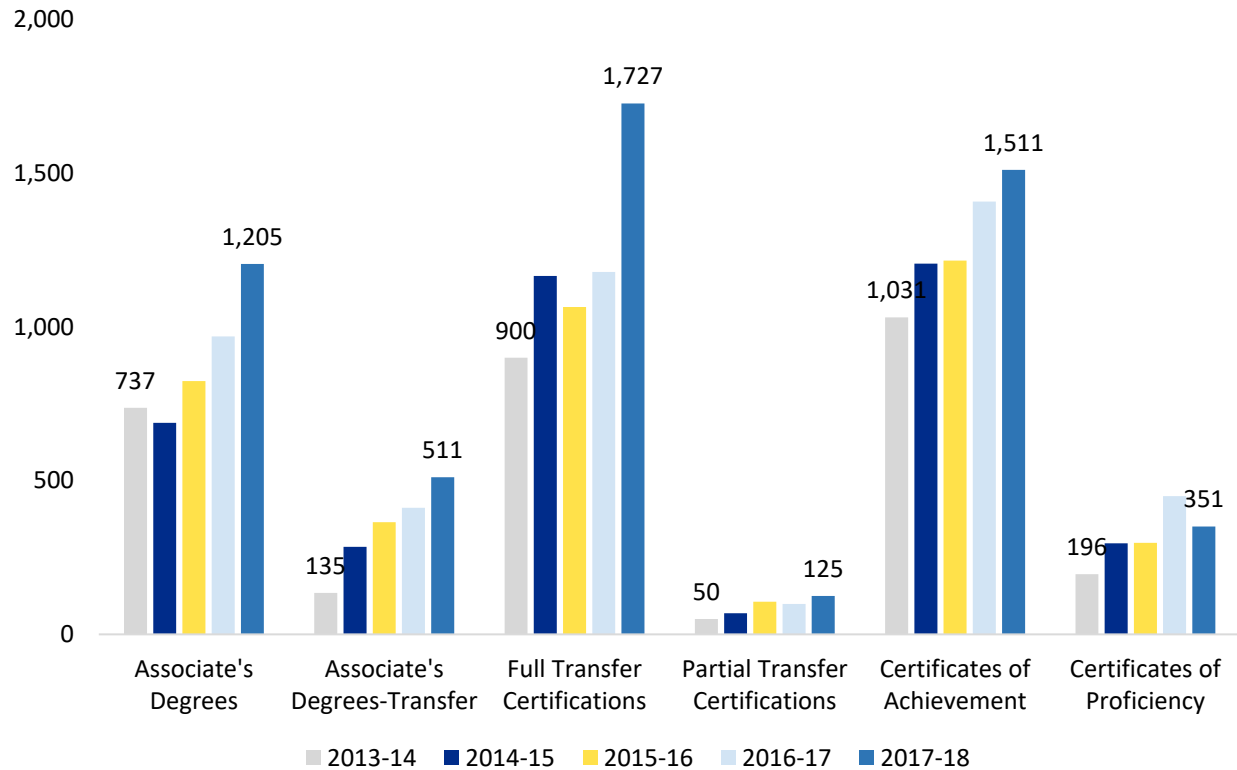
Source: California Community Colleges Chancellor's Office, Student Success Scorecards for Irvine Valley College

FIGURE 3.34: COMPLETION, PERSISTENCE AND 30-UNIT RATES, IRVINE VALLEY COLLEGE, STUDENT COHORTS 2007-2008 THROUGH 2010-2011



Source: California Community Colleges Chancellor's Office

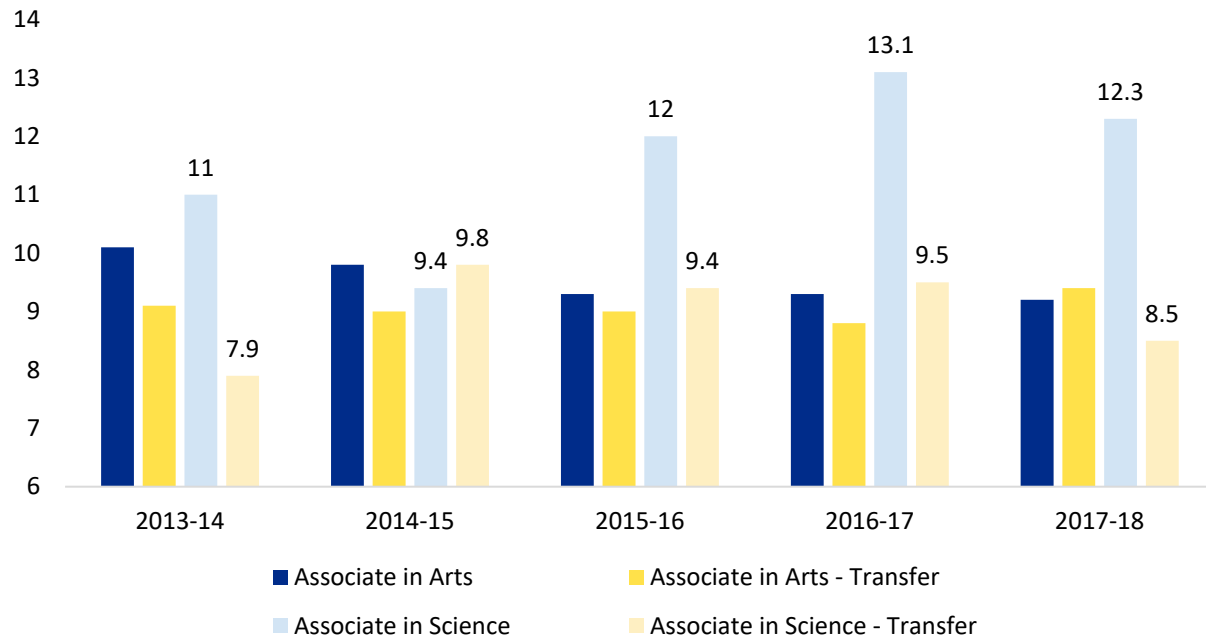
FIGURE 3.35: DEGREES AND CERTIFICATES AWARDED, IRVINE VALLEY COLLEGE, ACADEMIC YEARS 2013-14 TO 2017-18



Degrees and Certificates	2013-14	2014-15	2015-16	2016-17	2017-18
Associate in Arts	675	623	710	855	1,086
Associate in Arts - Transfer	68	101	156	185	220
Associate in Science	62	65	114	114	119
Associate in Science - Transfer	67	184	209	227	291
Full Transfer Certification	900	1,166	1,065	1,179	1,727
Partial Transfer Certification	50	69	106	99	125
Certificate of Achievement	1,031	1,206	1,216	1,408	1,511
Certificate of Proficiency	196	296	298	450	351
Total	3,049	3,710	3,874	4,517	5,430

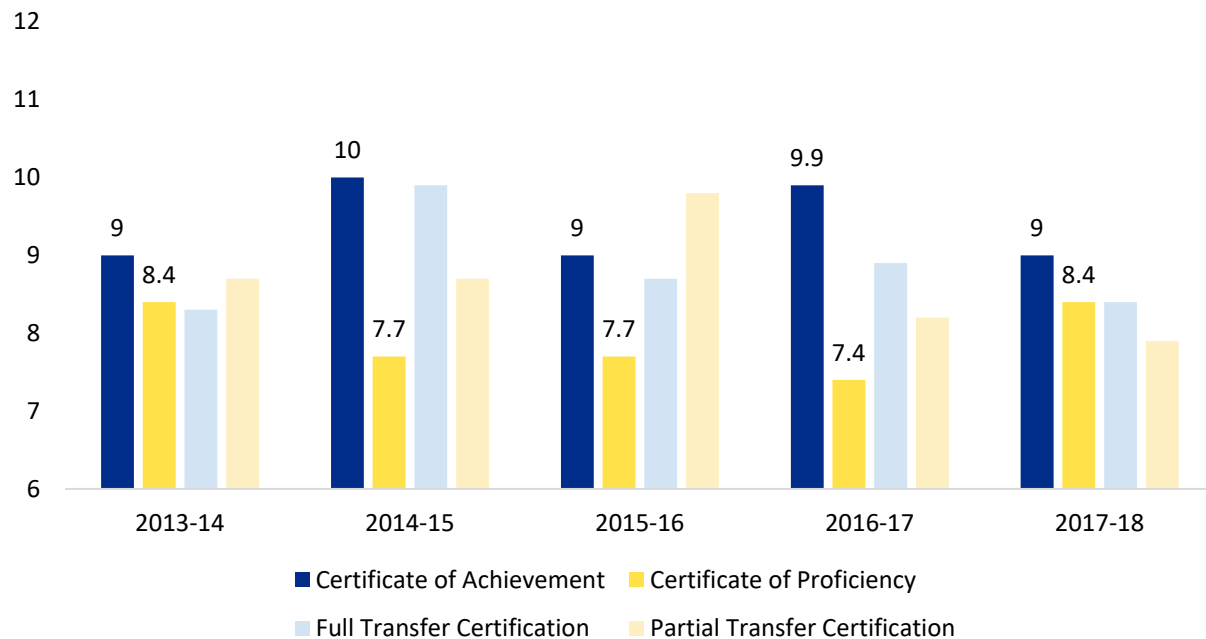
Source: SOCCCD inFORM Data Warehouse

FIGURE 3.36: AVERAGE SEMESTERS ATTENDED PRIOR TO DEGREE AWARD, IRVINE VALLEY COLLEGE, ACADEMIC YEARS 2013-14 TO 2017-18



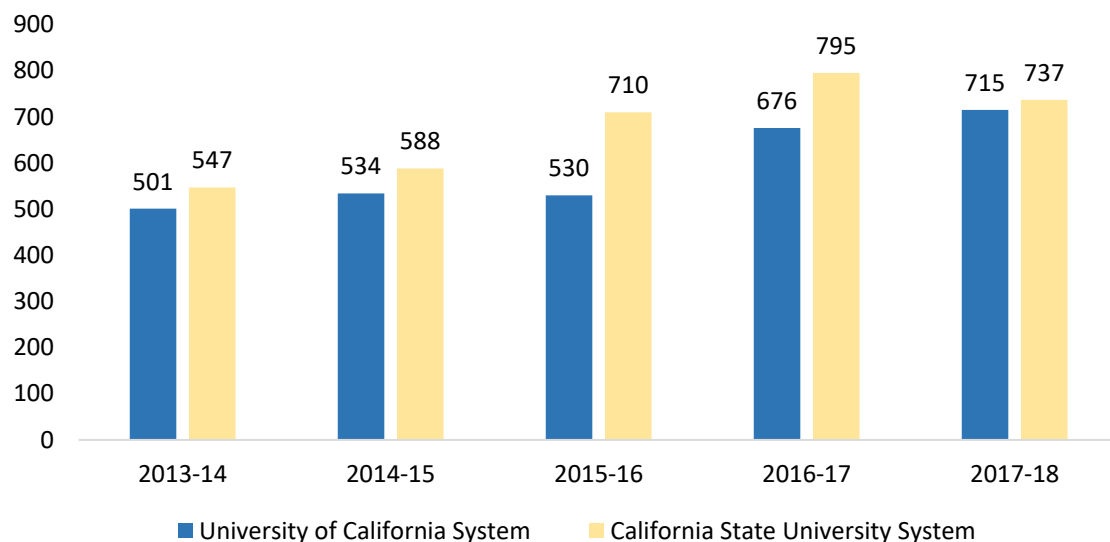
Source: SOCCCD inFORM Data Warehouse

FIGURE 3.37: AVERAGE SEMESTERS ATTENDED PRIOR TO CERTIFICATE AWARD, IRVINE VALLEY COLLEGE, ACADEMIC YEARS 2013-14 TO 2017-18



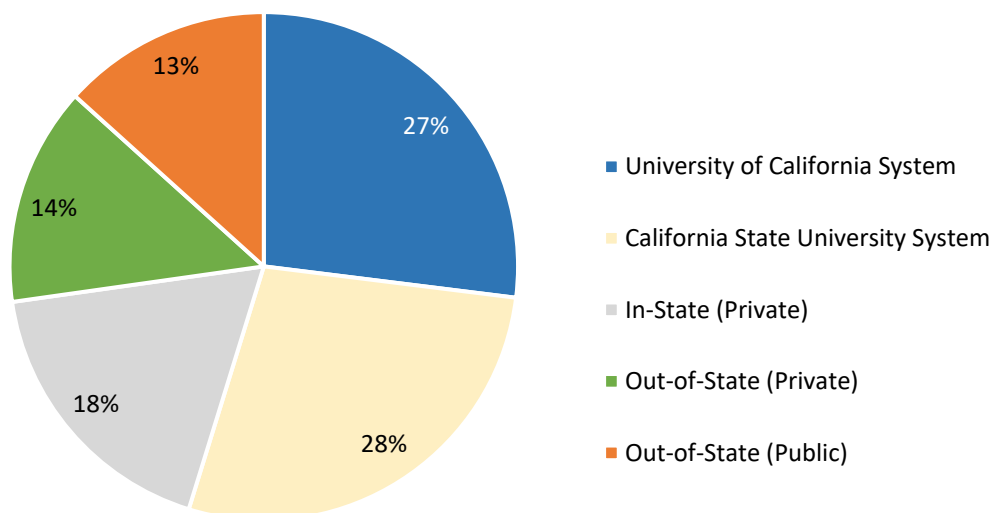
Source: SOCCCD inFORM Data Warehouse

FIGURE 3.38: TOTAL TRANSFERS TO UC AND CSU SCHOOLS, IRVINE VALLEY COLLEGE, ACADEMIC YEARS 2013-14 TO 2017-18



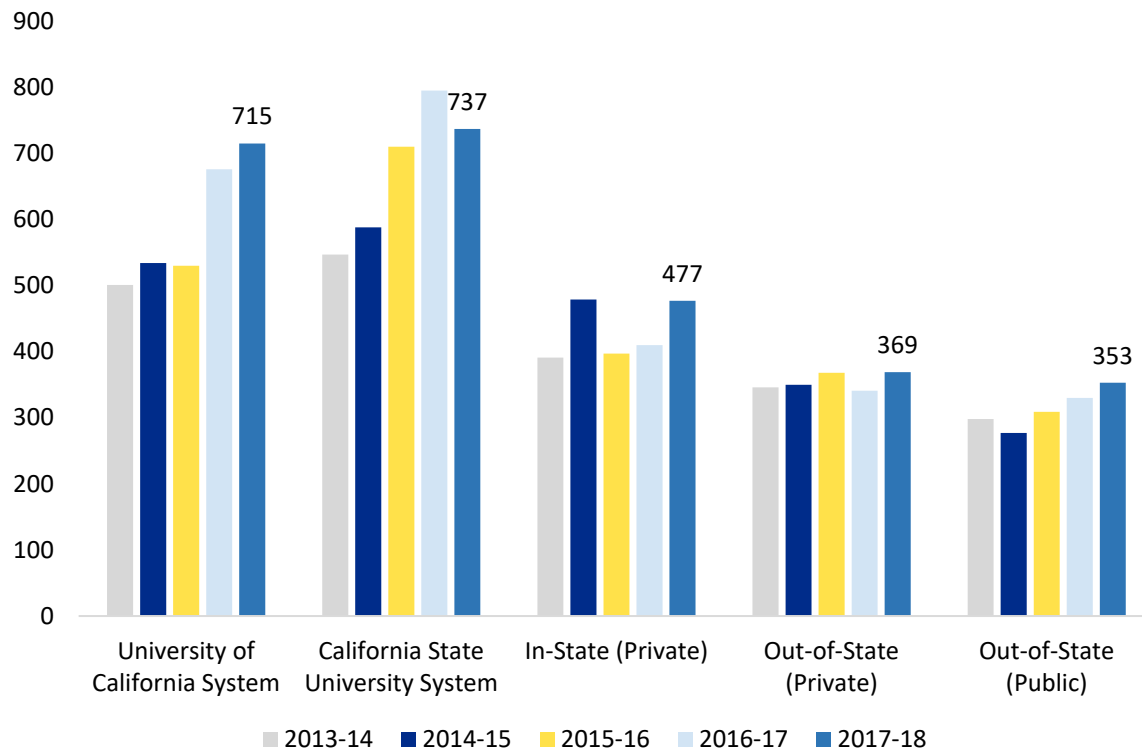
Source: SOCCCD inFORM Data Warehouse

FIGURE 3.39: STUDENT TRANSFERS TO FOUR YEAR INSTITUTIONS, IRVINE VALLEY COLLEGE, 2017



Source SOCCCD inFORM Data Warehouse

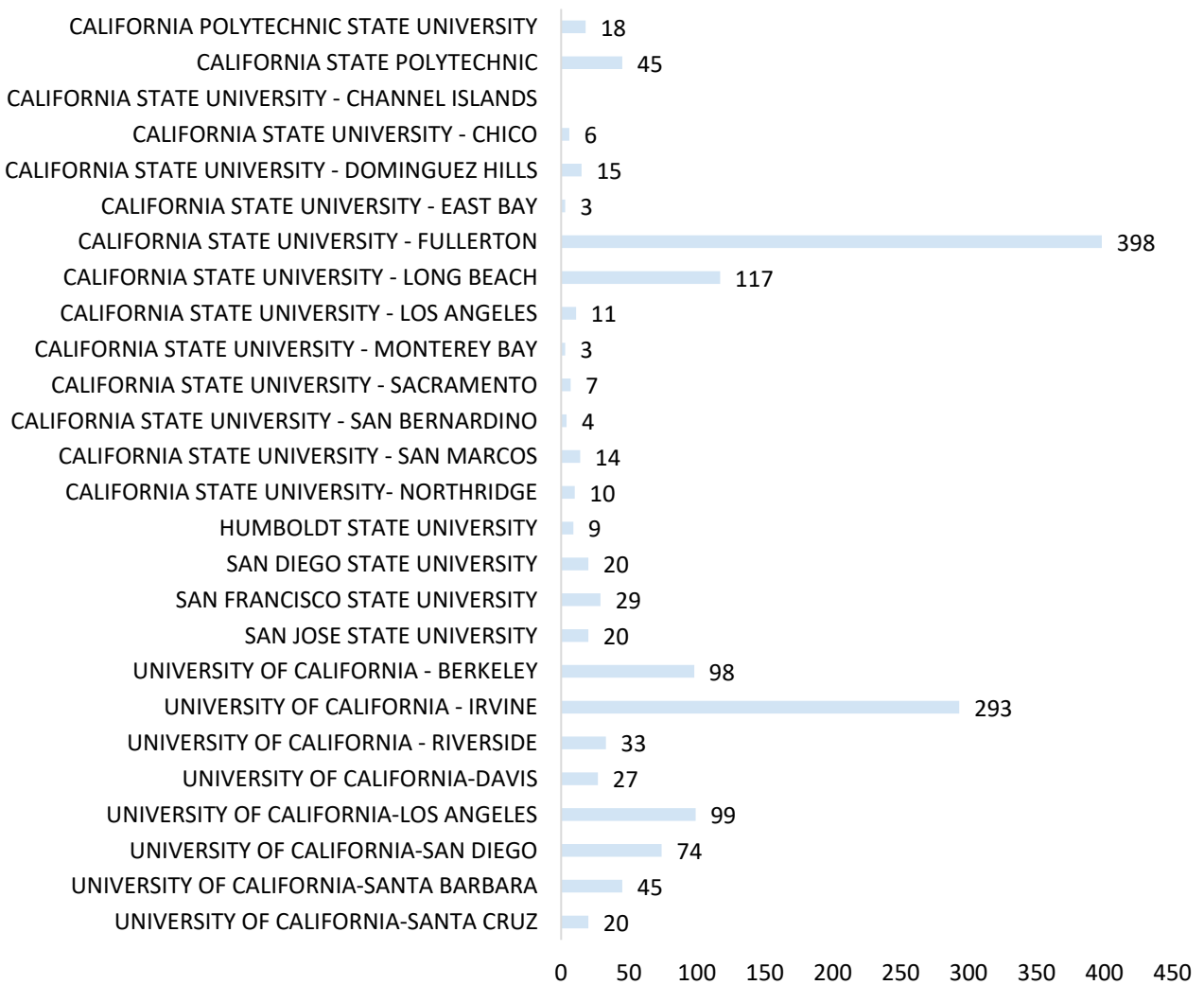
FIGURE 3.40: TRANSFERS TO FOUR-YEAR COLLEGES AND UNIVERSITIES, IRVINE VALLEY COLLEGE, ACADEMIC YEARS 2013-14 TO 2017-18



Annual Transfers, Irvine Valley	2013-14	2014-15	2015-16	2016-17	2017-18
University of California System	501	534	530	676	715
California State University System	547	588	710	795	737
In-State (Private)	391	479	397	410	477
Out-of-State (Private)	346	350	368	341	369
Out-of-State (Public)	298	277	309	330	353
Total, all Transfers	2,083	2,228	2,314	2,552	2,651

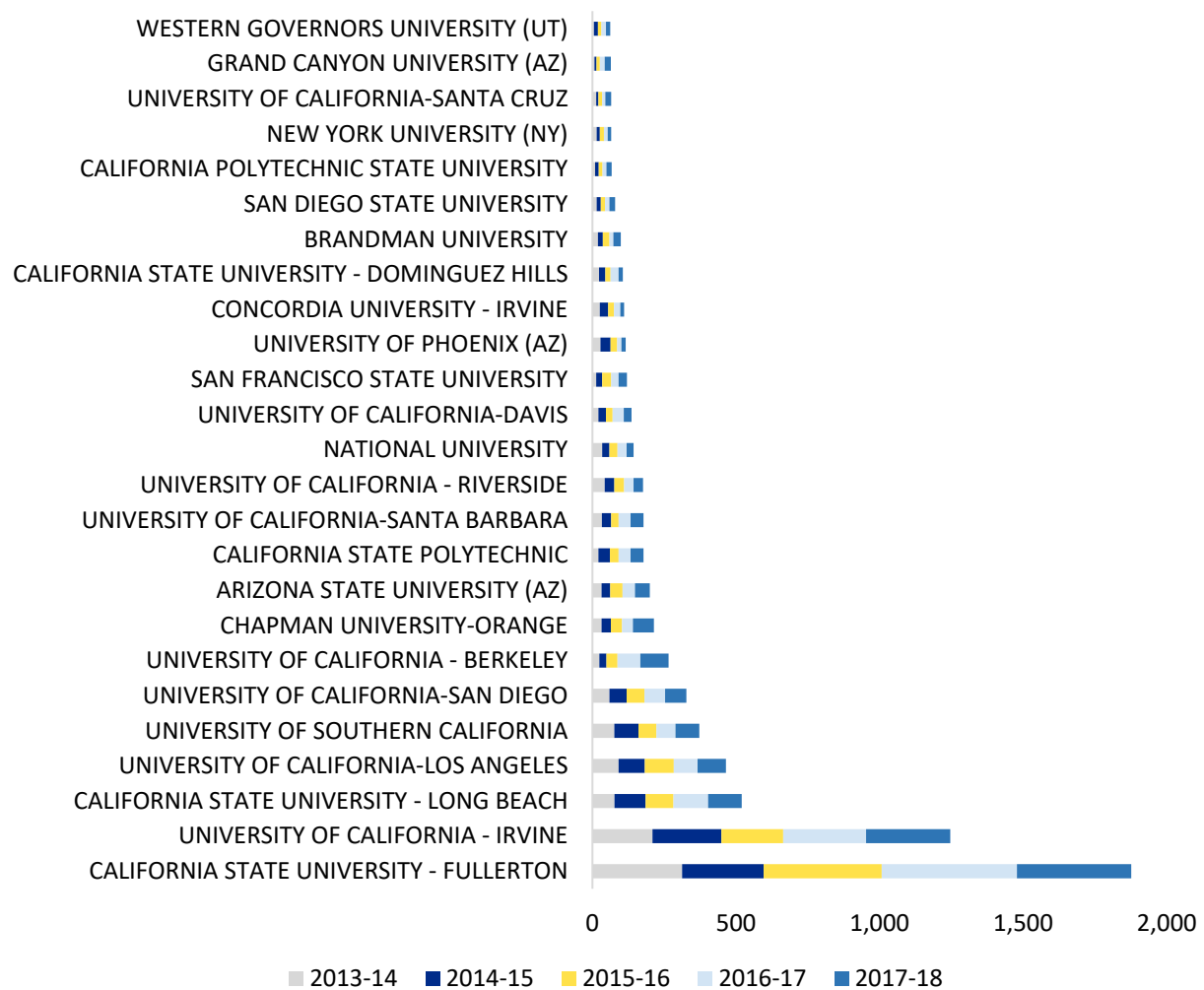
Source: SOCCCD inFORM Data Warehouse

FIGURE 3.41: TRANSFERS TO UC AND CSU INSTITUTIONS FROM IRVINE VALLEY COLLEGE, 2017



Source: SOCCCD inFORM Data Warehouse

FIGURE 3.42: TOP 25 TRANSFERS TO ALL FOUR-YEAR INSTITUTIONS, IRVINE VALLEY COLLEGE, 2013-14 TO 2017-18 ACADEMIC YEARS



Note: See Appendix for additional Transfer data.

Source: SOCCCD inFORM Data Warehouse

MAJORS, DEGREES, AND CERTIFICATES

This section gives an overview of the academic programs and awards available at Irvine Valley College and looks at the top degree majors and certificate programs. It also reviews the CE programming available at the school.

PROGRAMS AND TOP DISCIPLINES

- Irvine Valley College offers 79 associate degrees and associate degrees for transfer and 69 certificate awards (see Table 3.1).
- More than 1,800 degrees in Social and Behavioral Sciences have been awarded to Irvine Valley students between the 2013-14 and 2017-18 academic years. Other top degree majors include Business Administration (909 awards), Liberal Studies for Teacher Education (728 awards), Psychology (350 awards), and Natural Sciences and Mathematics (249 awards) (Figure 3.43).
- Irvine Valley has awarded 12,267 General Studies Certificates and Certificates for Transfer between 2013-14 and 2017-18 (Figure 3.44). Other top certificate programs by awards include Financial, Managerial, and Computerized Accounting programs and Early Childhood Teacher Training.

CAREER EDUCATION (CE) PROGRAMS

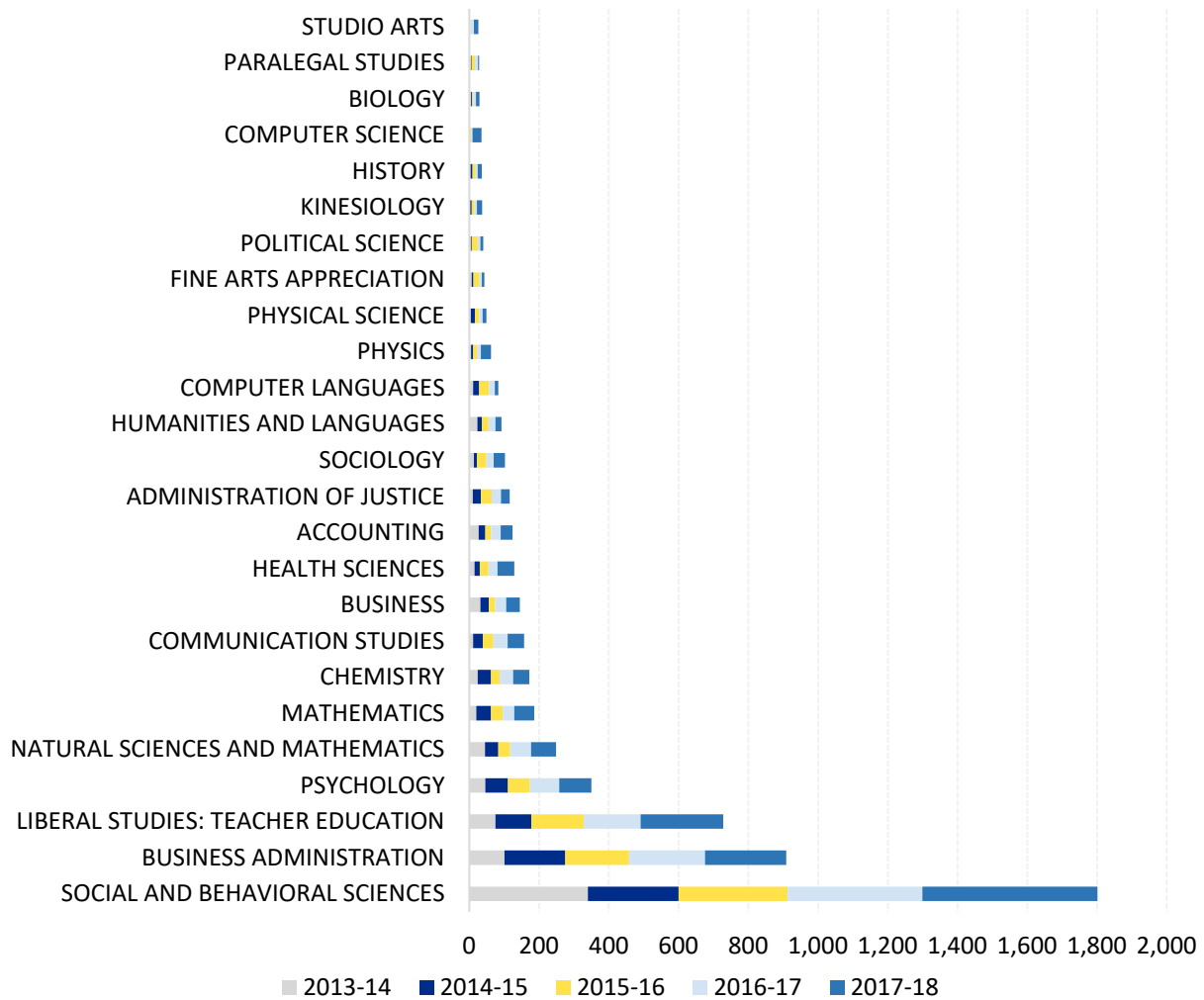
- CE classes constitute 14 percent of class sections at Irvine Valley College (Figure 3.45).
- In the Fall 2017 term, there were nearly 5,300 enrollments from 3,600 students at Irvine Valley College (Figure 3.46).

TABLE 3.1: TOTAL NUMBER OF IRVINE VALLEY COLLEGE DEGREE AND CERTIFICATE PROGRAMS, 2019

Award Type	
A.A. Degree	34
A.A Transfer Degree	18
A.S. Degree	19
A.S. Transfer Degree	8
Total Associate Degree Programs	79
Certificate of Achievement	25
Certificate of Completion	3
Certificate of Proficiency	41
Total Certificate Programs	69
Total, All Awards	148

Sources: COCI Program Data, SOCCCD, 2019; Website Course Listings, 2019

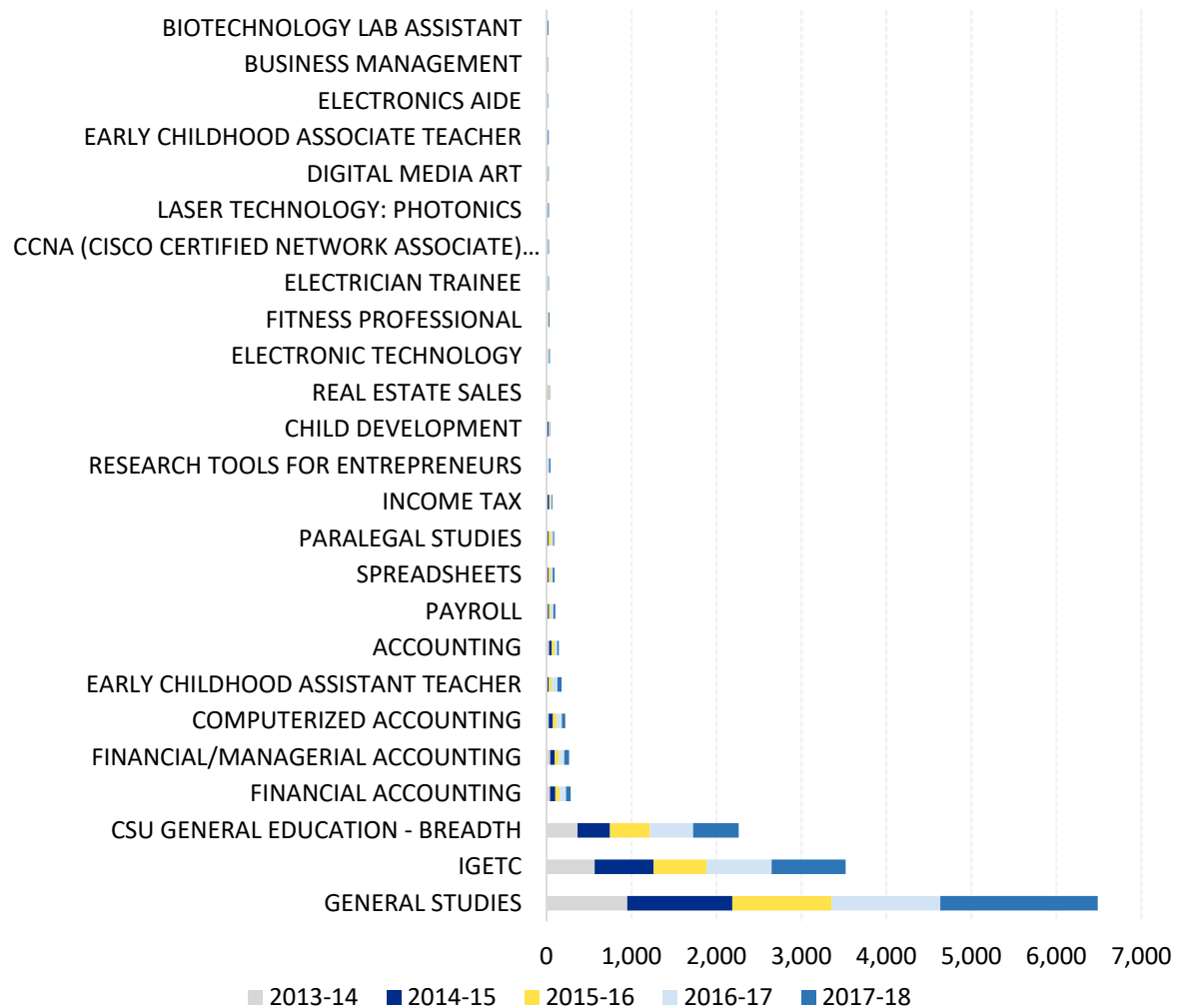
FIGURE 3.43: TOP 25 ASSOCIATE DEGREE AWARDS BY MAJOR, IRVINE VALLEY COLLEGE, ACADEMIC YEARS 2013-14 TO 2017-18



Note: See Appendix for additional Top 25 Degree and Certificate data.

Source: SOCCCD inFORM Data Warehouse

FIGURE 3.44: TOP 25 CERTIFICATE AWARDS BY PROGRAM, IRVINE VALLEY COLLEGE, ACADEMIC YEARS 2013-14 TO 2017-18



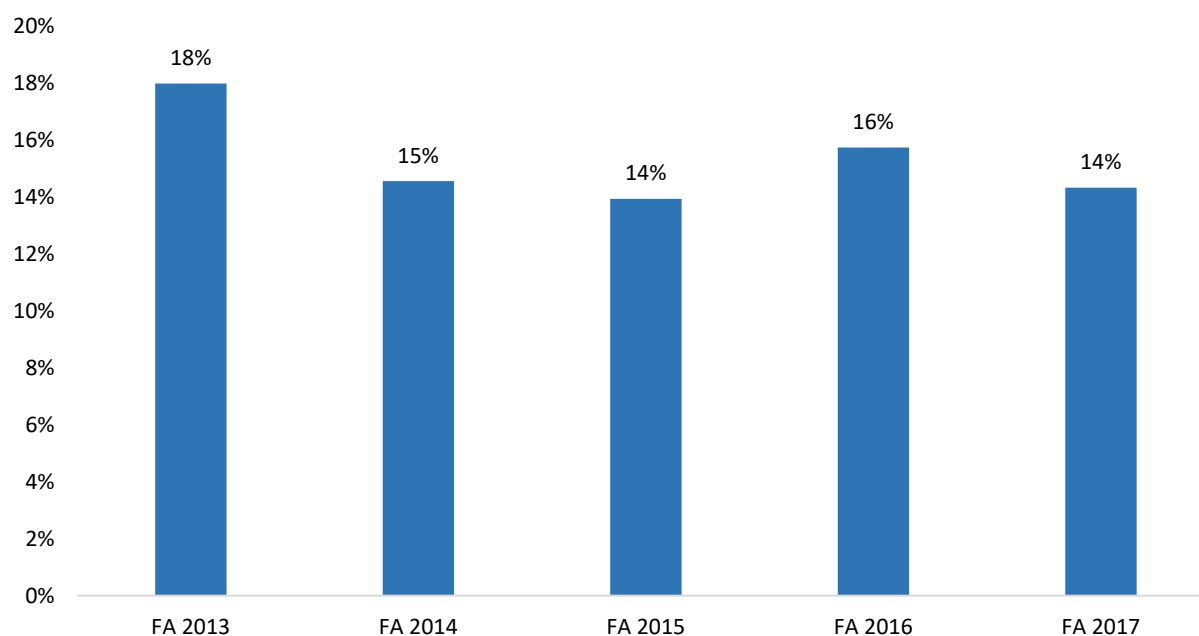
Note: See Appendix for additional Top 25 Degree and Certificate data.

Source: SOCCCD inFORM Data Warehouse

TABLE 3.2: CE TRAINING BY INDUSTRY SECTOR OFFERED AT SOCCCD:

Irvine Valley (IDEA at ATEP) ³⁴ :
Trades and Construction
Business and HR
Design Tools and Manufacturing
Employee Skills Development
Leadership and Soft Skills Courses
Business Consulting Services

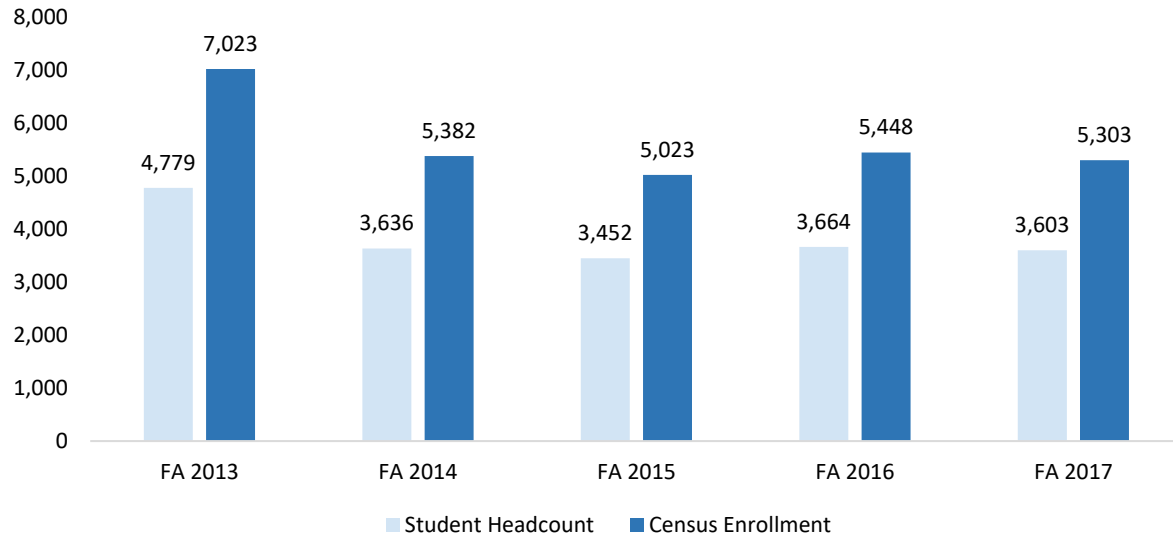
FIGURE 3.45: CE SECTIONS OFFERED, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2017



Source: SOCCCD inFORM Data Warehouse

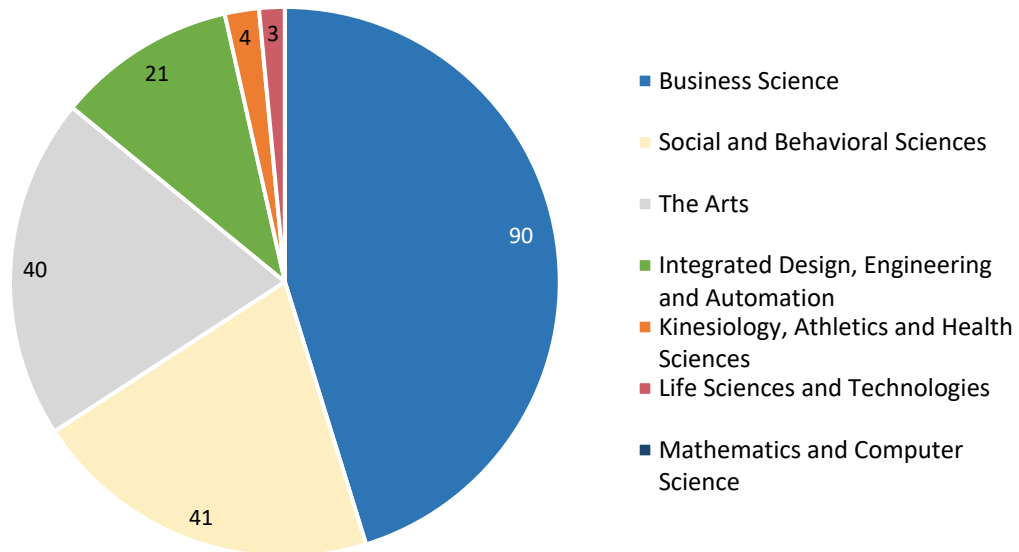
³⁴ Irvine Valley College, Business and Employee Training Programs, accessed March 2019 from www.ivc.edu/ewd/Pages/business.aspx

FIGURE 3.46: STUDENT HEADCOUNT AND ENROLLMENT IN CE CLASSES, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2017



Source: SOCCCD inFORM Data Warehouse

FIGURE 3.47: CE SECTIONS BY DIVISION, IRVINE VALLEY COLLEGE, ACADEMIC YEAR 2017-18



Source: SOCCCD inFORM Data Warehouse

STUDENT-TO-FACULTY RATIOS

Student-to-faculty ratios help measure how efficiently colleges use one of their most important resources. Below we compare student counts with those of faculty to get a sense of instructional productivity and efficiency at Irvine Valley College.

Student-to-faculty ratio, or FTES/FTEF, measures the number of full-time equivalent students per each full-time equivalent faculty member. Instructional load, or WSCH/FTEF (Weekly Student Contact Hours/Full-Time Equivalent Faculty), measures the number of student hours per week each full-time equivalent faculty member has in the school term.

FACULTY RATIOS AND LOAD

- Irvine Valley College has averaged 311 full-time-equivalent faculty between 2013 and 2017, and an average student-to-faculty ratio of 15.53 (see Table 3.3).
- The average instructional load during this period was 480 hours per full-time faculty member.

TABLE 3.3: STUDENT-TO-FACULTY RATIOS AND INSTRUCTIONAL LOADS, IRVINE VALLEY COLLEGE, FALL 2013 TO FALL 2017

Term	Total FTEF	Census WSCH	Census FTES	Student/Faculty Ratio (FTES/FTEF)	Load (WSCH/FTEF)
Fall 2013	277.94	142,151	4,595	16.53	511
Fall 2014	300.47	143,132	4,680	15.58	476
Fall 2015	305.55	145,036	4,668	15.28	475
Fall 2016	359.08	159,950	5,164	14.38	445
Fall 2017	312.61	154,356	4,965	15.88	494
Average, Fall Terms 2013 - 2017	311.13	148,925	4,814	15.53	480

Source: SOCCCD inFORM Data Warehouse

CHAPTER 4 SCHOOL AND PROGRAM ASSESSMENTS

INTRODUCTION

The Education Master Plan for Irvine Valley College is rooted in an analysis of the programs and services offered to students at the school, and in the expectations of future trends and program needs. Drawing upon that analysis, this chapter presents detailed assessments of the recent conditions of each Academic School and Student Services Program at Irvine Valley College, as well as the anticipated needs of schools and programs to serve current and future students at IVC.



Reflecting the organizational structure of Irvine Valley College, chapter four is organized into two parts. The first part, beginning on page 127 focuses on the 11 academic schools and the Emeritus Institute overseen by the Office of Instruction. In turns, these Schools are organized by departments, of which there are 55. The second part of this chapter describes the 10 Student Services programs provided by the Office of Student Services.

In the pages that follow, a three-part profile of each Academic School and Student Services program is provided. Each profile was developed by deans and department chairs and consists of:

- **A description** of the school/service department, including an overview of the School and of individual departments within the School.
- **Challenges and opportunities** foreseen by School/Service Department leadership and faculty over the next decade, as well as suggested action steps needed to address these challenges and opportunities.
- **Future directions** of the school/service department.

The narrative for each academic school is supported by quantitative data related to the recent performance of the School and its individual Departments, including projected growth over the next decade. Data related to each School is presented as a snapshot, using Annual 2018 data and average trends from Fall 2014 to Fall 2018.

Definition of Terms Used in Chapter 4

Course Fill Rate

This calculation is a measure of the seat occupancy within a course. It is based on the number of seats taken in a course section divided by the course capacity, which is set in the curriculum of the course record.

Full Time Equivalent Faculty (FTEF)

This unit of measurement is used to create an equivalency for full-time and part-time faculty. It takes all the course hours taught within a program and divides them by a full-time faculty load, which is 30 Lecture Hour Equivalents (LHE) a year or 15 a semester.

Full Time Equivalent Student (FTES)

This unit of measurement is the basis for apportionment (how the college is funded). It tells us how many full-time equivalent students are served by a class or program. FTES is not “headcount enrollment,” but is calculated by dividing the total student hours at a specified point in time (determined by the attendance accounting method used, as explained below) by 525. The number 525 represents the number of contact hours for a theoretically derived full-time student enrolled in courses 3 hours a day, 5 days a week, for an academic year of 35 weeks ($3 \times 5 \times 35 = 525$).

Weekly Student Contact Hours (WSCH)

This calculation provides the total number of contact hours on a weekly basis for each course. It is determined by multiplying the number of weekly contact hours for the course (as determined in the curriculum) by the number of students in a given class at section census date.

Productivity (WSCH/FTEF)

This calculation shows how “productive” a class/program is based on a ratio of revenue (WSCH [using the sum of the full-semester WSCH including DSCH and Positive Attendance equivalents]) to costs (FTEF). This calculation measures how many WSCH are generated per full-time equivalent faculty. With certain exceptions, 525 is considered the ideal number on which productivity is based; if a program is at or above 525, it is considered to be productive.

Retention Rate

This is the percentage of students who maintained enrollment in the course until the end of the semester. It is based on the number of students who do not withdraw from class and who receive a grade (A, B, C, D, F, I, CR, NC, P, NP). Only Ws are counted against the retention rate. Students who drop or are dropped by the no-penalty drop date are not used in this calculation.

Success Rate

This is the percentage of students who ended the semester with a passing grade. It is based on the number of students who receive a passing/satisfactory grade of A, B, C, CR, or P. At the time the report is run, non-passing grades, incompletes, and Ws are counted against the success rate.

EDUCATIONAL AND SERVICES PROGRAM OFFERINGS

Academic Schools

- The Arts
- Business Sciences
- Emeritus Institute
- Humanities
- Integrated Design, Engineering and Automation
- Kinesiology, Health Sciences, and Athletics
- Languages and Learning Resources
- Library and Student Success Center
- Life Sciences and Technologies
- Mathematics and Computer Science
- Physical Sciences and Technologies
- Social and Behavioral Sciences

Student Services and Resources

- Counseling Center
- Disabled Students Programs and Services
- EOPS/CARE/CalWORKs
- Financial Aid
- Guardian Scholars
- Health and Wellness Center
- International Student Program
- Matriculation
- Outreach and Community Relations
- Veterans Services Center

COLLEGE AND SCHOOL GROWTH FORECASTS

Recent enrollment trends at the college and population projections in Orange County paint a picture of growing headwinds for Irvine Valley and SOCCCD. Faculty and staff talk about the recent difficulty in maintaining enrollments due to declining college-age student populations and the coming “cliff” among high school graduations in the next decade. This means that there may be little likelihood of significant college-wide growth.

Several factors influence college enrollments, including population growth and high school graduation rates. Economic trends such as labor market growth among middle-skill occupations and the unemployment rate also play a role in helping to estimate future demand, especially among CE and continuing education programs. Because of significant current and expected declines among college-age residents in Orange County and area high school graduation rates, the college estimates an annual average growth rate of 0.08% per year between 2020 and 2030.

At the department level, to determine relative growth to the college, a set of metrics was developed to measure department performance, including enrollments and fill rates, and award outcomes and related program job growth, where applicable.

The following data was used as performance benchmarks to develop our growth estimates for each department:

- Department Enrollments as a Percent of All Irvine Valley Enrollments
- Average Annual Growth/Decline in Department Enrollments
- Average Annual Growth/Decline in Department Productivity (WSCH/FTEF)
- Average Course Fill Rate for the Department
- Projected Annual Job Growth Rate for Related Occupations
- Average Annual Growth/Decline in Department Degrees awarded at Irvine Valley
- Irvine Valley’s Share of Department Degrees as a Percent of All Orange County Degrees from Similar Academic Programs

Each of the 55 departments was given a numerical rating of {-1, 0, 1 or 3} for each of the above metrics relative to all departments at the college, grouping programs into three percentile ranges (25th percentile (0 to 25), 50th percentile/median range (26 to 74), and 75th percentile (75 to 100)). An average of these numerical ratings was used to determine each department’s growth rate relative to the overall college growth rate of 0.08%. Programs with an average rating of 1 are estimated to grow at the same rate as the college overall; those with an average rating greater than 1 are estimated to grow at a greater rate than the college average annual growth rate; and those with a rating less than 1 are estimated to grow less than the college average annual growth rate.

About half of departments (23) have an estimated annual average growth rate slightly greater than the college, from 0.09% to 0.16% per year, and 17 departments have an estimated annual average growth rate less than that of the college-wide rate, from 0.07% to -0.06% per year. The rest are projected to grow at the same rate as the college.

ACADEMIC SCHOOLS—DESCRIPTIONS, TRENDS AND FUTURE DEVELOPMENT

The Office of Instruction (OOI)'s primary charge is institutional effectiveness—that is, the degree to which the college achieves its mission in service of students and the community. Accordingly, the overarching goals for the instruction office include student performance, student outcomes, and the accreditation status and fiscal health of the college. In support of these goals, the OOI is organized around the following themes:

- Direct student instruction - encompassing 11 academic schools, the Emeritus Institute, Community and Contract Education, and dual enrollment offerings with local K-12 partners
- Student support services - including the library and learning resources centers
- Institutional research - executed through the Office of Research, Planning and Accreditation

The academic schools work collaboratively with multiple stakeholders to deliver quality instruction and services to IVC students. The schools' strengths and challenges are described individually below, but all have been impacted by the COVID-19 pandemic. Consequently, each school will focus on the additional challenges caused by COVID-19 related to shifts in student demographics and enrollments, refining online education (synchronous and asynchronous), and hybrid instruction for labs and activities courses.

THE ARTS

DESCRIPTION

The School of the Arts is comprised of five departments further subdivided into 13 individual areas of study overseen by a dean, five department chairs, and nine permanent staff members:

Art: The Art curriculum includes 2-D and 3-D design, drawing, painting, digital and interactive media arts, and art history. All courses are designed to develop students' understanding and appreciation of the artist's techniques, materials, and processes; current creative technologies; aesthetic and critical theory; and appreciation for the historical canons.

Communication Studies: The curriculum focuses on the study of communication, how meaning is exchanged in a variety of contexts to a variety of audiences. The basic course teaches students the skills required for presenting a speech—analyzing an audience, listening, coping with fear, using visual aids—as well as the skills they will need to prepare a speech: researching a topic, analyzing arguments and texts, and organizing and outlining material. Beyond that, advanced courses address issues such as conflict management and the communication that occurs in interpersonal relationships, small group settings, intercultural settings, public debate venues, and other performance environments.

Dance: The department welcomes dancers of all levels and genres who want to further their practice and achieve their goals within the area of dance. The dance department programs serve students seeking to transfer, obtain a degree or certificate, enhance career skills, or improve skills as lifelong learners. The dance curriculum includes training on preventing injuries, reducing stress, improving quality of life, and techniques for any movement-based endeavor. The curriculum includes technique courses in ballet, modern dance, jazz dance, tap dance, ballroom dance, Middle Eastern and African dance, and an introductory course that includes many dance genres.

Music: The Music department is one of the college's most high profile and active departments. The department offers courses that enable students to both make and create music, and to better understand it. The curriculum includes courses in music appreciation, theory, composition, and performance. The department sponsors six performing ensembles (instrumental, vocal, guitar, and collaborative keyboard). The department presents upwards of 40 performances a year by its large ensembles, student recitals, faculty recitals, and guest artists.

Theatre Arts: The Theatre Arts Department aims to provide students with a comprehensive theatre experience encompassing all aspects of acting, musical theatre, voice, diction, directing, design, and theatre production as well as an introduction to theatre history. Students may structure their own program to suit their personal goals and experience level through enrolling in a wide range of courses as well as through participating in the theatre department's highly acclaimed productions. Students completing theatre arts programs can perform a role in a theatrical production, analyze text as it relates to acting performance, construct theatrical elements, manage a theatrical production, analyze the literary and vocal components of musical theatre, and apply the fundamentals of theatrical design.

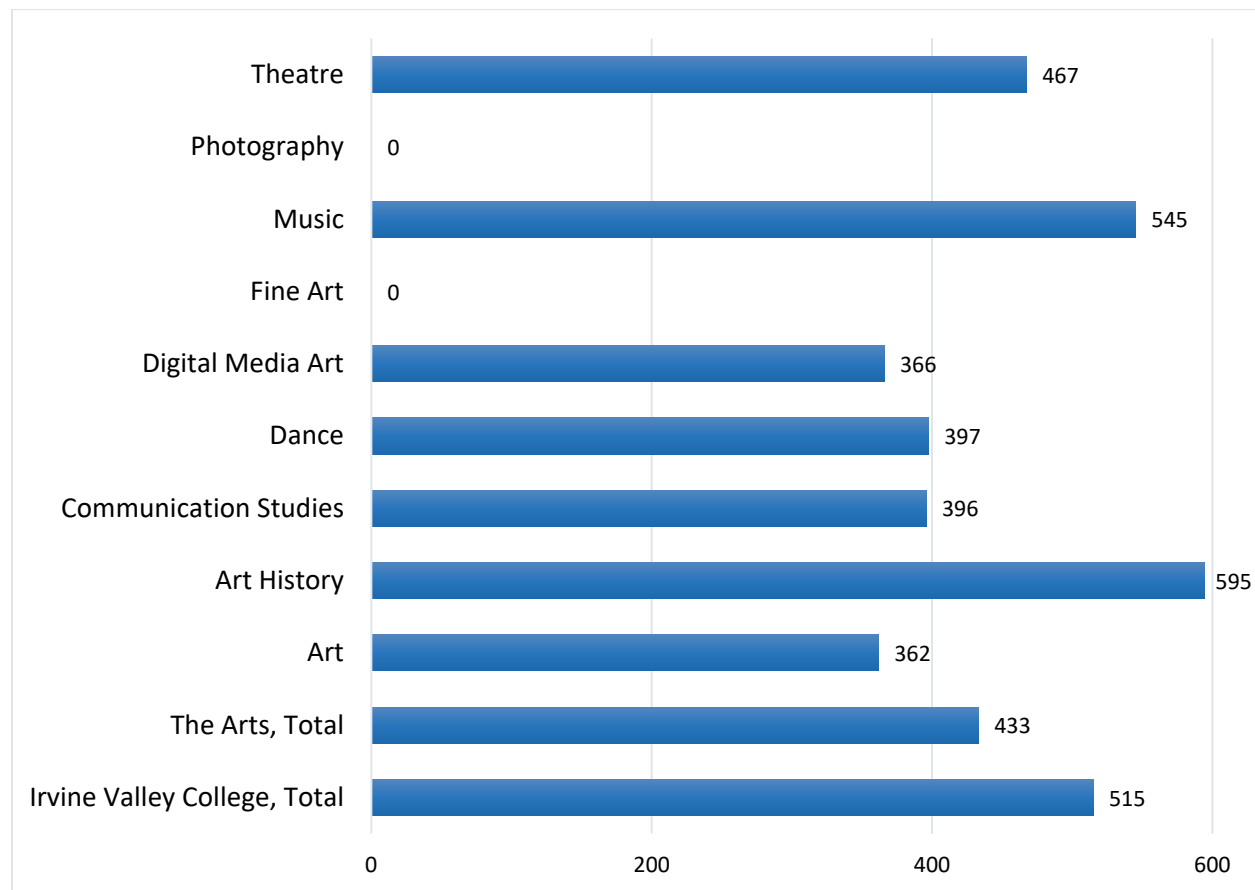
In addition to these programs, the School of the Arts also contains the Performing Arts Center (PAC), which is overseen by a director and ticket office manager. The PAC hosts approximately 80 ticketed events annually, serving over 7,500 patrons. In addition to performances, the PAC is also used for campus activities and forums.

Success rates within the School of the Arts are well above the college average. The arts have seen strong growth rates in the areas of communication studies, studio art, and digital media art, and these areas are tracking well ahead of the annual growth of IVC. The School of the Arts produces over 100 events on and off campus annually in the areas of theatre, dance, music, art exhibitions, and debate tournaments.

Table 4.1: The Arts and Irvine Valley College

College, School, Department, 2018-19 Academic Year	TOTAL SECTIONS	COURSE FILL RATE	FTEF	WSCH	FTES	PRODUCTIVITY (WSCH/FTEF)
Irvine Valley College, Total	2,690	92.5%	681.30	350,778	10,995	515
The Arts, Total	379	80.3%	89.40	38,720	1,172	433
Art	40	72.5%	14.40	5,208	173	362
Art History	25	75.6%	5.07	3,015	84	595
Communication Studies	110	85.0%	21.60	8,547	287	396
Dance	45	78.0%	9.31	3,700	123	397
Digital Media Art	35	82.8%	12.60	4,608	140	366
Fine Art	0		0.00	0	0	0
Music	92	78.2%	16.65	9,077	251	545
Photography	0		0.00	0	30	0
Theatre	32	66.0%	9.77	4,565	83	467

Figure 4.1: The Arts, Productivity Bar Chart (WSCH/FTEF), per Table4.1 Final Column



Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.2: Retention and Success Rates

Average Retention Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Retention	87.6%	88.2%	88.4%	88.7%	89.5%
The Arts - Retention	88.4%	89.4%	89.9%	91.3%	91.7%

Average Success Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Success	70.7%	71.3%	72.0%	72.3%	74.1%
The Arts - Success	77.9%	79.6%	80.1%	81.3%	82.2%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.3: FTES and WSCH, Total Growth and Average Annual Growth Rates

College, School, Department, 2014-15 to 2018-19	FTES GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, FTES, 2014-15 to 2018-19	WSCH GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, WSCH, 2014-15 to 2018-19
Irvine Valley College, Total	3.7%	0.9%	7.8%	1.9%
The Arts, Total	4.5%	1.1%	6.8%	1.7%
Art	18.5%	4.3%	19.6%	4.6%
Art History	-22.9%	-6.3%	-13.2%	-3.5%
Communication Studies	12.5%	3.0%	12.9%	3.1%
Dance	8.4%	2.0%	9.1%	2.2%
Digital Media Art	45.8%	9.9%	29.5%	6.7%
Fine Art*				
Music	-7.7%	-2.0%	3.9%	1.0%
Photography	-3.2%	-0.8%		
Theatre	-15.5%	-4.1%	-9.8%	-2.6%

***Note: No data available for Fine Art during this period**

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.4: Section Count and Fill Rates

College, School, Department, 2014-15 to 2018-19	AVERAGE NUMBER OF SECTIONS, 2014-15 to 2018-19	AVERAGE COURSE FILL RATE, 2014-15 to 2018-19
Irvine Valley College, Total	3,223	79.7%
The Arts, Total	437	75.1%
Art	40	69.9%
Art History	34	74.0%
Communication Studies	106	82.0%
Dance	49	64.7%
Digital Media Art	35	71.3%
Fine Art*	0	
Music	134	72.6%
Photography	0	
Theatre	38	68.2%

***Note: No data available for Fine Art during this period**

Data Source: SOCCCD inFORM Data Warehouse, 2019

CHALLENGES AND OPPORTUNITIES FACING THE SCHOOL

The challenges and opportunities for the School of the Arts include:

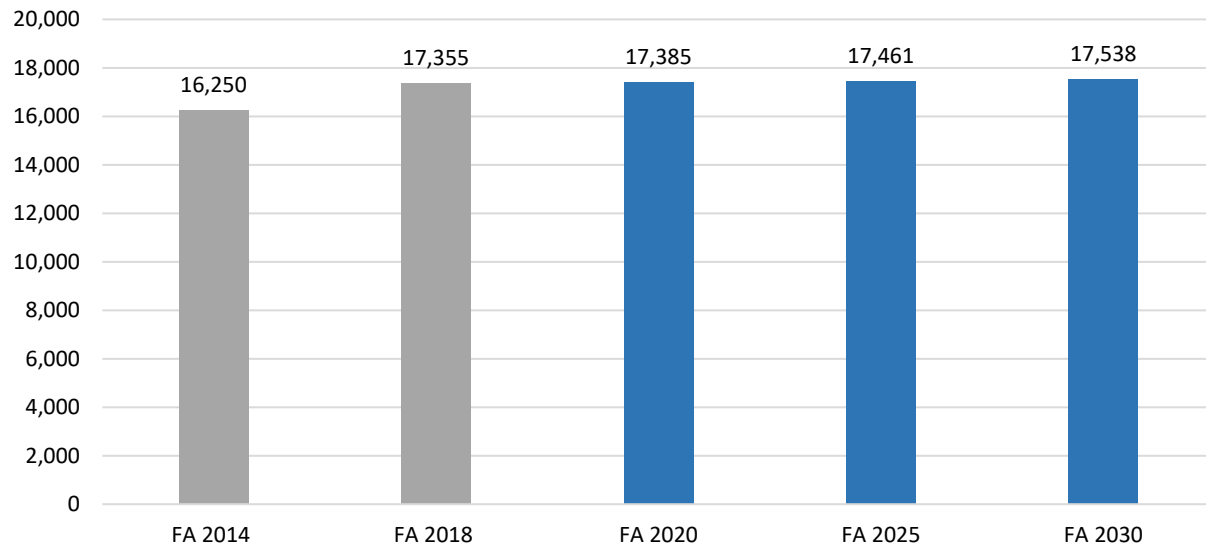
- Facilities and integration of programs. The studio arts have strong growth potential but lack the facilities to realize this growth.
- Consolidating the arts programs into an arts village for the benefit of students and the campus-wide community. The Arts complex is critical for our students' education and arts experience.
- The current studio arts facilities are inadequate and do not have studios for sculpture, 3D, or ceramics.
- Construction of the arts complex. Funding for a three-building arts village project has recently been secured.
- Investigating the Art History program's desire to sponsor, organize, and execute study-abroad classes on various art history topics.
- Enhancing the Art History program's ability to establish and organize annual art history events such as an art history lecture series and/or master classes, in an effort to put a more public face on the Art History program, and involve the local community in the beneficial success of such a program in their area.
- Continuing the Forensics team efforts to educate students and provide advanced opportunities to fine-tune public speaking, teambuilding, critical thinking, and time management skills.
- Maintaining the ability for Forensics students to compete at a variety of tournaments at the local, state, and national levels.
- Continuing to support international Forensics team events and activities.
- Increasing dance science offerings as recommended by the commercial dance advisory panel.
- Maintenance and upkeep of the current dance facilities.
- Course and program sequencing for DMA/IMA certificates and degrees that provide the greatest opportunities for student retention, completion, and success as well as expansion and growth in the department.
- Expanding academic and professional opportunities for students through collaborations with other institutional colleagues, other DMA/IMA programs, and related industry professionals.
- Assisting lifelong learners who are a bedrock for the music department. This population forms a constant community for us that brings numerous intangibles such as maturity, experience, wisdom, and even financial support. They enroll in courses across the department including ensembles and general education courses, and occasionally are part of the music major.

FUTURE DIRECTION OF THE SCHOOL

A new 68,000-square-foot arts complex is due to open in the summer of 2023 and will provide space and facilities for music, dance, digital media, and studio art. The facilities will allow the School to begin new programs such as ceramics, sculpture, and crafts. It will also allow for the expansion of printmaking and aerial dance. This will be a student-friendly complex that encourages campus-wide participation in the arts.

With the new facility, the School expects growth within the fine art disciplines—studio art, digital media arts, and interactive media arts, specifically in the areas of 3D studio art and ceramics. There is also room for growth with the online general education courses.

Figure 4.2: School and Program WSCH, The Arts, Actual and Estimated Growth, 2014 to 2030



WSCH, Actual and Projected	FA 2014	FA 2018	FA 2020	FA 2025	FA 2030	WSCH Estimated Average Annual Growth Rate, 2018 to 2030
Art	2,040	2,370	2,375	2,387	2,399	0.10%
Art History	1,560	1,419	1,421	1,427	1,433	0.08%
Communication Studies	2,988	3,678	3,687	3,710	3,734	0.13%
Dance	1,571	1,562	1,564	1,568	1,573	0.06%
Digital Media Art	1,734	2,022	2,025	2,033	2,041	0.08%
Music	3,820	4,111	4,119	4,140	4,162	0.10%
Photography	0	0	0	0	0	0.00%
Theatre	2,537	2,193	2,194	2,195	2,196	0.01%
The Arts, Total	16,250	17,355	17,385	17,461	17,538	0.09%

Data Source: SOCCCD inFORM Data Warehouse, 2019

BUSINESS SCIENCES

DESCRIPTION

The School of Business Science includes five department in which the overarching goal is to impart to students the technological, career, ethical, and analytical knowledge needed to handle real-world challenges, uncertainties, risks, and change. The school offers a student-centered course schedule and a variety of awards, ranging from low-unit certificates to degrees, focused on preparing students for career training and/or transfer.

The departments in the School of Business Sciences as follows:

Accounting: The Accounting Program focuses on the principles and practices of accounting and seeks to train students how to make critical decisions based on data contained in various financial reports and statements. The major prepares students for transfer and some entry-level accounting positions in the public and private sectors in such areas as service, merchandising, and manufacturing companies. Coursework can count toward CPA certification.

Business/Management: Coursework in Business/Management trains student in intermediate principles and practices of management, enabling students to lead, direct, plan, organize, and make critical managerial decisions. Such training is widely applicable, and knowledge of management principles is essential to all individuals entering the various business fields. The major prepares students to enter management positions in the public and private sector in such areas as retail, wholesale, trades, banking, import/export, small business and government.

Computer Information Management: The Computer Information Management program encompasses a broad area of study, including computer operating systems, software applications, and networking and internetworking technologies. Courses are designed to prepare students at various levels of competence—from the novice to the expert—for immediate employment, professional careers, and/or transfer. The program combines classroom lecture/demonstration and individual hands-on training in a laboratory setting. Faculty members work closely with local businesses and industries to ensure relevant and state-of-the-art training.

Entrepreneurship: The Entrepreneurship program provides educational experiences to students that foster the development of an entrepreneurial mindset and increase their ability to identify business opportunities, evaluate ideas, validate concepts and strategy, and take action on their ideas. Students combine entrepreneurship education with other disciplines to unleashing the power of knowledge towards improving society, developing economically, and creating personal well-being and wealth. This can lead to starting your own business or being entrepreneurial minded while working for a start-up or large organization.

Paralegal Studies: The American Bar Association (ABA)-approved Paralegal Studies program provides students with the skills and knowledge needed to work as a paralegal in civil litigation, bankruptcy or estate planning law firms; an understanding of ethical rules and regulations applicable to legal professionals; an overview of legal theory; and a practical introduction to legal research and writing. The

program prepares students to assist attorneys as paralegals in administrative agencies, corporations, insurance companies, private law firms, government and other legal environments.

Real Estate: The Real Estate program prepares students to enter the real estate industry for jobs as a real estate salesperson, property manager, loan officer, real estate broker, real estate developer, escrow officer and related positions. Students learn about the many areas of real estate, including homes, investments, development, financing, leasing, appraising and the tools used to transfer real property. Students who complete the real estate certificates are equipped with not only immediately marketable skills but will also meet the education requirements for the California Real Estate Salesperson and Broker Licenses.

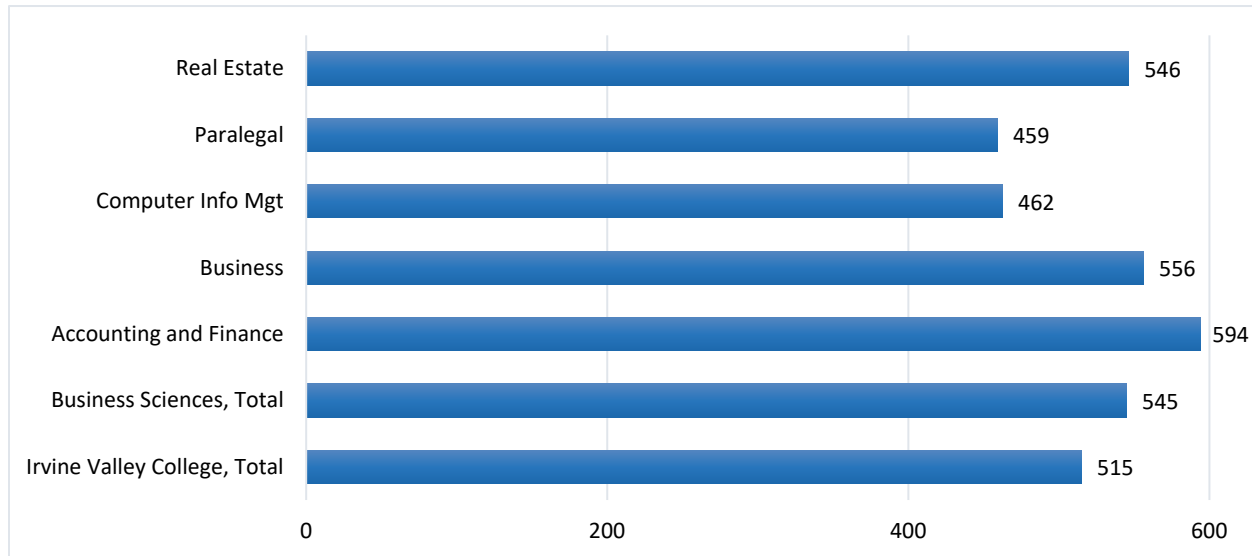
The accompanying data show that the School of Business Sciences is more productive than the college average, with predicted low growth through 2030. Student retention and success were slightly above the college average, and both have steadily improved over the last several years. However, these measures do not convey the most noteworthy attributes of the School of Business Sciences: the faculty's strong ties with the business community and professional associations and their robust commitment to student mentoring and success through a variety of innovative programs, including 30 to CPA; the GAP 4+1 Accounting pathway with California State University, Fullerton; the CyberPatriot program; the Entrepreneurship pitch competitions; dual enrollment; and summer bridge. The school has cultivated strong partnerships and a reputation for excellence with regional businesses, higher education institutions, K-12 school districts, and accrediting institutions such as the American Bar Association.

Table 4.5: Business Sciences and Irvine Valley College

College, School, Department, 2018-19 Academic Year	TOTAL SECTIONS	COURSE FILL RATE	FTEF	WSCH	FTES	PRODUCTIVITY (WSCH/FTEF)
Irvine Valley College, Total	2,690	92.5%	681.30	350,778	10,995	515
Business Sciences, Total	178	81.2%	35.36	19,264	639	545
Accounting and Finance	47	120.8%	13.58	8,066	297	594
Business	53	82.8%	9.28	5,160	172	556
Computer Info Mgt	54	48.4%	8.02	3,708	91	462
Paralegal	7	66.5%	1.34	615	19	459
Real Estate	17	80.4%	3.14	1,715	59	546

Data Source: SOCCCD inFORM Data Warehouse, 2019

FIGURE 4.3: SCHOOL OF BUSINESS SCIENCES, PRODUCTIVITY BAR CHART (WSCH/FTEF), TABLE 4.5 FINAL COLUMN



Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.6: Retention and Success Rates

Average Retention Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Retention	87.6%	88.2%	88.4%	88.7%	89.5%
Business Science - Retention	85.1%	86.5%	87.5%	87.8%	90.0%

Average Success Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Success	70.7%	71.3%	72.0%	72.3%	74.1%
Business Science - Success	69.0%	70.5%	72.3%	72.4%	77.7%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.7: FTES and WSCH, Total Growth and Average Annual Growth Rates

College, School, Department, 2014-15 to 2018-19	FTES GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, FTES, 2014-15 to 2018-19	WSCH GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, WSCH, 2014-15 to 2018-19
Irvine Valley College, Total	3.7%	0.9%	7.8%	1.9%
Business Science, Total	-13.6%	-3.6%	-12.6%	-3.3%
Accounting and Finance	-11.6%	-3.0%	-13.2%	-3.5%
Business	-0.1%	0.0%	5.8%	1.4%
Computer Info Mgt	-34.3%	-10.0%	-27.1%	-7.6%
Paralegal	-53.1%	-17.3%	-52.1%	-16.8%
Real Estate	16.1%	3.8%	14.0%	3.3%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.8: Section Count and Fill Rates

College, School, Department, 2014-15 to 2018-19	AVERAGE NUMBER OF SECTIONS, 2014-15 to 2018-19	AVERAGE COURSE FILL RATE, 2014-15 to 2018-19
Irvine Valley College, Total	3,223	79.7%
Business Science, Total	209	74.7%
Accounting and Finance	52	116.8%
Business	60	73.8%
Computer Info Mgt	68	46.7%
Paralegal	12	56.5%
Real Estate	17	76.2%

Data Source: SOCCCD inFORM Data Warehouse, 2019

CHALLENGES AND OPPORTUNITIES FACING THE SCHOOL

The challenges and opportunities for the School of Business Science include:

- A potential new challenge, with an unknown impact currently, is Calbright College, the latest addition to the California Community Colleges system. Some of the course offerings of this fully online, non-credit, skills-based college appear to directly compete with classes that the school offers or are planning to offer in cybersecurity.
- The School of Business Sciences was downsized to meet efficiency targets and student demand. Shrinking course offerings to meet student demand and maintain productivity has led to challenges maintaining a teaching load for all full-time faculty in the school. Course cancelations have made completion of specific certificates difficult for a few students.
- Low growth projections, running a smaller schedule, and national trends present opportunities to reexamine and update curriculum, methods of course delivery, and scheduling protocols.

The School of Business Sciences has adopted the following action plans to address the internal and external challenges identified above, including:

- Leveraging strategic marketing communication, the School of Business Sciences website, and partnerships to create awareness of the school and enhance enrollment and program sustainability.
- To date, the School of Business Sciences has received adequate funding for equipment and supplies. There will be an ongoing need for funds to cover equipment and supplies for the Computer Information Management (CIM) program and other Business Sciences programs to keep pedagogical materials and technology up to date.
- The School of Business Sciences is currently understaffed in Accounting due to the retirement of a full-time faculty member. Since Spring 2019, the school is overstaffed in Business. Careful scheduling and enrollment management will continue to be necessary to provide a full-time

teaching load for all members of the school who rely on business classes for their load. The School of Business Sciences will eventually need resources to cover hiring as faculty retire.

- At the present time, there are occasional room conflicts primarily with the computer lab in BSTIC 216. This points to the need for additional computer classrooms on campus and additional computer classroom space assigned to the School of Business Sciences
- Since its inception in Fall 2016, the GAP 4+1 accounting pathway has been grant-funded through Perkins and Strong Workforce. The funding includes stipends for program coordination, a part-time administrative assistant, and a part-time counselor that costs approximately \$80,000 annually. In addition, the full-time accounting faculty use their college service hours to support the program. As grant funds diminish, the program will need to be institutionalized and supported through the college's general fund.
- To date, the School of Business Sciences has been marketed through a variety of methods except for social media. The School will work with the marketing department to increase the use of digital marketing for its programs.
- As careers continue to transform through artificial intelligence, data analytics, data visualization, and other technological developments, professional development resources will be needed to help faculty stay up to date with the latest developments. As an example, Tableau, a software platform that is being used by more and more businesses, will need to be taught in our classrooms soon. CIM faculty have all requested funding to learn Tableau.

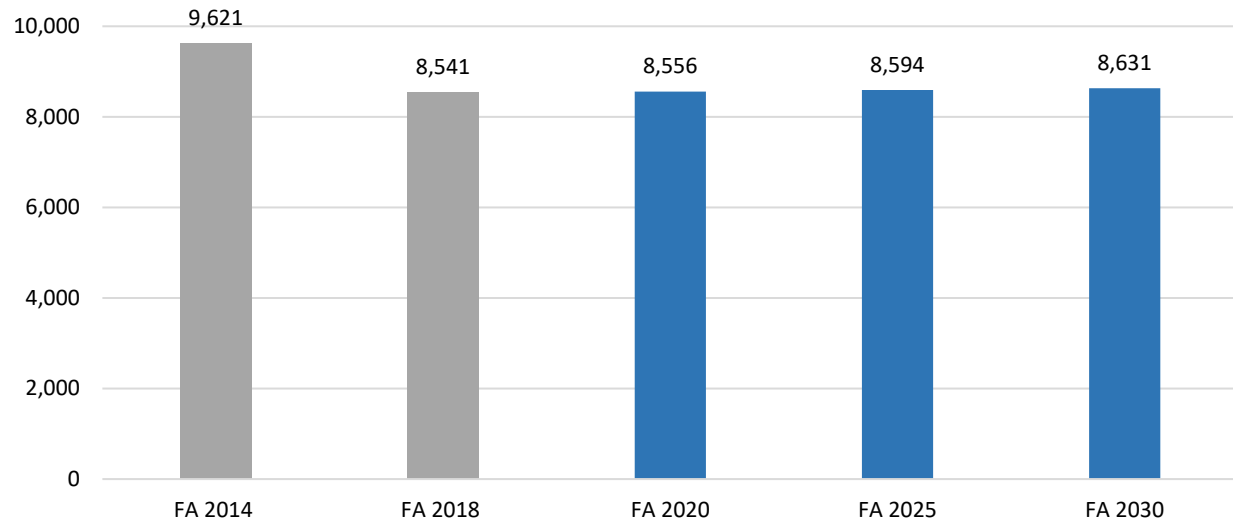
The School of Business Sciences has cultivated many strategic partnerships to provide opportunities for students from high school through transfer and employment. The maintenance of these important relationships and the cultivation of new ones are a priority of the School of Business Sciences. Current partnerships include:

- **Accounting and CSUF:** The School of Business Sciences has a longstanding partnership with California State University, Fullerton (CSUF) centered on the GAP 4+1 accounting pathway.
- **College and Career Access Pathways:** The Entrepreneurship program offers certificate programs at Beckman, Northwood, and Foothill high schools, with plans to expand the program into an additional school in Fall 2020. The School of Business Sciences supports and encourages the development of other strategic partnership programs serving students in K-12 educational institutions.
- **Computer Information Management and CSUF:** The department of Computer Information Management (CIM) began discussions with CSUF in 2017 regarding the development of a CIM pathway into CSUF. The proposed program, called the Guaranteed Information Science Pathway (GISP), identifies a sequence of courses that, when completed with the attainment of a specified GPA, would guarantee students admission into the CSUF information science program. The School of Business Sciences has plans to resume talks with CSUF regarding the GISP pathway.
- **Computer Information Management and CyberPatriot:** The Computer Information Management (CIM) department was recognized as a CyberPatriot Center of Excellence in 2017. CyberPatriot is a National Youth Cyber Education Program created by the Air Force Association (AFA). Its goal is to inspire K-12 students to pursue knowledge and careers in cybersecurity or other science, technology, engineering, and mathematics (STEM) disciplines. This program provides essential cyber defense skills to the next "digital" generation, is a great avenue to promote IVC STEM and career education (CE) programs to students interested in these fields,

increases the potential workforce in an area that is experiencing a severe shortage of skilled workers, and prepares bright students for a challenging and rewarding career. The program is funded through a regional Strong Workforce Grant and will continue to need resources and support in the coming years.

- **Paralegal Studies and American Bar Association Approval:** In February 2019, the Paralegal Studies program received accreditation from the American Bar Association.
- **School of Business Sciences and United Way:** The School of Business Sciences has a six-year relationship with United Way and its VITA program, which provides free tax preparation services to low-income (under \$60,000 per year) members of the community utilizing college facilities in the Business Sciences, Technology, and Innovation Center (BSTIC) building. In 2019, Irvine Valley College was the 6th largest VITA site in Orange County. School of Business Sciences office personnel provide logistical support for this community service and plan to continue to do so due to the positive impact the program has on the local community and for our students, who serve as volunteers. The volunteer students gained experience preparing tax returns, learning tax law, and honing their skills in client interaction, interviewing, critical thinking, and quality customer service.

Figure 4.4: School and Program WSCH, School of Business Sciences, Actual and Estimated Growth, 2014 to 2030



WSCH, Actual and Projected	FA 2014	FA 2018	FA 2020	FA 2025	FA 2030	Estimated Average Annual Growth Rate, 2018 to 2030
Accounting and Finance	4,179	3,604	3,611	3,630	3,649	0.10%
Business	2,018	2,251	2,255	2,264	2,273	0.08%
Computer Info Mgt	2,265	1,692	1,693	1,698	1,703	0.06%
Paralegal	580	225	225	225	225	0.02%
Real Estate	579	770	772	777	782	0.13%
Business Sciences, Total	9,621	8,541	8,556	8,594	8,631	0.09%

Data Source: SOCCCD inFORM Data Warehouse, 2019

FUTURE DIRECTION OF THE SCHOOL

As a school committed to teaching students how to handle real-world challenges, uncertainties, risks, and change, the School of Business Sciences is well-equipped to address the internal and external challenges described here. Predicted low growth, running a tighter schedule, new in-demand skills to incorporate into the school's curriculum, and competition from other programs present opportunities for the school to identify creative, forward-thinking solutions to maintaining currency and building enrollments.

The School of Business Sciences will continue its robust commitment to student mentoring and success by sustaining its current programs and partnerships and nurturing new ones. The school will continue its commitment to building strong K-12 pathways into its programs of study and will continue to work with universities to forge healthy transfer pathways. The school will continue building relationships with

employers to provide internship and job opportunities for its students. The school will continue its commitment to excellence by engaging in professional development and strategic planning to prepare for its future, including incorporating in-demand skill sets into the curriculum, such as data analytics, data visualization, artificial intelligence, and cybersecurity.

The School of Business Sciences must develop and maintain a robust marketing strategy to support its programs:

- Resource allocations are needed to support hiring, existing programs, new programs, and professional development.
- Facilities, technology, and curriculum must be continually monitored and upgraded or amended as needed to address changing labor market demands and maintain currency.
- The School of Business Sciences must maintain and look for opportunities to expand its strategic partnerships with business and educational institutions.

EMERITUS INSTITUTE

DESCRIPTION

The Emeritus Institute program affirms the importance of intellectual activity, critical thinking, and creative expression for older adults. The curriculum challenges participants to formulate relationships between past experiences and new ideas and to keep current in all academic areas. Courses are developed to stimulate participants' intellectual and personal growth and to benefit their daily lives—personally, socially, culturally, economically, and environmentally. The Emeritus Institute provides educational options for students who no longer find the traditional path of credit instruction appropriate for their lifestyles but continue to be eager to learn, develop and grow as individuals.

The Emeritus Institute serves approximately 2,200 students at 13 off-site locations in Irvine, Tustin, Laguna Beach, Lake Forest, and Laguna Hills. Courses and schedules are established in collaboration with Emeritus faculty, college administration, and on-site staff in response to the needs of Emeritus students and community members.

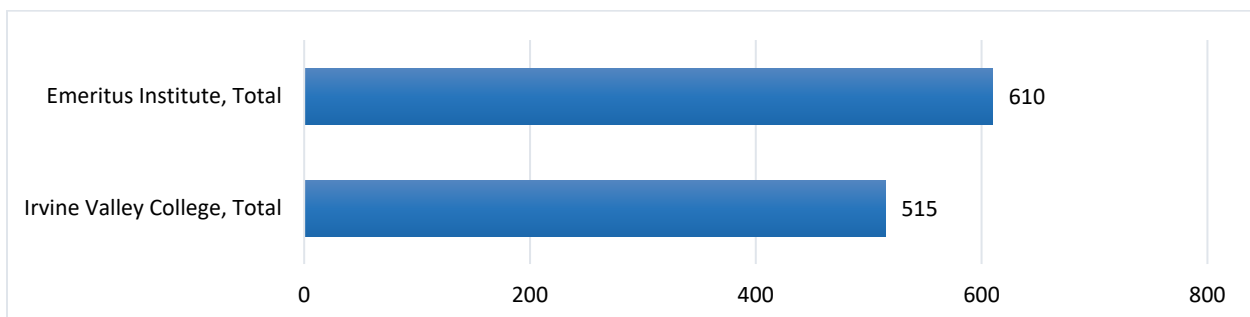
The data below shows the Emeritus program is more productive than the college average. The Emeritus program has demonstrated consistent enrollment growth from 2014-2018, with predicted low growth through 2030. While retention and success data are not included, Emeritus students consistently attend their classes, persist to the completion, and successfully complete their classes. While grades are not awarded, Emeritus students find personal satisfaction in completing their courses each semester.

Table 4.9: Emeritus Institute, and Irvine Valley College

College, School, 2018-19 Academic Year	TOTAL SECTIONS	COURSE FILL RATE	FTEF	WSCH	FTEF	PRODUCTIVITY (WSCH/FTEF)
Irvine Valley College, Total	2,690	92.5%	681.30	350,778	10,995	515
Emeritus Institute, Total	139	89.1%	14.70	8,965	231	610

Data Source: SOCCCD inFORM Data Warehouse, 2019

Figure 4.5: Emeritus Institute, Productivity Bar Chart (WSCH/FTEF) per Table 4.9 Final Column



Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.10: Retention and Success Rates

Average Retention Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Retention	87.6%	88.2%	88.4%	88.7%	89.5%
Emeritus Institute - Retention	N/A	N/A	N/A	N/A	N/A

Average Success Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Success	70.7%	71.3%	72.0%	72.3%	74.1%
Emeritus Institute - Success	N/A	N/A	N/A	N/A	N/A

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.11: FTES and WSCH, Total Growth and Average Annual Growth Rates

College, School, 2014-15 to 2018-19	FTES GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, FTES, 2014-15 to 2018-19	WSCH GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, WSCH, 2014-15 to 2018-19
Irvine Valley College, Total	3.7%	0.9%	7.8%	1.9%
Emeritus Institute, Total	75.0%	15.0%	246.4%	36.4%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.12: Section Count and Fill Rates

College, School, 2014-15 to 2018-19	AVERAGE NUMBER OF SECTIONS, 2014-15 to 2018-19	AVERAGE COURSE FILL RATE, 2014-15 to 2018-19
Irvine Valley College, Total	3,223	79.7%
Emeritus Institute, Total	179	57.6%

Data Source: SOCCCD inFORM Data Warehouse, 2019

CHALLENGES AND OPPORTUNITIES FACING THE SCHOOL

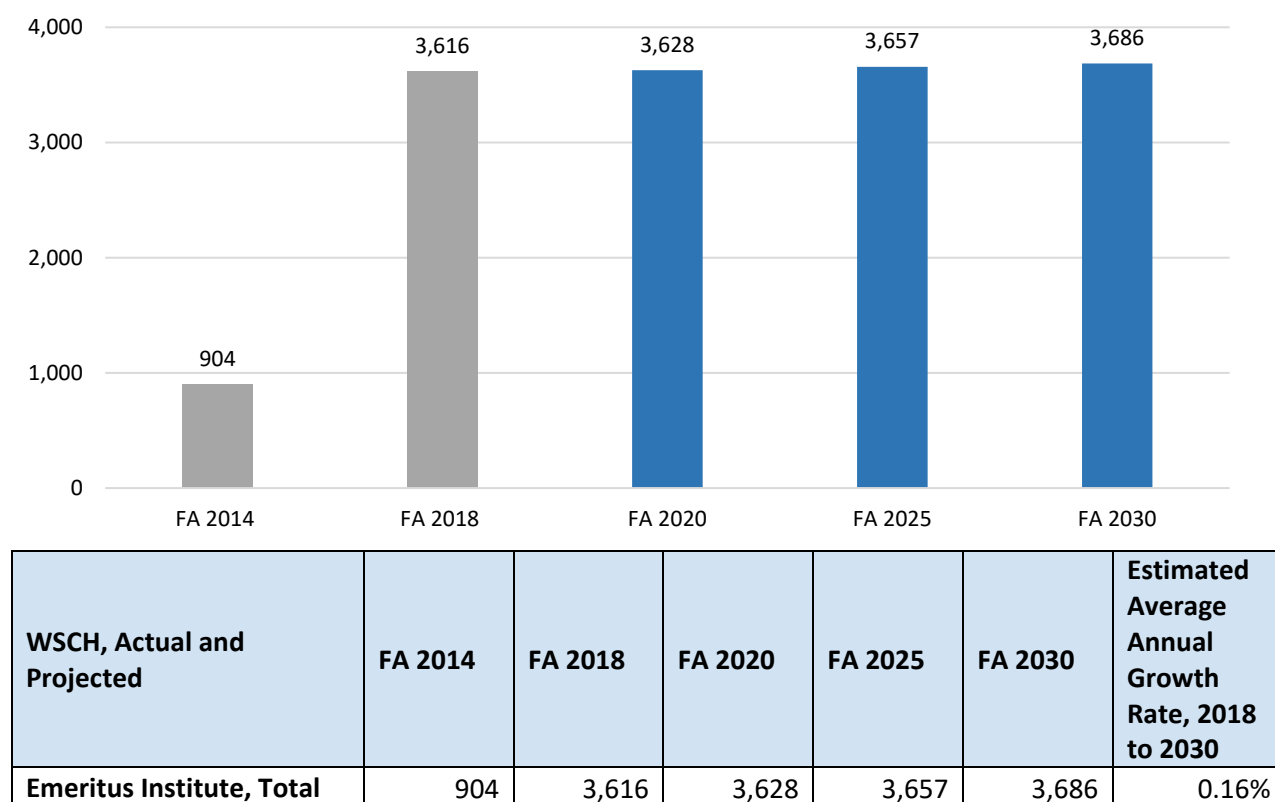
The challenges for the Emeritus Institute include:

- Emeritus students struggle with enrollment and registration processes.
- A significant number of the students struggle to use a computer and are challenged by the college's application process (CCCApply), MySite and college email.
- A limited number of Emeritus instructors and no full-time Emeritus faculty make it challenging to expand the program. Emeritus courses are offered in partnership with city-sponsored classes offered at senior centers, city buildings, and community centers, but limited availability at off-site locations makes it difficult to add classes and grow programs.

The opportunities for the Emeritus Institute include:

- Explore options for curriculum development with possible assistance from full-time IVC faculty.
- Expand funding for the mailing list and development of the Community Education and Emeritus brochure that are produced three times per year.
- Improve brochure design and expand the distribution area.
- Provide ongoing professional development and training opportunities for existing faculty.
- Continue to provide customer service to Emeritus students in person, as well as email, phone, and mail.
- Continue to create and provide instruction sheets to assist Emeritus students navigate college processes, such as registration and email forwarding.
- Maintain partnerships with city staff and site managers to secure additional time slots/days to schedule additional Emeritus sections.

Figure 4.6: School and Program WSCH, Emeritus Institute, Actual and Estimated Growth, 2014 to 2030



Data Source: SOCCCD inFORM Data Warehouse, 2019

FUTURE DIRECTION OF THE SCHOOL

The future directions of the Emeritus Institute include:

- Explore options for expanding course offerings to additional off-site locations (senior centers, community centers, city buildings, etc.).
- Schedule additional Emeritus Institute sections in order to provide educational opportunities for waitlisted students as well as expanding the program to new students.
- Increase the number of Emeritus Institute faculty to provide students with new educational experiences, including exposure to new methods of instruction and teaching styles.
- Continue to develop and improve support services for Emeritus students, including improvements to the enrollment and registration processes.
- Work with Student Support Services personnel to improve the onboarding process for Emeritus students.
- Continue informing the campus community of the benefits and value of the Emeritus Institute.

HUMANITIES

DESCRIPTION

The purpose of the School of Humanities is to develop students' literacies of all kinds: media, textual, academic, critical thinking, historical, and cultural. The courses offered by the school fulfill the needs of students seeking transfer to four-year colleges and universities, students wanting to earn an associate degree, high school students wishing to obtain early college credit, and working or retired adults seeking personal or professional enrichment.

The school has stayed at the forefront of educational trends and developed pedagogical, curricular, and extra-curricular strategies to recognize and promote the strengths of our diverse student population and respond to their and our society's changing needs.

Programs include College Writing, Creative Writing, Cultural Studies, Ethnic Studies, Film Studies, Gender Studies, History, Humanities, Journalism, Literature, Philosophy, and Religious Studies. The multidisciplinary Honors Program is also housed in Humanities. The school is overseen by department chairs and a dean and employs 20 full-time faculty and over 60 part-time faculty.

Courses have high fill efficiency ratings, exceeding the college average in 2018-19. Retention and success rates are strong and have improved steadily from 2014-15 to 2018-19.

The departments in the School of Humanities are as follows:

English Department: The department offers programs in literature and creative writing, and key transfer-level courses in college composition and research writing, for students seeking to transfer, obtain a degree or certificate, improve career skills, or participate in life-long learning. The curriculum includes courses in British and American literature, writing poetry, and writing fiction. The department produces an annual literary magazine, *The Ear*. The department is supported by a Writing Center which provides students with writing assistance from IVC English instructors.

Humanities Department: The department includes programs in history, ethnic studies, film studies, gender studies, interdisciplinary humanities, journalism, philosophy, and religious studies for students seeking to transfer, obtain a degree or certificate, improve career skills, or participate in life-long learning.

Honors Program: The Honors Program at IVC is a member of the Honors Transfer Council of California (HTCC) and the UCLA Transfer Alliance Program (TAP). IVC honors students can take advantage of unique agreements with several four-year institutions that grant priority consideration for transfer admission. These agreements are updated regularly, and IVC honors students hold higher transfer rates over the general student population. The Honors Program also recruits honors and non-honors students campus-wide to engage in meaningful, faculty-mentored research while at IVC and coordinates student participation at several undergraduate research conferences.

History: The History Department offers courses in American history, European history, and the history of selected non-European and non-Western cultures. The curriculum emphasizes the study of history as a means of developing critical intelligence and fostering an awareness of ourselves and our world through examining the past, including the ways in which human beings have attempted to understand the meaning of historical events and issues.

Students majoring in history at the lower-division level concentrate on learning how to use critical thinking skills to identify and analyze the ways in which historical events, trends, and themes interact within any society to determine its values, legitimize its authority, and perpetuate its existence. Thus the major is appropriate for students who wish to acquire an understanding of the ideas that have shaped the culture of this country, and for students who wish to transcend their own cultural limits and, by a study of other societies in other ages, to open their eyes to the diversity of the human environment.

Philosophy: Philosophy studies general and fundamental human problems, such as knowledge, reason, reality, and existence. It is often distinguished from other academic disciplines by its systematic approach to these issues and its reliance on rational argument. Philosophers have pursued logic, or the study of good and bad reasoning, at least since the time of the ancient Greeks. “Logical thinking” has the sort of role and importance in philosophy that the “scientific method” has in the natural sciences.

The student of philosophy seeks to uncover the assumptions underlying our understanding of the world and to subject those assumptions to careful scrutiny. Thus, those who do well in philosophy can expect to think more clearly and logically and to approach problems or issues more systematically.

Journalism: The journalism curriculum integrates the study of multiple disciplines in an effort to document the significant events, fundamental questions, cultural meaning, and values that are common in society. The journalism courses are designed around the inquiry of major themes or issues that frequently cut across traditional cultural or historical boundaries. The curriculum emphasizes the close study of a variety of events in order to explore not only traditional assertions regarding the values of culture but also the criticism of those assertions, in a historical as well as contemporary light.

Journalism majors develop an ability to communicate well, both orally and in writing, and the capacity to think clearly and analytically. The versatility of the major makes it appropriate not only for student who plan to pursue professional writing, but for students whose career decisions may be uncertain.

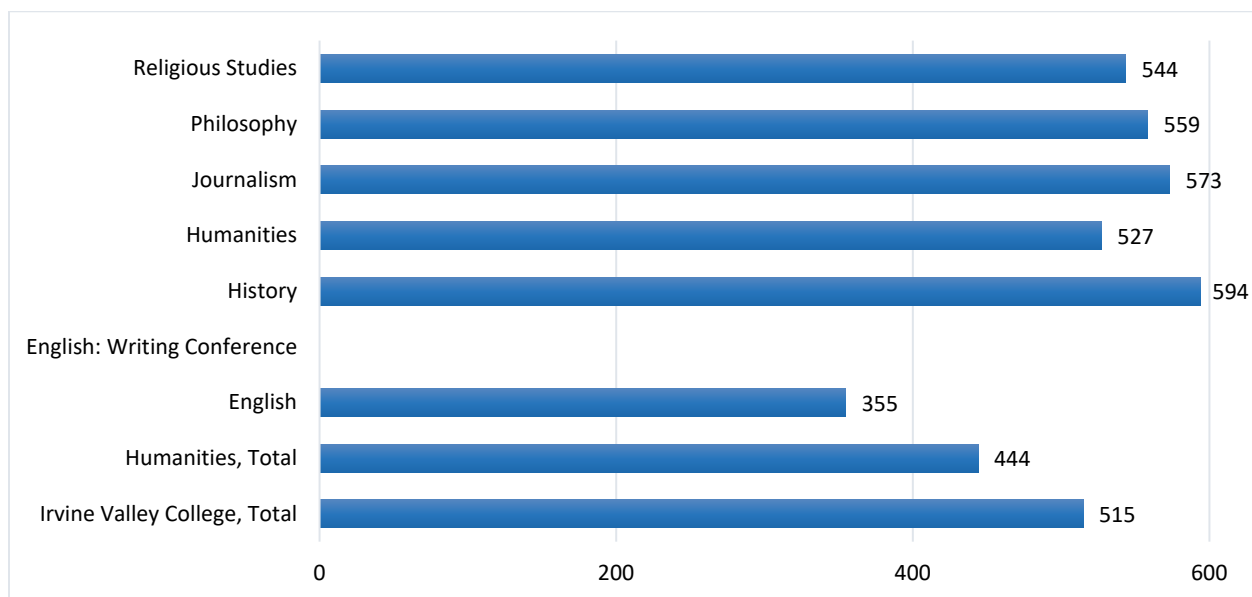
Religious Studies: Religious studies incorporate the study of religious institutions, traditions, sacred texts, and beliefs in modern and historical contexts. The curriculum describes and compares texts, artifacts, and events in order to interpret and explain religion’s influence on society. Consequently, the curriculum integrates the study of history, literature, philosophy, and the arts. Courses offered in the curriculum meet general education and transfer requirements in and may be applied to a major in humanities for an Associate in Arts degree.

Table 4.13: Humanities and Irvine Valley College

College, School, Department, 2018-19 Academic Year	TOTAL SECTIONS	COURSE FILL RATE	FTEF	WSCH	FTES	PRODUCTIVITY (WSCH/FTEF)
Irvine Valley College, Total	2,690	92.5%	681.30	350,778	10,995	515
Humanities, Total	433	93.9%	96.01	42,635	1,407	444
English	252	95.4%	65.25	23,150	770	355
English: Writing Conference	30	96.1%	0.00	1,947	54	N/A
History	75	97.4%	15.56	9,240	305	594
Humanities	33	88.2%	6.60	3,480	115	527
Journalism	9	89.4%	1.80	1,032	35	573
Philosophy	30	84.5%	6.00	3,351	114	559
Religious Studies	4	85.3%	0.80	435	14	544

Data Source: SOCCCD inFORM Data Warehouse, 2019

Figure 4.7: Humanities, Productivity Bar Chart (WSCH/FTEF), per Table 4.13 Final Column



Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.14: Retention and Success Rates

Average Retention Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Retention	87.6%	88.2%	88.4%	88.7%	89.5%
Humanities - Retention	88.6%	89.6%	89.7%	89.6%	91.0%

Average Success Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Success	70.7%	71.3%	72.0%	72.3%	74.1%
Humanities - Success	72.0%	73.3%	72.8%	73.4%	75.6%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.15: FTES and WSCH, Total Growth and Average Annual Growth Rates

College, School, Department, 2014-15 to 2018-19	FTES GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, FTES, 2014-15 to 2018-19	WSCH GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, WSCH, 2014-15 to 2018-19
Irvine Valley College, Total	3.7%	0.9%	7.8%	1.9%
Humanities, Total	-3.6%	-0.9%	-3.1%	-0.8%
English	4.3%	1.1%	4.7%	1.2%
English: Writing Conference	-53.4%	-17.4%	-42.9%	-13.1%
History	-4.4%	-1.1%	-6.5%	-1.7%
Humanities	5.5%	1.3%	4.9%	1.2%
Journalism	40.0%	8.8%	38.2%	8.4%
Philosophy	-15.6%	-4.1%	-17.7%	-4.7%
Religious Studies	-12.5%	-3.3%	-8.8%	-2.3%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.16: Section Count and Fill Rates

College, School, Department, 2014-15 to 2018-19	AVERAGE NUMBER OF SECTIONS, 2014-15 to 2018-19	AVERAGE COURSE FILL RATE, 2014-15 to 2018-19
Irvine Valley College, Total	3,223	79.7%
Humanities, Total	552	73.7%
English	260	92.6%
English: Writing Conference	127	43.2%
History	85	89.1%
Humanities	34	84.3%
Journalism	7	84.3%
Philosophy	33	80.8%
Religious Studies	5	75.3%

Data Source: SOCCCD inFORM Data Warehouse, 2019

CHALLENGES AND OPPORTUNITIES FACING THE SCHOOL

The challenges and opportunities for the School of Humanities include:

- Despite the opening of the new Language Arts building, not all classroom designs adequately accommodate teaching strategies, and available classrooms still need to be sought in buildings other than LA and A 200. Office space in the Liberal Arts building does not accommodate the growing number of full-time faculty, as the faculty are split, with some housed in LA and others in A 200. This will need to be considered when A 200 is remodeled.
- The school has experienced growth in many areas of its curriculum, but occasionally some course sections have had to be cancelled because of low enrollment.
- Concerns are present regarding the number of full-time faculty in the school compared to the large pool of part-time faculty. Maintaining, evaluating, and training a qualified group of over 60 part-time faculty members presents challenges for the department chairs and the dean.
- The school will also need to decide where to concentrate its efforts in meeting IVC's equity goals. It will also need to decide on what part it wants to play in the School of Humanities' journalism program.

The challenges and opportunities for the English department include:

- The department is working to offer an adequate number of sections in writing and literature, and to maintain a high quality of instruction for those sections. These efforts are sometimes compromised by an insufficient number of full-time faculty due to low full-time faculty-to-student ratios and an inability to replace retired faculty members in a timely manner.
- The department has also increased online course offerings and has been careful about quality control of these courses.
- New state laws such as California AB705 have required that the English department revise basic skills writing instruction and support. Part of this revision includes experimenting with new ways to support students through the Writing Center and to collect data on placement to help decide which groups of students may be required to enroll in support classes in compliance with AB705 guidelines. The department and the Writing Center need room to investigate the most successful methods for support instruction for these students. The English Multiple Measures Workgroup (comprised of English faculty, counseling faculty, and a researcher) continues to meet monthly to review data on the Guided Self Placement process and student success and completion rates in Writing 1 and Writing 2 so that data-driven decisions can continue to be made to better support students.
- The department consistently provides training and support to instructors for its co-requisite college writing classes, providing mentorship to faculty in active classroom practices and behaviors that respond to student affective issues. In addition, through BSI-funding support, the English department is developing a supplemental instruction program to support students in the stand-alone transfer-level course to provide additional 1-on-1 instruction and support inside and outside of the classroom.
- The creative writing program has been experiencing an increase in enrollments, and the literary journal, *The Ear*, has attracted student and community participation. The excellent quality of

instructors in writing provides an opportunity for program growth and cooperation with transfer schools.

- The Liberal Arts building has enhanced classroom spaces in general, providing an inviting learning environment. The department, however, needs access to a larger computer lab with more flexible design (such as “islands” small group layout) that would benefit the literary journal, a possible journalism program, and our co-requisite courses.

Challenges and opportunities for the Humanities department:

- The department is committed to expanding the curriculum that focuses upon intersectionality and promotes equity within the classroom. With this charge, the department will offer more gender studies and ethnic studies courses. The department will therefore need a full-time faculty member who specializes in critical race theory and plans to partner with campus initiatives that also promote equity and inclusion. The department will need additional classrooms and this need should be addressed when A200 is remodeled.

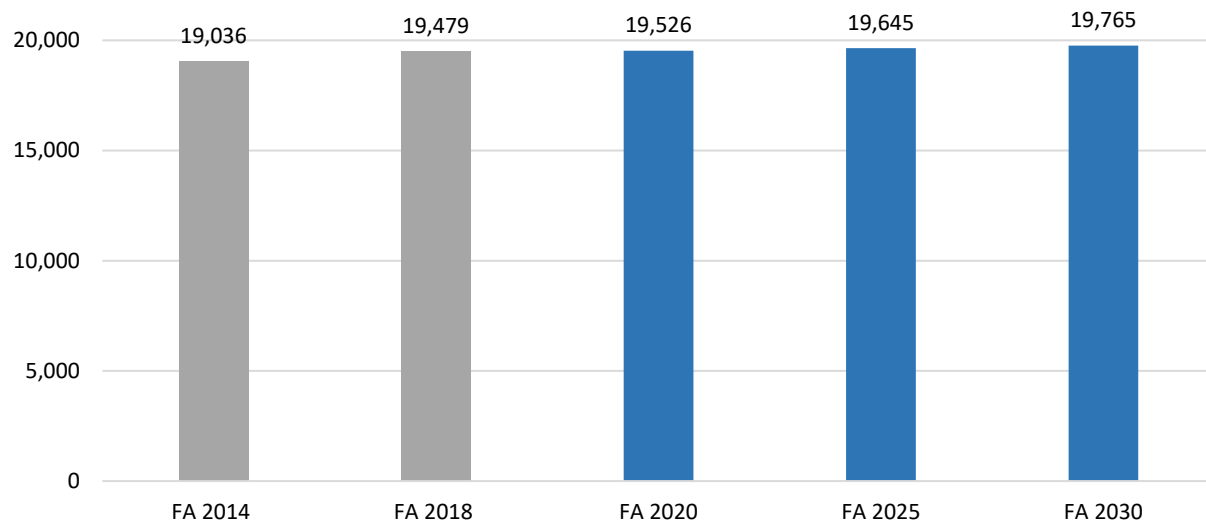
The Humanities department has recently collaborated with The Arts to develop a now Board-approved interdisciplinary major in Film and Digital Media. IVC has a sizable population of students who wish to enter the film industry, pursue work in media studies scholarship, or both. As the program is new, there is no data to examine currently. The department has also added a new UC-approved course entitled “Introduction to Television Studies” and acquired a site license for Kanopy, a feature film streaming service for universities and colleges.

Students have consistently expressed interest in a journalism program, and the development of such a program would help advertise for the college, District, and quality of the curriculum offered here, but funding and additional campus-wide support for full-time faculty are needed.

Internally, Humanities’ primary challenge continues to be securing adequate, if not appropriate, classroom setups and technologies. For example, at present nearly all film classes are taught in a room with a low ceiling (thus inhibiting subtitle viewing) and woefully outdated audio and video technology. Film studies needs one additional course for the AA to become a transfer degree: sound design/production (in process in The Arts).

The Honors Program has experienced significant growth in its student membership and is working to keep up in terms of the number of Honors course sections offered and essential student support such as designated Honors Counseling and a larger Honors Study Lounge. The Program also is challenged to meet the needs of support for undergraduate research as participation expands.

FIGURE 4.8: SCHOOL AND PROGRAM WSCH, HUMANITIES, ACTUAL AND ESTIMATED GROWTH, 2014 TO 2030



WSCH, Actual and Projected	FA 2014	FA 2018	FA 2020	FA 2025	FA 2030	Estimated Average Annual Growth Rate, 2018 to 2030
English	9,380	10,743	10,772	10,847	10,921	0.14%
English: Writing Conference	1,508	1,041	1,040	1,038	1,036	-0.04%
History	4,218	4,014	4,026	4,056	4,086	0.15%
Humanities	1,620	1,599	1,602	1,610	1,618	0.10%
Journalism	357	447	447	449	450	0.05%
Philosophy	1,728	1,416	1,419	1,426	1,434	0.10%
Religious Studies	225	219	219	220	221	0.08%
Humanities, Total	19,036	19,479	19,526	19,645	19,765	0.12%

Data Source: SOCCCD inFORM Data Warehouse, 2019

FUTURE DIRECTION OF THE SCHOOL

English Department recommendations include:

- Hire additional full-time faculty (both new and replacement).
- Increase offerings of standalone and co-requisite transfer-level writing.
- Acquire dedicated classroom space that can meet the needs of both writing and literature classes, particularly when A200 is remodeled.

- Increase funding professional development for all faculty (with incentivized attendance for associate faculty).
- Explore ways to contribute to meeting IVC's goals of equity and inclusion.
- Protect under-enrolled creative writing and literature courses.
- Protect the Writing Center as it transitions due to AB 705 and other external factors.
- Continue to support *The Ear* literary journal and the growing creative writing program.
- Introduce leadership training for faculty who will become chairs, administrators, and/or lead large campus-wide initiatives.

The Humanities Department programs recommends:

- Build adequate classroom space with the remodeling of A 200, to meet instructional and technological needs, especially for film studies.
- Hire a full-time Ethnic Studies/American History faculty member.
- Hire a full-time faculty member who specializes in critical race theory and plans to partner with campus initiatives that also promote equity and inclusion.

The Honors Program recommendations include:

- Increase offerings of honors courses to meet the needs of expanding membership.
- Create a core of STEM honors courses that will meet the transfer needs of STEM honors students and attract additional STEM students to the campus and program.
- Protect enrollments, facilities, and instructional needs of the STEM honors core as it is implemented.
- Provide increased counseling support for Honors Program students,
- Find a temporary solution that would allow the Honors Lounge to stay open from at least 8 am until 7 pm.
- Expand the Honors Study Lounge space to accommodate more students, perhaps by relocating to the A 200 building during remodeling or expanding in the LA building.
- Create an Undergraduate Research Program with dedicated work and office space, a faculty coordinator (with reassigned time), administrative staff, and other resources that would supplement or replace coordination currently carried out by Honors Program and support a campus-wide culture of undergraduate research.

INTEGRATED DESIGN, ENGINEERING AND AUTOMATION (IDEA)

DESCRIPTION

The disciplines of the School of Integrated Design, Engineering and Automation (IDEA) are Design Model Making and Rapid Prototyping, Drafting Technology and Engineering, Electrical Technology, Electronic Technology, and Laser Technology. The programs at the School target the next generation of innovators and students by providing high quality, hands-on technical learning through its high-tech classrooms and lab spaces, outdoor learning areas, and collaborative spaces. Classrooms and lab spaces are equipped with state-of-the-art equipment and technology, which provide students with the knowledge and skills needed to successfully transfer and/or transition to employment. A variety of awards are offered in the School of IDEA, including low-unit certificates and transfer degrees.

Design Model Making and Rapid Prototyping: The growth of digital technology has opened many new areas of development in the representation and construction of models, digital simulation, and rapid prototyping. The department prepares students with the skills necessary to design products and build models using both traditional and emerging technologies. Students in the program gain a unique insight into both the physical and digital disciplines of model making and design, cultivating technical and arts skills based on critical thinking.

Drafting Technology and Engineering: The department offerings include computer-aided design (CAD) which is a rapidly growing segment of the technical job market. The complete computer-aided design certificate introduces students to mechanical, civil, electrical, and architectural modeling techniques that conform to US and international industry standards. In addition to gaining intermediate and advanced knowledge of common CAD software platforms, students receive instruction on modern manufacturing methods, materials of construction, and inspection procedures. Using traditional as well as three-dimensional computer-based graphic modeling applications, laboratory assignments are designed to develop the skills that are required to produce, revise, test, animate, and interpret typical parts or assemblies.

Electrical Technology: The department offers two certificate programs. The electrical and solar technology certificate programs provide a solid foundation for immediate employment or further study in either of these fields. The electrician trainee certificate program equips students for entry into the electrical industry in areas such as residential wiring, commercial wiring, facility maintenance, and troubleshooting electrical circuits and equipment. The solar trainee program is designed to both prepare students new to the industry and upgrade skills of those already employed in the electrical and solar photovoltaic industry.

Electronic Technology: The program offers students the opportunity to work in a hands-on environment with high-tech devices and products including computers and peripherals, communication devices, medical equipment, entertainment products, automotive equipment, test equipment, and industrial equipment (monitors, controllers, and robotics). Through laboratory and classroom instruction, students learn how to troubleshoot, repair, design, and manufacture today's electronic equipment as an electronic technician or engineering technologist.

Laser Technology (Photonics): The program educates students on cutting-edge applications of lasers, cameras, lenses, mirrors, sensors, displays, fiber optics, and other technical devices that interact with light. The current program is funded, in part, by a National Science Foundation Advanced Technology Education (NSF ATE) Grant, for which Laser Technology instructors lead hands-on, laboratory-driven classes with state-of-the-art industrial equipment that was largely donated by its strong network of industrial partners.

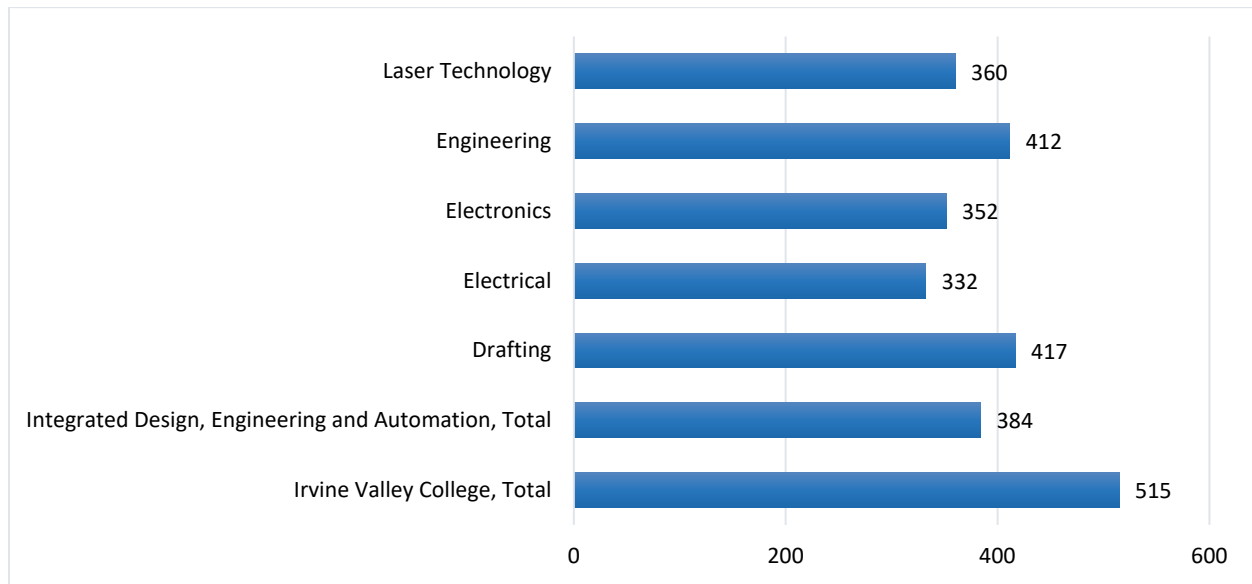
The data below shows the School of IDEA is less productive than the college average; however, the School of IDEA's productivity target is set lower than the college's target. The School of IDEA continues to meet and/or exceed the reduced target and will continue its efforts to increase the productivity rate while ensuring access is not limited. The retention and success rates of the School of IDEA are a bit higher than the college averages, with an above-average fill rate in Engineering/Drafting Technology, Electronics Technology, and Laser Technology. The data indicated low growth over the next several years.

Table 4.17: IDEA and Irvine Valley College

College, School, Department, 2018-19 Academic Year	TOTAL SECTIONS	COURSE FILL RATE	FTEF	FTES	WSCH	PRODUCTIVITY (WSCH/FTEF)
Irvine Valley College, Total	2,690	92.5%	681.30	10,995	350,778	515
Integrated Design, Engineering and Automation, Total	43	77.2%	11.83	152	4,545	384
Drafting	3	104.2%	1.08	15	450	417
Electrical	4	77.5%	1.08	12	359	332
Electronics	11	83.0%	3.55	42	1,248	352
Engineering	23	71.4%	5.52	75	2,272	412
Laser Technology	2	100.0%	0.60	7	216	360

Data Source: SOCCCD inFORM Data Warehouse, 2019

Figure 4.9: IDEA, Productivity Bar Chart (WSCH/FTEF), per Table 4.17 Final Column



Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.18: Retention and Success Rates

Average Retention Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Retention	87.6%	88.2%	88.4%	88.7%	89.5%
Integrated Design, Engineering and Automation - Retention	88.4%	91.0%	90.2%	89.7%	91.5%

Average Success Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Success	70.7%	71.3%	72.0%	72.3%	74.1%
Integrated Design, Engineering and Automation - Success	74.2%	78.0%	78.1%	76.3%	81.0%

Data Source: SOCCCD inFORM Data Warehouse, 2019;

Table 4.19: FTES and WSCH, Total Growth and Average Annual Growth Rates

College, School, Department, 2014-15 to 2018-19	FTES GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, FTES, 2014-15 to 2018-19	WSCH GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, WSCH, 2014-15 to 2018-19
Irvine Valley College, Total	3.7%	0.9%	7.8%	1.9%
Integrated Design, Engineering and Automation, Total	-7.1%	-1.8%	-9.4%	-2.4%
Drafting	-16.7%	-4.5%	-14.8%	-3.9%
Electrical	-50.0%	-15.9%	-50.3%	-16.1%
Electronics	0.0%	0.0%	-7.1%	-1.8%
Engineering	6.9%	1.7%	5.9%	1.4%
Laser Technology	-28.1%	-7.9%	-22.0%	-6.0%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.20: Section Count and Fill Rates

College, School, Department, 2014-15 to 2018-19	AVERAGE NUMBER OF SECTIONS, 2014-15 to 2018-19	AVERAGE COURSE FILL RATE, 2014-15 to 2018-19
Irvine Valley College, Total	3,223	79.7%
Integrated Design, Engineering and Automation, Total	58	64.0%
Drafting	4	94.3%
Electrical	8	53.9%
Electronics	13	73.7%
Engineering	29	61.3%
Laser Technology	5	68.5%

Data Source: SOCCCD inFORM Data Warehouse, 2019

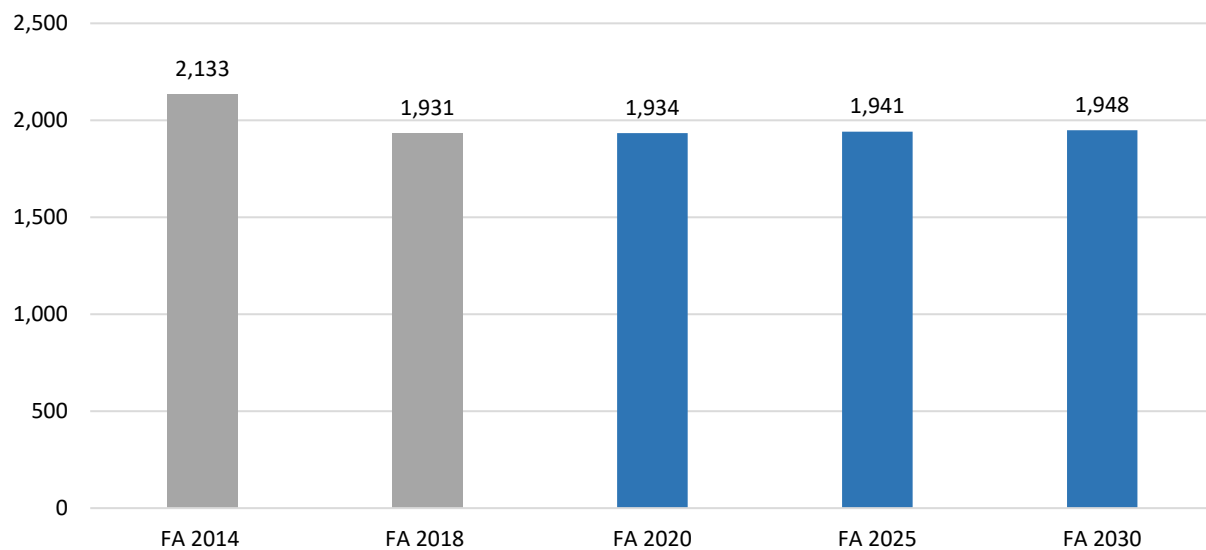
CHALLENGES AND OPPORTUNITIES FACING THE SCHOOL

The challenges and opportunities for the school of IDEA include:

- Low enrollment numbers.
- The negative impact of course cancellations due to low enrollment in some sections, making completion of specific certificates difficult for a few students. As a result of course cancellations, the School of IDEA also struggles to ensure faculty can meet their full-time load obligation.
- The persistent need to attend career and job fair events at K-12 institutions as a key part of ongoing outreach and recruitment efforts to increase student enrollment.

- Supporting outreach by developing targeted marketing materials for IDEA programs in general and specifically for underrepresented and underserved student populations.
- Developing targeted marketing and outreach efforts for industry and employment partners.
- Developing a more streamlined curriculum along with more program options to ensure students can complete on time.
- Capitalizing on the state-of-the-art labs, advanced technology, and equipment now available to students to highlight the benefits of enrolling in an IDEA program and/or CE program at IVC.
- Providing dedicated staffing in the Student Resource Center and expanding support services for students at the IDEA campus, including tutoring.
- Countering the perception that IVC is primarily a transfer focused institution, which seemingly devalues Career Education programs. The IDEA dean, faculty, and staff continue to be advocates for Career Education programming and work with the CTE Taskforce to identify activities and campus events that can focus on and highlight the benefits of Career Education.

Figure 4.10: School and Program WSCH, IDEA, Actual and Estimated Growth, 2014 to 2030



WSCH, Actual and Projected	FA 2014	FA 2018	FA 2020	FA 2025	FA 2030	Estimated Average Annual Growth Rate, 2018 to 2030
Drafting	228	294	295	296	298	0.11%
Electrical	264	167	167	168	169	0.08%
Electronics	612	528	529	531	534	0.09%
Engineering	860	822	823	825	827	0.05%
Laser Technology	169	120	120	121	121	0.09%
IDEA, Total	2,133	1,931	1,934	1,941	1,948	0.07%

Data Source: SOCCCD inFORM Data Warehouse, 2019

FUTURE DIRECTION OF THE SCHOOL

The School of IDEA will continue to focus on providing high quality, hands-on technical skills to students to provide them with the necessary knowledge and skills needed for employment. Areas of focus will include:

- Increase enrollment numbers through marketing and outreach efforts.
- Streamline the curriculum and improve program alignment to ensure students can successfully complete on time.
- Provide faculty with professional development and training opportunities.
- Expand partnership opportunities to provide students with internships and apprenticeships.
- Expand the UCI-IVC Engineering Academy program.
- Utilize the NSF S-STEM funds to provide scholarships, mentoring and tutoring services to Engineering students.
- Utilize the NSF Grant in Photonics to expand online curriculum opportunities and develop partnerships with industry and college partners.
- Expand the Electrical Technology program to include a full program approval for its Electrician Certification.
- Expand support services for students at the IDEA building at ATEP.

KINESIOLOGY, HEALTH AND ATHLETICS

DESCRIPTION

The School of Kinesiology, Health and Athletics (KHA) is an educational unit that manages three very closely related disciplines. The school's mission statement is focused on serving students, faculty, and staff. As a result of state mandated reductions in concurrent enrollments and course repeatability, KHA serves a very traditional student transfer population; one with only a low level of interest in the current CTE curriculum but with high rates of student success, retention, and transfer. In addition, the school attracts a very diverse student population to its programs and is also able to serve students with a wide range of different educational and personal goals. The school offers an associate degree for transfer in Kinesiology and a certificate of achievement in Professional Fitness.

Kinesiology: Kinesiology is the foundational department in the school. It offers curriculum in lecture-based courses that lead to the AA-T in Kinesiology for students intending to transfer to a four-year institution with a major in kinesiology, recreation, or leisure studies. For those seeking immediate job opportunities in the fields of personal training and fitness, it offers a COA for the Fitness Professional. Also provided are activities-based courses in individual and team sports, strength, fitness, and adapted activities. Kinesiology provides opportunities for students in the concepts of lifelong fitness and health. Students not only exercise but also are introduced to topics related to exercise such as the physiology of the body, nutrition, injury prevention, and health enhancement. Activity classes are designed not only to provide for physiological and skills development but also to educate students about the principles involved in that process and to introduce the related topics of nutrition, injury prevention, and health enhancement.

Public Health: Public Health is the newest program in the school. An AS-T in Public Health has recently been approved and courses have been offered since Fall 2018. These courses offer a direct pipeline to both transfer and career paths by applying critical analysis skills to contemporary health issues and assessing the fundamental characteristics and organizational structures of the US health system and the significant differences with systems in other countries. Students discuss the role of community engagement in promoting public health and social justice, and learn of the multiple determinants of health, including sociological, economic, genetic, behavioral, environmental, and other factors that impact human health and health disparities. Students study the risk factors and modes of transmission for infectious and chronic diseases and how these diseases affect both personal and public health, while applying the basic concepts, methods, and tools of public health data collection, use, and analysis and explain why evidence-based approaches are an essential part of public health practice.

Health: The Health program does not offer any degrees or certificates, but it is a major contributor to student success and enrollment management. At other colleges, it is more appropriately known as Health Education. The program offers a curriculum in personal health education, nutrition, and gender-based health education. The program continues to be responsive to dynamic changes in a global learning environment. Primary in these course offerings are classes that address the fundamental challenge of balancing personal health with other personal challenges in academia, careers, social tensions and stress in a world of continuous environmental, medical, and nutritional change. The importance of diet and exercise is heavily reinforced, as are the topics of personal choice, moderate consumption, and a commonsense regimen of personal health and well-being. Program offerings also

include instruction in the health needs of special populations, assessing personal fitness, and weight management and stress reduction.

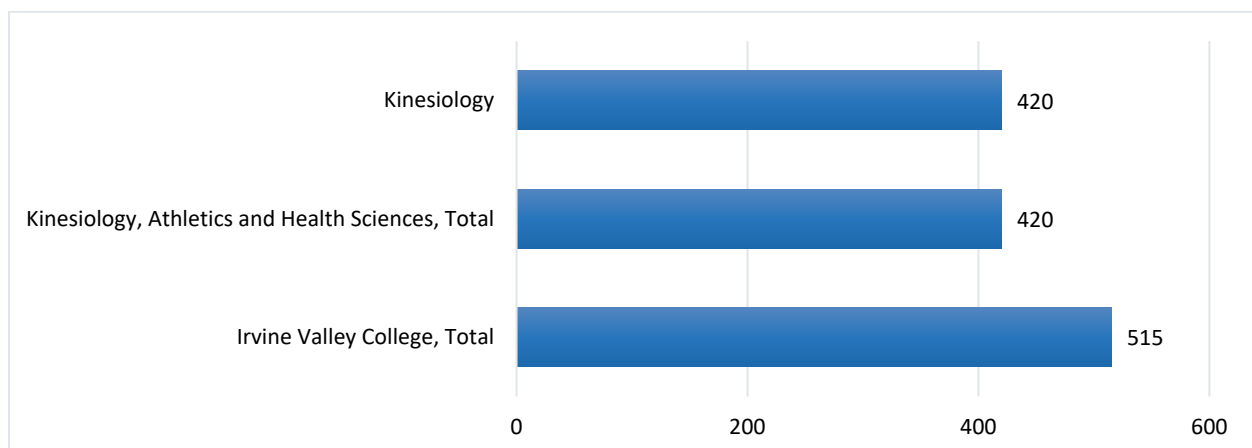
Intercollegiate Athletics: As is typical in higher education, Intercollegiate Athletics is the most well-known of the departments. Athletics provides a challenging student experience for the elite level athlete emphasizing the principles of academic achievement, personal integrity, sportsmanship, wellness, equity, and fulfillment of the student-athlete's potential as part of a holistic academic approach. These aims are achieved through attention to the role and integrity of Athletics in the academic setting and the health and welfare of the student-athlete. IVC is a member of the California Community College Athletic Association (CCCCA), the governing body for community college athletics in California, with a conference affiliation with the Orange Empire Conference. The OEC is the premier two-year athletic conference in the nation. The department recognizes that participation in intercollegiate athletics requires a significant commitment but seeks to ensure minimal interference with the student-athlete's academic goals, objectives, and daily schedule.

Table 4.21: Kinesiology, Athletics and Health Sciences, and Irvine Valley College

College, School, Department, 2018-19 Academic Year	TOTAL SECTIONS	COURSE FILL RATE	FTEF	WSCH	FTEs	PRODUCTIVITY (WSCH/FTEF)
Irvine Valley College, Total	2,690	92.5%	681.30	350,778	10,995	515
Kinesiology, Athletics and Health Sciences, Total	132	66.8%	31.23	13,105	389	420
Kinesiology	132	66.8%	31.23	13,105	388	420

Data Source: SOCCCD inFORM Data Warehouse, 2019

Figure 4.11: Kinesiology, Athletics and Health Sciences, Productivity Bar Chart (WSCH/FTEF), per Table 4.21 Final Column



Data Source: SOCCCD inFORM Data Warehouse, 2019

It should be noted that the productivity rates reflect the inherent nature and reality of individual sports. As a prime example, best practices in some sports such as men's and women's golf, men's and women's tennis, and women's badminton require squad size enrollments of less than 10 students. For these courses, achieving a high productivity rate every semester is not realistic.

The data presented here also does not reflect recent changes in sports sponsorship. Men's and women's golf will no longer be sponsored by IVC as of the 2020-21 academic year. Together with recent scheduling changes, this has led to a significant rise in productivity as of Spring 2020 to 481, the highest level in more than a decade.

Table 4.22: Retention and Success Rates

Average Retention Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Retention	87.6%	88.2%	88.4%	88.7%	89.5%
Kinesiology, Athletics and Health Sciences - Retention	88.5%	90.0%	91.3%	91.6%	92.9%

Average Success Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Success	70.7%	71.3%	72.0%	72.3%	74.1%
Kinesiology, Athletics and Health Sciences - Success	72.5%	73.8%	76.5%	78.1%	83.2%

Data Source: SOCCCD inFORM Data Warehouse, 2019

High retention rates are due in large part to recent KHA faculty efforts to embrace the Guided Pathways model, and is indicative of coaches' recruiting, advising, and placement efforts. Success rates also demonstrate effective roster management by the school's faculty, and the integrity of their grading processes.

Table 4.23: FTES and WSCH, Total Growth and Average Annual Growth Rates

College, School, Department, 2014-15 to 2018-19	FTES GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, FTES, 2014-15 to 2018-19	WSCH GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, WSCH, 2014-15 to 2018-19
Irvine Valley College, Total	3.7%	0.9%	7.8%	1.9%
Kinesiology, Athletics and Health Sciences, Total	-8.3%	-2.1%	-3.8%	-1.0%
Kinesiology	-8.7%	-2.3%	-3.8%	-1.0%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.24: Section Count and Fill Rates

College, School, Department, 2014-15 to 2018-19	AVERAGE NUMBER OF SECTIONS, 2014-15 to 2018-19	AVERAGE COURSE FILL RATE, 2014-15 to 2018-19
Irvine Valley College, Total	3,223	79.7%
Kinesiology, Athletics and Health Sciences, Total	148	63.4%
Kinesiology	148	63.4%

Data Source: SOCCCD inFORM Data Warehouse, 2019

CHALLENGES AND OPPORTUNITIES FACING THE SCHOOL

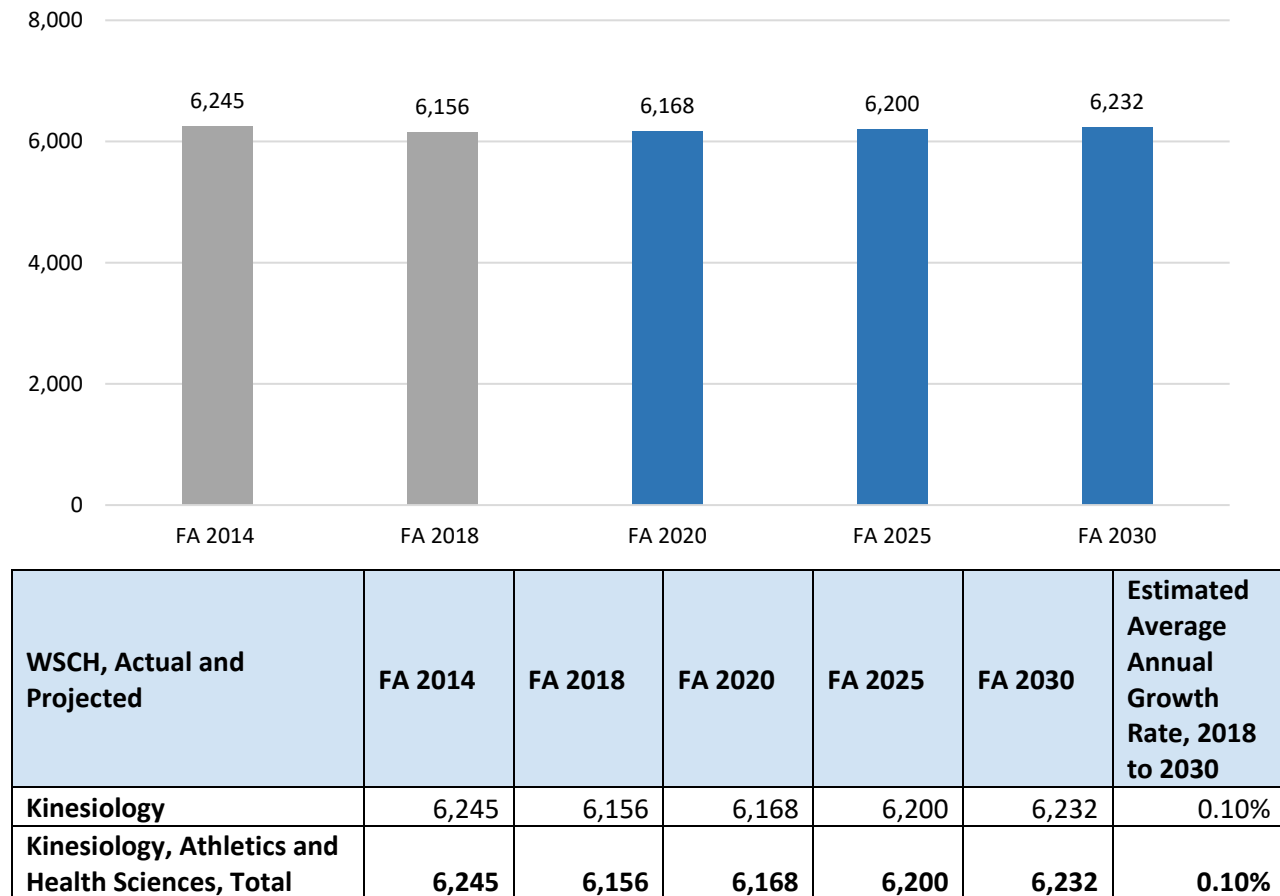
The challenges and opportunities for the school include:

- Available physical space and the limitations it imposes on curriculum, enrollment growth, enrollment management, and personnel costs remains an ongoing issue. Developing the auxiliary gym space, as first detailed in the 2006 Education and Facilities Master Plan, is the final piece needed to remedy these factors. Both permanent and temporary solutions have been offered in previous EFMP processes.
- A stagnating curriculum is an additional issue. There have been strides of late, with the advent of the Public Health degree and the addition of KNES courses to the College and Career Access Pathways (CCAP) program. But a flagship CTE program remains elusive, as does a Sports Management degree and a connection to the Teacher Education pipeline for those seeking career opportunities through KNES outside of the Pre-med and Pre-PT paths most favored by KNES majors currently.
- The school has always been compelled to examine not only the courses offered but the methodology behind scheduling. In the last several years, online offerings have expanded, evening sections have been almost eliminated, hybrids have been created, and faculty loading mechanisms have all created a more student-friendly and efficient schedule. With no economy of scale, since KHA offers a total of fewer than 60 sections per term, constant review and scheduling refinements will be an on-going necessity.
- In consultation with KHA faculty, women's golf was eliminated in Fall 2019, men's golf will be eliminated after Spring 2020, and badminton will be eliminated upon the retirement of the fulltime faculty member coaching that sport. Participation numbers and college-level skills are low in these sports at IVC and statewide, and the number of colleges sponsoring these sports continues to drop. KHA intends to reinvest those resources in one sport, rather than three. This sport is currently unserved by the entire District and will also bring gender balance to IVC's athletic offerings. Women's wrestling is the fastest-growing high school sport in California, and IVC will lead the state in offering this program. Offering this sport will lead to lower costs, higher enrollments, and a unique marketing niche for IVC.
- Significant changes have been made by KHA to bolster student success, bring greater rigor to courses, and to maximize enrollment management metrics. As an example, the Life Fitness Center course is now a hybrid which will better serve student-athletes.
- The CCAP program has been an incredible opportunity for KHA. As the state continues to prohibit concurrent enrollments for high school students in activity courses, the chance to

capture an academically ambitious demographic in the Tustin school district has been wonderfully successful. This success has been noted by our colleagues in the Laguna Beach school district, who have requested a meeting to discuss a similar program.

- Though the college is likely to see continued growth, a flat enrollment pattern for the School of KHA is likely accurate. The potential for growth is hindered by repeatability restrictions in the Education Code, and growth in Athletics would likely be prohibitive due to expenses and the negative impact on enrollment efficiencies.

Figure 4.12: School and Program WSCH, Kinesiology, Athletics and Health Sciences, Actual and Estimated Growth, 2014 to 2030



Data Source: SOCCCD inFORM Data Warehouse, 2019

FUTURE DIRECTION OF THE SCHOOL

The School of KHA will continue to be shaped by student interest in the programs offered. Although the EMP will examine growth as it relates to the facility master plan, KHA anticipates that those measures of growth will be low. The disciplines offered at this level of education within the school have always been needed by students, the community, and the college, and this has been the case for more than two decades.

Public Health appears to be a growth opportunity, as student interest was strong even before the degree was approved in Fall 2019, primarily based on job market data and a growing relationship between the lead faculty member and the program at UC Irvine.

Athletics is likely to remain very consistent due to a more focused vision, as outlined previously, keen student interest, and high scoring metrics in all areas of student success. Esports is an area in which the School of KHA is interested. Although it will initially be hosted by KHA , it is likely that an esports course would eventually be housed elsewhere. CCAP is an area in which KHA can invest and grow, pending circumstances beyond the control of the college (Education Code, Irvine USD, etc.).

The AS for the Physical Therapy Assistant remains a possibility, but only if the college agrees to invest in that program with one FT faculty hire and the re-allocation of OSH from diminished CE programs within KHA and elsewhere.

The School of KHA can become a more effective operating model and provide greater academic and fiscal benefit to students and the college, if the school can finalize solutions on facility issues, adjust faculty hiring (full-time and part-time) to the needs of students when openings arise, and continue to explore new curriculum and programs that best serve students.

LANGUAGES AND LEARNING RESOURCES

DESCRIPTION

The School of Languages and Learning Resources (LLR) strives to create an environment that fosters effective student learning and faculty instruction by providing accurate, clear information, resources, policies, procedures, and services to students and faculty that ensure a consistent pattern of high-quality instruction and learning. The School of Languages and Learning Resources is comprised of World Languages (including American Sign Language, Chinese, French, Japanese, and Spanish), English as a Second Language and Adult English as a Second Language, and Reading. The departments also are supported by student learning centers.

World Languages Program: The World Languages Program provides high-quality instruction in lower-division courses in American Sign Language, Chinese, French, Japanese, and Spanish. The program emphasizes the acquisition of listening, speaking, reading, and writing taught through communication skills. Communicative competence, cultural enrichment, technological innovation, and tutorial help (in conjunction with the college's Student Success Center and Language Acquisition Center) are hallmarks of the program. The courses offered by the Languages Program fulfill the needs of a variety of students: students completing requirements for transfer, students seeking to earn an associate degree, members of the business community, high school students wishing to obtain early college credit, and working or retired adults seeking personal or professional enrichment. On- and off-campus cultural events supplement the classroom experience.

The Languages faculty are highly skilled language professionals, as all full-time faculty attend and present at various language conferences. The faculty builds a community of learners in each classroom through engaging activities, music, and cultural information. Outside of the classroom, faculty offer cultural events to enhance student learning (music night, game night, conversation groups, and opportunities to see drama and to visit museums and local restaurants). Language faculty organize a twice-yearly language film festival open to all students, and there are an active French Club and recently developed ASL club. Three faculty have also been involved in writing textbook materials.

English as a Second Language: The ESL department serves credit and noncredit students at Irvine Valley College by offering comprehensive English language education and services. ESL/AESL is the third-largest department at IVC with over 40 adjunct faculty. The department equips students with language skills, academic skills, and the cultural understanding necessary to meet their educational, professional, and personal goals that lead to their full participation in the diverse society of the United States. IVC English learners, consisting of long-term residents, recent immigrants, US high-school graduates, and international students, are a diverse group with a variety of educational needs.

To serve this heterogeneous student population, the ESL department offers two separate programs: the ESL credit program and the **AESL (Adult English as a Second Language)** non-credit program. The ESL credit program, which consists of Academic Writing and Independent Academic Skills courses, is designed for students who are working primarily towards academic goals, such as transferring to a program at another college or university, completing a degree program at IVC, or attaining a career/technical certificate. The ESL sequence leads to Writing 1 (WR 1) and the program serves California high school graduates, international students, and re-entry students. The AESL program

consists of noncredit ESL courses designed for students who need to improve their English language skills for job-related or personal goals, or for those students who eventually have academic goals but don't have the English proficiency to succeed in college courses yet. Within the program there are three AESL certificates of competency students can achieve at the beginning, intermediate, and advanced levels. Upon completion of the AESL program, students may transition to the ESL credit program or short-term vocational programs at IVC or Saddleback College for employment purposes.

Highlights of the ESL Credit Program include the following:

- High student completion and throughput rates.
- 93 percent pass WR 1 pass rate for students completing the ESL credit program.
- 76 percent and 74 percent WR 1 throughput rates for one-level below transfer and two-level below transfer ESL courses, respectively.
- Innovative academic ESL instruction.
- Language Acquisition Center (LAC) for instructional support.
- Access to computer labs for flipped-classroom writing instruction.
- Statewide and local reputation as leaders in the field.
- Quality instructors aided by ongoing internal professional development.

Highlights of the AESL noncredit program include the following:

- Increasing student enrollment, popularity, and growth fulfilling a strong community need for quality noncredit language instruction.
- Access to computer labs for digital literacy component.
- An AESL Center that provides customized support services.
- Quality instruction aided by ongoing internal professional development.

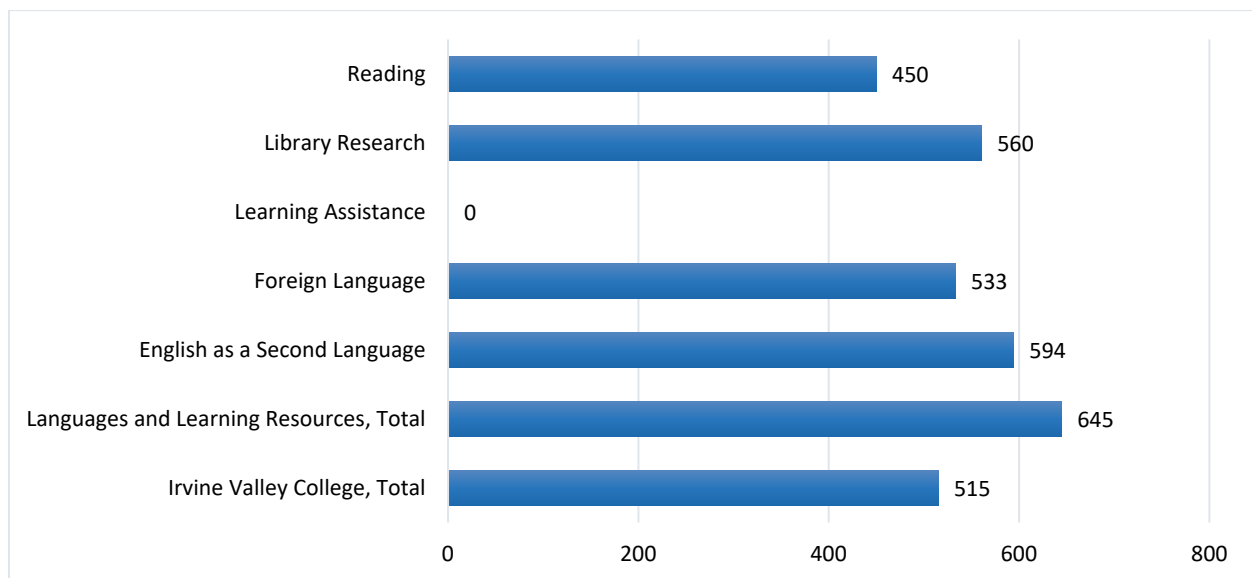
Reading: Reading classes in the School of Languages and Learning Resources serve the needs of students across the campus as they sharpen their skills in critical reading and critical thinking and prepare for work in their other college courses. Classes focus on several active reading skills that teach students to engage with and evaluate college-level research articles, books, and textbooks. The courses assist student in meeting expectations for lower-division college work and for upper-division work in transfer colleges and universities.

Table 4.25: Languages and Learning Resources and Irvine Valley College

College, School, Department, 2018-19 Academic Year	TOTAL SECTIONS	COURSE FILL RATE	TOTAL FTEF	WSCH	FTES	PRODUCTIVITY (WSCH/FTEF)
Irvine Valley College, Total	2,690	92.5%	681.30	350,778	10,995	515
Languages and Learning Resources, Total	257	111.3%	82.89	53,425	1,401	645
English as a Second Language	148	102.3%	56.91	33,817	876	594
Foreign Language	89	85.9%	24.65	13,136	427	533
Learning Assistance	11	391.5%	0.00	5,814	75	
Reading	4	85.7%	0.80	360	12	450

Data Source: SOCCCD inFORM Data Warehouse, 2019

Figure 4.13: Languages and Learning Resources, Productivity Bar Chart (WSCH/FTEF), per Table 4.25 Final Column



Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.26: Retention and Success Rates

Average Retention Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Retention	87.6%	88.2%	88.4%	88.7%	89.5%
Languages and Learning Resources – Retention	88.7%	87.5%	90.0%	88.2%	88.6%

Average Success Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Success	70.7%	71.3%	72.0%	72.3%	74.1%
Languages and Learning Resources – Success	74.2%	71.0%	73.7%	70.4%	71.6%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.27: FTES and WSCH, Total Growth and Average Annual Growth Rates

College, School, Department, 2014-15 to 2018-19	FTES GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, FTES, 2014-15 to 2018-19	WSCH GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, WSCH, 2014-15 to 2018-19
Irvine Valley College, Total	3.7%	0.9%	7.8%	1.9%
Languages and Learning Resources, Total	37.4%	8.3%	53.0%	11.2%
English as a Second Language	106.6%	19.9%	158.1%	26.8%
Foreign Language	11.8%	2.8%	10.6%	2.6%
Learning Assistance	-21.9%	-6.0%	-5.0%	-1.3%
Reading	-88.8%	-42.1%	-89.9%	-43.6%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.28: Section Count and Fill Rates

College, School, Department, 2014-15 to 2018-19	AVERAGE NUMBER OF SECTIONS, 2014-15 to 2018-19	AVERAGE COURSE FILL RATE, 2014-15 to 2018-19
Irvine Valley College, Total	3,223	79.7%
Languages and Learning Resources, Total	397	74.4%
English as a Second Language	174	79.5%
Foreign Language	107	68.0%
Learning Assistance	82	125.7%
Reading	28	70.6%

Data Source: SOCCCD inFORM Data Warehouse, 2019

CHALLENGES AND OPPORTUNITIES FACING THE SCHOOL

Challenges and Opportunities for World Languages:

- Declining enrollment in language classes nationwide is an ongoing concern among faculty. Many universities have reduced their language requirements and STEM courses often compete with languages for electives.
- Class sizes for IVC language classes are larger than the class caps at many colleges in Southern California, including our sister college, Saddleback. The department continues to monitor enrollment and class offerings while the faculty continue to advocate for the capacity for the course to be reduced.
- A new full-time Japanese instructor has been hired and we will be working closely with the new instructor to strengthen and re-energize the Japanese program.
- The department is actively involved in planning and implementing Dual Enrollment in Sign Language and Japanese at several local high schools and possibly Spanish at the new Tustin magnet high school.
- The department is monitoring the impact of dual enrollment courses on the existing language courses at IVC. An advantage of dual enrollment is the increased number of students in beginning levels of language, which may potentially increase enrollments in the second year.
- Faculty participate at Laser Day and Irvine Global Village.
- Faculty continue to promote AA degrees in languages with success.
- The department offers both hybrid and online courses to attract a more diverse student population.

Challenges and Opportunities for AESL:

- The recent decrease in enrollment due to AESL growth (non-academic-bound students have switched from our ESL credit program to our AESL noncredit program) and AB 705 (ESL courses are no longer a required pre-requisite to WR1, although heavily recommended).
- ESL credit is assigned classrooms in A300 that are in a separate building from the faculty offices and the Liberal Arts school office.
- Possible decrease in the international student population with recent travel restrictions.
- Continue the categorical funding support to maintain ongoing faculty professional development and the Supplemental Instructor Program.
- Possible increase in international student population with recently approved recruitment funding for the International Student Program.
- Development of additional academic skills courses.
- Continue working with International Student Program to develop more wrap-around services.
- Move ESL credit classrooms into A 200 when it is rebuilt and remodeled so that it can be housed with the rest of Liberal Arts and the ESL faculty offices.

Challenges and Opportunities for the AESL Noncredit Program:

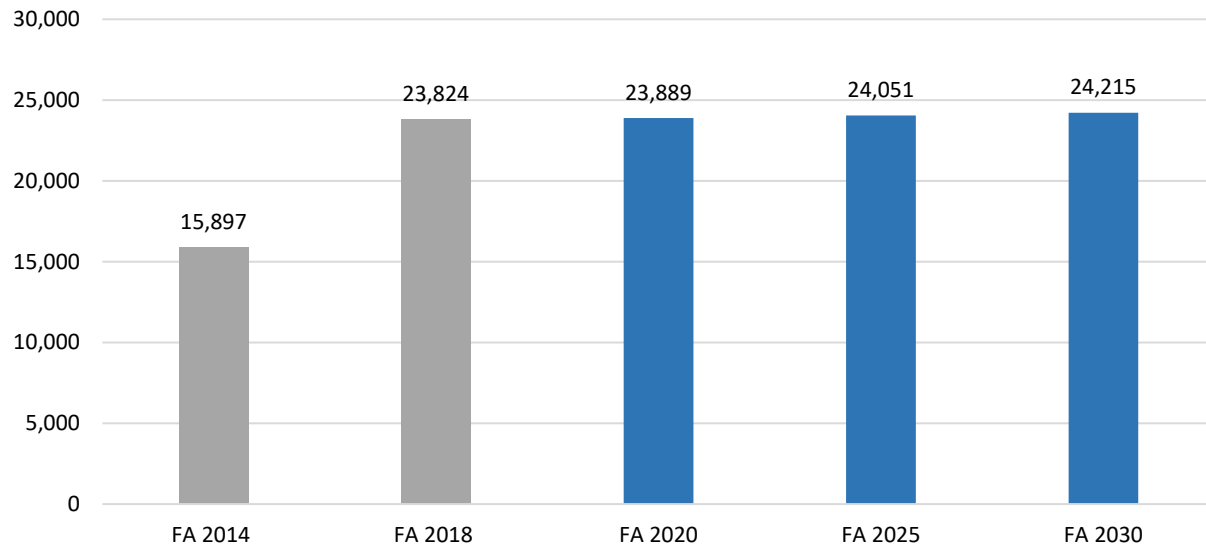
- The region is seeing an increased level of English language learners, many of whom are approaching retirement age.

- Lack of classroom space and facilities as the AESL program is housed in various locations, including the Advanced Technology and Education Park (ATEP) in Tustin, with no centralized location. Due to the curriculum the department needs a computer lab one day a week for each section, leaving some sections to meet in three different classrooms weekly.
- There are space concerns in the AESL Center that affect counselors, the permanent staff, and available student seating.
- Limited general fund funding for the program - current reliance is on categorical funding.
- The Language Acquisition Center (LAC) and AESL Center currently reside in B300 and could benefit from being brought into a new A200 building and being redesigned to maximize collaboration and student needs. This move would also assist the AESL Center in providing the needed office and workshop space noted above. Further, the highly productive AESL and ESL programs have grown tremendously, so they need more designated classrooms.
- The department needs to secure another designated computer lab and lecture classroom that can both seat 45; the department could more easily block schedule AESL classes to meet student needs and maximize room utilization as it does in the IDEA building at ATEP.
- In labor market trends for health care and social assistance jobs, which are often filled by English language learners, 19% employment growth is projected in IVC's service area.
- Work with CE, business, IDEA, and other IVC and Saddleback career-focused faculty to develop pathways to increase opportunities for employment for these students.
- Work with community business partners/organizations to provide workplace ESL instruction and/or create short-term vocational ESL courses for specific segments of industry such as health care, social assistance, and transportation logistics.
- Increase articulation from AESL noncredit to ESL credit. Hire an individual to serve as a combined AESL/ESL Counselor/Faculty Coordinator/Articulation Coordinator to work directly with the articulation of these AESL/ESL students into all these various pathways, including all local CAEP (California Adult Education Program) goals.
- Add vocational and digital literacy AESL curricula. Offer AESL classes, taught by IVC ESL faculty, at needed offsite locations in the community (community education; IVC provides the instructor and curriculum and the outside organization provides the facilities and other community services). Increase student service support by connecting to outside community partners, such as those providing immigration, employment, financial, housing, and other community services.

Challenges and Opportunities for Reading:

- The program has experienced decreased enrollment and demand for the courses over the years due to changes in the English and ESL curriculum but has held stable for two years. The department is bringing back the Reading 171 course to try and offer it in Spring 2020.

Figure 4.14: School and Program WSCH, Languages and Learning Resources, Actual and Estimated Growth, 2014 to 2030



WSCH, Actual and Projected	FA 2014	FA 2018	FA 2020	FA 2025	FA 2030	Estimated Average Annual Growth Rate, 2018 to 2030
English as a Second Language	5,650	15,117	15,165	15,287	15,410	0.16%
Foreign Language	5,283	5,479	5,490	5,519	5,547	0.10%
Learning Assistance	2,901	2,931	2,936	2,947	2,959	0.08%
Library Research	89	117	117	118	119	0.14%
Reading	1,974	180	180	180	180	0.00%
Languages and Learning Resources, Total	15,897	23,824	23,889	24,051	24,215	0.14%

Data Source: SOCCCD inFORM Data Warehouse

FUTURE DIRECTION OF THE SCHOOL

The future directions of School of Language and Learning Services include:

- The Languages program hopes to continue offering five languages and possibly others despite the nationwide decline in language enrollments due to the current emphasis on STEM and reduced UC language requirements.
- The ESL/AESL department will continue to offer ESL credit courses to support AA and transfer-bound students.
 - The AESL program will continue to grow to meet community demand. There is a stable enrollment for ESL credit, but it is susceptible to general enrollment trends of the college. Continue increasing enrollment in noncredit (42 percent increase year over year from F16/S17 to F17/S18; 55 percent increase year over year from F17/S18 to F18/S19; 12 percent estimated growth from F18/S19 to F19/S20).
 - For AESL growth, labor market trends, changing service area demographics, increased curricular pathways, and articulation pathways to IVC and Saddleback workforce programs should increase enrollment. As the general college-age student population decreases for traditional credit programs, AESL growth should be able to partially offset this decrease because the AESL program serves immigrants and older students, both of which are increasing population segments in the service area.
- The Reading program will continue to support any enrollment growth or student demand for the Reading courses.

LIBRARY SERVICES AND STUDENT SUCCESS CENTER

Note: Although Library Services is its own school, data for Library Services is located within the data tables within the previous section (Language and Learning Services) due to the current structure of the college taxonomy.

The School of Library Services is comprised of the Library and the Student Success Center and is overseen by one faculty chair and a dean. The Student Success Center, located in BSTIC 110, is equipped with computers, printers, scanners, as well as a 3D printer available for student use. All computers in the Student Success Center, as well as the library instruction space (LIB 101), have software required by courses taught at IVC. Both locations provide physical space, resources, instruction, and online support to help students with research and tutoring services. In addition to the tools and resources provided by the Library and Student Success Center, the Library also provides in-person and online workshops, orientations, and reference assistance.

Library: The overarching goal of the Library is to assist students, faculty, staff, administrators, and community members in achieving their educational and personal goals for independent, lifelong learning, and to create information-literate students. The Library offers high-quality face-to-face and online instruction, print and electronic collections, professional development training, and technology support that library users need to develop and build their knowledge-base. The Library supports the college transfer goal by offering credit courses that articulate with universities, including LIB 10, 11, and 112. The Library provides services to users both on and off campus and is an early adopter of new technologies in support of student learning. The Library is highly involved with equity, OER, guided pathways, outreach, and student success at the campus level.

The Library continues to be extensively used by students for a multitude of reasons: research materials (books, articles, media), space (technology support, printing, computer access, scanning, and group study rooms), and instruction. According to the IVC Climate Survey in Spring 2018, the library, after parking, was the second highest used support service on campus; 80 percent of students have used the library, which has an almost 96 percent overall satisfaction rate by those who have used it.

The Library strives to provide a comfortable and safe place for students that promotes learning and collaboration. The group study rooms are in high demand throughout the year and usage has grown by over 10 percent in the past 5 years, with an almost 90 percent fill capacity during the Fall and Spring semesters. The Library has 140 computer stations, a computer lab with 22 computers, 9 multi-use printers, and 2 scanners. All of these are used by Library faculty and staff to assist students. Approximately 40 percent of all library student transactions are technology related.

The Library's Reserves collection continues to be the most heavily used, accounting for almost 60 percent of all checkouts. This critical service provides students with access to over 1,500 course textbooks and other classroom materials at no cost. Additionally, the Library collaborates with IVC EOPS program and the AESL department to check out books to students enrolled in those programs, resulting in over 8,000 books being checked out to over 2,000 students annually.

One of the primary purposes and points of pride of the Library is its instruction program, including but not limited to its credit classes. The goal of the Library Services instruction program is to provide varying

levels of information literacy instruction to as many students as possible. The Library has seen a dramatic increase in workshop attendance and requests for bibliographic instruction for research-based classes in the past four years. Since 2015, the number of bibliographic instruction sessions increased by 62 percent, resulting in 56 percent more students receiving on-demand library instruction. Additionally, in response to a significant increase in faculty and student demand for library workshops, the Library has increased the number of workshops offered by 42.5 percent between Fall 2018 and Fall 2019, with varying times and dates (including nights and weekends) to accommodate students' schedules. The Library's credit courses are in line with the demand for instruction that have been seen in the workshops and bibliographic instruction sessions. The three Library classes consistently have high productivity, retention, and success rates, and there have been regular requests for an honors Library class as well as a certificate of proficiency.

Student Success Center: The mission of the Student Success Center at Irvine Valley College is to enhance the quality of education in an atmosphere of mutual support. It provides access to learning opportunities that promote student success and class retention by improving study skills and fostering independent learning through tutoring and computer lab access. This department offers a personal approach to academic success through a variety of tutoring modalities, such as one-on-one, walk-in and group tutoring, and learning skills development. Tutoring is conducted in a constructive environment of learning using a variety of tutoring techniques, tailored to each student's individual learning style. The Student Success Center also offers computer lab access to students enrolled in courses requiring specialized software with computer tutors and faculty available on hand to support their learning and technological skills.

The Student Success Center recognizes and respects each individual as a unique learner with potential for continued educational growth and with the capacity to achieve and succeed. The Student Success Center encourages students to become self-directed, independent, and successful learners.

CHALLENGES AND OPPORTUNITIES FACING THE SCHOOL

The challenges and opportunities for the Library include:

- Workshops on bibliographic instruction held in the Library have dramatically increased, putting a strain on the Library's classroom. This same space also serves as overflow for the Student Success Center and contains the only computers on campus available in the evenings with specialized software.
- The Library classroom has only 22 computers and comfortably sits 25, which is sufficient for ESL and Writing courses. However, the Library classroom also serves courses that have 30 or more students in a class, such as counseling, psychology, political science, human development, and more. Additionally, workshops offerings have exceeded the 25-student capacity on a regular basis, frequently resulting in students sitting on the floor.
- The Library needs a second larger area with computer stations with which to more comfortably accommodate and teach more students at the same time.
- The Library is also collaborating with Saddleback Library to develop additional online workshops at both campuses to help with the demand for Library workshops.
- The Library offers services to almost every student at IVC, either online or in-person, and therefore needs to be much more proactive to ensure that services are as equitable and inclusive as possible.

To this end, the Library needs to be able to provide more training and support for faculty and staff to ensure that the best possible services are being provided to help students succeed.

- Noise continues to be the biggest issue at the Library. The design of the Library's space is not conducive to noise reduction. Given the two-story atrium, tile floors, and an open second level, noise tends to travel upstairs. Additionally, the lack of study room space means students have no choice but to work and converse in groups rather than as individuals who can study in silence.
- The Library is scheduled for interior remodeling to assist with some of these problems, but once that effort is completed, additional changes will still be needed. The Library had four study rooms removed when the tutoring center was added to the bottom floor. Later, after the tutoring center was relocated to the Student Success Center, the area was then remodeled to serve as offices for the Academic and Classified Senates. Not only are these spaces no longer accessible to students for study, the influx of faculty and staff using these offices has added further to the noise level and traffic in the library.
- Students and faculty need more accessible technology support by either establishing a technology hub in the Library or elsewhere on campus. As it is now, library faculty and staff spend significant time assisting students and faculty with technology issues including printing, accessing and using Canvas, logging into MySite, using computers, and Wi-Fi. A technology hub will enable the campus to provide more on-demand support to students and faculty. This will alleviate some of the demand now being placed on the application specialist in IT, who will then be more free to support the campus at large.
- There is a possibility the Library will be migrating to a new Library Service Platform (LSP). This undertaking will impact every aspect of the Library over a period of 12 to 24 months. A major aspect of this migration endeavor is that all bibliographic data will need to be cleaned up pre- and post-migration to accommodate an entirely new database structure. Due to the significant demands of this project, the librarians will need release time to obtain request certificates, to work with the vendor on every aspect of the migration, and to obtain additional staff support to complete the project.
- Outreach and equity have become a priority for the library over the years. This has culminated in the creation of an Outreach and Equity librarian position. The Outreach and Equity librarian has taken a leadership role addressing equity issues facing students both in the Library and on campus.

FUTURE DIRECTION OF THE SCHOOL

The Library has entered a period of growth and expansion that is not yet reflected in the current WSCH projections. With the addition of a new instruction librarian this year, the Library has commenced long-term planning for a new for-credit curriculum and development of a certificate. This initiative is expected to increase the Library's WSCH over the next several years.

- In response to increasing IVC student enrollments in the Saddleback Library honors course, the IVC Library submitted a new honors-level library course for approval. The library will continue to improve its course offerings, culminating in the development of a Certificate of Proficiency.
- The Library will continue to offer a robust in-person library workshop program in response to student and faculty demand. In addition, however, the Library is developing online workshops for students, as well as developing accessible and deployable information literacy modules in Canvas for faculty to embed into their Canvas shells. The first phase in the development of these new learning materials is anticipated to be fully implemented by Spring 2020. Creating more workshops and

developing a Library presence on Canvas, however, will require increased time for both development and maintenance as the number of online workshops and Canvas Library modules and their support continues to grow.

- The Library has also started work on a Certificate of Proficiency, which will include the revision of current library courses, as well as the addition of new information literacy courses. An honors-level library course was submitted for approval and will serve as a capstone course for this certificate. A timeline for further course review and revision is set for Spring 2020, with submission for committee approvals in Fall 2020. The Library hopes to offer the Certificate of Proficiency starting Fall 2021.
- The Library has become an essential part of the Guided Pathways initiative on campus. The goal is to have information competency/literacy offered and embedded into Guided Pathways planning, as well as partnering with local high schools to offer information literacy workshops, non-credit classes, and/or dual enrollment courses.
- In an increasingly divisive social climate, it is the library's inherent value and civic duty to uphold social justice, equity, and inclusion. The IVC Library's mission is driven by these values to ensure that all patrons from IVC and the community receive equitable services and inclusive experiences.
 - To accomplish this, the Library actively participates in college leadership by sustaining diverse and inclusive experiences, challenging institutional bias and structural racism, and through the selection of diverse and inclusive library materials combined with progressive events.
 - In the near future, the Library hopes to develop a strategic plan for equity, diversity, and inclusion (EDI) with actionable outcomes to implement policies, structures, resources, and services that reduce barriers to research and learning.
 - Internally, all library staff and faculty need resources for EDI training in order to develop a library work environment that embodies values of EDI and mutual respect.
 - Externally, the Library needs resources to support inclusive programming and the acquisition of learning materials to increase meaningful student engagement through outreach and events. For example, the Library would like to collaborate with the IVC LGBTQIA+ students to host speakers and workshops on gender literacy. These events will be designed to increase community understanding and thereby strengthen support for a dynamic and diverse gender population.
 - The department envisions the Library as the heart of the college campus where people from all backgrounds and experiences feel safe, welcomed, respected, and empowered to accomplish their personal and academic goals. To implement these visions and goals, the Library needs appropriate budget, physical space, and staffing resources as well as continued campus-wide support.
 - Physical space is the greatest barrier to the realization of the Library's EDI and outreach plans. Currently, the Library lacks space to host interactive workshops or speakers. There is no space that can accommodate interactive student engagement without disturbing students who want or need to study quietly.
 - Ultimately, the Library needs campus-wide support to recognize that the Library serves students across all disciplines, backgrounds, and experiences.

LIFE SCIENCES AND TECHNOLOGIES

DESCRIPTION

The School of Life Sciences and Technologies (LST) is committed to the college's primary goal of facilitating student success. This commitment is expressed in the following ways:

- Providing exemplary instruction by maintaining a well-prepared and skilled full-time and adjunct faculty with diverse educational and experiential backgrounds.
- Maintaining a diverse catalog of courses and a strategically designed course schedule through which a student can tailor a course program to meet his/her long-term educational and/or career goals in a rewarding yet efficient manner.
- Offering instructional resources and facilities that expose students to cutting-edge technologies and methodologies in the biological and health sciences.
- Creating opportunities for students seeking individual educational experiences beyond that obtained in the traditional classroom or laboratory setting.

Biological Sciences: The School of Life Sciences and Technologies at Irvine Valley College offers a wide range of courses in the biological sciences as well as courses in environmental studies. Introductory courses focus on theories and concepts in five primary areas: cellular and molecular biology, genetics, evolution, ecology, and whole organism biology. More specialized courses examine extensions of these basic principles as they relate to a variety of specific areas of study, including botany, zoology, cellular biology, natural history, and marine biology. Students may complete courses within the department in order to fulfill general education requirements, to meet graduation requirements at prospective transfer institutions, or to complete the Associate in Science degree with a major in biology. The requirements for majors in the biological sciences are intended to provide a solid foundation for the student who wishes to pursue further study at the baccalaureate level and for some graduate-level programs.

Health Sciences: The School of Life Sciences and Technologies at Irvine Valley College offers a wide range of courses in the Health Sciences. The courses examine extensions of these basic principles as they relate to a variety of specific areas of study, including human anatomy, human physiology, biotechnology, and microbiology. Students may complete courses within the department in order to fulfill general education requirements, to satisfy prerequisites for health-related programs such as nursing, to meet graduation requirements at prospective transfer institutions, or to complete the Associate in Arts degree with a major in health sciences. The requirements for majors in the health sciences are intended for students who plan to enter a preprofessional or professional program in a health-related field. Biotechnology is the use of microorganisms or biological substances, such as enzymes, to solve problems; develop or make useful products; or perform specific manufacturing processes. The Biotechnology Laboratory Assistant Certificate of Achievement is designed for students who wish to obtain the skills required to gain entry level employment in the biotechnology industry.

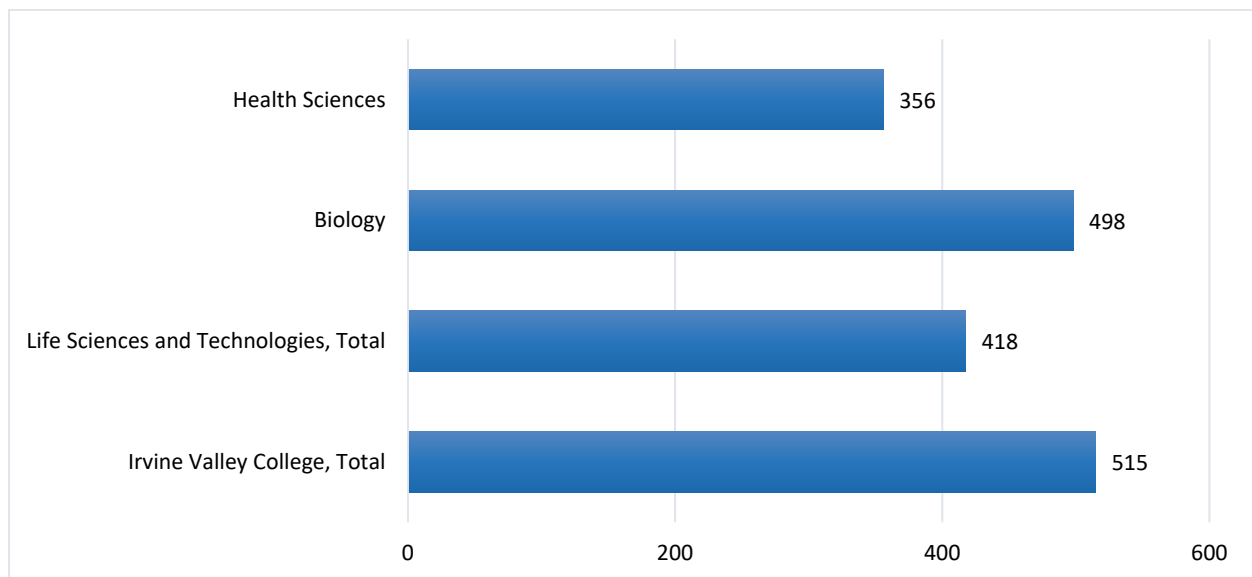
The school's section counts, enrollment counts, and productivity measures have been in the anticipated range and basically stable. Productivity has been lower than the college productivity because most of the class caps are set at 28. The fill rates have been significantly higher than the college's fill rate each year. Retention and success rates vary by department, but the school average is below the college's average. There has been an increase in the number of degrees and certificates awarded between 2012 and 2017.

Table 4.29: Life Sciences and Technologies and Irvine Valley College

College, School, Department, 2018-19 Academic Year	TOTAL SECTIONS	COURSE FILL RATE	TOTAL FTEF	WSCH	FTES	PRODUCTIVITY (WSCH/FTEF)
Irvine Valley College, Total	2,690	92.5%	681.30	350,778	10,995	515
Life Sciences and Technologies, Total	207	85.9%	67.63	28,243	939	418
Biology	124	87.9%	29.36	14,622	485	498
Health Sciences	83	82.2%	38.27	13,621	454	356

Data Source: SOCCCD inFORM Data Warehouse, 2019

Figure 4.15: Life Sciences and Technologies, Productivity Bar Chart (WSCH/FTEF), per Table 4.29 Final Column



Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.30: Retention and Success Rates

Average Retention Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Retention	87.6%	88.2%	88.4%	88.7%	89.5%
Life Sciences and Technologies – Retention	84.3%	84.0%	84.8%	85.8%	86.2%

Average Success Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Success	70.7%	71.3%	72.0%	72.3%	74.1%
Life Sciences and Technologies – Success	64.0%	64.2%	68.3%	69.4%	68.8%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.31: FTES and WSCH, Total Growth and Average Annual Growth Rates

College, School, Department, 2014-15 to 2018-19	FTES GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, FTES, 2014-15 to 2018-19	WSCH GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, WSCH, 2014-15 to 2018-19
Irvine Valley College, Total	3.7%	0.9%	7.8%	1.9%
Life Sciences and Technologies, Total	3.2%	0.8%	3.1%	0.8%
Biology	-11.5%	-3.0%	-12.1%	-3.2%
Health Sciences	25.1%	5.8%	26.4%	6.0%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.32: Section Count and Fill Rates

College, School, Department, 2014-15 to 2018-19	AVERAGE NUMBER OF SECTIONS, 2014-15 to 2018-19	AVERAGE COURSE FILL RATE, 2014-15 to 2018-19
Irvine Valley College, Total	3,223	79.7%
Life Sciences and Technologies, Total	210	85.5%
Biology	131	87.6%
Health Sciences	80	81.7%

Data Source: SOCCCD inFORM Data Warehouse, 2019

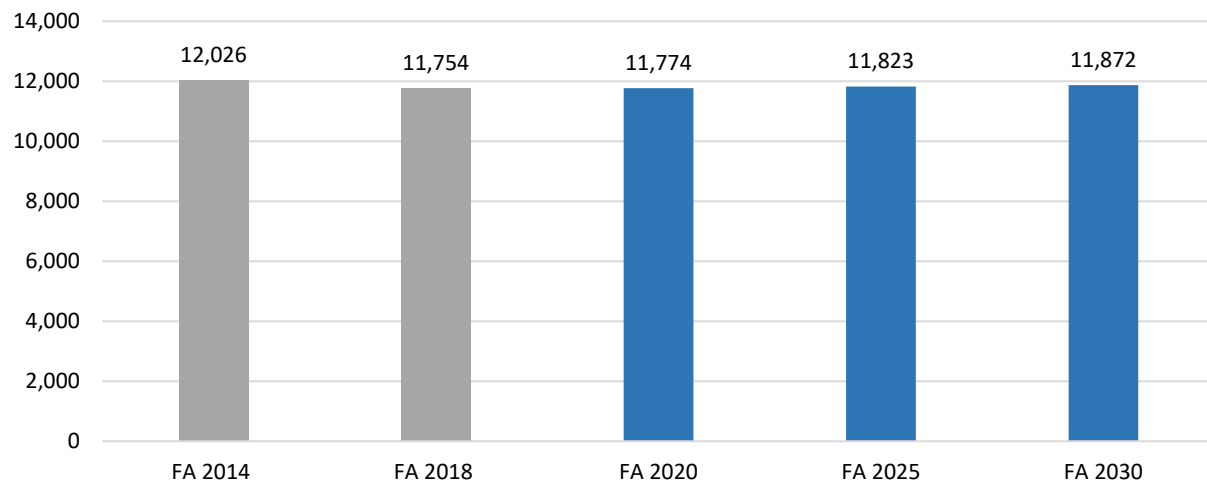
CHALLENGES AND OPPORTUNITIES FACING THE SCHOOL

The challenges and opportunities for the School of Life Sciences and Technologies include:

- Reviewing laboratory-based course operational costs and implementing alternative cost-effective methods as they become available.
- Seeking outside donations for equipment and supplies.
- Sharing of laboratory resources between courses, when and where feasible.
- Assessing the production of chemical wastes and other consumables in the laboratories and switching to “green” alternatives as they become available and when fiscally feasible.
- Maintaining a policy of “Use and Reuse.”
- Incorporating landscaping plans that minimize water and chemical usage and that concomitantly serve as education resources for our students, staff, and the general public.
- Emphasizing environmental stewardship and sustainability in our approved course curriculum, where applicable.

- Maintaining the outdoor environmental laboratory, the Biology, Ecology and Environmental Sciences (BEES) Garden, as a resource to demonstrate alternative landscaping, wildlife habitat construction and maintenance, and sustainable gardening practices.
- Supporting STEM-based education and independent student laboratory research.
- Securing funding to increase the number of sections of high demand courses, as identified by waiting lists and fill rates.
- Increasing baseline materials and supply budgets prior to the final approval of new laboratory-based courses/course sections, and to address the needs of the environment.
- The continued development and assessment of the Biotech and Environmental Sciences Programs.
- Continued research and implementation of environmentally sound practices in the laboratories and outdoor teaching facilities and field courses.

Figure 4.16: School and Program WSCH, Life Sciences and Technologies, Actual and Estimated Growth, 2014 to 2030



WSCH, Actual and Projected	FA 2014	FA 2018	FA 2020	FA 2025	FA 2030	Estimated Average Annual Growth Rate, 2018 to 2030
Biology	7,073	6,233	6,239	6,253	6,267	0.05%
Health Sciences	4,953	5,521	5,535	5,570	5,605	0.13%
Life Sciences and Technologies, Total	12,026	11,754	11,774	11,823	11,872	0.08%

Data Source: SOCCCD inFORM Data Warehouse, 2019

FUTURE DIRECTION OF THE SCHOOL

Instructional Equipment and Supplies Needs: The School of Life Sciences and Technologies is heavily reliant on instructional equipment and supplies. Our unique STEM programs require both equipment and supply funds to maintain the biology and anatomy laboratories. This requires the continued commitment of the college to sustain the current level of class offerings. An inventory of equipment, along with its life expectancy, is maintained to plan for replacement before equipment breaking.

Facility Needs: Facilities is an ongoing issue as most classes require laboratories. All anatomy classes fill every semester with waitlists for every class. Expansion may be a possibility in the future. As the Biotechnology program grows, the department will need a Cell Cultural Lab and Prep Room. The discussion of B 300 remodeling may provide solutions.

Staffing Needs: A permanent full-time Laboratory Technician has been replaced. The need for additional staff will be assessed next fiscal year.

CE Program Support Needs: Life Sciences continues to grow the Biotech program. Staffing will become a concern as the program expands.

Professional Development Needs: The current availability of college-wide funding for professional development has met the needs of the departments.

MATHEMATICS AND COMPUTER SCIENCE

DESCRIPTION

The School of Mathematics and Computer Science (MCS) offers comprehensive curricula to meet the varied needs of students. The Math Department offers an Associate in Science degree in mathematics designed to prepare students for upper-division courses in most professional careers related to mathematics. The Computer Science Department offers two degrees: Computer Science, AS and Computer Science for Transfer, AS-T. The Computer Science, AS degree offers a more general program in computer science including a variety of programming languages and theory that prepares students for transfer to University of California campuses and private and out-of-state universities. The Computer Science for Transfer, AS-T degree prepares students for transfer to California State University campuses.

Mathematics Department: The mission of the Mathematics Department at Irvine Valley College is to help our students achieve their mathematical potential and to prepare them for their educational and career goals. With the advent of AB 705, the department primarily offers college-level courses to students who plan to transfer to four-year colleges and universities. However, the department still offers a few developmental courses taught in a variety of formats. Students can enroll in these courses for personal enrichment and/or to get ready to take courses at the college level. The department offers support for all mathematics students in the Mathematics Center, a facility staffed by faculty and tutors.

Computer Science Department: The CS department acquaints students with the presently available methods of computer science that are useful in solving problems of science, industry, and government. It also prepares students for the additional formal education and self-education required in this ever-developing field. Finally, it fosters students' abilities to solve computer science problems.

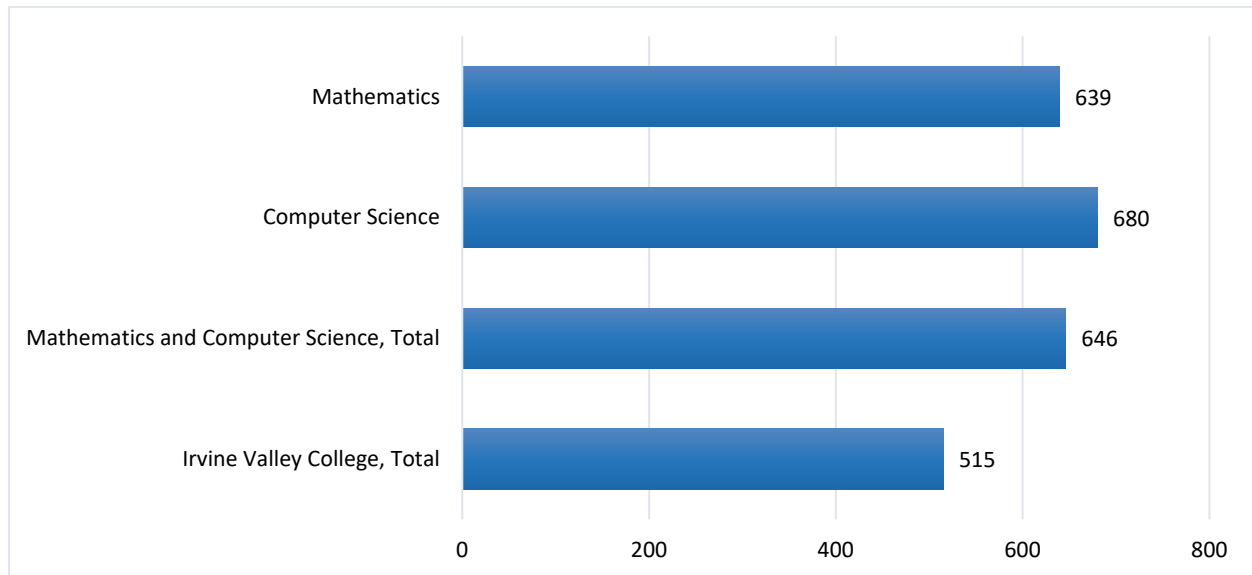
The school's productivity and fill rates are significantly higher than the college's productivity and rates. The school's student retention rates are close to the college's average. Student success rates are slightly below those of the college as a whole and most mathematics and computer science students state transfer as their educational goal.

Table 4.33: Mathematics and Computer Science and Irvine Valley College

College, School, Department, 2018-19 Academic Year	TOTAL SECTIONS	COURSE FILL RATE	FTEF	WSCH	FTES	PRODUCTIVITY (WSCH/FTEF)
Irvine Valley College, Total	2,690	92.5%	681.30	350,778	10,995	515
Mathematics and Computer Science, Total	324	113.2%	102.36	66,126	2,161	646
Computer Science	53	140.3%	17.31	11,770	410	680
Mathematics	271	107.9%	85.05	54,356	1,752	639

Data Source: SOCCCD inFORM Data Warehouse, 2019

Figure 4.17: Mathematics and Computer Science, Productivity Bar Chart (WSCH/FTEF), per Table 4.33 Final Column



Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.34: Retention and Success Rates

Average Retention Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Retention	87.6%	88.2%	88.4%	88.7%	89.5%
Mathematics and Computer Science - Retention	85.7%	86.2%	84.5%	84.7%	86.8%

Average Success Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Success	70.7%	71.3%	72.0%	72.3%	74.1%
Mathematics and Computer Science - Success	63.8%	64.7%	64.0%	63.3%	66.3%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.35: FTES and WSCH, Total Growth and Average Annual Growth Rates

College, School, Department, 2014-15 to 2018-19	FTES GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, FTES, 2014-15 to 2018-19	WSCH GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, WSCH, 2014-15 to 2018-19
Irvine Valley College, Total	3.7%	0.9%	7.8%	1.9%
Mathematics and Computer Science, Total	5.6%	1.4%	7.7%	1.9%
Computer Science	25.4%	5.8%	22.8%	5.3%
Mathematics	1.9%	0.5%	4.8%	1.2%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.36: Section Count and Fill Rates

College, School, Department, 2014-15 to 2018-19	AVERAGE NUMBER OF SECTIONS, 2014- 15 to 2018-19	AVERAGE COURSE FILL RATE, 2014-15 to 2018-19
Irvine Valley College, Total	3,223	79.7%
Mathematics and Computer Science, Total	372	105.1%
Computer Science	60	131.0%
Mathematics	312	100.2%

Data Source: SOCCCD inFORM Data Warehouse, 2019

CHALLENGES AND OPPORTUNITIES FACING THE SCHOOL

The challenges and opportunities for Mathematics and Computer Science include:

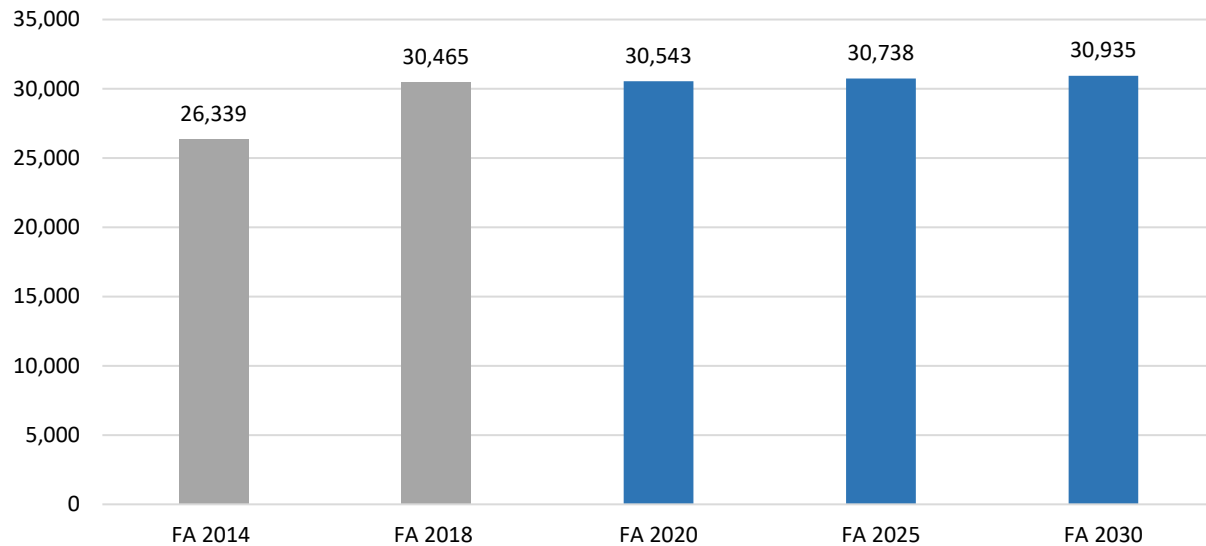
Mathematics Department

- Scheduling and training requirement to successfully implement AB 705.
- Continued support for drop-in tutoring services through the Math Center.
- Increasing the Supplemental Instruction (SI) workshops offerings through the Math Center.
- Regularly updating the computers and other technology equipment in classrooms and the Math Center.
- Need for space in B 200, which will enable faculty members to help several students at a time during office hours.
- Finding additional funding sources to implement the use of embedded tutors and to increase the number of SI activities for developmental courses.
- Expanding online offerings by experimenting with new online courses and by adding additional online sections for courses that currently have some online sections.

Computer Science Department

- Maintaining efforts to keep articulation agreement up to date.
- Developing the curriculum for additional online/hybrid courses in Computer Science.
- Increasing core programming courses to match student demand.
- Research possible new Computer Science programs such as gaming, web programming, apps programming, data analysis, and data mining.

Figure 4.18: School and Program WSCH, Mathematics and Computer Science, Actual and Estimated Growth, 2014 to 2030



WSCH, Actual and Projected	FA 2014	FA 2018	FA 2020	FA 2025	FA 2030	Estimated Average Annual Growth Rate, 2018 to 2030
Computer Science	3,929	5,164	5,178	5,214	5,250	0.14%
Mathematics	22,410	25,301	25,365	25,524	25,685	0.13%
Mathematics and Computer Science, Total	26,339	30,465	30,543	30,738	30,935	0.13%

Data Source: SOCCCD inFORM Data Warehouse, 2019

FUTURE DIRECTION OF THE SCHOOL

Instructional Equipment and Supplies Needs: The School of Mathematics and Computer Science is adequately funded to cover their equipment and supply needs.

Facility Needs: Although the current math facilities mostly meet today's needs, the aging B 100, B 200 and B 300 buildings and room technology need to be addressed. The Computer Science program seems to have adequate laboratory facilities to meet student needs. Many students complete their lab work and homework off campus, but a number of students also use the Student Success Center to receive tutoring assistance for lab work and homework.

Staffing Needs: There was one retirement in Computer Science in the spring of 2019 and there will be a retirement in Math in the spring of 2020. Additional full-time faculty will be required to fill these vacancies. The need for the adjunct faculty remains high. An ongoing concern of the Mathematics

Department for the past few years has been acquiring enough full-time faculty members to meet the growth in student demand for mathematics classes. The current process for determining college wide hiring priority relies mainly on the FT/PT ratio which puts math at a disadvantage for replacement positions.

Professional Development Needs: The current availability of college-wide funding for professional development has met the needs of the school.

PHYSICAL SCIENCES AND TECHNOLOGIES

DESCRIPTION

The School of Physical Sciences and Technologies offers courses and programs in various branches of the physical sciences, including astronomy and physics, chemistry, geology, and oceanography. The instructional programs include lower-division courses for the transfer student, introductory lecture/laboratory courses, the geology field program, and technological training courses. Curriculum throughout the school emphasizes the study of the natural universe from the perspective of empirical science. The goal is to provide students with an essential foundation which will allow them to better appreciate and understand the world and the problems of its management.

Physical Sciences: The curriculum in physical science includes courses in astronomy and physics. The curriculum is designed to attract and cultivate the student's imagination as to the origin, composition, and mechanics of the solar system; the movement of objects in relation with gravitational, magnetic, and electrical forces; the interaction between matter and energy; the behavior of light; and the physical characteristics of substances. The program mission is to serve students in a variety of scientific fields from a multitude of backgrounds who seek to obtain a degree in their respective discipline and/or transfer. The curriculum is an enhanced traditional approach that encourages entrance into scientific careers via hands on investigation that develops the analytic, applied, and professional skills needed to succeed in today's academic and professional environment.

Geological (Earth) Sciences: The Earth Sciences major allows the student to participate in an interesting career in diverse fields such as geology, which includes finding and developing energy resources including petroleum and natural gas; exploring mineral resources, from metals to building materials; and, in engineering geology, conducting studies to minimize damage from earthquakes and landslides and improve public safety for local, state, and federal agencies. Earth scientists also include meteorologists, who study and make predictions of weather and climate changes. Marine scientists include oceanographers and marine geologists, who study the physical conditions of the oceans and seafloor.

Chemistry: The chemistry curriculum is designed to foster an understanding of the fundamental principles of chemistry in a variety of applications including medicine, health-care products, energy, food production, body metabolism, structural materials, microelectronics, and the environment. Students learn how chemical knowledge is derived, theorized, and applied in solving problems in everyday life. Students are afforded the opportunity to perform experiments in modern chemistry laboratories with state-of-the-art equipment under the guidance of experienced faculty.

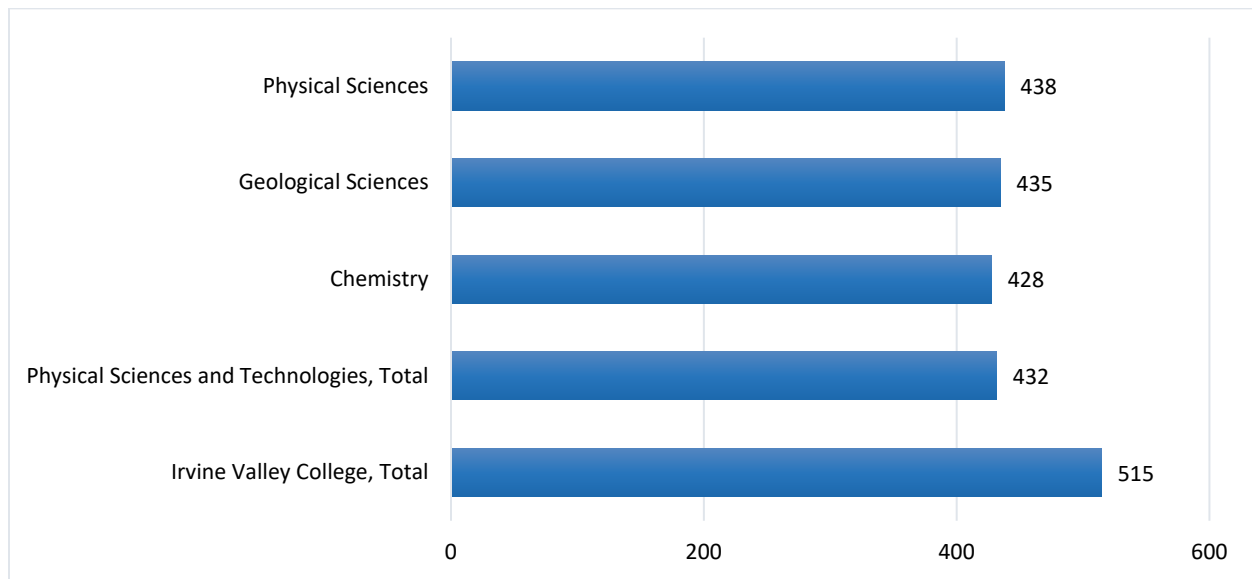
For the school, section counts, enrollment counts, and WSCH and FTES measures have varied over time. Productivity has been lower than the college productivity because the class caps are 30 in most classes. The fill rates have been significantly higher than the college's fill rate each year. Student retention rates vary, but the school average is close to the college's average. Student success rates are higher than the college's average. Most physical sciences students state transfer as their educational goal. There has been an increase in the number of degrees and certificates awarded between 2013 and 2017.

Table 4.37: Physical Sciences and Technologies and Irvine Valley College

College, School, Department, 2018-19 Academic Year	TOTAL SECTIONS	COURSE FILL RATE	FTEF	WSCH	FTES	PRODUCTIVITY (WSCH/FTEF)
Irvine Valley College, Total	2,690	92.5%	681.30	350,778	10,995	515
Physical Sciences and Technologies, Total	132	96.7%	59.50	25,699	857	432
Chemistry	59	94.9%	32.96	14,101	472	428
Geological Sciences	22	89.0%	7.66	3,330	110	435
Physical Sciences	51	102.1%	18.88	8,268	275	438

Data Source: SOCCCD inFORM Data Warehouse, 2019

Figure 4.19: Physical Sciences and Technologies, Productivity Bar Chart (WSCH/FTEF), per Table 4.37 Final Column



Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.38: Retention and Success Rates

Average Retention Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Retention	87.6%	88.2%	88.4%	88.7%	89.5%
Physical Sciences and Technologies – Retention	89.7%	88.7%	88.7%	89.5%	89.7%

Average Success Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Success	70.7%	71.3%	72.0%	72.3%	74.1%
Physical Sciences and Technologies – Success	76.8%	75.8%	75.4%	76.3%	77.5%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.39: FTES and WSCH, Total Growth and Average Annual Growth Rates

College, School, Department, 2014-15 to 2018-19	FTES GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, FTES, 2014-15 to 2018-19	WSCH GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, WSCH, 2014-15 to 2018-19
Irvine Valley College, Total	3.7%	0.9%	7.8%	1.9%
Physical Sciences and Technologies, Total	2.8%	0.7%	2.9%	0.7%
Chemistry	-10.9%	-2.9%	-10.7%	-2.8%
Geological Sciences	-6.7%	-1.7%	-6.5%	-1.7%
Physical Sciences	47.8%	10.3%	46.9%	10.1%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.40: Section Count and Fill Rates

College, School, Department, 2014-15 to 2018-19	AVERAGE NUMBER OF SECTIONS, 2014-15 to 2018-19	AVERAGE COURSE FILL RATE, 2014-15 to 2018-19
Irvine Valley College, Total	3,223	79.7%
Physical Sciences and Technologies, Total	141	94.9%
Chemistry	68	94.5%
Geological Sciences	24	84.4%
Physical Sciences	48	100.3%

Data Source: SOCCCD inFORM Data Warehouse, 2019

CHALLENGES AND OPPORTUNITIES FACING THE SCHOOL

The challenges and opportunities for the School of Physical Sciences and Technologies include:

Chemistry

- Facilities modification to convert B230 into an additional laboratory and then remodel the current labs.
- Coordinating with the Success Center Coordinator to ensure that all chemistry tutors are screened by full-time faculty Course Coordinators.
- A lack of glassware drawer availability requires students to share drawers and work in pairs. Students are at a disadvantage when they work this way because one student will not have the same hands-on experience as the other.

Physical Sciences

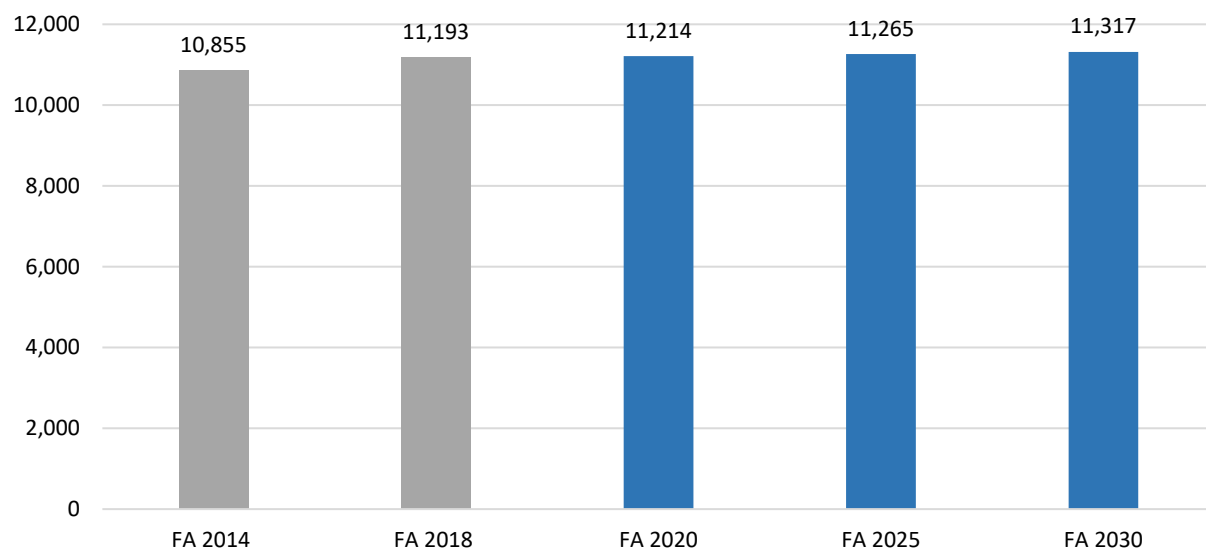
- Increasing tutorial services to all physics students seeking help at the Success Center.
- Supporting the Physics Club (lead mentor) and the Applied Science and Engineering club (ASEC).

- Supporting student participation at nearby full-scale, national-level meetings and conferences—for example, the Southern California Conference on Undergraduate Research, the Honors Transfer Council Conference (HTCC), and the IVC research conference.
- Supporting student activities including trips, internships, and research opportunities at local corporations, businesses, and national institutes.
- Developing relationships/partnerships with local high schools, colleges, and universities.
- Developing hands-on laboratory work to engage and enhance the lecture learning and overall course learning objectives.

Geological Sciences

- Reviewing and making improvements to the field studies courses.
- The Geology Department currently shares the time of a Senior Lab Technician with other departments. Additional technician support will be needed for future expansion of the program.
- The geology lab is dated and could be updated.
- Students enrolled in geology courses would benefit by having access to new laptop computers for use when completing real-time data analysis in the lab.

Figure 4.20: School and Program WSCH, Physical Sciences and Technologies, Actual and Estimated Growth, 2014 to 2030



WSCH, Actual and Projected	FA 2014	FA 2018	FA 2020	FA 2025	FA 2030	Estimated Average Annual Growth Rate, 2018 to 2030
Chemistry	6,657	6,274	6,287	6,319	6,352	0.10%
Geological Sciences	1,726	1,520	1,521	1,522	1,524	0.02%
Physical Sciences	2,472	3,399	3,406	3,424	3,441	0.10%
Physical Sciences and Technologies, Total	10,855	11,193	11,214	11,265	11,317	0.09%

Data Source: SOCCCD inFORM Data Warehouse, 2019

FUTURE DIRECTION OF THE SCHOOL

The future directions for Physical Sciences and Technologies include:

- Instructional Equipment and Supplies Needs:** The School of Physical Sciences and Technologies is heavily reliant on instructional equipment and supplies. Our unique STEM programs require both equipment and supply funds to maintain the chemistry, physics, and geology laboratories. The rapid expansion of the physics program (doubling in size since Fall 2015) increased the need for equipment and supplies. Although the department received budget increases there are additional needs for operating supplies. An inventory of equipment along with its life expectancy is maintained to plan for replacement prior to the equipment breaking.
- Facility Needs:** Facilities is an ongoing issue as many classes require laboratories. Plans exist to create an additional chemistry lab and then remodel the existing aging chemistry labs, one lab at a time. The rapid expansion of the physics program created the need for a second physics laboratory. The remodel of the B 300 building being discussed should take care of the facilities needs of physics and geology.
- Staffing Needs:** Recruitment has been completed to fill two full-time chemistry faculty positions, one full-time physics/astronomy faculty position, one full-time geology faculty position, and one chemistry lab technician position. The recruitment is underway to fill a permanent part-time physical science laboratory technician position.
- Professional Development Needs:** The current availability of college-wide funding for professional development has met the needs of the departments.

SOCIAL AND BEHAVIORAL SCIENCES

DESCRIPTION

The departments in the School of Social and Behavioral Sciences are Administration of Justice, Anthropology, Economics, Human Development, Geography, Political Science, Psychology, Sociology, and Sustainability and Resource Management. The overarching goal of these departments and the school is to impart to students the knowledge of how to analyze past and present human behavior to understand and shape themselves and their society. Courses taught in the school utilize the methods of analysis, written conventions, critical thinking, and scientific approaches characteristic of social and behavioral sciences, providing students with an excellent foundation for transfer, upper-division work, and critical thinking about society and behavior. The school offers a student-centered schedule of courses to help students reach their goals of career training and/or transfer on time. The faculty, many of whom have received awards for teaching excellence, are committed to offering superior instruction and student mentoring both inside and outside the classroom.

The departments in the School of Social and Behavioral Sciences are as follows:

Administration of Justice: The Administration of Justice program offers a wide range of courses that prepare students for transfer to upper division coursework towards a four-year degree, and prepare students to seek employment in various agencies of the criminal justice system. The curriculum is designed to acquaint pre-service and in-service students with the principles and practices of criminal justice in the United States. Coursework provides a solid foundation for students intending to pursue careers or further study in law enforcement, corrections, supervision and administration, parole and court duties, private security, and pre-law programs.

Anthropology: Anthropology is the study of the organization, behavior, and development of the human species. Physical anthropology examines the fossil remains of ancestral humans and the behavior of primates in order to construct theories of how and why human beings have evolved. Cultural anthropology is concerned with the basic structures of human cultures, particularly with regard to subsistence strategies, social organization, language, religion, and political and economic systems. Anthropology focuses on the acquisition of knowledge through use of the scientific method, allowing students to explain evolutionary theory in light of the human fossil record, analyze the relationship between modern humans and non-human primates, and objectively evaluate non-western customs and beliefs.

Economics: Economics is the study of how people make choices when faced with scarcity and is therefore the study of the process of decision-making by individuals, businesses, governments, or any other group that must make such choices, and the study of the institutional context in which these decisions are made. Coursework in Economics covers the impact of scarcity on decision making by individuals, firms, and society; basic economic modeling, mathematical and graphical analysis for evaluating resource allocation, markets, and the economy; and government policies related to markets and the economy.

Geography: The academic discipline of Geography studies the earth and its people in their many mutual relationships and regional variations. Geography students examine a broad range of topics, from the

physical nature of the earth's surface and atmosphere to the varied human activities which interrelate with the physical environment and result in a distinct spatial imprint on the land. As a result of its interdisciplinary nature, geography is an outstanding discipline for students who wish to integrate the physical and social sciences. An undergraduate major in geography can prepare students for professional careers in urban and community planning, resource management, earth and atmospheric sciences, cartography and geographic information systems, education, and regional analysis

Global Studies: Global Studies is an interdisciplinary program designed to enhance student knowledge and understanding of global processes and their implications for societies, markets, governments, cultures, and environments around the world. The program also introduces students to the study of global issues and perspectives while providing the methodological tools and techniques necessary to analyze them at multiple (local, regional, and international) levels. An understanding of the world's social, economic, political, cultural, and natural systems and their growing interdependence not only enabled students to think globally, but prepares them to live, work, and participate in an increasingly globalized world as well.

Human Development: The Human Development program focuses primarily on the development of the child from infancy through school age and explores programs and activities designed to promote children's overall growth and well-being. Students learn, both in theory and through direct observation, ways of meeting the emotional, physical, social, and cognitive needs of the young child. Courses in the program are relevant for those seeking training for employment in childcare facilities, as well as for parents and potential parents, recreation leaders, and elementary school teachers.

Political Science: The Political Science program exposes students to the political systems and ideas that are vital in an increasingly interdependent world. The study of Political Science addresses how social, economic and moral issues have political implications and how governmental policy impacts daily life. Students are taught how groups of people govern themselves; how policies are made; and how to influence government policies at the local, state, national, and international levels. The program curriculum addresses American politics, international affairs, and critical issues such as civil rights, health care, the environment, and the deficit.

Psychology: Psychology courses at Irvine Valley College provide academic instruction in basic psychology concepts, theories, terminology, and research methods, and promote students' life skills, personal growth, and interpersonal effectiveness. Students majoring in psychology at the lower-division level focus on understanding human personality and behavior, cognition, and emotions, as well as researching psychological issues of current concern. The critical insight that psychology requires makes this major especially appropriate for those considering careers in any of the helping professions, teaching, or behavioral research, or for those seeking a widely applicable liberal arts background.

Sociology: Sociology focuses on patterns of human behavior within social contexts, seeking to understand both the forces that mold us as individuals and the elements that govern our social existence. Sociology's subject arena ranges from the intimate family to the hostile mob, from crime to religion, from the divisions of race, gender, and social class to the shared beliefs of a common culture. Undergraduate training in sociology can open a variety of doors in business and the human services. Sociology majors who enter the business world work in sales, marketing, customer relations, or human resources. Those who enter human services work with youths at risk, the elderly, or people experiencing problems related to poverty, substance abuse, or the justice system.

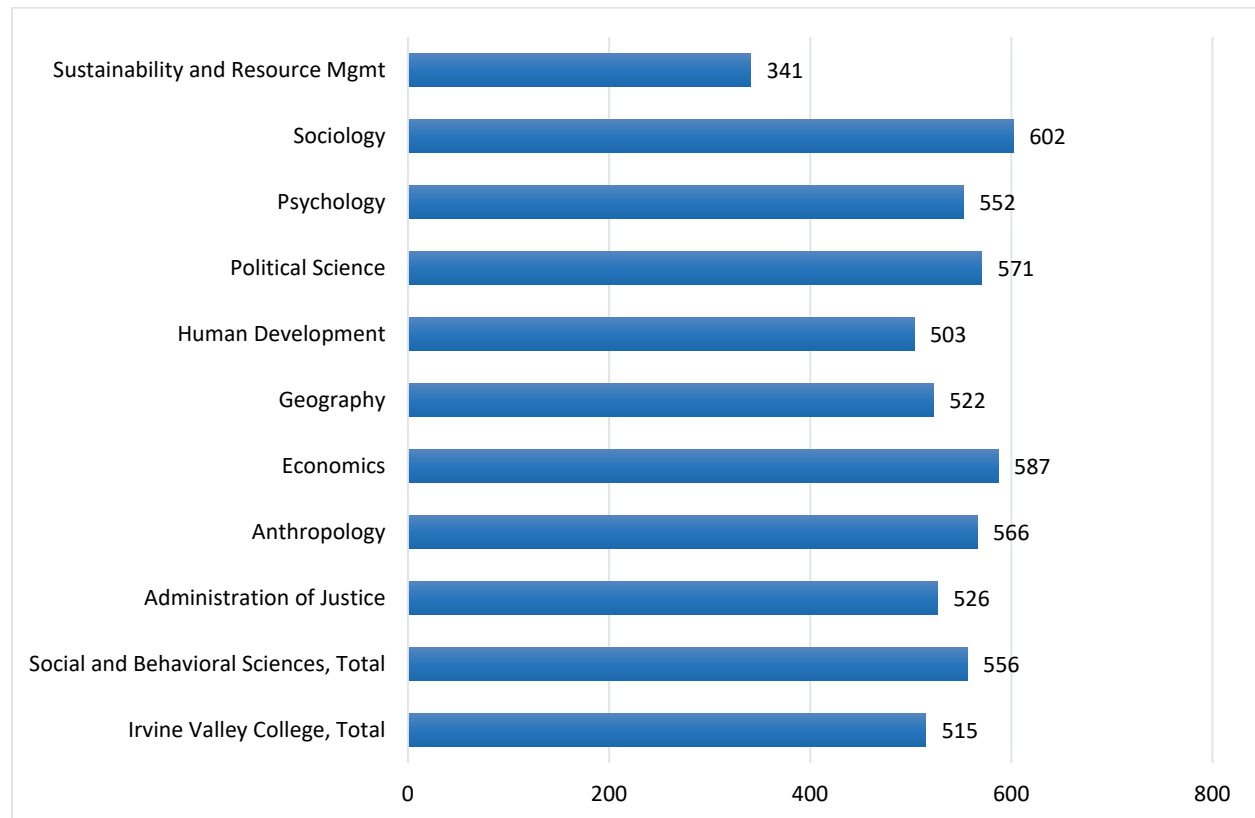
Sustainability and Resource Management: Sustainability and Resource Management is among the largest and most rapidly growing industries in America. As more cities and businesses develop sustainability and zero waste policies, the need increases for personnel who can properly manage resource use and recycling. Utilizing resources efficiently can enable businesses to increase their economic bottom line, improve community relations, and contribute to environmental health. The sustainability and resource management curriculum emphasizes an interdisciplinary approach, exploring recycling and resource management from a variety of perspectives and in a variety of settings. Core curriculum provides students with an in-depth study of waste and resource management, emphasizing cultural, community, and business applications. Courses cover governmental and organizational policies, practices, and procedures in waste resource management, including best management practices and successful community and educational programs.

The accompanying data show a school with higher than average productivity and success rates that has experienced a contraction in course offerings to “right-size” itself, with projected flat to low growth over the next several years. However, growth rates, fill rates, and productivity are not the most noteworthy attributes of the School of Social and Behavioral Sciences. These are the faculty’s robust culture of mentorship and student engagement and their continuous striving to incorporate more data-informed touchpoints and supports for student learning. Through extra- and co-curricular activities such as the Model United Nations, the Psi Beta psychology honor society, the PTK national honor society, the XTE Administration of Justice honor society, the Green Team Alliance, the Undergraduate Research Irvine Valley College (UR-IVC) program, and the Social Justice, Geography, and Political Science clubs, the faculty have found ways to marry theory and practice in the lives of students, while fostering leadership, research, and civic engagement on both a local and global scale.

Table 4.41: Social and Behavioral Sciences and Irvine Valley College

College, School, Department, 2018-19 Academic Year	TOTAL SECTIONS	COURSE FILL RATE	TOTAL FTEF	WSCH	FTES	PRODUCTIVITY (WSCH/FTEF)
Irvine Valley College, Total	2,690	92.5%	681.30	350,778	10,995	515
Social and Behavioral Sciences, Total	381	91.8%	77.78	43,256	1,421	556
Administration of Justice	28	105.8%	6.01	3,164	105	526
Anthropology	32	101.4%	7.15	4,047	134	566
Economics	58	88.0%	11.70	6,868	225	587
Geography	29	87.1%	5.83	3,046	101	522
Human Development	40	69.5%	7.37	3,709	93	503
Political Science	58	86.7%	11.93	6,809	225	571
Psychology	90	101.2%	18.66	10,306	374	552
Sociology	42	96.0%	8.40	5,058	153	602
Sustainability and Resource Mgmt.	4	57.1%	0.73	249	8	341

Figure 4.21: Social and Behavioral Sciences, Productivity Bar Chart (WSCH/FTEF), per Table 4.41 Final Column



Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.42: Retention and Success Rates

Average Retention Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Retention	87.6%	88.2%	88.4%	88.7%	89.5%
Social and Behavioral Sciences - Retention	88.8%	89.9%	90.8%	91.9%	91.9%
Average Success Rate	2014-15	2015-16	2016-17	2017-18	2018-19
Irvine Valley College - Success	70.7%	71.3%	72.0%	72.3%	74.1%
Social and Behavioral Sciences - Success	70.1%	71.4%	72.9%	75.2%	75.7%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.43: FTES and WSCH, Total Growth and Average Annual Growth Rates

College, School, Department, 2014-15 to 2018-19	FTES GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, FTES, 2014-15 to 2018-19	WSCH GROWTH, 2014-15 to 2018-19	AVERAGE ANNUAL GROWTH RATE, WSCH, 2014-15 to 2018-19
Irvine Valley College, Total	3.7%	0.9%	7.8%	1.9%
Social and Behavioral Sciences, Total	-9.8%	-2.5%	-9.7%	-2.5%
Administration of Justice	-2.0%	-0.5%	-5.9%	-1.5%
Anthropology	-14.1%	-3.7%	-13.9%	-3.7%
Economics	-19.3%	-5.2%	-19.7%	-5.3%
Geography	-10.6%	-2.8%	-10.4%	-2.7%
Human Development	-24.1%	-6.7%	-22.9%	-6.3%
Political Science	5.7%	1.4%	5.8%	1.4%
Psychology	-6.5%	-1.7%	-4.9%	-1.3%
Sociology	-15.5%	-4.1%	-11.4%	-3.0%
Sustainability and Resource Mgmt.	133.3%	23.6%	112.8%	20.8%

Data Source: SOCCCD inFORM Data Warehouse, 2019

Table 4.44: Section Count and Fill Rates

College, School, Department, 2014-15 to 2018-19	AVERAGE NUMBER OF SECTIONS, 2014-15 to 2018-19	AVERAGE COURSE FILL RATE, 2014-15 to 2018-19
Irvine Valley College, Total	3,223	79.7%
Social and Behavioral Sciences, Total	430	87.0%
Administration of Justice	33	95.8%
Anthropology	33	100.5%
Economics	71	81.9%
Geography	34	80.3%
Human Development	53	65.2%
Political Science	63	81.6%
Psychology	96	99.3%
Sociology	46	94.8%
Sustainability and Resource Mgmt.	4	34.8%

Data Source: SOCCCD inFORM Data Warehouse, 2019

CHALLENGES AND OPPORTUNITIES FACING THE SCHOOL

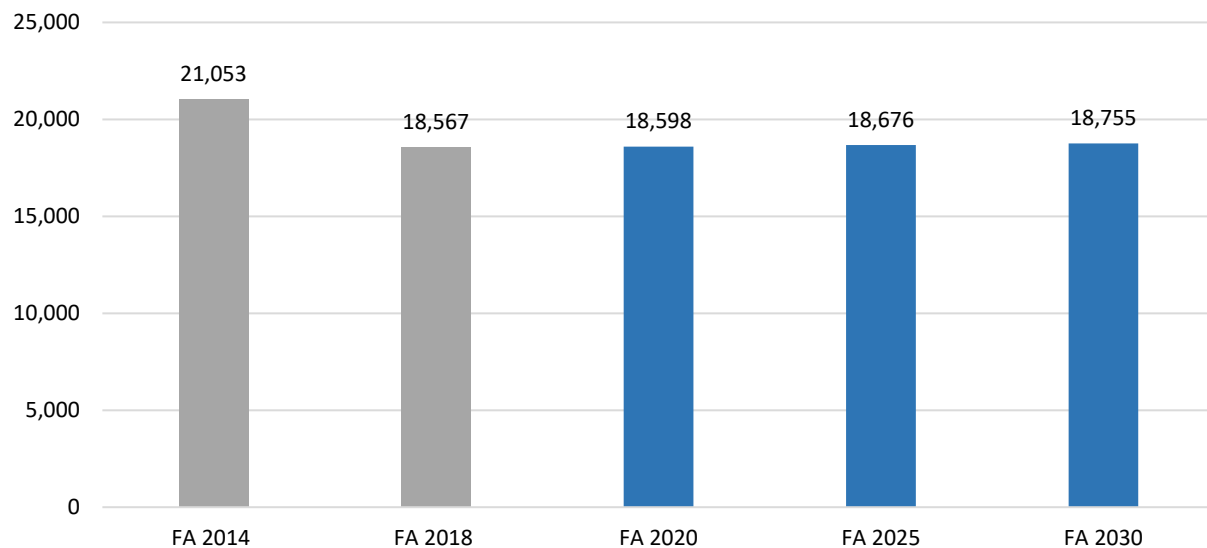
The challenges and opportunities facing the School of Social and Behavioral Sciences include:

- Between 2014 and 2018, the School of Social and Behavioral Sciences downsized its course offerings to meet college efficiency targets, and student demand and growth projections show no to low growth through 2030.
- The college is implementing guided pathways reforms to improve student outcomes. The school experienced a major challenge in 2016, when the college closed the Child Development Center, depriving the Human Development program of an important local site for student mentoring and child development observations.
- Growth projections show no to low growth for most disciplines within the School of Social and Behavioral Sciences through 2030. In recent years, students have demonstrated an increased interest in online and hybrid courses, and a decreased interest in evening courses. With these changes come challenges.
- The school must consider how to offer high-quality online options while maintaining security and academic integrity.
- The school should be prepared to explore ways of delivering exceptional content to students in both asynchronous and synchronous online instructional modes. The school must consider flexible scheduling options to meet the potential demand for shorter-term courses and accelerated learning. In addition, the school should explore new technologies and other resources to “flip” classroom instruction by linking the outside world to in-class theoretical concepts to improve content retention.

- Low growth projections do not prevent the need for state-of-the-art facilities, appropriate staffing, professional development opportunities, and programmatic build-out to meet best practices in pedagogy for student success. The School of Social and Behavioral Sciences has the following plans and needs over the next several years:
- There is an ongoing need for funds to cover equipment and supplies for the Anthropology-Geography Laboratory, which opened in Fall 2017 and is still in the process of acquiring instructional materials, display cases, and instruments for laboratory work.
- Other programs with ongoing supply and equipment needs are Psychology and Human Development. The need for equipment and supplies for Psychology will increase as the program grows and when the department eventually establishes a psychology laboratory.
- Human Development needs an on-campus laboratory childcare program. There will be a need for instructional equipment and supplies to build the childcare lab program.
- The Geography department needs to upgrade its Geographic Information Systems (GIS) capabilities by developing either a stationary or mobile GIS lab equipped with appropriate hardware and software.
- A Psychology Laboratory is needed to serve Psychology 3L, Psychology 2, Psychology 15 and Psychology 1 Honors, which would be fully scheduled from 8 am to 7 pm, Monday through Friday, within two semesters of opening.
- A stationary or mobile Geographic Information Systems (GIS) Laboratory is needed so that GIS training can be incorporated into more of the curriculum.
- The Undergraduate Research at IVC Program (UR-IVC) needs a permanent dedicated space for student research, collaboration, and preparation for research symposia.
- As demand for the use of dedicated computer classrooms has risen collegewide, the School of Social and Behavioral Sciences finds itself competing for scarce computer classroom space. Geography needs computers with GIS software, and other departments, such as Sociology, Economics, and Psychology, utilize statistical and other programs that provide students an opportunity to develop real-world research and problem-solving skills. To meet this demand, the School of Social and Behavioral Sciences needs two to three additional computer-equipped spaces.
- As planned many years ago, a new building designed for and dedicated to the Social and Behavioral Sciences is needed. The Social and Behavioral Sciences building will encompass additional laboratory spaces, computer rooms, collaboration space for co-curricular programs, state-of-the-art classrooms, and outdoor teaching spaces.
- Additional full-time faculty are needed in Economics and Human Development.
- Resources will be needed to cover additional hiring needs over the next several years as faculty retire.
- Additional advertising and marketing support are needed for the three Career Education programs in the School: Human Development, Administration of Justice, and Sustainability Resource Management.
- Initiatives focused on student equity, completion, and a closer integration of student services and instruction, which fall under the broad umbrella of Guided Pathways, have increased and will continue to increase the demand for professional development and training.

- Continue the practice of combining student government funds and general funds to support the four co-curricular programs within the School of Social and Behavioral Sciences. This has been a stabilizing policy with an overall positive impact.

Figure 4.22: School and Program WSCH, Social and Behavioral Sciences, Actual and Estimated Growth, 2014 to 2030



WSCH, Actual and Projected	FA 2014	FA 2018	FA 2020	FA 2025	FA 2030	Estimated Average Annual Growth Rate, 2018 to 2030
Administration of Justice	1,482	1,445	1,448	1,455	1,463	0.10%
Anthropology	2,058	1,785	1,789	1,801	1,812	0.13%
Economics	3,817	2,990	2,991	2,995	2,998	0.02%
Geography	1,452	1,179	1,180	1,182	1,184	0.03%
Human Development	1,974	1,821	1,823	1,828	1,834	0.06%
Political Science	2,671	2,973	2,978	2,992	3,006	0.09%
Psychology	5,028	4,235	4,245	4,272	4,299	0.13%
Sociology	2,520	2,028	2,031	2,039	2,048	0.08%
Sustainability and Resource Management	51	111	111	112	113	0.11%
Social and Behavioral Sciences, Total	21,053	18,567	18,598	18,676	18,755	0.08%

Data Source: SOCCCD inFORM Data Warehouse, 2019

FUTURE DIRECTION OF THE SCHOOL

Although projected growth for the School of Social and Behavioral Sciences is low, the physical plant, staffing, professional development, and other programmatic accoutrements must reflect best practices in pedagogy for student success.

The future directions for Social and Behavioral Sciences include:

- Focus on programs needing lab facilities as described above to reflect pedagogical needs.
- Physical space and staffing need to be added and/or reconfigured to support wrap-around counseling and other supports as part of the guided pathways model focused on dedicated student support services tailored to Social and Behavioral Sciences students.
- The profile and prominence of the school should be highlighted in the name of a dedicated building, designed to enhance and highlight the school's unique programs and ethos.
- Enough funds should be granted to support professional development, lab buildouts, field studies, co-curricular and research programs, full staffing, and administrative support for the unit.
- Facilities should reflect and support the vision and goals of the School of Social and Behavioral Sciences, which include a strong commitment to scholarly research, student mentoring and success, environmental sustainability, personal growth, social justice, and civic engagement.

STUDENT SERVICES DIVISION – DESCRIPTIONS, TRENDS AND FUTURE DEVELOPMENT

The Office of Student Services provides a range of programs and services designed to help IVC students overcome hurdles that may interfere with their progress as students, thus enabling them to successfully complete their academic goals. These programs include the following: Admissions and Records, Counseling Center; Disabled Students Programs and Services (DSPS); Extended Opportunity Programs and Services (EOPS), Cooperative Agencies Resources for Education (CARE) and California Work Opportunity and Responsibility to Kids (CalWORKs); Financial Aid; Guardian Scholars; Health and Wellness Center; International Student Program; Matriculation; Outreach and Community Relations; Student Equity; Student Life; and the Veterans Services Center, among others. These individual programs work cooperatively to ensure they are meeting the full spectrum of student needs. Each program is described individually, along with the challenges, opportunities, and future directions specific to each program.



ADMISSION AND RECORDS

DESCRIPTION

The Admissions and Records Office provides quality customer service, access, accuracy, and equity to students, staff, and faculty while maintaining the integrity of South Orange County Community College District and Irvine Valley College rules and regulations and upholding the laws of the State of California. Admissions and Records serves the needs of students, faculty, staff, and college administrators by providing a range of online and in-person services to support admissions application processing, registration, grade collection, transcript services, enrollment and/or degree verifications, records security and maintenance, the evaluation of transfer credit, and degree and certificate audits.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

The unit anticipates there will be a change in the demographics of the IVC student population in light of the college's desire to increase diversity. Also, as new technology is introduced to student services and academic and student life programming is added to support various diversity initiatives, there may also be changes in the level of student engagement, the need for Admissions and Records services, and student expectations regarding not only the breadth and scope of services but also the manner in which they are delivered. As the college moves forward with its diversity initiatives, staff will need professional development opportunities that cover a broad base of issues including, but not limited to, cultural diversity, communication, conflict resolution, supervision, leadership, and teamwork.

With the changes in state and/or federal regulations, Admissions and Records will be tasked with developing appropriate steps to accommodate them. This may require (1) further dependence on the use of technology, (2) innovation as a means of maintaining compliance and meeting student, faculty, and administrative expectations, (3) staff training, (4) the need for greater coordination of activities among offices within student services (i.e. BOG Fee Waiver and Probation/Dismissal, and Petitions, etc.), and (5) flexibility.

Furthermore, technology will impact delivery methods for services, which may be supplemented to include greater access to students by way of remote access (i.e. video chat, instant messaging, and other engagements via social media).

Taken together, as the population comes to rely more and more on the use of technology to provide services, staffing must evolve to reflect the need for increased technical proficiency.

Admissions and Records is envisioned to change in many ways over the next five years, and these changes will impact the needs of the department. These future changes and related needs are summarized below.

FUTURE DIRECTION OF THE UNIT

Technology: It is expected that additional online and self-service improvements will take place. Moreover, given recent trends in the use of mobile devices along with the emphasis on putting in place the necessary infrastructure for mobile connectivity, students and other constituents will come to

expect they can engage Admissions and Records for services with smartphones. Appropriate steps must be taken to meet this expectation and may include (1) targeted communication strategies that include the ability to “push” information to students on mobile platforms (i.e. with CRM Advise), and (2) revamping the college’s online presence to accommodate mobile connectivity for faster loading of pages, form completion, and submission, to include fillable forms and the ability to attach support documents.

Another area of technological advances is with Degree Audit – U-Achieve implementation. Once the college has fully integrated U-Achieve and developed appropriate business processes to support it, the next steps will be to a) use Degree Audit to provide students and staff with degree outcomes and what-if scenarios for academic planning (i.e. courses needed to meet educational objectives, educational plans, etc.) to inform the academic scheduling process, such that departments are made aware of the number of students who need specific courses in order to meet their educational objectives, and b) automate graduation clearance using Degree Audit/U-Achieve and MySite Workflow.

Once Degree Audit is fully implemented, it will improve the unit’s operational effectiveness with respect to timeliness of service, access to student information, accuracy of information, and efficiency of processing. This will be accomplished through the use of not only Degree Audit but further integration with an online graduation application, automation, and installation of a mass graduation process. Technology will also be used in areas of records security and maintenance. Specifically, greater emphasis will be placed on electronic storage of student records in order to facilitate their access and improve efficiency for retrieval. Hard copies of student records will continue to be digitally scanned, indexed, and retained according to the South Orange County Community College District Document Retention Schedule. Records that no longer have to be maintained after a predefined period of time will be destroyed. For Admissions and Records, these tasks will be undertaken by the staff. However, other offices on campus have taken the initial steps to facilitate scanning in their areas as well.

COUNSELING CENTER**DESCRIPTION**

The Irvine Valley College Counseling Center provides counseling services to help students with a variety of academic, career, and personal concerns. Counseling faculty assist students in clarifying their needs, making decisions, setting goals, and dealing effectively with personal obstacles. The Center provides holistic counseling designed to address all aspects of student life. Academic counseling assists students in defining, evaluating, and implementing educational goals. Career counseling assists students in clarifying career and occupational goals by evaluating and analyzing their interests, abilities, values, and skills. Personal counseling also assists with personal, family, or other social concerns that may hinder students' educational success.

In addition, counseling services to further develop transfer readiness and degree completion are provided through the Articulation Office, the Veterans Service Center, the International Student Center, the Career Center, and the Transfer Center.

The Counseling Center also identifies and assists students in need by connecting them to campus and off-site resources to address concerns and barriers that may hinder their success. Finally, the Counseling Center provides workshops, programs, and services to assist in the recruitment, retention, and success of students.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

Counseling Services is doing an adequate job in meeting its unit goals. The unit continues its ongoing work in identifying opportunities to enhance the programs and services it provides students. As IVC continues to establish more programs such as dual enrollment with local high schools, the UCI/IVC Engineering Academy, the CSUF/IVC GAP 4+1 Program, and the Chapman/IVC Pharmacy Program, the unit has to make sure that this growth includes counseling support, which is a key student support function and is vital to planning and student success.

The Articulation Office reviews courses and develops and implements articulation agreements with the California State University system, University of California system, and out-of-state and private universities while also maintaining and updating ASSIST. This is a year-round process; thus, summer articulation hours are needed to promote transfer readiness and degree completion.

FUTURE DIRECTION OF THE UNIT

There are several goals that need to be accomplished over the next five to ten years:

Counseling

- Improve collaboration and communication with discipline faculty
- Improve collaboration and communication with high school counselors
- Expand physical space to provide more offices for counseling faculty and a larger waiting area for students and counter staff

- Increase counseling appointment time from 30 minutes to 45 minutes, in order to more successfully and holistically serve students
- Continue to hire more diverse faculty and staff
- Provide ongoing training for counselors
- Make progress towards the counselor/student ratio of 1:370, as recommended by the Academic Senate for California Community Colleges
- Work with the Office of Research, Planning and Accreditation to identify trends that will inform the unit's work with underserved student populations

Articulation

- Fully fund the summer articulation budget to continue articulation with CSU, UC, out-of-state and private schools
- Establish an ongoing budget for maintaining Transferology

DISABLED STUDENTS PROGRAMS AND SERVICES (DSPS)

DESCRIPTION

The Irvine Valley College Disabled Students Programs and Services (DSPS) unit promotes an inclusive environment for students with disabilities on campus. The primary responsibility of the department is to approve and coordinate academic accommodations, equipping students with auxiliary aids and support services, and facilitating self-advocacy. Furthermore, the unit partners with faculty to assist them in determining appropriate strategies to implement in the classroom, as they accommodate their students and strive to create an environment that employs universal design learning (UDL). Additionally, DSPS provides guidance that enables the college to remain in compliance with federal and state mandates that govern accessibility for individuals with disabilities.

DSPS provides counselors who work with students to determine, approve, and coordinate accommodations, auxiliary aids, and support services. The unit assists students with eliminating barriers that may hinder their academic success and creates an equitable learning environment for students with disabilities. In addition, DSPS provides test proctoring services, provision of adapted furniture, alternate media, note-taking services, interpreting and captioning for Deaf and Hard of Hearing (DHH) students, and other individual student accommodations. Assessing students for learning disabilities is another service for students who have not been previously diagnosed, allowing them to successfully complete their long-term educational goal with the application of compensatory strategies.

Coordinating these services for the campus requires considerable organization from the unit's staff and faculty. The desire to create an equitable educational environment for all students is the impetus behind the department's mission.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

Over the past seven years, the student population receiving services from DSPS has increased 44%, from 725 to 1,043 (unduplicated student count). The number of students who disclosed a secondary disability has increased by 247%, from 114 to 396 (unduplicated student count). Students who have self-identified as being diagnosed with a mental health issue make up the largest disability category served on the campus; over the past seven years, there has been a 265% increase in this population, from 93 to 340 students. The disability categories of ADHD, a learning disability, and other health-related concerns are additional categories that represent a large population of the students served in DSPS.

Given the increase in students served, and the in depth services required by students diagnosed with a mental health disability, the department needs additional counselors to support students as they experience crises and also more faculty to implement classroom strategies and student consults. Currently a counselor department lead coordinates the program in addition to seeing students, while the Dean of Counseling and Guidance supervises the staff and faculty. Even though the dean and department lead collaborate well, this structure does not lend itself to managing the program in the most effective manner. With the significant increase of students and services, program coordination requires a full-time administrator who can provide direct oversight to manage daily issues, in addition to the faculty lead position. The department also needs additional staff due to being housed in two

locations: the new testing center (DTC1) and the DSPS office (SSC 171). This need also can be seen in a 169% increase in test proctoring services over the past seven years (from 990 to 2,663 exams).

In addition, Guided Pathways has had a significant impact on DSPS students and how they navigate both enrollment and their academic pathways. With the onset of AB 705, students are now placed directly into transfer-level courses. Many DSPS students, depending on the specific nature of their disability, benefit from and/or require the scaffolding offered by below-transfer-level courses. It is unfortunate that they may miss out on the opportunity provided by this scaffolding due to lack of advisement or encouragement to enroll directly into transfer-level courses. Furthermore, the Guided Pathways movement encourages all students to complete transfer-level Math and English in their first year, contributing to a culture that fosters quick completion and transfer above most other academic goals. While this benefits many students, it may be discouraging to some DSPS students who need or want to take their time to ensure they experience success at each stage of their academic experience.

Resource requests for additional staff and adjunct counselors are submitted annually, and a proposal to hire an administrator to provide direct oversight to manage daily issues is being considered. Over the past few years, the unit has begun transitioning more service requests to an electronic submission process, including requests for services such as interpreting, captioning, classroom furniture, volunteer notetakers, alternative media, and test proctoring. This impacts the efficiency and effectiveness of the services provided by DSPS.

When the Guided Pathways initiative is considered globally, the unit recognizes it is crucial that DSPS students be part of the conversation. As the unit strives to improve the student experience for *most* students (i.e., those with a goal of transfer), it must also ensure IVC is not neglecting the *few* who may have other goals (i.e., personal or professional development, skills development, certificate, associate degrees, or transfer) or unique pathways to reaching those goals. These alternative pathways should be treated with respect and dignity, as they are no less important than those of the majority.

FUTURE DIRECTION OF THE UNIT

Creating an accessible campus is the responsibility of the college, with DSPS providing technical assistance to faculty, staff, and administrators in order to create an equitable educational environment. Emphasis will be given to interacting with faculty, supporting them to create a universal designed learning environment, as well as with students to help them acquire the skills and support services needed to successfully obtain their long-term educational goals. DSPS needs to be capable of responding to the college's demographic shifts and the increasingly complex needs of IVC's students.

EXTENDED OPPORTUNITY PROGRAMS AND SERVICES (EOPS), COOPERATIVE AGENCIES RESOURCES FOR EDUCATION (CARE), AND CALIFORNIA WORK OPPORTUNITY AND RESPONSIBILITY TO KIDS (CALWORKS)

DESCRIPTION

The EOPS/CARE and CalWORKs programs are categorically funded by the state Chancellor's Office. EOPS provides educational opportunities to low-income and educationally disadvantaged students. CARE provides services to EOPS students who are also single parents receiving CalWORKs cash aid. CalWORKs supports cash recipients who have been approved to include education as part of their welfare-to-work contracts with Social Services.

Program staff currently consists of five full-time classified staff, three full-time counselors, one full-time faculty coordinator, and two work study students, all of whom report to the Dean of Counseling Services. The EOPS/CARE program currently serves 800 students. CalWORKs serves 900 students. CalWORKs serves non-credit students. EOPS/CARE does not.

In addition to academic, career, and personal counseling by counselors and general guidance from support staff, students receive financial assistance in the form of textbook loans, parking permits, ASVCE membership, transportation assistance (gas cards and bus passes), cafeteria meal cards, grants, and work study (CalWORKs only).

These programs provide support to some of the campus' most at-risk students. Despite numerous disadvantages, participating students consistently achieve above the IVC general population in factors such as GPA, persistence, retention, transfer, and graduation. Given the additional support they receive, they thrive against many odds. The unit is very pleased with the success that its students achieve and continues to explore strategies to help them continue to reach their goals.

As part of its mission, EOPS/CARE/CalWORKs partners with a variety of outside community organizations including Families Forward, Second Harvest, and Charter 100, to name but a few.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

Even though Irvine Valley College is located in a relatively affluent community, there will always be new immigrants and impoverished individuals in the student population, and the demand for specialized support services will continue to exist. But at this point in time, no major changes to EOPS/CARE/CalWORKs programs are anticipated. The program has reached its maximum size, given space and funding limitations. Eight hundred unduplicated students appear to be about all that the unit can manage without more space and more funding. Stretching for more students would only dilute the program. Currently, all three counseling offices are occupied during every hour the department is open, and there is no room to grow in its current space.

The unit has done its best to request special training to enhance the technical skills of its staff, but additional training will still be helpful.

Specifically, more campus support for IVC's Annual Adopt-a-Family Program is needed. Donations have gradually declined over the years. In past years, the program was more of a campus-wide event, but new supporters have not stepped up to take the place of longtime supporters who have retired. The

unit recognizes it shares some responsibility to improve marketing of the program across campus and that there are many competing needs during the holiday season.

FUTURE DIRECTION OF THE UNIT

The EOPS program has been in existence since 1969, while CARE started in 1982 and CalWORKs began in 1998. Given this history, statewide documented program successes, and strong advocacy efforts by program leaders statewide, the unit believes it is likely that each of these programs will continue to be funded for years to come.

This year, the IVC Guardian Scholars program was aligned with EOPS/CARE and CalWORKs. It was a logical alignment, given that foster youth students are in need of the same support mechanisms as EOPS students. EOPS serves many of the same disproportionately impacted students supported by Student Equity. Planning for the future, the unit would look to more closely align its programs with Student Equity, the Veterans Services Center, and DSPS, and have them report to a new/second counseling dean to oversee them. As IVC grows and the demands on Student Services continue to increase, this could be a logical division of programs and supervision.

A current effort led by an EOPS counselor seeks to diversify the EOPS student population through outreach to high schools that serve a broader population of low-income students.

FINANCIAL AID

DESCRIPTION

The primary purpose of the IVC Financial Aid Office is to help students pay for college by offering an array of federal, state, and institutional aid programs. A critical component for most students attending college is having the financial resources to pay for tuition/fees, books and supplies, and other educationally related expenses.

The IVC Financial Aid Office is innovative in how it delivers services to students. Besides employing new technologies such as the Campus Logic system, which allows students to complete their financial aid file online, the unit continuously evaluates business practices to ensure unnecessary barriers are removed from students accessing college, and aligns them to achieve college, District and statewide goals on student success. Between Fall 2014 and Fall 2016, IVC had the second highest increase in Pell Grant rates among California community college students. Similar increases in the Cal Grant program took place over the same period of time.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

The IVC Financial Aid Office is located on the first floor of the Student Services Center, across from the Admissions and Records Office. It is the third most frequented department in Student Services, serving 8,000 students and processing 12,000 applications each academic year. The two greatest challenges facing the IVC Financial Aid Office (and the college) are the declining number of students applying for and receiving student aid, including the Federal Pell Grant and the California College Promise Grant, and technological limitations.

Regarding the former, the improved economy has resulted in a drop in the number of financial aid applications (e.g. the Free Application for Federal Student Aid, or FAFSA), which can affect the college's share of funding based upon the new Student Centered Funding Formula. Additionally, the District's homegrown student information system (SIS) is not a complete system, as the financial aid and student accounts modules have not been developed. Extensive integration, albeit incomplete, is required and regularly updated, although updates often result in extensive delays. A case in point is the implementation of Single Sign-On (SSO) functionality. This technology allows students to have one login for multiple systems, and which enables the different systems to communicate with one another and eases the student experience. Presently, the IVC Financial Aid Office manually updates the PowerFAIDS student financial aid portal (NetPartner) with updates from the Campus Logic student financial aid engagement platform. In addition, students and staff must log in three different times, between the MySite (SIS) system, PowerFAIDS, and Campus Logic, to check their financial aid status and complete their work.

In order to address the declining number of financial aid applications and Federal Pell Grant and California College Promise Grant recipients, the college has approved hiring a full-time staff member funded by the Promise Program (AB 19 and AB 2) to perform outreach at the local high schools and on campus. Additionally, the District is looking at utilizing an artificial intelligence chatbot to provide 24/7

customer support to students. Other District technological initiatives include a current project to implement SSO for the Campus Logic system, as well as NetPartner afterwards, to address the technological challenges for the Financial Aid Office and students. The District also is exploring moving from MySite to a complete student system, preferably Workday Student, with financial aid and student account modules.

FUTURE DIRECTION OF THE UNIT

Several states already have legislation in place requiring high school graduates to complete the FAFSA as a requirement for graduation. California has introduced similar legislation. Due to the correlation between college attendance and completion and FAFSA completion, greater emphasis on students completing the FAFSA will occur. In order to adequately prepare for the existing and future industry and societal changes regarding student success, the IVC Financial Aid Office will utilize new technologies and optimize existing functionality to improve student service, institutional compliance, and staff productivity, including PowerFAIDS setup, SSO implementation, and an AI chatbot. The department will also continue to evaluate business practices to increase student access and remove barriers. One of the chief goals of the department is to have as many students as possible paid during the first week of classes in the fall semester.

The goals of the IVC Financial Aid Office are in alignment with the Chancellor's Statewide Vision for Success to increase student degree and certificate completion, as well as reducing the number of units students earn prior to graduation or transfer. Changes moving forward will most likely entail implementing new technology, such as a student information system (e.g. Workday Student). Likewise, statewide goals, including the Guided Pathways Initiative, Vision for Success, and Student Centered Funding Formula, will also dictate the future direction of the IVC Financial Aid Office. Similarly, the IVC Student Services division will need to ensure it is also appropriately aligned with statewide objectives to produce measurable results.

GUARDIAN SCHOLARS

DESCRIPTION

Guardian Scholars is a comprehensive program that supports current or former foster youth in their pursuit of a college education. Foster youth face unique challenges (e.g., lack of traditional family support, attending multiple schools, etc.). The program strives to provide support services needed in order to overcome these challenges. A dedicated counselor is provided to assist students in navigating the college's policies and procedures, as well as to provide one-on-one support.

The primary student success goals for the program are to improve the retention of current and former foster youth participating in the program as well as their attainment of their academic goals. Retention rates among foster youth are dismal, so providing case management-based counseling is an integral part of keeping students engaged. In addition, students who identify as foster youth may lack social capital, so exposure to four-year universities is also important.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

The program is on its way to being a robust program that is recognized by outside partners who work with current and former foster youth. Building relationships with on- and off-campus partners is a priority. In doing so, social workers and case managers are gradually increasing their referral of students to IVC. Students on campus are also starting to build a rapport with counselors and seeking services on a more regular basis.

In order for the program to grow, awareness of the many challenges that foster youth experience must also increase among the IVC campus community. The best referrals have come from the college's own faculty and staff members. An ally program has been developed and the plan is to offer the training several times a year to ensure that more faculty and staff become allies.

It is a vital part to the success of the program to partner with programs/units both internally and externally. Internally, there are several programs that are key to helping students achieve success, including Financial Aid, EOPS, and DSPS, just to name a few. For instance, more collaboration with Admissions and Records as well as the Financial Aid Office will help the unit to identify foster youth students when they first apply to IVC.

Externally, it's important to have a good relationship with outside partners who may have worked with students in different capacities. For instance, in order for a student to be a participant, they must provide verification that they were a ward of the court. This verification may be provided by the student's social worker. In addition, some of the students live in transitional housing and are assigned case managers. Other external agencies may offer services that the student needs in order to focus on their studies.

More financial support is needed to address some of the hardships students face that become barriers toward achieving their goals. For this reason, continued funding for direct student support is crucial. In

addition, among the many challenges facing foster youth at IVC is the minimal amount of low-income and transitional housing available in Irvine.

More professional development for staff is needed, as there are always new assembly bills proposed that affect foster youth. Additional staffing is needed to help with program outreach and to provide program services.

Changes to Student Equity funding could significantly impact the success of the Guardian Scholars program. Unfortunately, current data on foster youth is based on a small number of identified students and does not provide an accurate depiction of this student population.

FUTURE DIRECTION OF THE UNIT

The unit anticipates strong growth. In the next couple of years, the program could double or even triple in size. With this growth, a designated center will be needed where students can study, hang out to build a peer support system, and just have a safe space. Finally, more financial support will be needed to address some of the hardships these students must overcome to achieve their goals. Building relationships with on-campus and off-campus partners will be an ongoing priority.

HEALTH AND WELLNESS CENTER

DESCRIPTION

The purpose of the Health and Wellness Center (HWC) is to provide students who are enrolled at the college with acute health services and mental health services, along with providing education for the entire college to keep the campus healthy.

The unit's services include immunizations, flu vaccines, sick care, wellness care, physical exams, dispensing medications, lab draws, Family Pact, and crisis intervention for mental health issues.

The unit's staff provide quality services and are licensed and extremely knowledgeable about college-age health and mental health issues. The unit has built a large resource list for services it cannot offer, such as dental work and treatment of chronic mental health issues. The unit provides education to staff and faculty on health issues and intervention as well as monthly education about wellness issues on campus. Mental health providers speak in classrooms and with faculty about prevention and intervention of student behavioral issues, and the unit provides workshops about suicide education and intervention several times during the semester. These workshops are open to all faculty and staff.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

Each year the unit become increasingly busy with student issues. The unit's number of students presenting with mental health issues has increased over 40% in the last three years and is continuing to grow. The unit needs a second full-time mental health provider and more permanent, sustainable staff that are not funded with grants or hired as hourly medical professionals. The college's student health fee provides the unit's funding. However, it is becoming more and more evident that additional funds need to be allocated from the campus general fund in order to sustain health/education programs and build more programs to address the health and barrier needs of students. One in three students suffer from a mental health issue, so the unit needs more help to treat and care for IVC's students. Faculty face daily crisis in their classrooms and are not prepared to assist students in need, even with the unit's outreach education efforts.

In the medical area, student health care needs are increasing; a large number are not covered under their parents' insurance plans. There is an increase in sexually transmitted diseases in college-age populations across the nation, and education on prevention is vital to decrease this statistic. Suicide is the tenth leading cause of death in the country among all residents. However, the suicide rates in veteran college students and students ages 18 to 24 is increasing. This requires more intervention, as well as training staff and faculty on what to do and how to speak to a student in need.

The unit has just moved into a newly built Health and Wellness Center building on campus, which will allow students to feel more comfortable when coming in for help.

It also is implementing more printed educational materials on campus for students and will place more posters and brochures out to encourage more positive behaviors.

The unit's website is up to date with current information, and more in-class education will be introduced throughout the campus regarding the increase in sexually transmitted diseases, as well as the Family Pact family planning services the unit offers. This will be complemented with continuing mental health education classes for faculty and staff.

FUTURE DIRECTION OF THE UNIT

Unit services will continue to adjust based on student needs each semester, along with new research findings for medical and mental health needs in this student population age group. The unit's recommendation for the future is to increase services and have stable, full-time medical and mental health practitioners available daily for students to access.

INTERNATIONAL STUDENT PROGRAM

DESCRIPTION

The International Student Program (ISP) provides IVC's 830 F-1 visa/international students with a comprehensive set of essential support services to ensure they achieve their academic and career goals. The ISP also provides campus-wide leadership in advocating for and implementing the college's goals for international education and promotes a campus environment that embraces diversity.

Maintaining compliance with federal regulations of the US Department of Homeland Security (US DHS) is a core responsibility of the ISP. Accuracy in regular enrollment reporting through the Student and Exchange Visitor Information System (SEVIS) is an essential function of the ISP so that IVC continues to be able to admit F-1 visa students for study.

The unit offers an array of services for its students and for IVC. This includes coordinating all recruitment activities for international students, such as print and web marketing; working with local ESL programs; overseas recruitment; and working with educational agents. The ISP's assistance to its students includes admissions and application processing, providing specialized orientation, immigration advising and coordination of all reporting to the US government, academic counseling and university transfer assistance, workshops, and social programming/activities.

The ISP is essential to the college's goal for revenue generation. International student enrollment currently generates approximately \$8 million, including \$6 million in foreign student tuition fees and over \$700,000 in capital outlay funds. This money directly benefits IVC's general fund on an annual basis.

IVC's F-1 visa/international enrollment experienced sizable growth from 2010 to 2014, increasing by 106%. However, in line with national trends, growth since then has been minimal (12% growth from 2014 to 2019). The college's primary market is China, representing over 65% of its total international student population; however, students from 50 countries are represented in the program.

The program's students also contribute in a positive way towards the Vision for Success goals. Specifically, 85% or more of its students indicate they intend to transfer to university. In the spring 2018 and fall 2019 transfer cycle, the program had 145 F-1 visa students transfer to the UC system and 50 F-1 visa students transfer to the CSU system.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

Internal: The International Student Program is at an exciting point of expansion and development. It has had very sizable investment in the last three years, which is of great benefit to the future potential for growth and improvement in its services. The college has increased its budget by \$250,000 in the past four years, which has and will continue to allow the program to undertake extensive marketing and, more importantly, provide new and augmented support services to its international students. This anticipated growth will create a later need for more staffing within the next three to five years.

One challenge that the ISP faces is that the District at large does not make internationalization a priority. It is not listed in any planning or strategic goal document at the college or District level. This directly

impacts the program and leads to difficulty in implementing initiatives that would help international students and program growth.

Additional internal challenges in the future include access to classes for ISP students, as greater numbers of students now arrive during ISP orientation season. The program's current practice in providing access to classes for new F-1 visa students may need to be re-visited as it moves forward in its recruitment efforts.

External: Overall international student enrollment growth nationwide is flat, while new enrollment growth is decreasing. This is due to various factors including the political climate in the US, changes to US immigration policy, concerns related to safety in the US, and the overall high cost of US higher education in comparison with competitors (the United Kingdom, Canada, etc.). Due to this, anticipated enrollment growth at IVC from new marketing initiatives may be negatively impacted. IVC benefits from its high transfer rates and safe location in Irvine; these factors will be highlighted in all marketing efforts.

AB 705 has also led to a disparity in access to registration for international students. Technological issues prevent international students from accessing the Guided Self Placement, which delays their access to registration. This is an equity issue that needs to be addressed as the college moves to potential online self-assessment tools in the future. Such tools must be accessible to students overseas so that they have equal access to classes the same as their domestic counterparts. The District needs to take this into consideration when moving forward with future plans.

FUTURE DIRECTION OF THE UNIT

The International Student Program is truly at a point of dynamic change. It has recently received investment into its program through the resource request process that will allow it to actively undertake targeted marketing initiatives, with the goal of increasing both its overall numbers and diversity within the program. Specifically, such initiatives include direct overseas marketing, increased print and web advertising, and partnerships with educational agents. IVC is very well positioned in terms of the enrollment growth of international students due to its transfer reputation, its location in Irvine (which is one of the safest cities in America), and the academic reputation of the college. The unit anticipates 3% growth within two years of its concerted marketing efforts and 5% growth by year five.

This growth in program numbers will require additional staffing to support students. This will include the addition of an ISP specialist position, additional counseling staff, and an assistant director. As such, the program will require additional office space to house these positions, and discussions are underway in connection with the Student Services Building redesign.

The program also received funding to undertake ongoing social programming including activities, workshops, and a peer mentor program. The goal is to increase the inclusion and sense of community among ISP students, as this has been lacking. These are core components to support the total student and will change the program from "transactional" to "full-service."

Long term, the International Student Program would like to see formal study abroad opportunities be made available for IVC students. There is potential for the ISP to become an “international education center” that assists with both inbound and outbound student programming.

MATRICULATION

DESCRIPTION

The primary function of Matriculation is to assist students with the onboarding process prior to enrolling in classes at the college. The pre-enrollment steps are required for most incoming students and are essential in the unit's efforts to maximize student success while enrolled at IVC. The process requires students to receive their placements in math and English, develop a first-semester plan, learn about programs of study, majors, certificates, and careers during advisement, and become familiarized with important dates and deadlines, services and resources, and college expectations, policies, and procedures. In addition to helping facilitate the pre-enrollment process, matriculation staff also assist with determining placements, prerequisites, and course equivalencies.

One notable attribute that the matriculation staff is known for is their flexibility and adaptability. The role of matriculation requires working closely with Outreach, Counseling, Enrollment Services, faculty, and high schools. Matriculation often coordinates services between various departments and the local high schools. With several new state initiatives such as Guided Pathways and AB 705, Matriculation has been required to alter their practices and methods of delivering pre-enrollment and placement services while keeping all stakeholders apprised of the updated processes. The Matriculation staff have exemplified these attributes of communication, flexibility, and adaptability during these times of transition.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

Some external core issues that face the Matriculation unit pertain to recent statewide initiatives. Several other community colleges recently closed their Assessment Centers and repurposed their staff due to AB 705. With this legislation there was concern about job duties and position stability. Some preliminary discussions focused on possibly updating job descriptions once AB 705 was fully implemented.

AB 705 eliminated assessments and provided all incoming students with baseline math and English placements into transfer-level courses. To meet the needs of incoming students, Matriculation has had to revamp the services offered at high schools by offering in-person orientations along with facilitating the guided self-placement surveys. As a result of AB 705, students now have the ability to complete all matriculation steps online, thus eliminating any touch points with the matriculation staff. While this process provides convenience to students, confusion and uncertainty have resulted in some students attending in-person sessions for various matriculation activities after having already completed the process. There still remains a need to offer in-person services to students. The challenge may lie in showcasing the value and importance of continuing to do so at the local high schools, due to the effort required of high school counselors in securing facilities and resources and coordinating with matriculation staff.

AB 705 has also impacted the fluidity of implementation centered around the efforts between Matriculation, Counseling, Outreach, and the local high schools. As the implementation process is ever changing, the unit has experienced challenges communicating these updates and the constant changes to local stakeholders. In addition, with math and English assessments being eliminated, colleges were tasked with using high school transcript data as the primary placement method. One particular

challenge Matriculation faced was developing a process of collecting transcripts for placement. While the CCCCCO indicated using high school data as the primary source of placement, they also clarified that colleges could not require students to submit their data. In addition to this, there are no current workflow processes in place to collect and to notify matriculation staff when transcripts have been received. High schools were also seeking clarification on the high school transcript submission process. Enrollment Services is currently working with Parchment and District IT to develop a workflow for intake and placement that will help streamline the process for incoming students and minimize the impact and traffic with the high school registrar offices.

Internally, the organizational chart lists five matriculation staff positions; but currently only four of these positions are filled. The Matriculation unit has never had all five positions occupied, and it will be critical to have all positions filled to best meet the needs of the IVC Enrollment Management initiative. Recruitment is currently underway to fill that final vacancy in Matriculation to help with the onboarding of incoming students, the outreach efforts at the high schools, and the placement process. This will be critical with IVC's service area growing and new local high schools being developed. In addition to this recruitment, a temporary call center is being developed to assist students in need of additional support in completing the pre-enrollment steps, registering for classes, developing educational plans, and receiving any additional follow-up services.

FUTURE DIRECTION OF THE UNIT

As a result of the continued growth from IVC's service area, accompanied by local and statewide initiatives such as Guided Pathways, AB 705, the Student Centered Funding Formula, and Enrollment Management efforts, the demands on the Matriculation unit will continue to expand and evolve. In response to these statewide and local initiatives, Matriculation is actively recruiting for additional permanent and part-time staff to provide support in these efforts. The hiring of new staff and the continued growth of the unit will require additional workspace to adequately provide these services. As part of the ongoing discussions pertaining to the Student Services Center, Matriculation is in need of and will be requesting a larger workspace with sufficient storage.

OUTREACH AND COMMUNITY RELATIONS

DESCRIPTION

The Irvine Valley College Outreach and Community Relations unit develops and strengthens partnerships and relationships with K-12 schools and districts and serves as the primary liaison between the college and the high school community.

Outreach and Community Relations plans, organizes, and executes IVC informational nights, college nights, college fairs, and other community-facing events to provide prospective students and families with information about the college. Outreach and Community Relations works with a variety of departments on campus to disseminate critical information related to admissions, matriculation, and financial aid to prospective students. Furthermore, throughout the academic year, Outreach and Community Relations works with Marketing and Creative Services to develop unique recruitment tools and materials to attract new students to the campus.

The Outreach team regularly services the Irvine Unified, Tustin Unified, and Laguna Beach Unified school districts and provides campus tours to prospective students and families. Throughout the semester, the Outreach team provides large group campus tours for K-12 partners, often with upwards of 100 to 200 attendees.

The director of the Outreach department serves as co-chair of the Irvine Valley Promise program, which provides fee waivers and additional benefits for eligible first-time freshmen. The Outreach Director also oversees the IVC Student Ambassador Leadership Program, which consists of a group of student leaders who are in paid positions to provide peer-to-peer connection at outreach events by sharing their personal collegiate journeys. Simultaneously, the Ambassadors participate in leadership development throughout the academic year.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

The Outreach and Community Relations team consists of just two full-time staff members, which poses a challenge to the unit's ability to service local schools; especially since events the unit attends typically lead to a great deal of follow-up. With positive customer service at the forefront, the unit does its best to service its service area districts. However, in order to stay competitive with the eight other community colleges in the area, it would be vital to have an additional full-time Outreach Specialist staff member who can work specifically on recruitment and events. With growing programs such as Irvine Valley Promise, the Student Ambassadors, a Welcome Center, Enrollment Management priorities, and Guided Pathways, additional staffing will be necessary to uphold each of them. Other area community college outreach teams have multiple full-time specialists who are stationed in high schools and are making inroads to middle schools.

Given the projection that enrollment is set to stabilize and/or decline within the next one to two years, many suggestions have been made as to what the Outreach department can and should do. However, per the above, it is a current challenge with existing staffing to expand beyond current limits. In order to attract prospective students to IVC, Outreach provides a general idea of the school, then connects Admissions and Matriculation staff to the high schools for more customized guidance.

We are currently working to make the Outreach and Community Relations Unit a formal program within the Student Services Unit. This involves developing a program charge and program review, which will need to go through the various governance groups on campus. Simultaneously, the unit is working to identify relevant data that can help us assess the Outreach and Community Relations team's work, which historically has not been attained.

FUTURE DIRECTION OF THE UNIT

With enrollment management one of the key priorities for the college, the Outreach team plays a critical role in this process by sharing information on what is occurring in the field.

The unit's core recommendation for Student Services and hope for the future is that all units within Student Services better understand what each area does and their key goals. With this shared understanding all Student Services units can begin to integrate their respective goals and work collaboratively.

Finally, sufficient staffing is necessary to maintain and grow outreach efforts at Irvine Valley College; current staffing levels make it challenging to accommodate K-12 school needs and compete with other area community colleges.

STUDENT EQUITY

DESCRIPTION

The primary goals of the Office of Student Equity at Irvine Valley College are to:

1. Provide equitable support for disproportionately impacted students,
2. Promote active inclusion of IVC's diverse student population, and
3. Help educate and empower the campus community in practices of equity, inclusion, and cultural humility.

The Office of Student Equity provides support for disproportionally impacted students through its Equity Scholars programs, such as Dream Scholars, Pride Scholars, Re-Entry Scholars, and HEARTS Scholars. These programs offer support to students who identify as Dreamers, undocumented persons, or LGBTQ+; are over 25 years old; and/or struggle with food and housing insecurity. Each program is led by a culturally competent counselor and, whenever possible, a member of the community they serve.

The unit addresses active inclusion of IVC's diverse student population through the use of intentional programming and celebration of cultural events on campus. The unit creates and executes large-scale cultural celebrations several times a year, honoring holidays, days of remembrance, and national heritage months. Every event is focused on empowering the community being honored as well as providing personal growth opportunities and education for non-group members.

The Office of Student Equity educates and empowers the campus community through the use of workshops and training opportunities to continually improve the skills of IVC faculty and staff members, including respectful communication, identification of personal blind spots, and active inclusion of all students.

In order to accomplish these goals, the Office of Student Equity works collaboratively with departments across campus to provide appropriate training and thoughtful conversations about the best approaches to take in pursuing these goals. One of the primary vehicles for these conversations is the Student Equity Task Force, led by the Director of Student Equity.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

One of the main issues facing Student Equity, which is both a challenge and an opportunity, is that of engaging the campus at large in the work of equity. Creating excitement and investment in learning and growing to better serve IVC's diverse students is a large undertaking that requires buy-in across campus. In pursuing this goal, they have begun forming collaborations with groups such as the Academic Affairs Committee, Academic Senate, Classified Senate, the Health and Wellness Center's Basic Needs Program, and the Guided Pathways Workgroup.

Equity and practices of inclusion exist for every role at IVC. Specifically, this means inclusive, affirming practices in the classroom for faculty; leadership techniques for managers; respectful engagement for staff; development of new student support programs; creating official allyship trainings for employees and students; and influencing the spending of SEA program funds.

In order to meet these challenges and opportunities, an increase in Office of Student Equity staffing would be ideal. The role of Student Equity is projected to only increase in coming years. Specifically, as the unit increases its engagement with IVC campus employees and students in equity-minded practices, as well as running programming that directly supports and celebrates IVC's diverse student population, the unit's needs for staffing will likewise continue to increase.

Similarly, the Office of Student Equity requires the physical space to run programming and to offer students safe spaces to connect with their communities. The opening of the Equity and Inclusion Center is a wonderful opportunity to provide this space, as well as to have the physical space to hold Equity Scholars programming. In the future, the unit hopes to increase the size and number of these intentional spaces to continually better serve IVC's diverse student communities.

FUTURE DIRECTION OF THE UNIT

The pool of students served by the Office of Student Equity continues to expand. This expansion has occurred in three ways. First, the Institutional Research team continues to identify new disproportionately impacted student groups in need of equity services. Second, new AB 1018 legislation requires Student Equity Plans to address additional student populations, such as LGBTQ+ and food and housing insecure students. Lastly, the campus community may decide that there are certain student groups that are in need of services above and beyond those required service populations.

With this continued expansion of direct services to students also comes an expansion of training needs across campus to appropriately and respectfully engage with these students, throughout all their points of contact with IVC faculty and staff. Equity training is like painting a bridge. As soon as the training is complete, it is time to start again. Best practices change rapidly in the equity field as language and identities are reimagined, implicit biases are identified, and blind spots are continually addressed. The need for such training and thoughtful implementation of policy and programming on campus will only expand as the campus community expands.

The unit highly recommends investing in more staffing of the Office of Student Equity. The unit has an opportunity to dynamically support students and continue to highlight IVC's status as an inclusive, affirming environment for all people. In addition to what the unit already offers, they would like to see the Student Equity office working collaboratively with the Academic Senate and SOCCCD Equal Employment Opportunity Committee to create a Diverse Teacher Training Internship program at IVC. The unit would like to see Student Equity student staff members taking on more responsibility with student-led programming, in the form of Student Empowerment Leaders. It would like the Student Equity Task Force to create formal guidelines for various allyship training programs across campus and work with Technology Services to create online badges professors can display in Canvas. The ideas listed here are just a few ways that Student Equity will continue to grow and better serve the college's continually diversifying student and employee populations.

STUDENT LIFE

DESCRIPTION

The Irvine Valley College Office of Student Life is committed to providing meaningful services, activities, and communications that build community; ensure academic success; encourage creative expression, personal growth, and well-being; foster diversity and social justice; and promote student advocacy and leadership. The Office of Student Life provides resources in the following four areas: services and activities, leadership development, facilities and technology, and fiscal management.

The primary responsibilities of the office are to provide student support services, mentoring, leadership, coaching, and guidance for a high level of student engagement in many activities and programs throughout the college. The Office of Student Life is responsible for the coordination of and assistance with major events such as Laser Day, scholarship and commencement ceremonies, and a variety of student-centered activities including Pride Day and Black History Month. The Office of Student Life facilitates and/or organizes over 50 individual campus-wide events that work to improve campus culture competency and advocacy.

The Associated Students of Irvine Valley College (ASIVC) organization is a large component of the Office of Student Life's efforts. ASIVC works to empower students to engage in shared governance, representing the student perspective to members of the campus community through leadership and active citizenship. Each year, a student body president and senators are to represent students through the student government's legislative branch. Each senator represents an academic school, department, and/or program. ASIVC also works to support the Inter-Club Council (ICC), which consists of all ASIVC-approved clubs and co-curricular programs. IVC is home to over 40 student clubs that bring together students with shared interests, including academic topics, sports, arts, and cultural backgrounds. ICC, headed by its president and other officers, sponsors club events, organizes campus-wide club activities, and holds monthly meetings with active clubs during the fall and spring semesters.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

The Office of Student Life is located in the Student Activities Center, a former Child Development Center in a standalone building at one corner of the campus in a parking lot. When the Office of Student Life moved to the building, the building was not remodeled or modified to house it. This building is also home to ASIVC, the campus Outreach unit, the Student Equity program, the Equity and Inclusion Center, the Reflection Center, and the Inter-Club Council. While this facility does offer some free amenities, such as a game room with pool table, ping pong, foosball tables, and HDTV, the physical location of the center is on the opposite side of the campus and some distance away from other student support services. The location and structure of this facility pose challenges for students, faculty, and staff who seek to support student activities. With the past six years, the Inter-Club Council has grown from five active clubs to 40 active clubs. This increase in student clubs and leadership activities necessitates larger facilities for the office to carry out its day-to-day functions.

A new Student Services Building is being planned but will not be available for four years. In the meantime, the campus will need to monitor the growth of the program and prepare for location adjustments or modifications based on overall projections and any increases in activities.

The efforts of the Office of Student Life are funded through student fees, a bookstore contract, and a cafeteria contract. Although the student fee portion of the budget is increasing because of a new “opt-out” payment option, the fees derived from the bookstore and cafeteria contracts are vulnerable and subject to change. Recent state legislation, AB 1504, which was signed in October 2019, requires each community college with a student body association to collect a \$2 student representation fee (with an opt-out option). Districts are required to send half of this new revenue to the state student leadership organization to support student advocacy. Some see this increase of fees as a means for greater state-wide advocacy, while others see it as a burden on the student’s ability to keep abreast of overall increases in fees for education.

FUTURE DIRECTION OF THE UNIT

The college must create a centralized area for all of the functions within the Office of Student Life, where students can come together for information on how to get engaged and build community at IVC.

A well-thought-out plan for the Office of Student Life area would serve as the focal point for student activities and programs, with a relaxing and supportive environment where students could interact with one another. The Office of Student Life should offer large meeting spaces, and even larger spaces for social functions, activities, lectures, clubs, and student government activities. The appropriate space would provide an atmosphere for fun that includes games and a relaxing place to finish homework, quietly read, or meditate.

VETERANS SERVICES CENTER

DESCRIPTION

The primary goal of the Veterans Services Center (VSC) is to assist in the transition of military service members and veterans from active military to civilian life in their pursuit of higher education. The center offers comprehensive support of IVC students with a plethora of wrap-around support services located in a complete one-stop environment on campus.

Notable attributes include the center's peer-to-peer approach to engaging with students, mental health services provided in the center three to four times per week, the center's innovative work with data collection and an Innovation Grant, a conference to share best practices with other community colleges, addressing food insecurities with an onsite Veterans Services Center food pantry, daily tutoring, full-time academic counseling, an active student veterans club, "We Got Your 6" ally training for staff and faculty, extended hours of operation, and an emergency fund for student veterans in need.

CHALLENGES AND OPPORTUNITIES FACING THE UNIT

Some internal issues facing IVC student veterans stem from a lack of space in the center. The space provided in the center is very much appreciated by these students; however, they find themselves having to leave to find more space due to the overcrowded feeling in the center. A small computer lab is used for tutoring, computer usage, studying, and quiet space. A tutoring worktable and whiteboard aren't able to be successfully used for instruction due to noise factors. Much of the success in the VSC is due to its ability to adapt and overcome such issues as lack of space. Other essential needs include confidential space for its providers and outside collaborators who come to provide to provide vocational rehabilitation and disability services via the Veterans Administration. The center's licensed mental health provider must have a secure and confidential space. Full-time staff must be present to continue scheduling services, implementing programs, and accessing services for students in need. These staff members currently are funded through categorical funds, not general funds. Sustainability is vital to the center being able to continue its success and continue to be recognized as a "Best Practice Model" with the state for the veteran support services it provides.

Some external issues derive from veteran student's lack of preparedness for the educational setting. They are adult learners who have been out of school for many years. Some were not the best students while in K-12, and also are dealing with transitional needs from leaving the military, which include lack of housing, a decrease in finances, mental health needs, and simply adjusting to life post-military. Other external issues focus on the slow payment cycles for student veterans and their GI Bill benefits. Student veterans depend on a housing allowance that can sometimes take over a month to receive. This produces barriers to success, with home evictions, an inability to pay for necessities like food and clothing, anxiety, depression, and possible homelessness.

The center proposes several actions that address these challenges, including:

- Increasing the space of the center to offer five private, confidential offices and tutoring space with computers.

- Including food services and access to funds for the start of the fall semester to include housing, food, outside enrollment into VA healthcare benefits, employment if desired, and transportation or bus passes.
- Increasing integrated peer services on campus and offering a place to increase camaraderie for veterans who have been recently discharged, may have no family support, and need interaction with others to decrease isolation.

FUTURE DIRECTION OF THE UNIT

The anticipated future of the Veterans Services Center is to continue outreach and to support the veteran population on campus while building an increase in daily support services. Services must expand to meet the needs of incoming veterans. Each fall, a new group of veterans arrives with different support needs. The center needs to adjust and be able to formulate programs to each incoming set of requirements, which may include offering more on-site services, increased tutoring, more frequent check-ins with the academic counselor, or clothing and housing needs. The center's staff have been and will continue to change the program to meet the needs of each group, with surveys and needs assessments that can indicate how best to assist veterans in a more holistic manner.

The core recommendations for Student Services is that it is critical to acknowledge the fact that the veteran population is an older population with specific needs and barriers to education. Their support is, therefore, specific to their needs. They suffer from medical and mental health issues, have been exposed to high levels of trauma, and most often suffer from silent wounds that must be addressed for their acclimation to be successful. The center seeks to create an environment that is accepting of their needs and offers support to help them accomplish this transition while seeking their education. The center's goal is to invest in this population with their identified needs, prevent isolation, allow acclimation with support, and endeavor to improve their lives via education while also increasing awareness that each day the center supports veterans in their efforts to overcome every obstacle they may face, both in the center itself and on campus.

APPENDIX

TRANSFER DATA

TABLE 1: TOP 25 TRANSFERS TO ALL FOUR-YEAR INSTITUTIONS, IRVINE VALLEY COLLEGE, 2013 TO 2017

Type of Institution	University	Total Transfers, 2013 to 2017
In-State Public	CALIFORNIA STATE UNIVERSITY - FULLERTON	1,876
In-State Public	UNIVERSITY OF CALIFORNIA - IRVINE	1,246
In-State Public	CALIFORNIA STATE UNIVERSITY - LONG BEACH	520
In-State Public	UNIVERSITY OF CALIFORNIA-LOS ANGELES	465
In-State Private	UNIVERSITY OF SOUTHERN CALIFORNIA	372
In-State Public	UNIVERSITY OF CALIFORNIA-SAN DIEGO	327
In-State Public	UNIVERSITY OF CALIFORNIA - BERKELEY	265
In-State Private	CHAPMAN UNIVERSITY-ORANGE	214
Out-of-State Public	ARIZONA STATE UNIVERSITY (AZ)	200
In-State Public	CALIFORNIA STATE POLYTECHNIC	178
In-State Public	UNIVERSITY OF CALIFORNIA-SANTA BARBARA	178
In-State Public	UNIVERSITY OF CALIFORNIA - RIVERSIDE	176
In-State Private	NATIONAL UNIVERSITY	143
In-State Public	UNIVERSITY OF CALIFORNIA-DAVIS	136
In-State Public	SAN FRANCISCO STATE UNIVERSITY	120
Out-of-State Private	UNIVERSITY OF PHOENIX (AZ)	116
In-State Private	CONCORDIA UNIVERSITY - IRVINE	110
In-State Public	CALIFORNIA STATE UNIVERSITY - DOMINGUEZ HILLS	106
In-State Private	BRANDMAN UNIVERSITY	99
In-State Public	SAN DIEGO STATE UNIVERSITY	79
In-State Public	CALIFORNIA POLYTECHNIC STATE UNIVERSITY	67
Out-of-State Private	NEW YORK UNIVERSITY (NY)	65
In-State Public	UNIVERSITY OF CALIFORNIA-SANTA CRUZ	65
Out-of-State Private	GRAND CANYON UNIVERSITY (AZ)	64
Out-of-State Private	WESTERN GOVERNORS UNIVERSITY (UT)	62

Source: SOCCCD inFORM Data Warehouse

TOP 25 DEGREE AND CERTIFICATE AWARDS DATA

TABLE 2: TOP 25 ASSOCIATE DEGREE AWARDS BY MAJOR, IRVINE VALLEY COLLEGE, 2013 TO 2017

Top 25 Degrees	2013-14	2014-15	2015-16	2016-17	2017-18	Total
SOCIAL AND BEHAVIORAL SCIENCES	340	260	313	386	502	1,801
BUSINESS ADMINISTRATION	101	174	183	218	233	909
LIBERAL STUDIES: TEACHER EDUCATION	75	103	150	163	237	728
PSYCHOLOGY	46	65	63	84	92	350
NATURAL SCIENCES AND MATHEMATICS	45	38	34	60	72	249
MATHEMATICS	20	42	34	33	57	186
CHEMISTRY	24	38	25	39	46	172
COMMUNICATION STUDIES	11	28	30	41	47	157
BUSINESS	32	24	18	32	39	145
HEALTH SCIENCES	15	15	25	26	48	129
ACCOUNTING	27	19	16	28	34	124
ADMINISTRATION OF JUSTICE	10	23	31	27	25	116
SOCIOLOGY	13	9	27	21	32	102
HUMANITIES AND LANGUAGES	23	13	19	20	17	92
COMPUTER LANGUAGES	11	17	29	16	10	83
PHYSICS	5	6	11	11	29	62
PHYSICAL SCIENCE	4	12	12	10	11	49
FINE ARTS APPRECIATION	7	5	17	7	7	43
POLITICAL SCIENCE	4	3	17	8	8	40
KINESIOLOGY	2	5	8	7	15	37
HISTORY	3	6	9	6	12	36
COMPUTER SCIENCE	-	1	4	4	26	35
BIOLOGY	5	3	3	8	10	29
PARALEGAL STUDIES	5	2	9	9	3	28
STUDIO ARTS	-	-	3	10	13	26

Source: SOCCCD inFORM Data Warehouse

TABLE 3: TOP 25 CERTIFICATE AWARDS BY PROGRAM, IRVINE VALLEY COLLEGE, 2013 TO 2017

Top 25 Certificates	2013-14	2014-15	2015-16	2016-17	2017-18
GENERAL STUDIES	950	1,235	1,171	1,278	1,852
IGETC	565	694	621	768	872
CSU GENERAL EDUCATION - BREADTH	365	382	467	510	537
FINANCIAL ACCOUNTING	41	61	52	75	55
FINANCIAL/MANAGERIAL ACCOUNTING	43	54	47	64	56
COMPUTERIZED ACCOUNTING	25	50	41	64	39
EARLY CHILDHOOD ASSISTANT TEACHER	10	16	32	70	49
ACCOUNTING	29	30	37	30	19
PAYROLL	14	15	19	33	21
SPREADSHEETS	8	14	25	26	20
PARALEGAL STUDIES	5	17	32	23	13
INCOME TAX	10	21	13	16	9
RESEARCH TOOLS FOR ENTREPRENEURS	-	1	-	28	17
CHILD DEVELOPMENT	4	19	6	7	4
REAL ESTATE SALES	10	6	9	8	6
ELECTRONIC TECHNOLOGY		5	11	11	11
FITNESS PROFESSIONAL	8	5	7	3	13
ELECTRICIAN TRAINEE	6	4	5	6	7
CCNA (CISCO CERTIFIED NETWORK ASSOCIATE) ROUTING AND SWITCHING	-	8	5	6	9
LASER TECHNOLOGY: PHOTONICS	-	1	12	4	10
DIGITAL MEDIA ART	8	3	4	3	8
EARLY CHILDHOOD ASSOCIATE TEACHER	2	2	2	9	11
ELECTRONICS AIDE	1	7	5	6	4
BUSINESS MANAGEMENT	2	3	6	8	3
BIOTECHNOLOGY LAB ASSISTANT	-	-	1	8	13

Source: SOCCCD inFORM Data Warehouse

PROGRAM OVERLAP AT SOCCCD COLLEGES

TABLE 4: ASSOCIATE DEGREES OFFERED AT BOTH SOCCCD COLLEGES, 2019

Major, A.A. or A.S. Degrees	Major, A.A. or A.S. for Transfer
Accounting	Anthropology
Administrative Assistant	Art History
Anthropology	Biology
Art	Business Administration
Biology	Communication Studies
Business Management	Early Childhood Education
Chemistry	Economics
Computer Science	Elementary Teacher Education
Dance	English
Economics	Geography
English Literature	Geology
Fine and Applied Arts	Global Studies
French	History
Geology	Kinesiology
Health Sciences	Mathematics
Humanities	Music
Infant/Toddler	Philosophy
Japanese	Physics
Mathematics	Political Science
Music	Psychology
Philosophy	Sociology
Physical Sciences	Spanish
Political Sciences	Studio Arts
Real Estate	Theatre Arts
Social and Behavioral Sciences	
Spanish	
Theatre Arts	
Theatre Arts: Technical Theatre	

Sources: COCI Program Data, SOCCCD, 2019; Website Course Listings, 2019

TABLE 5: CERTIFICATE AWARDS OFFERED AT BOTH SOCCCD COLLEGES, 2019

Certificate Programs
Accounting
Administrative Assistant
Advanced Adult ESL
Beginning Adult ESL
Business Information Worker
Business Leadership/Management
Coaching
Computer Graphics and Digital Design
Computerized Accounting
Corrections and Law Enforcement
CSU General Education
Early Childhood Assistant/Associate Teacher
Electronic Technology
Entrepreneurship
Entrepreneurship Skills
IGETC
Infant/Toddler
Intermediate Adult ESL
Real Estate
Real Estate Escrow/Sales
School-Age Child
Theatre Arts Entertainment and Theatre Technology
Web Authoring and Design

Note: Some certificate programs offer multiple, similar awards; some certificate awards available at both colleges may have similar curriculums or partially overlap with other certificate courses.

Source(s): COCI Program Data, SOCCCD, 2019; Website Course Listings, 2019