



# Comprehensive Master Plan

**SAN BERNARDINO VALLEY COLLEGE**  
SAN BERNARDINO COMMUNITY COLLEGE DISTRICT





# 2017 Comprehensive Master Plan

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**SAN BERNARDINO VALLEY COLLEGE**  
SAN BERNARDINO COMMUNITY COLLEGE DISTRICT

San Bernardino Valley College - Main Campus  
701 S Mt Vernon Ave.  
San Bernardino, CA 92410

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**HMC Architects**, Facilities Planning

**ALMA Strategies**, Educational & Capital Outlay Planning

**Snipes-Dye**, Civil Engineering

**Marcene Taylor Inc.**, Cost Modeling

### College & Community Meetings & Forums

Held to provide opportunities for broader input from the entire campus and the community. We thank all who participated.

In-service Day Open Forum — January 14, 2016

Master Plan Open Forum — April 19, 2016

Campus & Community Meeting — August 12, 2016

Master Plan Open Forums — September 21, 2016

# Letter from the President



“

It is difficult to pin down when, throughout its celebrated, 90-year history, our college has not been in a state of change. Within the last two decades, many of us have watched our campus completely transform before our eyes. This year marked the completion of one of the biggest building projects in our history: a brand-new, 108,000-square-foot Kinesiology & Athletics Complex that has redefined our campus landscape. It is the biggest and tallest building on campus and the surrounding community.

In 1926, San Bernardino Valley College's first classes began at San Bernardino High School and Colton High School, attended by just about 300 students and taught by our inaugural team of 17 faculty members. Our district's board of trustees had just been formed and was busy searching for a location for a new college campus. They settled on our current location because it was equally distant between the downtowns of San Bernardino and Colton. Our Administration building was completed just in time for the college's second year in fall 1927. During that busy second year, instruction occurred amid more construction, and the Life Science Building, the Gymnasium and the Library were all completed.

San Bernardino Valley College has now grown to offer over 140 degree and certificate options and to accommodate over 14,000 students every semester. Although the geographic area of our campus has changed little over these 90 years, our ability to serve the needs of our community has changed dramatically. The one thing that has not changed is the steadfast tradition of academic excellence that was established by our founders.

As we formulate our Educational and Facilities Master Plan for the coming years, let us consider what lies ahead of us in the near future. This living document is the result of the collaborative efforts of hundreds of educators, students, professionals, and community members who make our campus the special place that it is. Just as our region's economy is expected to grow considerably over the coming years, so will the need for high-quality educational programs in our community. It is our historic ability to meet these challenges that has made San Bernardino Valley College an educational cornerstone in the Inland Empire and Southern California.

San Bernardino Valley College has a long and celebrated history. Let this document serve as our roadmap for continuing our traditions of academic excellence and student success.

Diana Z. Rodriguez  
President

”

# Mission, Vision, Values

## Mission

San Bernardino Valley College maintains a culture of continuous improvement and a commitment to provide high-quality education, innovative instruction, and services to a diverse community of learners. Its mission is to prepare students for transfer to four-year universities, to enter the workforce by earning applied degrees and certificates, to foster economic growth and global competitiveness through workforce development, and to improve the quality of life in the Inland Empire and beyond.

## Vision

San Bernardino Valley College will become the college of choice for students in the Inland Empire and will be regarded as the alma mater of successful, lifelong learners. We will build our reputation on the quality of our programs and services and on the safety, comfort, and beauty of our campus. We will hold both our students and ourselves to high standards of achievement and will expect all members of the college community to function as informed, responsible, and active members of society.

## Values (College Tenets)

We believe:

- › That a well-educated populace is essential to the general welfare of the community.
- › That a quality education empowers the student to think critically, to communicate clearly, and to grow personally and professionally.
- › That an enriched learning environment promotes creativity, self-expression, and the development of critical thinking skills.
- › That our strength as an institution is enhanced by the cultural diversity of our student population and staff.
- › That we must provide students with access to the resources, services, and technological tools that will enable them to achieve their educational goals.
- › That we can measure our success by the degree to which our students become self-sufficient learners and contributing members of society.
- › That plans and decisions must be data driven, and based on an informed consideration of what will best serve students and the community.
- › That we must model our commitment to lifelong learning by maintaining currency in our professions and subject disciplines.
- › That, as part of the collegial consultation process, all levels of the college organization must openly engage in sharing ideas and suggestions to develop innovative ways to improve our programs and services.
- › That interactions between all members of the college community must be marked by professionalism, intellectual openness, and mutual respect.
- › That we must hold ourselves and our students to the highest ethical and intellectual standards.
- › That we must maintain a current, meaningful and challenging curriculum.
- › That students succeed best when following an educational plan and when enrolled in classes that meet their interests and goals, and match their level of academic preparedness.
- › That all members of our campus community are entitled to learn and work in an environment that is free from physical, verbal, sexual, and/or emotional threat or harassment.
- › That students learn best on a campus that is student-centered and aesthetically pleasing.
- › That we must be responsible stewards of campus resources.

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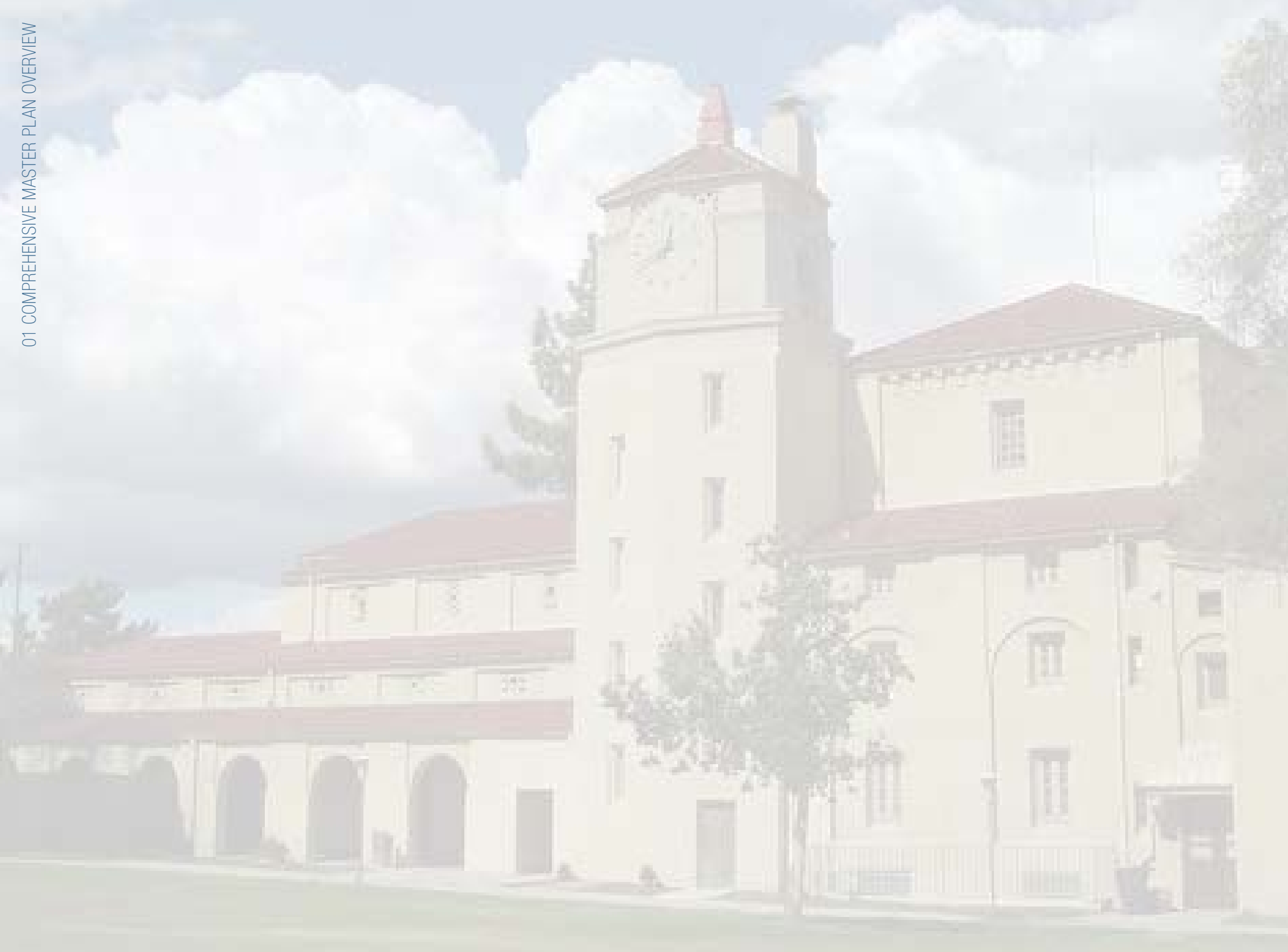
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# SAN BERNARDINO VALLEY COLLEGE





# Comprehensive Master Plan Overview

This section provides an overview of San Bernardino Valley College's *2017 Comprehensive Master Plan*—an integrated plan that is comprised of both the *Educational Master Plan* and the *Facilities Master Plan*.

The following sections are included in the Comprehensive Master Plan Overview:

- › Intent + Purposes of the Comprehensive Master Plan
- › Integrated Planning + Collegial Consultation Process
- › Facilities Planning Process
- › SBVC Planning History + Context
- › Glossary of Terms

## Overview

# INTENT + PURPOSES OF THE COMPREHENSIVE MASTER PLAN

### Intent of the Educational Master Plan

The *San Bernardino Valley College (SBVC) Educational Master Plan (EMP)* is a comprehensive document that establishes a clear direction for the College by envisioning the future of academics and student support under changing internal and external conditions. Quantitative and qualitative data indicators are analyzed to guide the planning process. Additionally, the EMP is directed by core values and goals within the College and by District-wide plans as well as the SBVC and *San Bernardino Community College District (SBCCD) Strategic Plan*.

While the *Educational Master Plan* is intended to provide direction to SBVC over the next five years (2016-21); it is not a rigid script. It helps determine the institution's current level of effectiveness and produces key goals leading to action and dialogue as the College moves toward the future. It is a living document that should be reviewed and updated regularly. Thus, the *Educational Master Plan* is an evolving description of the College's needs and, though past performance data can greatly inform future growth, emerging regional issues, and unforeseen events can alter a community's path.

The EMP will provide guidance and support for the College's emerging strategic initiatives and serve as a foundation for other College planning activities.

### Purposes of the Educational Master Plan

The main purposes of this *Educational Master Plan* are as follows:

- › Provide a framework within which the College can coordinate long-term goals in support of student learning.
  - › Integrate planning, not only with the SBCCD and the State Chancellor's Office, but also with other College planning documents and the work of planning and consultation committees.
  - › Receive input from all stakeholders (faculty, staff, students and the community) to inform the College's planning decisions.
  - › Serve as an instrument to promote the College by communicating its strengths and capabilities to constituencies in the community.
- › Guide further planning and decision-making at all levels.
  - › Maintain a living and strategically useful document.

### Purposes of the Facilities Master Plan

The *2017 Facilities Master Plan (FMP)* is intended to be a flexible and long-range plan that will guide the development of San Bernardino Valley College's facilities. It addresses the growth in enrollment planned over the next 15 years. It describes campus development strategies to support the Strategic Directions of the *2017 Educational Master Plan* and positions the College to maximize funding and partnership opportunities. The FMP is part of an integrated planning process that supports accreditation and demonstrates compliance with accreditation standards for facilities planning.

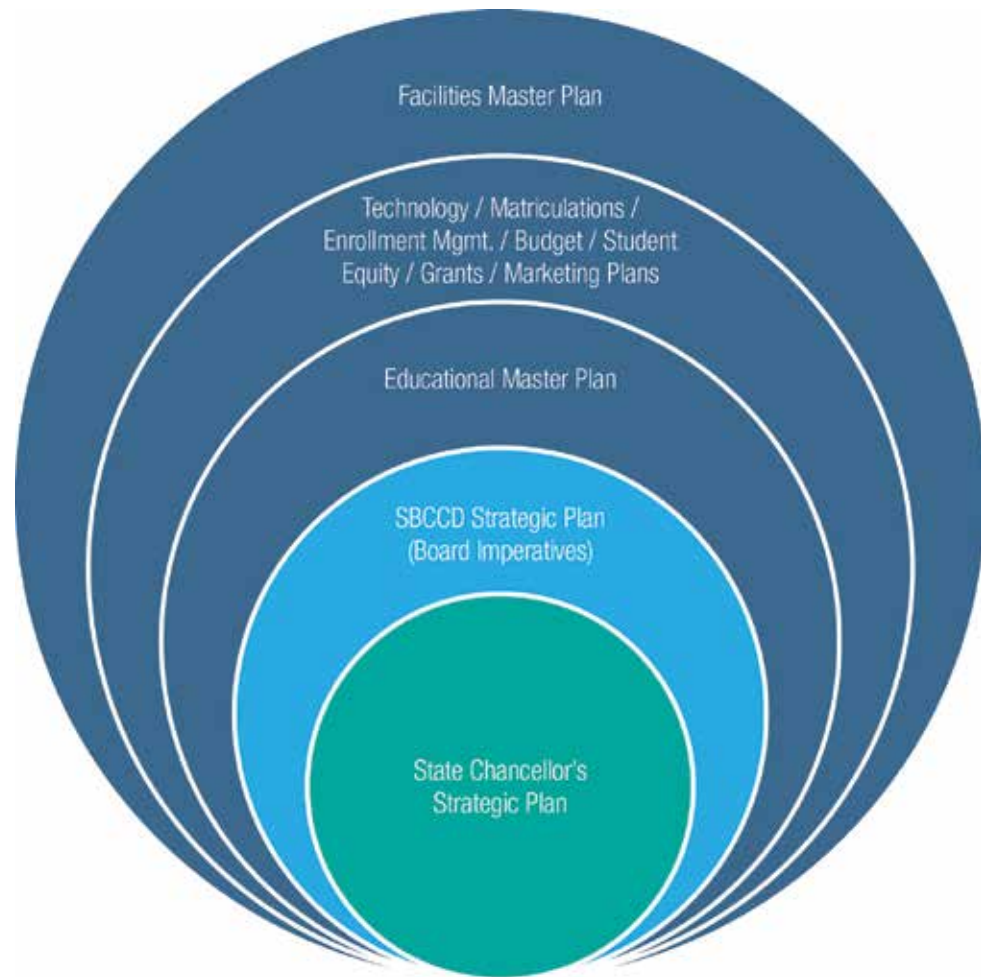


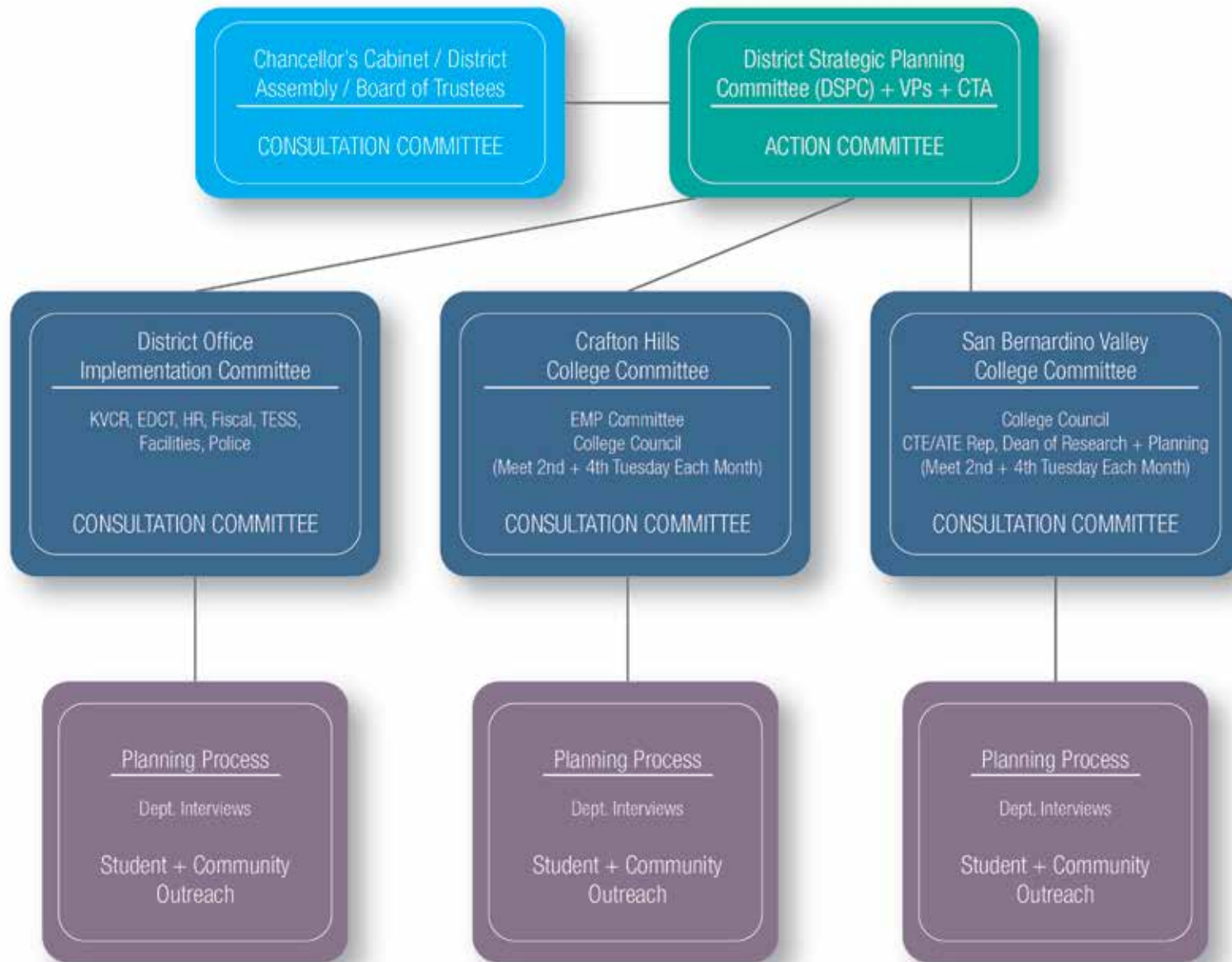
## Overview

# INTEGRATED PLANNING + COLLEGIAL CONSULTATION PROCESS

The College's educational planning process is guided by an integrated approach. Goals and objectives of the SBVC *Educational Master Plan* must align with a number of plans relevant to the California community college system. These plans include the State Chancellor's Office and San Bernardino Community College District Strategic Plans. Locally, they include the *SBVC Facilities Master Plan*, *Technology Plan*, *Matriculation Plan*, *Enrollment Management Plan*, *Student Equity Plan*, *Grants Plan*, *Budget Plan* and *Marketing/Public Relations Plan*.

The SBVC collegial consultation process is guided by its Board of Trustees policy (Board Policy 2225) to establish procedures to ensure faculty, management, classified staff and students the right to participate effectively in planning processes. The EMP is a result of an inclusive collegial shared governance process with input from administration, faculty, staff, students and the community.





## Overview

# FACILITIES PLANNING PROCESS

The 2017 *Facilities Master Plan* was developed through an inclusive, participatory, and transparent process that engaged and sought input from the College's many constituencies. San Bernardino Valley College Council (Valley College Council)—which represents the committees within Valley College's collegiate consultation structure and includes faculty, staff, students, and administrators—played a key role as the working committee that participated most closely in the development and review of this document. Additional venues for dialogue included one-on-one interviews, presentations, open forums, community meetings, and working sessions with the SBCCD Board of Trustees. Meeting minutes and exhibits were posted on the SBCCD intra-net and widely shared.

The contributions of Valley College Council members and other participants were vital to the success of the facilities master planning process. Please refer to the *Acknowledgements* section for a complete listing. The educational and facilities master plans were prepared through an integrated process that was facilitated by a single team of educational and facilities planning consultants. When it was practical, stakeholders were engaged in joint educational and facilities planning interviews and forums. Discussions were framed by a

holistic perspective that acknowledges the connection between the quality of the campus environment and the success of the students.

As part of the integration and alignment of long-range planning across the District, a five-step facilities planning process was followed within the same timeframe at both San Bernardino Valley College and Crafton Hills College. This process is organized around a logical sequence of activities and discussions that is intended to foster a shared understanding of the planning environment and build consensus around planning objectives and recommendations. This five-step process is outlined as follows.



# THE 5 STEPS

## 01

### PREPARE

Planning began in fall 2015 with the development of the timeline of planning activities. Measures of success for the master planning process and outcomes were gathered from stakeholders. Educational and facilities planning information was requested.

## 02

**ANALYZE**

To build an understanding of existing campus facilities and their current use, campus facilities were surveyed and the space inventory was updated in fall 2015. In early spring 2016, educational and facilities planners participated in program interviews with faculty and staff from each instructional, student support, and administrative support department in order to hear about facilities-related issues first-hand. The analysis of existing campus conditions was prepared, presented, and validated with Valley College Council and is documented in the *Facilities Analysis* section.

## 03

**FRAME**

In the spring of 2016, during college-wide discussions of the EMP strategic directions, the facilities planning process advanced into a discussion of planning objectives and space needs. The forecasted space needs that are documented in *Program of Instruction and Space Needs* were established through the educational planning process and analyzed in relation to the current space inventory on the campus. The planning objectives and programmed space needs provided a framework for the exploration of development options in the next step. This framework and the methodology used to arrive at these results are documented in the *Needs* section.

## 04

**EXPLORE**

Over the course of two workshops that were held prior to summer 2016, development options were presented to Valley College Council, who provided insightful input. During this step, a Final Project Proposal (FPP) was developed to apply for state funding for a facility to replace the Technical Education Building. Faculty in the Applied Technology, Transportation, & Culinary Arts Division participated in its development. Additional meetings with faculty and staff took place as needed to gather specific input. A draft list of recommended projects was reviewed with Valley College Council during the second workshop.

## 05

**RECOMMEND**

When planning resumed in fall 2016, the draft FMP document, which had been prepared over the summer, was reviewed and revised in accordance with the College's established procedures. During this time, discussions of the linkages between the educational and facilities plans took place with Valley College Council, yielding more specific implications for facilities planning that were included in the FMP document and addressed in its recommendations.

## Overview

# SBVC PLANNING HISTORY + CONTEXT

Established in 1926, San Bernardino Valley College primarily serves the communities in western San Bernardino County. An election to establish the San Bernardino Valley Union Junior College District was held on March 26, 1926. The first class offerings for the College were scheduled at San Bernardino High School and Colton High School.

A thirty-acre portion of the current site on Mt. Vernon Avenue was selected for the campus and a bond to fund its purchase was approved by the voters in September 1926. During the 1927-28 academic year, classes were offered for the first time at the current SBVC site location. The College enrolled nearly 300 students for the fall 1927 semester with fifty-four course offerings.

The Administration Building, the Life Sciences Building, the Gymnasium, and the Library were completed before the end of the 1927-28 academic year. The Social Hall, the College's first campus center was completed in 1929. The Observatory was completed in 1930 and outfitted with a 16-inch Newtonian reflector telescope under a metal rooftop dome. The design of the telescope mount is notable for being a precursor to the mount used at the Palomar Observatory. During

the Great Depression, the Auditorium, Greek Theater, stadium bleachers, and a vocational building were constructed with assistance from the Works Progress Administration and the California State Emergency Relief Administration.

During World War II, no new buildings were built and enrollment and the number of faculty fell significantly, but building resumed in the post-war years in response to the greatly increased student enrollment and the G.I. Bill. A change in the age and interests of post-war students were reflected in changes in the curriculum. Courses in business and technical fields were offered for an increasing percentage of students interested in achieving immediate occupational goals. Twenty years after its founding and one year after the conclusion of World War II, a bond was passed in April 1946, providing for the construction of many new buildings on campus, including an engineering building, a student center, a fine arts building, a new science building, a business education building, and an addition to the library. In 1950, North Hall—a large technical education, home economics, and music building—was completed. The Student Life Building was completed in 1955 and the Chemistry Building was completed in 1957.

By the late 1950s, student enrollment had grown to nearly 6,500 students. Valley College was the center of social life for students. Athletic events were well attended and homecoming festivities were a social highlight in the community. Many new building were built, including the existing Technical Education Building, and the campus land area was expanded to its current boundaries. The campus was expanded to Grant Avenue, Esperanza Street, and K Street. In 1963, the Fairview School property was acquired. Its existing school buildings were repurposed for instruction and services, such as the warehouse, the shipping and receiving office, and the print shop. In 1952, the student-run radio station, KVCR, was launched from the Valley College campus and joined by KVCR public television in 1963.

By 1975, SBVC enrollment reached approximately 18,000 day and evening students. Changes in curriculum mirrored changing social and economic conditions of the 1960's and '70s. The civil rights movement resulted in a substantial increase in the number of minority students. During the 1970s, many more buildings were added to the campus as the acquired residential property was fully developed. The Liberal Arts Building and the Planetarium remain from





## Overview

# SBVC PLANNING HISTORY + CONTEXT *(cont.)*

among those built in this decade. KVCR became one of the original heritage stations when National Public Radio was launched in 1971. Crafton Hills College opened its doors in 1972 and enrollment at Valley College reached its peak at 18,000 students in 1975.

The 1980's were filled with a variety of challenges for SBVC. The introduction of state-mandated tuition in 1984 and a cap on state funding resulted in a sharp drop in enrollment. In 1992, the Library was damaged by the Landers and Big Bear earthquakes. During the 1995-96 winter break, geotechnical investigations conducted to assess the risk from future earthquakes found that fifteen buildings on campus were located on or near the San Jacinto earthquake fault. In November 2002, SBCCD's voters approved Measure P, which provided \$190 million of bond funds to improve the facilities of both Crafton Hills College and San Bernardino Valley College. The College and SBCCD also secured \$40 million in funding from FEMA and a California state higher education bond.

Between 2002 and 2009 five new buildings were constructed on the SBVC campus, while six buildings had to be demolished and three buildings were retrofitted. Two new classroom buildings were dedicated

in the summer of 2010. The construction of the Library, the Administration/Student Services Building, Health Life Sciences Building, the Art Complex, North Hall, the Media and Communications Building, and the Physical Sciences Building was completed by 2011. The Business Education Building was renovated and structurally strengthened and reopened in 2013. After further analysis, it was determined that the Auditorium, which lies within the seismic folding zone, could be renovated and saved. It was reopened in 2015.

With the passage of Measure M in February 2008, \$500 million in funding capacity was approved by the voters. Between 2005 and 2009, a facilities master plan was developed to plan for three horizons: Horizon 1 – 2010, Horizon 2 – 2020, and Horizon 3 – 2030 Build-out, based on Valley College's strategic educational objectives. Following the recommendations of the 2009 FMP, the New Gymnasium and Field Buildings project is being constructed and is scheduled for completion in 2017.

The "Great Recession" following the economic crisis of 2008 took its toll on College enrollments and operational budgets from the 2009-10 to 2012-13 academic years. The drop in property values throughout

the District during the Great Recession reduced SBCCD's bonding capacity by about half. Plans for projects that were designed and approved by the Division of the State Architect, such as plans for a parking structure, were postponed.

The passage of Proposition 30 in November 2012 prevented further budget cuts and provides operational funding for the College. Since 2013-14, the College has increased enrollments, full-time equivalent faculty, and course section offerings. San Bernardino Valley College most recently conducted a comprehensive Self-Evaluation Report for the Accrediting Commission for Community and Junior Colleges (ACCJC) in October 2014. The College is in the process of addressing recommendations outlined by the ACCJC and submitted a follow-up Self-Evaluation Report in March 2016. Now, completing its 90th year, SBVC continues to embrace a culture of institutional improvement and refinement. The SBVC Comprehensive Master Plan attests to the College's determination to sustain a culture of accountability and integrated planning. The future starts here.





## Overview

# GLOSSARY OF TERMS

### **Assignable Square Footage (ASF)**

A measure of “usable” square footage in a given facility that is typically measured by the area from within interior walls of a space. Excludes circulation, custodial, mechanical, electrical and restroom areas.

### **Capacity Load Ratio**

The relationship between the assignable space available for utilization and the efficiency level at which the space is being utilized. There are five space categories for which the state measures capacity load ratios: classroom (lecture), laboratory, office, library and audio visual/television/radio (AV/TV).

### **Economic Modeling Specialists International (EMSI)**

An online database that utilizes multiple sources to provide data regarding population demographics and various economic market trends by geographic locations.

### **Education Master Plan (EMP)**

A College-wide plan that defines the educational goals of an institution. The plan precedes and guides other institutional planning documents.

### **Enrollment (Unduplicated)**

A student enrollment count (also referred to as “headcount”) based on an individual student that identified a student only once in the system.

### **Environmental Scan**

An analysis that considers present and future factors that may influence the direction and goals of an institution. May include external and internal elements that are evaluated for their potential impact on an institutions ability to serve its constituents.

### **Full Time Equivalent Faculty (FTEF)**

A measure used to calculate the sum total of faculty resources (full-time and part-time combined) that equate to measurable units of 15 hours per week of “teaching time.”

### **Full Time Equivalent Student (FTES)**

A measure used to calculate attendance accounting and student workload that represents 525 instructional contact hours in a full academic year (fall and spring terms).

### **Participation Rate**

The number of headcount students a college enrolls for every 1,000 persons within the service area population.

### **Regional Area**

The geographic boundary which an institution may consider the primary area of influence regarding student participation and employment opportunities for service area residents. Usually identified on a county level.

### **Retention**

The number of student who received a grade within a course, divided by the total number of student initially enrolled within the course.

### **Service Area**

The geographic boundary from which an institution draws 90% or more of its enrollment. Usually identified by zip codes, cities, and/or census tract.

### **Space Inventory**

A record of buildings and space at an institution. Key components include buildings, room numbers, room use types, assignable square footage, gross square footage, taxonomy of program (TOP) codes, and number of stations.

**State Chancellor's Office**

The state agency responsible for leadership, funding and technical assistance for the California Community College system.

**Strategic Plan**

An organizational plan which defines its overall strategy or direction and process for making decisions regarding resource allocation. Typically, a strategic plan is used to guide divisional plans.

**Student Success Scorecard**

An annual report provided by the State Chancellor's Office that tracks the progress of first-time students in cohorts over six years on seven measures including persistence, completion of 30 units, remedial math, English and ESL success, and overall completion (SPAR).

**Weekly Student Contact Hours (WSCH)**

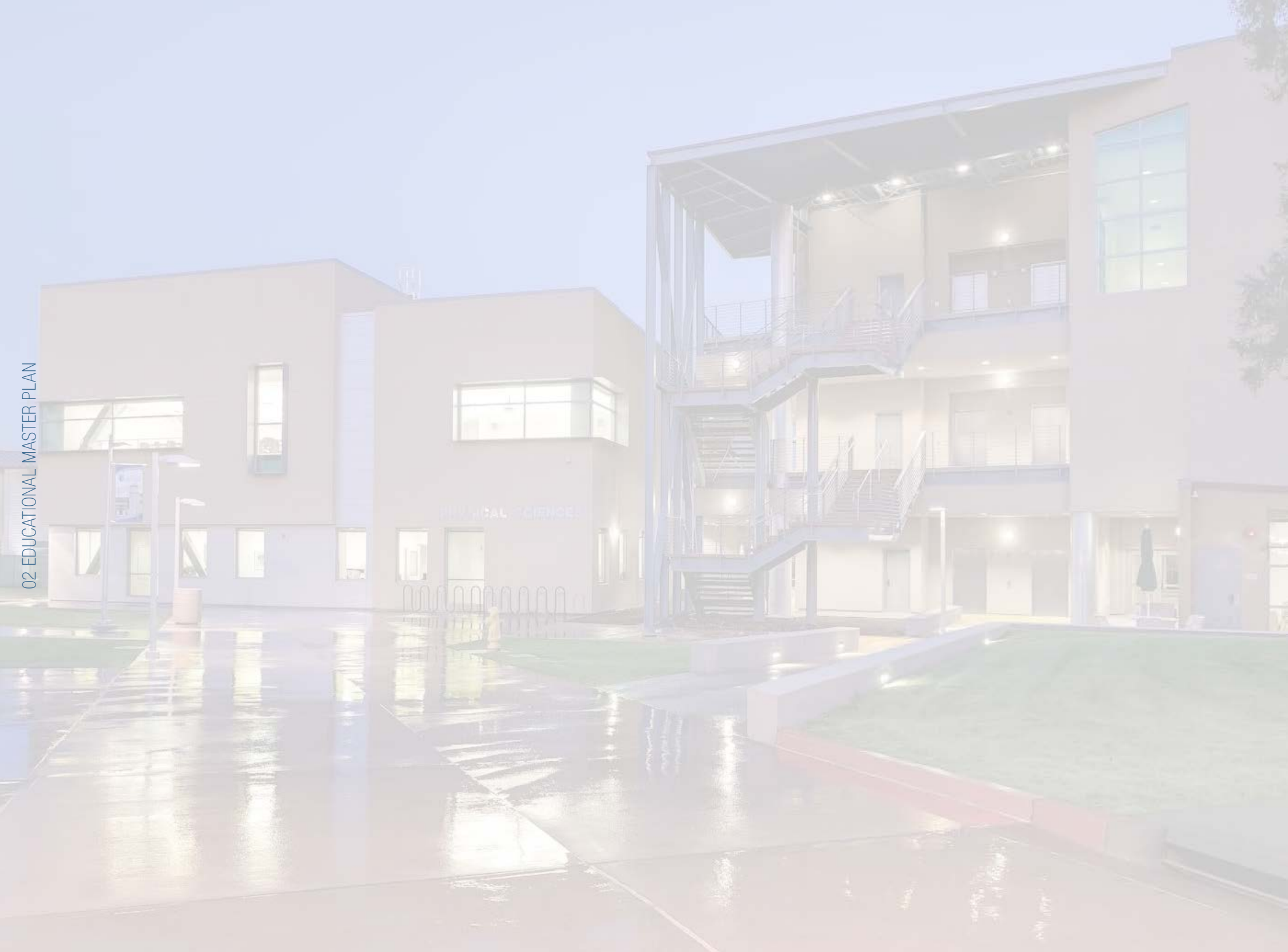
A measure of the number of students enrolled in a course, multiplied by the number of hours the course meets per week. A class that meets 3 hours per week and has 30 students generates 90 WSCH. WSCH is utilized to report apportionment attendance.

**WSCH/FTEF**

A calculation, often referred to as "productivity," is a ratio between a faculty members' hours of instruction per week (load) and the weekly contact hours (WSCH) of students enrolled in a course. The state productivity standard is 525 WSCH/FTEF.



# SAN BERNARDINO VALLEY COLLEGE





# Educational Master Plan



# SAN BERNARDINO VALLEY COLLEGE



# Planning Framework

The San Bernardino Valley College (SBVC) *Educational Master Plan* (EMP) is a comprehensive document that establishes a clear direction for the College by envisioning the future of academics and student support under changing internal and external conditions. Quantitative and qualitative data indicators are analyzed to guide the planning process. Additionally, the EMP is directed by core values and goals within the College and by District-wide plans, as well as the SBVC and San Bernardino Community College District (SBCCD) Strategic Plans.

## Planning Framework

# SBVC ORGANIZATIONAL STRUCTURE

### Instructional Services

The Instructional Services Office is responsible for working with each instructional division to develop a balanced schedule of classes, providing administrative support for the development of new courses and providing leadership to ensure the quality of the College's instructional program. The Vice President of Instruction is responsible for all instructional matters including accreditation and each academic division along with their respective departments. SBVC consists of the following divisions and departments:

1. Applied Technology, Transportation, and Culinary Arts
  - › Aeronautics
  - › Electricity & Electronics
  - › Heating Ventilation Air Conditioning and Refrigeration
  - › Technical Calculations
  - › Automotive Technology
  - › Diesel
  - › Automotive Collision
  - › Culinary Arts
  - › Food & Nutrition
  - › Machine Trades
  - › Welding
  - › Inspection Technology
  - › Water Supply Technology
2. Arts and Humanities
  - › Art
  - › Communication Studies
  - › Radio, Television and Film
  - › English
  - › Modern Languages
  - › Music
  - › Theater Arts
  - › Dance
  - › Reading
3. Mathematics, Business, and Computer Technology
  - › Accounting
  - › Business Calculations
  - › Real Estate
  - › Computer Information Technology
  - › Computer Science
  - › Mathematics
4. Science
  - › Architecture and Environmental Design
  - › Chemistry
  - › Physical Science
  - › Biology
  - › Pharmacy Technology
  - › Geography
  - › Geographic Information Systems
5. Social Science, Human Development, and Physical Education
  - › Geology
  - › Oceanography
  - › Nursing
  - › Psychiatric Technology
  - › Physics
  - › Astronomy
  - › Engineering
6. Social Science, Human Development, and Physical Education
  - › Administration of Justice
  - › Corrections
  - › Anthropology
  - › Child Development
  - › Economics
  - › History
  - › Human Services
  - › Health
  - › Kinesiology
  - › Philosophy
  - › Religious Studies
  - › Political Science
  - › Psychology
  - › Sociology

### Student Services

The Vice President of Student Services is responsible for all student services matters, including counseling and matriculation, student development, and success and special services.

- › Academic Advancement – An instructional program that introduces students to the college environment and strategies for success in college, as well as providing students with tools for peer tutoring.
- › Admissions and Records – Provides enrollment services, including registration, transcripts, and graduation.
- › California Work Opportunity and Responsibility to Kids (CalWORKs) and Workforce Development – Provides intensive instruction, counseling and support services such as childcare and work experience to students receiving Temporary Assistance for Needy Families (TANF) benefits.
- › Cooperative Agencies Resources for Education (CARE) – Provides supplemental financial support and services to qualified students who are single heads of household.
- › Counseling – Provides students counseling and career services.
- › Disabled Student Programs and Services (DSPS) – Ensures access to educational opportunities for students with visual, hearing, physical, learning, and mental disabilities.
- › Dreamers Resource Center (DRC) – Helps successfully transition dreamers into college by providing academic advising, counseling, referrals to student services programs and peer-to-peer advising in a welcoming environment where students can connect with campus and community resources.
- › Extended Opportunities Programs and Services (EOPS) – Provides supplemental services and financial aid to academically and financially at-risk students.
- › Financial Aid – Oversees application for and disbursement of federal and state financial aid.
- › First Year Experience (FYE) – Transitions first year students into college; provides a supporting and welcoming environment where first year students connect with student support services on campus to ensure student success.
- › Foster and Kinship Care Education - Provides quality education and support opportunities for caregivers of children and youth in out-of-home care so that these providers may meet the educational, emotional, behavioral, and developmental needs of children and youth.
- › Guardian Scholars Foster Youth Services – Offers support to current and former foster youth to achieve a college education, certificate, or transfer to a four-year college or university.
- › International Students – The College is approved by the Immigration and Naturalization Service to admit non-immigrant F-1 Visa international students.
- › Library Services – Affords students library and learning resource services.

## Planning Framework

# SBVC ORGANIZATIONAL STRUCTURE *(cont.)*

- › Library Technology – An Associate of Arts and certificate program for students who are interested in working as paraprofessionals in the library field.
- › Outreach and Recruitment – Disseminates SBVC information, stimulates SBVC prospective student enrollment growth through outreach and recruitment activities in service area high schools, maintains strong collaborative working partnerships with area high school personnel, establishes a positive image of SBVC and maintains strong working relationships with churches, community organizations, political agencies, and businesses.
- › Puente Program – Provides counseling, mentoring and writing components for successful statewide transfer program.
- › Success through Achievement and Retention (STAR) – Provides counseling and supplemental services.
- › Student Development - An instructional program that provides students with guidance on career opportunities and life planning, as well as an assessment of learning disabilities and support with English and mathematics learning.
- › Student Health Services – Provides first aid, urgent care, and mental health services.
- › Student Life – Promotes student engagement in clubs and co-curricular activities. Supports and guides the Associated Student Government.
- › Transfer Center – Provides information and guidance about transfer opportunities, as well as support for the transfer process.
- › Tumaini Program – Affords students a learning community designed to increase academic and personal success, and promote transfer to four-year colleges and universities.
- › Valley Bound Commitment (VBC) – Generously supported by the San Manuel Band of Mission Indians, aims to remove all economic barriers to the first year of college while providing critical guidance and support that is essential to continue striving towards individual educational and career goals.
- › Veterans – Provides veteran students with referral, certification and liaison support services.
- › Welcome Center – Provides students assistance with admissions, registration and advising in a one-stop location.
- › Youth Empowerment Strategies for Success/ Independent Living Program (YESS/ILP) – Offers life skills classes to eligible foster youth, referred to the College by the county.
- › Workability III (WAIll) – A collaborative program between SBVC and Department of Rehabilitation (DOR) aimed at assisting development of employability skills and confidence.



### Administrative Services

The Vice President of Administrative Services is responsible for the maintenance, operations, budgeting, safety compliance and business office. SBVC consists of the following administrative services:

- › Administrative Services – Responsible for budget development and management, facilities use, and reservations.
- › Bookstore – Provides students with new and used textbooks, supplies, and clothing.
- › Cafeteria & Snack Bar – Provides meals and food service to students, staff, and faculty.
- › Campus Business Office – Responsible for management of citations, parking decals, and the handling for college funds.
- › Capital Projects – Oversees and manages capital improvements/consultation and modernization.
- › Mail Room – Provides mail services to campus departments, faculty, staff, and students.
- › Maintenance and Operations – Responsible for maintenance and operations of facilities and grounds.
- › Switchboard – Provides callers with information and directs calls to campus offices and departments.
- › Campus Technology Services – Responsible for researching, specifying, acquiring, approving, installing, maintaining, and replacing all campus-owned computer and instructional technology resources.
- › Middle College High School (MCHS) – Responsible for the administration of MCHS operations. Serves as a liaison with San Bernardino Unified School District personnel.
- › Police Academies – Responsible for administration and supervision of Police Academy programs.
- › Research, Planning, and Institutional Effectiveness – Responsible for collecting, analyzing, and reporting data; coordinating campus planning; and professional development.

### Departments Reporting to the President

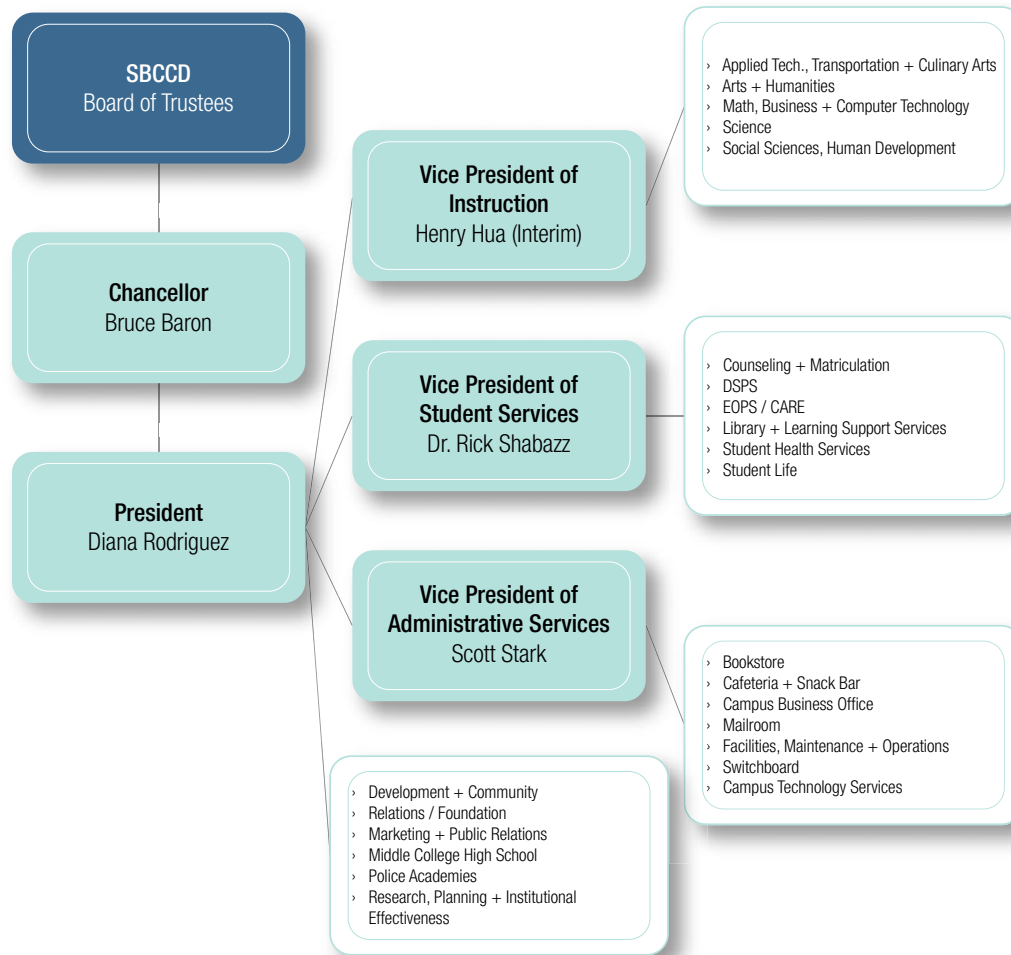
The following departments report directly to the SBVC President:

- › Development and Community Relations/ Foundation – Responsible for raising private donations and administering Foundation scholarships.
- › Marketing and Public Relations – Responsible for all college media relations, advertising, publications, website, and social media.

## Planning Framework

# SBVC ORGANIZATIONAL STRUCTURE *(cont.)*

EXHIBIT 1.01: COLLEGE ORGANIZATIONAL CHART



# SAN BERNARDINO VALLEY COLLEGE



# Planning Environment

## Internal Scan

The internal scan of San Bernardino Valley College (SBVC) is an opportunity to assess demographics and other characteristics of the student and employee population based on historical data. The data is utilized to identify and understand patterns to inform institutional planning decisions. Internal scan data presented in this plan will analyze student and employee data on an overall College level.

- › Student Enrollment + Demographics
- › Sections, WSCH, FTEF, Success + Retention
- › Employee Demographics
- › Internal Scan Findings

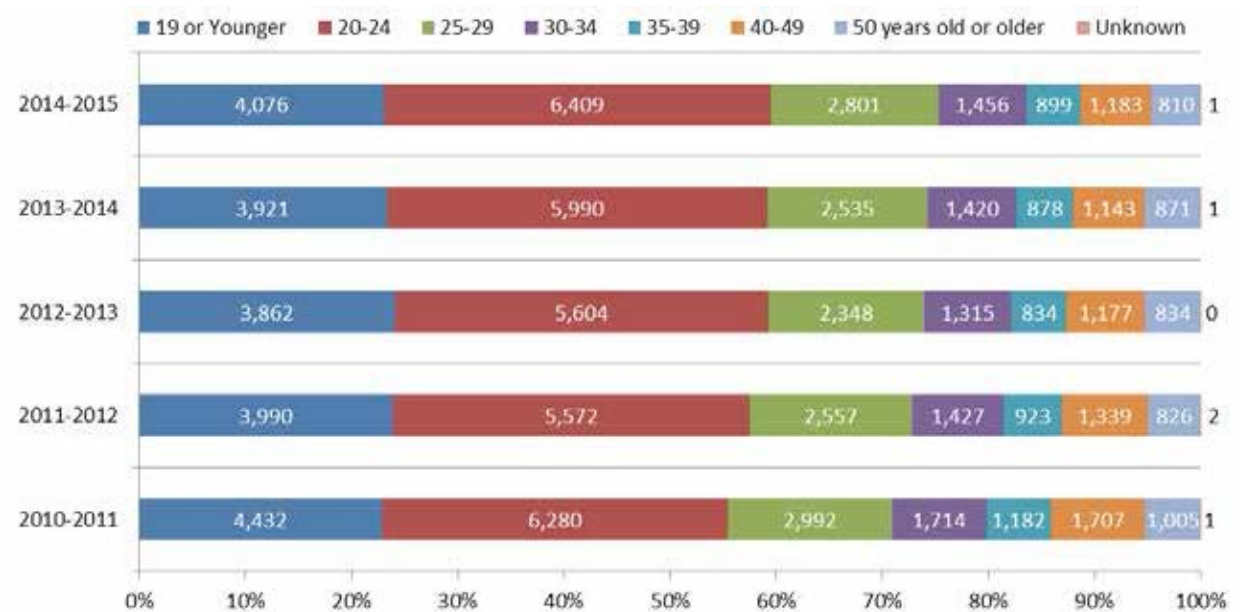
## Planning Environment - Internal Scan

# STUDENT DEMOGRAPHICS + ENROLLMENT

### Student Demographics

From 2010-11 to 2014-15, students in the 20-24 age group accounted for an average of 34.64% of unduplicated enrollment (5,971 students), while students age 19 and under accounted for an average of 23.52% of unduplicated enrollment (4,056 students), and students 25-29 years old accounted for an average of 15.31% of unduplicated enrollment (2,647 students). The only age group to increase in enrollment during the five academic years from 2010-11 to 2014-15 was students 20-24 years old (129 students). The age group that experienced the most decline during the same time period was students between 40-49 (-524 students).

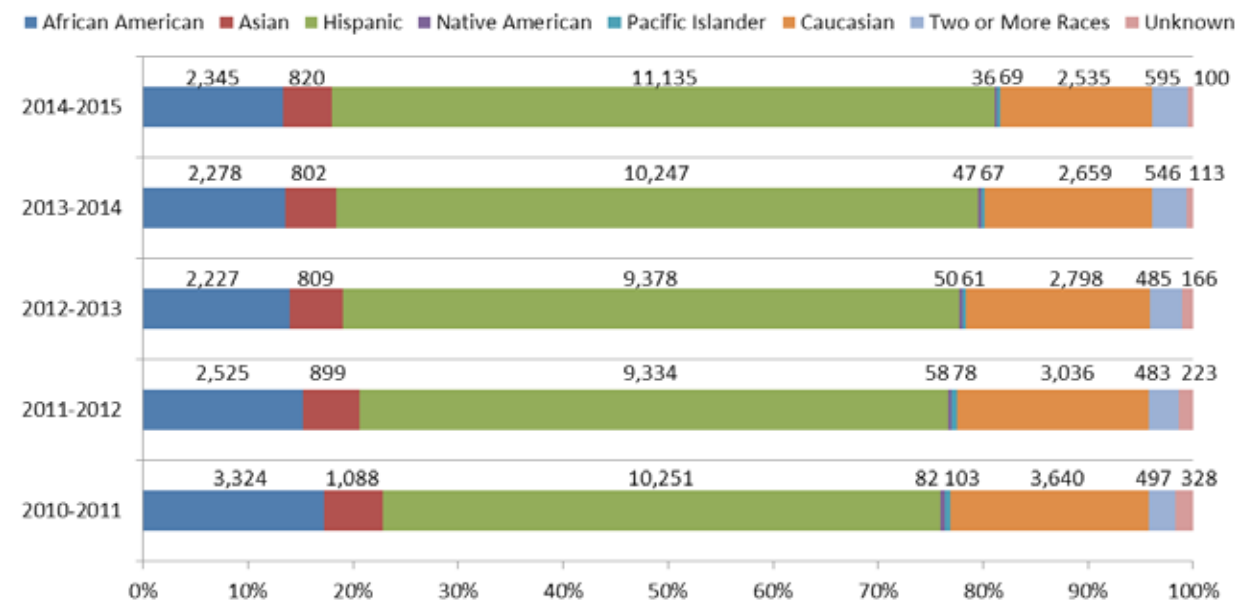
EXHIBIT 2.01: UNDUPLICATED ENROLLMENT BY AGE GROUP



Source: SBCCD Office of Institutional Effectiveness, Research & Planning

From 2010-11 to 2014-15, Hispanic students at SBVC increased from 53.1% of unduplicated enrollment to 63.1% of enrollment, an increase of 884 students. Conversely, Caucasian students decreased from 18.8% of students to 14.4% of unduplicated enrollment, a decrease of 1,105 students. African American students decreased as well, from 17.2% of students in 2010-11 to 13.3% of unduplicated enrollment in 2014-15, a decrease of 979 students. During the same time, Asian students decreased by 268 students, while students identifying themselves as two or more races increased by 98 students.

**EXHIBIT 2.02: UNDUPLICATED ENROLLMENT BY RACE/ETHNICITY**



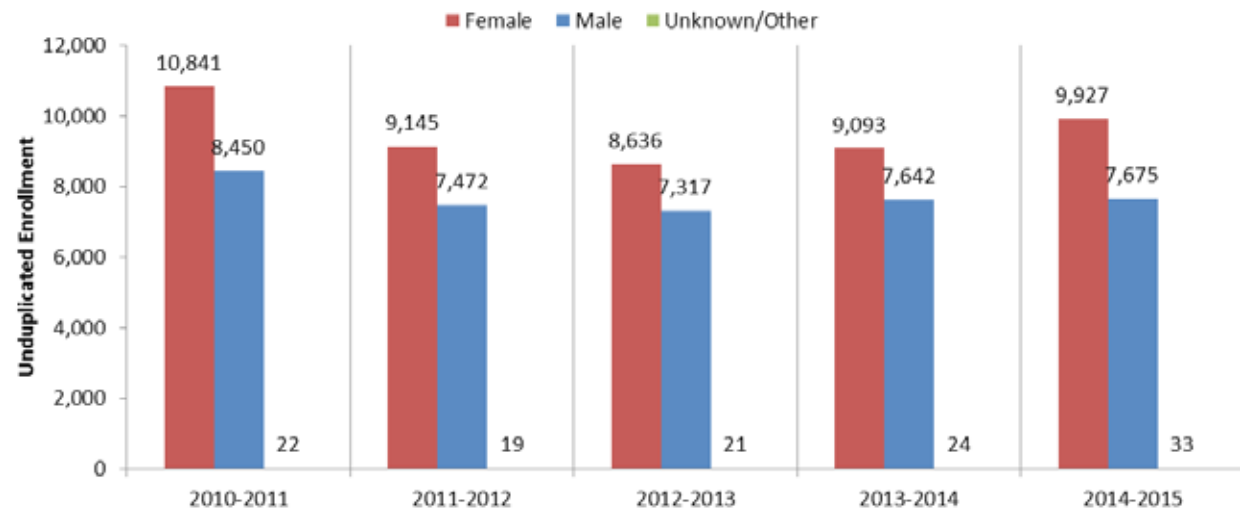
Source: SBCCD Office of Institutional Effectiveness, Research & Planning

## Planning Environment - Internal Scan

# STUDENT DEMOGRAPHICS + ENROLLMENT *(cont.)*

From 2010-11 to 2014-15, females accounted for an average of 55.1% of unduplicated enrollment (9,528 students), while males accounted for an average of 44.7% of unduplicated enrollment (7,711 students). During the same time, females decreased by 914 students (-8.4%), while males decreased by 775 students (-9.2%).

EXHIBIT 2.03: UNDUPLICATED ENROLLMENT BY GENDER



Source: SBCCD Office of Institutional Effectiveness, Research & Planning

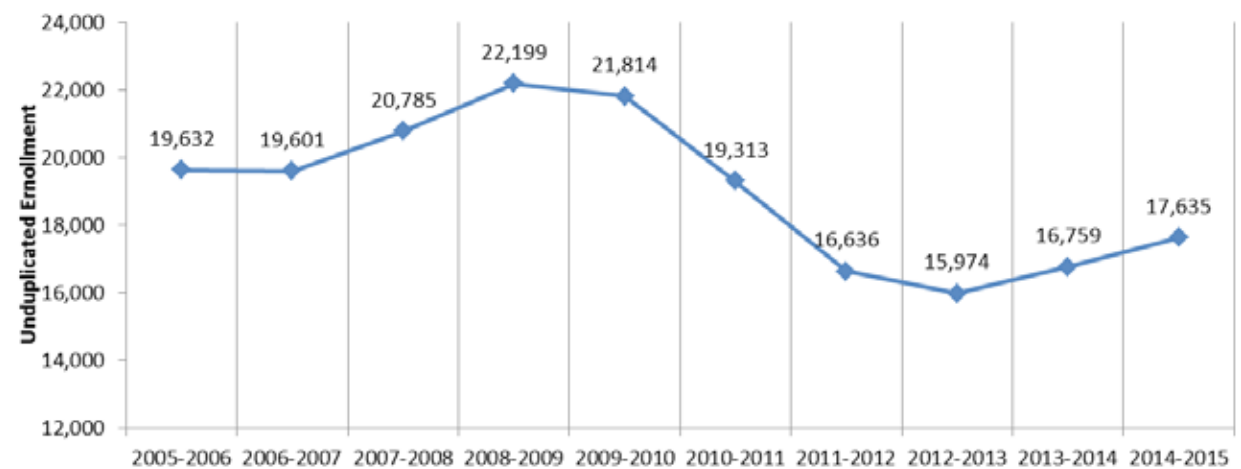


### Enrollment Trends

The most recent peak enrollment at SBVC was during the 2008-09 academic year, when the College enrolled 22,199 students. From 2008-09 to 2012-13 overall College unduplicated enrollment decreased by 6,225 students (-28.04%). The decline equates to a 7.9% average annual decrease in enrollment over four academic years. This decline occurred during a time when the statewide economy was experiencing the “Great Recession” and California Community Colleges were in the midst of budget cuts and annual budget uncertainty. More recently, the College has been experiencing an increase in enrollment. From 2012-13 to 2014-15, unduplicated enrollment increased by 1,661 students (10.4%). The increase is equivalent to a 5.07% average annual increase in enrollment over two academic years.

Overall, SBVC students account for approximately 70% of District-wide unduplicated enrollment.

EXHIBIT 2.04: HISTORICAL UNDUPLICATED ENROLLMENT



Source: SBCCD Office of Institutional Effectiveness, Research & Planning

## Planning Environment - Internal Scan

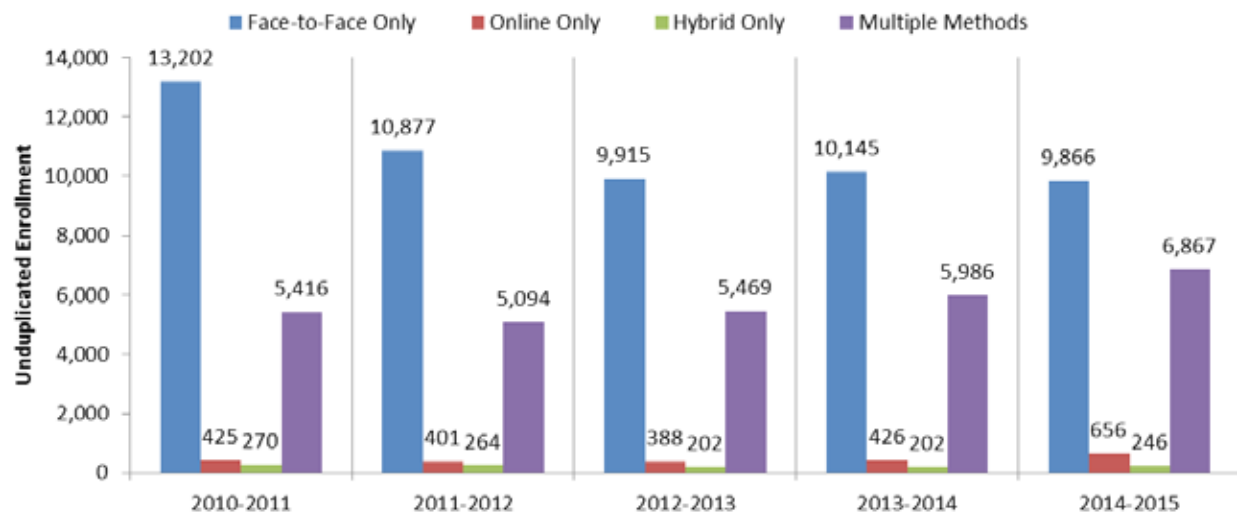
# STUDENT DEMOGRAPHICS + ENROLLMENT *(cont.)*

From 2010-11 to 2014-15, students who only enrolled in face-to-face courses at SBVC accounted for an average of 62.46% of unduplicated enrollment (10,801 students). During the same years, students who only enrolled in online classes accounted for an average of 2.66% of unduplicated enrollment (459 students) and students who only enrolled in hybrid courses accounted for an average of 1.37% of unduplicated enrollment (237 students). Students who took courses using multiple instructional methods accounted for an average of 33.51% of unduplicated enrollment (5,766 students).

From 2010-11 to 2014-15, enrollment in only face-to-face courses decreased by 3,336 students (-25.3%) and hybrid only enrollment decreased by 24 students (-8.9%). During the same time period, students who only enrolled in online classes increased by 231 students (54.4%) and enrollment in courses with multiple instructional methods increased by 1,451 students (26.8%).

The number and proportion of students enrolling in traditional face-to-face instruction only has been declining and shifting to students utilizing multiple instructional methods for their courses.

**EXHIBIT 2.05: UNDUPLICATED ENROLLMENT BY INSTRUCTIONAL METHOD**



Source: SBCCD Office of Institutional Effectiveness, Research & Planning

California (CA) residents accounted for 97.79% of SBVC unduplicated enrollment in 2010-11 (18,886 students); however, the proportion of California resident students fell to 94.95% by 2014-15 (16,745 students). This is a decline of 2,141 California resident students (-11.34%) over five academic years. The number and proportion of CA non-resident (AB 540) students has consistently increased from 2010-11 to 2014-15, increasing by 451 students (234.9%) over four academic years. AB 540 allowed students to qualify for an exemption from paying out-of-state tuition if they met certain criteria. From 2010-11 to 2014-15, foreign country resident enrollment at SBVC increased by 94 students (67.14%).

**TABLE 2.06: UNDUPLICATED ENROLLMENT BY RESIDENCY STATUS**

Residency Status	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
CA Resident	18,886	16,019	15,428	15,982	16,745
CA Nonresident	192	242	347	519	643
Out of State	8	4	3	2	0
Foreign Country	140	161	136	206	234
Unknown	87	210	60	50	13
<b>Total Unduplicated Enrollment</b>	<b>19,313</b>	<b>16,636</b>	<b>15,974</b>	<b>16,759</b>	<b>17,635</b>

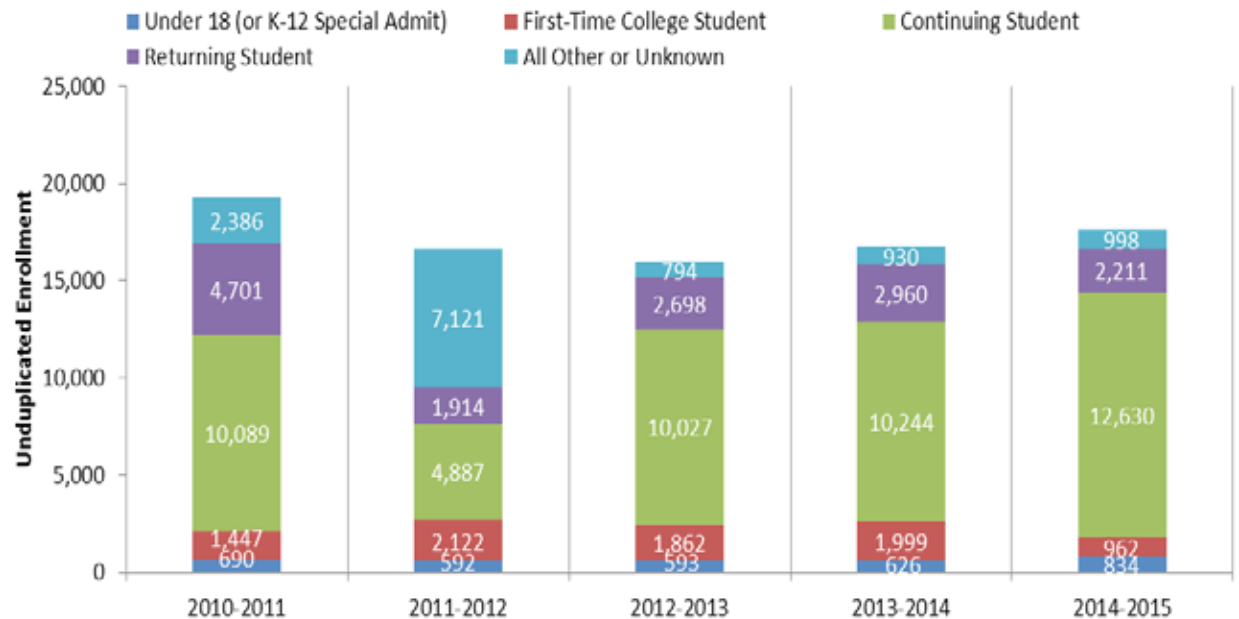
Source: SBCCD Office of Institutional Effectiveness, Research & Planning

## Planning Environment - Internal Scan

# STUDENT DEMOGRAPHICS + ENROLLMENT *(cont.)*

From 2012-13 to 2014-15, continuing students accounted for an average of 65.17% of unduplicated enrollment (10,967 students), while returning college students accounted for an average of 15.7% of unduplicated enrollment (2,623 students), and first-time college students accounted for an average of 9.68% of unduplicated enrollment (1,608 students). During the same three year period, unduplicated enrollment from continuing students increased by 2,603 students (26%) and under 18 (or K-12 special admit) students increased by 241 students (40.6%). From 2012-13 to 2014-15, unduplicated enrollment from first-time college students decreased by 900 students (-48.3%) and by 487 students (-18.1%) for returning college students.

EXHIBIT 2.07: UNDUPLICATED ENROLLMENT BY ENROLLMENT STATUS



Source: SBCCD Office of Institutional Effectiveness, Research & Planning

Colton High School has consistently been among the top two feeder high schools for SBVC, accounting for 134 first-time students in fall 2014. San Gorgonio High School was a top two feeder high school from fall 2010 to fall 2013, however dropped to the fifth ranked feeder high school in fall 2014. The College enrolls a high number of students who are home schooled. In fall 2014, 100 first-time college students at SBVC reported that they were home schooled (ranked third amongst feeder high schools).

**TABLE 2.08: ENROLLMENT FROM FALL 2014 TOP 10 FEEDER HIGH SCHOOLS**

Institution	Fall 2010		Fall 2011		Fall 2012		Fall 2013		Fall 2014	
	Rank	#	Rank	#	Rank	#	Rank	#	Rank	#
COLTON HIGH SCHOOL	2	123	2	87	2	104	1	135	1	134
PACIFIC HIGH	8	65	7	63	4	81	6	101	2	102
OTHER HOME SCHOOL	9	57	5	72	6	67	8	81	3	100
CAJON HIGH	3	97	3	85	3	81	3	115	4	99
SAN GORGONIO HIGH	1	126	1	89	1	107	2	129	5	94
ARROYO VALLEY HIGH	6	79	4	82	5	72	4	110	6	84
SAN BERNARDINO HIGH	7	76	9	55	8	51	7	93	7	79
RIALTO HIGH	4	93	8	62	7	65	5	105	8	74
EISENHOWER SENIOR HIGH	5	87	6	65	9	48	10	71	9	66
MIDDLE COLLEGE HIGH	17	29	19	18	14	31	9	73	10	54

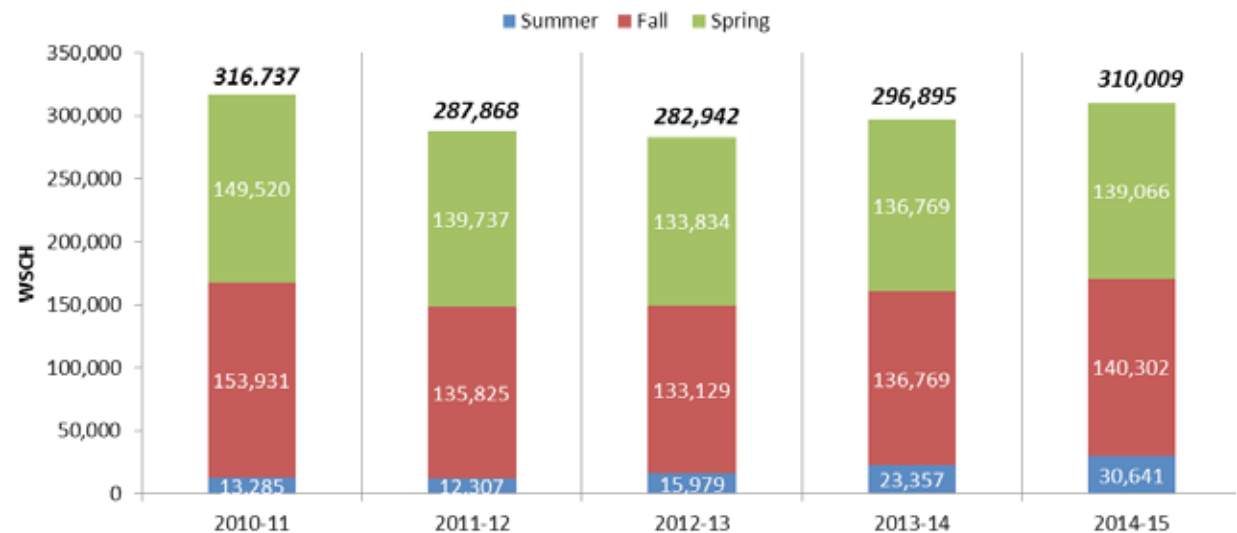
Source: SBCCD Office of Institutional Effectiveness, Research & Planning

## Planning Environment - Internal Scan

# SECTIONS, WSCH, FTEF, SUCCESS + RETENTION

Weekly Student Contact Hours (WSCH) is calculated by the number of hours courses meet during the semester, times the number of students in those courses. WSCH generation is considered a measure of revenue for the College. From 2010-11 to 2014-15, fall and spring terms each accounted for an average of 46.8% of total WSCH while summer accounted for an average of 6.4% of WSCH. During this period, overall WSCH at SBVC decreased by 2.1% (-6,727 WSCH). From 2010-11 to 2014-15, fall term WSCH decreased by 8.9% (-13,630 WSCH) and spring term WSCH decreased by 7% (-10,454 WSCH). However, summer WSCH increased by 130.6% (17,356 WSCH). Since 2012-13, SBVC's WSCH generation has increased by 9.6% (27,067 WSCH) over two academic years (2013-14 and 2014-15).

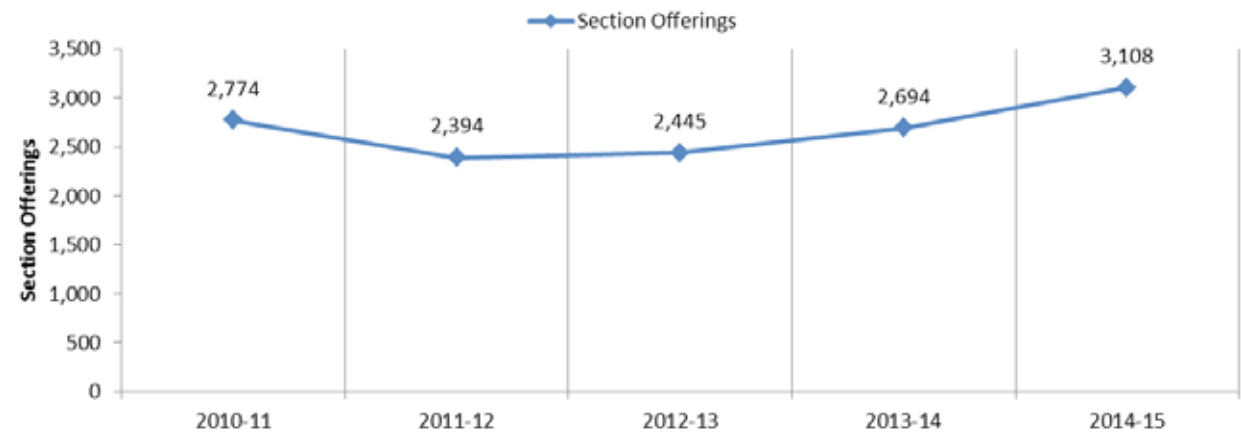
**EXHIBIT 2.09: WSCH GENERATION**



Source: SBCCD Office of Institutional Effectiveness, Research & Planning

From 2010-11 to 2014-15, the average annual growth rate of section offerings was 2.88% (equivalent to 83.5 sections added per year). Section offerings reached their most recent low during the 2011-12 academic year (2,394 sections). However, SBVC generated 120.2 WSCH per section offering in 2011-12. As section offerings have recently increased, WSCH generation has not increased at the same pace. From 2011-12 to 2014-15, course offerings increased by 714 sections (29.8%), while WSCH per section offered decreased to 99.7 WSCH/section.

**EXHIBIT 2.10: SECTION OFFERINGS**



Source: SBCCD Office of Institutional Effectiveness, Research & Planning

## Planning Environment - Internal Scan

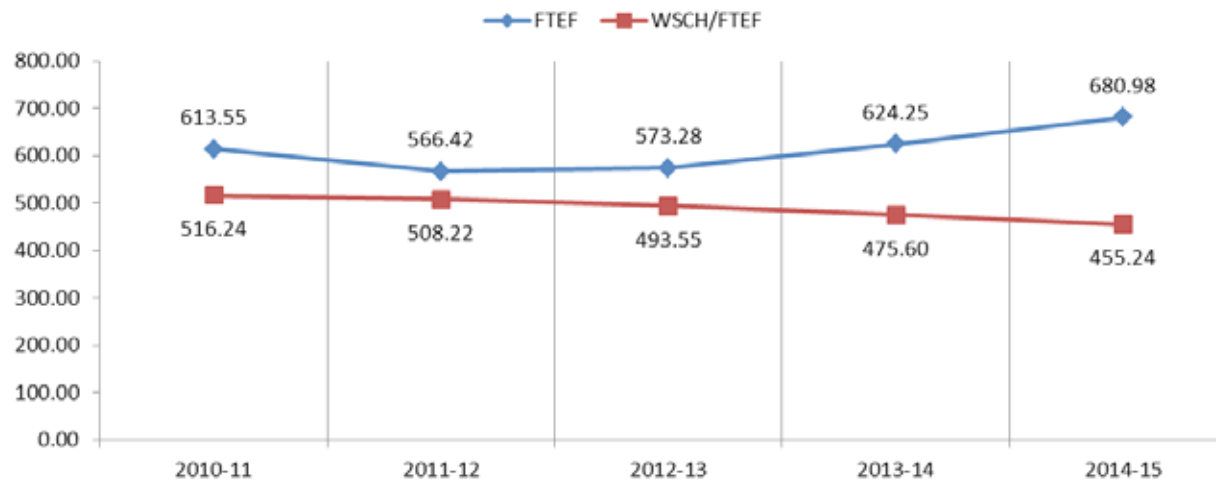
# SECTIONS, WSCH, FTEF, SUCCESS + RETENTION *(cont.)*

From 2010-11 to 2014-15, SBVC achieved its highest productivity in 2010-11 when the College had 613.55 full time equivalent faculty (FTEF) and produced 516.24 WSCH/FTEF. From 2011-12 to 2014-15, the College increased faculty by 114.56 FTEF (20.2%); however, productivity decreased by 52.99 WSCH/FTEF (-10.4%). The California community college recommended standard for productivity is 525 WSCH/FTEF, which represents the approximate point of financial break even for a College.

In 2014-15, 64.6% of SBVC students (11,392 students) stated that their educational goal was to obtain a bachelor's degree (BA/BS) upon transfer. During the same academic year, 18.8% of students (3,307 students) had an educational goal of obtaining an associate degree (AA/AS) or certificate without transfer, and 6% of students (1,054 students) identified their goals as related to job skills or maintaining a certification/license.

From 2010-11 to 2014-15, the proportion of students with the goal of obtaining a BA/BS upon transfer increased by 13.1% (1,440 students). During the same time, the proportion of students with goals related to job skills or maintaining a certification/license decreased by 5.4% (-1,140 students). It should also be noted that the number of students with an undecided goal decreased by 1,026 students during the same time period.

**EXHIBIT 2.11: PRODUCTIVITY (WSCH/FTEF)**



Source: SBCCD Office of Institutional Effectiveness, Research & Planning



TABLE 2.12: UNDUPLICATED ENROLLMENT BY EDUCATIONAL GOAL

Educational Goals	Academic Year									
	2010-2011		2011-2012		2012-2013		2013-2014		2014-2015	
	#	%	#	%	#	%	#	%	#	%
BA/BS Degree after Assoc.	8,309	43.0%	7,748	46.6%	7,989	50.0%	8,656	51.6%	9,652	54.7%
BA/BS degree w/o Assoc.	1,643	8.5%	1,494	9.0%	1,461	9.1%	1,525	9.1%	1,740	9.9%
Assoc. Degree w/o trans.	2,394	12.4%	2,068	12.4%	1,991	12.5%	2,191	13.1%	2,292	13.0%
Voc. Assoc. w/o transfer	272	1.4%	212	1.3%	224	1.4%	248	1.5%	256	1.5%
Voc. Certif. w/o transfer	838	4.3%	653	3.9%	633	4.0%	685	4.1%	759	4.3%
Career Exploration	212	1.1%	176	1.1%	135	0.8%	118	0.7%	95	0.5%
Acquire Job Skills	1,005	5.2%	780	4.7%	694	4.3%	632	3.8%	478	2.7%
Update Job Skills	561	2.9%	402	2.4%	332	2.1%	347	2.1%	303	1.7%
Maintain Cert/License	416	2.2%	306	1.8%	234	1.5%	179	1.1%	178	1.0%
Basic Skills	270	1.4%	204	1.2%	169	1.1%	162	1.0%	137	0.8%
H.S Diploma/GED	75	0.4%	36	0.2%	30	0.2%	34	0.2%	33	0.2%
Non-credit to credit	14	0.1%	16	0.1%	11	0.1%	7	0.04%	4	0.02%
4-yr student taking classes	945	4.9%	746	4.5%	651	4.1%	629	3.8%	584	3.3%
Educational Development	389	2.0%	284	1.7%	219	1.4%	210	1.3%	238	1.3%
Personal Interest	44	0.2%	21	0.1%	12	0.1%	10	0.1%	6	0.03%
Undecided Goal	1,903	9.9%	1,478	8.9%	1,182	7.4%	1,122	6.7%	877	5.0%
Uncollected/Unreported	23	0.1%	12	0.1%	7	0.04%	4	0.02%	2	0.01%
Not Applicable	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.01%
<b>Total</b>	<b>19,313</b>	<b>100%</b>	<b>16,636</b>	<b>100%</b>	<b>15,974</b>	<b>100%</b>	<b>16,759</b>	<b>100%</b>	<b>17,635</b>	<b>100%</b>

Source: SBCCD Office of Institutional Effectiveness, Research &amp; Planning

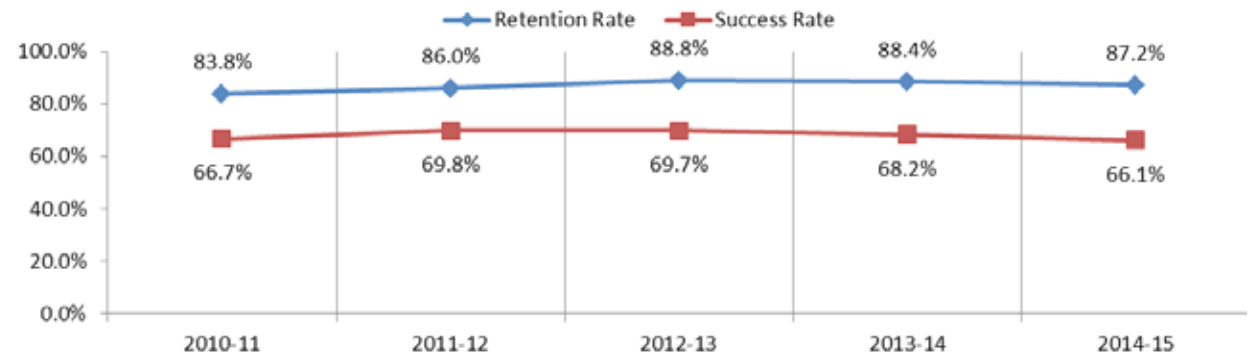
## Planning Environment - Internal Scan

# SECTIONS, WSCH, FTEF, SUCCESS + RETENTION *(cont.)*

### Student Success and Completion

From 2010-11 and 2014-15, SBVC experienced an average retention rate of 86.8% and an average success rate of 68.1%. The most recent peak retention rate at SBVC was 88.8% in 2012-13, while the most recent peak success rate was 69.8% in 2011-12. From 2012-13 to 2014-15, SBVC's retention rate declined at an average annual rate of 0.91% while success rate declined at an average annual rate of 2.65%. From 2010-11 to 2014-15, the average gap between success and retention rates was 18.7%. In fall 2014, statewide averages for success and retention rates were 69.01% and 86.3%, respectively.

EXHIBIT 2.13: SUCCESS AND RETENTION RATES



Source: SBCCD Office of Institutional Effectiveness, Research & Planning

The total number of degrees and certificates awarded at SBVC increased by 37.8% (364 awards) from 2010-11 to 2014-15. During the same time period, the number of AA degrees awarded increased by 51.8% (232 degrees), while the number of certificates requiring 30 to less than 60 semester units decreased by 9.6% (-20 certificates). From 2012-13 to 2014-15, the number of associate for transfer degrees (AA-T/AS-T) awarded increased by 134 awards over just two academic years. In 2014-15, associate for transfer degrees accounted for 15.9% of all associate degrees awarded (156 AA-T/AS-T awards of 981 total AA/AS awards).

**TABLE 2.14: DEGREES AND CERTIFICATES AWARDED**

Degree / Certificate Type	2010-11	2011-12	2012-13	2013-14	2014-15
Associate in Science for Transfer (A.S.-T) Degree	0	0	14	27	100
Associate in Arts for Transfer (A.A.-T) Degree	0	0	8	30	56
Associate of Science (A.S.) degree	150	150	142	180	145
Associate of Arts (A.A.) degree	448	576	652	746	680
Certificate requiring 60+ semester units	8	4	10	14	11
Certificate requiring 30 to < 60 semester units	208	178	229	214	188
Certificate requiring 18 to < 30 semester units	105	118	128	132	115
Certificate requiring 12 to < 18 units	0	0	2	0	0
Certificate requiring 6 to < 18 semester units	28	44	40	46	33
Other Credit Award, < 6 semester units	17	0	0	1	0
<b>Total Degrees / Certificates Awarded</b>	<b>964</b>	<b>1,070</b>	<b>1,225</b>	<b>1,390</b>	<b>1,328</b>

Source: California Community Colleges Chancellor's Office – Datamart

## Planning Environment - Internal Scan

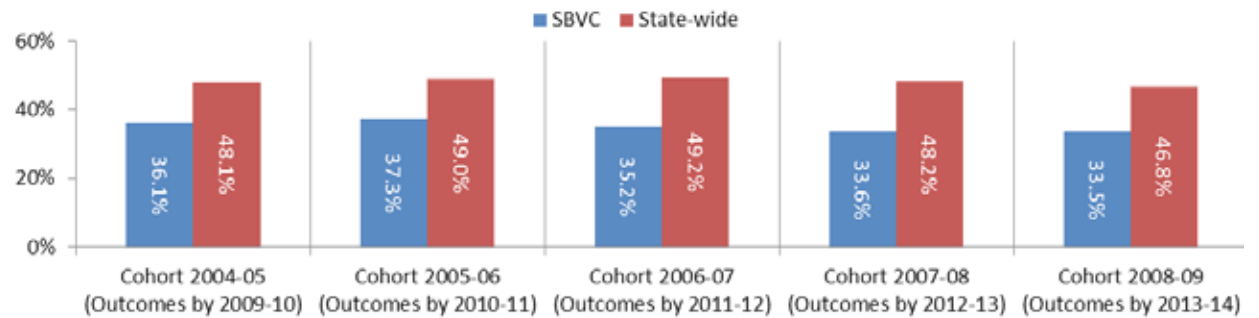
# SECTIONS, WSCH, FTEF, SUCCESS + RETENTION *(cont.)*

Completion rate or student progress and attainment rate (SPAR) may be defined as the percentage of first-time students with a minimum of 6 units earned who attempted any math or English in the first three years and achieved any of the following outcomes within six years of entry:

- › Earned an AA/AS or credit Certificate (Chancellor's Office approved)
- › Transfer to a four-year institution
- › Achieved "transfer prepared" status (successful completion of 60 UC/CSU transferrable units with a GPA  $\geq 2.0$ )

Student cohorts from 2004-05 to 2008-09, had an average completion rate of 35.1% within six years, while the statewide average completion rate was 48.3%. During the same time period, the average gap between SBVC's completion rate and the statewide average completion rate was 13.1%.

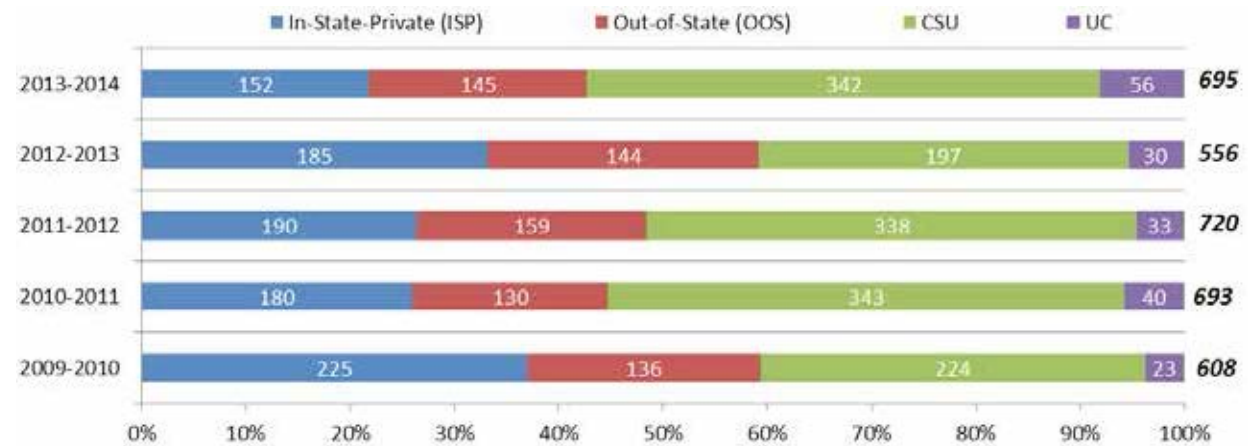
**EXHIBIT 2.15: COMPLETION/STUDENT PROGRESS + ATTAINMENT RATE (SPAR)**



Source: California Community Colleges Chancellor's Office – Datamart

SBVC transfer volume most recently peaked in 2011-12 with 720 total transfers. From 2009-10 to 2013-14, the average proportion of California State University (CSU) transfers was 43.6%, the average proportion of in-state private school transfers was 28.9%, the average proportion of out-of-state transfers was 22% and the average proportion of University of California (UC) transfers was 5.5%. During the same time period, total transfer volume at SBVC increased by 87 students (14.3%).

**EXHIBIT 2.16: TRANSFER VOLUME**



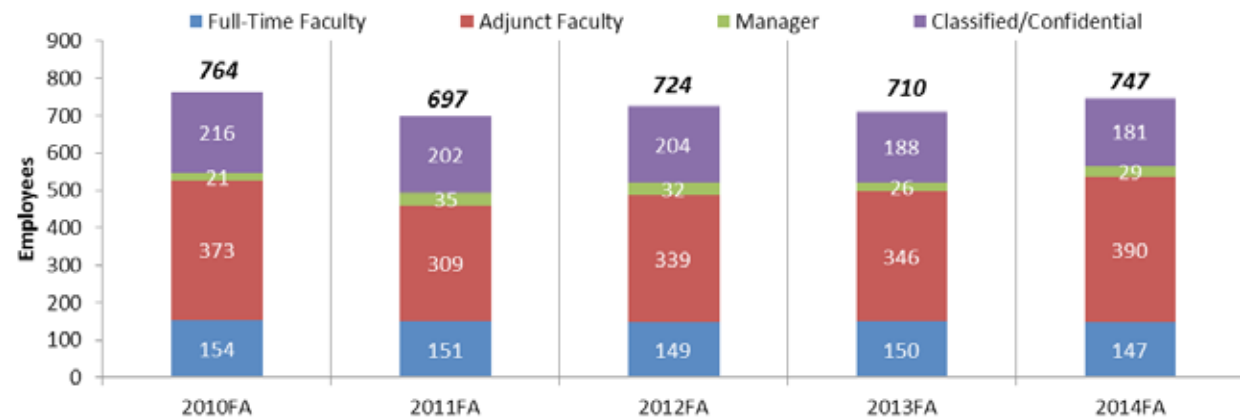
Source: California Community Colleges Chancellor's Office – Datamart

## Planning Environment - Internal Scan

# EMPLOYEE DEMOGRAPHICS

From fall 2010 to fall 2014, the average proportion of adjunct faculty at SBVC was 48.2%, classified/confidential employees accounted for an average of 27.2% of all employees, the average proportion of full-time faculty was 20.6% and managers accounted for an average of 3.9% of all employees. Full-time faculty decreased by 4.5% (-7 employees) over the same five fall terms, while adjunct faculty increased by 4.6% (17 employees), classified/confidential employees decreased by 16.2% (35 employees) and managers increased by 38.1% (8 employees). From fall 2010 to fall 2014, the total number of employees at SBVC decreased by 2.2% (-17 employees). In fall 2014, 27.4% of the College's faculty were full-time employees (147 full-time faculty of 537 total faculty).

EXHIBIT 2.17: UNDUPLICATED EMPLOYEES BY TYPE (FALL TERM)



Source: SBCCD Office of Institutional Effectiveness, Research & Planning

From fall 2010 to fall 2014, employees age 18-34 years old decreased by 24.1% (-27 employees) and employees age 50-54 years old decreased by 19% (-23 employees). During the same time, employees age 70 or older increased by 80% (16 employees). In fall 2014, 216 employees were within the 50-59 age group (28.9%) and 176 employees were age 60 or older (23.6%). Employee data by age group suggests that it may be reasonable to expect over half of the College's employees to retire within the next 15 years.

**EXHIBIT 2.18: UNDUPLICATED EMPLOYEES BY AGE (START OF FALL TERM)**



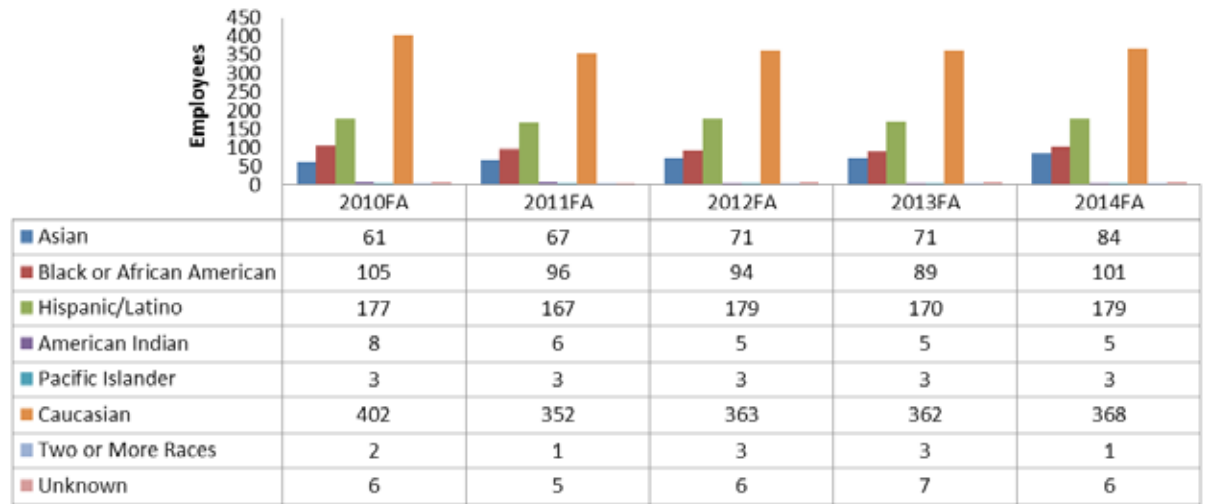
Source: SBCCD Office of Institutional Effectiveness, Research & Planning

## Planning Environment - Internal Scan

# EMPLOYEE DEMOGRAPHICS *(cont.)*

From fall 2010 to fall 2014, the number of Asian employees at SBVC increased by 37.7% (23 employees), while the number of Caucasian employees decreased by 8.5% (-34 employees). During the same time period, Caucasians accounted for an average of 50.7% of employees, Hispanics accounted for an average of 23.9% of employees and African Americans accounted for an average of 13.3% of employees.

**EXHIBIT 2.19: UNDUPLICATED EMPLOYEES BY RACE/ETHNICITY (FALL TERM)**

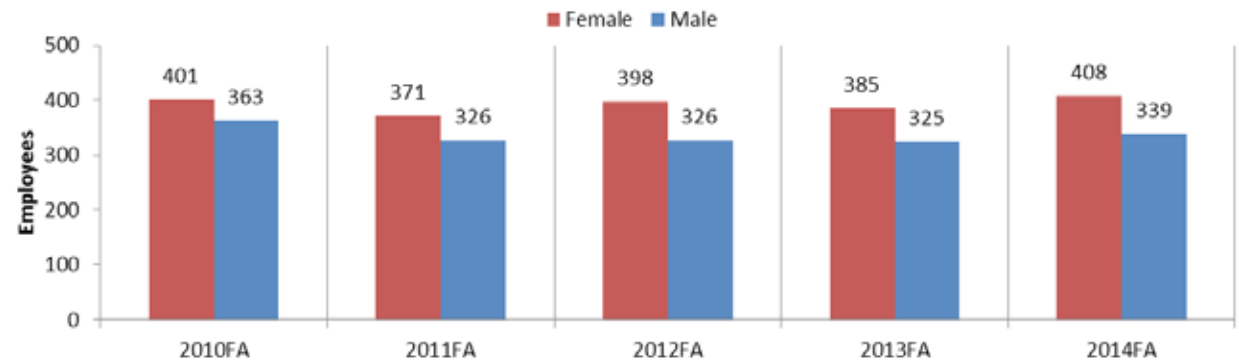


Source: SBCCD Office of Institutional Effectiveness, Research & Planning



From fall 2010 to fall 2014, females accounted for an average of 53.9% of SBVC employees, while males accounted for an average of 46.1% of employees. During the same time, female employees increased by 1.7% (7 persons), while males decreased by 6.6% (24 employees).

**EXHIBIT 2.20: UNDUPLICATED EMPLOYEES BY GENDER (FALL TERM)**



Source: SBCCD Office of Institutional Effectiveness, Research & Planning

## Planning Environment - Internal Scan

# INTERNAL SCAN FINDINGS

Analysis of data regarding the internal college profile at SBVC provides insight for making informed planning decisions. The following findings are derived from the internal scan data presented in this chapter of the EMP:

### Student Demographics

- › Students 20-24 years old is the largest age group within the College (6,409 students in 2014-15) and the only student age group to increase in enrollment from 2010-11 to 2014-15. The student age group that experienced the most decline during the same period were those 40-49 years old (-524 students).
- › Hispanic students accounted for 63.1% of College enrollment in 2014-15 (11,135 students). From 2010-11 to 2014-15, the number of Caucasian students decreased by 1,105 students (-30.4%) and the number of African American students decreased by 979 students (-29.5%).
- › Female students accounted for 56.3% of College enrollment in 2014-15 (9,927 students). From 2010-11 to 2014-15, the number of female students decreased by 914 students (-8.4%), while the number of male students declined by 775 students (-9.2%).

### Enrollment Trends

- › From 2008-09 to 2012-13, overall College enrollment decreased by 6,225 students (-28.04%). However, from 2013-14 to 2014-15, SBVC's enrollment increased by 1,661 students (10.4%). In 2014-15, the College was still 4,564 students shy of its most recent peak enrollment (22,199 students in 2008-09 compared to 17,635 students in 2014-15).
- › The number and proportion of students enrolling in traditional face-to-face instruction only has been declining and shifting to students utilizing multiple instructional methods. In 2010-11, 70.9% of students at SBVC enrolled in traditional face-to-face courses (13,202 students). By 2014-15, 59% of students at SBVC enrolled in traditional face-to-face courses (9,866 students).
- › Although California residents account for over 95% of students, California resident students declined by 2,141 students (-11.34%) from 2010-11 to 2014-15. During the same time, California non-residents increased by 451 students (234.9%) and foreign country residents increased by 94 students (67.1%).
- › Continuing students account for the majority of SBVC enrollment (12,630 students or 71.6% of unduplicated enrollment in 2014-15). First-time college students only accounted for 5.46% of unduplicated enrollment in 2014-15 (962 students), a decrease of 900 students from 2012-13 to 2014-15. During the same time, under age 18 or K-12 special admit students increased by 241 students (40.6%).
- › Colton High School has consistently been among to top two feeder high schools for SBVC, accounting for 134 first-time students in fall 2014. San Geronimo High School was a top two feeder high school from fall 2010 to fall 2013, however dropped to the 5th ranked feeder high school in fall 2014. Pacific High School went from the 8th ranked feeder high school for SBVC in fall 2010 to the 2nd ranked feeder high school in fall 2014.
- › From 2010-11 to 2014-15:
  - › Total WSCH generation decreased by 6,727 WSCH (-2.1%)
  - › Total unduplicated enrollment decreased by 1,678 students (-8.7%)
  - › Total section offerings increased by 334 sections (12%)

- › Total FTEF increased by 67.43 FTEF (11%)
- › Total productivity decreased by 61 WSCH/FTEF (11.8%)
- › In 2011-12, the College generated 120.2 WSCH per section. However, in 2014-15 the College generated 99.7 WSCH per section.
- › In 2010-11, the College had 613.55 FTEF that reached a productivity level of 516.24 WSCH/FTEF. However, in 2014-15 the College had 680.98 FTEF that reached a productivity level of 455.24 WSCH/FTEF.
- › The majority of students at SBVC stated an educational goal of obtaining a BA/BS upon transfer to a four-year institution (11,392 students or 64.6% of unduplicated enrollment in 2014-15). From 2010-11 to 2014-15, the proportion of students with the goal of obtaining a BA/BS upon transfer increased by 13.1% (1,440 students).

### Student Success and Completion

- › From 2010-11 to 2014-15, SBVC experienced an average retention rate of 86.8% and an average success rate of 68.1%. In 2014-

15, the College's retention rate was 87.2% (statewide retention rate for fall 2014 was 86.3%). In 2014-15, the College's success rate was 66.1% (statewide success rate for fall 2014 was 69.01%).

- › From 2010-11 to 2014-15, total degrees and certificates awarded increased by 364 awards (37.8%). The most significant growth was experienced in AA degrees, which increased by 232 awards (51.8%) during the same time period.
- › Student cohorts from 2004-05 to 2008-09, had an average completion rate of 35.1% within 6 years, while the statewide average completion rate was 48.3%.
- › From 2009-10 to 2013-14, the average transfer volume at SBVC was 654 students. During the same period, the average proportion of CSU transfers was 43.6%, while the average proportion of in-state private school transfers was 28.9%. Approximately 22% of transfers went to out-of-state schools, and 5.5% of transfer students enrolled in UC schools.

### Employee Demographics

- › In fall 2014, adjunct faculty accounted for 52.2% of all employees (390 persons), while full-time faculty accounted for 19.7% of all employees (147 persons). Approximately 27.4% of the College's faculty were full-time employees (147 full-time employees of 537 total faculty members).
- › In fall 2014, 216 employees were within the 50-59 age group (28.9% of all employees) and 176 employees were age 60 or older (23.6% of all employees). Data suggests that it is reasonable to expect up to over half of the College's employees to retire within the next 15 years.
- › In fall 2014, 49.3% of SBVC employees were Caucasian (368 persons), 24% of employees were Hispanic (179 persons), 13.5% of employees were African American (101 persons) and 11.2% were Asian (84 persons). From fall 2010 to fall 2014, Caucasian employees decreased by 34 persons (-8.5%), while Asian employees increased by 23 persons (37.7%).

## Planning Environment - Internal Scan

# INTERNAL SCAN FINDINGS *(cont.)*

- › In fall 2014, 54.6% of the College's employees were female (408 persons), while 45.4% of employees were male (339 persons). From fall 2010 to fall 2014, the number of male employees decreased by 24 persons (-6.6%) while females increased by 7 employees (1.7%).

# SAN BERNARDINO VALLEY COLLEGE



# Planning Environment

## External Scan

The intent of the external scan of San Bernardino Valley Community College (SBVC) is to assess demographics and other characteristics of the regional community that the College services. The external scan is used to identify and understand patterns and trends within the area and informs planning directions. The analysis presented in this plan is based on service area (ZIP codes) and region (Riverside and San Bernardino Counties). Economic Modeling Specialists International (EMSI), Census 2010 American Community Survey 5-Year Estimates (2010-2014), and California Department of Education data was utilized to analyze the community that the College serves.

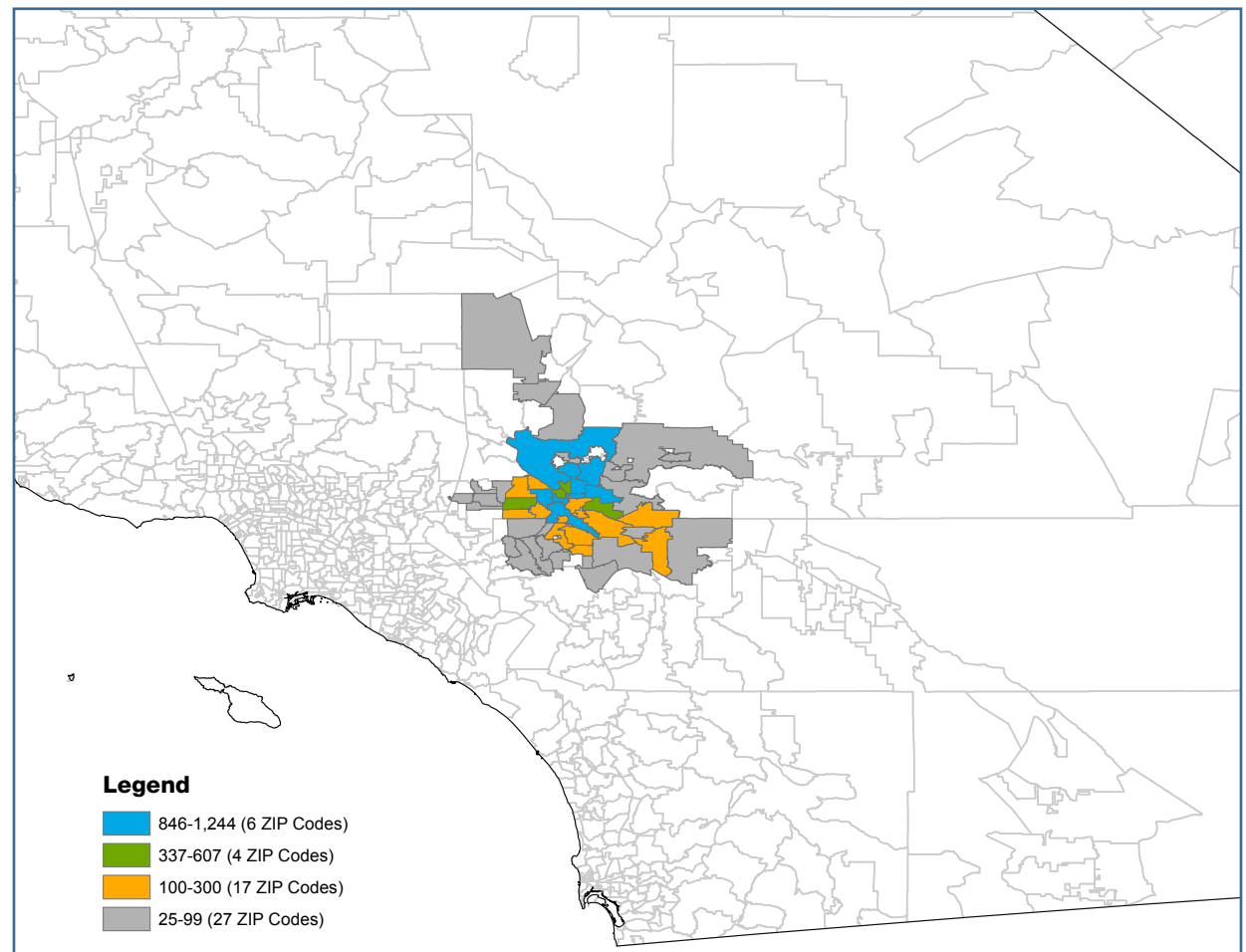
- › San Bernardino Valley Community College Service Area
- › Population Estimates and Projections
- › Educational Attainment
- › Household Size, Income, + Property
- › Service Area High Schools
- › Neighborhood Higher Education Institutions
- › Regional + Neighborhood Context Summary

## Planning Environment - External Scan

# SAN BERNARDINO VALLEY COMMUNITY COLLEGE SERVICE AREA

The San Bernardino Valley Community College service area includes 20 Cities/areas: Rancho Cucamonga, Beaumont, Grand Terrace, Bloomington, Calimesa, Colton, Crestline, Fontana, Highland, Lake Arrowhead, Loma Linda, Lytle Creek, Mentone, Redlands, Rialto, Running Springs, Yucaipa, San Bernardino, Riverside and Moreno Valley. Regionally, SBVC serves the counties of San Bernardino and Riverside.

**EXHIBIT 3.01: SBVC SERVICE AREA MAP**





## Planning Environment - External Scan

# POPULATION ESTIMATES + PROJECTIONS

Population data provides an opportunity to understand the make-up of the population SBVC primarily serves relative to the region and state. From 2005 to 2015, the service area population grew by 14.7% (181,878 persons), while the region's total population grew by 17.3% (669,696 persons). By comparison, the state's population grew by 9.1%.

The projected population growth of the service area and region is expected to diminish over the next 10 years. From 2015 to 2025, the service area total population is projected to grow by 5.15% (73,120 persons) and the region's total population is projected to grow by 5.55%

(252,316 persons). Both of these increases exceed the state's projected growth during the same time period, which is expected to grow by 5.08% (1,987,346 persons).

In 2015, the proportion of the service area population age 19 and under was 31.3% (444,130 persons). This is more than the regional proportion of 29.8% (1,353,226 persons) and statewide proportion of 26.22% (10,248,399 persons) during the same year.

Between 2015 and 2025, population projections suggest that the proportion of those in the 19 and under

age group will increase by 1.14% within the service area (5,067 persons) and 1.45% in the region (19,651 persons), which is less than the projected 2.07% increase projected for the proportion of the statewide population in the same age group (212,632 persons).

The 20-24 age group may be considered SBVC's core age demographic. The 20-24 age group accounted for 8.85% of the service area population in 2015 (125,582 persons). The proportion of the service area population in the 20-24 age group was slightly greater than the regional proportion of 8.28% (376,421 persons) and the State proportion of 8% (3,122,810 persons).

**TABLE 3.02: TOTAL POPULATION ESTIMATES + PROJECTIONS**

Area	2010	2011	2012	2013	2014	2015	2020	2025
Service Area	1,330,288	1,349,005	1,363,020	1,381,744	1,400,318	1,418,898	1,478,258	1,492,018
Regional	4,243,556	4,302,146	4,350,609	4,416,590	4,481,004	4,545,323	4,755,883	4,797,639
California	37,335,221	37,687,015	38,047,900	38,395,867	38,757,231	39,090,228	40,251,903	41,077,574

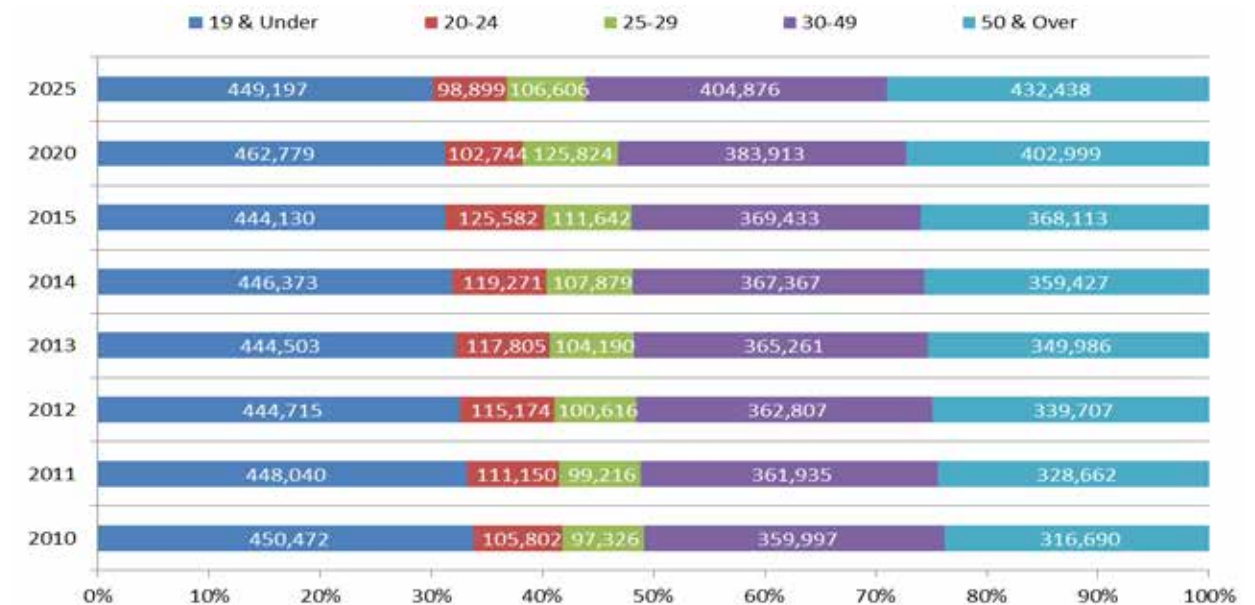
Source: EMSI

## Planning Environment - External Scan

# POPULATION ESTIMATES + PROJECTIONS *(cont.)*

Between 2015 and 2025, population projections suggest that the proportion of those in the 20-24 age group will decrease by 21.25% (-26,683 persons) in the service area population and 20.23% (-76,153 persons) in the regional population. These are larger decreases than the projected 16.75% (-522,916 persons) decrease expected for the proportion of the statewide population in the same age group.

EXHIBIT 3.03: SERVICE AREA POPULATION BY AGE GROUP



Source: EMSI

From 2015 to 2025, population projections indicate that the proportion of those in the 50 and over age group will increase by 17.47% (64,325 persons) within the service area and 16.55% (216,825 persons) in the region. The projected increase for that same age group in the state is 15.38% (1,884,696 persons).

**EXHIBIT 3.04: REGIONAL AREA POPULATION BY AGE GROUP**



Source: EMSI

## Planning Environment - External Scan

# POPULATION ESTIMATES + PROJECTIONS *(cont.)*

The service area is estimated to have seen an increase in the proportion of Hispanics between 2010 and 2015 by approximately 11.81% (86,911 persons). By 2025, the proportion of Hispanics in the service area is projected to reach 60.31% of the total population (899,783 persons) and 52.51% of the total regional population (2,519,083 persons). Hispanics are projected to make-up 40.3% of the state population by the year 2025 (16,555,395 persons).

Between 2010 and 2015 the service area is estimated to have seen a decrease of Caucasians by approximately 4.44% (-16,313 persons). Caucasians in the regional population are estimated to have decreased by approximately 2.2% in the same time period (-34,730 persons). Caucasians in the statewide population are estimated to have decreased by 1.5% between 2010 and 2015 (-231,334 persons).

Between 2015 and 2025, the number of Caucasians in the service area is projected to decrease by 5.91% (-20,744 persons) and 3.77% in the region (-57,336 persons). The number of Caucasians in the state is projected to decrease by 0.77% in the same time period (-113,913 persons).

**EXHIBIT 3.05: SERVICE AREA POPULATION BY RACE/ETHNICITY**

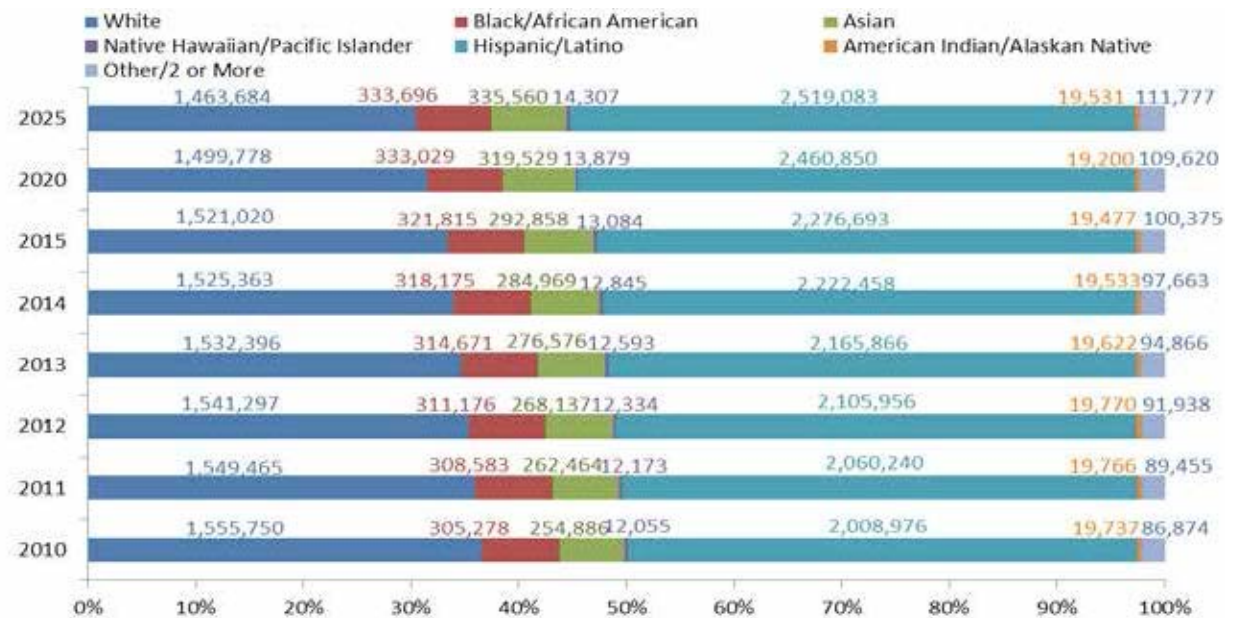


Source: EMSI

In 2015, the proportion of African Americans within the service area population was 9.3% (132,485 persons). By 2025 the proportion of African Americans is projected to make up 9.05% of the service area population (135,039 persons) and 6.96% of the regional population (333,696 persons), as compared to the projected 5.5% of the state population (2,259,304 persons).

In 2015, the proportion of Asians in the service area population was 5.79% (82,113 persons). By 2025, the proportion of Asians in the service area population is projected to be 6.27% (93,482 persons) and 6.99% in the region (335,560 persons), as compared to 14.85% of the state (6,101,547 persons).

**EXHIBIT 3.06: REGIONAL POPULATION BY RACE/ETHNICITY**



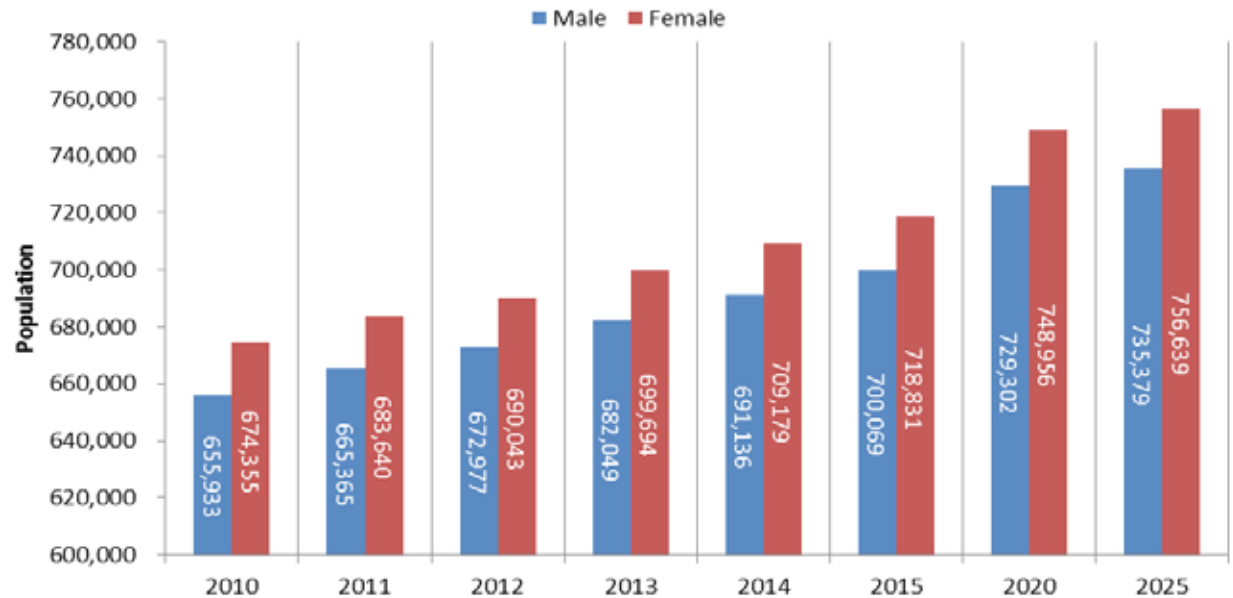
Source: EMSI

## Planning Environment - External Scan

# POPULATION ESTIMATES + PROJECTIONS *(cont.)*

Between 2010 and 2015, the service area male population proportion stayed relatively steady at 49.3% of the population. In the same time period, the regional male population proportion increased marginally by 0.1%. The state's male population proportion increased by an even smaller amount of 0.01% during the same time period.

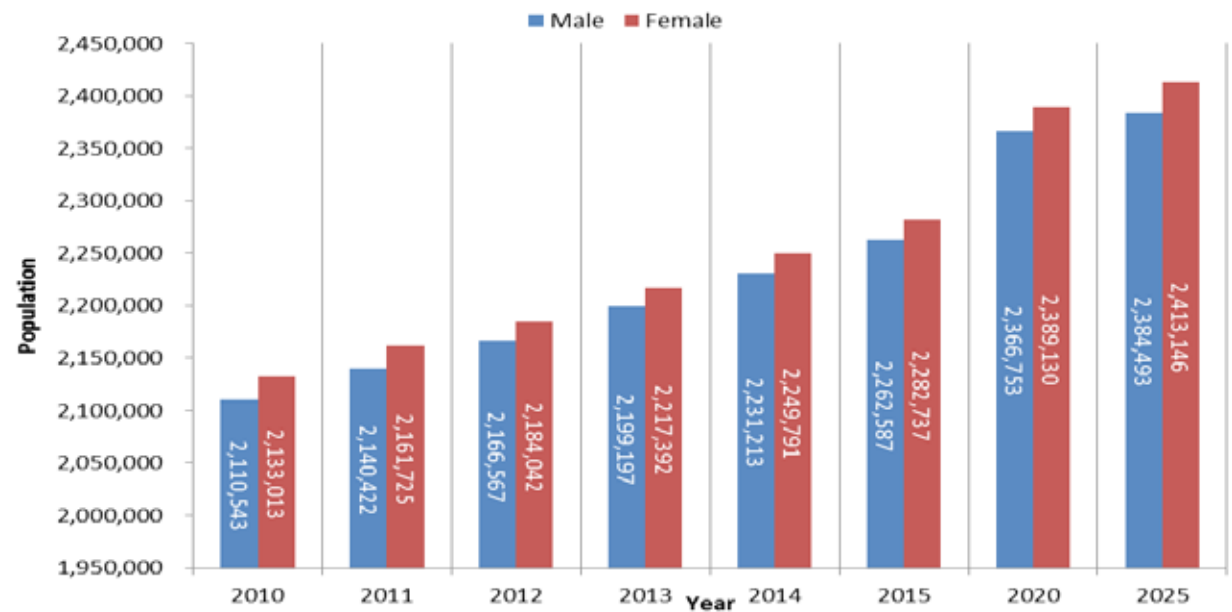
**EXHIBIT 3.07: SERVICE AREA POPULATION BY GENDER**



Source: EMSI

Between 2015 and 2025, the service area male population is projected to increase by 5.04% (35,310 persons) and the female population is projected to increase by 5.4% (37,808 persons). The number of males in the region is projected to increase by 5.39% (121,906 persons) and females are expected to increase by 5.71% (130,409 persons). The number of males within the statewide population is projected to increase by 4.8% (931,711 persons) and 5.4% for females (1,055,635 persons) during the same time period.

**EXHIBIT 3.08: REGIONAL POPULATION BY GENDER**



Source: EMSI



## Planning Environment - External Scan

# EDUCATIONAL ATTAINMENT

College service area, regional, and state data regarding educational attainment provide insight into the academic achievement background of the population and the relationship between income and education levels.

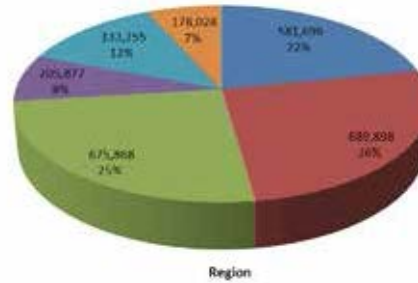
The proportion of service area residents age 25 and over with no high school diploma is 25.01% (208,590 persons), which is higher than the regional proportion of 21.83% (581,696 persons). Both the service area and regional proportion of population with no high school diploma exceeds the statewide proportion of 19.28%.

The proportion of service area residents age 25 and over with at most a high school diploma or equivalent is 25.68% (214,198 persons), which is fractionally less than the regional proportion of 25.89% (689,898 persons). The proportion of the population with at most a high school diploma or equivalent in the service area and region exceeds the state's proportion of 20.91%. Slightly more than half of the population in the service area (50.68%) and slightly less than half of the regional population (47.72%) age 25 and over do not have any higher education experience. The statewide average population age 25 and over without any higher education experience is 40.18%.

The largest discrepancy between service area and regional residents age 25 and over with college experience when compared to state levels of educational attainment, is for those with a Bachelor's degree. The proportion of the service area population with a BA/BS degree is 11.13%, which is approximately 1.73 times less than that of the state's 19.2%. The proportion of the regional population with a BA/BS degree (12.51%) is slightly higher than the service area proportion. Approximately 10.9% of the state population has a Graduate or Professional degree, while the service area proportion is 6.5% (6.68% regionally).

### EXHIBIT 3.09: EDUCATIONAL ATTAINMENT (FIVE-YEAR ESTIMATES)

■ No H.S. Diploma ■ H.S. Diploma or Equiv. ■ Some College ■ AA/AS ■ BA/BS ■ Graduate or Prof.



Source: EMSI; Census 2010, ACS 5-Year Estimates

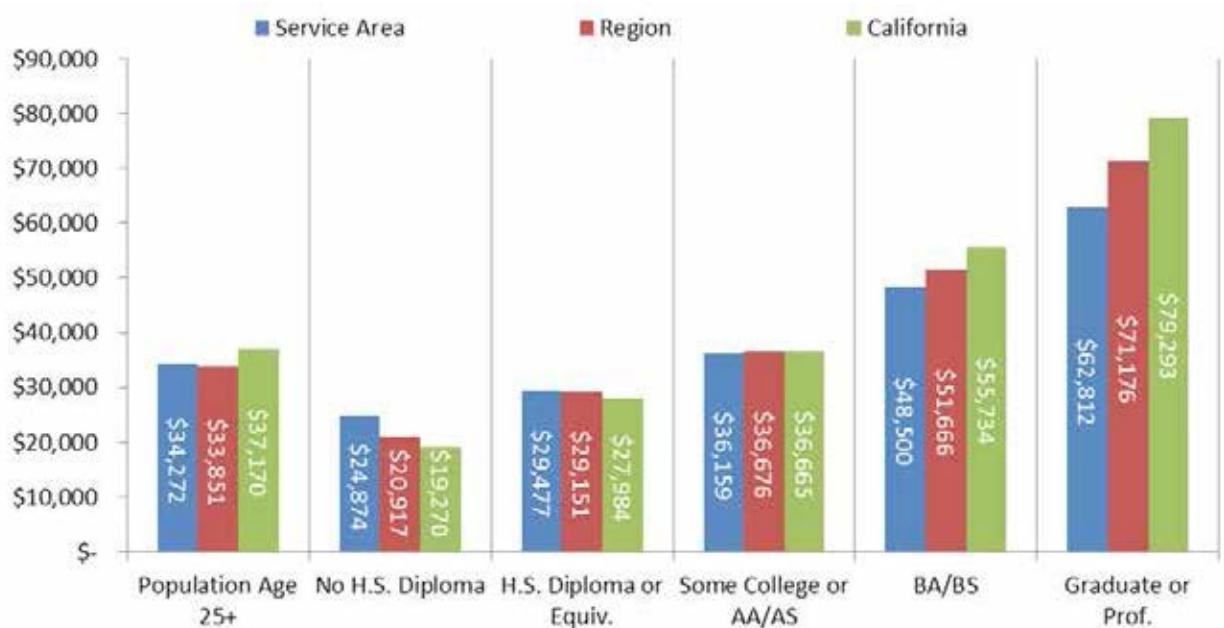


The average median income of the population age 25 and over in the service area (\$34,272) and region (\$33,851) is slightly less than the state median of \$37,170.

For service area residents age 25 and over, the average median income of those with at least some college experience or an AA/AS degree increases by \$6,682 when compared to the income of those with only a high school diploma or equivalent. Moreover, the average median income for service area residents with a BA/BS degree increases by \$12,341 when compared to those with only some college experience or AA/AS degree, and increases by \$19,023 when compared to those with only a high school diploma or equivalent.

Service area and regional residents with a high school diploma or equivalent, or less, have a median income that is greater than the statewide average. Conversely, service area and regional residents with a BA/BS degree or higher have a median income that is less than the statewide average. This dynamic may be correlated to the make-up and availability of blue collar jobs in the area.

**EXHIBIT 3.10: MEDIAN INCOME BY EDUCATIONAL ATTAINMENT (5- YEAR ESTIMATES)**



Source: Census 2010, ACS 5-Year Estimates

## Planning Environment - External Scan

# HOUSEHOLD SIZE, INCOME, + PROPERTY

The service area average household size (3.07 persons) is slightly higher than that of the region (2.92 persons). Both the service area and regional average household size are greater than the state's average of 2.76 persons. Median household income within the service area is \$1,552.06 more than in the region (\$55,346) and is \$4,590.94 less than the state median (\$61,489). Average per capita income in the service area is \$510.70 less than in the region (\$22,522) and is \$7,894.70 less than the statewide per capita income (\$29,906).

The poverty rate of families within the service area (16.05%) is 1.14 times greater than within the region (14.14%). However, both the service area and regional poverty rate of families are greater than the state's average of 12.3%.

**TABLE 3.11: HOUSEHOLD SIZE, INCOME + POVERTY**

Area	Avg. Household Size	Median Household Income	Per Capita Income	Families Below Poverty (%)
Service Area	3.07	\$56,898.06	\$22,011.30	16.1%
Region	2.92	\$55,346.00	\$22,522.00	14.1%
California	2.76	\$61,489.00	\$29,906.00	12.3%

Source: Census 2010, ACS 5-Year Estimates

## Planning Environment - External Scan

# FEEDER HIGH SCHOOL STUDENT PROFICIENCY

Student proficiency is measured with the California Assessment of Student Performance and Progress (CAASPP) test administered to students in the 11th grade. In the 2014-15 academic year, Middle College High produced the greatest percentage of proficient students, with 98% having either met or exceeded the CAASPP standards for English and 72% having either met or exceeded the CAASPP standards for math. Cajon High produced the second largest percentage of proficient students, with 56% having either met or exceeded the standards for English and 26% having met or exceeded the standards for math. The least proficient feeder high school in English was Pacific High, where 34% of students met or exceeded the standards for English. The least proficient feeder high school in math was Colton High, where 14% of students met or exceeded the standards for math.

In the 2014-15 academic year, the average percentage of students from the top 10 feeder high schools who either met or exceeded the CAASPP standards for English was 49%, which is 5% higher than the state average of 44%. The average percentage of top 10 feeder high school students who either met or exceeded the CAASPP standards for math was 24%, which is 9% lower than the state average of 33%.

**TABLE 3.12: 2014-15 CAASPP TEST RESULTS (ADMINISTERED IN 11TH GRADE)**

School	Percent of Students Who Met or Exceeded Standards	
	English	Math
Colton	35%	14%
Pacific HS	34%	17%
Cajon	56%	26%
Other Home School	N/A	N/A
San Geronio	47%	19%
Arroyo Valley	46%	16%
San Bernardino HS	40%	18%
Rialto	40%	21%
Eisenhower Senior HS	49%	23%
Middle College HS	98%	72%
Wilmer Armina	51%	16%
Bloomington HS	43%	20%
Feeder Average	49%	24%
California	44%	33%

Source: California Department of Education, DataQuest

## Planning Environment - External Scan

# NEIGHBORING HIGHER EDUCATIONAL INSTITUTIONS

Recognizing other higher educational institutions located within a reasonable distance of the SBVC service area is an important factor in understanding educational options available to service area residents. For those with vehicular transportation means, an approximate one hour drive-time is considered a reasonable distance for service area residents to travel for higher education needs.

Approximately 52 higher education institutions are within approximately one driving hour away from SBVC. Of those institutions, 23 are California Community Colleges (excluding Crafton Hills College). There is also one private junior college within one driving hour from SBVC, 21 private four-year colleges, five California State Universities (Cal Poly Pomona, CSU San Bernardino, CSU Fullerton, CSU Los Angeles and CSU Long Beach), and two University of California colleges (UC Riverside and UC Irvine).

**TABLE 3.13: NEIGHBORING HIGHER EDUCATION INSTITUTIONS**

Institution	Type	Distance from SBVC (mi)	Approx. Drive time from SBVC
National University	Private 4-Year	5.7	10 min
Loma Linda University	Private 4-Year	5.8	10 min
CSU San Bernardino	California State University	7.5	12 min
University of Redlands	Private 4-Year	10.6	13 min
UC Riverside	University of California	11	16 min
Riverside City College	Community College	11.5	16 min
California Baptist University	Private 4-Year	15.4	19 min
San Joaquin Valley College	Private Junior College	18.3	20 min
Chaffey College	Community College	20.3	21 min
University of Riverside	Private 4-Year	20.3	22 min
La Sierra University	Private 4-Year	20.9	23 min
Moreno Valley College	Community College	22.8	29 min
Claremont-McKenna College	Private 4-Year	28.9	32 min
Norco College	Community College	29.2	31 min
University of La Verne	Private 4-Year	30.9	33 min
Cal Poly Pomona	California State University	33.1	34 min
Mt. San Jacinto College	Community College	35.5	38 min
Asuza Pacific University	Private 4-Year	38.8	40 min
Citrus College	Community College	39.5	38 min
Santiago Canyon College	Community College	41.1	42 min
Chapman University	Private 4-Year	45.2	49 min
CSU Fullerton	California State University	46.5	51 min

Institution	Type	Distance from SBVC (mi)	Approx. Drive time from SBVC
Anaheim University	Private 4-Year	46.8	55 min
Hope International University	Private 4-Year	47.3	45 min
Rio Honda College	Community College	48.5	49 min
Fullerton College	Community College	49.3	49 min
Santa Ana College	Community College	50	53 min
Whittier College	Private 4-Year	50.8	1 hr
UC Irvine	University of California	51.4	1 hr 4 min
Coastline Community College	Community College	52.1	54 min
California Institute of Technology	Private 4-Year	52.9	1 hr 3 min
Concordia University Irvine	Private 4-Year	53.6	53 min
CSU Los Angeles	California State University	54.3	1 hr 2 min
Cypress College	Community College	54.5	1 hr 14 min
Vanguard University of Southern California	Private 4-Year	54.5	54 min
Biola University	Private 4-Year	54.6	58 min
Orange Coast College	Community College	54.8	58 min
Cerritos College	Community College	57.5	1 hr
Golden West College	Community College	57.9	1 hr 1 min
Occidental College	Private 4-Year	58.8	1 hr 10 min
Soka University of America	Private 4-Year	59.9	1 hr 9 min
Glendale Community College	Community College	60.1	1 hr 1 min
Saddleback College	Community College	60.1	59 min
East Los Angeles Community College	Community College	61.5	1 hr

## Planning Environment - External Scan

# NEIGHBORING HIGHER EDUCATIONAL INSTITUTIONS *(cont.)*

Institution	Type	Distance from SBVC (mi)	Approx. Drive time from SBVC
CSU Long Beach	California State University	61.6	1 hr 11 min
El Camino College Compton Center	Community College	63.1	1 hr 4 min
San Antonio College	Community College	63.1	39 min
Woodbury University	Private 4-Year	67.2	1 hr 9 min
University of Southern California	Private 4-Year	67.5	1 hr 18 min
College of the Desert	Community College	67.6	1 hr 3 min
El Camino College	Community College	71	1 hr 16 min
Barstow Community College	Community College	71.7	1 hr 4 min

## Planning Environment - External Scan

# EXTERNAL SCAN FINDINGS

Analysis of data regarding the external scan provides insight for making informed planning decisions. The following findings are derived from the external scan data presented in this section of the EMP:

### Population Demographics

- › From 2005 to 2015:
    - › Service area total population is estimated to have grown by 14.7% (181,878 persons)
    - › Regional area total population is estimated to have grown by 17.3% (669,696 persons)
    - › State total population is estimated to have grown by 9.1% (1,755,007 persons)
  - › From 2015 to 2025:
    - › Service area total population is projected to grow by 5.15% (73,120 persons)
    - › Regional area total population is projected to grow by 5.5% (252,316 persons)
    - › State total population is projected to grow by 5.08% (1,987,346 persons)
  - › Population projections suggest that between 2015 and 2025, the proportion of people in the 19 and under age group will increase by 1.14% (5,607 persons) within the service area and 1.45% (19,651 persons) in the region, which is less than the projected 2.07% (212,632 persons) increase statewide
- › Between 2015 and 2025, population projections indicate that the proportion of people in the 20-24 age group will decrease by 21.25% in the service area population (-26,683 persons) and 20.23% in the region (-76,153 persons), both of which are larger than the projected 16.75% decrease expected statewide (-522,916 persons)
  - › Population projections suggest that the proportion of people in the 50 and over age group will increase by 17.47% in the service area (64,325 persons) and 16.55% in the region (216,825 persons) by the year 2025. The projected increase for that same age group in the state is 15.38% (1,884,696 persons)
  - › By 2025, Hispanics are expected to make up:
    - › 60.31% of the service area population
    - › 52.51% of the regional population
    - › 40.3% of the state population
- › By 2025, Caucasians are expected account for:
    - › 18.79% of the service area population
    - › 29.73% of the regional population
    - › 37.05% of the state population
  - › By 2025 African Americans are expected to constitute:
    - › 9.05% of the service area population
    - › 6.96% of the regional population
    - › 5.5% of the state population.
  - › By 2025, Asians are expected to comprise:
    - › 6.27% of the service area population
    - › 6.99% of the regional population
    - › 14.85% of the state population
  - › By 2025, the service area male population is projected to increase by 5.04% (35,310 persons) and the female population is projected to increase by 5.4% (37,808 persons). The number of males within the statewide population is projected to increase by 4.79% (931,711 persons) and 5.37% for females (1,055,635 persons) during the same time period.

## Planning Environment - External Scan

# EXTERNAL SCAN FINDINGS *(cont.)*

### Educational Attainment

- › The proportion of service area residents age 25 and over with no high school diploma is 25.01% (208,590 persons), which is higher than the regional proportion of 21.83% (581,696 persons). Both the service area and regional proportion of population with no high school diploma is higher than the statewide proportion of 19.28%.
- › 50.68% of the service area residents age 25 and over do not have any higher education experience (422,787 persons) while 47.72% of regional residents age 25 and over do not have any higher education experience (1,271,594 persons). The statewide average of persons without any higher education experience is 40.18% (9,954,719 persons).
- › The proportion of service area residents age 25 and over with a BA/BS degree is 11.13%, which is 1.73 times less than that of the state's 19.23%. The proportion of the regional population age 25 and over with a BA/BS degree is 12.51%.
- › The average median income of the population age 25 and over in the service area (\$34,272) and region (\$33,851) is slightly less than the state median of \$37,170.
- › Service area and regional residents with a high school diploma/equivalent or less have a median income that is greater than the statewide average. Conversely, service area and regional residents with a BA/BS degree or higher have a median income that is less than the statewide average. This dynamic may be correlated to the makeup and availability of blue collar jobs in the area.
- › Per capita income in the service area is \$22,011.30 and \$22,522 in the region, while per capita income in the state is \$29,906.
- › The percentage of families below the poverty line in the service area is 16.1%. The percentage of families below the poverty line in the region is 14.1% and 12.3% in the state.

### Service Area High Schools

- › In the 2014-15 academic year, Middle College High produced the most proficient students, with 98% having either met or exceeded the CAASPP standards for English and 72% having either met or exceeded the CAASPP standards for math. The next proficient students came from Cajon High, with 56% and 26% of students having met or exceeded the standards for English and math, respectively. The least proficient feeder high school in English was Pacific High, with 34% of students meeting or exceeding the CAASPP standards. The least proficient feeder high school in math was Colton High, with 14% of students meeting or exceeding the CAASPP standards.

### Household Size, Income & Poverty

- › The average household size in the service area is 3.07 persons and 2.92 persons in the region, both of which are higher than the state's average of 2.76 persons.
- › Median household income in the service area is \$56,898.06, as compared \$55,346 in the region and, \$61,489 in the state.



- › In the 2014-15 academic year, the average percentage of feeder high school students who either met or exceeded the CAASPP standards for English was 49%, which is 5% higher than the state average of 44%.
- › In the 2014-15 academic year, the average percentage of feeder high school students who either met or exceeded the CAASPP standards for math was 24%, which is 9% lower than the state average of 33%.

#### **Neighboring Higher Education Institutions**

- › There are approximately 52 higher education institutions that are approximately one driving hour away from SBVC. Those 52 neighboring institutions are comprised of:
  - › 23 California Community Colleges
  - › 1 private junior college
  - › 21 private four-year colleges
  - › 5 California State Universities (Cal Poly Pomona, CSU San Bernardino, CSU Fullerton, CSU Los Angeles and CSU Long Beach)
  - › 2 University of California Institutions (UC Riverside and UC Irvine)



# SAN BERNARDINO VALLEY COLLEGE



# Labor Market Information

San Bernardino Valley College (SBVC) is committed to providing students with education for transfer to four-year institutions and with career technical and professional education important to the region. In an effort to best understand economic conditions, the following examines labor market information for the region (San Bernardino and Riverside Counties) as well as the service area community directly in the College's sphere of influence.

- › Labor Force, Employment + Unemployment
- › Industry Estimates + Projections
- › Occupation Estimates + Projections
- › Labor Market Information Findings
- › Considerations From Internal + External Scan Data Comparison

# Labor Market Information

## LABOR FORCE, EMPLOYMENT + UNEMPLOYMENT

Labor force may be defined as the working age (16 years and older) population that is employed (part or full time) or actively seeking employment. The SBVC service area labor force is comprised of approximately 729,700 residents age 16 and over. Approximately 1,961,800 of the regional population age 16 and over made up the labor force.

In 2015, the unemployment rate of the service area (6.39%) and the region (6.6%) was fractionally higher than the state’s estimated unemployment rate of 6.2%.

EXHIBIT 4.01: LABOR FORCE, EMPLOYMENT + UNEMPLOYMENT (ANNUAL AVERAGE 2015)

Area	Labor Force	Employment	Unemployment	Unemployment Rate
Service Area	729,700	683,400	46,600	6.39%
Region	1,961,800	1,832,300	129,500	6.60%
State	18,981,800	17,798,600	1,183,200	6.20%

Source: California Employment Development Department, LMI Division



## Labor Market Information

# INDUSTRY ESTIMATES + PROJECTIONS

In 2015, the top five employment industries for the service area were the following: Healthcare and Social Assistance (17% or 63,624 jobs), Government (13.39% or 50,130 jobs), Retail Trade (12.55% or 46,964 jobs), Accommodation and Food Services (8.94% or 33,458 jobs), and Transportation and Warehousing (8.23% or 30,810 jobs).

Between 2010 and 2015, the top five employment industries in the service area grew by the following: Healthcare and Social Assistance (49% or 20,857 jobs), Government (1% or 435 jobs), Retail Trade (9% or 3,836 jobs), Accommodation and Food Services (23% or 6,290 jobs), and Transportation and Warehousing (39.14% or 8,666 jobs).

By 2025, the top five employment in the service area are projected to be: Healthcare and Social Assistance (19.1% or 83,142 jobs), Retail Trade (12.83% or 55,837 jobs), Government (11.85% or 51,582 jobs), Accommodation and Food Services (9.19% or 40,010 jobs), and Transportation and Warehousing (9.04% or 39,341 jobs).

From 2015 to 2025, the largest numerical job growth for service area employment by industry is expected to be the following: Healthcare and Social Assistance (19,518 jobs or 30.68%), Retail Trade (8,873 jobs or 18.89%), Transportation and Warehousing (8,531 jobs or 27.69%), Accommodation and Food Services (6,552 jobs or 19.58%), and Administrative/Support and Waste Management/ Remediation Services (4,145 jobs or 14.97%).



TABLE 4.02: SERVICE AREA EMPLOYMENT PROJECTIONS BY INDUSTRY (2010-2025)

Description	2010 Jobs	2015 Jobs	2010 - 2015 Change	2025 Jobs	2015 - 2025 Change
Health Care and Social Assistance	42,767	63,624	20,857	83,142	19,518
Retail Trade	43,128	46,964	3,836	55,837	8,873
Government	49,695	50,130	435	51,582	1,452
Accommodation and Food Services	27,168	33,458	6,290	40,010	6,552
Transportation and Warehousing	22,144	30,810	8,666	39,341	8,531
Administrative and Support and Waste Management and Remediation Services	24,303	27,682	3,379	31,827	4,145
Manufacturing	26,148	29,840	3,692	30,713	873
Construction	15,405	20,409	5,004	21,319	910
Wholesale Trade	12,903	15,792	2,889	19,370	3,578
Professional, Scientific, and Technical Services	9,334	10,949	1,615	13,503	2,554
Other Services (except Public Administration)	14,795	10,292	(4,503)	11,649	1,357
Finance and Insurance	7,375	8,442	1,067	9,632	1,190
Educational Services	5,859	6,598	739	8,402	1,804
Real Estate and Rental and Leasing	3,967	4,167	200	4,183	16
Arts, Entertainment, and Recreation	2,794	3,496	702	3,875	379
Management of Companies and Enterprises	3,199	3,353	154	3,156	(197)
Utilities	2,607	2,522	(85)	2,564	42
Information	3,341	2,394	(947)	2,282	(112)
Unclassified Industry	526	1,363	837	1,529	166
Crop and Animal Production	2,025	1,774	(251)	1,150	(624)
Mining, Quarrying, and Oil and Gas Extraction	139	259	120	302	43
<b>Total</b>	<b>319,622</b>	<b>374,317</b>	<b>54,696</b>	<b>435,367</b>	<b>61,050</b>

Source: EMSI

## Labor Market Information

# INDUSTRY ESTIMATES + PROJECTIONS *(cont.)*

In 2015, the top five employment industries in the region were the following: Government (17.62% or 233,853 jobs), Retail Trade (12.91% or 171,405 jobs), Healthcare and Social Assistance (12.84% or 170,431 jobs), Accommodation and Food Services (9.97% or 132,410 jobs), and Administrative/Support and Waste Management/Remediation Services (7.11% or 94,319 jobs).

Between 2010 and 2015, the top five industries for employment in the region grew by the following: Government (-0.14% or -330 jobs), Retail Trade (11% or 16,642 jobs), Healthcare and Social Assistance (45% or 53,075 jobs), Accommodation and Food Services (23% or 24,840 jobs), and Administrative/Support and Waste Management/Remediation Services (13.9% or 3,692 jobs). Manufacturing dropped from the 5th ranked employment industry in the region to the 6th ranked employment industry.

By 2025, the top five industries for employment in the region are projected to be the following: Government (15.96% or 244,893 jobs), Healthcare and Social Assistance (14.48% or 222,162 jobs), Retail Trade (13.28% or 203,840 jobs), Accommodation and Food

Services (10.28% or 157,773 jobs), and Administrative/Support/Waste Management/Remediation Services (7.41% or 113,626 jobs).

From 2015 to 2025, the largest numerical job growth for regional employment by industry is expected to be the following: Healthcare and Social Assistance (51,731 jobs or 30.35%), Retail Trade (32,435 jobs or 18.92%), Accommodation and Food Services (25,363 jobs or 19.15%), Transportation and Warehousing (23,046 jobs or 28.75%), and Administrative/Support and Waste Management/Remediation Services (19,307 jobs or 20.47%).

TABLE 4.03: REGIONAL EMPLOYMENT PROJECTIONS BY INDUSTRY (2010-2025)

Description	2010 Jobs	2015 Jobs	2010 - 2015 Change	2025 Jobs	2015 - 2025 Change
Government	234,183	233,853	(330)	244,893	11,040
Health Care and Social Assistance	117,356	170,431	53,075	222,162	51,731
Retail Trade	154,763	171,405	16,642	203,840	32,435
Accommodation and Food Services	107,570	132,410	24,840	157,773	25,363
Administrative and Support and Waste Management and Remediation Services	77,889	94,319	16,430	113,626	19,307
Transportation and Warehousing	55,804	80,133	24,329	103,179	23,046
Construction	59,611	84,152	24,541	92,042	7,890
Manufacturing	83,940	93,624	9,684	91,421	(2,203)
Wholesale Trade	48,722	62,436	13,714	77,877	15,441
Professional, Scientific, and Technical Services	34,961	42,551	7,590	52,089	9,538
Other Services (except Public Administration)	51,914	35,982	(15,932)	40,986	5,004
Finance and Insurance	25,569	28,298	2,729	32,091	3,793
Educational Services	13,126	16,109	2,983	20,399	4,290
Arts, Entertainment, and Recreation	15,710	18,009	2,299	19,863	1,854
Real Estate and Rental and Leasing	15,511	16,859	1,348	18,094	1,235
Crop and Animal Production	14,822	14,291	(531)	11,693	(2,598)
Information	16,046	11,260	(4,786)	10,652	(608)
Management of Companies and Enterprises	8,632	9,148	516	8,679	(469)
Unclassified Industry	2,251	5,582	3,331	6,189	607
Utilities	5,754	5,493	(261)	5,668	175
Mining, Quarrying, and Oil and Gas Extraction	1,017	1,100	83	1,202	102
<b>Total</b>	<b>1,145,149</b>	<b>1,327,444</b>	<b>182,294</b>	<b>1,534,418</b>	<b>206,973</b>

Source: EMSI

## Labor Market Information

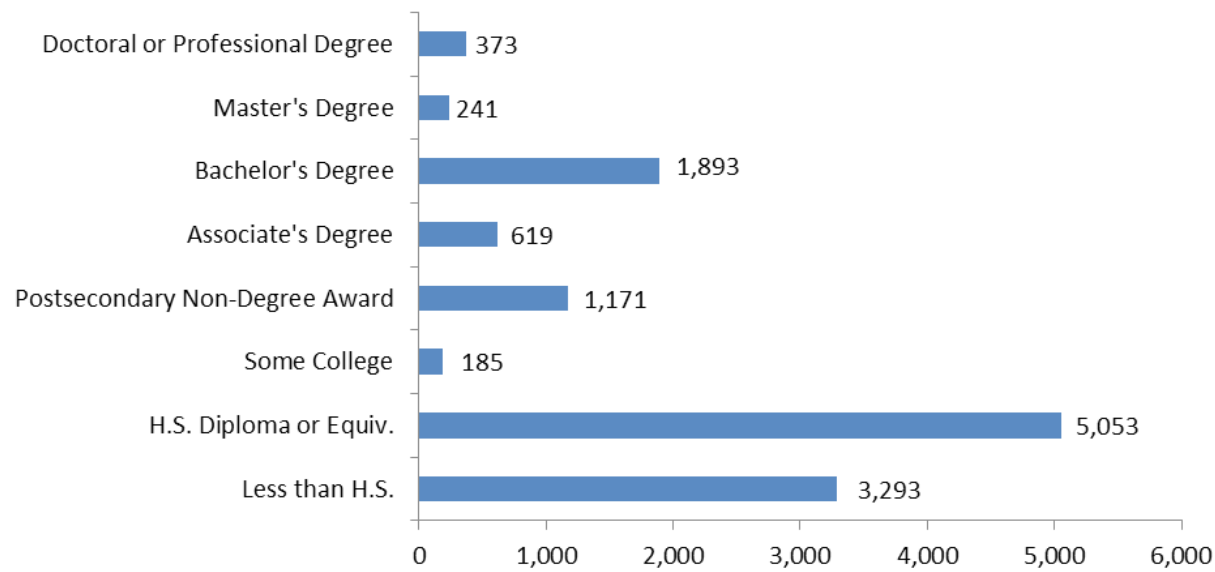
# OCCUPATION ESTIMATES + PROJECTIONS

There are projected to be approximately 12,828 average annual openings in the service area between 2015 and 2025. Annual openings are determined by the sum of new and replacement jobs in an occupation over the selected time frame (2015-2025), divided by the number of years in the time frame. Of these annual openings, 8,346 (65.06%) have a typical entry level education of a high school diploma/equivalent or less, 185 (1.44%) have a typical entry level education of some college, 1,171 (9.13%) have a typical entry level education of a postsecondary non-degree award, 619 (4.82%) have a typical entry level education of an Associate's degree, 1,893 (14.76%) have a typical entry level education of a Bachelor's degree, and 614 (4.79%) have a typical entry level education of a Master's degree or higher.

It should be noted that occupations with an average hourly wage of less than \$12 were excluded, as were those occupations with insufficient data to determine average hourly wages. Additionally, typical entry level education required is determined by the minimum qualifications identified by the U.S. Department of Labor and Bureau of Labor Statistics. Although a job may be identified as requiring a typical entry level education

of a high school diploma or equivalent, in many circumstances the Department of Labor and Bureau of Labor Statistics recommends some level of continuing higher education to be competitive for obtaining that particular job.

EXHIBIT 4.04: SERVICE AREA AVERAGE ANNUAL JOB OPENINGS BY TYPICAL ENTRY LEVEL EDUCATION (2015-2025)



Source: EMSI

## Labor Market Information

OCCUPATION ESTIMATES + PROJECTIONS *(cont.)*

Of the occupations with the most expected annual openings within the service area by the year 2025, SBVC may be in a position to provide instruction that would supply workers for the following jobs: registered nurses, nursing assistants, licensed practical and licensed vocational nurses, medical assistants, home health aides, elementary and postsecondary teachers, teacher assistants, general and operations managers, customer service representatives, first-line supervisors of office/administrative support/retail sales/food prep. workers, sales representatives in wholesale and manufacturing, secretaries/administrative assistants, accountants/auditors, maintenance and repair workers, and automotive service technicians/mechanics.

For a full listing of average annual job openings by occupation in the service area please refer to the *Appendix*.

TABLE 4.05: TOP 30 SERVICE AREA AVERAGE ANNUAL JOB OPENINGS BY OCCUPATION (2015-2025)

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015-2025 % Change	Avg. Hourly Earnings
Laborers and Freight, Stock, and Material Movers, Hand	835	14,935	17,997	3,062	21%	\$13.46
Retail Salespersons	784	12,621	15,575	2,954	23%	\$12.48
Heavy and Tractor-Trailer Truck Drivers	406	11,393	13,428	2,035	18%	\$23.12
Registered Nurses	368	8,305	10,147	1,842	22%	\$42.92
Stock Clerks and Order Fillers	363	7,774	8,856	1,082	14%	\$12.84
Office Clerks, General	265	8,271	9,081	810	10%	\$14.58
Customer Service Representatives	232	4,471	5,432	961	21%	\$17.62

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015-2025 % Change	Avg. Hourly Earnings
General and Operations Managers	205	5,653	6,550	897	16%	\$51.26
Nursing Assistants	198	3,597	4,755	1,158	32%	\$13.58
Elementary School Teachers, Except Special Education	187	5,414	6,019	605	11%	\$35.16
Packers and Packagers, Hand	180	3,794	4,465	671	18%	\$12.08
First-Line Supervisors of Office & Admin. Support Workers	179	4,033	4,766	733	18%	\$25.41
Janitors/Cleaners, Except Maids & Housekeeping Cleaners	173	5,265	5,932	667	13%	\$13.56
Home Health Aides	172	1,596	2,854	1,258	79%	\$13.22
First-Line Supervisors of Retail Sales Workers	160	3,576	4,308	732	20%	\$20.82
First-Line Supervisors of Food Prep. & Serving Workers	150	2,678	3,316	638	24%	\$14.93
Secretaries & Admin. Assts., Except Legal, Medical, & Executive	149	5,094	5,910	816	16%	\$17.90
Sales Reps., Wholesale & Manuf., Except Tech. & Sci. Products	145	3,127	3,886	759	24%	\$31.53
Teacher Assistants	138	4,410	4,745	335	8%	\$14.34
Industrial Truck and Tractor Operators	138	3,317	3,837	520	16%	\$15.93
Licensed Practical and Licensed Vocational Nurses	134	2,327	2,994	667	29%	\$23.13
Receptionists and Information Clerks	131	2,656	3,167	511	19%	\$13.52
Postsecondary Teachers	127	3,189	3,907	718	23%	\$41.67
Shipping, Receiving, and Traffic Clerks	124	2,882	3,291	409	14%	\$15.33
Medical Assistants	123	2,603	3,257	654	25%	\$14.07
Landscaping and Grounds keeping Workers	118	2,965	3,343	378	13%	\$12.35
Accountants and Auditors	111	2,103	2,522	419	20%	\$34.16
Maintenance and Repair Workers, General	109	3,016	3,478	462	15%	\$18.75
Construction Laborers	105	3,153	3,288	135	4%	\$20.07
Automotive Service Technicians and Mechanics	101	2,350	2,707	357	15%	\$19.74

Source: EMSI

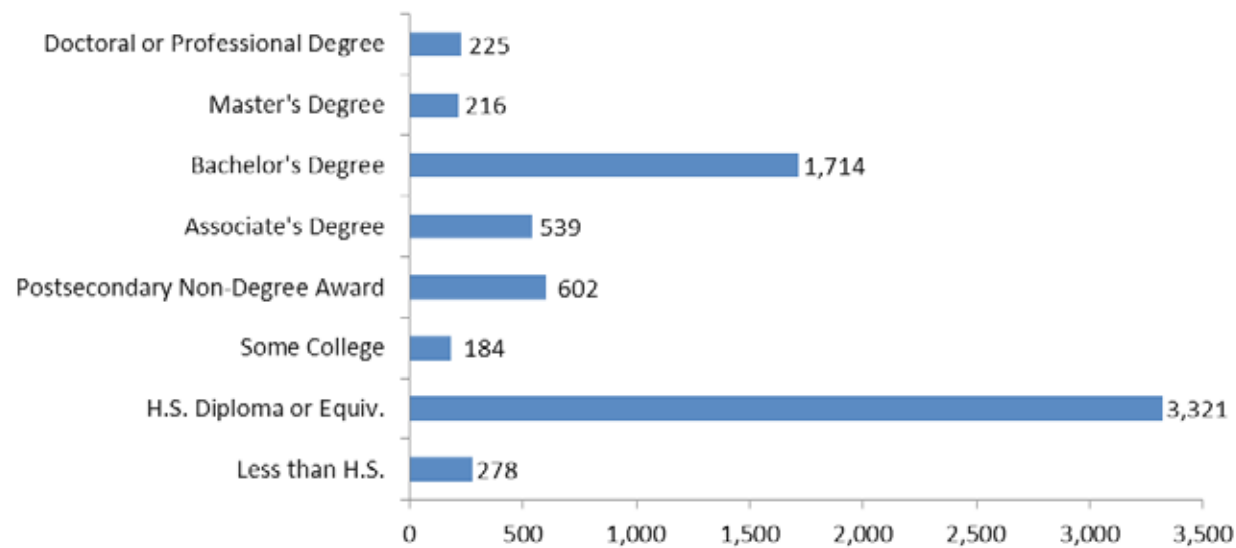
## Labor Market Information

# OCCUPATION ESTIMATES + PROJECTIONS *(cont.)*

Of the projected 12,828 average annual job openings between 2015 and 2025 in the service area, approximately 7,079 openings belong to occupations that are related to programs offered by SBVC. An occupation was determined to be related to a program if the program prepared an individual for employment in the occupation or for transfer to another program that would then prepare the individual for employment in the occupation (for example, a background in psychology may prepare a student for medical school to eventually become a psychiatrist, thus, the psychiatrist occupation is considered to be related to SBVC's psychology program). Approximately 3,599 jobs (50.84%) have a typical entry level education of a high school diploma/ equivalent or less, 184 (2.59%) have a typical entry level education of some college, 602 (8.5%) have a typical entry level education of a postsecondary non-degree award, 539 (7.61%) have a typical entry level education of an Associate's degree, 1,714 (24.33%) have a typical entry level education of a Bachelor's degree, and 441 (6.23%) have a typical entry level education of a Master's degree or higher.



EXHIBIT 4.06: SERVICE AREA ANNUAL JOB OPENINGS RELATED TO OFFERED PROGRAMS BY TYPICAL ENTRY LEVEL EDUCATION (2015-2025)



Source: EMSI

## Labor Market Information

OCCUPATION ESTIMATES + PROJECTIONS *(cont.)*

SBVC programs with the highest number of related average annual openings in the service area were the following: Business Administration (22.22% or 1,573 openings), Nursing (17.68% or 1,252 openings), Childhood Development/Education (11.62% or 823 openings), Accounting (7.69% or 544 openings), and Automotive Technology (5.25% or 372 openings).

**TABLE 4.07: SERVICE AREA AVERAGE ANNUAL JOB OPENINGS BY PROGRAM (2015-2025)**

Program	Annual Openings		Avg. Hourly Wage
	%	#	
Bus. Administration	22.22%	1,573	\$32.86
Nursing	17.68%	1,252	\$28.51
Childhood Development/Education	11.62%	823	\$30.00
Accounting	7.69%	544	\$26.81
Automotive Tech.	5.25%	372	\$20.81
Culinary Arts	4.48%	317	\$15.74
Communication Studies	4.02%	284	\$25.60
Human Services	3.90%	276	\$26.33
Admin. Of Justice/Corrections	3.25%	230	\$38.43
Electricity/Electronics	2.77%	196	\$27.46
Biology	2.71%	192	\$47.90
Machinist Technology	2.42%	171	\$16.62
Comp. Info. Tech./Comp. Science	2.33%	165	\$41.17
Pharmacy Technology	1.26%	89	\$32.03
Kinesiology	0.85%	60	\$24.35
Welding	0.83%	59	\$22.39
Inspection Technology	0.81%	57	\$26.44
Diesel Technology	0.69%	49	\$21.75
Engineering	0.61%	43	\$36.96
Real Estate	0.44%	31	\$29.57
Architecture/Environmental Design	0.37%	26	\$37.36
HVAC/R	0.35%	25	\$19.86

Program	Annual Openings		Avg. Hourly Wage
	%	#	
Psychology	0.34%	24	\$48.73
Art	0.31%	22	\$26.18
Philosophy	0.28%	20	\$57.01
Food & Nutrition	0.25%	18	\$22.50
Physics	0.24%	17	\$38.14
Mathematics	0.22%	16	\$36.67
Religious Studies	0.22%	16	\$24.91
Physical Science	0.22%	16	\$37.00
Chemistry	0.19%	14	\$29.55
Theatre Arts	0.15%	11	\$25.67
English	0.14%	10	\$34.32
History	0.14%	10	\$18.43
Aeronautics	0.14%	10	\$33.65
Modern Languages	0.10%	7	\$19.93
Psychiatric Technology	0.10%	7	\$20.38
Music	0.09%	7	\$26.19
Geography	0.08%	6	\$30.03
Water Supply Technology	0.08%	6	\$28.23
Sociology	0.04%	3	\$29.12
Economics	0.03%	2	\$33.80
Geology	0.03%	2	\$31.40
Anthropology	0.02%	1	\$25.59
Dance	-	-	\$21.58

Source: EMSI

## Labor Market Information

OCCUPATION ESTIMATES + PROJECTIONS *(cont.)*

Between 2015 and 2025, the service area job openings that have a typical entry level education of a postsecondary non-degree award or higher are expected to primarily relate to the following programs: Nursing (28.81% or 949 openings), Child Development/Education (18.15% or 598 openings), Business Administration (15.81% or 521 openings), Accounting (7.08% or 233 openings), and Human Services (5.78% or 191 openings).

**TABLE 4.08: SERVICE AREA AVERAGE ANNUAL JOB OPENINGS BY PROGRAM, POSTSECONDARY NON-DEGREE AWARD OR HIGHER (2015-2025)**

Program	Annual Openings		Avg. Hourly Wage
	%	#	
Nursing	28.81%	949	\$31.27
Child Development/Education	18.15%	598	\$32.06
Business Administration	15.81%	521	\$42.51
Accounting	7.08%	233	\$35.04
Human Services	5.78%	191	\$27.97
Biology	5.63%	186	\$53.97
Comp. Info. Tech./Comp. Science	3.99%	131	\$43.84
Electricity/Electronics	1.54%	51	\$32.80
Communication Studies	1.45%	48	\$27.46
Engineering	1.31%	43	\$36.96
Pharmacy Technology	1.27%	42	\$63.37
Kinesiology	1.22%	40	\$28.23
Architecture & Environmental Design	0.79%	26	\$39.40
HVAC/R	0.75%	25	\$24.50
Psychology	0.73%	24	\$51.03
Philosophy	0.61%	20	\$57.01
Food & Nutrition	0.54%	18	\$22.50
Physics	0.52%	17	\$38.14
Religious Studies	0.48%	16	\$24.91

Program	Annual Openings		Avg. Hourly Wage
	%	#	
Mathematics	0.48%	16	\$36.67
Physical Science	0.47%	16	\$31.40
Art	0.37%	12	\$24.56
Chemistry	0.31%	10	\$27.86
English	0.31%	10	\$32.69
History	0.31%	10	\$18.40
Aeronautics	0.25%	8	\$28.03
Modern Languages	0.22%	7	\$19.93
Geography	0.13%	4	\$30.84
Psychiatric Technology	0.12%	4	\$27.39
Music	0.08%	3	\$25.52
Sociology	0.08%	3	\$29.12
Economics	0.07%	2	\$33.80
Administration of Justice/Corrections	0.07%	2	\$40.30
Theatre Arts	0.07%	2	\$32.96
Machinist Technology	0.07%	2	\$25.73
Geology	0.06%	2	\$37.26
Anthropology	0.04%	1	\$25.59
Real Estate	0.04%	1	\$34.12

Source: EMSI

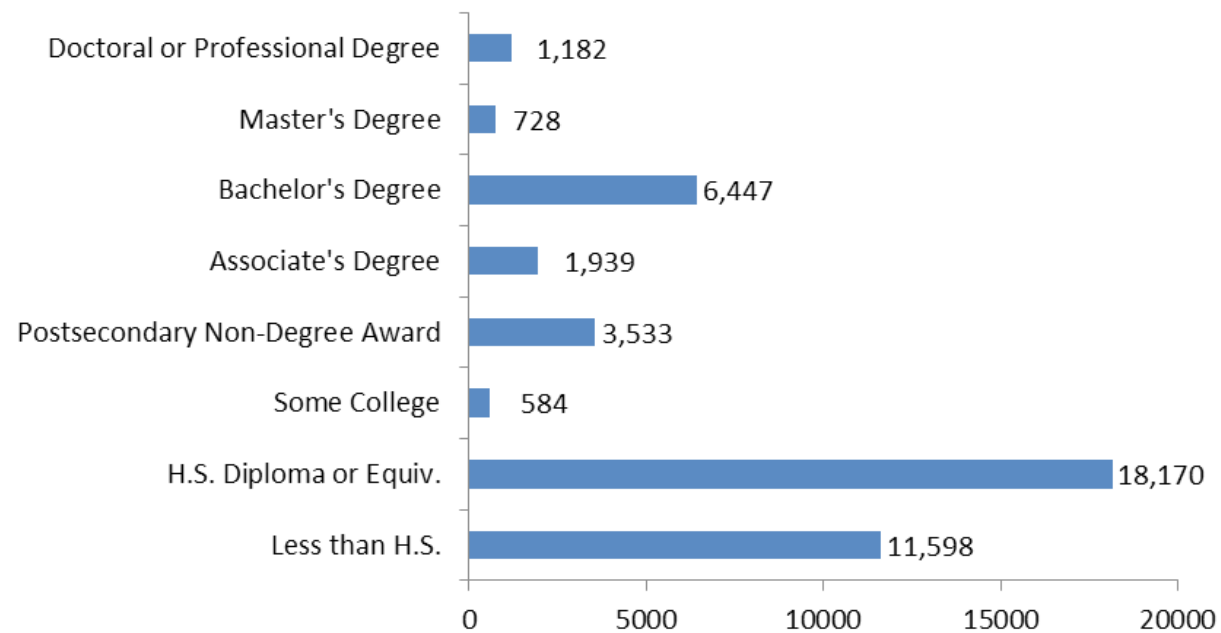
## Labor Market Information

# OCCUPATION ESTIMATES + PROJECTIONS *(cont.)*

There are projected to be approximately 44,181 average annual job openings between 2015 and 2025 in the region. Of these annual openings, 29,768 (67.38%) typically require an entry level education of a high school diploma/equivalent or less, 584 (1.32%) typically require some college, 3,533 (8%) have a typical entry level education of a postsecondary non-degree award, 1,939 (4.39%) typically require an Associate's degree, 6,447 (14.59%) have an entry level education of a Bachelor's degree, and 1,910 (4.32%) typically require a Master's degree or higher.

Again, it should be noted that occupations with an average hourly wage of less than \$12 were excluded, as were those occupations with insufficient data to determine average hourly wages. Additionally, typical entry level education required is determined by the minimum qualifications identified by the U.S. Department of Labor and Bureau of Labor Statistics. Although a job may be identified as requiring a typical entry level education of a high school diploma or equivalent, in many circumstances the Department of Labor and Bureau of Labor Statistics recommend some level of continuing higher education to be competitive for obtaining that particular job.

EXHIBIT 4.09: REGIONAL AVERAGE ANNUAL JOB OPENINGS BY ENTRY LEVEL EDUCATION (2015-2025)



Source: EMSI

## Labor Market Information

OCCUPATION ESTIMATES + PROJECTIONS *(cont.)*

Of the occupations with the most expected annual openings within the region by the year 2025, SBVC may be in a position to provide instruction that would supply workers for the following jobs: registered nurses, nursing assistants, licensed practical and licensed vocational nurses, home health aides, elementary and postsecondary teachers, teacher assistants, general and operations managers, customer service representatives, first-line supervisors of office/administrative support/retail sales/food prep. workers, sales representatives in wholesale and manufacturing, secretaries/administrative assistants, accountants/auditors, and maintenance and repair workers.

For a full listing of average annual job openings by occupation in the region please refer to the *Appendix*.

TABLE 4.10: TOP 30 REGIONAL AVERAGE ANNUAL JOB OPENINGS BY OCCUPATION (2015-2025)

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015-2025 % Change	Avg. Hourly Earnings
Retail Salespersons	3,052	49,183	60,673	11,490	23%	\$12.46
Laborers and Freight, Stock, and Material Movers, Hand	2,624	47,382	57,228	9,846	21%	\$13.45
Stock Clerks and Order Fillers	1,209	26,373	29,870	3,497	13%	\$12.83
Registered Nurses	1,076	24,849	30,146	5,297	21%	\$43.04
Heavy and Tractor-Trailer Truck Drivers	1,022	26,335	31,860	5,525	21%	\$22.84
Office Clerks, General	926	29,566	32,330	2,764	9%	\$14.57
Customer Service Representatives	833	16,189	19,613	3,424	21%	\$17.62



Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015-2025 % Change	Avg. Hourly Earnings
General and Operations Managers	716	20,281	23,346	3,065	15%	\$51.21
Security Guards	650	15,768	19,495	3,727	24%	\$12.10
Janitors/Cleaners, Except Maids and Housekeeping Cleaners	610	18,992	21,282	2,290	12%	\$13.55
First-Line Supervisors of Retail Sales Workers	608	13,373	16,191	2,818	21%	\$20.79
First-Line Supervisors of Office and Admin. Support Workers	607	14,391	16,735	2,344	16%	\$25.37
Packers and Packagers, Hand	584	12,300	14,577	2,277	19%	\$12.09
Landscaping and Grounds keeping Workers	576	14,111	16,053	1,942	14%	\$12.33
Elementary School Teachers, Except Special Education	569	16,400	18,248	1,848	11%	\$35.11
Sales Reps., Wholesale & Manuf., Except Tech./Sci. Products	541	11,759	14,587	2,828	24%	\$31.15
Nursing Assistants	533	9,577	12,714	3,137	33%	\$13.61
First-Line Supervisors of Food Prep. & Serving Workers	528	9,361	11,627	2,266	24%	\$15.07
Secretaries/Admin. Assts., Except Legal, Medical, & Executive	516	17,907	20,732	2,825	16%	\$17.85
Home Health Aides	437	4,029	7,240	3,211	80%	\$13.32
Construction Laborers	418	11,705	12,926	1,221	10%	\$20.01
Maintenance and Repair Workers, General	413	12,074	13,722	1,648	14%	\$18.77
Teacher Assistants	413	13,372	14,340	968	7%	\$14.32
Shipping, Receiving, and Traffic Clerks	409	9,840	11,155	1,315	13%	\$15.24
Receptionists and Information Clerks	401	8,579	10,048	1,469	17%	\$13.51
Industrial Truck and Tractor Operators	398	9,849	11,357	1,508	15%	\$15.89
Accountants and Auditors	393	7,554	9,014	1,460	19%	\$33.59
Postsecondary Teachers	392	10,851	12,959	2,108	19%	\$41.66
Licensed Practical and Licensed Vocational Nurses	359	6,562	8,286	1,724	26%	\$23.06
Bookkeeping, Accounting, and Auditing Clerks	347	13,270	15,416	2,146	16%	\$19.07

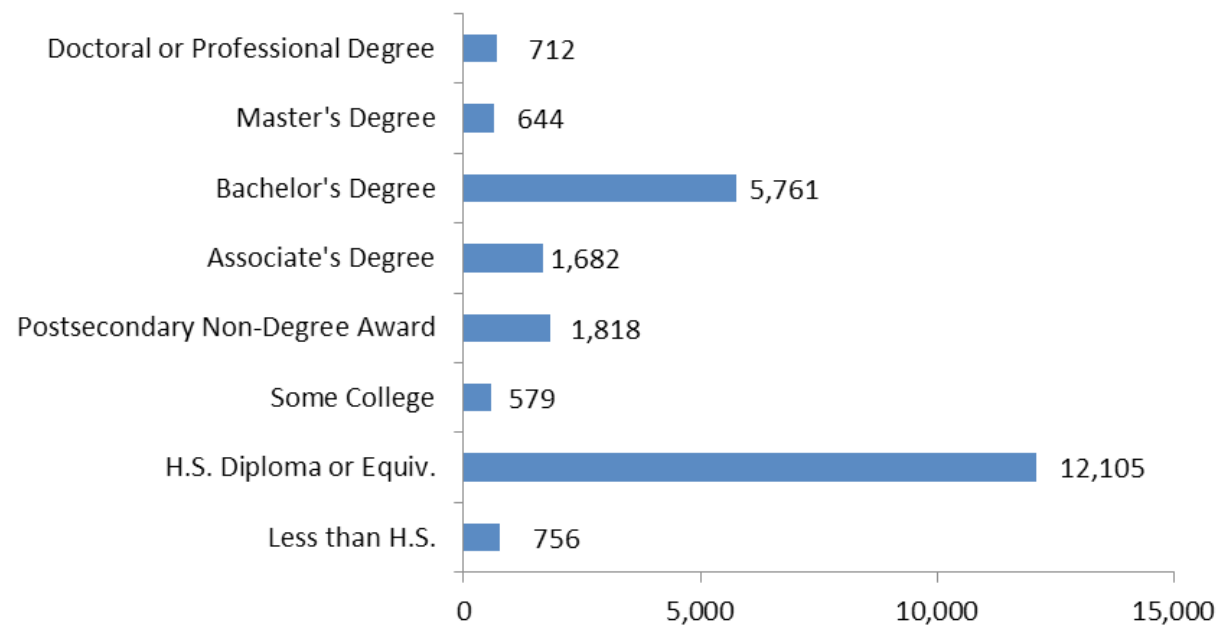
Source: EMSI

## Labor Market Information

# OCCUPATION ESTIMATES + PROJECTIONS *(cont.)*

Of the 44,181 average annual job openings in the region, approximately 24,057 openings belong to occupations related to programs offered by SBVC. Approximately 756 (3.14%) jobs have a typical entry level education of less than high school, 12,105 (50.32%) have a typical entry level education of a high school diploma or equivalent, 579 (2.41%) have a typical entry level education of some college, 1,818 (7.56%) have a typical entry level education of a postsecondary non-degree award, 1,682 (6.99%) have a typical entry level education of an Associate's degree, 5,761 (23.95%) have a typical entry level education of a Bachelor's degree, 644 (2.68%) have a typical entry level education of a Master's degree, and 712 (2.96%) have a typical entry level education of a Doctoral or professional degree.

EXHIBIT 4.11: REGIONAL AVERAGE ANNUAL JOB OPENINGS RELATED TO OFFERED PROGRAMS BY ENERGY LEVEL EDUCATION (2015-2025)



Source: EMSI

## Labor Market Information

OCCUPATION ESTIMATES + PROJECTIONS *(cont.)*

The programs with the highest number of related average annual openings in the region were the following: Business Administration (22.01% or 5,295 openings), Nursing (14.46% or 3,748 openings) Child Development/Education (10.29% or 2,476 openings), Accounting (8.64% or 2,079 openings) and Administration of Justice/Corrections (6.71% or 1,614 openings).

**TABLE 4.12: REGIONAL AVERAGE ANNUAL JOB OPENINGS BY PROGRAM (2015-2025)**

Program	Annual Openings		Avg. Hourly Wage
	%	#	
Business Administration	22.01%	5,295	\$33.27
Nursing	14.46%	3,748	\$28.34
Child Development/Education	10.29%	2,476	\$29.75
Accounting	8.64%	2,079	\$27.93
Admin. of Justice/Corrections	6.71%	1,614	\$35.07
Automotive Technology	5.40%	1,299	\$20.71
Culinary Arts	4.34%	1,045	\$15.78
Communication Studies	4.30%	1,033	\$26.57
Human Services	3.34%	804	\$25.34
Electricity/Electronics	2.93%	705	\$27.54
Biology	2.84%	683	\$46.24
Comp. Info. Tech./Comp. Science	2.41%	580	\$39.94
Machinist Technology	2.07%	498	\$17.00
Pharmacy Technology	1.25%	300	\$32.03
Kinesiology	0.86%	208	\$24.53
Welding	0.83%	201	\$22.19
Inspection Technology	0.78%	188	\$26.37
Engineering	0.65%	156	\$38.30
Diesel Technology	0.60%	144	\$21.40
Real Estate	0.54%	131	\$29.69
HVAC/R	0.49%	117	\$19.59
Architecture/Environmental Design	0.47%	114	\$36.70
Art	0.40%	95	\$25.45

Program	Annual Openings		Avg. Hourly Wage
	%	#	
Philosophy	0.36%	88	\$49.55
Psychology	0.30%	72	\$57.45
History	0.29%	70	\$20.89
Physics	0.25%	61	\$40.71
Food & Nutrition	0.23%	56	\$22.48
Mathematics	0.23%	55	\$34.01
Chemistry	0.22%	54	\$29.74
Aeronautics	0.22%	53	\$33.91
Water Supply Technology	0.21%	52	\$27.97
English	0.17%	41	\$32.44
Religious Studies	0.16%	39	\$24.11
Theatre Arts	0.16%	38	\$27.58
Modern Languages	0.11%	27	\$20.28
Geography	0.11%	26	\$29.35
Psychiatric Technology	0.09%	22	\$20.54
Music	0.07%	16	\$25.99
Geology	0.05%	13	\$37.45
Economics	0.04%	9	\$34.11
Sociology	0.04%	9	\$27.81
Physical Science	0.02%	5	\$42.52
Dance	0.02%	4	\$22.09
Anthropology	0.01%	4	\$25.92
Political Science	-	-	\$36.67

Source: EMSI

## Labor Market Information

OCCUPATION ESTIMATES + PROJECTIONS *(cont.)*

Between 2015 and 2025, the regional job openings that have a typical entry level education of at least a postsecondary non-degree award or higher are expected primarily to be in the following programs: Nursing (25.11% or 2,666 openings), Child Development/Education (17.12% or 1,818 openings), Business Administration (15.74% or 1,671 openings), Accounting (8.69% or 922 openings), and Biology (6.17% or 655 openings).

**TABLE 4.13: REGIONAL AVERAGE ANNUAL JOB OPENINGS BY PROGRAM, POSTSECONDARY NON-DEGREE AWARD OR HIGHER (2015-2025)**

Program	Annual Openings		Avg. Hourly Wage
	%	#	
Nursing	25.11%	2,666	\$32.26
Child Development/Education	17.12%	1,818	\$31.66
Business Administration	15.74%	1,671	\$43.58
Accounting	8.69%	922	\$36.25
Biology	6.17%	655	\$48.46
Human Services	5.35%	568	\$27.15
Comp. Info. Tech./Comp. Science	4.36%	463	\$42.28
Electricity/Electronics	2.03%	215	\$30.52
Communication Studies	1.56%	165	\$26.27
Engineering	1.47%	156	\$38.30
Kinesiology	1.32%	140	\$27.74
Pharmacy Technology	1.31%	139	\$63.40
HVAC/R	1.09%	115	\$24.11
Architecture/Environmental Design	1.08%	114	\$36.70
Philosophy	0.83%	88	\$49.55
Psychology	0.68%	72	\$57.45
History	0.66%	70	\$20.89
Art	0.61%	65	\$27.99
Physics	0.57%	61	\$42.09
Food & Nutrition	0.52%	56	\$22.48
Mathematics	0.52%	55	\$34.01
Aeronautics	0.46%	49	\$37.26

Program	Annual Openings		Avg. Hourly Wage
	%	#	
Chemistry	0.39%	41	\$32.86
English	0.39%	41	\$32.44
Religious Studies	0.37%	39	\$24.11
Admin. of Justice/Corrections	0.33%	35	\$65.84
Modern Languages	0.26%	27	\$20.28
Geography	0.17%	18	\$30.21
Geology	0.12%	13	\$37.45
Psychiatric Technology	0.12%	12	\$27.61
Theatre Arts	0.10%	11	\$29.14
Economics	0.09%	9	\$34.11
Sociology	0.09%	9	\$27.81
Real Estate	0.08%	9	\$33.99
Machinist Technology	0.07%	8	\$25.77
Music	0.06%	6	\$25.32
Automotive Technology	0.06%	6	\$20.84
Physical Science	0.05%	5	\$42.52
Anthropology	0.03%	4	\$25.92
Culinary Arts	0.01%	1	\$20.33
Political Science	-	-	\$36.67
Sociology	0.04%	9	\$27.81
Physical Science	0.02%	5	\$42.52
Dance	0.02%	4	\$22.09
Anthropology	0.01%	4	\$25.92
Political Science	-	-	\$36.67

Source: EMSI

## Labor Market Information

# LABOR MARKET INFORMATION FINDINGS

Analysis of data regarding the labor market in the service area and region provides insight for making informed planning decisions. The following findings are derived from the labor market information presented in this section of the EMP:

### Labor Force, Employment and Unemployment

- › The labor force for 2015 was:
  - › 729,700 in the service area
  - › 1,961,800 in the region
  - › 18,981,800 in the state
- › The number of employed persons in 2015 was:
  - › 683,400 in the service area
  - › 1,832,300 in the region
  - › 17,798,600 in the state
- › The unemployment rate for 2015 was:
  - › 6.39% in the service area
  - › 6.6% in the region
  - › 6.2% in the state

### Industry Estimates and Projections

- › In 2015, the top five industries in the service area in terms of people employed were:
  - › Healthcare and Social Assistance (63,624 jobs) – 48.77% growth from 2010
  - › Government (50,130 jobs) – 0.88% growth from 2010
  - › Retail Trade (46,964 jobs) – 8.89% growth from 2010
  - › Accommodation and Food Services (33,458 jobs) – 23.15% growth from 2010
  - › Transportation and Warehousing (30,810 jobs) – 39.13% growth from 2010.
- › By 2025, the top five industries in the service area in terms of people employed are projected to be:
  - › Healthcare and Social Assistance (83,142 jobs) – 30.68% growth from 2015
  - › Retail Trade (55,837 jobs) – 18.89% growth from 2015
  - › Government (51,582 jobs) – 2.9% growth from 2015
  - › Accommodation and Food Services (40,010 jobs) – 19.58% growth from 2015
  - › Transportation and Warehousing (39,341 jobs) – 27.69% growth from 2015
- › In 2015, the top five industries in the region in terms of people employed were:
  - › Government (233,853 jobs) – 0.14% decline from 2010
  - › Retail Trade (171,405 jobs) – 10.75% growth from 2010
  - › Healthcare and Social Assistance (170,431 jobs) – 45.23% growth from 2010
  - › Accommodation and Food Services (132,410 jobs) – 23.09% growth from 2010
  - › Administrative/Support and Waste Management/Remediation Services (94,319 jobs) – 21.09% growth from 2010
- › By 2025, the top five industries in the region in terms of people employed are projected to be:
  - › Government (244,893 jobs) – 4.72% growth from 2015
  - › Healthcare and Social Assistance (222,162 jobs) – 30.35% growth from 2015
  - › Retail Trade (203,840 jobs) – 18.92% growth from 2015
  - › Accommodation and Food Services (157,773 jobs) – 19.15% growth from 2015



- › Administrative/Support and Waste Management/Remediation Services (113,626 jobs) –20.47% growth from 2015

### Occupation Estimates and Projections

- › There are projected to be about 12,828 average annual occupation openings in the service area between 2015 and 2025, excluding occupations with an average hourly wage of less than \$12 and occupations with insufficient data to determine average hourly wages. The 12,828 annual openings can be broken down by typical entry level education as follows:
  - › 3,293 (25.67%) openings – less than high school
  - › 5,053 (39.39%) openings – high school diploma or equivalent
  - › 185 (1.44%) openings – some college, no degree
  - › 1,171 (9.13%) openings – postsecondary non-degree award
  - › 619 (4.82%) openings – Associate's degree
  - › 1,893 (14.76%) openings – Bachelor's degree
- › 241 (1.87%) openings – Master's degree
- › 373 (2.91%) openings – Doctoral or professional degree
- › Of the top thirty annual job openings within the service area between 2015 and 2025, approximately 994 openings are related to medical occupations, 1,332 are related to business occupations, and 452 are related to education/teaching.
- › Of the projected 12,828 average annual occupation openings in the service area between 2015 and 2025, approximately 7,079 openings belong to occupations that are related to programs offered by SBVC. The 7,079 openings can be broken down by typical entry level education as follows:
  - › 278 (3.93%) openings – less than high school
  - › 3,321 (46.91%) openings – high school diploma or equivalent
  - › 184 (2.59%) openings – some college, no degree
  - › 602 (8.5%) openings – postsecondary non-degree award
- › 539 (7.61%) openings – Associate's degree
- › 1,714 (24.33%) openings – Bachelor's degree
- › 216 (3.06%) openings – Master's degree
- › 225 (3.17%) openings – Doctoral or professional degree
- › The programs with the highest number of related average annual openings in the service area between 2015 and 2025 are the following:
  - › Business Administration (22.22% or 1,573 openings)
  - › Nursing (17.68% or 1,252 openings)
  - › Childhood Development/Education (11.62% or 823 openings)
  - › Accounting (7.69% or 544 openings)
  - › Automotive Technology (5.25% or 372 openings)

## Labor Market Information

# LABOR MARKET INFORMATION FINDINGS *(cont.)*

- › The service area job openings that have a typical entry level education of a postsecondary non-degree award or higher between 2015 and 2025 are expected to primarily be related to the following programs:
  - › Nursing (28.81% or 949 openings)
  - › Childhood Development/Education (18.15% or 598 openings)
  - › Business Administration (15.81% or 521 openings)
  - › Accounting (7.08% or 233 openings)
  - › Human Services (5.78% or 191 openings)
- › There are projected to be approximately 44,181 average annual job openings between 2015 and 2025 in the region, excluding occupations with an average hourly wage of less than \$12 and occupations with insufficient data to determine average hourly wages. The 44,103 openings can be broken down by typical entry level education as follows:
  - › 11,598 (26.25%) openings – less than high school
  - › 18,170 (41.13%) openings – high school diploma or equivalent
  - › 584 (1.32%) openings – some college, no degree
- › 3,533 (8%) openings – postsecondary non-degree award
- › 1,939 (4.39%) openings – Associate's degree
- › 6,447 (14.59%) openings – Bachelor's degree
- › 728 (1.65%) openings – Master's degree
- › 1,182 (2.68%) openings – Doctoral or professional degree
- › Of the top thirty annual job openings within the region between 2015 and 2025, approximately 2,404 annual openings are related to medical occupations, 5090 are related to business professions, and approximately 1,374 jobs are related to education/teaching.
- › Of the 44,181 regional openings projected between 2015 and 2025, approximately 24,057 of the openings belong to occupations related to programs offered by SBVC. The 24,057 average annual openings can be broken down by typical entry level education as follows:
  - › 756 (3.14%) openings – less than high school
- › 12,105 (50.32%) openings – high school diploma or equivalent
- › 579 (2.41%) openings – some college, no degree
- › 1,818 (7.56%) openings – postsecondary non-degree award
- › 1,682 (6.99%) openings – Associate's degree
- › 5,761 (23.95%) openings – Bachelor's degree
- › 644 (2.68%) openings – Master's degree
- › 712 (2.96%) openings – Doctoral or professional degree
- › The programs with the highest number of related average annual openings in the region between 2015 and 2025 are the following:
  - › Business Administration (22.01% or 5,295 openings)
  - › Nursing (14.46% or 3,748 openings)
  - › Child Development/Education (10.29% or 2,476 openings)
  - › Accounting (8.64% or 2,079 openings)
  - › Administration of Justice/Corrections (6.71% or 1,614 openings)

- › The regional job openings that have a typical entry level education of at least a postsecondary non-degree award or higher between 2015 and 2025 are expected to primarily relate to the following programs:
  - › Nursing (25.11% or 2,666 openings)
  - › Child Development/Education (17.12% or 1,818 openings)
  - › Business Administration (15.74% or 1,671 openings)
  - › Accounting (8.69% or 922 openings)
  - › Biology (6.17% or 655 openings)

## Labor Market Information

# CONSIDERATIONS FROM INTERNAL + EXTERNAL SCAN DATA COMPARISON

Participation rate may be defined as the number of head count students the College enrolls for every 1,000 persons within the service area population. During the 2014-15 academic year, SBVC had a participation rate of 12.59 students per 1,000 persons within the service area. During the most recent enrollment peak (2008-09) the College's participation rate was 17.11 students per 1,000 persons within the service area. The statewide California Community College participation rate is approximately 54 students per 1,000 persons within the total population. There is a significant opportunity for SBVC to increase its participation rate.

While service area population age 20-29 years old increased by 34,096 persons from 2010 to 2015, enrollment from students age 20-29 years old declined by 62 persons from 2010-11 to 2014-15. Between 2015 and 2025, the 20-29 year old age group within the service area is projected to decrease by 31,719 persons (-13.37%). The College cannot rely on population growth as a major contributor to enrollment growth and should focus efforts on attracting a larger proportion of persons within its core College demographic.

The College is considered a Hispanic-serving institution with Hispanics accounting for 63.1% of unduplicated

**EXHIBIT 4.14: PARTICIPATION RATE (PER 1,000 PERSONS IN TOTAL POPULATION)**



enrollment (11,135 students) in the 2014-15 academic year. In 2015, Hispanics accounted for 58% of the service area population (822,776 persons) and by the year 2025 Hispanics are expected to makeup 60.3% of the service area population (899,783 persons). However, in the 2014-15 academic year, Caucasians comprised 14.4% of unduplicated enrollment. In 2015, Caucasians made up 24.8% of the service area population. Additionally, Asians are the second

fastest growing population within the service area, with an increase of 11,369 persons expected between 2015 and 2025 (13.85% growth). The College has an opportunity to continue increasing student diversity, particularly with respect to Caucasian and Asian students.

During the fall 2014 term SBVC enrolled 134 first-time college students from Colton High School. During the

2013-14 academic year Colton High School produced 389 graduates. It is reasonable to expect that some of the fall 2014 enrollment from Colton High School graduates were not from the high school class of 2013-14. However, assuming that a great majority of those enrolled at SBVC from Colton High School in fall 2014 were from the high school class of 2013-14, then approximately 34.5% of Colton High School graduates from the class of 2013-14 enrolled at SBVC in the fall of 2014. During the fall 2014 term SBVC captured approximately 26% of 2013-14 graduates from Pacific High School and 23% of graduates from San Bernardino High School. The College captured less than 20% of 2013-14 graduates from Cajon, San Geronimo, Arroyo Valley, Rialto, and Eisenhower high schools. It should be noted that during the fall 2014 term SBVC captured over 100% of the 2013-14 graduates from Middle College High School, indicating that the College is very successful at capturing both the current and previous class' graduates. However, there still exists an opportunity for the College to capture a larger proportion of feeder high school graduates.

Labor market information projections show that 13.71% (6,057 openings) of the 44,181 projected annual job openings between 2015 and 2025 in the region with an

average hourly wage of \$12 or more typically require an entry level education of either some college, a postsecondary non-degree award, or an Associate's degree, and 14.59% (6,446 openings) require a Bachelor's degree. The College will increase regional employment by supporting existing certificate and degree programs, creating new programs that support local labor needs, and supporting transfer to four-year institutions.

During the fall 2014 term SBVC produced 12,943 WSCH from English courses, however, 7,266 WSCH was attributable to below college level English (56.14% of total English WSCH). Reading courses accounted for 3,881 WSCH of which 100% are considered below college level courses. English as a second language (ESL) courses accounted for 718 WSCH of which 100% are considered below college level courses. Combined, English, reading, and ESL courses accounted for 17,543 WSCH during fall 2014, of which 11,866 WSCH (67.64%) was attributable to below college level courses. During the fall 2014 term SBVC produced 19,758 WSCH from mathematics courses, however, 13,131 WSCH was generated from below college level math (66.46% of total mathematics WSCH). The high demand for below college level courses is also

supported by CAASPP scores for students within the top feeder high schools. The average percentage of students from the top ten feeder high schools (fall 2014) that tested below standards in English was 51% while 76% tested below standards in mathematics. The College continues to identify innovations and best practices to support the needs of unprepared/under prepared students.

During the fall 2014 term SBVC produced 11,290 WSCH from CTE designated courses (8.05% of total WSCH). Between 2015 and 2025, there are projected to be approximately 1,280 average annual job openings for occupations related to CTE programs offered by SBVC in the service area (9.97% of all service area job openings). There are projected to be approximately 4,357 average annual job openings for occupations related to CTE programs offered by SBVC in the region during the same time period (9.86% of all regional job openings). The College has an opportunity to expand its offerings of CTE courses to meet the anticipated future demand for skilled vocationally trained workers in the service area and region.

During the fall 2014 term, SBVC generated 98,338 WSCH from 100 level and above transfer and general

## Labor Market Information

# CONSIDERATIONS FROM INTERNAL + EXTERNAL SCAN DATA COMPARISON *(cont.)*

education courses. These courses support 79.2% of students who have identified their educational goal in 2014-2015 as BA/BS Degree after Associates, BA/BS Degree without Associates, and Associates/Vocational Degree without transfer. WSCH for 100 level and above transfer and general education courses is inclusive of CTE programs with degree and transfer patterns. The College intends to support and increase Associate degrees and transfer by providing greater access to 100 level and above courses.

# SAN BERNARDINO VALLEY COLLEGE





# Strategic Directions + Goals

The College's Strategic Directions, goals, and objectives were defined through a collegial consultation process at SBVC and are included within its 2014-2019 *Strategic Plan*.

Steps in the strategic planning process include the following:

- › Reviewing progress toward achieving goals and objectives from the previous *Strategic Plan*
- › Reviewing the College mission statement
- › Soliciting input from all stakeholders (faculty, staff, students, foundation members, Board of Trustees members, community members, business leaders, K-12 representatives, and political officials)
- › Establishing Strategic Directions, goals, and objectives based on major themes from stakeholder input and data in correlation with the College mission
- › Presenting bimonthly updates and receiving feedback from College Council
- › Presenting campus-wide updates to all stakeholders at the beginning and end of each semester
- › Reviewing and revising the final Strategic Plan with a sub-committee of the Academic Senate

## Strategic Directions + Goals

# STRATEGIC DIRECTIONS + GOALS

## 1

### INCREASE ACCESS

Goal: SBVC will improve the application, registration, and enrollment procedures for all students.

Supporting Actions:

- › Match the number of basic skills courses to student demand
- › Increase the number of accelerated basic skills courses
- › Provide more pre-assessment workshops
- › Improve the assessment process for more accurate placement
- › Establish and maintain partnerships with community organizations, K-12 systems, and adult schools
- › Explore and expand online advising opportunities
- › Improve access to transfer, CTE Certificate, and other courses needed for graduation
- › Create better balance between transfer and CTE program offerings
- › Improve access to technology

Supporting Institutional Learning Outcomes:

- › 1, 2, 3

## 2

### PROMOTE STUDENT SUCCESS

Goal: SBVC will increase course success, program success, access to employment, and transfer rates by enhancing student learning.

Supporting Actions:

- › Increase the percentage of students who succeed in basic skills courses
- › Promote and increase the number of students in learning communities
- › Expand the use of early alert systems (i.e. SARS)
- › Improve performance on all Student Success Scorecard measures
- › Increase the use of low-cost and free online resources
- › Maintain up-to-date curriculum that is relevant to community needs
- › Encourage greater full-time enrollment
- › Use Student Learning Outcomes (SLOs) and Service Area Outcomes (SAOs) in an ongoing, systematic cycle of continuous quality improvement
- › Increase the number of students with terminal education plans
- › Establish and maintain an appropriate ratio of full-time to part-time faculty
- › Increase the number of grant opportunities to support student success

Supporting Institutional Learning Outcomes:

- › 1, 2, 3, 4, 5

## 3

### IMPROVE COMMUNICATION, CULTURE + CLIMATE

Goal: SBVC will promote a collegial campus culture with open line of communication between all stakeholder groups on and off-campus.

Supporting Actions:

- › Promote a sense of community and solidarity within the campus and embrace diversity (students, faculty and staff)
- › Promote budgetary transparency
- › Disseminate College Committee meeting minutes and all plans online
- › Build community recognition and networks by capitalizing on the College community roots
- › Expand and enhance local business and community awareness of the College
- › Establish a College historical archive that is accessible online
- › Build a stronger relationship with the SBVC foundation
- › Ensure exceptional customer service in all campus offices
- › Work with the District to streamline and expedite campus hiring practices
- › Improve campus morale

Supporting Institutional Learning Outcomes:

- › 5

## 4

**MAINTAIN LEADERSHIP + PROMOTE PROFESSIONAL DEVELOPMENT**

Goal: SBVC will maintain capable leadership and provide professional development to a staff that will need skills to function effectively in an evolving educational environment.

## Supporting Actions:

- › Reduce manager turnover – fewer interims and more permanent managers
- › Improve access to a wide variety of professional development activities/organizations
- › Maintain a personal achievement inventory for faculty and staff
- › Establish partnerships with neighboring community colleges

## Supporting Institutional Learning Outcomes:

- › 4, 5

## 5

**EFFECTIVE EVALUATION + ACCOUNTABILITY**

Goal: SBVC will improve institutional effectiveness through a process of evaluation and continuous improvement.

## Supporting Actions:

- › Maintain up-to-date information on campus indicators, including evaluation data on support/retention programs and accreditation self study evidence
- › Improve and maintain effective Program Review procedures
- › Evaluate and update all campus level plans on a regular cycle
- › Produce and present annual reports that assess student success
- › Measure satisfaction with assessment and placement
- › Manage grant expenditures and align them with grant objectives

## Supporting Institutional Learning Outcomes:

- › 1, 2, 3, 4, 5

## 6

**PROVIDE EXCEPTIONAL FACILITIES**

Goal: SBVC will support the construction and maintenance of safe, efficient, and functional facilities and infrastructure to meet the needs of students, employees and the community.

## Supporting Actions:

- › Conserve resources
- › Maintain a safe and secure environment
- › Improve campus signage
- › Continue with the facilities improvement plan (Implementation of the Facilities Master Plan)
- › Develop and maintain adequate parking
- › Provide exemplary technology and support while maintaining fiscal and environmental responsibilities

## Supporting Institutional Learning Outcomes:

- › 4

**\*SBVC's Institutional Learning Outcomes (ILOs) can be found in the Appendix.**



# SAN BERNARDINO VALLEY COLLEGE



# Commitments For The Future

## Commitments For The Future

# CONTEXT

### Positive Forecast for the East Valley in 2001:

- › A decade and a half ago, San Bernardino Valley was described as an area with a rapidly growing population and a strong potential for job growth. There was reason for optimism. In 2001, John Husing, an economist with deep knowledge of the Inland Empire, made the case for a favorable future in a report titled “San Bernardino Community College District and the East San Bernardino Valley’s Future.” He based his assessment of the potential for the Inland Empire and, more specifically, the East San Bernardino Valley (East Valley) on population growth and job growth. The availability of affordable housing and undeveloped land along transportation corridors were major factors supporting his favorable view of the economic potential for the region.

### Barriers to an Improved Economy:

- › Husing identified two primary barriers to development in the East Valley: low income levels and limited educational attainment in the region. While the availability of land and affordable housing were attractive features to potential employers, the lack of an educated work force was a disincentive to businesses

looking to locate in the region. Those two limitations are still relevant to discussions of the economic and social future of the region.

### Cooperative Leadership Necessary for an Improved Standard of Living:

- › Husing’s report called for a response from the leadership of the East Valley. He advocated for strategic cooperation among the area’s governmental, business, and educational institutions for the economic and cultural development of the area. In particular, he advocated that the SBCCD, as the major tax-supported institution for adult education and training in the East Valley, take an active leadership role in the future development of the region. He cautioned that without a concerted effort to address the educational needs of the area, the East Valley will become bigger, but no better.

### The District and San Bernardino Valley College:

- › Husing claimed that the future success of the region depended on the participation of SBCCD with governmental, business and other educational institutions in leading a movement to vitalize the area. He argued that regional leadership would make the difference

between success and failure. For its part, the District was encouraged to lead in the effort to raise the standard of living in the region and to fundamentally alter educational dynamics in favor of integrating its programs with those of other community institutions and to develop mechanisms to respond rapidly to training needs as they arise.

- › The optimism of the forecast in 2001 reflected the confidence and hope of many at that time. Employment was growing; population and school enrollments were increasing in double-digit numbers; and housing was booming. The economic cataclysm of 2008 was nowhere in sight.
- › The passage of bond measures in 2002 and 2008 validated the importance taxpayers assigned to the District and its colleges and their confidence in the future. Funds from the bonds revitalized facilities, addressed earthquake vulnerabilities and constructed new buildings. Even with the economic turnaround in late 2008, the importance of the District as a major cultural institution was, and is, recognized by all.



### San Bernardino Valley College Vital to Cultural Development of the Inland Empire:

- › SBVC, as the older and larger of the two colleges in the District has served its community since 1926. It has stood the test of time and stands as the primary cultural institution of the East Valley. During its 90-year history, it has adapted to and survived the Great Depression, World War II, the turmoil of the Civil Rights Movement, fires in its surrounding area, threat of earthquake and annual funding fluctuations based on a state budget that rises and falls from year-to-year.
- › Today, SBVC is a medium-sized college, located in an urban center of the East San Bernardino Valley. In 2014-15, approximately 17,635 students enrolled at the College (down from its peak enrollment of 22,199 students in 2008-09. A majority of students are Hispanic. The College offers approximately 40 programs of general education curricula and 12 Career and Technical Education departments. Extensive student support services and programs are available, including Admissions and Records, Financial Aid, Library Services, Student Health, Student Clubs, Tutoring, and a number of others.

The leadership of administrative staff and the support of classified staff are essential to the management and operation of the College. The Aspen Institute recognized SBVC as one of the top 150 community colleges in the nation that show improvement in student performance and completion.

- › A number of competitive grants have contributed to recent successes at SBVC. Tutoring resources and basic skills funding are two examples. In 2013-14, approximately 695 students from SBVC transferred to four-year institutions. In 2014-15, approximately 981 associate degrees were awarded and 347 certificates were awarded from SBVC.
- › SBVC is in a strong position to be a catalyst in a rebounding economy over the coming decade. With public awareness that the Inland Empire was among the regions hit hardest by the Great Recession, all eyes are on its recovery. Along with the attention given to other communities damaged by the recession, San Bernardino has had media attention questioning its future. James Fallows, a journalist and former editor of *The Atlantic*, in an article called, “Can America Put Itself Back

Together?” referred to San Bernardino as a “hard luck city” whose resilient residents were encouraged by “...the collaborative efforts on education reform under way right now in their own town.” During the 2015 *Inland Empire Economic Forecast Conference*, Husing stated that “the economy here is really doing incredibly well... This will be the third year in a row that we’ve added over 50,000 jobs. That’s never happened before... The economy is really taking off.” At the national level, community colleges, which once garnered little attention in the national spotlight, are now prominent in policy discussions about education in Washington, D.C.

- › There is potential for renewal that will take the College to a new level. It is assured that the region will grow in population and more complexity of its organization. SBVC provides multiple pathways for students. SBVC provides students with educational opportunities for basic skills, job skills, workforce certificates and transfer preparation. Students are also introduced to a wide array of career and learning opportunities.

## Commitments For The Future

# COMMITMENTS FOR THE FUTURE OF SAN BERNARDINO VALLEY COLLEGE

The following commitments for the future were developed from analysis of extensive data scans of the College and the external environment; interviews of more than 50 administrators, faculty, student services employees and classified staff; review of College and District planning documents; commentary from industry experts; the State Strategic Plan for California Community Colleges; and the College's most recent Accreditation documents. Consultation with College Council was an ongoing feature in the EMP development process.

As appropriate to an Educational Master Plan, the Strategic Directions are intended to be long-term priorities and areas of focus, subject to modifications as conditions and capacity change. Strategic Directions have been brought into alignment with the State System Plan and the District Plan, as well as other College level plans.

In addition to the College's Strategic Directions, Goals, and Supporting Actions (identified in *Strategic Directions & Goals*), SBVC considers the following commitments to shape the future of the College and serve the East Valley community:

- › Enhancing and Improving Transfer Pathways
- › Doing What Matters for Career and Technical Education (CTE)
- › Assuring that Basic Skills Courses Lead to Success and the Realization of Student Goals
- › Improving Student Success by Strengthening Coordination between Student Services, Instruction, and Academic Support
- › Advancing Educational Partnerships
- › Lead the Restructuring of Adult Education in the Region

## Commitments For The Future

# ENHANCING + IMPROVING TRANSFER PATHWAYS

- › Continue to provide a clear pathway for students who have a goal of transferring to a four-year college or university.
- › Maintain and enhance relationships with surrounding four-year colleges and universities to help students obtain information about available options.
- › Continue to enhance the Honors Program to facilitate transfer to four-year institutions.
- › Increase opportunities on campus for students to learn about requirements for transferring and increase articulation agreements.
- › Evaluate and improve the availability of transferrable courses to meet the needs of our students' schedules; incoming college-ready students may have the possibility to complete a degree within two years.
- › Collaborate internally and with external partners to provide sufficient resources to support student success and career exploration.

### Rationale

San Bernardino Valley College, as mentioned earlier, is responsible for providing high-quality education to an underserved population. As such, the college recognizes, as one of its missions that it must continually strengthen and enhance its services to students who have chosen this institution as a pathway to four-year colleges and universities. Over the years, the College has had an increase in students with the educational goal of obtaining advanced degrees. In the 2014-15 academic year, nearly 65% of students stated transfer as their educational goal (see Table: *Unduplicated Enrollment by Educational Goal*) and the College upholds its responsibilities to provide those students with the skills, knowledge, and tools they need to become independent and successful learners at those institutions. With the increasing number of students who want to continue their education at four-year institutions, the College must continue its commitment to transfer students and provide those students with a high-quality education and with services targeted at those goals.

### Strategic Directions

- › #1 - Increase Access
- › #2 - Promote Student Success
- › #5 - Effective Evaluation + Accountability
- › #6 - Provide Exceptional Facilities

## Commitments For The Future

# DOING WHAT MATTERS FOR CAREER + TECHNICAL EDUCATION

- › Work collaboratively to develop high quality curriculum and implementation programs for Career and Technical Education that are aligned with state and local economic priorities, and meet workforce development needs.
- › Establish partnerships with education, business and public sector members to develop education and training for employment that will provide a living wage and opportunity for career advancement.
- › Work with academic partners to develop comprehensive pathways that encompass core basic skills, applied academic and career technical education, and ongoing education for career advancement. This may also include articulation of certain CTE courses with four-year institutions.
- › Participate actively in collaborations with regional networks engaged in economic and workforce development.
- › Evaluate course offerings and WSCH production balance between CTE, for transfer, and basic skills courses to adjust for current and future community needs.

### Rationale

A renewed focus on Career and Technical Education for acknowledgement of SBVC's vital role in the economic development of San Bernardino. The rosy forecast for the region in 2001 was stalled by a series of events that have prompted San Bernardino to be labeled a "hard luck" community. Recovery from The Great Recession of 2009 has been slow, but steady growth is, once again, on the horizon. San Bernardino Valley College, as the primary educator of adult residents of the East Valley has an opportunity and obligation to take an active role in realizing the economic future of the region.

A scan of WSCH by instructional area shows that in fall 2014, transfer courses produced 72.8% of WSCH; basic skills courses generated 17.8% of total WSCH; and CTE courses produced 8% of total WSCH. Given current external needs of the service area and region, CTE appears to be underrepresented in course offerings. The College may wish to examine that balance and realign its curriculum.

### Strategic Directions

- › #1 - Increase Access
- › #2 - Promote Student Success
- › #5 - Effective Evaluation + Accountability
- › #6 - Provide Exceptional Facilities

## Commitments For The Future

# ASSURING THAT BASIC SKILL COURSES LEAD TO SUCCESS + THE COMPLETION OF STUDENT GOALS

- › Accurately assess and place students in courses appropriate to their abilities and academic preparation.
- › Determine whether students emerge from different sections of the same course with comparable new skills.
- › Assure students are fully prepared by each course for the next course in a sequence and/or college-level sequence.
- › Integrate basic skills in appropriate lower division courses.
- › Take a leadership role in the Regional Consortium for Adult Education to address the need for basic skills and ESL education in the region.
- › Include basic skills sequences when promoting pathways to associate degrees and transfer success. This may also include developing enhanced non-credit offerings with pathways to certificates, associate degrees and transfer.
- › Train all employees in methodologies that support basic skills students.
- › Continue actively seeking basic skills grant funding. This may require designating a District or College level manager for responsibility of grant writing, fiscal management, and implementation.

### Rationale

The crisis in educational attainment is pervasive at all

levels of public education. Across California community colleges, more than 60% of entering students require at least one basic skills class when they enroll, (recent information in the 2016-17 Governor's Budget Proposals places that figure at 75%). In California, only 25% of basic skills reading students ever enroll in transfer-level English classes and only 10% make it to transfer-level math, (*A Guide to Transforming Basic Skills Education*).

SBVC is among the California community colleges with the largest share of under prepared students. Reading, writing, math and ESL instruction are in high demand. The State Student Success Scorecard reports a low success rate for the College in progress to subsequent enrollment in college-level work. By this measure, SBVC's success is low in both English and math compared to other community colleges in the state. Underprepared students was the most frequently identified issue in interviews with deans and faculty at SBVC.

The growing Hispanic population in the region, many of whom have limited English proficiency, reflect the need for ESL instruction and basic skills. The current work of the Regional Consortium for Adult Education is an opportunity to clarify the role of SBVC in answering this important unmet need for ESL instruction.

The impact of low educational attainment is hard to overestimate. The social costs of unemployment and underemployment are seen in poverty, crime rates, mental health needs, and other conditions that undermine communities. There is little doubt that education is a factor in these costs to society. The economic costs are direct, reflected in employers decisions to locate elsewhere due to a lack of a skilled and/or educated workforce and dissatisfaction with job applicants.

The statement of the seriousness of the problem is not to suggest the SBVC community is remiss in addressing it. Nearly 18% of the College's WSCH comes from basic skills courses. The recent development of courses to target identified needs in math and reading attest to faculty response to basic skills needs. Early results from new, accelerated basic skills curriculum are positive. The College pursuit of grant funds for basic skills is another indication of its commitment. Still, the need to address basic skills needs remains acute.

### Strategic Directions

- › #1 - Increase Access
- › #2 - Promote Student Success
- › #3 - Improve Communication, Culture + Climate
- › #4 - Maintain Leadership + Promote Professional Development

## Commitments For The Future

# IMPROVING STUDENT SUCCESS BY STRENGTHENING COORDINATION BETWEEN STUDENT SERVICES, INSTRUCTION + ACADEMIC SUPPORT

- › Resolve issues related to assessment tests, including alignment of tests with specific college courses so that assessment processes are reliable predictors of course success, ESL testing, and early assessment.
- › Address the gap in information sharing between Student Services and Instruction so that students are able to make full use of student Support Services. Employ technology to Support communication and information between instructional and student services.
- › Develop structural mechanisms to build trust and common understanding among stakeholders across the campus, with regard to tutoring, supplemental instruction, student success courses, and other support programs.
- › Streamline written information for easy comprehension and follow through.

### Rationale

Student learning does not take place exclusively inside the classroom. Learning takes place in a counselor's office, a library, cohort groups, specialized services, tutoring centers, and dedicated labs. Over the years, Student Services has evolved and contributes to student success and equity in ways unimagined a generation ago. Coordination and communication between student support programs, instruction, and academic support services is vital to student success. Several support service programs and academic support services are well integrated into formal instruction at the College. However, the number of traditional and innovative programs and services offered at SBVC (over 30) makes increasing communication and collaboration across campus challenging, but necessary to student success.

### Strategic Directions

- › #2 - Promote Student Success
- › #3 - Improve Communication, Culture + Climate
- › #4 - Maintain Leadership + Promote Professional Development
- › #6 - Provide Exceptional Facilities

## Commitments For The Future

# ADVANCING EDUCATIONAL PARTNERSHIPS

- › Deepen involvement with K-12 partners by expanding and extending past efforts.
- › Collaborate with K-12 partners in addressing assessment and placement issues.
- › Include K-12 personnel in deliberations with four-year university pathways discussions.
- › Continue work with CSU partners to smooth the way to transfer.
- › Continue to pursue relationships with UC to secure transfer opportunities for SBVC students.
- › Continue to enhance relationships with other educational partners in the community.
- › Strengthen and enhance dual and concurrent enrollment opportunities.

### Rationale

SBVC has had productive relationships with a number of K-12 partners. The Middle College is noteworthy for its accomplishments in providing enrollment for the College as well as students who tested most proficient in English and math among top feeder high schools (as measured by CAASPP test results administered in 11th grade). Among feeder high schools various opportunities for interaction with College personnel have been productive. The busy schedules of personnel in public schools and the College currently limit the capacity to interact on each other's school sites.

Policy-makers at all levels, education experts, taxpayers, professional educators and students are in agreement that pathways to education at all levels are of the highest importance in public education. Common course numbering, articulation of course content and sequences, streamlining instruction for timely completion of educational programs, the use of technology to improve access and a variety of other strategies are all on the table. The size and scope of challenges facing education is such that crossing the boundaries of public education institutions to form alliances is important.

### Strategic Directions

- › #1 - Increase Access
- › #2 - Promote Student Success
- › #3 - Improve Communication, Culture + Climate
- › #6 - Provide Exceptional Facilities

## Commitments For The Future

# LEAD THE RESTRUCTURING OF ADULT EDUCATION IN THE REGION

- › Participate in rebuilding adult education delivery capacity in the region.
- › Along with educational partners, restore and renew adult education programs, especially basic skills, CTE, and ESL.
- › Align assessments for placement between adult education and community college courses, especially basic skills, CTE, and ESL.
- › Work with other regional partners to develop a common accountability system for data collection and exchange between the K-12 adult schools and the community college system.
- › Maintain and extend structures for ongoing coordination with Adult Education and community partners.

### Rationale

As many as 800,000 people were eliminated from the rolls of Adult Education programs in California during statewide budget cuts beginning in early 2009. From then until the passage of Assembly Bill 86, continuity and coherence of the entire state program were in acknowledged disarray. The new legislation in 2013

charged the California Department of Education and the Community College Chancellor's Office to restore, reform, and improve the long-standing Adult Education system in the state.

Since the 1960s, the responsibility for adult education in California has been shared between the community colleges and the K-12 systems. The determination as to which institution offered courses was a local matter. That joint responsibility continues, but with the additional opportunity now to update its program offerings and improve operations.

Participation of the District and SBVC in the Adult Education regional planning effort is an important opportunity to clarify roles of education providers and jointly determine how to serve the large numbers of community members seeking education in basic skills, as well as potential ESL students. Regarding CTE, collaboration with education partners and private sector partners in redesigning job training opportunities for today's labor market should be a priority. The potential to improve the flow of students from adult education programs to college is an investment in improving the retention and success of those who have often dropped out in the past.

Aligning curriculum between adult schools and community colleges presents a substantial challenge—a project that is best approached over time. And yet it can be done as it has between community colleges and some CSU campuses. It is similar to the widely endorsed priority to align curriculum and assessment with high schools. The logic of the recommendation is sound, but the scarce resources of time and money are recognizable obstacles. A counter to the concern about resources is the major accomplishment the community colleges and the four-year universities have achieved with alignment of curriculum and guaranteed transfer. In the current proposed state budget, the Governor's office calls for taking the next step in improving student access to education.

### Strategic Directions

- › #1 - Increase Access
- › #2 - Promote Student Success
- › #3 - Improve Communication, Culture + Climate
- › #6 - Provide Exceptional Facilities



# SAN BERNARDINO VALLEY COLLEGE



# Program Of Instruction + Space Needs

Educational program development and curriculum processes have been identified in Title 5 as academic and professional matters and, as such, all current and future processes operate under the authority of the Academic Senate. SBVC administration respects and relies primarily upon the recommendations of the program review committee, curriculum committee, and Academic Senate in matters related to program creation, program growth, and program discontinuance. Current processes, which include curriculum, program efficacy, needs assessment, and program discontinuance require programs to undergo a thorough analysis of educational and economic data before the committees/Academic Senate make a recommendation to the President.

The SBVC campus continues its annual review process for growth and contraction, carefully analyzing all data pertinent to its decision making. For the purposes of estimating needs during this master planning cycle, a linear growth model for department growth is being

utilized to estimate the future program of instruction and space needs. However, it is the College's intent to update growth projections annually and implement its plan for selective programmatic growth, once finalized through the collegial consultation process.

The 2015 State Chancellor's Office Long Range WSCH Projections for SBCCD were utilized to establish projected enrollment and WSCH growth. From 2015-16 to 2021-22, the state anticipates that District-wide WSCH will increase annually by 1.7% and growth will decrease to 1.4% annually thereafter. Historical data from 10 consecutive terms (fall 2005 to fall 2014) suggest that San Bernardino Valley College is responsible for 68.35% of District-wide WSCH. Fall 2014 data established baseline program of instruction data for the College. Future program of instruction projections were developed and analyzed with Title 5 space standards to estimate instructional space needs for the College.

The following considerations are accounted for within enrollment and WSCH projections:

- › Historical data regarding enrollment and WSCH generation
- › Projected population growth within the College service area and region
- › Historical participation rate of the population's enrollment at SBVC
- › Conditions within the external and internal environment

## Program Of Instruction + Space Needs

# PROGRAM OF INSTRUCTION

The primary metric for determining the total student demand on facilities space needs is WSCH. This measurement is representative of the student contact hours within instructional space on campus during the semester. Fall 2014 data was utilized to determine a baseline for WSCH generation by department and establish a baseline program of instruction.

Math and English comprise the largest WSCH generating subjects for the College, constituting 14.1% and 9.2% of WSCH during the fall 2014 semester, respectively. The next highest group of WSCH generating subjects at the College generated between

5.6% and 3.6% of total WSCH during the fall 2014 semester, which include Biology, Chemistry, History, and Art.

Future program of instruction projections anticipate that the College may see a 3.87% increase in WSCH generation by the fall 2016 term, from 140,302 WSCH during fall 2014 to 145,728 WSCH during fall 2016. From fall 2016 to fall 2021, the College is expected to increase its WSCH generation to 158,457 WSCH (8.73% growth over 5 years). From fall 2021 to fall 2026, the College is expected to increase its WSCH generation to 169,978 WSCH (7.27% growth over

5 years). From fall 2026 to fall 2031, the College is expected to grow to generating 182,214 WSCH (7.2% growth over 5 years).

### EXHIBIT 7.01: PROGRAM OF INSTRUCTION (FALL 2014 – FALL 2031)

Department	SBVC - FALL WSCH BY COURSE TYPE					
	Subject	2014	2016	2021	2026	2031
Academic Advancement (ACAD)	ACAD	331	344	374	401	430
Accounting (ACCT)	ACCT	2,104	2,185	2,376	2,549	2,733
Administration of Justice (ADJUS)	ADJUS	1,683	1,748	1,901	2,039	2,186
Aeronautics (AERO)	AERO	1,047	1,087	1,182	1,268	1,360
Anthropology (ANTHRO)	ANTHRO	1,453	1,509	1,641	1,760	1,887
Arabic (ARAB/ARABIC)	ARAB	240	249	271	291	312
Architecture & Environmental Design (ARCH)	ARCH	441	458	498	534	573
Art (ART)	ART	5,014	5,208	5,663	6,074	6,512
American Sign Language (ASL)	ASL	1,361	1,414	1,537	1,649	1,768

Department	SBVC - FALL WSCH BY COURSE TYPE					
	Subject	2014	2016	2021	2026	2031
Astronomy (ASTRON)	ASTRON	315	327	356	382	409
Automotive (AUTO)	AUTO	3,307	3,435	3,735	4,007	4,295
Biology (BIOL)	BIOL	7,855	8,159	8,871	9,516	10,202
Business Administration (BUSAD)	BUSAD	2,009	2,087	2,269	2,434	2,610
Child Development (CD)	CD	3,837	3,985	4,333	4,648	4,983
Chemistry (CHEM)	CHEM	5,680	5,900	6,415	6,882	7,377
Computer Information Technology (CIT)	CIT	3,314	3,442	3,743	4,015	4,304
Communication Studies (COMMST)	COMMST	4,237	4,400	4,785	5,133	5,502
Corrections (CORREC)	CORREC	462	480	522	560	600
Criminal Justice (CRMJUS)	CRMJUS	182	189	206	221	237
Computer Science (CS)	CS	852	885	962	1,032	1,107
Culinary Arts (CULART)	CULART	1,106	1,149	1,250	1,340	1,437
Dance (DANCE)	DANCE	369	383	417	447	479
Diesel (DIESEL)	DIESEL	548	569	619	664	712
Economics (ECON)	ECON	1,695	1,761	1,914	2,054	2,201
Electricity (ELEC)	ELEC	174	181	197	211	226
Electronics (ELECTR)	ELECTR	1,261	1,310	1,424	1,528	1,638
English (ENGL)	ENGL	12,943	13,444	14,618	15,681	16,810
Real Estate (REALST)	REALST	327	340	369	396	425
English as Second Language(ESL)	ESL	718	746	811	870	933
Food & Nutrition (FN)	FN	666	692	752	807	865
Geography (GEOG)	GEOG	1,841	1,912	2,079	2,230	2,391
Geology (GEOL)	GEOL	261	271	294	316	338
Geographic Information Systems(GIS)	GIS	205	213	232	249	267

## Program Of Instruction + Space Needs

PROGRAM OF INSTRUCTION *(cont.)*

Department	SBVC - FALL WSCH BY COURSE TYPE					
	Subject	2014	2016	2021	2026	2031
Health Education (HEALTH)	HEALTH	1,543	1,602	1,742	1,869	2,004
History (HIST)	HIST	5,093	5,290	5,752	6,171	6,615
Human Services (HUMSV)	HUMSV	2,586	2,686	2,920	3,132	3,358
Heating, Ventilation Air Conditioning & Refrig. (HVAC/R)	HVAC/R	890	924	1,005	1,078	1,156
Inspection Technology (INSPEC)	INSPEC	120	125	136	145	156
Kinesiology(KIN)	KIN	700	727	791	848	909
Kinesiology Adapted (KINA)	KINA	66	69	75	80	86
Kinesiology Fitness (KINF)	KINF	2,987	3,102	3,373	3,619	3,879
Kinesiology Team/Sport & Skill (KINS)	KINS	120	125	136	145	156
Kinesiology Varsity (KINX)	KINX	2,491	2,587	2,813	3,017	3,235
Library Technology (LIB)	LIB	250	260	283	303	325
Machine Technology (MACH)	MACH	330	343	373	400	429
Mathematics (MATH)	MATH	19,758	20,522	22,315	23,938	25,661
Music (MUS/MUSIC)	MUS	2,182	2,266	2,464	2,644	2,834
Nursing (NURS)	NURS	2,850	2,960	3,218	3,452	3,701
Oceanography (OCEAN)	OCEAN	165	171	186	200	214
Occupational Safety and Health Admin. (OSHA)	OSHA	40	41	45	48	51
Philosophy/Religious Studies (PHIL)	PHIL	1,479	1,536	1,670	1,792	1,921

Department	SBVC - FALL WSCH BY COURSE TYPE					
	Subject	2014	2016	2021	2026	2031
Pharmacy Technology (PHT)	PHT	374	388	422	453	486
Physics (PHYSIC)	PHYSIC	2,308	2,398	2,607	2,797	2,998
Police Science (POLICE)	POLICE	2,808	2,917	3,172	3,402	3,647
Political Science (POLIT)	POLIT	2,886	2,997	3,259	3,496	3,748
Physical Science (PS)	PS	79	82	89	96	103
Psychology (PSYCH)	PSYCH	4,227	4,390	4,773	5,121	5,489
Psychiatric Technology (PSYTCH)	PSYTCH	1,075	1,116	1,214	1,302	1,396
Reading & Skills Study (READ)	READ	3,881	4,031	4,383	4,702	5,040
Religious Studies (RELIG)	RELIG	627	651	708	760	814
Radio, Television & Film (RTVF)	RTVF	952	989	1,075	1,153	1,236
Student Development (SDEV)	SDEV	1,105	1,148	1,248	1,339	1,435
Sociology (SOC)	SOC	2,161	2,244	2,440	2,618	2,806
Spanish (SPAN)	SPAN	3,399	3,531	3,839	4,119	4,415
Technical Calculations (TECALC)	TECALC	192	199	217	233	249
Theater Arts (THART)	THART	899	933	1,015	1,089	1,167
Welding Technology (WELD)	WELD	861	894	972	1,043	1,118
Water Supply Technology (WST)	WST	980	1,018	1,106	1,187	1,272
<b>TOTAL</b>		<b>140,302</b>	<b>145,728</b>	<b>158,457</b>	<b>169,978</b>	<b>182,214</b>

## Program Of Instruction + Space Needs

# CURRENT + FUTURE INSTRUCTIONAL SPACE NEEDS

The amount of assignable square footage (ASF) required at SBVC to accommodate current and projected growth is based on the College's WSCH projections, fall 2014 baseline program of instruction, and Title 5 space standards. By utilizing the 2015 state Chancellor's Office Long Range WSCH projection growth estimates and Title 5 space standards, a college may estimate instructional space needs based on projected capacity load ratios that are consistent with how overbuilt or underbuilt the state considers a college to be. Capacity load ratios are a measurement of how much instructional space is required for the amount of WSCH a college is anticipated to generate

and are used to determine eligibility for state funding. Therefore, recommended lecture and lab space needs presented in this Plan are consistent with what the state would consider needed to adequately serve the projected WSCH load. It is immaterial what year the College actually reaches the designated amount of projected WSCH. The most important factor is that whenever the College actually reaches a projected level of WSCH generation, the correlated amount of lecture and lab space indicated within this Plan will be minimally required.

### EXHIBIT 7.02: TITLE 5 RECOMMENDATIONS FOR INSTRUCTIONAL SPACE (FALL 2014 – FALL 2031)

Subject	Lecture:Lab WSCH Ratio	TITLE 5 SPACE RECOMMENDATIONS: LECTURE & LAB									
		2014		2016		2021		2026		2031	
		Lect. ASF	Lab ASF	Lect. ASF	Lab ASF	Lect. ASF	Lab ASF	Lect. ASF	Lab ASF	Lect. ASF	Lab ASF
ACAD	100:0	142	0	148	0	160	0	172	0	184	0
ACCT	100:0	903	0	938	0	1,019	0	1,094	0	1,172	0
ADJUS	100:0	722	0	750	0	815	0	875	0	938	0
AERO	30:70	135	5,489	140	5,702	152	6,200	163	6,651	175	7,129
ANTHRO	100:0	623	0	647	0	704	0	755	0	810	0
ARAB	100:0	103	0	107	0	116	0	125	0	134	0
ARCH	30:70	57	793	59	824	64	896	69	961	74	1,030



Subject	Lecture:Lab WSCH Ratio	TITLE 5 SPACE RECOMMENDATIONS: LECTURE & LAB									
		2014		2016		2021		2026		2031	
		Lect. ASF	Lab ASF	Lect. ASF	Lab ASF	Lect. ASF	Lab ASF	Lect. ASF	Lab ASF	Lect. ASF	Lab ASF
ART	30:70	645	9,020	670	9,369	729	10,187	782	10,928	838	11,715
ASL	100:0	584	0	607	0	660	0	707	0	758	0
ASTRON	80:20	108	162	112	168	122	183	131	196	140	210
AUTO	30:70	426	19,818	442	20,584	481	22,382	516	24,010	553	25,738
BIOL	40:60	1,348	11,076	1,400	11,504	1,522	12,509	1,633	13,418	1,751	14,384
BUSAD	100:0	862	0	895	0	974	0	1,044	0	1,119	0
CD	70:30	1,152	2,958	1,197	3,073	1,301	3,341	1,396	3,584	1,496	3,842
CHEM	40:60	975	8,759	1,012	9,098	1,101	9,892	1,181	10,611	1,266	11,375
CIT	80:20	1,137	1,133	1,181	1,177	1,285	1,280	1,378	1,373	1,477	1,472
COMMST	100:0	1,817	0	1,888	0	2,053	0	2,202	0	2,360	0
CORREC	100:0	198	0	206	0	224	0	240	0	257	0
CRMJUS	40:60	31	234	32	243	35	264	38	283	41	304
CS	40:60	146	874	152	908	165	987	177	1,059	190	1,135
CULART	30:70	142	1,990	148	2,067	161	2,248	173	2,412	185	2,585
DANCE	10:90	16	853	16	887	18	964	19	1,034	21	1,108
DIESEL	45:55	106	2,579	110	2,679	119	2,913	128	3,125	137	3,350
ECON	100:0	727	0	755	0	821	0	881	0	944	0
ELEC	45:55	34	307	35	319	38	347	41	372	44	399
ELECTR	45:55	243	2,226	253	2,312	275	2,514	295	2,697	316	2,891
ENGL	100:0	5,553	0	5,767	0	6,271	0	6,727	0	7,212	0
REALST	100:0	140	0	146	0	158	0	170	0	182	0
ESL	100:0	308	0	320	0	348	0	373	0	400	0

## Program Of Instruction + Space Needs

CURRENT + FUTURE INSTRUCTIONAL SPACE NEEDS *(cont.)*

Subject	Lecture:Lab WSCH Ratio	TITLE 5 SPACE RECOMMENDATIONS: LECTURE & LAB									
		2014		2016		2021		2026		2031	
		Lect. ASF	Lab ASF	Lect. ASF	Lab ASF	Lect. ASF	Lab ASF	Lect. ASF	Lab ASF	Lect. ASF	Lab ASF
FN	100:0	286	0	297	0	323	0	346	0	371	0
GEOG	80:20	632	946	656	983	714	1,069	765	1,146	821	1,229
GEOL	80:20	89	134	93	139	101	151	108	162	116	174
GIS	40:60	35	211	37	219	40	238	43	255	46	274
HEALTH	100:0	662	0	687	0	747	0	802	0	860	0
HIST	100:0	2,185	0	2,270	0	2,468	0	2,647	0	2,838	0
HUMSV	100:0	1,109	0	1,152	0	1,253	0	1,344	0	1,441	0
HVAC/R	40:60	153	1,714	159	1,780	172	1,936	185	2,077	198	2,226
INSPEC	100:0	51	0	53	0	58	0	62	0	67	0
KIN	100:0	300	0	312	0	339	0	364	0	390	0
KINA	0:100	0	212	0	220	0	239	0	257	0	275
KINF	0:100	0	9,588	0	9,959	0	10,829	0	11,616	0	12,452
KINS	0:100	0	385	0	400	0	435	0	467	0	500
KINX	0:100	0	7,995	0	8,304	0	9,030	0	9,686	0	10,383
LIB	75:25	81	201	84	209	91	227	98	243	105	261
MACH	40:60	57	762	59	792	64	861	69	924	74	990
MATH	100:0	8,476	0	8,804	0	9,573	0	10,269	0	11,008	0
MUS	40:60	374	3,365	389	3,495	423	3,800	454	4,076	486	4,370
NURS	40:60	489	3,659	508	3,801	552	4,133	592	4,433	635	4,752
OCEAN	70:30	50	127	51	132	56	144	60	154	64	165

Subject	Lecture:Lab WSCH Ratio	TITLE 5 SPACE RECOMMENDATIONS: LECTURE & LAB									
		2014		2016		2021		2026		2031	
		Lect. ASF	Lab ASF	Lect. ASF	Lab ASF	Lect. ASF	Lab ASF	Lect. ASF	Lab ASF	Lect. ASF	Lab ASF
OSHA	50:50	8	51	9	53	10	57	10	62	11	66
PHIL	100:0	634	0	659	0	717	0	769	0	824	0
PHT	40:60	64	480	67	499	72	542	78	582	83	624
PHYSIC	40:60	396	3,560	411	3,697	447	4,020	480	4,312	514	4,623
POLICE	40:60	482	3,606	501	3,745	544	4,072	584	4,368	626	4,683
POLIT	100:0	1,238	0	1,286	0	1,398	0	1,500	0	1,608	0
PS	100:0	34	0	35	0	38	0	41	0	44	0
PSYCH	100:0	1,813	0	1,883	0	2,048	0	2,197	0	2,355	0
PSYTCH	40:60	184	1,380	192	1,433	208	1,558	223	1,672	240	1,792
READ	60:40	999	3,990	1,038	4,144	1,128	4,506	1,210	4,834	1,297	5,182
RELIG	100:0	269	0	279	0	304	0	326	0	349	0
RTVF	40:60	163	1,222	170	1,270	185	1,381	198	1,481	212	1,588
SDEV	90:10	427	284	443	295	482	321	517	344	554	369
SOC	100:0	927	0	963	0	1,047	0	1,123	0	1,204	0
SPAN	100:0	1,458	0	1,515	0	1,647	0	1,767	0	1,894	0
TECALC	100:0	82	0	86	0	93	0	100	0	107	0
THART	40:60	154	1,386	160	1,439	174	1,565	187	1,679	200	1,800
WELD	20:80	74	2,652	77	2,754	83	2,995	89	3,213	96	3,444
WST	100:0	420	0	437	0	475	0	509	0	546	0
TOTAL ASF NEED		44,242	116,182	45,953	120,676	49,967	131,217	53,600	140,757	57,459	150,890

## Program Of Instruction + Space Needs

# OVERALL CURRENT + FUTURE SPACE NEEDS

Projected space needs for all facility needs (instructional and other support spaces) may also be determined based on enrollment and WSCH projections, Title 5 space standards and a college's current/projected space inventory.

The State Chancellor's Office monitors five space categories by capacity load ratio for funding consideration and support. These five categories are: classroom (lecture), laboratory, office, library, and audio visual/television/radio (AV/TV). An analysis of SBVC's capacity load ratios determines that the College currently requires space in three of the five capacity load categories: laboratory, library and AV/TV.

When accounting for future construction projects on campus, such as the new gymnasium, demolition of Snyder and women's gymnasiums, new field buildings, activation of vacated space within the liberal arts building, and removal of various temporary portables, the College is anticipated to have a need for 48,344 ASF in laboratory, 9,634 ASF of library, and 5,179 ASF of AV/TV space by the year 2021. The need for laboratory space is anticipated to grow to 75,560 ASF by the year 2031. However, the College is significantly overbuilt in classroom and office space for the amount of lecture WSCH it is projected to generate and projected FTEF. It is important to understand that even though a college may perceive that they are efficiently

utilizing existing classrooms and there is a need for additional classroom space, state standards for space needs are based on the amount of lecture WSCH a campus should be generating based on the amount of classroom ASF. Thus, although classrooms may be efficiently utilized by hours during a semester, they are not efficiently generating the amount of WSCH that they should be. Overall, the College should work towards reducing its classroom capacity load ratio by converting existing classroom space to laboratories and/or generating more lecture WSCH.

**EXHIBIT 7.03: CAPACITY LOAD RATIOS + SPACE NEEDS/SURPLUS**

SBVC Capacity Load	F2015	F2016	F2017	F2017 ADJ*	F2021	F2026	F2031
Classroom Capacity	155,904	162,904	162,904	154,100	154,100	154,100	154,100
Classroom WSCH Load	71,349	72,554	73,780	73,780	78,892	84,628	90,720
Classroom Capacity Load	219%	225%	221%	209%	195%	182%	170%
Space Need/Surplus	-36,274	-38,760	-38,234	-34,457	-32,264	-29,804	-27,190
Laboratory Capacity	49,694	50,068	50,068	50,068	50,068	50,068	50,068
Laboratory WSCH Load	61,718	62,761	63,821	63,821	68,243	73,205	78,474
Laboratory Capacity Load	81%	80%	78%	78%	73%	68%	64%
Space Need/Surplus	31,984	33,762	36,583	36,583	48,344	61,542	75,560
Office Capacity	493	502	505	506	506	506	506
Office Load	367	374	381	381	411	427	445
Office Capacity Load	134%	134%	133%	133%	123%	118%	114%
Space Need/Surplus	-17,647	-17,953	-17,358	-17,445	-13,245	-11,005	-8,485
Library Capacity	29,886	29,886	29,886	29,886	29,886	29,886	29,886
Library Load	37,328	37,561	38,059	38,059	39,520	41,977	43,638
Library Capacity Load	80%	80%	79%	79%	76%	71%	68%
Space Need/Surplus	7,442	7,675	8,173	8,173	9,634	12,091	13,752
AV/TV Capacity	6,577	6,577	6,577	6,577	6,577	6,577	6,577
AV/TV Load	11,577	11,604	11,624	11,624	11,756	11,969	12,168
AV/TV Capacity Load	57%	57%	57%	57%	56%	55%	54%
Space Need/Surplus	5,000	5,027	5,047	5,047	5,179	5,392	5,591

\* 2017 ADJ estimates capacity load ratios following space inventory changes due to existing capital construction projects.



# SAN BERNARDINO VALLEY COLLEGE





# Facilities Master Plan

Together, the 2017 *Educational Master Plan* (EMP) and Facilities Master Plan comprise a comprehensive guide toward the future of San Bernardino Valley College. These plans were developed concurrently through an integrated and collaborative process. The EMP establishes clear directions for the future of academics, student support, and administrative support by describing strategic directions and the actions that will be taken to support them. It quantifies the amount and type of space needed to deliver future programs of instruction. In doing so, the EMP provides the basis for planning and decision-making in the key area of campus facilities development. The 2017 *Facilities Master Plan* (FMP) translates these goals, actions, and needs into a holistic and implementable vision of the future campus.



# SAN BERNARDINO VALLEY COLLEGE



# Facilities Analysis

This chapter documents the analysis of existing conditions that shape the use of the San Bernardino Valley College campus. It was compiled from the College's existing planning information, overlaid with the insights of faculty and staff and the observations of the Planning Team.

The analysis of the existing campus is presented through the following lenses.

- › District Service Area
- › Neighborhood Context
- › Environmental Conditions
- › Existing Campus
- › Development History
- › Vehicular Circulation & Parking
- › Pedestrian Circulation
- › Site Utilities Infrastructure
- › Facilities Condition
- › Space Utilization
- › Campus Zoning

## Facilities Analysis

# DISTRICT SERVICE AREA

The SBCCD service area is characterized by geographical and geological diversity. Situated at the edge of the Inland Empire, it includes Cajon Pass, a gateway to the high desert, as well as a large portion of the San Bernardino Mountains. The abrupt transitions in regional geology result from the movement of tectonic plates as they grind past each other along the San Andreas rift zone. The rift zone passes through the SBCCD service area at Cajon Pass and along the southern edge of the San Bernardino Mountains. It is this movement that has lifted the San Bernardino and San Gabriel Mountains and set the stage for this region's role as a crossroads and destination.

These great transverse mountain ranges are barriers at the edge of the high desert that force travelers to choose among a few routes into the Inland Empire. As a crossroad on the routes from the north, through Cajon Pass, and the east, through Banning Pass, the San Bernardino Valley has long been a notable point along the route of travelers to coastal Southern California, as well as the home to people of many cultures. It continues to be a hub as successive transportation systems were built, including railroads, and interstate highways. World War II brought the development of San Bernardino Army Air Field. This facility is currently the San Bernardino International Airport, which provides

passenger, air cargo and logistics, general aviation, and aircraft maintenance services.

These mountains profoundly influence climate conditions in this region. They capture rain and snow and send rivers freighted with alluvium out into the valleys of the Inland Empire. The riverine natural environment of the region's valleys was created by these processes and supported early communities. As the land was developed, frequent flooding was controlled in channels that confine rivers in their courses.

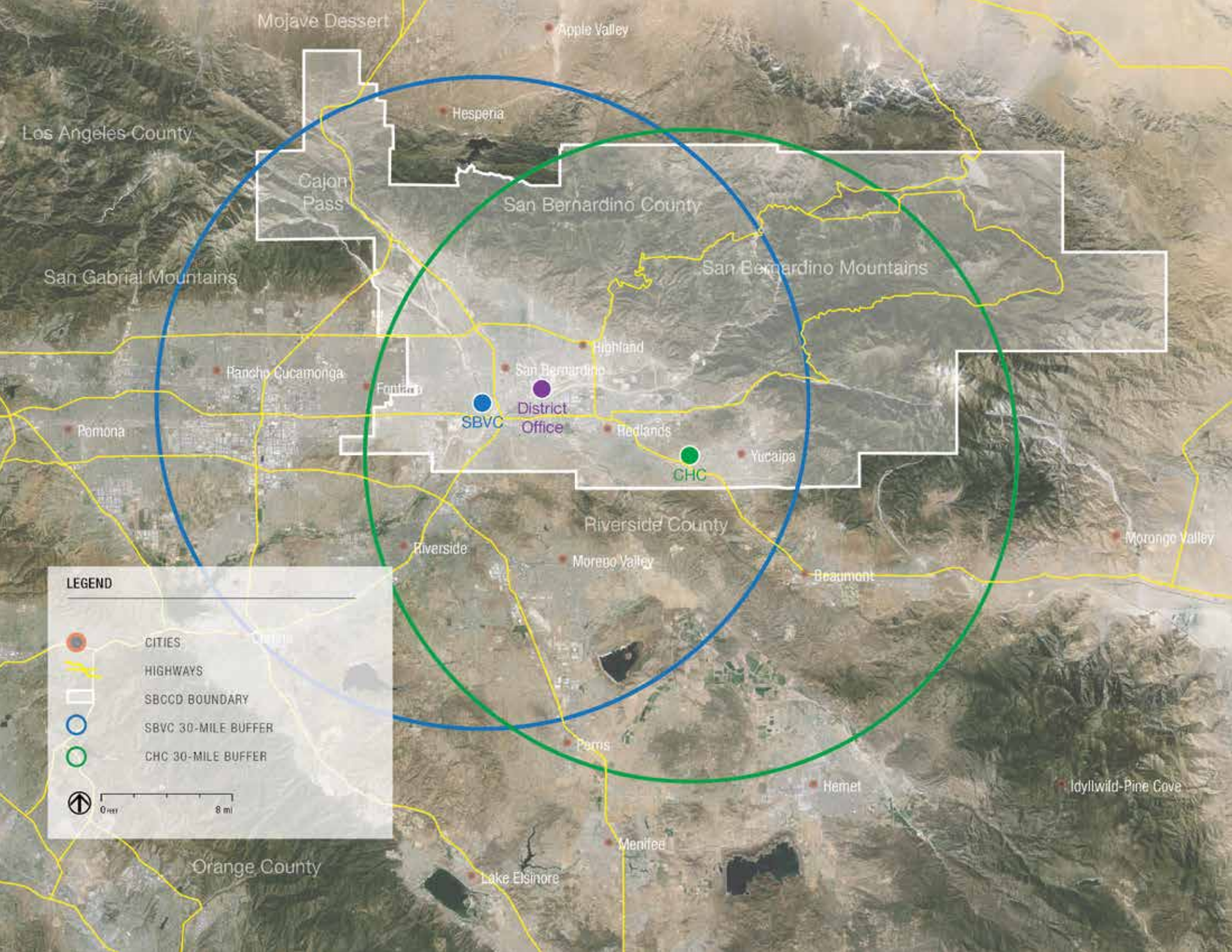
The campus is situated in the western portion of the SBCCD service area. It is the western-most of SBCCD's three sites, nearest to the densest population centers within the Los Angeles metropolitan area and San Bernardino County. The campus is situated within San Bernardino Valley near the confluence of Lytle Creek and the Santa Ana River, within a long-established, albeit evolving, suburban community.

### Observations:

- › The campus has been in service for many decades and benefits from its longstanding presence and physical connections within its community.







Mojave Desert

Apple Valley

Los Angeles County

Cajon Pass

Hesperia

San Bernardino County

San Gabriel Mountains

San Bernardino Mountains

Rancho Cucamonga

Fontana

Highland

San Bernardino

Redlands

Yucaipa

SBVC

District Office

CHC

Riverside County

Riverside

Moreno Valley

Beaumont

Moreno Valley

LEGEND



CITIES



HIGHWAYS



SBCCD BOUNDARY



SBVC 30-MILE BUFFER



CHC 30-MILE BUFFER



0 feet 8 mi

Orange County

Lake Elsinore

Menifee

Hemet

Idyllwild-Pine Cove

Perris



## Facilities Analysis

# NEIGHBORHOOD CONTEXT

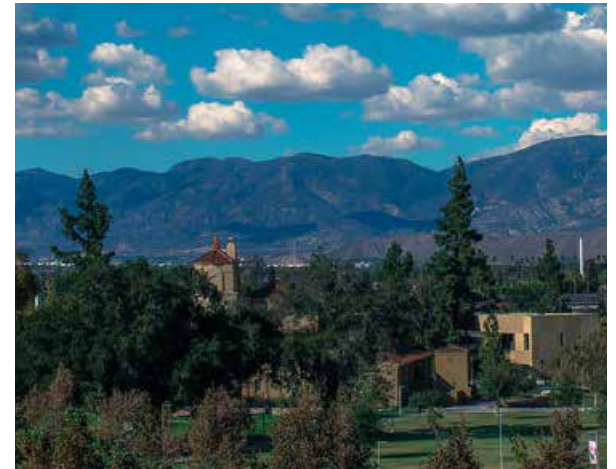
The San Bernardino Valley College campus is located in the City of San Bernardino at its border with the City of Colton. Its neighborhood is served by direct connections to municipal streets and nearby freeways. Regional commercial centers include downtown San Bernardino, which lies around a mile and a half to the northeast and the Inland Center Shopping Mall, which lies less than a mile to the east. Land uses to the north, east, and south of campus mainly consist of single-family residential neighborhoods that are served by San Bernardino City Unified School District. The closest schools are Urbita Elementary School, Richardson PREP HI Middle School, and Lytle Creek Elementary School. Lytle Creek Park is the only public park within a mile of the Valley College campus.

The Valley College campus abuts South Mt. Vernon Avenue, a primary commercial corridor, and is within walking distance of many community services, eateries, and stores. The Pro-Swap Meet is situated across Mt. Vernon Street and directly west of the campus. The College and Pro-Swap Meet have both benefited for many years from a joint-use parking agreement. The campus of Valley College's Middle College High School (MCHS) is situated across West Esperanza Street and directly north of the College. High school students walk between and attend classes on both campuses.

The campus is open to its neighborhood for the enjoyment of the community and the vast majority of visitors respect and are protective of the campus. When incidents occur they tend to be focused on the outer edges of campus, between buildings and the surrounding streets. Measures taken to protect facilities include CCTV system and intrusion alarms. SBCCD Police patrol the campus at all times and are on call to escort students and staff to the swap meet parking lot or other destinations in the evenings. Homeless individuals do shelter in less visible areas of courtyards and outdoor walkways where they are not seen by police patrolling in vehicles.

### Observations:

- › Open space, parks, and outdoor recreational facilities are not plentiful in the College's neighborhood and use of the College campus and facilities is valued by the community.







LYTLE CREEK PARK

RICHARDSON  
PREP HI MIDDLE  
SCHOOL

MILL ST

MIDDLE COLLEGE  
HIGH SCHOOL

ESPERANZA ST

MT VERNON AVE

PRO-SWAP  
MEET  
PARKING

JOHNSTON ST

BORDWELL AVE

CITRUS ST

SBVC CAMPUS



HAZEL AVE

URBITA  
ELEMENTARY  
SCHOOL

215

INLAND  
CENTER  
SHOPPING  
MALL

INLAND CENTER DR

GRANT AVE

FAIRVIEW  
PRECINCT

LYTLE CREEK

LA CADENA DR

COLTON AVE



## Facilities Analysis

# EXISTING CAMPUS

The Valley College campus occupies most of the city block bounded by South Mt. Vernon Avenue, West Esperanza Street, South K Street, and East Grant Avenue. The existing campus comprises 82 acres. About 18 acres that lie within the earthquake fault and folding zones have been set aside as The Glade, a permanent open space.

A portion of the campus lies to the south of Grant Avenue and will be referred to as the Fairview Precinct. This area was the campus of Fairview School that was acquired by SBCCD in 1963. It contains four former school buildings that were constructed in the 1930s and 1950s, as well as temporary buildings and the Transportation Building, which houses the Diesel Technology Program.

The graphic on the facing page shows the campus as it is projected to appear in 2017, after the construction of the Gymnasium, Stadium, and athletic fields is completed. In 2017, Valley College will hold 684,712 gross square feet of building area and 464,791 square feet of assignable space—59% of all assignable space that will be held by SBCCD.

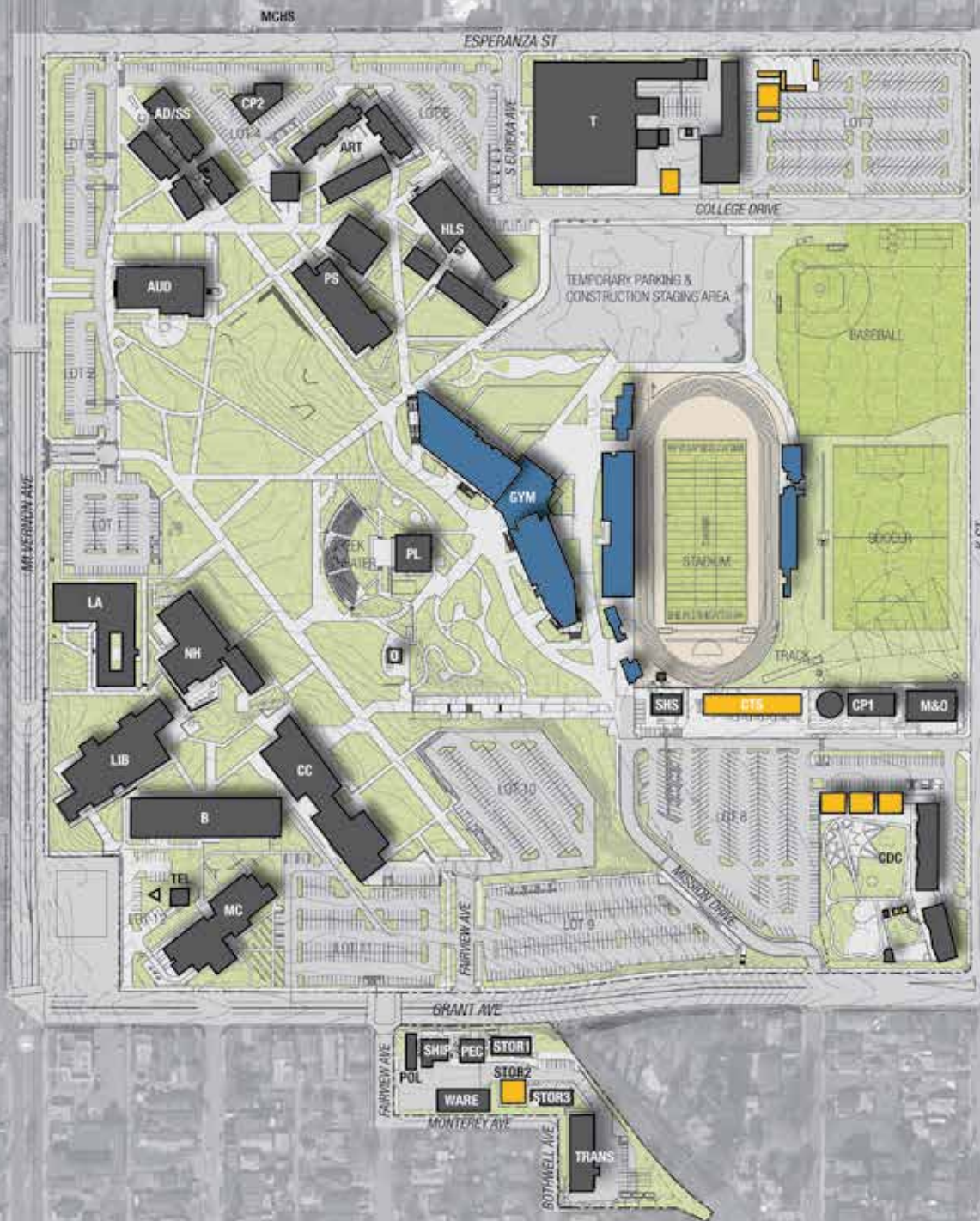
Permanent buildings are shown with a dark gray color. There are a number of temporary buildings on

the campus and these are shown with a yellow color. Facilities used for SBCCD functions, such as the warehouse and the campus office of the SBCCD Police Department are indicated on the graphic. Most of the Media & Communication Building is used by KVCR, the SBCCD public television and national public radio broadcast station.

### Observations:

- › The earthquake fault and folding zone are a significant portion of the campus and divide campus buildings into two clusters.
- › Many of the buildings built during the last 15 years are oriented to be generally parallel or perpendicular to the fault. Buildings constructed earlier are aligned with the cardinal points of the compass.
- › The largest temporary facility houses Campus Technology Services (CTS) who are responsible for supporting the use of instructional and institutional technologies on the campus.





## EXISTING CAMPUS PLAN

### BUILDING KEY

ID	Building Name
AD/SS	ADMINISTRATION/STUDENT SERVICES
ART	ART CENTER
AUD	AUDITORIUM
B	BUSINESS
CC	CAMPUS CENTER
CP1	CENTRAL PLANT (NEW)
CP2	CENTRAL PLANT (OLD)
CDC	CHILD DEVELOPMENT CENTER
CTS	COMPUTER TECHNOLOGY CENTER
GYM	GYMNASIUM
HLS	HEALTH & LIFE SCIENCE
LA	LIBERAL ARTS
LIB	LIBRARY
M&O	MAINTENANCE & OPERATIONS
MC	MEDIA/COMMUNICATIONS
NH	NORTH HALL
O	OBSERVATORY
PEC	PARENT EDUCATION CENTER
PS	PHYSICAL SCIENCES
PL	PLANETARIUM
POL	POLICE STORAGE
SHIP	SHIPPING & RECEIVING OFFICE
STOR1	STORAGE BUILDING 1
STOR2	STORAGE BUILDING 2
STOR3	STORAGE BUILDING 3
SHS	STUDENT HEALTH SERVICES
T	TECHNICAL
TEL	TELECOM BUILDING
TRANS	TRANSPORTATION
WARE	WAREHOUSE

### LEGEND

---	PROPERTY LINE
■	EXISTING PERMANENT FACILITIES
■	EXISTING TEMPORARY FACILITIES
■	FACILITIES IN DESIGN & CONSTRUCTION

HMC Architects





## Facilities Analysis

# ENVIRONMENTAL CONDITIONS

### Environmental Conditions

The San Bernardino Valley College campus is situated in the San Bernardino Valley near the point where the Santa Ana River emerges from the San Bernardino Mountains. This broad inland valley is framed by the striking profiles of rugged mountains shaped by active geological forces. Understanding the campus' environmental conditions will help to shape recommendations for sustainable campus design strategies.

### Climate

Climate conditions at Valley College are influenced by its inland valley location. Valley floors become colder during the winter when frost is a possibility and warmer in the summer than the surrounding slopes and hillsides from which cold air drains and warm air rises. This climate is only nominally influenced by the ocean. Days are quite sunny and the conditions are favorable for solar energy production. Most of the rain falls during the winter, with the exception of summer monsoons that can bring strong wind and heavy rain. Storm water flows can be sudden and heavy and the college's infrastructure must be ready to prevent flooding and erosion. Wildfire is a growing concern during an increasingly lengthening fire season, but especially during the fall and winter when downslope winds are more frequent, sweeping down from Cajon Pass and the San Bernardino Mountains.

### Natural Habitat

Prior to its development, the San Bernardino Valley was characterized by chaparral. Wide and constantly shifting river beds, most of which are dry and cobble-filled during most of the year, absorbed water that swept with great force out of the San Bernardino and San Gabriel Mountains to recharge ground water aquifers. Oak woodlands grew along rivers and streams. Having evolved with periodic fire, many of these native trees and shrubs are less flammable than non-native plants.

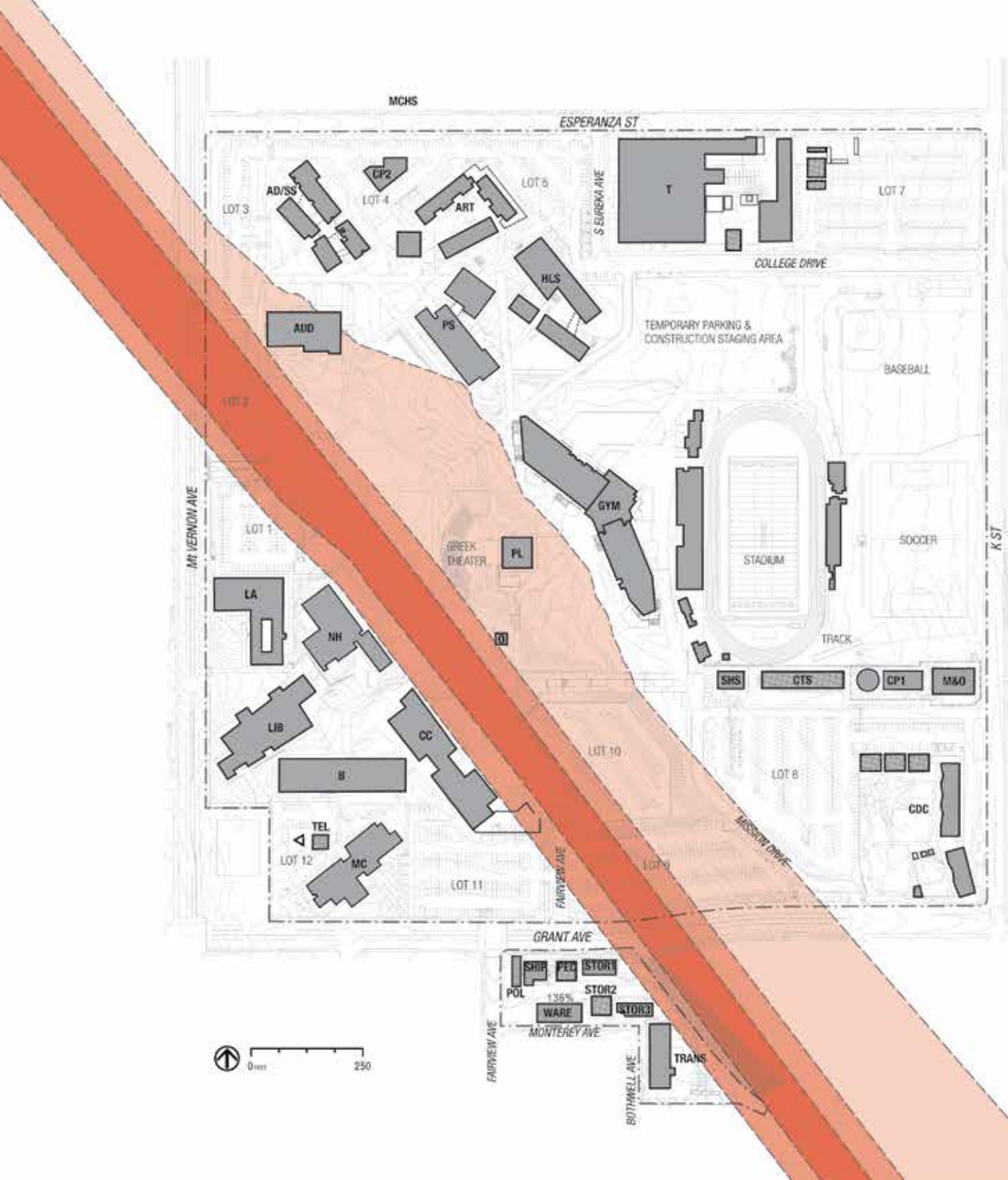
### Geology

Geological forces are clearly visible on the San Bernardino Valley College campus. The SBVC campus lies about 7 miles from the San Andreas rift zone and within the wider zone of fracturing and associated faults. One of these, the San Jacinto Earthquake Fault, passes through the campus. The presence of this fault and folding zone was discovered and studied in great detail during the mid-1990s. In accordance with the Alquist-Priolo Earthquake Fault Zoning Act, the construction of structures are not permitted within 50 feet of an earthquake fault. New structures are also not permitted within the folding zone. Following the mapping of these zones, which are shown on the graphic on the facing page, the campus was reorganized significantly. SBCCD's geotechnical engineering study noted that

planning for buildings to be rectangular, three-stories tall, and orienting perpendicular or parallel to the fault would simplify their structural design.

### Observations:

- › Protection from sun, wind, and rain will make outdoor spaces much more comfortable and usable. Hot and windy conditions in particular can discourage the use of outdoor areas.
- › Open space within suburban areas can provide green oases that mitigate heat islands and provide homes for beneficial birds and insects.
- › Most of the natural riverine habitat within Valley College's neighborhood has long been replaced with suburban development, but understanding the natural landscape of the past can help the College to foster an appreciation of its benefits and beauty.



### CAMPUS SEISMIC ZONE

TEMPORARY FACILITIES
EXISTING CULTURE BUILDINGS
PAINT ZONE
50' SETBACK
FLOOD ZONE
PROPERTY LINE

### BUILDING KEY

ID	Building Name
AD/SS	ADMINISTRATION/STUDENT SERVICES
ART	ART CENTER
AUD	AUDITORIUM
B	BUSINESS
CC	CAMPUS CENTER
CP1	CENTRAL PLANT (NEW)
CP2	CENTRAL PLANT (OLD)
CDC	CHILD DEVELOPMENT CENTER
CTS	COMPUTER TECHNOLOGY CENTER
GYM	GYMNASIUM
HLS	HEALTH & LIFE SCIENCE
LA	LIBERAL ARTS
LIB	LIBRARY
M&O	MAINTENANCE & OPERATIONS
MC	MEDIA/COMMUNICATIONS
NH	NORTH HALL
O	OBSERVATORY
PEC	PARENT EDUCATION CENTER
PS	PHYSICAL SCIENCES
PL	PLANETARIUM
POL	POLICE STORAGE
SHIP	SHIPPING & RECEIVING OFFICE
STOR1	STORAGE BUILDING 1
STOR2	STORAGE BUILDING 2
STOR3	STORAGE BUILDING 3
SHS	STUDENT HEALTH SERVICES
T	TECHNICAL
TEL	TELECOM BUILDING
TRANS	TRANSPORTATION
WARE	WAREHOUSE

## Facilities Analysis

# DEVELOPMENT HISTORY

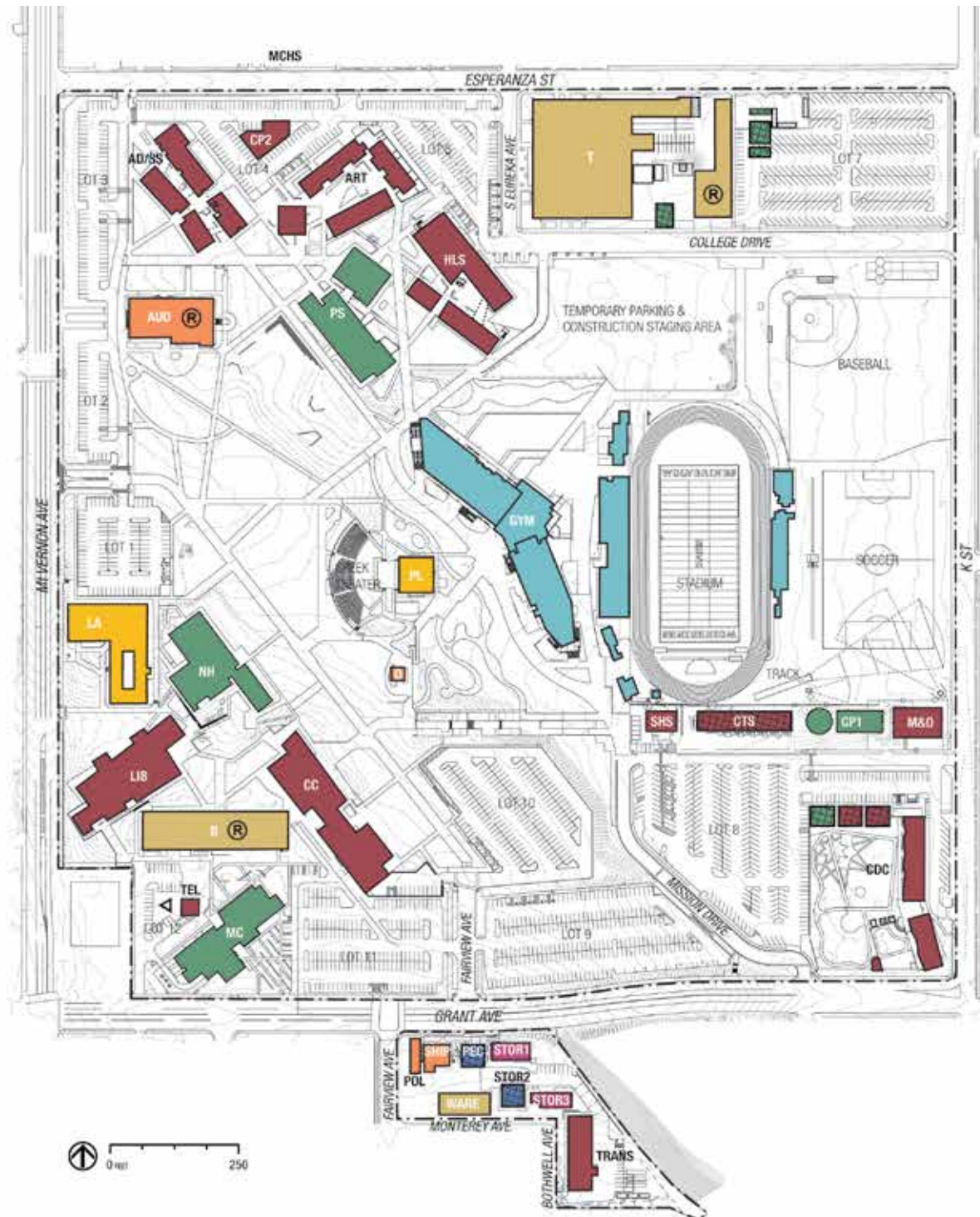
Campus construction by decade is shown by color on the graphic on the opposing page. Buildings that have recently undergone a comprehensive renovation are shown with a ®.

### Observations:

- › Many college staff and members of the community fondly recall the campus as it was before being redeveloped in the last decade. They recall that indoor and outdoor spaces encouraged a greater and more visible degree of gathering, collegiality, and use by students and staff.
- › Although most of the campus buildings were built or renovated after 2000, several aged facilities remain in service. The Liberal Arts Building and the Technical Education Building are the two most aged instructional buildings. The east wing of the Technical Education Building was recently renovated to address health and safety issue.
- › The service buildings on the Fairview Precinct are among the oldest with two building that were constructed in the 1930s and two in the 1950s.







## CAMPUS DEVELOPMENT HISTORY

### TEMPORARY FACILITIES

### RECENTLY RENOVATED



PROPERTY LINE

### BUILDING KEY

ID	Building Name
AD/SS	ADMINISTRATION/STUDENT SERVICES
ART	ART CENTER
AUD	AUDITORIUM
B	BUSINESS
CC	CAMPUS CENTER
CP1	CENTRAL PLANT (NEW)
CP2	CENTRAL PLANT (OLD)
CDC	CHILD DEVELOPMENT CENTER
CTS	COMPUTER TECHNOLOGY CENTER
GYM	GYMNASIUM
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STOR3	STORAGE BUILDING 3
SHS	STUDENT HEALTH SERVICES
T	TECHNICAL
TEL	TELECOM BUILDING
TRANS	TRANSPORTATION
WARE	WAREHOUSE

## Facilities Analysis

# VEHICULAR CIRCULATION + PARKING

The campus occupies most of a roughly square city block, with the exception of the commercial property at the corner of South Mt. Vernon and Grant Avenues. Therefore, much circulation occurs on the surrounding city streets. Mt. Vernon Avenue, a major arterial, is the most travelled circulation route and it connects the campus to Interstate Highway 10. Plans are in place to upgrade the Mt. Vernon Avenue/I-10 interchange for improved mobility and Mt. Vernon Avenue is being considered for the route of a future bus rapid transit (BRT) line. A Metrolink light rail station is planned for Colton.

The main campus vehicular entry is on Mt. Vernon Avenue, to the south of the signal at Johnston Street. West Mill Street connects to Interstate Highway 215, as does Grant Avenue via South I Street and Inland Center Drive. Many travel to campus via Grant Avenue. Entry points from Grant Avenue, South K Street, and Esperanza Streets lead directly to well-distributed parking lots.

Near the perimeter of campus, several on-campus streets, such as College Drive and South Eureka Avenue, accommodate general vehicular traffic within the campus, but travel through the center of campus is restricted to emergency and service vehicles.

### Parking

Available parking include 1,585 stalls in 12 campus parking lots and 465 on-street spaces on the surrounding streets: South Mt. Vernon Avenue, Grant Avenue, South K Street, Esperanza Street, South Eureka Avenue, Holly Avenue, and Fairview Avenue. Through a joint-use agreement, 414 stalls in the Pro Swap-Meet parking lot, which is situated directly across Mt. Vernon Avenue at Johnston Street, are available for campus use. In exchange, stalls in Lots 1 through 5 are used by the swap meet in the evenings on Friday, Saturday, and Sunday.

### Transit

Half of the students at Valley College regularly use public transportation to travel to the campus. Through the Go Smart Program, Valley College encourages students to commute by bus. OMNITRANS is the primary bus transit provider in the Colton and San Bernardino region. Students can ride for free on any regular OMNITRANS route with their student identification card. Routes 1 and 15 provide frequent and convenient service to the campus.

### Bicycling and Walking

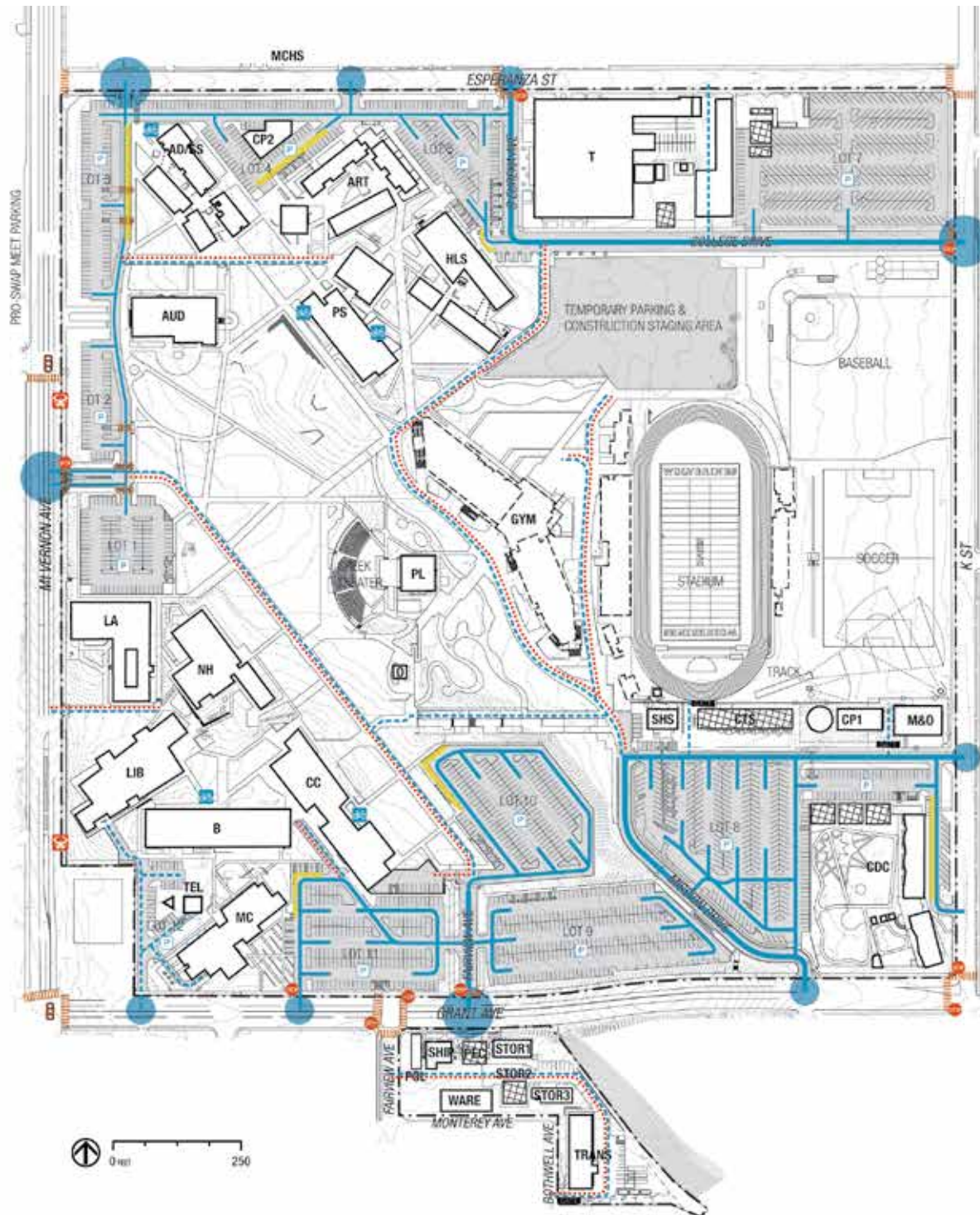
Valley College encourages commuting by bicycle and provides two bicycle racks next to the Physical

Sciences Building. The City of Colton, in its mobility plan, expresses its commitment to maintaining Mt. Vernon Avenue and other key transportation corridors as attractive and walkable. Mt. Vernon Avenue is a designated Class III bicycle route and a multi-modal transit street that accommodates public transit, pedestrians, and bicycles, as well as vehicles. The Class I bicycle path that parallels nearby Colton Avenue is intended for the exclusive use of bicycles. The City plans to extend the Class I Bike Path along the Lytle Creek Channel, which passes close to the campus and connects to Mt. Vernon Avenue.

### Observations:

- › During hot weather, students place a premium on parking that is close to their destination and parking lots near instructional buildings fill quickly. During the peak periods, on-campus parking even in remote areas along K Street, are filled. However, on-street parking is observed to be available, as well as swap meet parking, even during the busiest times.





### EXISTING VEHICULAR CIRCULATION

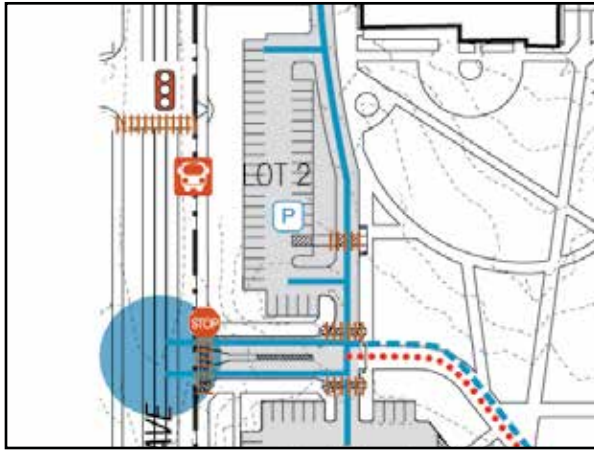
	FACILITIES
	IN DESIGN/UNDER CONSTRUCTION
	TEMPORARY FACILITIES
	CAMPUS ENTRY - MAJOR/MINOR
	PASSENGER LOADING/DROP OFF ZONE
	PARKING AREA
	PRIMARY VEHICULAR ROUTE
	SECONDARY VEHICULAR ROUTE
	SERVICE VEHICULAR ROUTE
	EMERGENCY VEHICULAR ROUTE
	BICYCLE PARKING
	CROSSWALKS
	BUS STOPS
	TRAFFIC SIGNALS
	STOP SIGNS
	GATED ENTRY
	PROPERTY LINE

Lot	Spaces
1	99
2	45
3	70
4	104
5	106
6 (gravel)	25
7	203
8	298
9	232
10	160
11	139
12	26
College Dr	45
Eureka Ave	9
CDC	10
Total	1585

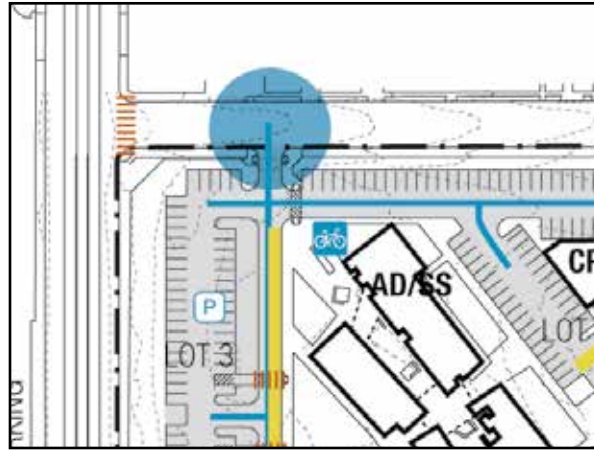
## Facilities Analysis

# VEHICULAR CIRCULATION + PARKING (cont.)

### VEHICULAR CIRCULATION NEEDS



The main vehicular entry point, being offset from the signal at Johnston Street, limits traffic to right turns-in and right turns-out.



The busy entry point to Lot 3 on Esperanza Street near the intersection at Mt. Vernon Avenue lacks stacking space and is occasionally gridlocked during busy hours.



Passenger loading occurs in designated zones and informally in parking lots, especially Lots 1, 3, and 4.

Year	Planned Fall Student Headcount	Recommended Supply Rate	Recommended Supply	Recommended On-campus Supply
Horizon 1 - 2021	14,040	0.18	2,527	1,648
Horizon 2 - 2026	15,060	0.18	2,711	1,832
Horizon 3 - 2031	16,145	0.18	2,906	2,027

### Parking Needs

An assessment of existing parking utilization and future parking needs was prepared in 2003 and updated in June 2009. The updated report projected future parking demand during three master plan development horizons, based upon enrollment projections that were current in 2009. For this plan, updated enrollment projections that are established by the Educational Master Plan for years 2021, 2026, and 2031 are used. The current projections reflect more conservative expectations for the growth of the College's enrollment. A parking utilization rate of 0.16 spaces per enrolled student was calculated for the 2009 parking study, based on vehicle counts and field observations. To estimate future demand, the study recommended a parking supply rate of 0.18 spaces per enrolled student—after adding a 15% circulation and turnover factor.

It is likely that in the long-term the required supply rate will drop as students and staff have available more transportation choices that lessen their demand for parking capacity. Local and regional mobility plans show that the cities and county are committed to this objective. And Valley College is successfully encouraging students and staff to use public and alternative transportation. It is also likely that trends toward online delivery of instruction and support services will change students' the amount of time that each student spends on campus. Parking is but one of many land uses competing for space on the Valley College campus. Sufficient parking is necessary, but not directly linked to the College's educational mission. And due to the expense of acquiring land and building parking structures, a measured approach is recommended when planning for parking. This approach should encourage alternatives to single-occupant vehicle use and monitor changes in the actual parking utilization rate.





## Facilities Analysis

# PEDESTRIAN CIRCULATION

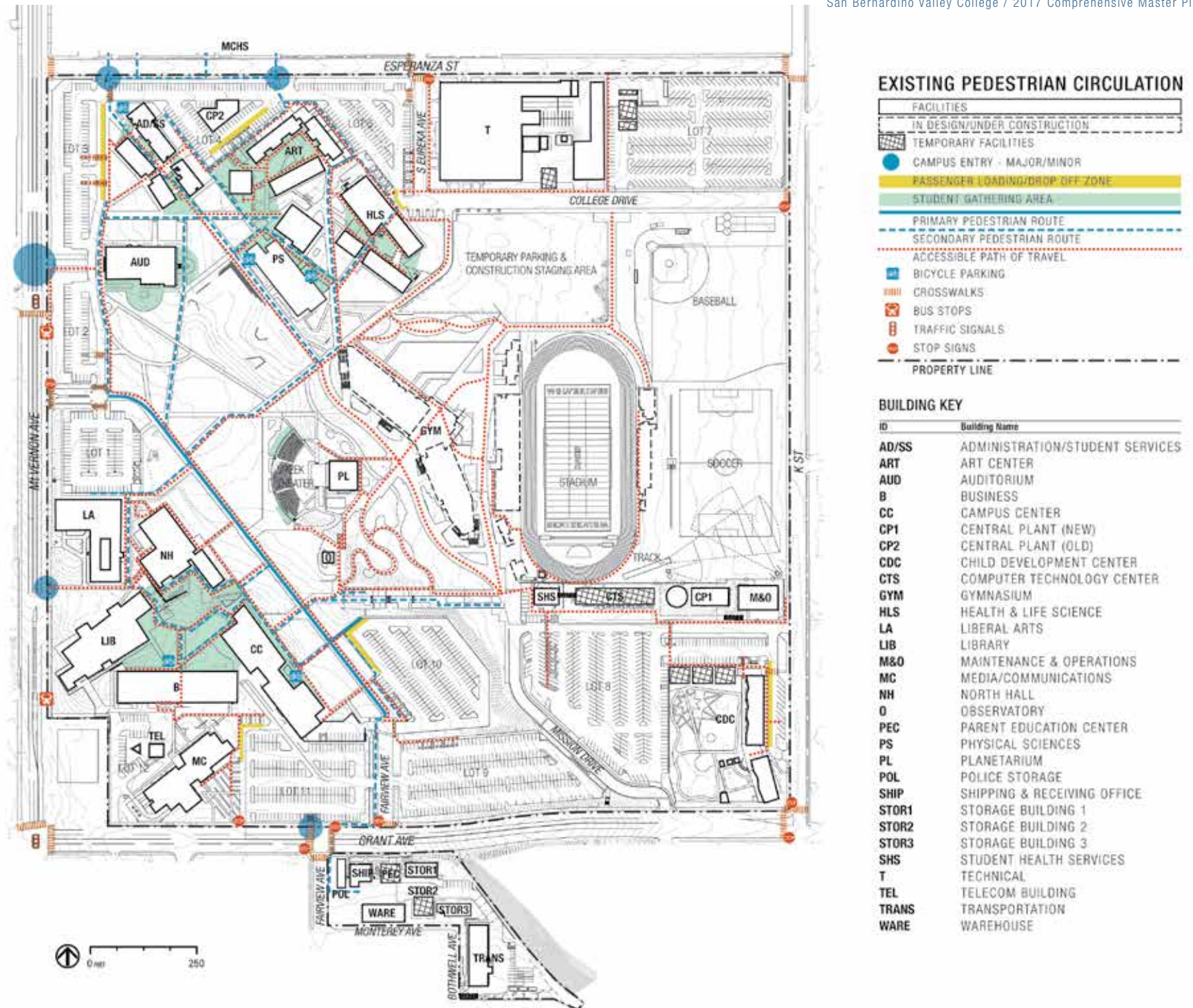
SBCCD and Valley College studied how well campus facilities comply with accessibility requirements and prepared a plan to remove existing architectural barriers. Each recent project has implemented part of this plan and together they have removed most of the barriers that prevent universal access to parking, buildings, and site areas. The New Gymnasium and Field Building Project is transforming the center of the campus by constructing accessible new paths, plazas, and learning gardens. The last phase of this project will provide barrier-free paths to outdoor athletic fields. The Glade, which contains the earthquake fault and folding zones, is the primary open space on campus. Much of the Glade consists of open lawns. The more mature trees grace the areas near the Auditorium and the Greek Theater.

Courtyards among the two clusters of buildings vary in character, scale, and degree of use by students. One of the better used courtyards is set between North Hall, the Library, the Business Education Building, and the Campus Center. The courtyards around the Physical Sciences and Health and Life Science Buildings are also well used.

### Observations:

- › The Glade has changed the character of the campus. It has lessened the sense of place and the level of activity in the outdoor spaces. The Glade offers little to engage students, but it has the potential to be developed further.
- › The existing paths across the Glade do not offer the choice of a clear and direct path between the two instructional building clusters.
- › A safer way to cross Esperanza Street could be provided for high school students traveling between MCHS and Valley College.
- › A safer crosswalk to cross Grant Avenue could be provided for students and staff traveling between the Fairview Precinct and the rest of campus.
- › Electric carts used by college maintenance staff are often recharged in walkways, blocking the path of students.







## Facilities Analysis

# SITE FACILITIES INFRASTRUCTURE

Campus-wide infrastructure systems connect college facilities to utilities and communication systems that support the College's educational mission. Robust power, water, and data connections are increasingly necessary to fully use state of the art learning environments. As part of its program to replace seismically vulnerable buildings, the College implemented an infrastructure project that built new pathways for utilities to the planned sites of new buildings. In 2013, SBCCD and Valley College completed a central plant and thermal energy storage (TES) tank that allows the campus to chill water at night, when the cost of power is lower, and store it for use the next day. Currently, a new communication fiber optic backbone is being installed as part of the Gymnasium and Field Buildings project. WiFi access points serve the indoor areas of all buildings, but coverage does not yet extend to all outdoor spaces.

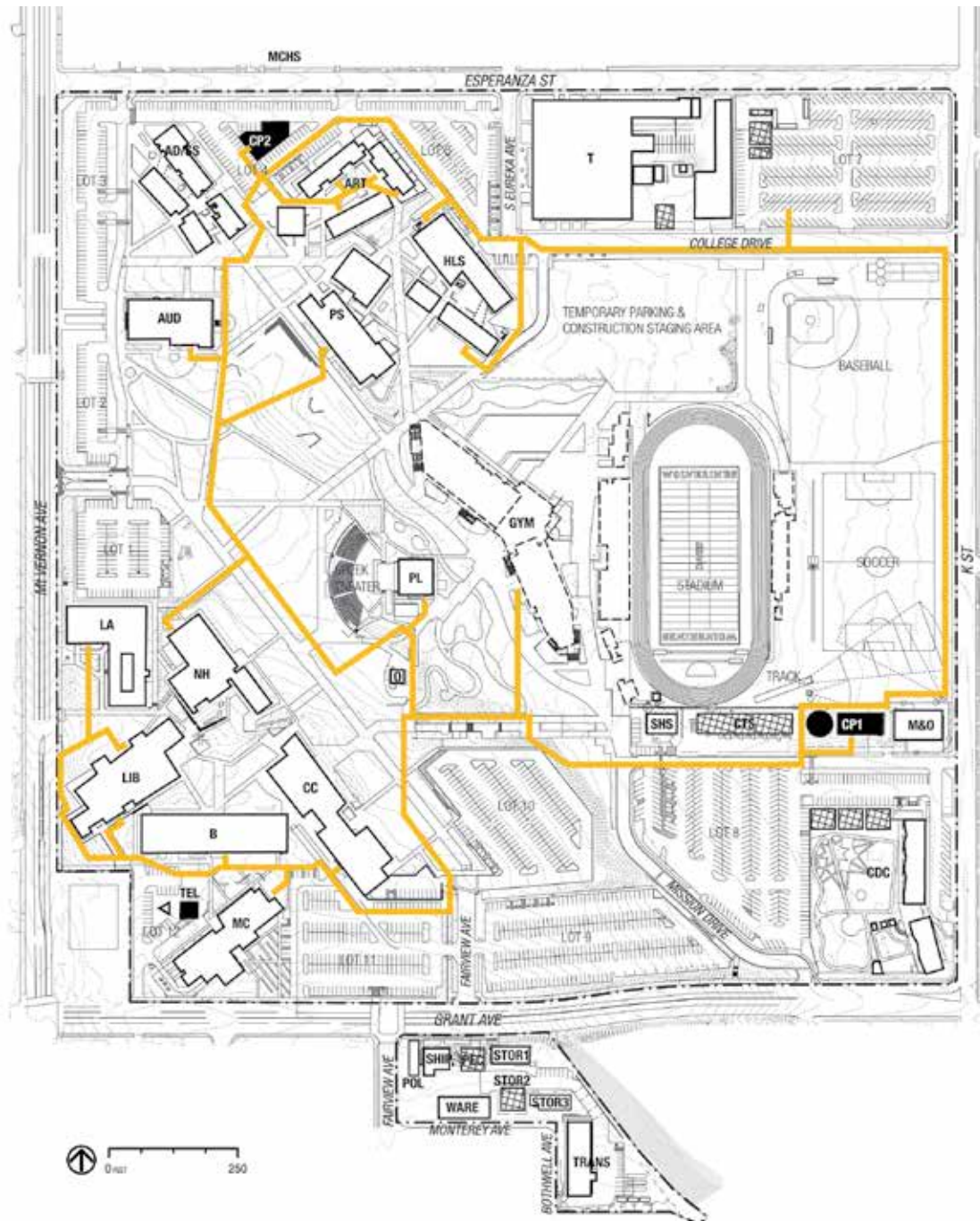
Valley College's students, faculty, and staff are working to make SBVC an even greener campus. Guided by the SBCCD Sustainability Plan, they are adopting environmentally sustainable practices in their daily habits as they operate and use the campus facilities. New buildings, renovation projects, and gardens are being designed and constructed to meet increasingly stringent goals for efficient and healthy places to work

and learn. For example, recently constructed buildings, beginning with the Physical Sciences Building, have been designed and constructed to be certified through the Leadership in Energy and Environmental Design (LEED) rating system. These buildings are or will soon be certified by the US Green Building Council at either the LEED Silver or LEED Certified levels.

### Observations:

- › Due to current water quality regulations, adequate space must be set aside for the storm water retention and treatment systems that will be required for future building projects.
- › The capacity of the TES tank is currently being fully used. As when considering any strategy, the cost of increasing the capacity should be weighed against projected savings and compared to the benefits of investing in other energy saving strategies.





## CAMPUS UTILITIES

FACILITIES
UNDER CONSTRUCTION
TEMPORARY FACILITIES
CHILLED WATER LOOP
PROPERTY LINE

## BUILDING KEY

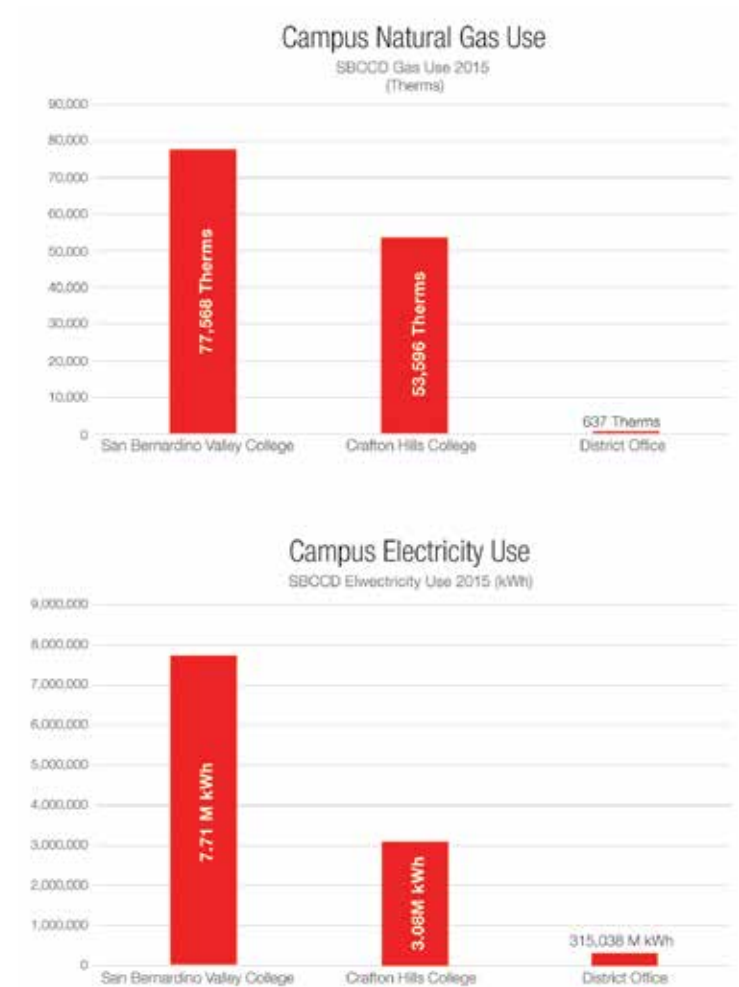
ID	Building Name
AD/SS	ADMINISTRATION/STUDENT SERVICES
ART	ART CENTER
AUD	AUDITORIUM
B	BUSINESS
CC	CAMPUS CENTER
CP1	CENTRAL PLANT (NEW)
CP2	CENTRAL PLANT (OLD)
CDC	CHILD DEVELOPMENT CENTER
CTS	COMPUTER TECHNOLOGY CENTER
GYM	GYMNASIUM
HLS	HEALTH & LIFE SCIENCE
LA	LIBERAL ARTS
LIB	LIBRARY
M&O	MAINTENANCE & OPERATIONS
MC	MEDIA/COMMUNICATIONS
NH	NORTH HALL
O	OBSERVATORY
PEC	PARENT EDUCATION CENTER
PS	PHYSICAL SCIENCES
PL	PLANETARIUM
POL	POLICE STORAGE
SHIP	SHIPPING & RECEIVING OFFICE
STOR1	STORAGE BUILDING 1
STOR2	STORAGE BUILDING 2
STOR3	STORAGE BUILDING 3
SHS	STUDENT HEALTH SERVICES
T	TECHNICAL
TEL	TELECOM BUILDING
TRANS	TRANSPORTATION
WARE	WAREHOUSE

## Facilities Analysis

# SITE FACILITIES INFRASTRUCTURE *(cont.)*

### Energy Use

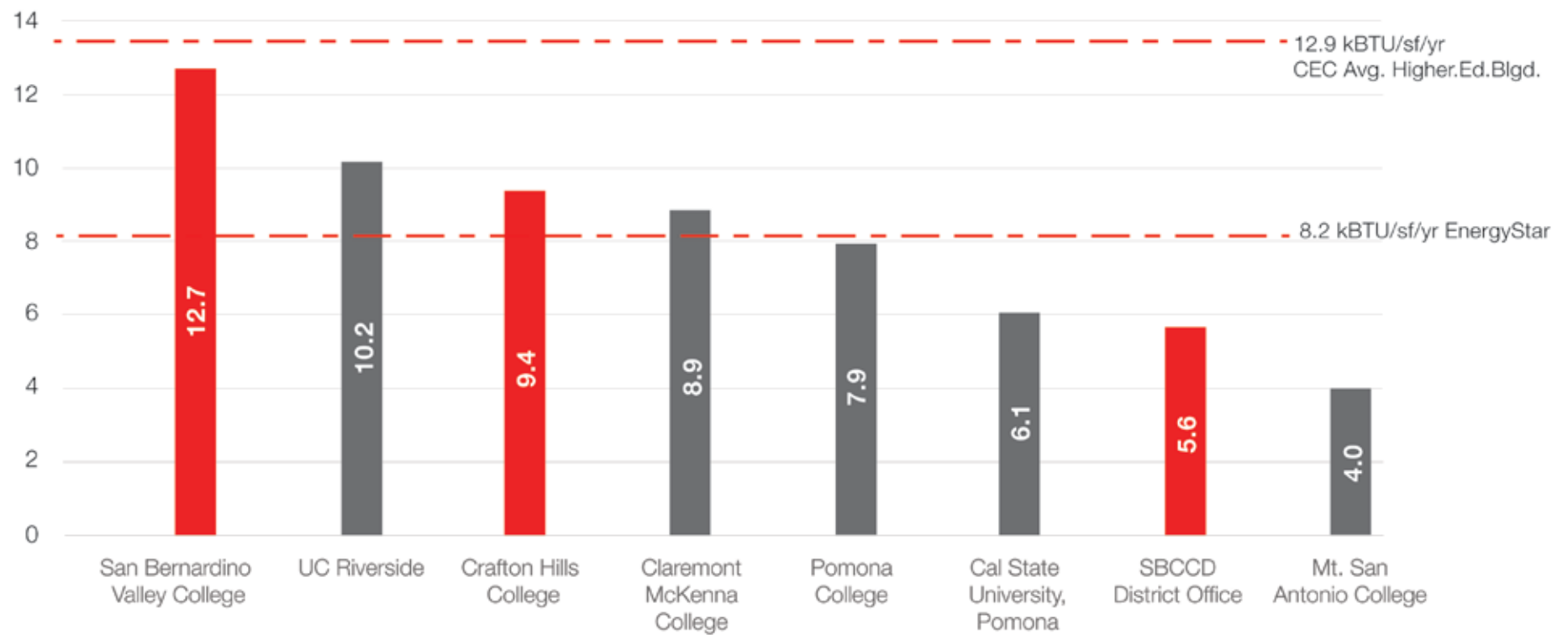
SBCCD and Valley College have invested in measures that are making the campus more energy efficient. The two graphs on this page compare the use of energy in the forms of electricity and natural gas on SBCCD's three main sites. The graphs show the total number of kilowatt-hours of electricity and therms of gas used in 2015. Because the three sites are not the same size, it is helpful to compare their average energy usage for each square foot of building area. For the graph on the opposing page, the data has been converted to the equivalent amount of carbon dioxide (CO<sub>2</sub>e) expressed in metric tons per square foot of overall gross campus building area. Several other higher education institutions are shown for comparison, using data that they reported to the American College and University Climate Action Plan's 2014-2015 Annual Report. At 12.7 CO<sub>2</sub>e/square foot/year, the level of energy use at Valley College falls just below 12.9 CO<sub>2</sub>e/SF/year, the level of the average higher education building in this climate zone, as reported by the California Energy Commission. Both Valley College and Crafton Hills College are at a higher level than 8.2 CO<sub>2</sub>e/SF/year, the Energy Star benchmark, which represents the level of a green building in this climate zone.





## Campus Carbon Footprint from Energy Use

Natural Gas and Electricity  
(CO<sub>2</sub>e/gsf/yr expressed in metric tons)



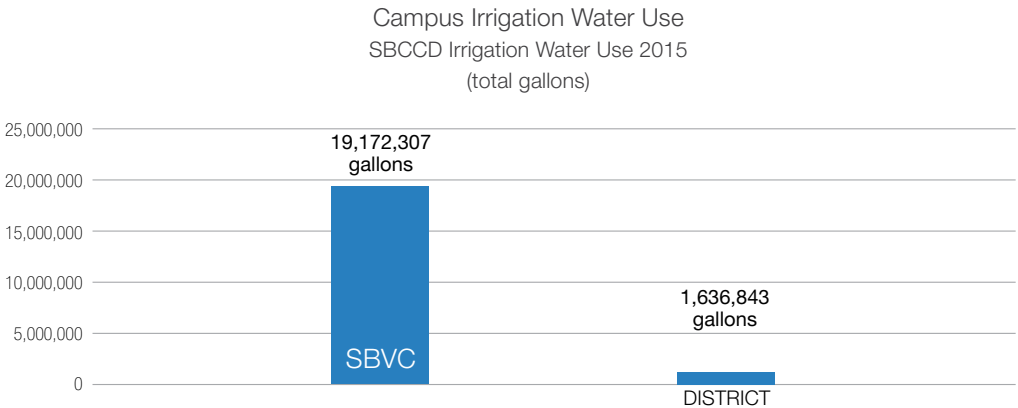
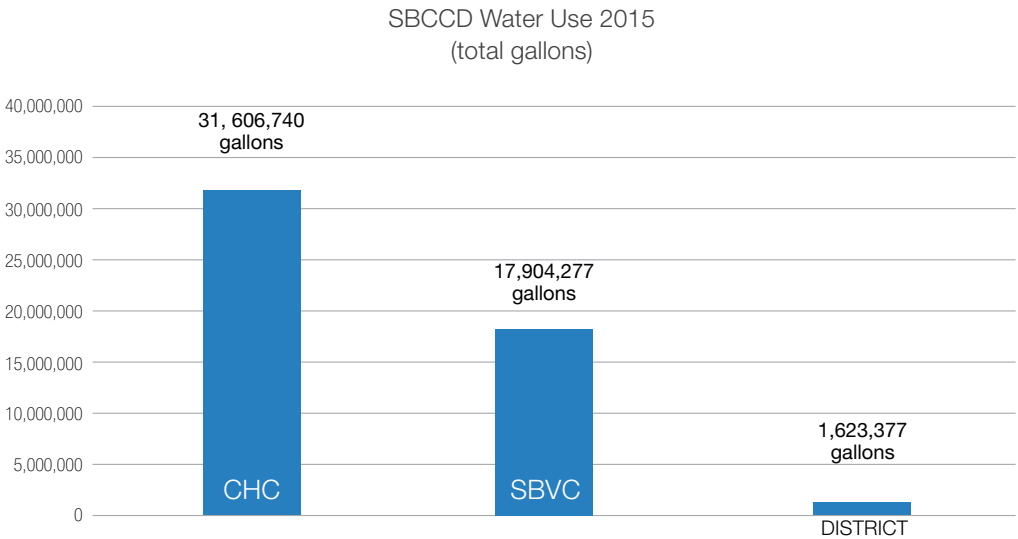
# Facilities Analysis

## SITE FACILITIES INFRASTRUCTURE (cont.)

### Water Use

The two graphs on this page compare the use of water on SBCCD's three main sites. Valley College used almost 18 million gallons of water in 2015 for non-irrigation purposes. It used over 19 million gallons to irrigate landscaped areas and lawns. Valley College used just over 37 million gallons in total. The water usage for Crafton Hills College is not metered separately for irrigation and non-irrigation use. CHC used 31,606,740 gallons in total for both. For perspective, it is helpful to compare the average water usage for each square foot of building area to broadly recognized benchmarks for conservative water usage. The graph on the opposing page shows that within its buildings Valley College used an average of 29 gallons/SF/year in 2015. This amount is greater than the two benchmarked levels: 20 gallons/SF/year for the Energy Star 2012 Data Trends for Office Buildings and 12 gallons/SF/year for the Energy Star 2012 Data Trends for Pre-K-12 School Buildings. Counting water used both within buildings and for irrigation, Crafton Hills College used an average of 81 gallons/SF/year in 2015.

In 2015 Valley College used about 19 million gallons of potable water for landscape irrigation, which cost about \$250,000. Irrigation of the turf in The Glade likely accounted for much of this usage.



\*Water readings for CHC were taken from the same main. Therefore CHC's water use values include both building water use and irrigation.

## Facilities Analysis

# FACILITIES CONDITIONS

San Bernardino Valley College and SBCCD participate in the California Community Colleges Facility Condition Assessment Program, which assesses existing buildings to help districts plan for maintenance and repair work. The results of the spring 2016 assessment are shown on the graphic on the opposing page. The Facilities Condition Index (FCI) is the ratio of the cost of all needed repairs to the replacement cost of the facility, expressed as a percentage. An FCI value is shown for each facility.

In addition, San Bernardino Valley College gathers information on maintenance needs, regulatory compliance, potential sustainability and energy efficiency upgrades, and repair issues. Based on interviews with college staff and the Facilities Condition Assessment report, each facility has been placed in one of four categories:

- › Good Condition
- › Fair Condition
- › Poor Condition
- › Very Poor Condition

### Observations:

- › Most of the buildings are in good condition, being fairly new or recently renovated, however, very little has been done to maintain these newer buildings since they were constructed.
- › Several of the buildings are in poor or very poor condition. These few buildings use a disproportional amount of the resources that are allocated for the maintenance of the entire campus.





## FACILITIES CONDITIONS INDEX

TEMPORARY FACILITIES
IN DESIGN/UNDER CONSTRUCTION
GOOD
FAIR
POOR
VERY POOR
(X%) FACILITIES CONDITION INDEX
PROPERTY LINE

## BUILDING KEY

ID	Building Name
AD/SS	ADMINISTRATION/STUDENT SERVICES - 0%
ART	ART CENTER - 0%
AUD	AUDITORIUM - 29%
B	BUSINESS - 0%
CC	CAMPUS CENTER - 0%
CP1	CENTRAL PLANT (NEW)
CP2	CENTRAL PLANT (OLD)
CDC	CHILD DEVELOPMENT CENTER - 0%
CTS	COMPUTER TECHNOLOGY CENTER
GYM	GYMNASIUM
HLS	HEALTH & LIFE SCIENCE - 0%
LA	LIBERAL ARTS - 41%
LIB	LIBRARY - 0%
M&O	MAINTENANCE & OPERATIONS - 0%
MC	MEDIA/COMMUNICATIONS - 0%
NH	NORTH HALL - 0%
O	OBSERVATORY - 8%
PEC	PARENT EDUCATION CENTER - 5%
PS	PHYSICAL SCIENCES - 0%
PL	PLANETARIUM - 17%
POL	POLICE STORAGE
SHIP	SHIPPING & RECEIVING OFFICE - 17%
STOR1	STORAGE BUILDING 1 - 40%
STOR2	STORAGE BUILDING 2
STOR3	STORAGE BUILDING 3
SHS	STUDENT HEALTH SERVICES - 0%
T	TECHNICAL - 20%
TEL	TELECOM BUILDING - 0%
TRANS	TRANSPORTATION - 0%
WARE	WAREHOUSE - 11%



## Facilities Analysis

# SPACE UTILIZATION

The EMP includes a study of the utilization of Valley College's lecture and laboratory space. The study looks at usage in fall 2014, the most recent available for the study and does not include the new Gymnasium and Field Buildings.

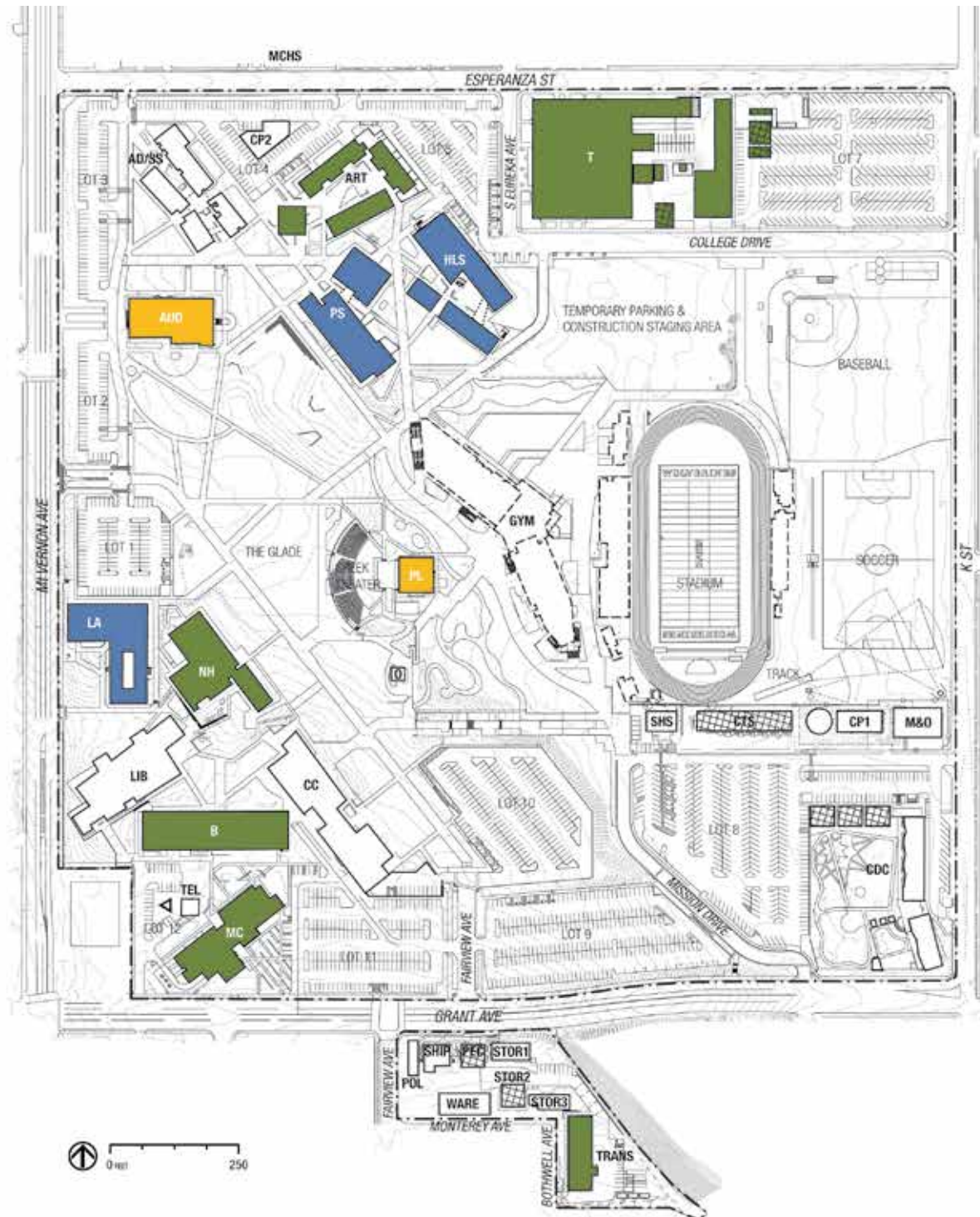
The graphic on the opposing page illustrates the results of the first section of the study, the Overall Building Summary, which indicates the instructional space usage by hours of weekly utilization per semester on an overall building level. The level of utilization of a classroom or lab can be influenced by its many physical attributes, including its configuration, equipment, furnishings, acoustics, indoor environmental quality, location, and accessibility. Low hourly utilization could indicate deficient facilities and spaces that are not desirable or adequately outfitted places to learn.

Please refer to *San Bernardino Valley College Space Utilization*, dated April 2016 for the full report.

### Observations:

- › Utilization could be improved for many of the buildings, with regard to the average number of contact hours that occurred in classrooms and labs. The site review indicated that the utilization of most classrooms and labs was not due to deficiencies in physical design and outfitting.
- › The study showed that the highest average hourly utilization occurred in the Health Life Science, Liberal Arts, and Physical Sciences Buildings.
- › In many classrooms only one or two subjects were taught, indicating that classrooms may be “owned” by specific programs instead of being shared among all programs.
- › Often a perceived shortage of classrooms and labs is due to competition for desirable timeslots.





## SPACE UTILIZATION



## BUILDING KEY

ID	Building Name
AD/SS	ADMINISTRATION/STUDENT SERVICES
ART	ART CENTER
AUD	AUDITORIUM
B	BUSINESS
CC	CAMPUS CENTER
CP1	CENTRAL PLANT (NEW)
CP2	CENTRAL PLANT (OLD)
CDC	CHILD DEVELOPMENT CENTER
CTS	COMPUTER TECHNOLOGY CENTER
GYM	GYMNASIUM
HLS	HEALTH & LIFE SCIENCE
LA	LIBERAL ARTS
LIB	LIBRARY
M&O	MAINTENANCE & OPERATIONS
MC	MEDIA/COMMUNICATIONS
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STOR3	STORAGE BUILDING 3
SHS	STUDENT HEALTH SERVICES
T	TECHNICAL
TEL	TELECOM BUILDING
TRANS	TRANSPORTATION
WARE	WAREHOUSE

## Facilities Analysis

# CAMPUS ZONING

The programmed uses of facilities across the campus are logically zoned for most college functions. Functions that are visited by the community, such as the administrative offices in the AD/SS Building, are located on Mt. Vernon Avenue where they are visible and near parking. The Auditorium and Library are also clearly visible from Mt. Vernon Avenue. Kinesiology and athletic facilities are well organized and clustered. Instructional facilities are loosely organized into program-related clusters. The Child Development Center is separated appropriately from the rest of campus.

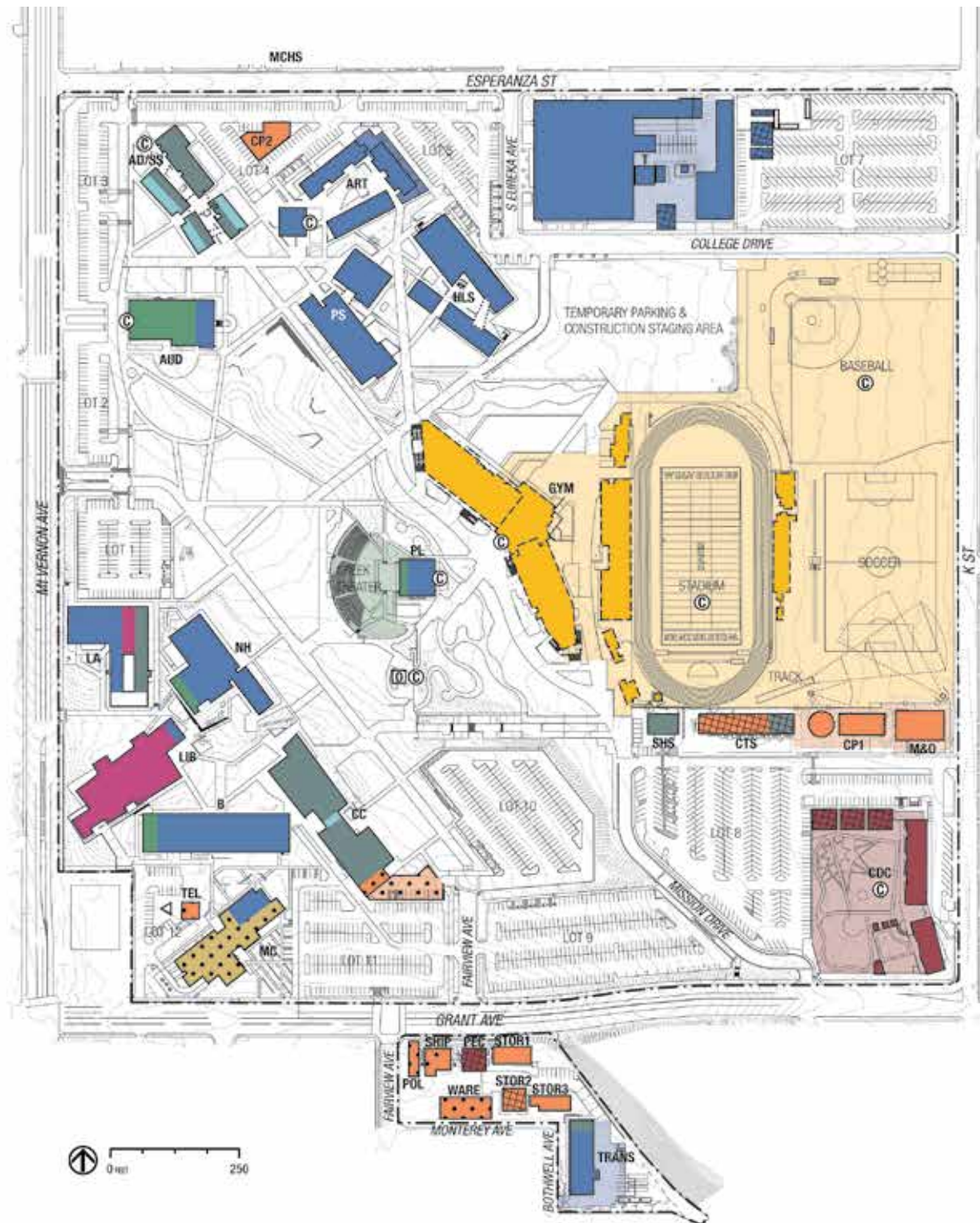
An important exception to the logical zoning of college functions is the zoning of facilities that house student support services. The Administration/Student Services Building was intended to be a one-stop location for all student services, but it was quickly outgrown. Students must seek guidance and support from services that are distributed across the AD/SS Building, the Liberal Arts Building, the Campus Center, and the Student Health Services Building—complicating their access to services that are critical to their success. It also complicates the ability of student services faculty and staff to collaborate and share resources.

### Observations:

- › The spaces assigned to student support services in the Liberal Arts Building are often not easily found by many students. These former faculty office spaces lack full accessibility and have not been repurposed to support the specific needs of these programs.
- › Spaces in the older buildings on the Fairview Precinct have not been properly repurposed to suit their current use.
- › The Diesel Technology Program occupies the Transportation Building, which is located on the Fairview Precinct, separated from support services and related programs that are housed in the Technical Education Building.
- › The STEM Success Center, a tutoring center in the Physical Sciences Building, cannot grow further due to lack of available space.







## CAMPUS ZONING

	TEMPORARY FACILITIES
	DISTRICT FACILITIES
	IN DESIGN/UNDER CONSTRUCTION
	STUDENT SERVICES & ACTIVITIES
	ADMINISTRATION
	LIBRARY
	INSTRUCTIONAL
	CHILD DEVELOPMENT CENTER
	RECREATION
	PHYSICAL EDUCATION
	EVENT SPACE
	ATHLETIC
	COMMUNITY USE
	EMPTY
	PROPERTY LINE

## BUILDING KEY

ID	Building Name
AD/SS	ADMINISTRATION/STUDENT SERVICES
ART	ART CENTER
AUD	AUDITORIUM
B	BUSINESS
CC	CAMPUS CENTER
CP1	CENTRAL PLANT (NEW)
CP2	CENTRAL PLANT (OLD)
CDC	CHILD DEVELOPMENT CENTER
CTS	COMPUTER TECHNOLOGY CENTER
GYM	GYMNASIUM
HLS	HEALTH & LIFE SCIENCE
LA	LIBERAL ARTS
LIB	LIBRARY
M&O	MAINTENANCE & OPERATIONS
MC	MEDIA/COMMUNICATIONS
NH	NORTH HALL
O	OBSERVATORY
PEC	PARENT EDUCATION CENTER
PS	PHYSICAL SCIENCES
PL	PLANETARIUM
POL	POLICE STORAGE
SHIP	SHIPPING & RECEIVING OFFICE
STOR1	STORAGE BUILDING 1
STOR2	STORAGE BUILDING 2
STOR3	STORAGE BUILDING 3
SHS	STUDENT HEALTH SERVICES
T	TECHNICAL
TEL	TELECOM BUILDING
TRANS	TRANSPORTATION
WARE	WAREHOUSE



# SAN BERNARDINO VALLEY COLLEGE



# Needs

This chapter highlights the linkage between the *Educational Master Plan* and the *Facilities Master Plan*. The EMP served as the foundation for all discussions related to facilities and was used to drive decisions related to the recommendations for the campus. The purpose of this section of the *Facilities Master Plan* is to establish the amount and type of space necessary to support the academic program of instruction and support services through the year 2031.

The approach uses both qualitative and quantitative information and is described in the sections listed below. *Educational Planning Linkages* describes the qualitative connections that were established through the identification of facilities-related implications of the *Educational Master Plan*. During fall 2016, College Council evaluated numerous ideas for repurposing, expanding, and creating space for services and programs, with regard to how well each idea supports the EMP's strategic directions, goals, and supporting actions.

The quantitative linkage is forged by translating the enrollment data shown in the EMP *Program of Instruction + Space Needs* into the amount of space needed to accommodate the projected enrollment levels. The approach used and the resulting program of space are described in *Quantified Space Needs*.

The chapter concludes with *Planning Objectives* that represent sound and prudent planning principles that align with SBVC's vision for an intellectually stimulating, welcoming, and inclusive campus environment.

- › Educational Linkages
- › Quantified Space Needs
- › Planning Objectives

## Needs

# EDUCATIONAL PLAN LINKAGES

## 01 INCREASE ACCESS

### GOALS:

IMPROVE THE APPLICATION, REGISTRATION AND ENROLLMENT PROCEDURES FOR ALL STUDENTS.

### SUPPORTING ACTIONS:

- › Match the number of basic skills courses to student demand
- › Increase the number of accelerated basic skills courses
- › Provide more pre-assessment workshops
- › Improve the assessment process for more accurate placement
- › Establish and maintain partnerships with community organizations, K-12 systems and adult schools
- › Explore and expand online advising opportunities
- › Improve access to transfer, CTE Certificate, and other courses needed for graduation
- › Create better balance between transfer and CTE program offerings
- › Improve access to technology

### FACILITIES LINKAGES:

- › Welcoming and easy to find one-stop Student Services
- › Marketing, Public Relations, and Outreach space
- › Opportunities for K-12 students' exposure to campus / familiarity with campus

## 02 PROMOTE STUDENT SUCCESS

### GOALS:

INCREASE COURSE SUCCESS, PROGRAM SUCCESS, ACCESS TO EMPLOYMENT, AND TRANSFER RATES BY ENHANCING STUDENT LEARNING.

### SUPPORTING ACTIONS:

- › Increase the percentage of students who succeed in basic skills courses
- › Promote and increase the number of students in learning communities
- › Expand the use of early alert systems (i.e. SARS)
- › Improve performance on all Student Success Scorecard measures
- › Increase the use of low-cost and free online resources
- › Maintain up-to-date curriculum that is relevant to community needs
- › Encourage greater full-time enrollment
- › Use Student Learning Outcomes (SLOs) and Service Area Outcomes (SAOs) in an ongoing, systematic cycle of continuous quality improvement
- › Increase the number of students with terminal education plans
- › Establish and maintain an appropriate ratio of full-time to part-time faculty
- › Increase the number of grant opportunities to support student success

### FACILITIES LINKAGES:

- › Collaboration space
- › Student Services space
- › Tutoring and supplemental instruction space, as well as Basic Skills instruction space
- › Campus living laboratory
- › Technology improvements

## 03 IMPROVE COMMUNICATION, CULTURE + CLIMATE

### GOALS:

PROMOTE A COLLEGIAL CAMPUS CULTURE, WITH OPEN LINES OF COMMUNICATION BETWEEN ALL STAKEHOLDER GROUPS ON AND OFF CAMPUS.

### SUPPORTING ACTIONS:

- › Promote a sense of community and solidarity within the campus and embrace diversity (students, faculty and staff)
- › Promote budgetary transparency
- › Disseminate college committee meeting minute and all plans online
- › Build community recognition and networks by capitalizing on the College community roots
- › Expand and enhance local business and community awareness of the College
- › Establish a College historical archive that is accessible online
- › Build a stronger relationship with the SBVC foundation
- › Ensure exceptional customer service in all campus offices
- › Work with the District to streamline and expedite campus hiring practices
- › Improve campus morale

### FACILITIES LINKAGES:

- › Event, meeting and collaboration spaces
- › Useful and welcoming outdoor spaces
- › Transportation access and parking for cars and bicycles
- › Invisible maintenance (lessen the impact of maintenance staff and equipment in student areas by building maintenance facilities with adequate cart charging and equipment storage space)
- › Library upgrades
- › College and local community history archives
- › Multiple centers for cultural competency programs

## 04 MAINTAIN LEADERSHIP + PROMOTE PROFESSIONAL DEVELOPMENT

### GOALS:

MAINTAIN CAPABLE LEADERSHIP AND PROVIDE PROFESSIONAL DEVELOPMENT TO STAFF THAT WILL NEED SKILLS TO FUNCTION EFFECTIVELY IN AN EVOLVING EDUCATIONAL ENVIRONMENT.

### SUPPORTING ACTIONS:

- › Reduce manager turnover – fewer interims and more permanent managers
- › Improve access to a wide variety of professional development activities/organizations
- › Maintain a personal achievement inventory for a faculty and staff
- › Establish partnerships with neighboring community colleges

### FACILITIES LINKAGES:

- › Collaboration space for faculty and Campus Technology Services (CTS)
- › More centralized location for CTS offices in order to collaborate more easily with faculty
- › Professional Development Center
- › Learning Lab

## 05 EFFECTIVE EVALUATION + ACCOUNTABILITY

### GOALS:

IMPROVE INSTITUTIONAL EFFECTIVENESS THROUGH A PROCESS OF EVALUATION AND CONTINUOUS IMPROVEMENT.

### SUPPORTING ACTIONS:

- › Maintain up-to-date information on campus indicators, including evaluation data on support/retention programs and accreditation self study evidence
- › Improve and maintain effective Program Review procedures
- › Evaluate and update all campus level plans on a regular cycle
- › Produce and present annual reports that assess student success
- › Measure satisfaction with assessment and placement
- › Manage grant expenditures and align them with grant objectives

### FACILITIES LINKAGES:

- › Integrated planning areas
- › Facilities Implementation Studies
- › Facilities Archives and Records
- › Effective and sufficient assessment and testing space

## 06 PROVIDE EXCEPTIONAL FACILITIES

### GOALS:

SUPPORT THE CONSTRUCTION AND MAINTENANCE OF SAFE, EFFICIENT, FUNCTIONAL FACILITIES AND INFRASTRUCTURE TO MEET THE NEEDS OF STUDENTS, EMPLOYEES, AND COMMUNITY.

### SUPPORTING ACTIONS:

- › Conserve resources
- › Maintain a safe and secure environment
- › Improve campus signage
- › Continue with the facilities improvement plan (Implementation of the Facilities Master Plan)
- › Develop and maintain adequate parking
- › Provide exemplary technology and support while maintaining fiscal and environmental responsibilities

### FACILITIES LINKAGES:

- › Maintenance and facilities planning space
- › Sustainable and comfortable outdoor learning environments
- › Safe and secure campus with effective wayfinding
- › Parking capacity
- › Technology Improvements
- › Universally accessible facilities and campus



## Needs

# QUANTIFIED SPACE NEEDS

The *Program of Instruction + Space Needs* in the *Educational Master Plan* describes the planned growth rate, projected enrollment, and projected space need for each program offered by San Bernardino Valley College. These projections are aligned with the EMP's strategic directions and goals and take into consideration the results of research into the educational planning environment and economic opportunities.

### Calculating Space Needs

The inventory of facilities is an important tool in planning and managing college campuses. FUSION (Facilities Utilization, Space Inventory Options Net) is a database of all the California community college facilities that includes descriptive data on buildings and rooms for each college and district within the state. This information is essential for developing the annual five-year construction plans, planning for capital outlay construction projects, projecting future facility needs, and analyzing space utilization.

The California Community Colleges Chancellor's Office (CCCCO) mandates annual updates of the inventory of all facilities in a district. By combining existing and future enrollment and program forecasts with appropriate space standards, space requirements for current

and future needs are developed. Space capacity/load is the direct relationship between the amount of space available, by type, which may be used to serve students, and the number of students participating in campus programs.

Space capacity/load analysis enables an institution to identify the types of space it needs and the types of space it holds in excess. The analysis of space forms the core of this *Facilities Master Plan*.

Space capacity/load analysis typically includes the categories of space listed in Table 1 on the opposing page. Generally, the standard for the quantity of space is proportional to student enrollment. While the state provides standards for utilization for more than 60% of space types on campus, the capacity estimates for non-state standard spaces are based on a combination of factors, the most important being the specific needs of individual institutions identified through educational master planning discussions.

The upper five types of space listed in Table 1 are the capacity/load categories for which utilization and space standards are set by state regulations. The line item in Table 1 for space type “Other” includes a number of spaces on campus that are considered to be in non-capacity load categories. These are spaces that are not analyzed by the CCCCCO in relation to utilization and efficiency, but are important as part of the District’s inventory related to maintenance and operations. Types of spaces included in “Other” include the following:

- › Physical Education (Teaching Gym)
- › Clinic/Demonstration
- › Assembly/Exhibition
- › Food Facilities
- › Lounge
- › Merchandise Facilities (Bookstore)
- › Recreation
- › Meeting Rooms
- › Locker Rooms
- › Data Processing
- › Physical Plant/Facilities
- › Health Services

**TABLE 1: ROOM USE CATEGORIES**

Space Type	Room Use Numbers	Description
Lecture	100s	Classrooms + support spaces
Lab	200s	Labs + support spaces
Offices/Conference Room	300s	Offices + support spaces; all offices, including administrative and student services
Library/LRC Study/Tutorial	400s	Library, study and tutorial + support spaces
Instructional Media AV/TV	530s	AV/TV; Technology + support spaces
Other	520, 540 to 800s	PE, Assembly, Food Service, Lounge, Bookstore, Meeting Rooms, Data Processing, Physical Plant, Health Service

*Source: California Community Colleges Chancellor’s Office (CCCCO) Space Inventory Handbook*

## Needs

# QUANTIFIED SPACE NEEDS *(cont.)*

### Space Utilization and Planning

To determine the amount of space required to support the programmatic needs of each campus, the enrollment and program forecasts are applied to a set of standards for each type of space.

The required utilization and space standards for classroom, laboratory, office, library, and audio-visual are contained in the California Code of Regulations (CCR), Title 5, Chapter 8, Section 57020–57032. These standards refer to the Board of Governors of the California Community Colleges Policy on Utilization and Space Standards dated September 2010.

These space standards, when applied to the total weekly student contact hours (WSCH), produce total capacity requirements that are expressed in assignable square feet (allocated on a per student or per faculty member basis). The space standards and formulas used to determine both existing and future capacity requirements are summarized in Tables 2 and 3 on the following page.

Table 2, on the opposing page, is applied to a campus with less than 140,000 WSCH, such as the Crafton Hills College campus. Table 3 is applied to a campus for

140,000 or more WSCH, such as the San Bernardino Valley College campus.

The standards for teaching laboratories are measured in both ASF per student station and in ASF per 100 WSCH generated. Table 4, on page 3.40, summarizes these standards.

Each component of these standards is applied to projected enrollment to produce a total assignable square foot (ASF) capacity requirement for each category of space. The sum of these areas represents the total building area requirement for the campus.

The space standards are based on the following assumptions:

- › Utilization standards refer to the amount of time rooms and “stations” (such as a desk, laboratory bench, or computer terminal) should be in use. “Utilization” is the amount of time rooms and stations are actually in use. Utilization standards used address utilization on an “hours-per-week” basis.

- › Classrooms are available 48 hours per 70-hour week for a campus with less than 140,000 WSCH and 53 hours per 70-hour week for a campus with 140,000, or more, WSCH and will be occupied, on average, two-thirds of the time. (That occupancy percentage might be achieved by having full classrooms two-thirds of the time and empty classrooms the remaining time.) Thus, the classroom utilization standard is either 32 or 35 weekly hours of station use depending on amount of WSCH. The utilization standards for laboratories are lower than the classroom utilization standards.
- › Office space includes academic offices, administrative offices, clerical offices, office service rooms, and conference rooms.
- › Library space includes stack, staff, and reader station space.
- › Areas such as the main lobby (excluding card catalog area), elevators, stairs, walled corridors, restrooms, and areas accommodating building maintenance services are not deemed usable/assignable.

**TABLE 2: PRESCRIBED SPACE STANDARDS FOR A CAMPUS WITH LESS THAN 140,000 WSCH**

Category	Formula	Rates/ Allowances
Lecture (Classroom)	ASF/Student Station	15
	Station Utilization Rate (occupancy)	66%
	Average hours room/week	48
	Station use/week (hours)	31.68
Laboratory (Teaching Labs)	ASF/Student Station	see Table 4
	Station Utilization Rate (occupancy)	85%
	Average hours room/week	27.5
	Station use/work (hours)	23.375
Offices/Conference Room	ASF per FTE instructional staff member	140
Library/LRC/Study	Base ASF Allowance	3,795
	ASF/1st 3,000 DGE	3.83
	ASF/3001–9,000 DGE	3.39
	ASF/DGE>9,000 DGE	2.94
Instructional Media AV/TV + Radio	Base ASF Allowance	3,500
	ASF/1st 3,000 DGE	1.50
	ASF/3001–9,000 DGE	0.75
	ASF/DGE>9,000 DGE	0.25

Source: Board of Governors of the California Community Colleges, Policy on Utilization and Space Standards, September 2010.

The following definitions pertain to the formulas listed in above Tables 2 and 3.

ASF/Student Station:	Assignable square feet per student station
Average hours room/week:	Number of hours out of a 70-hour week, 8am to 10pm, a classroom or class laboratory, on the average, should be in use
Station Utilization Rate (occupancy):	The percentage of expected student station occupancy when rooms are in use
Station use/week:	The number of hours per week (out of the 70-hour week for classrooms and class laboratories) which a student station, on average, should be in use
FTE:	Full-time equivalent
DGE:	Day-graded enrollment
DGS:	Day-graded student

**TABLE 3: PRESCRIBED SPACE STANDARDS FOR A CAMPUS WITH 140,000, OR MORE, WSCH**

Category	Formula	Rates/ Allowances
Lecture (Classroom)	ASF/Student Station	15
	Station Utilization Rate (occupancy)	66%
	Average hours room/week	53
	Station use/week (hours)	34.98
Laboratory (Teaching Labs)	ASF/Student Station	see Table 4
	Station Utilization Rate (occupancy)	85%
	Average hours room/week	27.5
	Station use/work (hours)	23.375
Offices/Conference Room	ASF per FTE instructional staff member	140
Library/LRC/Study	Base ASF Allowance	3,795
	ASF/1st 3,000 DGE	3.83
	ASF/3001–9,000 DGE	3.39
	ASF/DGE>9,000 DGE	2.94
Instructional Media AV/TV + Radio	Base ASF Allowance	3,500
	ASF/1st 3,000 DGE	1.50
	ASF/3001–9,000 DGE	0.75
	ASF/DGE>9,000 DGE	0.25

Source: Board of Governors of the California Community Colleges, Policy on Utilization and Space Standards, September 2010.

## Needs

QUANTIFIED SPACE NEEDS *(cont.)*

TABLE 4: ASSIGNABLE SQUARE FEET (ASF) FOR LABORATORY SPACE

Top Code	Top Code Division	ASF per 100 WSCH	ASF per Station
0100	Agriculture and Natural Resources	492	115
0115	Agricultural & Forestry Power/Machinery	856	200
0200	Architecture and Environmental Design	257	60
0400	Biological Sciences	235	55
0500	Business and Management	128	30
0600	Communications	214	50
0700	Computer and Information Science	171	40
0800	Education	321	75
0936	Printing and Lithography	342	80
0937	Tool and Machine	385	90
0945	Mechanical Technology	556	130
0947	Diesel Technology	856	200
0948	Automotive Technology	856	200
0950	Aeronautical and Aviation Technology	749	175
0952	Construction Crafts/ Trades Technology	749	175
0954	Chemical Technology	556	130

Top Code	Top Code Division	ASF per 100 WSCH	ASF per Station
0956	Industrial Technology	385	90
All other 900s	(Engineering)	321	75
1000	Foreign Language	150	35
1200	Health Services	214	50
1300	Consumer Education/ Home Economics	257	60
1400	Law	150	35
1500	Humanities	150	35
1600	Library Science	150	35
1700	Mathematics	150	35
1800	Military Studies	214	50
1900	Physical Sciences	257	60
2000	Psychology	150	35
2100	Public Affairs and Service	214	50
2200	Social Sciences	150	35
3000	Commercial Services	214	50
4900	Interdisciplinary	257	60

Source: Board of Governors of the California Community Colleges, Policy on Utilization and Space Standards, September 2010.

**SBVC Space Inventory Analysis**

The San Bernardino Valley College Space Inventory Report was updated in 2015 and used to analyze the utilization and sufficiency of campus space. Table 5 summarizes the total assignable area in each of the capacity load categories of space.

The analysis compares the current inventory of space with current space needs. Current needs were calculated by applying space planning standards for each type of space in the capacity/load categories to the current enrollment. The results show that the College holds an excess of lecture, office, and instructional media space. A need for additional laboratory and library space is supported by the results.

**TABLE 5: EXISTING SPACE**

Space Type	Current Inventory (ASF)*	Current Space Needs**	Current Cap/ Load Ratios
Lecture	66,883	(36,274)	219%
Lab	132,187	31,984	81%
Office	69,027	(17,647)	134%
Library	29,886	7,442	80%
Instructional Media	6,577	5,000	57%
Other	143,244		
TOTALS	447,804		

\* 2015 Space Inventory

\*\* For fall 2015 enrollment

## Needs

# QUANTIFIED SPACE NEEDS *(cont.)*

The master plan space program forms the basis for developing recommendations for facilities. The space inventory analysis combined with the space needs forecast is summarized in Table 6 and indicates the total amount of additional assignable space needed to accommodate a master plan horizon student enrollment of 182,214 WSCH, which equates to 16,145 unduplicated student headcount.

It is important to note that the Space Inventory Report includes all facilities on campus that are in use, including temporary facilities. As described in the analysis of existing facilities, there are several facilities that are recommended for removal by this Facilities Master Plan. Table 6 includes an “adjusted inventory” which accounts for the removal of these permanent and temporary facilities, as shown in *Recommended Demolition & Replacement*. The analysis compares the current inventory of space with current space needs. Current needs were calculated by applying space planning standards for each type of space in the capacity/load categories to the current enrollment. The results show that the College holds an excess of lecture, office, and instructional media space. A need for additional laboratory and library space is supported by the results.

The methodology for projecting future space needs is summarized as follows:

- › The fall 2031 enrollment for each course was projected by applying the program-specific annual planned growth rate (compounded annually) to the baseline fall 2015 WSCH data for that course.
- › Master plan WSCH projections were applied in combination with appropriate space planning standards to result in a total space requirement in ASF by type of space.
- › The “adjusted inventory” was subtracted from the total space requirements described above to yield the net assignable area (ASF) overage or

**TABLE 6: 2031 SPACE NEEDS**

Space Type	2017 Inventory (ASF)*	Adjusted Inventory (ASF)	2031 Space Needs	Difference
Lecture	69,886	66,109	38,913	(27,196)
Lab	133,182	133,182	208,742	75,560
Office	70,698	70,785	62,300	(8,485)
Library	29,886	29,886	43,638	13,752
Instructional Media	6,577	6,577	12,168	5,591
Other	154,562	139,926		
TOTALS	464,791	446,465		

\* Temporary buildings (Campus Tech. Svcs. (CTS), Portable Conf. Bldg., Portable Classroom, Parent Edu. Ctr., CDC sheds 1-2, Storage 4 (old CD4), T-122, T-123, T-124) have been removed and the Gym and Field Buildings have been added to the 2017 inventory. Inactive offices in LA building considered re-activated.



need by type of space for the fall 2031 master plan horizon.

- › The result, net assignable square footage by type of space, served as the basis for developing facilities options for the master plan.

## Needs

# PLANNING OBJECTIVES

In addition to quantified space needs, the discussions with Valley College Council were informed by the vision of a campus that is imbued with the desired character and qualities. These lists of *Needs*, *Issues*, and *Challenges* and *Planning Objectives* summarize the most resonant elements of this qualitative vision and were used to guide the development and evaluation of facilities options.

### Needs, Issues, and Challenges

The following were heard as recurring themes in the program interviews or the analysis of existing facilities.

1. More classrooms and offices
2. Flexible classrooms
3. Appropriate instructional tools and equipment in classrooms
4. Consistent design standards for classrooms
5. Program-specific storage space
6. Faculty offices near shared collaboration space
7. A one-stop student services location
8. Consistent/equitable delivery of learning resources & tutoring
9. Dedicated open computer labs
10. Current with technology and technology access
11. More student study & gathering spaces
12. More parking
13. Improved safety & security on campus

### Planning Objectives

These objectives were established to guide the discussion and decision-making.

1. Align campus space with the educational priorities
2. Maximize the physical space on campus
3. Ensure a student-centered and friendly campus
4. Develop student gathering spaces + activity zones
5. Improve College visibility to the community
6. Provide flexible, consistent, and well-equipped instructional spaces
7. Plan for future teaching and learning opportunities
8. Showcase students' projects and successes
9. Create faculty office space that encourages collaboration
10. Continue sustainable campus development
11. Address parking needs and alternative transportation
12. Allocate resources to care for facilities

## Needs

# PLANNING PRINCIPLES

This list of planning principles represent good planning practices that guided the evaluation and discussion of facilities development options with Valley College Council.

- › Maximize functional space and activity zoning
- › Eliminate non-functional space
- › Improve efficiency and utilization of space/land
- › Right-size facilities to address program needs
- › Enhance the campus environment
- › Consider safety and security in redevelopment
- › Utilize CPTED (Crime Prevention Through Environmental Design) principles in site design
- › Plan for a sustainable campus
- › Plan for flexibility, change, and growth
- › Simplify implementation
- › Use resources prudently



# SAN BERNARDINO VALLEY COLLEGE



# Recommendations

The *2017 Facilities Master Plan* translates the strategic directions and space needs, which are identified in the *2017 Educational Master Plan*, into recommendations for the future development of the campus. While the drawings presented in this chapter may appear specific, the forms are conceptual sketches that describe the general location and purpose of improvements. As they are funded, each project will be programmed and designed in detail with the participation of a user group.

The recommendations for the future development of the campus are described in the following sections.

- › Recommended Demolition + Replacement
- › Opportunities
- › 2017 Long-Range Campus Master Plan
- › Project Descriptions
- › Exploration of Future Options
- › Implementation



## Recommendations

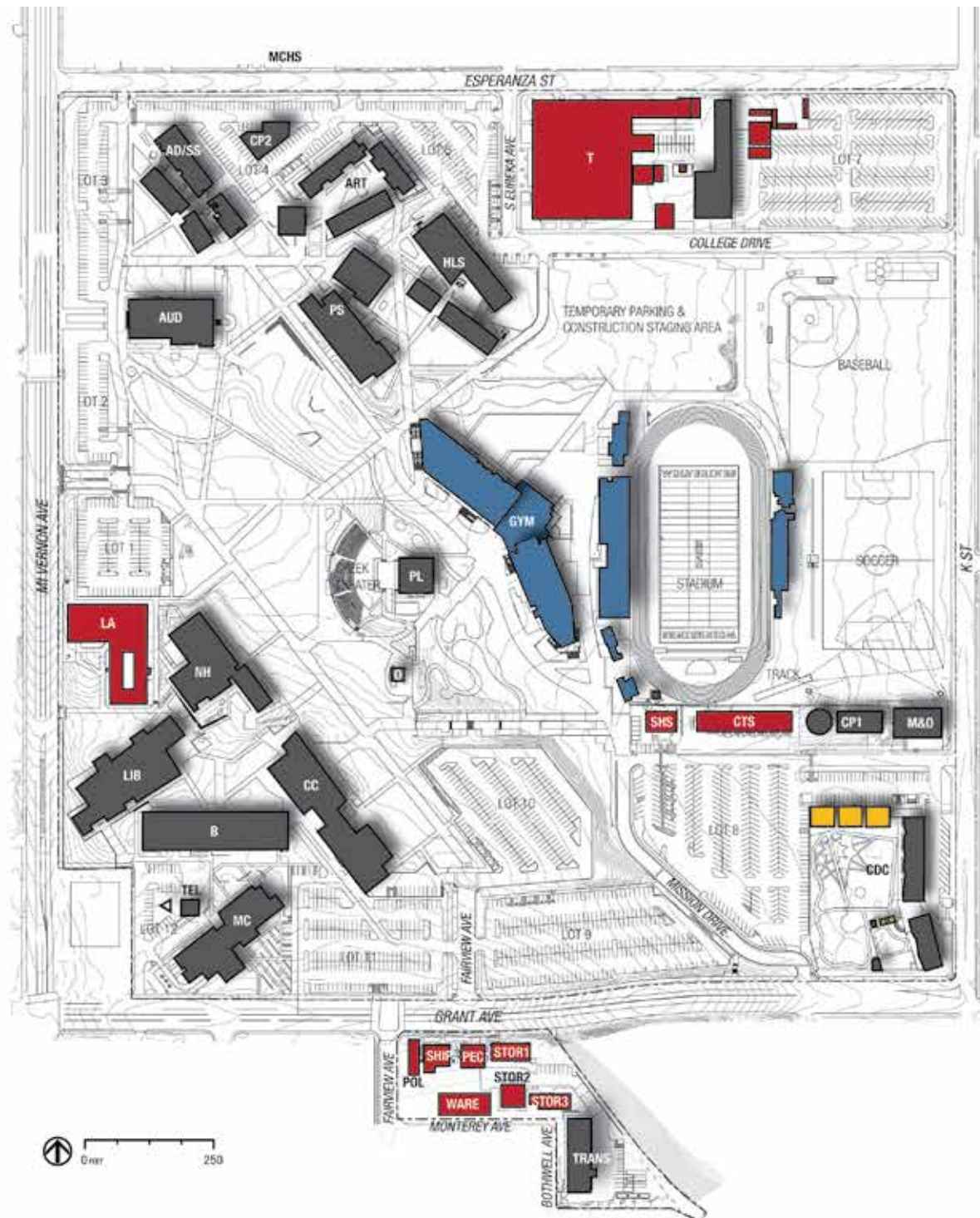
# RECOMMENDED DEMOLITION + REPLACEMENT

The graphic on the opposing page illustrates the recommendations for demolition and removal of facilities. Temporary facilities, as well as aged permanent facilities that are no longer feasible or cost effective to renovate, are recommended for replacement. The decision to renovate or replace an existing facility is often influenced by the limitations that an existing structure or site places on the success of a potential renovation. These factors were considered by SBCCD and San Bernardino Valley College in the course of seeking the most effective solutions.

The removal of the following facilities clears the way to improve the utilization of the campus land area. Removal of facilities will be phased to take place as new and renovated space becomes available. In certain circumstances, programs may be temporarily housed in swing space prior to being relocated to long-term facilities.

- › Technical Education Building (main wing and temporary buildings)
- › Liberal Arts Building
- › CTS Portables and Classrooms
- › Student Health Services
- › Police Storage
- › Shipping & Receiving
- › Parent Education Center
- › Warehouse
- › Storage Building 1
- › Storage Building 2
- › Storage Building 3





## RECOMMENDED DEMOLITION & REMOVAL

PROPERTY LINE
EXISTING PERMANENT FACILITIES
FACILITIES IN DESIGN & CONSTRUCTION
RECOMMENDED DEMOLITION & REMOVAL

## BUILDING KEY

ID	Building Name
AD/SS	ADMINISTRATION/STUDENT SERVICES
ART	ART CENTER
AUD	AUDITORIUM
B	BUSINESS
CC	CAMPUS CENTER
CP1	CENTRAL PLANT (NEW)
CP2	CENTRAL PLANT (OLD)
CDC	CHILD DEVELOPMENT CENTER
CTS	COMPUTER TECHNOLOGY CENTER
GYM	GYMNASIUM
HLS	HEALTH & LIFE SCIENCE
LA	LIBERAL ARTS
LIB	LIBRARY
M&O	MAINTENANCE & OPERATIONS
MC	MEDIA/COMMUNICATIONS
NH	NORTH HALL
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PEC	PARENT EDUCATION CENTER
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PL	PLANETARIUM
POL	POLICE STORAGE
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STOR1	STORAGE BUILDING 1
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STOR3	STORAGE BUILDING 3
SHS	STUDENT HEALTH SERVICES
T	TECHNICAL
TEL	TELECOM BUILDING
TRANS	TRANSPORTATION
WARE	WAREHOUSE

## Facilities Analysis

# OPPORTUNITIES

Removal of buildings opens up opportunities to improve the campus and address educational program needs. The graphic on the opposing page shows the campus without the facilities that are recommended for demolition and removal. Areas of opportunity are available to achieve many objectives.

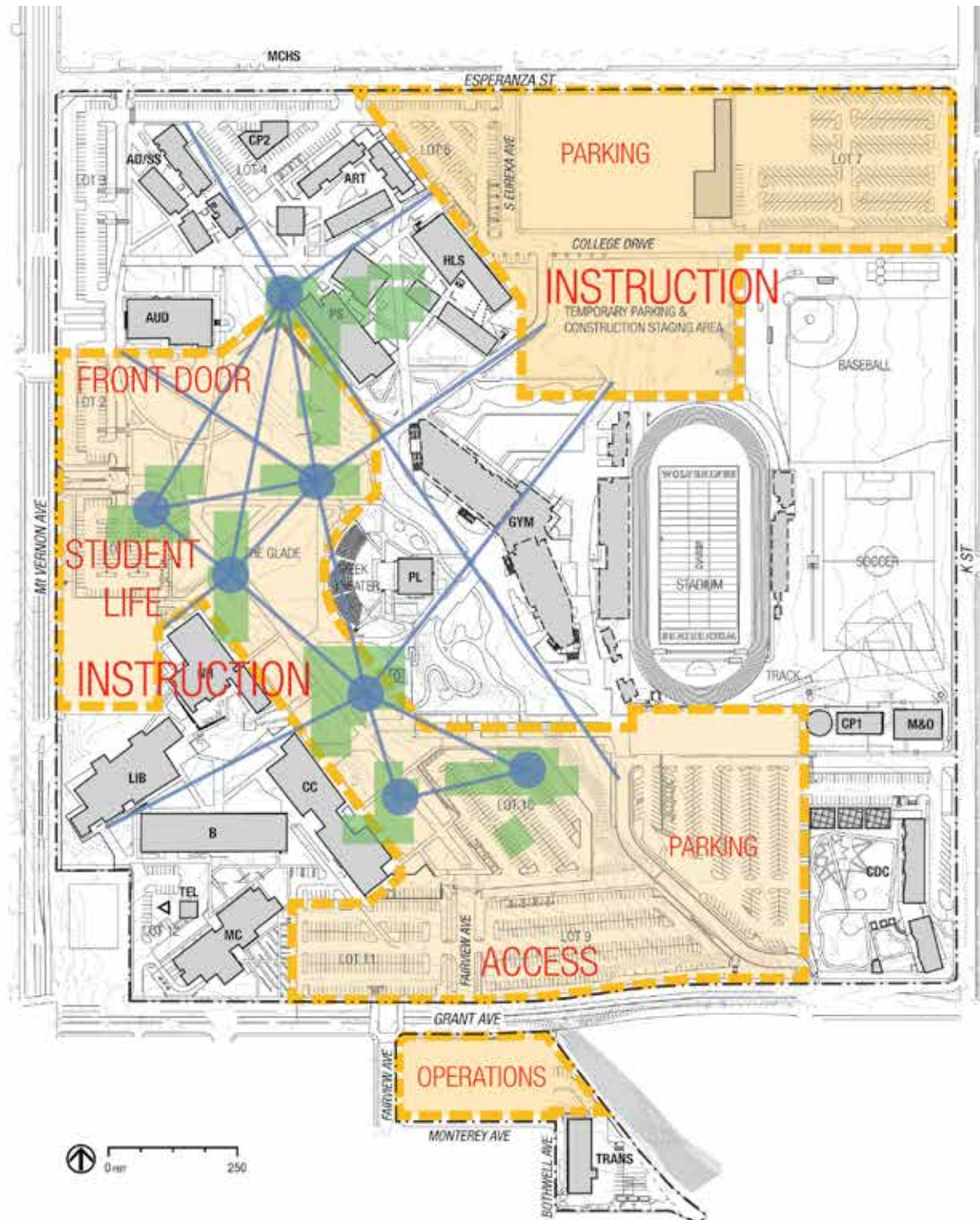
In addition, the facilities planning process took inspiration from the campus as it existed prior to the changes that followed the mapping of the San Jacinto Fault on the campus. Many stakeholders expressed their fond memories of the vibrant and well-used courtyards and walkways that comprised the spaces between buildings. The graphic illustrates the footprints of these long gone buildings (shown in green) and the scale of the outdoor spaces that connected them.

### Opportunities

- › To create a more prominent “front door” and visually consistent edges that strengthen the campus’ identity
- › To create usable, welcoming, and sustainable outdoor spaces
- › To build facilities that align with the new vision for career technical education
- › To build a hub for student services and activities
- › To provide modern operational support and storage facilities
- › To satisfy the long-range need for parking
- › To replace the most aged and inefficient facilities







## Recommendations

# 2017 LONG-RANGE CAMPUS MASTER PLAN

The *Facilities Master Plan* for the San Bernardino Valley College campus presents a picture of development that is intended to support the College's Strategic Directions and accommodate its projected enrollment and program forecasts.

Furthermore, the FMP supports the vision for a welcoming and student-centered campus that supports collegial interaction and collaboration among all who learn, teach, and support Valley College's students.

The recommendations are described in a series of capital construction and renovation projects, as well as initiatives for campus-wide improvement that are intended to be implemented in a flexible and phased manner. They also include steps to set standards and to plan for project implementation needs such as occupant move logistical plans, site utilities infrastructure expansion plans, and sustainable design goals.

A key step that is required by accreditation standards is planning for the life-cycle and operational costs of all facilities and campus-wide systems. Only by doing this can SBVC expect to maintain and refresh the campus over time, at the level of quality that the community deserves and has come to expect.

### PROJECT LIST

#### New Facilities

- › Career Pathways
- › Parking Structure
- › Student Services/Instructional Building
- › Warehouse Facilities
- › Softball Field

#### Renovation of Facilities

- › Maintenance & Operations Building Repurposing
- › Administration Building Repurposing
- › Campus Center Repurposing
- › Library Repurposing
- › Greek Theater & Planetarium Renovation
- › Physical Sciences and Health & Life Science Secondary Effects

#### Campus-Wide Improvements

- › Campus-wide Learning Environment Upgrades
- › Campus-wide Vehicular Circulation & Parking
- › Campus-wide Enriched Outdoor Environment
- › Campus-wide Security & Safety
- › Ancillary Logistics & Infrastructure

### Exploration of Future Options

- › Aeronautic Technology Program Facility at San Bernardino International Airport
- › Performing Arts Center
- › Aquatic Center
- › Tennis Facility



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## 2016 LONG-RANGE CAMPUS MASTER PLAN

## BUILDING KEY

ID	Building Name
AD	ADMINISTRATION
ART	ART CENTER
AUD	AUDITORIUM
B	BUSINESS
CC	CAMPUS CENTER
CP1	CENTRAL PLANT 1
CP2	CENTRAL PLANT 2
CDC	CHILD DEVELOPMENT CENTER
CTS	COMPUTER TECHNOLOGY CENTER
GRND	GROUNDS
GYM	GYMNASIUM
HLS	HEALTH & LIFE SCIENCE
LIB	LIBRARY
M&O	MAINTENANCE & OPERATIONS
MC	MEDIA/COMMUNICATIONS
NH	NORTH HALL
O	OBSERVATORY
PAC	PERFORMING ARTS CENTER
PATH1	CAREER PATHWAYS 1
PATH2	CAREER PATHWAYS 2
PRK	PARKING STRUCTURE
PS	PHYSICAL SCIENCES
PL	PLANETARIUM
SS/INST	STUDENT SERVICES/ INSTRUCTIONAL BUILDING
TEL	TELECOM BUILDING
WARE	WAREHOUSE

## LEGEND

---	PROPERTY LINE
█	EXISTING FACILITIES
█	PROPOSED RENOVATIONS
█	PROPOSED NEW FACILITIES
█	PROPOSED PARKING STRUCTURE

HMC Architects



PRO SWAP MEET PARKING

MT VERNON AVE

K ST

GRANT AVE

FAIRVIEW AVE

MONTEREY AVE

BOTHWELL AVE

LOT 13

LOT 9

LOT 8

PATH1

PATH2

STADIUM

TRACK

SOCCER

BASEBALL

SOFTBALL

LOT 5

LOT 6

LOT 7

LOT 8

LOT 9

LOT 10

LOT 11

LOT 12

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## Recommendations

# CAREER PATHWAYS

### PHASE 1

Phase 1 of the Career Pathways Complex will provide additional flexible, hands-on learning labs for the instruction of evolving and emerging applied technologies. This facility will replace one of the most aged and maintenance-intensive facilities on the campus with space that simulates current working environments and is richly supported with technology network connectivity and utilities. As a model of sustainable building design, this two-story facility will demonstrate and teach the use of innovative green technologies. Adjacent outdoor instructional spaces will support flexible, high-clearance ground floor laboratories. A new laboratory for diesel technology instruction will allow this program to move out of its current isolated location in the Fairview Precinct and near to related programs.

Both Phase 1 and 2 are planned to be near existing instructional buildings, thus taking advantage of this opportunity to expand the college's inventory of laboratory space for many programs that have outgrown their facilities. Phase 1 will house a new tutoring center, allowing for the expansion of this function and the repurposing of the existing Student Success Center tutoring space in the Physical Sciences Building into needed laboratories. The tutoring center will extend into an outdoor courtyard between Phase 1 and Phase 2.

### PHASE 2

Phase 2 of the Career Pathways Complex will provide additional laboratory space to accommodate the planned growth of Valley College's current and future career pathway programs—in particular, the programs that have grown to fill the Health Life Science and Physical Sciences Buildings. In addition to flexible and well-equipped laboratories, this facility will provide additional space for student-faculty interaction, supplemental instruction, and study.

This project will be followed by the Physical Sciences and Health & Life Science Secondary Effects Project. This project will reorganize and repurpose space in these buildings, in order to implement a holistic approach to growth by zoning existing and new programs and services logically and efficiently.



Vignette Plan



Key Plan





## Recommendations

# PARKING STRUCTURE

The Parking Structure will provide 1,225 parking stalls, including handicap accessible stalls, 51 stalls with electric vehicle charging stations, and 30 stalls for fuel efficient vehicles. It will replace a portion of the surface parking stalls in Lot 8, providing a net increase of 975 stalls. A 400 kW solar photovoltaic production plant will be built on the structure's top level.

The Parking Structure will be well-placed to accommodate parking for large campus events at the Stadium, The Glade, and the Greek Theater. It will be set back from the street front and screened with landscaping. Vehicular access directly from Grant Avenue will help to reduce traffic on campus driveways and spacious and accessible pedestrian pathways will link this structure to all parts of the campus.

The Parking Structure design shown on these pages is reflective of the prior design completed in 2010, which was not constructed due to a reprioritization of bond financed facilities allowing instructional buildings to be constructed instead.



Vignette Plan



Key Plan







## Recommendations

# STUDENT SERVICES/INSTRUCTIONAL BUILDING

The Student Services & Instructional Building will bring student-centered instructional and support space into a welcoming facility at the front of campus. The new “one-stop” center will replace offices that are currently distributed among three widely separated buildings, simplifying way-finding and access for students and collaboration and sharing of resources for staff. This facility will also provide modern space to replace aged classrooms, laboratories, and faculty offices in the existing Liberal Arts Building, which has outlived its usefulness. The location next to the existing Library is ideal to house the expansion of learning resources, tutoring centers, instructional media, study space, and open computer labs—providing sufficient space to grow these functions and support the initiative for basic skills instruction. Because the quality of resources and support for faculty bears directly on student success, this facility will provide space to expand the College’s Professional Development Center and faculty collaboration space in a central campus location.

The Student Services & Liberal Arts Building is well-located to give Valley College a stronger presence on Mt. Vernon Avenue. It will be bracketed by pedestrian-friendly outdoor spaces that flow directly into a ground-level student welcome center. A plaza will draw students in from the “front door” of the College. Students and

their family and friends will find respite in the sheltered and shady courtyard between this building and North Hall. A strong physical connection is recommended to link related functions to the existing Library.



Vignette Plan



Key Plan





## Recommendations

# WAREHOUSE FACILITIES

The Warehouse Facility will provide space for SBCCD's district shipping, receiving, and storage functions, as well as a storage space for San Bernardino Valley College. This facility replaces six aged and temporary buildings, including two that were built in the 1930s. The new facility will be durable and easy to maintain—providing flexible and efficient space for receiving and handling deliveries, inventory processing, and disposing of obsolete equipment. It will provide secure storage for the SBCCD Police Department. The college portion of this facility will provide secure storage for general college needs and the needs of individual departments. This facility will include provisions to support the management and recycling of waste, including the storage and disposal of hazardous materials.

The Warehouse will be located on the Fairview precinct of campus. The outdoor areas will be improved to provide for delivery vehicle access and loading and staff parking—all secured by an attractive perimeter wall and landscaping.



Vignette Plan



Key Plan





## Recommendations

# MAINTENANCE + OPERATIONS BUILDING REPURPOSING

Following the construction of the Career Pathway Complex, Phase 1, which will provide a new laboratory for the Diesel Technology program, the Transportation Building and its surrounding site will be repurposed to provide maintenance & operations work space. These work spaces are necessary to properly maintain the campus facilities and operate them efficiently, sustainably, and safely.

The building's location on the Fairview Precinct, south of Grant Avenue, is currently surrounded by unimproved grounds and this project will renovate the site and provide outdoor work space and maintenance vehicle parking and charging stations that are safely separated from student walking paths.



Vignette Plan



Key Plan

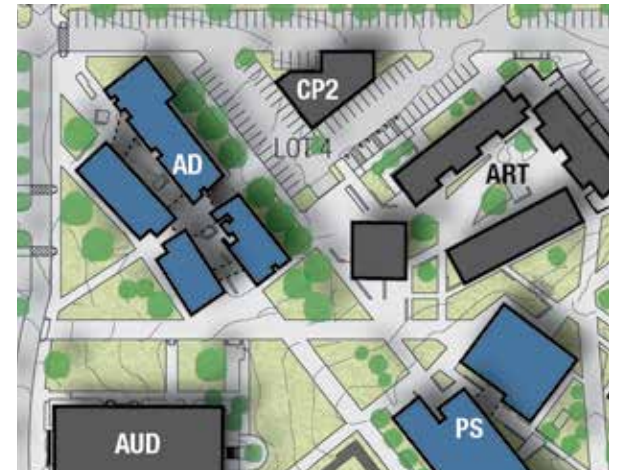


## Recommendations

# ADMINISTRATION BUILDING REPURPOSING

Following the construction of the Student Services & Instructional Building and the relocation of student services offices, the vacated space in this building, the former Administration/Student Services Building, will be repurposed to house additional meeting space and workspace for Campus Technology Services (CTS), as well as offices for the College Foundation and Marketing and Public Affairs, which are currently housed in the Campus Center. The renovation of this building is an opportunity to repair and replace worn building components, to make it more efficient to operate, and to update its technology network infrastructure and connectivity.

The Administration Building will provide an ideal location for CTS. Since CTS staff work closely with administration, faculty, and staff to integrate, support, and refresh general and program-specific instructional technologies in offices, classrooms, and labs, their ability to support the College will benefit from the needed expansion of their workspace and a location closer to their “customers.”



Vignette Plan



Key Plan





## Recommendations

# CAMPUS CENTER REPURPOSING

The Campus Center Renovation will provide more space that is dedicated to student activities and recreation, student government, and clubs. Relocating the Veteran's Center to the Student Services and Instructional Building and the College Foundation and Marketing and Public Affairs to the Administration Building frees space for a student lounge and recreation room and a student club workroom and meeting space.

Outdoor areas, including the enclosed patio and the lanai adjacent to the Sunroom and dining room will be shaded, improved, and outfitted to enlarge the space that is available for student dining and gathering. The renovation of this building is an opportunity to repair and replace worn building components, to make it more efficient to operate, and to update its technology network infrastructure and connectivity—specifically to integrate the use of student-owned devices to support college life.



Vignette Plan



Key Plan



## Recommendations

# LIBRARY REPURPOSING

The Valley College Library is a well-loved and well-used community and college resource. Students wait for its opening each morning and remain till closing at night and on weekends. This project will repurpose specific inactive and underutilized spaces, making room for 21st century learning resources that are in increasing demand. It will implement the shift toward e-resources; expanding tutoring space and collaborative study space within a technology-rich environment that also supports students' own devices. It will activate the café and create space to house Valley College's rich local history archives and special collections. The College will explore the potential to build a direct physical link to the Student Services/Instructional Building, which will accommodate a needed expansion of library space for the growing student enrollment.



Vignette Plan



Key Plan







## Recommendations

# GREEK THEATER + PLANETARIUM RENOVATION

The Greek Theater is well-known and loved by Valley College's community as the location of many memorable graduation ceremonies, events, and performances. This facility also serves the community through its many shows at the 57-seat planetarium that are seen each year by thousands of local K-12 students and that are also open to the public on Friday evenings twice a month from September through April. The Observatory houses a college history collection, as well as the 14-inch telescope that is open for night sky viewing after each public planetarium show.

To prepare these facilities for many more years of service, they will be renovated and updated for accessibility and energy efficiency. The Greek Theater will receive audio-visual and technology equipment and infrastructure upgrades. Options for shading the seating area, within the seismic constraints of the Alquist-Priolo Act, will be explored. Interior space that has been used for temporary housing during the construction of many buildings, including the Gymnasium and Stadium, will be repurposed for permanent uses.



Vignette Plan



Key Plan





## Recommendations

# SOFTBALL FIELD

Women's Softball is a well-established part of the Valley College Athletics Program. It advances the achievements of scholar-athletes through rigorous training and competition, requirements for academic achievement, conference- and state-wide honors, and recruitment by four-year institutions.

Currently the College does not have on-campus softball facilities. Home games are played at Ralph Lopez, Jr. Field in Cesar Chavez Park. This project will build facilities that comply with NCAA requirements for practice and collegiate competition and advance Valley College's plans for compliance with Title IX requirements.

This project also offers the opportunity to incorporate features that are designed to manage storm water and comply with state requirements that will be enforced for future campus development projects.



Vignette Plan



Key Plan

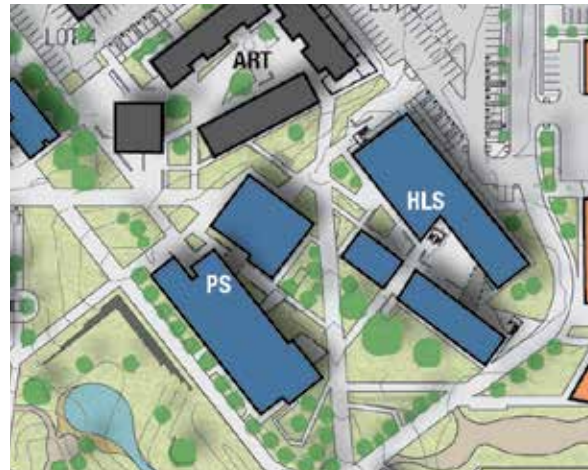




## Recommendations

# PHYSICAL SCIENCES AND HEALTH + LIFE SCIENCE BUILDINGS SECONDARY EFFECTS

Following the construction of the Career Pathways Building Project, Phase 1; space will be vacated in the Physical Sciences Building and the Health & Life Science Building as specific functions move to the new facility. This secondary effects project will reorganize and repurpose space in the PS and HLS buildings, in order to implement a holistic approach to growth by zoning existing and new programs and services logically and efficiently.



Vignette Plan



Key Plan



## Recommendations

# CAMPUS-WIDE LEARNING ENVIRONMENT UPGRADES

Learning and student development can and should take place in all areas of campus, from informal conversations outside of class to the discussions and investigations that take place in a classroom, lab, or tutoring space. The renovation and upgrades of existing instructional buildings and spaces provide the opportunity to create instructional, collaboration, and tutoring spaces that focus on the needs of students and faculty for today's learning. These redeveloped spaces should take place in a variety of locations all over the campus and be flexible to allow for a variety of instructional approaches, including direct presentation, group work, project-based learning, class discussion, and role playing.

### Instructional Spaces

Redevelopment of instructional spaces, particularly lecture classrooms, should consider student class size and average number of contact hours. A variety of instructional room sizes will provide options for scheduling courses in a space that aligns with the enrollment size of a particular course. The flexibility of space development with furnishings and technology can encourage creative approaches to discussions, project-based learning, and teamwork. Faculty in each classroom or lab need to feel empowered to re-arrange and create a space to suit their specific instructional needs. Redeveloped instructional spaces should

include mobile furnishings on casters that can easily be reconfigured to support various modes of instruction. Engagement of students could be increased with a layout that provides for small group discussions and activities, rather than rows of individual desks.

WiFi access to allow for use of tablets, laptops, and mobile devices should be included in all instructional spaces throughout the campus. Power for charging devices should be included along all walls. Opportunities for multiple large flat-screen monitors on the walls and multiple large front projection screens will increase visibility for direct presentations and allow for small group work. As technology changes, new options should be implemented to encourage the latest methods of research and interaction with information beyond the walls of the College.

### Distance Learning

As distance learning and blended learning opportunities increase at the College, consideration should be given for additional testing locations for these courses, as well as touch points for interaction with faculty and other students for personal contact and mentoring. Faculty office areas should be augmented with small conference rooms or group rooms to allow for more flexibility to meet with multiple students and to provide locations for faculty interaction.

### Corridors and Public Spaces

Public spaces are essential to the daily campus life of students, faculty, and staff. They foster a wide variety of activities and support informal, spontaneous interactions and socializing that can lead to a culture of trust, collaboration, sharing, and informal learning from others. Clear sightlines to these areas should be considered for security. The redevelopment of buildings and surrounding outdoor spaces should focus on the opportunities these transitional spaces can provide. Planning the campus' facilities should strategically distribute a mix of quiet and lively, public and semi-private spaces, such as cafés, common areas, and study rooms throughout all buildings. They should be created in easy-to-locate areas, such as lobbies, corridors, outside classrooms and offices, and outdoors. A variety of sizes and configurations of spaces should be considered for various uses. These informal learning and collaboration spaces should support a variety of student activities, including study and informal tutoring, waiting between classes, socializing, interactive dialogue between students and instructors, reading, and use of technology devices. The design of all areas should consider the need for power to charge technology devices.





## Recommendations

# CAMPUS-WIDE VEHICULAR CIRCULATION + PARKING

The Facilities Master Plan makes recommendations to improve circulation and access at specific portions of the campus vehicular circulation system. It increases the amount of parking spaces while also providing for alternatives to single-vehicle commuting that will help to slow the growing need for parking capacity. The FMP aligns with regional and local mobility plans to provide a range of transportation modes from which to choose. Close collaboration among SBCCD and Valley College, transit authorities, and local and regional planning authorities is recommended to facilitate these improvements.

### Campus Entry Points and Circulation

The FMP plans for the development of a welcoming “front door” to the campus along Mt. Vernon Avenue, between the Auditorium and the Student Services & Instructional Building. Within this zone, the main vehicular entry point is recommended to be aligned with the signal at Johnston Street. This change would allow both north-bound and south-bound vehicles to enter the campus. The signalized intersection would continue to provide for the pedestrians crossing Mt. Vernon Avenue between the campus and the Pro Swap-Meet. To improve the flow of traffic at the juncture of Lots 3 and 4, the driveway connecting Esperanza Street and

Lot 3 should be altered to allow entrance only. Vehicles will be able to exit the campus farther east to Esperanza Street and further south to Mt. Vernon Avenue. The FMP recommends closing College Drive to general vehicular circulation. This area will be incorporated into the outdoor instructional labs of the Career Pathway Complex and be restricted to pedestrian, service, and emergency circulation between the Baseball and Softball Fields.

The Parking Structure project will improve circulation in the driveways and parking lots near Grant Avenue. Traffic will flow directly into and out of the parking structure via Grant and Fairview Avenues lessening the traffic in other parking lots.

### Transit Stops & Passenger Loading zones

Currently many students are dropped off and picked up at the campus by family and friends. As the use of ride-sharing and ride-hailing becomes an even greater proportion of vehicle trips to campus, the need for passenger loading zones with adequate vehicle stacking space will grow. Providing dedicated loading zones reduces congestion in parking lots that currently serve as informal waiting and loading zones. The development of three passenger loading zones are recommended.

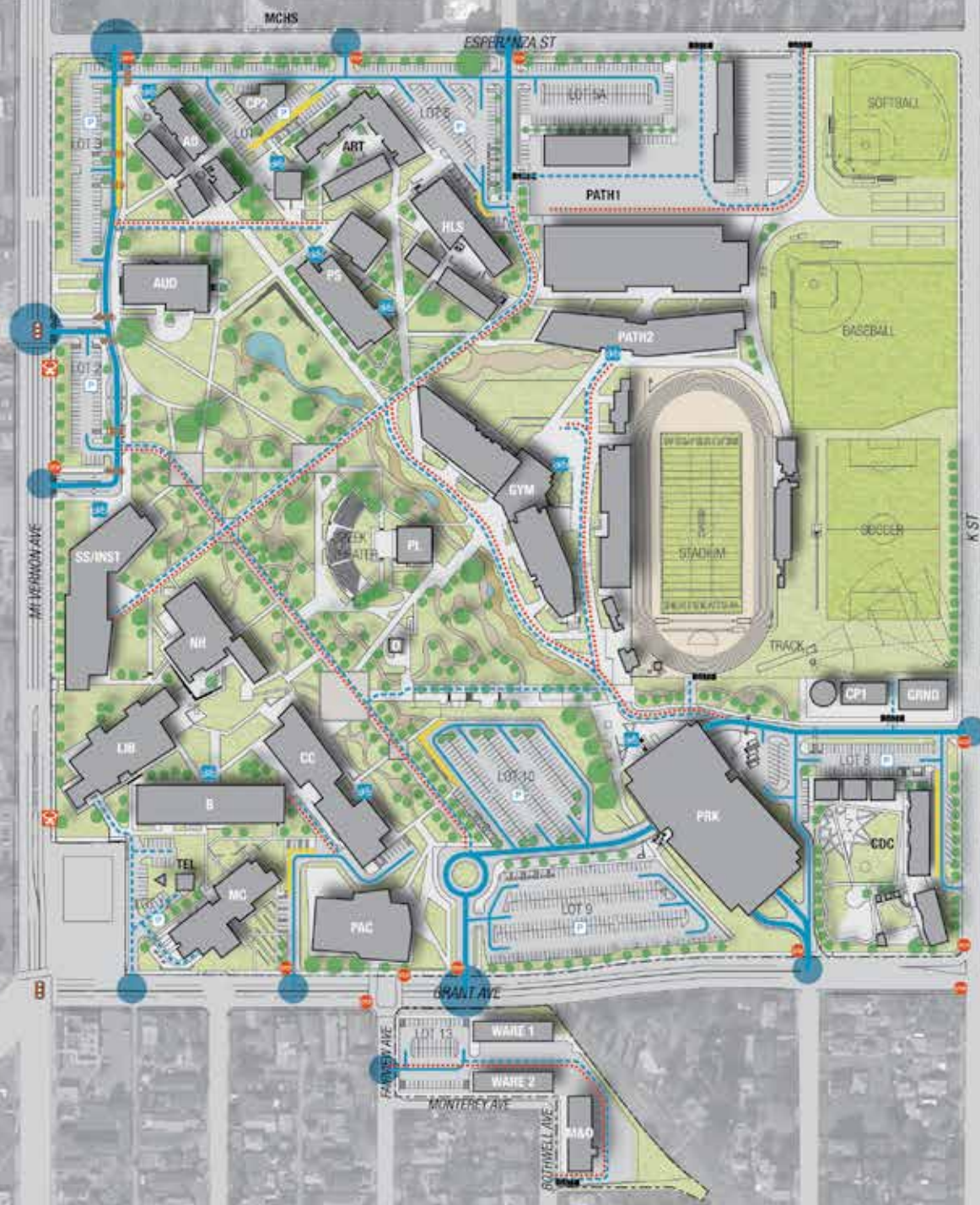
- › Main entrance passenger loading zone and transit stop
- › Eureka Avenue passenger loading zone
- › Fairview Avenue passenger loading zone

### Parking

The FMP plans for more parking on the Valley College campus. It also assumes that the joint-use parking agreement with Pro Swap-Meet, as well as on-street parking in the surrounding public streets will remain available during the master planning horizon.

The Parking Structure project will provide a net increase of 975 additional parking spaces. The FMP alters previous plans to build a second parking structure near Esperanza Street and instead plans for a redistribution of surface parking lots in the northern part of the campus. Much of the location previously planned for a second parking structure will instead be used to provide more indoor and outdoor instructional space for the Career Pathways Complex.

Looking beyond the planning horizon for this FMP, it is recommended that SBCCD and Valley College continue to implement policies and programs that encourage the use of alternative transportation modes that help

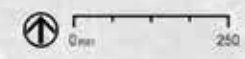


## 2016 LONG-RANGE CAMPUS MASTER PLAN

- FACILITIES**
- CAMPUS ENTRY - MAJOR/MINOR
  - PASSENGER LOADING/DROP OFF ZONE
  - P PARKING AREA
  - PRIMARY VEHICULAR ROUTE
  - SECONDARY VEHICULAR ROUTE
  - SERVICE VEHICULAR ROUTE
  - EMERGENCY VEHICULAR ROUTE
  - B BICYCLE PARKING
  - CROSSWALKS
  - BUS STOPS
  - TRAFFIC SIGNALS
  - STOP SIGNS
  - GATED ENTRY
  - PROPERTY LINE

Lot	Spaces	
	Existing	Proposed
1	99	n.a.
2	45	45
3	70	70
4	104	104
5	106	106
6 (gravel)	25	n.a.
7	203	n.a.
8	298	48
9	232	232
10	160	160
11	139	16 or 139
12	26	26
13	n.a.	44
Parking Structure	n.a.	1225
College Dr	45	0
Eureka Ave	9	?
CDC	10	10
Police Lot	15	15
<b>Total</b>	<b>1585</b>	

HMC Architects



## Recommendations

# CAMPUS-WIDE VEHICULAR CIRCULATION + PARKING *(cont.)*

to reduce the parking utilization rate. Because the continued availability and terms of use of the Pro Swap-Meet and off-campus street parking are not guaranteed, SBCCD and Valley College should continue to explore additional options. The joint-use agreement with Pro Swap-Meet should serve as a model for addressing the need for parking in ways that are cost-effective and based on community partnerships.

### **Bicycle Facilities**

Bicycling to campus promotes fitness and reduces the demand for parking lots. It also helps to reduce the College's carbon footprint that results from fuel-based transportation, by far its largest contribution of greenhouse gases. Valley College could do more to welcome cyclists. Discussions among stakeholders and a review of current policies are recommended to build consensus around a set of goals, policies, and rules for safe and convenient bicycle use on the campus.

The FMP recommends integrating bicycle use at the campus entry points, especially at or near existing and planned community bicycle routes and paths. Bicycle entrances are recommended at points on Mt. Vernon Avenue, which is a Class III bicycle route, and on Grant Avenue nearest the Lytle Creek Channel Class

I bicycle path. Signage along campus routes shared with vehicles or pedestrians will promote awareness of bicycle traffic. Existing pedestrian/emergency vehicle routes have the capacity to serve as bicycle routes and should be designated with signage placed next to or painted on the pavement. These paths extend to the Gymnasium, where secure parking and access to showers would be provided.







## Recommendations

# CAMPUS-WIDE ENRICHED OUTDOOR ENVIRONMENT

Beginning 20 years ago, when it became necessary to redevelop much of the campus, Valley College has tested different approaches for the design of its buildings and open spaces. Currently, a large area at the center of campus is being redeveloped for the Gymnasium and Stadium, implementing concepts that were developed with the participation of many faculty and staff.

These concepts draw upon the College's physical context and educational mission for inspiration. Learning gardens and outdoor classrooms are transforming the campus into a lab for learning that accommodates the diverse and active ways in which students learn. The FMP recommends extending these features into The Glade and throughout the campus—making it clear that the campus is here for Valley College's community by fostering a welcoming neighborhood feel that celebrates Valley College's community, history, and heritage.

### Student-centered Campus

In support of San Bernardino Valley College's strategic directions, the FMP recommends a revisioning of the campus into a place that welcomes and invites students to use it to further their growth and educational goals. To be an effective resource for student learning and growth, the campus must be an enriched, stimulating,

and interactive environment that offers many lessons that grow organically out of available opportunities. These include but are not limited to proximity to instructional programs, campus facilities, the natural environment, local history, and the expertise and interests of faculty and staff. Special features such as small performance opportunities and interactive displays may be incorporated. The concepts described are just a taste of the many possibilities.

### The Campus as a Living Laboratory

Valley College's history would be highlighted and honored through features that recall buildings, courtyards, and places such as the Free Speech platform, and their role in college history. Architectural elements of the Mission Revival-style that have been saved from the original campus buildings would be incorporated. Public art and student art will be displayed and featured in indoor and outdoor spaces to enhance gathering spaces.

Opportunities will be sought to program and design learning gardens such as the Biology Learning Garden that is being built next to the Gymnasium. For example, an Astronomy Learning Garden could be constructed around the Observatory and Planetarium. Other gardens could feature native habitat and wildlife, the local





## Recommendations

# CAMPUS-WIDE ENRICHED OUTDOOR ENVIRONMENT *(cont.)*

geology and seismicity, and storm water management and its effect on regional water quality.

Network connectivity through the campus WiFi system will be extended to cover outdoor areas to support instructional and social activities using both college- and student-owned devices.

### The Glade

Native riverine environments will be modeled by a dry creek bed that winds past the Gymnasium and into The Glade to find its destination among the oak trees. The dry creek would serve a double-duty by helping to manage storm water on the campus while recalling the restorative beauty of the naturally flowing water.

Plazas and gathering spaces of a variety of sizes and scales would be developed at nodes that recall the location and functions of past campus buildings. Areas furnished with tables and seating and paved with decomposed granite or other materials would support many uses, such as outdoor dining and events, or define outdoor living rooms that would welcoming students and staff. Use of natural elements such as boulders for informal seating and walkways accented with stone pavers will be encouraged.

Larger paths would link destinations across the campus. Smaller, winding paths would bring walkers through the garden environments at a slower pace.

Large trees will be preserved and many more trees will be planted to create shade. Shade structures will be provided where permitted.

### Courtyards

Paving, shade structures, landscaping, lighting, and furnishings will be provided for courtyards that are adjacent to the Career Pathways Complex and the Student Services and Instructional Building. Charging stations for personal devices and WiFi coverage will be provided.





## Recommendations

# CAMPUS-WIDE SECURITY + SAFETY

SBCCD and the College will take a proactive approach to the security and safety of the campus including designing outdoor and building space using CPTED (Crime Prevention through Environmental Design) design principles and best practices for creating secure environments. This approach will be augmented with electronic security and safety systems. Projects to upgrade systems can be done as new buildings and site areas are built, as existing facilities are renovated, or as specific security systems are brought on line. The implementation of these upgrades should be coordinated with the SBCCD Police and a campus-wide safety and security plan.

### Projects include:

- › Expand the electronic access control system to control access to all buildings.
- › Install digital CCTV security cameras and monitoring system in parking areas, in selected portions of buildings, and other key areas of the campus.
- › Expand the intrusion alarm system on campus to include all buildings and key spaces on campus.
- › Install a campus-wide emergency notification system through the fire alarm system and include exterior speakers to cover all areas of the campus.







## Recommendations

# ANCILLARY LOGISTICS + INFRASTRUCTURE

Developing new facilities, roads, and infrastructure on an active campus requires a rigorous and logistically-sound approach. New facilities must be integrated into existing systems, which, in turn, must be upgraded to accommodate increasing loads. Simultaneously, campuses must evolve to keep up with new regulations and standards for sustainability and efficiency—a responsibility that community colleges have embraced as an extension of their educational mission and as stewards of public resources.

### Temporary Facilities and Logistical Planning

SBCCD and Valley College will plan and budget for relocating occupants and providing temporary housing and parking when needed. Simplifying logistics is a key factor for the order in which projects will be built. Temporary space will be provided only when necessary for programs whose existing facilities must be demolished or removed before new or renovated facilities are ready to occupy.

### Sustainability Planning

Continued sustainable facilities planning is recommended to build upon Valley's successes and set milestones toward achieving net-zero energy usage and other sustainability goals. Next step strategies to consider include:

- › Ultra-efficient building design standards
- › Micro-grid and battery storage
- › Fuel cell electrical generation
- › Sub-metering of all systems
- › Online dashboard that shows power generation and water and power usage
- › Retro-commissioning on a 3- to 5-year cycle
- › Electric/hybrid vehicle charging stations
- › Emerging technologies

### Gymnasium Rooftop Solar Photovoltaic Plant

Valley College is poised to make its first move toward a renewable energy future. The new Gymnasium is solar-ready—built to support a 450 kW rooftop solar PV plant that will supply the campus with clean energy.

### Parking Structure Solar Photovoltaic Plant

The next renewable energy project is ready to build. The Parking Structure has been designed to support a 400 kW rooftop solar PV plant that will further decrease Valley College's reliance on the grid.

### Softball Field Storm Water Retention and Treatment

Recently enacted water quality regulations no longer exempt community colleges from complying with their requirements. Moving forward, the design of new buildings and site improvements must mitigate against increases in impervious surface areas—surfaces that restrict storm water from being absorbed into the ground. The design must include measures to retain and treat storm water that runs off roofs, parking lots, and other impervious surfaces. To the extent that it is practical, localized measures such as bio-swales, rain gardens, and pervious paving will be used to capture storm water close to where it falls. But it is likely that a more extensive retention and treatment system will be needed for development in the northeast portion of the campus, including Career Pathways, Phase 1 and 2 and Parking Lots 5A and 5B. The planned Softball Field is next to the connection to the municipal storm drain line and is a logical location for such a system.

In addition to storm water requirements, water quality regulations also require a campus sewer management plan and SBCCD and the College are currently studying the existing sewer infrastructure and identifying needed repairs and upgrades.

### Central Cooling Plant Upgrades

Air conditioning on campus runs on chilled water that is generated at the central cooling plant and circulates underground to each building. The Central Plant operates throughout the night when power costs less and stores chilled water in the thermal energy storage tank for use during the next day. This project will upgrade the chilling and storage capacity to keep pace with the development of new buildings.

### Site Utilities Infrastructure Study

A comprehensive utilities infrastructure study is recommended as the next step to support future facilities with vital services and prepare and budget for efficient and sustainable campus operations. The campus utilities infrastructure will be mapped and assessed with regard to condition and the capacity to respond to planned needs. This FMP will serve as the basis to estimate and plan for future needs.

The study will begin by thoroughly mapping, documenting, and assessing the condition and capacity of all existing systems. It will model future needs and plan for improvements to the campus' space heating and cooling, power (including increasing

site generated power), natural gas, communications, potable water, expanded use of non-potable irrigation water, sewer, and storm water management systems. It will consider emerging technologies and infrastructure systems that support the efficient use of resources and reduce the campus' environmental impacts.

## Recommendations

# EXPLORATION OF FUTURE OPTIONS

Since opening in 1927, the physical size of the campus has grown to offer students comprehensive educational and support services. These recommendations are intended to improve the utilization of the land area that is currently available as campus development approaches build-out capacity. This CMP plans for facilities to accommodate students' needs through year 2031, based on current enrollment projections. For the long-term, options should be explored to house functions that may be needed in the future--especially for space-intensive functions such as large outdoor instructional labs, facilities for specialized uses, and parking. As they arise, opportunities should be considered to acquire additional land for specific needs. In addition, opportunities should be considered to share development and operating costs with community partners through joint-use agreements.

The following are ideas that arose through master planning discussions. They are listed here as options for continued discussion and exploration.

### **Aeronautic Technology Program Facility at San Bernardino International Airport**

Explore the option for students in the Aeronautic Technology Program to learn within the active environment of an operating international airport. A facility here could have the space needed to expand Valley College's existing program beyond what is possible to teach on its campus. A presence at the airport could help to build partnerships with the industry, train incumbent workers, and place Valley College students in jobs and internship programs.



## Recommendations

# EXPLORATION OF FUTURE OPTIONS *(cont.)*

### Performing Arts Center

Valley College will continue to explore options to provide facilities to house teaching laboratory and performance space for the Theatre Arts and Dance Programs.





### Aquatic Center

Valley College will continue to explore the option to develop an aquatic center that would support instruction, as well as provide a needed recreational opportunity for the community. A location, with space for a 25-yard by 35-meter competition pool and a 6-lane 25-yard wellness pool, is planned within the Valley College campus. The location is adjacent to the Gymnasium, which houses locker and shower facilities.



### Tennis Facility

Valley College will continue to explore the option to develop a tennis facility that would support instruction, as well as provide a needed recreational opportunity for the community. Ideas for such a facility include a location on the upper deck of a parking structure, an expanded campus site, and a joint-use site within the community.





## Recommendations

# IMPLEMENTATIONS

An implementation plan is recommended to prepare for the orderly and timely implementation of this FMP. This important step is intended to prompt decision-making, planning, scheduling, and budgeting at a more detailed level and to prepare for the design and construction phases of individual projects. An implementation plan will create a detailed long-range vision that is linked to design standards and objectives, funding strategies, and a multi-discipline study of the campus' utilities infrastructure systems that must be ready to support each new facility.

During the planning process, Valley College Council engaged in a thorough discussion about the prioritization of future facilities projects. Taking into account educational priorities, time-sensitive opportunities, logistics, potential funding, and program growth; the Council determined the following order of priority. The campus-wide improvements are intended to be implemented incrementally, either in phases or as part of facilities projects:

### New Construction

1. Career Pathways, Phase 1
2. Parking Structure
3. Student Services + Instructional Building
4. Softball Field
5. Career Pathways, Phase 2
6. Warehouse Facilities

### Renovation + Repurposing

1. Maintenance + Operations Building Repurposing
2. Administrative Building Repurposing
3. Library Repurposing
4. Campus Center Repurposing
5. Greek Theater + Planetarium Renovation
6. Physical Sciences + Health and Life Sciences Secondary Effects

The campus-wide improvements are intended to be implemented incrementally, either in phases or as part of facilities projects.

### Campus-Wide Projects

1. Campus-Wide Vehicular Circulation + Parking
2. Campus-Wide Security + Safety
3. Campus-Wide Learning Environment Upgrades
4. Campus-Wide Enriched Outdoor Environment

### Future Exploration

1. Adult/Community Classes
2. Aeronautics Technology Program Facility at SB International Airport
3. 

Performing Arts Center  
Aquatic Center  
Tennis Courts







# Comprehensive Master Plan

APPENDIX

**SAN BERNARDINO VALLEY COLLEGE**  
SAN BERNARDINO COMMUNITY COLLEGE DISTRICT



# Institutional Learning Outcomes

Institutional Learning Outcomes (ILOs) are the knowledge, skills, abilities, and attitudes that students are expected to develop as a result of their overall experiences with any aspect of the College, including courses, programs, and student services. ILOs are designed to help guide individual departments and disciplines in the development of student learning outcomes for programs, courses, and services.



# INSTITUTIONAL LEARNING OUTCOMES

## 1

### COMMUNICATION SKILLS

#### Literacy

- › Reading
- › Listening
- › Observing
- › Speaking
- › Writing

#### Interpersonal Skills

- › Working with individuals and groups, including conflict resolution and giving/receiving constructive feedback

## 2

### QUANTITATIVE SKILLS

#### Mathematical Theory

- › Understanding mathematical concepts and structures

#### Applied Mathematics

- › Applying mathematical skills and numerical data to analyze and solve real world problems

#### Mathematical Visualization

- › Using graphs, charts, and tables

## 3

### CRITICAL THINKING SKILLS

#### Information Literacy

- › Finding, interpreting, and evaluating information in print, electronic, and non-electronic media sources

#### Logical Reasoning

- › Constructing, supporting, analyzing, and evaluating arguments

#### Problem Solving

- › Using evidence-based reasoning to articulate a problem and propose hypotheses or solutions

#### Creativity

- › Using creative reasoning for problem solving and personal and social expression

# 4

## DISCIPLINE SPECIFIC SKILLS

### Discipline Theory

- › Understanding and employing discipline vocabulary, ideas, theories, standards and ethics

### Discipline Technology

- › Using tools, computers, instruments, and equipment relevant to discipline

### Discipline Performance

- › Working in labs, workshops, clinics, performances, and work experience relevant to discipline

# 5

## PERSONAL, SOCIAL, PROFESSIONAL RESPONSIBILITY

### Self-Knowledge

- › Understanding and evaluating personal strengths, weaknesses, biases, and values

### Goal-Setting

- › Setting goals that are realistic and balance educational, professional, and personal life

### Cultural Awareness

- › Understanding and respecting one's own culture, other cultures, and diversity

### Ethics

- › Understanding and practicing ethics, intellectual honesty, fairness, and personal responsibility



# Individual Data Sheets By Division

## Individual Data Sheets By Division

# APPLIED TECHNOLOGY, TRANSPORTATION + CULINARY ARTS DIVISION (INSTRUCTION)

### AERONAUTICS – 2014-2015

#### Description:

- › The Airframe and Powerplant Technician program prepares Students for employment in the aviation industry as a certified Airframe and Powerplant Mechanic. The curriculum encompasses 1900 hours of instruction, 750 hours in Airframe, 750 hours Powerplant, and 400 hours in the Airframe and Powerplant General Curriculum. The program is certified by the FAA under Federal Aviation Regulation Part 147. The industry analyst from Boeing predicts that 556,000 new mechanics and 498,000 pilots will be needed by 2032.

#### Assessment:

- › FTES decreased by 25% within a year due to the sudden departure of the only full time Faculty and chair responsible for administering, promoting, and managing the program.
- › WSCH per FTEF has decreased 19% in five years but most noticeably in the last year for above stated reason. Lack of program continuity of the faculty not being full-time.
- › Even with reduced FTES and WSCH, Student success and retention are higher than the campus average. Program is #4 on campus in number of certificates issued.

- › ZERO (0) full-time Faculty for 6 FTEF, F/T needed to grow program and do required administrative duties of faculty.
- › Enrollment has dropped due to the lack of continuity of the faculty not being full-time.

#### Department Goals:

- › Focus on close association with industry representatives in a continuing effort to meet the needs of a changing workforce.
- › Update instructional technology and teaching aids to meet these industry needs.
- › Adapt and implement new regulatory and environmental requirements.
- › Hire full-time faculty so program can grow.
- › Fill the vacant laboratory assistant position.

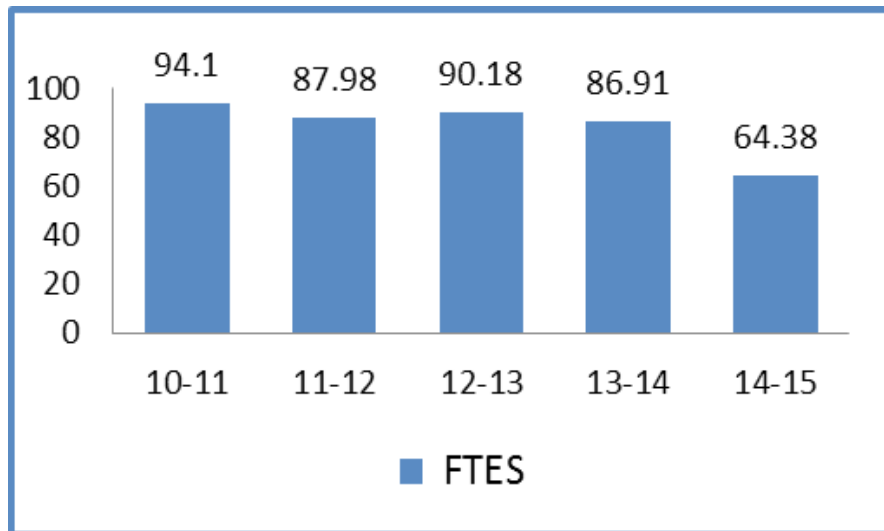
#### Challenges & Opportunities:

- › Increased regulatory demands and high FTEF demonstrate:
  - › The importance of additional F/T faculty to grow program and meet demands of the industry.
  - › Difficult to recruit part-time faculty due to HIGH employability in industry and low adjunct faculty pay.

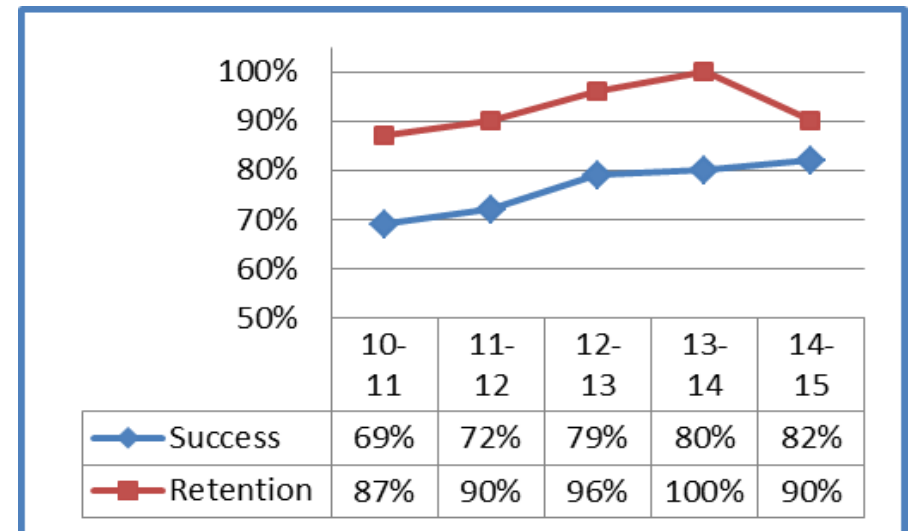
- › Lab Assistant is needed to ensure continued student safety and to prepare lab for improved student learning and efficiency.
- › Due to severe space constraints two lab sections are taught in one lab at the same time.

#### Action Plan:

- › Expose student to data that explains advantages of degree programs over minimum CTE course offerings.
- › Demonstrate the need and importance of full-time faculty based on institutional and industry driven data. Hire lab assistant for safety and success.
- › Pursue procurement of new technology environmentally friendly alternative fuel powerplants and hi technology composite structures.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	477	417	431	304	242
FTEF	7.02	6.82	6.09	5.69	5.98
WSCH per FTEF	402	387	445	458	323



	10-11	11-12	12-13	13-14	14-15
Sections	20	19	17	12	14
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	2	2	0	3	3
Certificates awarded	40	36	39	42	4

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 0950XX



## Individual Data Sheets By Division

# APPLIED TECHNOLOGY, TRANSPORTATION + CULINARY ARTS DIVISION (INSTRUCTION) *(cont.)*

### AUTOMOTIVE COLLISION – 2014-2015

#### Description:

- › The Collision Repair, Refinishing & Street Rod Program instructs students in collision repair, frame straightening, refinishing, estimating, street rod fabrication and vehicle restoration. Students acquire job skills that range from minor repairs and unibody frame replacement to spot jobs and complete vehicle refinishing. The newest edition to the program is the Auto Estimating in Fall 2014, Street Rod, Fall 2015 and Interior Restoration, Fall 2016. The automotive department and instructors are certified by ICAR which is a nationally recognized organization.

#### Assessment:

- › The Collision, Refinishing and Street Rod Program data shows increases in enrollment since 2009.
- › The success rates are 83%, well above the school average at 79%
- › The retention rate is 93%, well above the school average at 89%
- › Certificates have doubled from 2010-11
- › WSCH per FTEF average 407 because of duplicate enrollment
- › The FTEF data indicate need for additional full-time faculty as well as lab assistants.

- › The Collision and Refinishing Department is leading the Technical Division in certificates with 146 and 5 AS degrees in a five year period.

#### Department Goals:

- › Skills learned in the collision, refinishing and street rod programs overlap into other industries, with 72% of the San Bernardino population employed in blue collar jobs.
- › The collision, refinishing and street rod department will continue to offer quality education in vehicle restoration, interiors restoration and in green technology. This includes clean air refinishing techniques for collision and hybrid/alternative fuel body repair classes. To do this we will need the latest technology and equipment.
- › We will be restructuring the exciting lab space to better support our students to increase their success.
- › The addition of industry and education partners (Chief Auto-motive, LKQ, Service King, NAPA, Victor Valley & RCC, etc.) will help with our technical information, equipment, demonstrations and internships for continued student success.

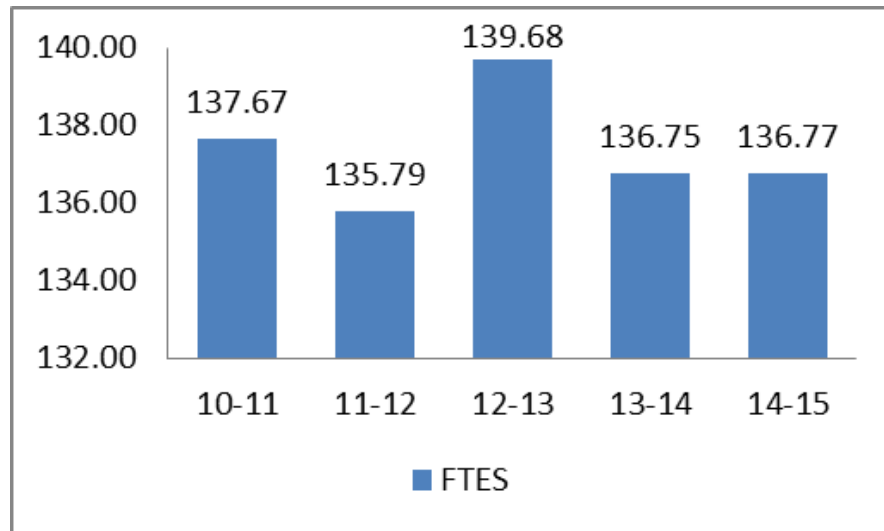
#### Challenges & Opportunities:

- › The department has had their building renovated. With the help of program review and grant monies,

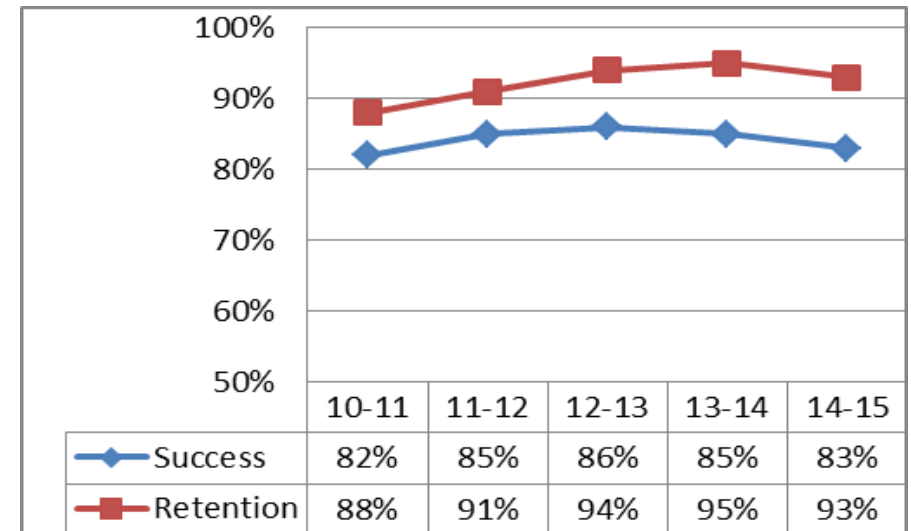
the department purchased new and updated equipment such as a frame rack, one aluminum repair station and three welding stations. The advisory board recommends that we restructure our space to keep up with industry standards. A challenge is where to put the cabinets, tooling, welding machines and supplies. One solution is to move the existing 40 foot container that was purchased years ago for street rod and move it to the auto compound. The department has doubled in sections in the past ten years but space has remained the same, so reutilizing space is necessary.

#### Action Plan:

- › The collision, refinishing and street rod program continues to grow with additional sections, two new estimating classes and two new street rod classes in Fall 2015 and Spring 2016, and interior restoration, Fall 2016. With the additional courses and sections, there must be annual funding. We are requesting additional budget money under the 0949 Tops Code.
- › The automotive department and instructors are continuing the certification process with ICAR (Inter Industry Conference on Automotive Collision Repair) and ASE (Automotive Service Excellence), which are nationally recognized organization.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	584	555	575	580	617
FTEF	9.38	9.38	10.19	10.44	11.39
WSCH per FTEF	440	434	411	393	360



	10-11	11-12	12-13	13-14	14-15
Sections	23*	23*	25*	25*	29*
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	1	0	4
Certificates awarded	15	48	31	35	17

\*Four of these courses overlap with Auto Technology (Auto 50, 52, 84, 56)

Data includes: SBVC, SOFF and SBBHS

Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

Code: 0949

## Individual Data Sheets By Division

# APPLIED TECHNOLOGY, TRANSPORTATION + CULINARY ARTS DIVISION (INSTRUCTION) *(cont.)*

### AUTOMOTIVE TECHNOLOGY – 2014-2015

#### Description:

- › The automotive technology program provides the students with the needed skill in order to be successful in today's industry. The courses offered apply towards a certificate and allow the students to work day or evening in order to complete the required courses. The FTES went up in 2013-14 due to the recruitment of the department and the improvements made in the lab equipment.

#### Assessment:

- › The department is moving forward and providing the students the skills to obtain a job in both collision and automotive repair. The success rate has risen to 76% and the retention at 90% which means the plan the department has to increase both areas is working.

#### Department Goals:

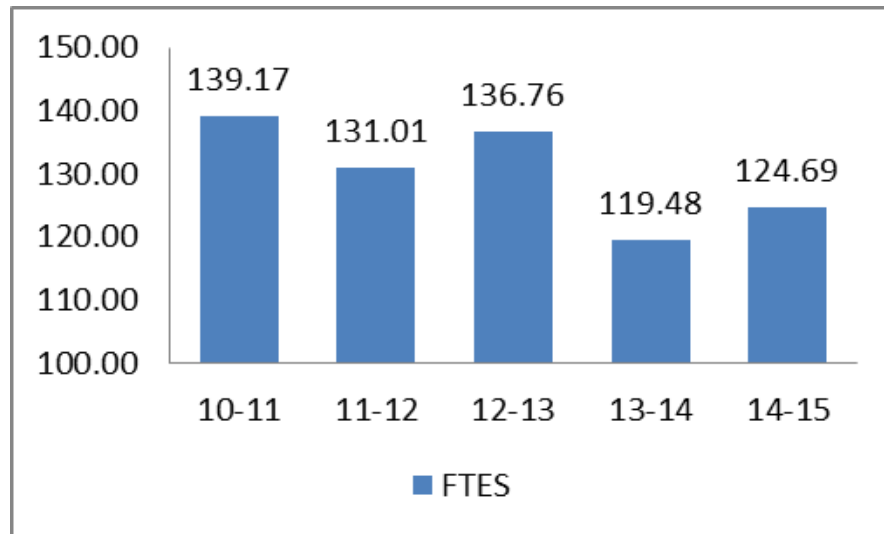
- › The department's goals are to help each student succeed and obtain their goal, of working in the industry and completing the automotive certificates and degrees. The department continues to recruit underserved population and to provide a shop with tools and equipment used today in local industry.

#### Challenges & Opportunities:

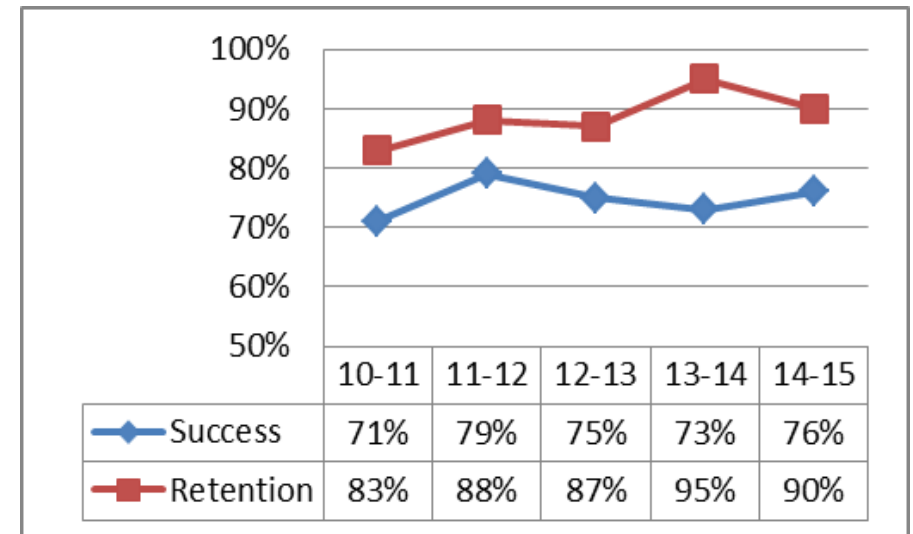
- › The challenge the department faces is our building is old and outdated. We are in desperate need for a new facility.

#### Action Plan:

- › To continue to recruit and promote our programs to all group ages gender and nationalities. The department will continue providing the students with the skills and knowledge to be successful in the industry. The department will continue to encourage students to complete a certificate and degrees.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	618	567	599	531	558
FTEF	9.16	8.41	9.16	8.45	8.39
WSCH per FTEF	456	467	448	424	446



	10-11	11-12	12-13	13-14	14-15
Sections	31*	28*	30*	22*	28*
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	3	1
Certificates awarded	6	5	20	16	12

\*Four of these courses overlap with Auto Collision (Auto 50, 52, 84, 56)

Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

Code: 0948

## Individual Data Sheets By Division

# APPLIED TECHNOLOGY, TRANSPORTATION + CULINARY ARTS DIVISION (INSTRUCTION) *(cont.)*

### CULINARY ARTS – 2014-2015

#### Description:

- › The Culinary Arts Department teaches students to run their own restaurant upon completion. There are several choices for the students upon completion of the program, cooks, bakers, sous chef, head chef, kitchen manager, dining room manager, server, food stylist, photographer, and food science. The students attend lecture courses and lab courses in order to get a full understanding of the restaurant hospitality industry. The program currently is a 1.5 year program if the student takes the courses when offered.

#### Assessment:

- › Although participation in the program has dropped from 2012-13 the numbers are coming back up in 2014-15 and will continue to climb over the next couple of years with the networking and marketing planned.
- › The FTEF has gone up from past years meaning that the department should have two full time instructors instead of four adjunct instructors. The more adjunct instructors we have in the program the less successful the students are and the continuity of the program and students suffer.
- › Student success and retention remains positive.

- › Certificates and graduation rates are also going up. Hiring a professional expert has helped work with the students and suggests the fastest route to graduation.

#### Department Goals:

- › Grow the program by advertising on billboards, bus stops, at high schools, etc.
- › Becoming more involved in Skills USA. Offering \$500.00 scholarships to incoming freshman that participated in SkillsUSA whose goals are to obtain a degree in Culinary Arts.
- › Purchase a catering truck in order to served food to the public and get SBVC Culinary known in the area.
- › Hire a full time classified staff to run the dining room during lunch, make deposits, tutor the students in the program, market the program, help the instructor with ordering, inventory and safety of the students. Reach out to industry.
- › Hire a classified lab tech for front of house.
- › Continue to have success and retention within the program.
- › Purchase a new steamer or combination oven.

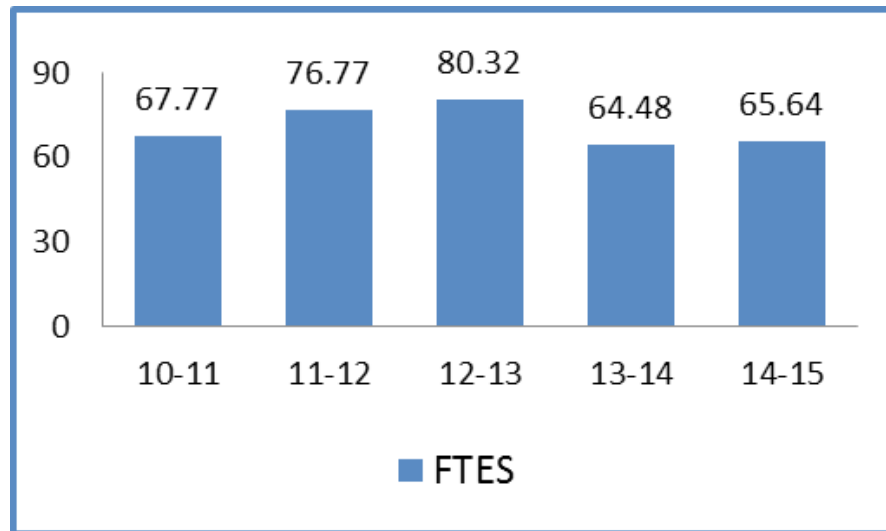
#### Challenges & Opportunities:

- › Adjuncts that do not allow extra time to help the program grow.

- › One full time instructor to handle two programs that need a lot of attention. Only so much time in a day.
- › Food truck to service the community and market the program. This would be a great experience for the students. The down side it would require an instructor to go out with them.
- › Open the Sunroom for light breakfast, coffees, teas and Danish, quiche, bagels etc. The staff is here each morning by 7:00am. Students are required to volunteer 100 hours during each semester.
- › Finding a classified lab tech for the front of the house. Most qualified don't have the skill or knowledge needed to work in a teaching environment.
- › Challenge: keeping all equipment working at optimal levels. Steamer and ovens.

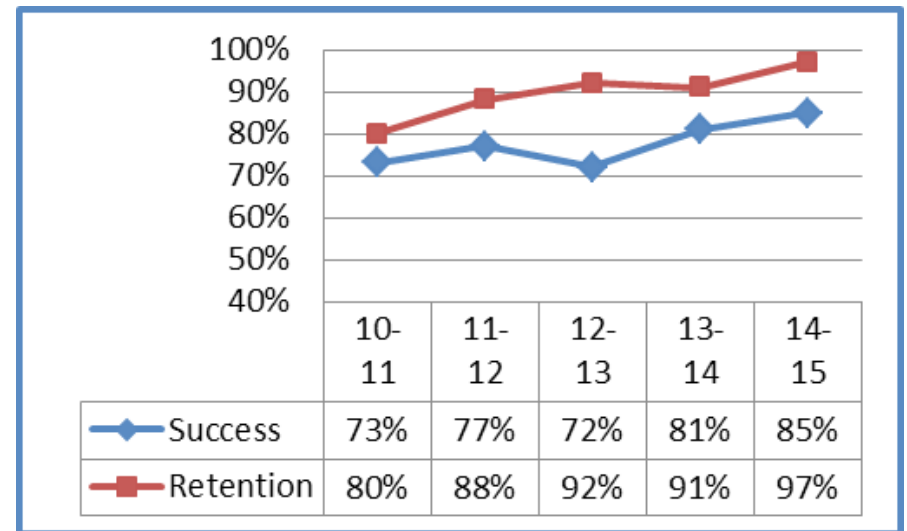
#### Action Plan:

- › Continue to grow the program using the suggestions listed above.
- › Hire one more full time faculty.
- › Look to see what a food truck would cost and have fund raisers to purchase and fix the truck for service.
- › Purchase proper permits for the truck.
- › Open three days a week for breakfast service to see how that goes and if successful create a course to cover breakfast service.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	307	326	375	362	344
FTEF	3.32	3.73	3.93	4.19	5.25
WSCH per FTEF	612	618	613	461	375

- › Open the position and hire a lab tech for front of the house.
- › Purchase a new combination oven or steamer to teach students how to use equipment properly.
- › Continue working with the students in order to keep certificates and graduation rates rising.



	10-11	11-12	12-13	13-14	14-15
Sections	9	10	11	17	20
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded*	1	0	4	3	6
Certificates awarded*	2	8	17	14	20

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 13630/130710



## Individual Data Sheets By Division

# APPLIED TECHNOLOGY, TRANSPORTATION + CULINARY ARTS DIVISION (INSTRUCTION) *(cont.)*

### DIESEL – 2014-2015

#### Description:

- › SBVC is the only public college in the area that offers a complete Diesel program in the Inland Empire Desert Region. Logistics is one of the five sectors that are targeted for work force development. The trucking industry in the Inland Empire is expanding with the growth of logistic industry and warehouses.

#### Assessment:

- › Year to year, the student enrollment has struggled due to local industry jobs, which appeal to our diesel students. A lack of advertising also contributes to low enrollment
- › FTEF have increased in 14-15 to 4.63 because of increased sections from 12 in 13-14 to 14 in 14-15. By increasing sections it allows working students an opportunity to attend other classes that meet their schedule needs.
- › Because the classes have a low count of students, when one or two students either drop the course or don't receive a passing grade, it affects the success rate tremendously.
- › The retention rate is steady at 95% in 14-15 as compared to 13-14.

- › One measure of program efficiency (WSCH/FTEF) struggles due to classroom capacity limitations. The department has requested the old uninhabited buildings be removed from the property and new classrooms be installed so the Diesel program can grow its department by adding the CNG training and manual transmission, differential and automatic transmission classes.
- › There were seven certificates awarded in 14-15 showing that students understand that graduating means jobs.

#### Department Goals:

- › Increase the number of certificates awarded in the Diesel program by adding a full-time faculty instructor
- › Update the facility to standards which include lighting, tooling and outdoor lab coverage to protect from the elements.
- › Expand customized not-for-credit training for incumbent workers.
- › Encourage students to achieve an AS degree.
- › Broaden the Industry Advisory Board membership pool.
- › This 14-15 year the department hopes to purchase a Compressed Natural Gas (CNG) training module and tools needed to complete the five-year master plan.

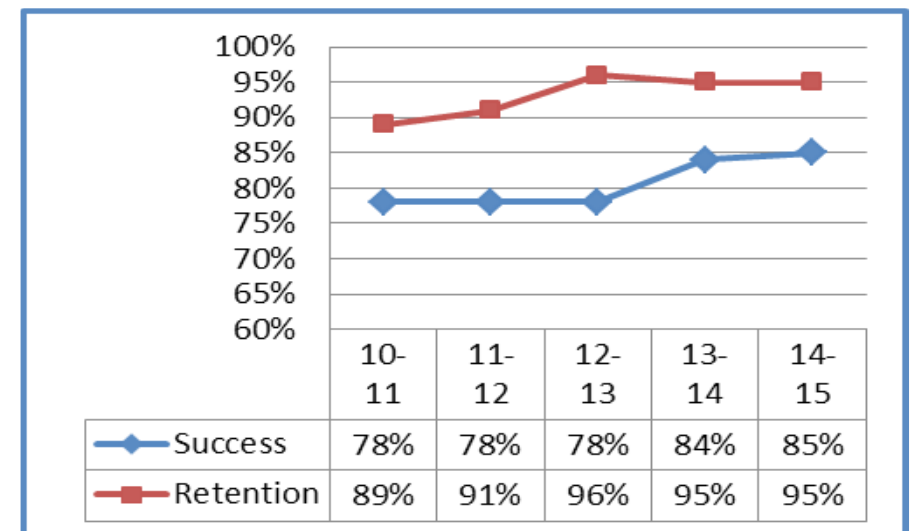
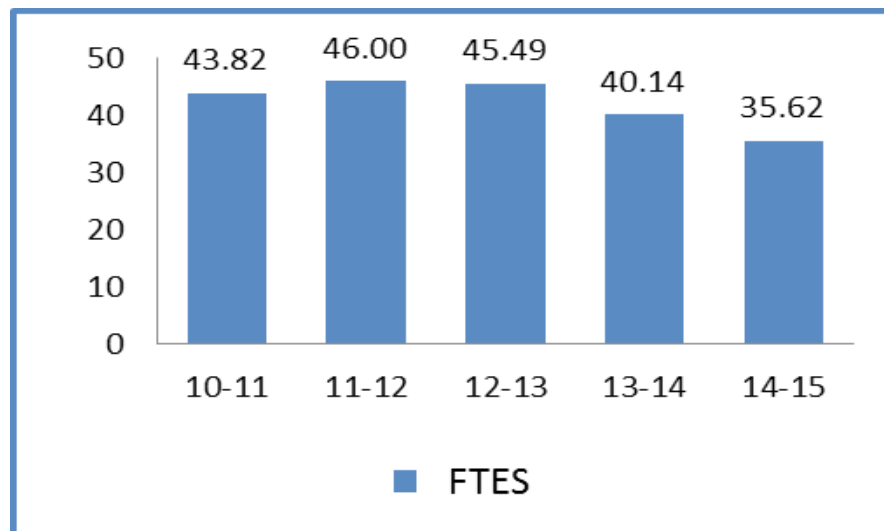
- › Work with the SBVC District to expand highly demanded, not-for-credit training for incumbent workers on, Compressed Natural Gas (CNG) engine classes.

#### Challenges & Opportunities:

- › The current facility is inadequate for the program needs; class cap of 18 makes it inefficient.
- › The breakroom and the meeting room were repurposed as classrooms without any modifications.
- › Newer teaching modules and tools are needed to keep up with the new buses and trucks and other vehicles, as the EPA tightens the emission standards in California by 2020.
- › The outside lab area, where students perform lab exercises, is unprotected and open to the elements. On hot days students cannot work on the trucks in the lab area.
- › Establishing a new AS Degree has been timely and cumbersome.

#### Action Plan:

- › Renovate the current facility to meet the program needs which would include better lighting and acoustics in the classrooms as well as lab. Also add two new buildings on the property after the



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	245	240	274	217	200
FTEF	3.74	3.4	3.9	3.94	4.63
WSCH per FTEF	352	405	350	305	231

old uninhabitable buildings are torn down and new ones installed.

- › Create two new certificates within the Diesel program to increase the number of certificates awarded within the program.

	10-11	11-12	12-13	13-14	14-15
Sections	12	12	14	12	14
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded*	N/A	N/A	N/A	N/A	N/A
Certificates awarded*	10	2	4	8	7

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 094700

## Individual Data Sheets By Division

# APPLIED TECHNOLOGY, TRANSPORTATION + CULINARY ARTS DIVISION (INSTRUCTION) *(cont.)*

### ELECTRICITY/ELECTRONICS – 2014-2015

#### Description:

- › The department provides an educational program that prepares and enables students to obtain entry-level positions as electricians or electronic technicians in a variety of fields such as electronics technology, computer technology, communications, industrial electronics, as well as electricians training. The core courses common to electrical and electronic fundamentals are articulated with four-year university for BS in Engineering Technology.

#### Assessment:

- › Enrollment has shown impressive improvements and has surpassed levels in previous five years.
- › Retention rate has slightly dropped but that is due to sharp increase in enrollment and is anticipated.
- › Success rate remains strong and degrees awarded and certificates awarded impressively increased.
- › WSCH and FTEF continued to be low due to concentration on student success and reducing size of lab classes so students get quality hands on training.

#### Department Goals:

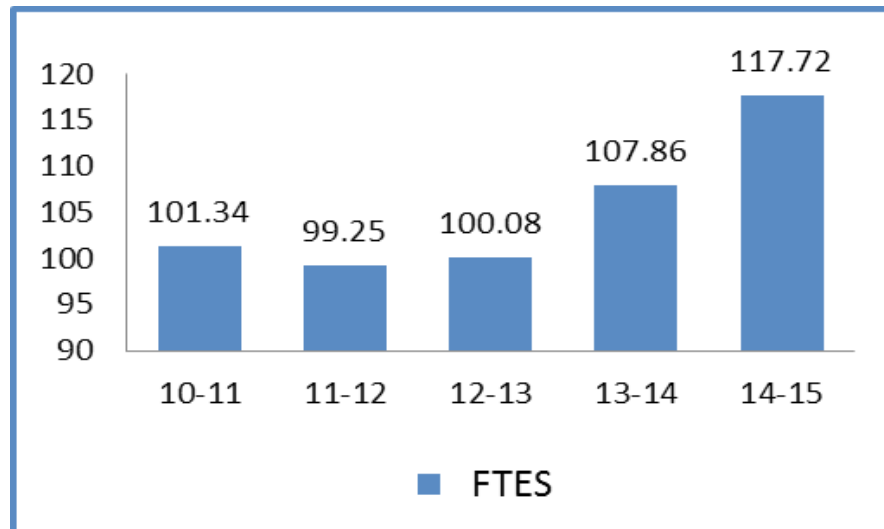
- › Hire a second full-time faculty as the FTEF rate has skyrocketed to an unprecedented 10.46, one of the highest in the technology department.
- › Hire more qualified faculty to teach updated curriculum materials relating to the specific subject matter.
- › Continue to update curriculum by adding or modifying industrial automation, communication, and micro-controller classes. Creating new Industrial automation certificate as well as green technology certificate.
- › Continue updating lab training equipment.

#### Challenges & Opportunities:

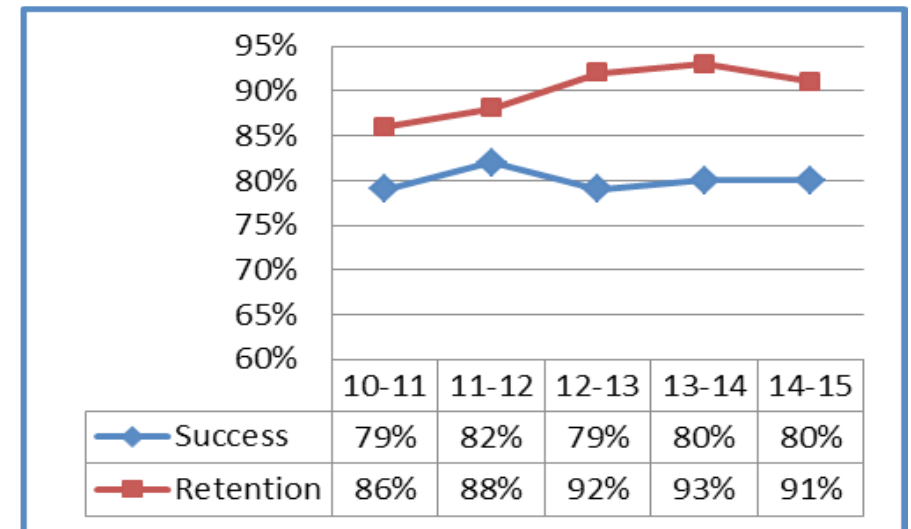
- › FTEF is at 10.46 which strongly justifies hiring new full-time faculty since last full-time faculty never replaced after retirement.
- › Hard to find qualifying part time faculty to teach during daytime.
- › Two distinct fields: Electricity power systems and electronics should have one full-time faculty per field.
- › Classrooms and lab rooms are used to capacity. More classrooms needed.

#### Action Plan:

- › Hire another full-time faculty for the electrical power systems program.
- › Purchase newer automation trainers and equipment for more comprehensive lab training to coincide with industry requirements.
- › Continue to update curriculum by adding or modifying industrial automation, communication, and micro-controller classes.
- › Seek more classroom space to try to offer more sections to expand enrollment.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	755	738	752	789	847
FTEF	7.57	6.96	7.10	8.20	10.46
WSCH per FTEF	402	427	423	395	338



	10-11	11-12	12-13	13-14	14-15
Sections	32	29	30	34	42
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded*	11	13	4	10	13
Certificates awarded*	30	18	23	19	28

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 0934XX

## Individual Data Sheets By Division

# APPLIED TECHNOLOGY, TRANSPORTATION + CULINARY ARTS DIVISION (INSTRUCTION) *(cont.)*

### FOOD & NUTRITION – 2014-2015

#### Description:

- › This department teaches food and nutrition, modified diets and health care and special diets. The students gain a certificate in dietary supervisor, which can lead to a job working in a hospital, retirement homes, spas, and school districts.
- › This industry is growing; we just need to revamp the program in order to students.

#### Assessment:

- › Although the interest in the program is high enrollment is low.
- › Enrollment in 2013-14 was at its highest. The department chair thought about discontinuing the program however the student body uses basic nutrition course for general education requirements.
- › Enrollment in 2014-15 is down from last year; however, the program needs some major changes.
- › This department has two adjunct instructors and no full-time instructors. With only two adjunct instructors, the WSCH per FTEF is not being met.
- › Student success is down within the program because of low enrollment the courses continue to be canceled.

- › Retention is high due to the department chair. The department chair works to retain each student within the program due to the overlap within the department curriculum.

#### Department Goals:

- › To revamp the program and articulate with a local university.
- › Offer updated certificates.
- › Hire more adjunct employees to offer more courses within the discipline.

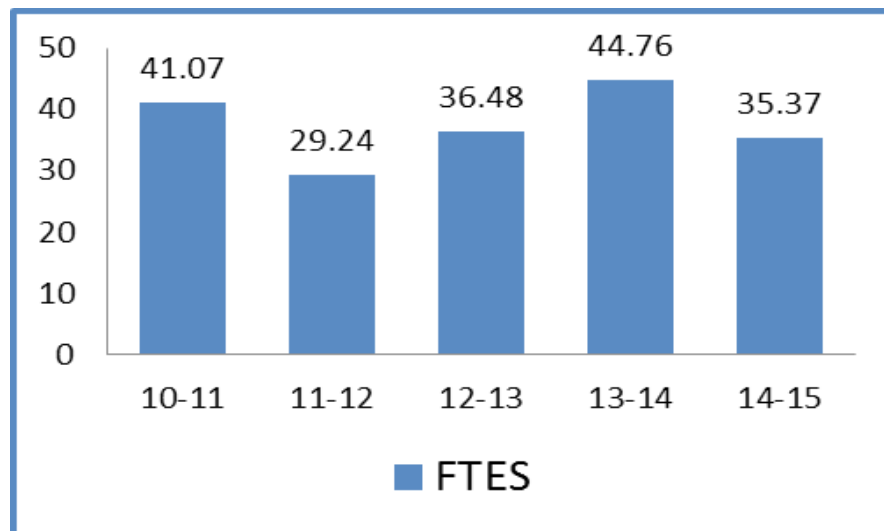
#### Challenges & Opportunities:

- › The challenge is that the department chair is extremely busy with her own department and does not really have time to give the food and nutrition department.
- › Finding qualified instructors to teach the courses.
- › Articulating with a university.
- › Creating updated certificates.
- › Increase enrollment by advertising to local school districts.

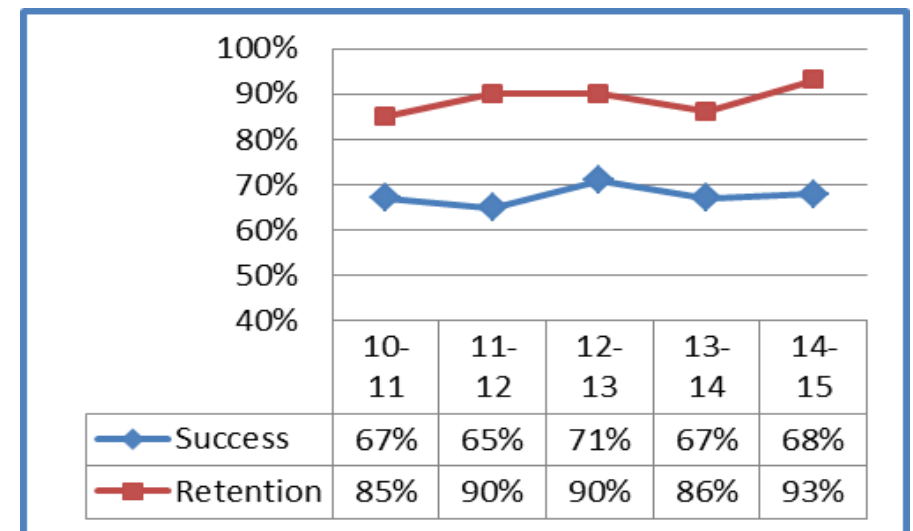
#### Action Plan:

- › To speak with the articulation officer to find out what colleges run the courses.

- › Scout for adjuncts.
- › Work with adjunct faculty to improve courses and draw more students into the program.
- › Advertise the program.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	411	278	354	443	353
FTEF	1.60	1.20	1.80	2.20	2.20
WSCH per FTEF	770	731	608	610	482



	10-11	11-12	12-13	13-14	14-15
Sections	11	6	9	11	11
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	12	1	0	2	2

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 130620



## Individual Data Sheets By Division

# APPLIED TECHNOLOGY, TRANSPORTATION + CULINARY ARTS DIVISION (INSTRUCTION) *(cont.)*

### HEATING, VENTILATION, AIR CONDITIONING & REFRIGERATION – 2014-2015

#### Description:

- › The program prepares students for entry level employment in the residential and commercial HVAC/R repair and installation. With climate change and longer dry periods in the west, HVAC/R technicians are in demand. Many have their own business or work as independent contractor for box stores. The department offers Environmental Protection Agency (EPA) certification, required for handling refrigerant gases used in the industry. The course curriculum has essentially remained the same in years.

#### Assessment:

- › FTEF has improved to its highest level in five years despite program has no full time faculty.
- › WSCH/FTEF continued a decline due to lab intensive classes but is within the norm compared with previous years.
- › Student success rate remained essentially unchanged but is higher than the campus average.
- › Number of degrees and certificates awarded has increased dramatically and reached 2010 levels.

- › Single, inadequately equipped lab serves the program and that continues to limit its growth.

#### Department Goals:

- › Priority One: Hire a full-time faculty to give program needed time and expertise to grow, expand, and update current standings since the program is running solely on part-time faculty.
- › Update the laboratory by purchasing advanced trainers that better serves the curriculum to help bring it up to current industry standards.
- › Update course content to include smart technologies and develop an industry recognized certificate program to be integrated with our existing program.
- › Increase number of sections in daytime to increase enrollment and attract a different student population since currently all classes are in evening.

#### Challenges & Opportunities:

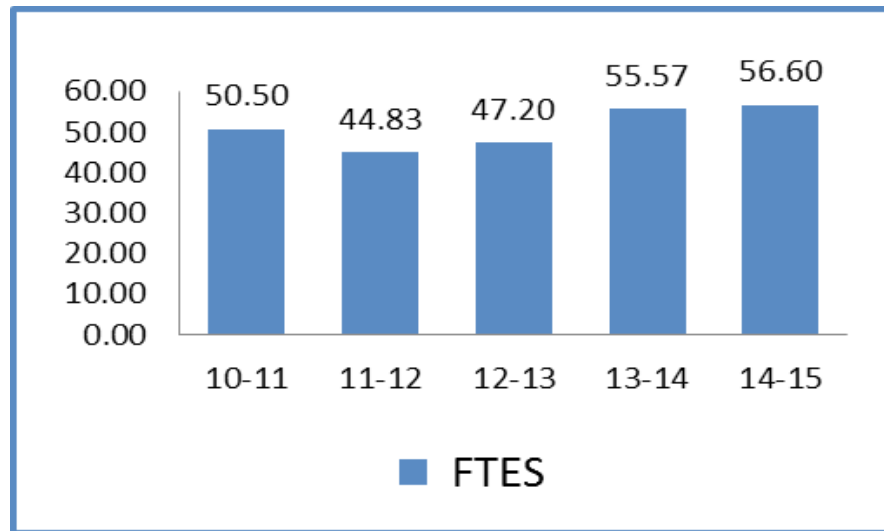
- › The full-time faculty retired in 2009; position eliminated.
- › No substantial budget ever allocated to program.
- › Program running with skeletal part-time faculty even though there is demand is high for program.
- › Hard to find Faculty to teach morning sections.

Hiring full-time faculty will also resolve issue.

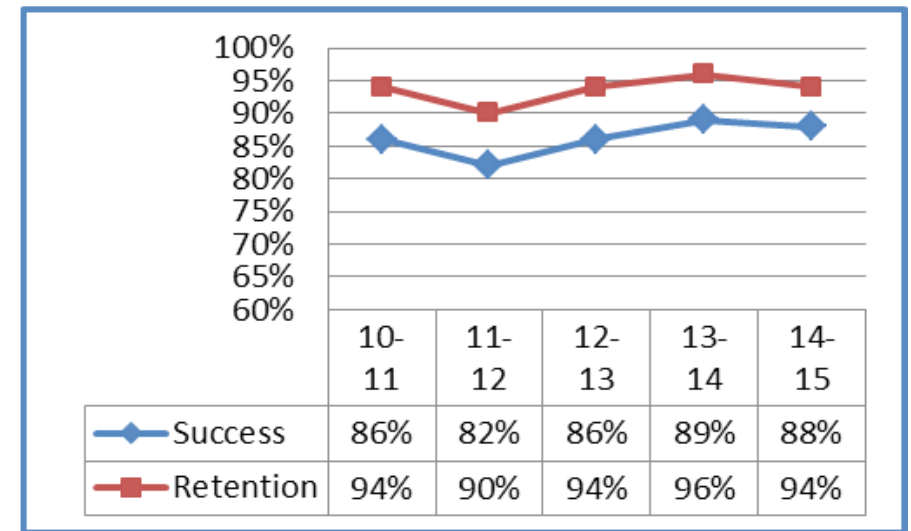
- › One lab available for entire program that continues to limit growth.

#### Action Plan:

- › Hire a full-time faculty and purchase updated trainers by securing extra funding for the expensive equipment.
- › Offer more sections of core courses.
- › Develop industry recognized certification.
- › Create a pool of part-time faculty who may be available to teach in the day time.
- › Provide the adjunct faculty with training opportunities to stay current with emerging technologies.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	258	218	229	271	276
FTEF	3.98	3.44	3.34	4.48	4.82
WSCH per FTEF	381	391	425	372	352



	10-11	11-12	12-13	13-14	14-15
Sections	12	10	10	13	14
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	2	1	0	2	3
Certificates awarded	14	6	8	8	12

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 094600

## Individual Data Sheets By Division

# APPLIED TECHNOLOGY, TRANSPORTATION + CULINARY ARTS DIVISION (INSTRUCTION) *(cont.)*

### INSPECTION TECHNOLOGY – 2014-2015

#### Description:

- › This is still a viable program for students interested in the construction industry. Although the curriculums have not been updated to reflect the recent changes in building and construction codes, the basic concepts are still being utilized and enforced by the industry. The curriculum covers testing of construction materials, non-structural plan review, interpretation and use of building codes, and related laws. It takes two years to complete the certification program. Graduates of the program work as building inspectors for government agencies. The student enrollment still has not recovered from the housing bubble in 2008 that adversely affected job prospects for graduates of the program.

#### Assessment:

- › There is no full-time faculty to take ownership of the program except the adjunct faculty who continues to bring industry experiences in the classroom.
- › Students in the program tend to stay until completion due to the specialized nature of the program.

- › The housing market in the Inland Empire has not fully recovered thus affecting enrollment.
- › Less courses are offered in each semester.
- › WSCH/FTEF has declined because of the decline in the housing market and construction.

#### Department Goals:

- › Enhance existing curriculums to meet current industry standards and employers' needs.
- › Offer additional sections in order to attract new students to the program
- › Offer short-term classes for incumbent workers to update their skills as building codes change.
- › Revise appropriate course contents to include the California Building Codes rather than International Building Codes.
- › Seek external funding through grants to pay faculty stipends in upgrading curriculums and purchase reference manuals and materials needed in the trade.

#### Challenges & Opportunities:

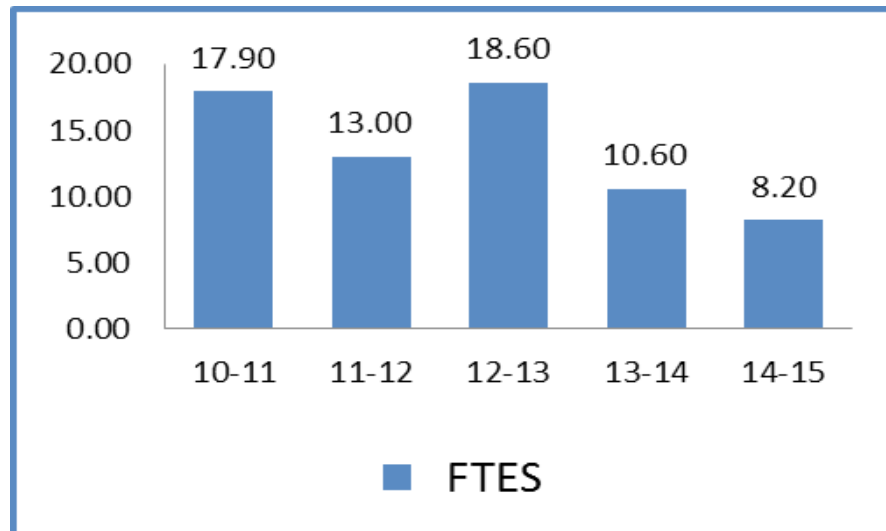
- › Request for program funding in order to enhance and grow the program.
- › Request for a full-time faculty position to take ownership of the program as there is an anticipated

job demand to train the future workforce in this field.

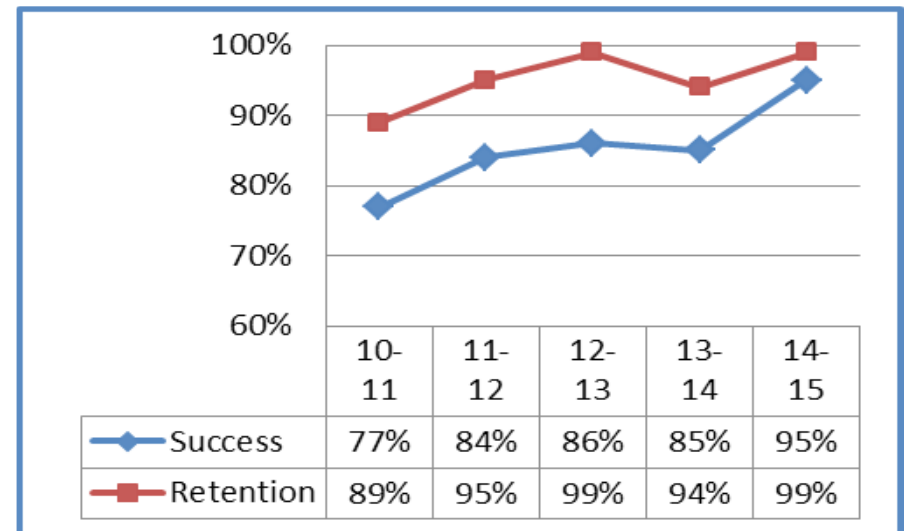
- › Updating the skills of incumbent trainings is needed due to changes in the standards and regulations.

#### Action Plan:

- › Get general funding for the program to pay a part-time faculty to update courses, degree and certificate.
- › Update curriculum creating a definite entrance and exit point and the current California Codes.
- › Explore additional funding through grants in order to update its curriculums and support program needs such as purchase of reference manuals and books.
- › Develop non-credit courses to address retraining of employees in this field.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	179	130	186	106	82
FTEF	1.20	1.20	1.40	1.20	1.00
WSCH per FTEF	448	325	399	265	246



	10-11	11-12	12-13	13-14	14-15
Sections	6	6	7	6	5
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	3	1	1	3	2
Certificates awarded	4	1	5	3	2

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 095720

## Individual Data Sheets By Division

# APPLIED TECHNOLOGY, TRANSPORTATION + CULINARY ARTS DIVISION (INSTRUCTION) *(cont.)*

### MACHINIST TECHNOLOGY – 2015-2014

#### Description:

- › The program is designed to train first-time students and to re-train those employed in the machine trades industry. Curriculum includes: conventional machining, computer numerical control (CNC), computer aided drafting (CAD), computer aided manufacturing (CAM), tool & die, metrology, inspection, and print reading. The program offers AS degree and certificates in machinist technology. The program offers students the opportunity to obtain National Industry Metal Skills (NIMS) credentials accredited by the American National Standards Institute (ANSI).

#### Assessment:

- › Removal of prerequisites and corequisites from courses to take effect fall 2016 and fall 2017. An increase in success and retention is expected when course modifications take effect.
- › FTEF remain the same as no new faculty has been hired since the retirement of full time faculty, reduction of adjunct faculty, and sections offered.
- › WSCH per FTEF continues to decline due to low enrollment. Removal of Prerequisites and Co-

requisites from courses to take effect fall 2016 and fall 2017. An increase in enrollment is expected when course modifications take effect.

- › Success and retention has declined only two percent and is still good, possibly affected only by low enrollment.

#### Department Goals:

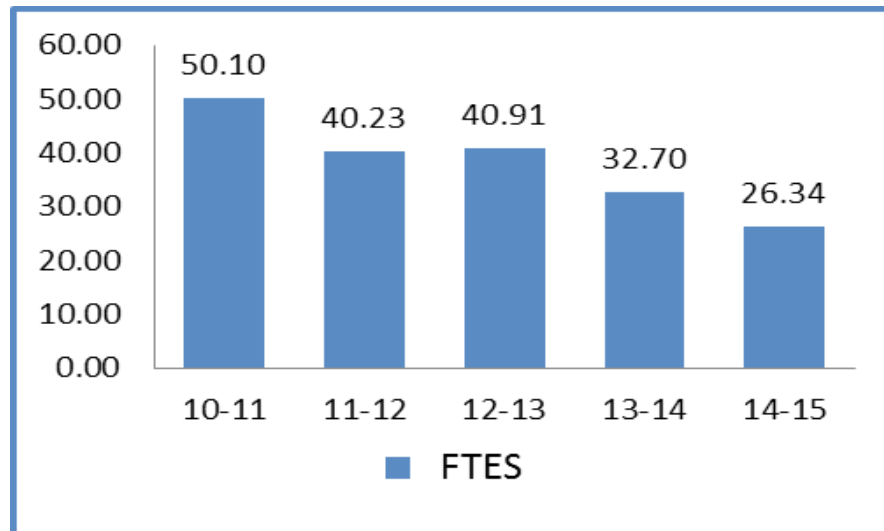
- › Hire full-time staff.
- › As previously stated in 2013-2014 educational master plan program goals.
- › Development of curriculum with NIMS for existing, new courses, and certificates are currently being created and will be reviewed by local industry advisory committee for implementation.
- › Increase program awareness, with local high schools, continuations, and options for youth.

#### Challenges & Opportunities:

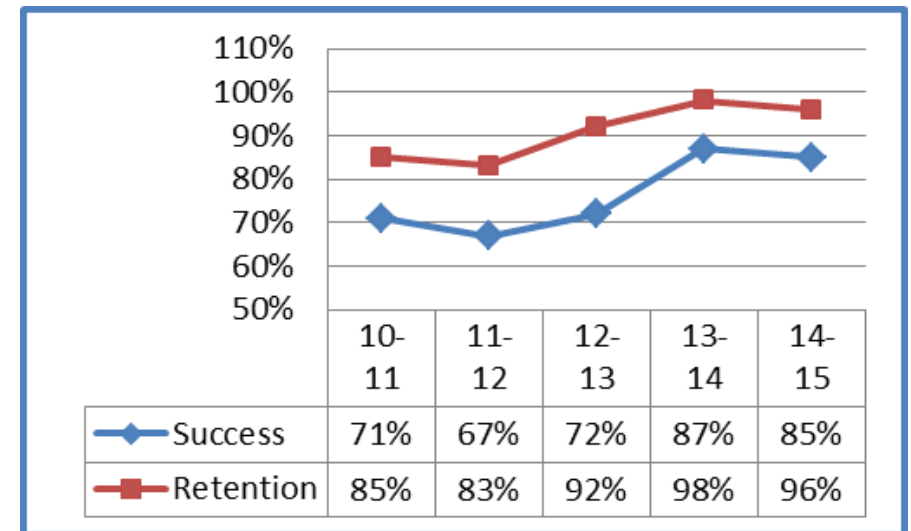
- › There is no full-time faculty to resolve all current machine trade's needs.
- › NIMS, curriculum, partnerships, and exposure to the program.
- › There are not enough CNC machine tools for each student; program needs to acquire more CNC machine tools, automated, and robotics equipment.

#### Action Plan:

- › Hire full-time, qualified machinist instructor that can transcend all facets of machine trades scope: NIMS, conventional machining, computer numerical control (CNC), computer aided drafting (CAD), and computer aided manufacturing (CAM), tool & die, metrology, inspection, and print reading.
- › Develop curriculum work with industry, schools and the community. Request funding to purchase equipment.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	260	206	220	190	141
FTEF	4.69	3.02	3.08	3.10	3.10
WSCH per FTEF	320	400	399	316	255



	10-11	11-12	12-13	13-14	14-15
Sections	27	16	17	16	17
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded*	2	0	2	4	3
Certificates awarded*	8	10	21	3	10

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 095630



## Individual Data Sheets By Division

# APPLIED TECHNOLOGY, TRANSPORTATION + CULINARY ARTS DIVISION (INSTRUCTION) *(cont.)*

### WATER SUPPLY TECHNOLOGY – 2014-2015

#### Description:

- › The water supply technology program is designed to serve students who are employed or interested in employment in the field of water/ wastewater. The program provides technical courses in water distribution, water treatment, wastewater collection, wastewater treatment, water use efficiency, as well as backflow prevention and cross-connection control. The courses prepare students to upgrade their skills and/or prepare them for licensing examinations and certifications from the California State Water Resource Board, American Water Works Association, California Water Environment Association, and other agencies. The program offers both vocational certificates as well as an Associate Degree.

#### Assessment:

- › Student enrollment is at an all-time low in five years.
- › Overall student success/retention has improved in five years.
- › Number of certificates awarded has improved and number of degrees awarded is 2nd highest in five years.
- › Efficiency has continued to fall in last two years to

an all-time low for a program with mainly lecture courses. This is highly troubling.

- › Many courses have low enrollment and the number of sections offered is high compared to enrollment numbers.
- › The FTEF is high, a reflection on multiple sections with low student enrollment.

#### Department Goals:

- › Obtain a stable, permanent budget from general funds in order to fund tutors, workshops, lab supplies, and field trips.
- › Track students who complete the courses to determine if they are receiving state certification and jobs in the field.
- › Increase partnership with industry to place all the interested students in work experience programs.
- › Schedule courses at time when convenient for students to attend.
- › Provide nurturing and adequate support service to adjunct faculty and students to sustain/improve the quality of the program.
- › Use grant funds to improve enrollment numbers in the program and increase class sizes.

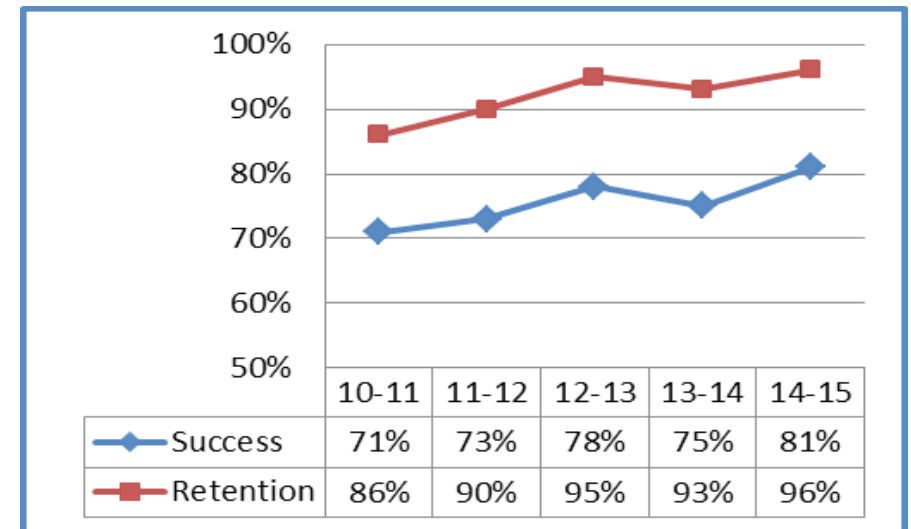
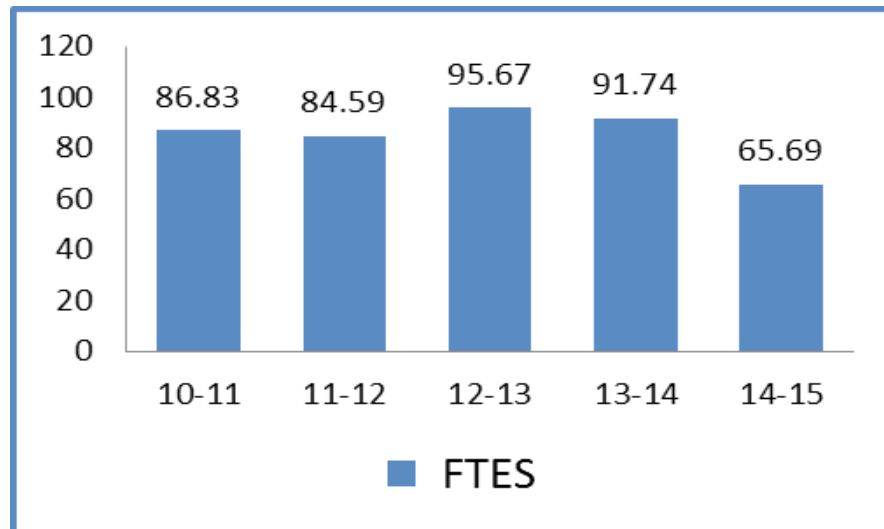
#### Challenges & Opportunities:

- › The backflow lab with six stations is inadequate for 25 students.

- › Lack of a stable permanent budget hampers long term planning.
- › Use grant to track students who go to work before completing a SBVC degree or a certificate.
- › Update curriculum with input from industry advisory boards.
- › Sudden move of the program to the technical division in the middle of 2013-14 academic year has led to uncertainty and uneven support services.
- › Courses are taught in many different buildings on the campus.
- › All classroom assignments are not done when schedule is prepared.
- › Some classes with low enrollment are cancelled after two weeks, leaving students to scramble for a class to make full load.

#### Action Plan:

- › Add a minimum of two stations to backflow lab.
- › For existing and future grants, align the goals of the grant to improve enrollment in the program.
- › Assign classroom to every course at the time schedule is prepared and hold all the water classes in one building and in a limited number of classrooms, to allow students to form informal community and network.
- › Move the program to a division that can adequately support it.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,015	852	952	933	758
FTEF	7.04	5.76	6.39	8.09	6.98
WSCH per FTEF	370	441	449	340	282

- › Schedule classes when it is convenient for students and cancel the sections with very low enrollment on the first day of class.
- › Update certificate and degree to allow for quick completion of program and success in obtaining state certification.

	10-11	11-12	12-13	13-14	14-15
Sections	47	37	39	45	45
% of online enrollment	2%	0%	3%	0%	0%
Degrees awarded	3	4	8	20	9
Certificates awarded	14	9	12	5	15

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 95800

## Individual Data Sheets By Division

# APPLIED TECHNOLOGY, TRANSPORTATION + CULINARY ARTS DIVISION (INSTRUCTION) *(cont.)*

### WELDING TECHNOLOGY – 2014-2015

#### Description:

- › The welding program is maintained to keep up with the welding technology industry standards in the areas of Oxy-fuel, Shielded Metal Arc, Gas Metal Arc, Flux-cored Arc, Gas Tungsten. Students in the program are being prepared to successfully pass the American Welding Society (AWS) certified welding inspectors or LA City certified structural welders. The department continues to provide the needed training for our students to obtain the skills and competencies needed in their welding profession. Various academic certificates and an associate degree are offered in welding technology.

#### Assessment:

- › Some of the curriculums were enhanced to meet industry needs and standards.
- › Due to the recent back welding building renovation project that limited class/lab room spaces, class sizes were affected resulting in further decline of the WSCH/FTEF.
- › There is only one full-time faculty for a 7.82 FTEF and also serves as the faculty chair.
- › Faculty with specialized skills comprise the adjunct faculty pool.

#### Department Goals:

- › Continue to collaborate with industry and employer partners.
- › Continue to promote the program to the community, feeder high schools and ROPs.
- › Upgrade equipment and curriculums to meet industry/ employer needs and requirements.
- › Explore external funding through grants to modernize equipment and tools.
- › Fulfill faculty and staffing needs.

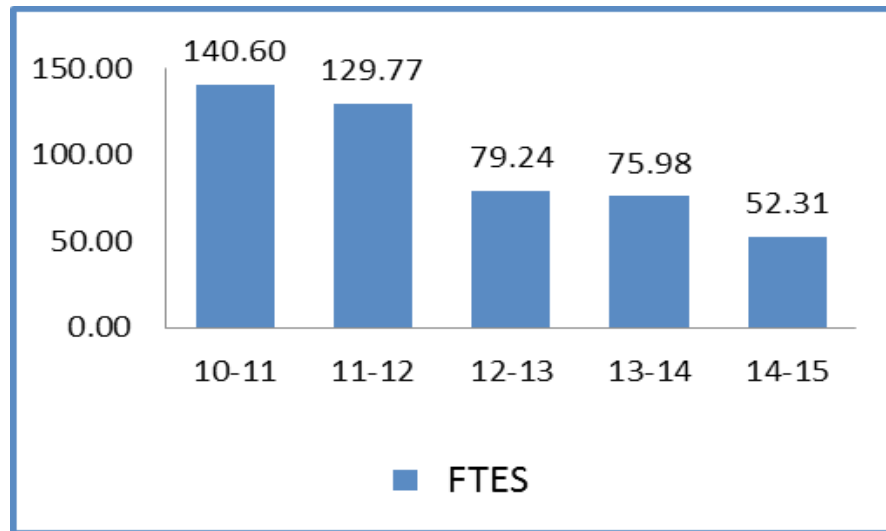
#### Challenges & Opportunities:

- › Space and facility issues still exist in the front welding lab.
- › Industry recognized certifications and credentials need to be embedded in our existing curriculums.
- › High costs of consumables thereby necessitated to purchase simulators to minimize instructional costs.
- › Major employers, such as the California Steel Industries provides internship opportunities for our students.

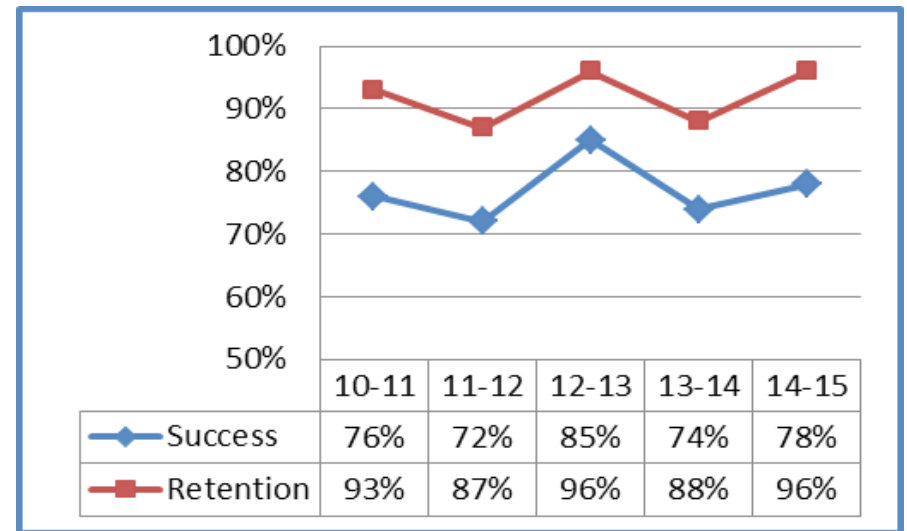
#### Action Plan:

- › Continue to request for additional full-time faculty positions (minimum = 2).
- › Improve the front welding lab to include upgraded ventilation and updated equipment.

- › Explore additional funding for the program through grants.
- › Offer work experience courses and/or partner with regional employers to provide internship opportunities for our students.
- › Enhance existing curriculums to meet industry/ employer needs and standards.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	506	374	429	463	338
FTEF	8.05	8.47	6.59	7.84	7.82
WSCH per FTEF	524	460	361	291	201



	10-11	11-12	12-13	13-14	14-15
Sections	52	34	32	39	32
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	1	1	0
Certificates awarded	6	3	4	1	6

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 095690

## Individual Data Sheets By Division

# ARTS + HUMANITIES DIVISION (INSTRUCTION)

### ART – 2014-2015

#### Description:

- › The art department provides quality art education to a diverse community of learners. Courses in Art are designed to serve lower division, transfer and general education students at the two-year college level, students interested in careers in graphic design, web design, computer animation and three-dimensional disciplines, and the personal interests of our community members. Art courses provide critical thinking skills and multicultural experiences that can be usefully applied in other areas of education and life.

#### Assessment:

- › Comparing the 2013-2014 and 2014-2015 academic years indicates:
- › There was a decrease of 4.24 FTES.
- › Duplicated enrollment increased by 54.
- › FTEF increased by .18 and the WSCH per FTE decreased by 12.
- › The decline in FTES, duplicated enrollment and FTEF may be linked to leveling x4 studio art classes and ed plans that do not allow for studio art classes.

- › Success rate decreased by 3% and retention rate decreased by 1%.
- › The % of online enrollment increased by 1%; degrees awarded decreased by 2; and certificates awarded remained the same.

#### Department Goals:

- › To increase the number of sections offered.
- › To increase online course offerings.
- › To evaluate and implement changes to the SLOs using the three-year course summaries.
- › To Increase the number of degrees and certificates awarded.
- › To develop a transferable 3-D foundations course and a 3-D printing course.
- › To align courses with the TMC for studio and art history courses.
- › To host an art career day.

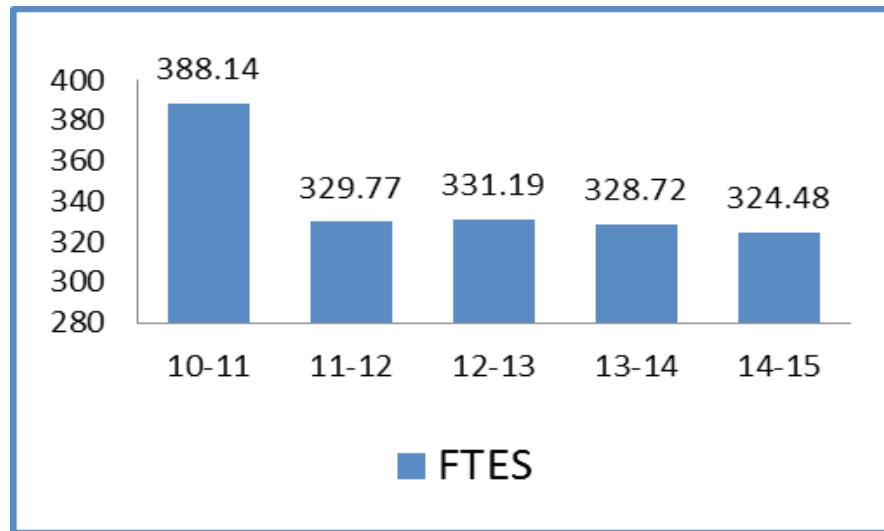
#### Challenges & Opportunities:

- › The challenges are lack of full time faculty, especially an art historian. There are FTEFs for ten full-time faculty, yet the department has three full time faculty. Additional challenges maintaining and increasing sections offered and students who are underprepared and lack basic skills.

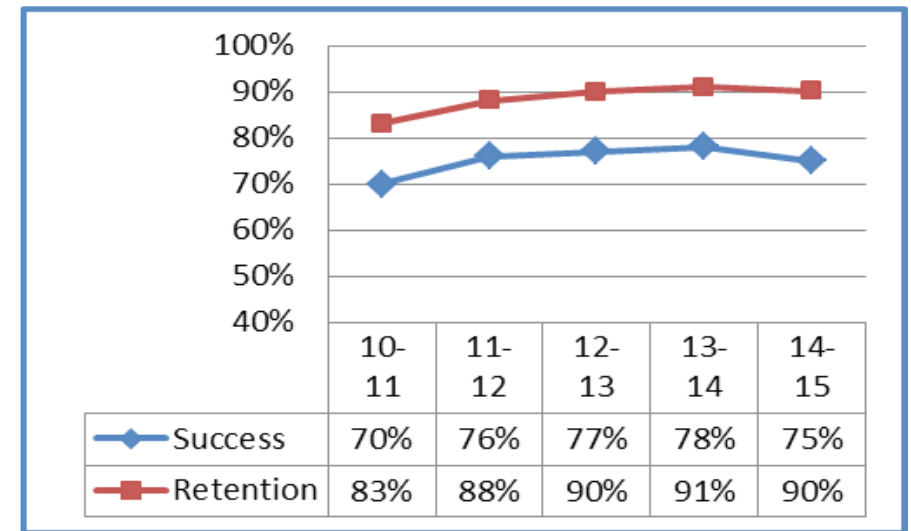
- › The opportunities are to develop new curriculum for a 3-D foundation course, develop curriculum for a 3-D printing course, increase online offerings, and align TMCs to increase educational partnerships with the CSU system.

#### Action Plan:

- › Continue to develop a strategic plan for growth and work with counselors on information about studio courses.
- › Continue regular department meetings to discuss department goals and strategies.
- › Identify an individual to write a 3-D foundations course.
- › Host art-related career day event.
- › Continue regular advisory committee meetings.
- › Continue to request an additional full-time faculty member through program review.
- › Continue SLO assessments and summaries and revise SLOs as necessary.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	2,754	2,224	2,152	2,209	2,263
FTEF	20.66	18.12	17.66	19.00	19.18
WSCH per FTEF	564	546	563	519	507



	10-11	11-12	12-13	13-14	14-15
Sections	95	75	73	80	130
% of online enrollment	4%	0%	3%	3%	4%
Degrees awarded	10	13	9	16	14
Certificates awarded	3	9	9	7	7

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 100200/061410/103000



## Individual Data Sheets By Division

# ARTS + HUMANITIES DIVISION (INSTRUCTION) *(cont.)*

### COMMUNICATION STUDIES – 2014-2015

#### Description:

- Communication studies has a FTE load equivalent to 9 FTEF. However, the department functions with four FTF, and seven adjunct faculty. Communications studies serves as an important role by preparing students for occupational and personal success through developing their communication skills. The department offers a variety of 100-level communication courses that meet general education requirements. Notably, this program is the only area where the A1 requirement for CSU transfer can be met. Courses are taught in various learning environments and various times, in order to create more access for students. Course offerings include traditional face to face classes, various late start schedules, 100% online, online-hybrid, morning, mid-day, and evening.

#### Assessment:

- The department is beginning to experience growth. Between the academic years of F13 and S15, the department FTES experienced approximately 4% growth.

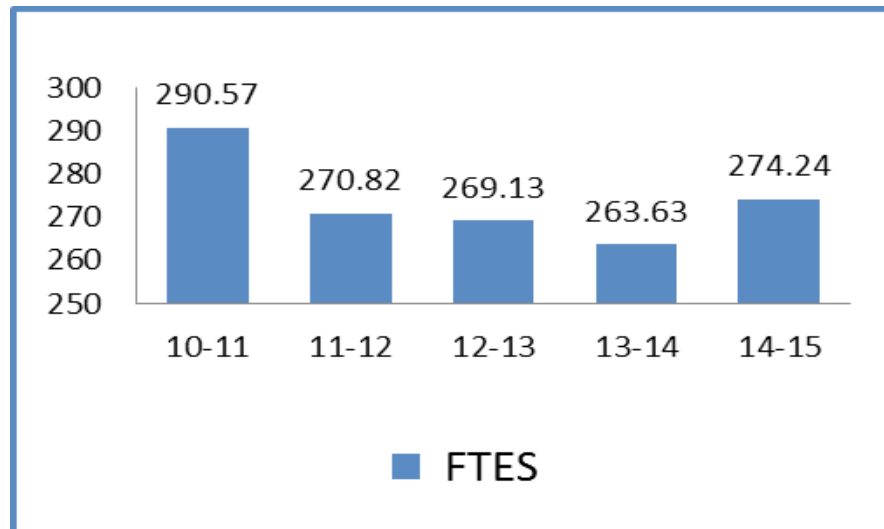
- Department maintains FTEF load of nine, but functions with four FTF and seven adjunct faculty.
- Department FTEF has continued to demonstrate growth each year since 2012-2015.
- Department retention for the past five years has experienced a fairly steady increase. More specifically, the department has increased retention rates 7% in the past five years between 2010 and 2015.
- Department success rates have increased 1% in the past five years. However, the department is experiencing a slight decline, which should be discussed further among the department.
- The AA-T in Communication Studies was recently state approved in 2013. In only two years, the number of degrees awarded has more than doubled from four to nine!

#### Department Goals:

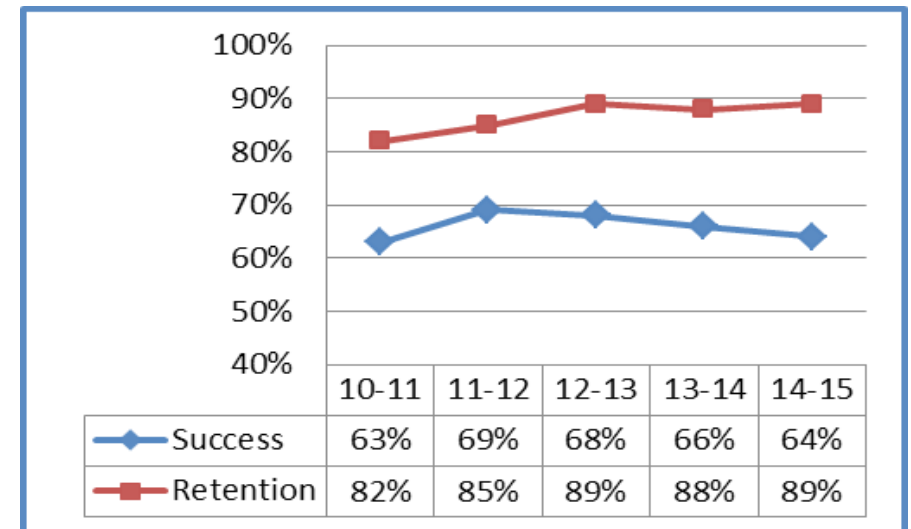
- The communication studies department will continue to promote the recently state approved AA-T in Communication Studies, and to continue to monitor the number of degrees awarded.
- We look forward to continuing to host our annual speech and debate tournament.

#### Challenges & Opportunities:

- ACCESS and STUDENT SUCCESS will be jeopardized if the communication studies department continues to function with four FTF, and seven adjunct faculty, but with an FTEF load equivalent to nine FTEF.
- We are not capable of fully accommodating our students at peak offering times.
- The department is concerned about being able to maintain student success with only four FT faculty while having load for nine, and is becoming apparent in the slight decline demonstrated in our success rates. This semester (Fall 2015), the department experienced a challenge staffing all of our sections. For the first time in the past 15 years, each FT faculty member in the department agreed to teach an over/overload (one section over the overload limit) to avoid cancelling classes. One FT faculty member over extended themselves taking on two sections over our limit. We are losing adjunct faculty to FT jobs, and it is making it difficult for us to staff our classes. This shortage is not unique to SBVC. Many surrounding communication studies departments have contacted us, looking for adjunct faculty, including our sister school CHC.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	2,932	2,725	2,613	2,636	2,760
FTEF	17.80	17.00	17.00	17.40	18.20
WSCH per FTEF	490	478	475	455	452



	10-11	11-12	12-13	13-14	14-15
Sections	91	85	85	87	91
% of online enrollment	13%	12%	9%	12%	13%
Degrees awarded*	N/A	N/A	N/A	4	9
Certificates awarded	N/A	N/A	N/A	N/A	N/A

\*A.A.-T Degrees were established in 2013.

## Individual Data Sheets By Division

# ARTS + HUMANITIES DIVISION (INSTRUCTION) *(cont.)*

### COMMUNICATION STUDIES – 2014-2015 *(cont.)*

#### Action Plan:

- › The communication studies department plans to continue to assess student needs regarding course offerings in order to continue serving our students to the best of our ability. We are moving toward a time of growth, and look forward to expanding our program. However, the department will continue to remain concerned about being able to maintain student success with only four FT faculty while having load for nine. Our department is committed to continue advertising the AA-T in Communication Studies, helping students succeed in their educational and career goals. We will continue to distribute brochures to help inform students of our department offerings and the Communication Studies AA-T degree.



## Individual Data Sheets By Division

# ARTS + HUMANITIES DIVISION (INSTRUCTION) *(cont.)*

### DANCE – 2014-2015

#### Description:

- › Dance is one of the most rewarding of all human endeavors and the dance faculty and students in the department share a deep love for their art and a common desire to achieve excellence in it. The curriculum provides basic preparation for further study in dance at the community or university level. It is the goal of the dance department to help students to develop their dance potential to the highest possible level.

#### Assessment:

- › The dance program has experienced a modest increase in FTES this year.
- › Our duplicated enrollment increased by 10% while our productivity dropped significantly from a previous high of 551 as we continue to struggle to find a “home” for our dance program.
- › The low success rate stayed at 63 and along with the lower productivity rate the search for a permanent home is clearly reflected in the numbers!
- › Since being dislocated from the Auditorium we have been in a temporary home, in the gym, for a number of years.

- › A dance studio, or some form of permanence, is obviously required to maximize both the dance and theater programs.

#### Department Goals:

- › We still hope to add ballet to our offerings utilizing and exceptional instructor already teaching for us in other classes. We are still struggling to offer additional sections in other areas of dance. Our performances are very well attended and class sizes (depending upon the faculty) are growing because of the increased size of the facility provided. We reiterate from last year’s statement, “The floor of the gym is NOT adequate for any dance requiring leaps of any kind!”

#### Challenges & Opportunities:

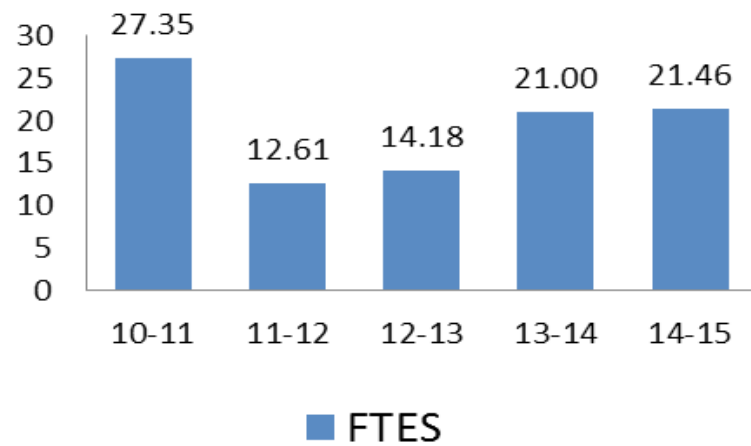
- › The largest challenge facing the department is the resulting loss of dedicated space in the auditorium’s renovation. The program, as stated in years past, requires a permanent dance studio, of appropriate space and with an appropriate, SAFE floor!
- › The department has experienced a significant drop in success rates since the loss of their facility. Students are NOT in an educationally appropriate

environment in their temporary home in the gym, with classes offered only when the PE department is not using it (early morning). The dance program is most desirous of expanding offerings and improving access to alternative days and times.

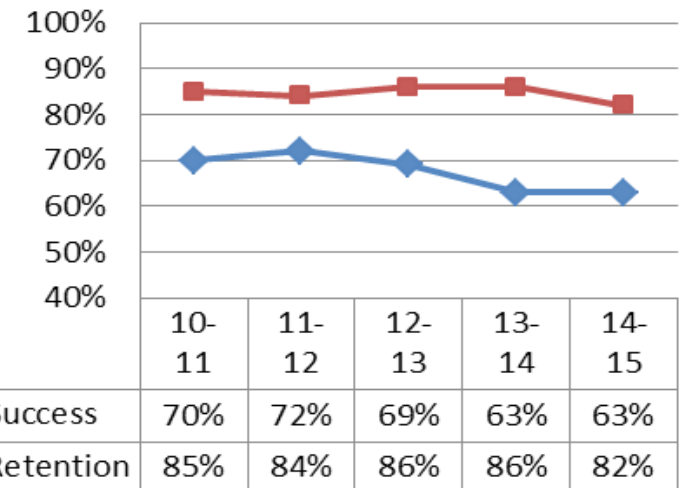
- › The dance program collaborated with the theater department this year with the very successful production of “Into the Woods.”

#### Action Plan:

- › The dance program will continue to grow with the expansion of sections and an appropriate facility is identified. Additional disciplines are necessary (ballet, tap, ballroom etc.)
- › The dance program (with the full backing of the performing arts department) is in negotiation with the PE department to find a permanent “home” in the yet to be completed new PE facility. While they continue to meet with resistance, they continue to “press on” with their struggle to find a “home!”
- › The department will continue to collaborate with theatre and music in support of its educational philosophy, featuring dance as a performance art form.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	128	61	72	105	115
FTEF	1.16	1.00	1.16	1.14	1.63
WSCH per FTEF	707	378	367	551	395



	10-11	11-12	12-13	13-14	14-15
Sections	10	5	8	8	19
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	N/A	N/A	N/A	N/A	N/A



## Individual Data Sheets By Division

# ARTS + HUMANITIES DIVISION (INSTRUCTION) *(cont.)*

### ENGLISH – 2014-2015

#### Description:

- › The SBVC English Department offers a comprehensive program of classes designed to help students improve literacy levels and study skills. Our courses are designed for transfer students, students seeking an AA Degree or Career Certificate, basic skills students, AA-T English Degree majors, and ESL students. Our courses are designed to foster practical and academic writing, critical thinking, comprehension skills, and communication skills.

#### Assessment:

- › The increase in FTES corresponds student demand and with the increase in the number of sections over the past 3 semesters. A byproduct of increase sections is that we are adding fewer students over cap, so class sizes are slightly smaller which might account for the statistically insignificant change in WSCH. It is expected that the department WSCH will always be lower than the college norm due to contractually set class caps the WSCH formula does not consider.
- › Success and retention rates remain constant despite significant changes and with increased

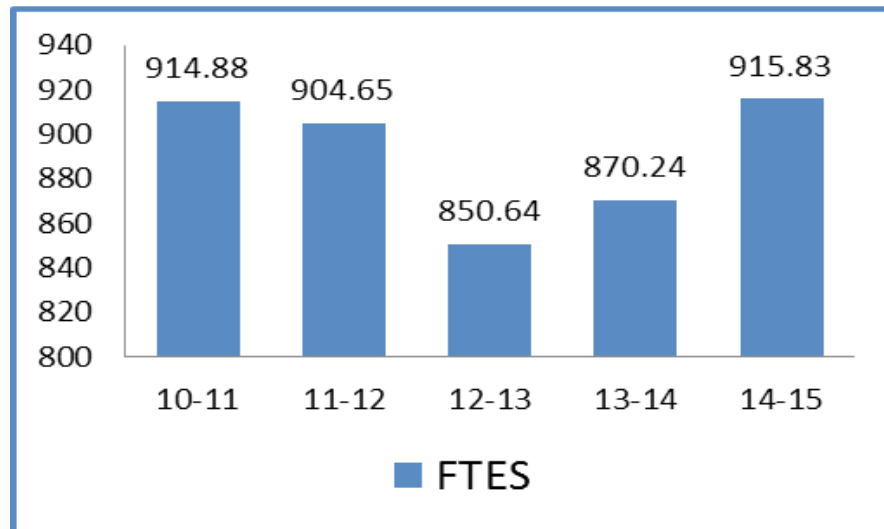
sections and FTES but not FT faculty, and a culture of continual improvement to curriculum, SLOs, and 015 rubric, classes and final exam. The number of online sections is in line with department pedagogical philosophy. Since the 2013 state approval of our AA-T Degree, 4 students have been awarded the degree, which we expect to increase in the next two years.

#### Department Goals:

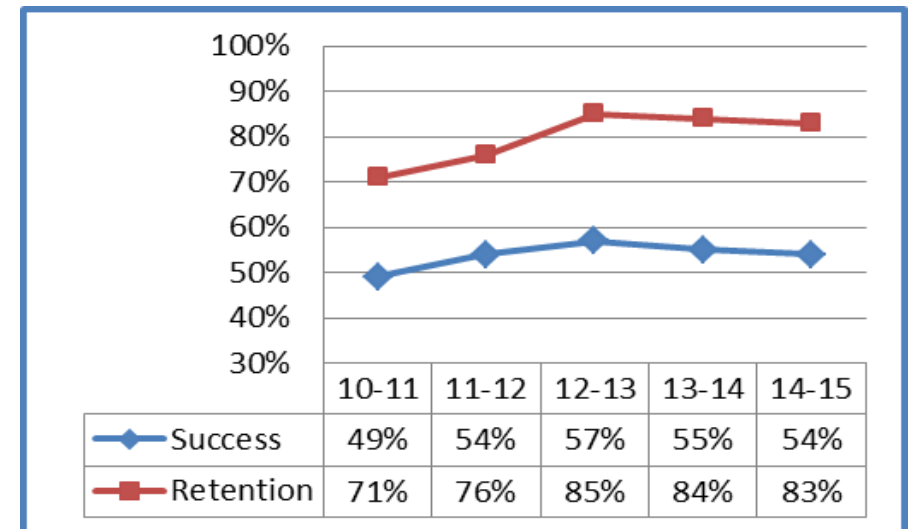
- › Hire three full-time, tenured faculty to maintain a complete program and to accommodate higher FTES and more sections.
- › Maintain & promote AA-T English Degree.
- › Continue to offer literature classes to support the AA-T Degree, even if lower than cap.
- › Mentor English Majors by assigning FT Faculty advisors to help increase student success.
- › Maintain on-going SLO assessment.
- › Increase use of the writing center by students from classes other than English.
- › Create a Bb community for part-time English faculty.
- › Investigate the possibility of pre-assessment or post-assessment workshops to help improve accuracy of placement.
- › Create English major alumni network to strengthen

resources for current English majors.

- › Explore avenues with related departments to further align curriculum and support students.
- › Explore different patterns of course offerings (linked, accelerated) to further improve access and student success.
- › Seek \$70-\$75k continual funding for the writing center.
- › Find and implement reliable assessment tests for ESL and for non-credit.
- › Establish student enrichment programs.
- › Establish a college-wide minimum standard for written work of college-level courses by creating a faculty writing handbook.
- › Maintain active involvement in the decision process for the college's Learning Management System, Canvas or Blackboard.
- › Investigate and participate in upcoming changes to assessment tools.
- › Investigation of, training in, and evaluation of the systems and regulations of the Online Education Initiative and how it might affect the AA-T English Degree.
- › Work with the counseling department to hire and train two full-time counselors to maintain and grow the Puente Program in accordance with all state Puente Program requirements.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	6,999	6,894	6,461	6,679	7,024
FTEF	64.91	65.83	63.58	64.10	68.23
WSCH per FTEF	423	412	401	407	403



	10-11	11-12	12-13	13-14	14-15
Sections	260	260	257	270	282
% of online enrollment	9%	9%	11%	10%	12%
Degrees awarded*	N/A	N/A	N/A	2	2
Certificates awarded	N/A	N/A	N/A	N/A	N/A

\*A.A.-T Degrees were established in 2013.

## Individual Data Sheets By Division

# ARTS + HUMANITIES DIVISION (INSTRUCTION) *(cont.)*

### ENGLISH – 2014-2015 (cont.)

- › Continue to monitor, evaluate, and revise the 015 curriculum and exam.
- › Expand the ESL program.

#### Challenges:

- › There are not enough classrooms to accommodate growth.
- › Efficiency of scheduling rooms and times, which could be solved if the college used the software purchased years ago for this purpose.
- › Maintaining effective and efficient communication on important discipline-specific information and curriculum changes is a challenge with 41+ part-time faculty members. This number will be higher by SP16.
- › The increasing number classes taught by part-time faculty and the college goal of growth further emphasize the need for full-time faculty.
- › Upcoming retirement of full-time faculty.
- › Continue to offer literature classes to meet AA-T English Degree requirements and improve completion time for students.
- › Assessment test accuracy continues to be a challenge. New state assessment system will need to be studied as information is available.

- › Many changes will be needed with the new LMS systems, once chosen.
- › Increase the number of 101 and 102 sections offered.

#### Opportunities:

- › Fostering a relationship with Student Services through SSSP is an opportunity to improve student equity and success and to grow the Puente Program in compliance with all state requirements.
- › Due to AA-T degree, there is an opportunity to create more coherent learning community of English majors, increasing their success, lessening their time to graduation, and increasing their transfer opportunities.

#### Action Plan:

- › Hire at least three full-time, tenured faculty to maintain current program and meet the college's goal of growth.
- › Host workshops and open houses for English majors.
- › Create SLO sub-committees.
- › Create Bb community for PT faculty.
- › Identify English faculty to serve on committees that will be studying and reviewing the Blackboard and

Canvas Learning Management Systems and the Online Education Initiative as well as new LMS.

- › Create mentor program for English Majors.
- › Continue to provide regular college-wide, multi-cultural movie, book, lecture, and other presentations to provide students with enrichment and enhance campus climate.
- › Establish a subcommittee to research, draft, print, and distribute a faculty writing handbook.
- › Work with the counseling department to hire and train two full-time counselors to maintain and grow the Puente Program in accordance with all state Puente Program requirements.



## Individual Data Sheets By Division

# ARTS + HUMANITIES DIVISION (INSTRUCTION) *(cont.)*

### MODERN LANGUAGES – 2014-2015

#### Description:

- › The modern languages department offers a range of beginning, intermediate, and advanced Spanish, French, Arabic and ASL courses for non-native and native speakers. The goal for non-native speakers is to learn these languages for personal or professional reasons, and/or to meet foreign language degree requirements. The goal for native speakers is to improve their reading, writing, listening and speaking skills. All transfer level courses are articulated with CSU/UC system

#### Assessment:

- › FTES increased gradually during 10-11; however, 11-12 and 12-13 FTES decreased significantly due to budget constraints that forced the MLD to offer fewer sections. 13-14 and 14-15 saw an increase in FTES as the budget allowed for more sections.
- › The WSCH decreased from 519 in 10-11 to 486 in 14-15 as we transitioned to the new full time ASL instructor in 2014, and one of our FT Spanish Instructors had a reassignment. In addition, we added Honor courses with a cap of 35 that were low enrolled, and we added less students over the cap.

- › Pass rates increased gradually but returned to 72% in 14-15 as financial aid changes forced some students to complete 60% of their courses even if they failed such courses. This explains why retention levels increased from 82% in 10-11 to 88% in 14-15.

#### Department Goals:

- › Review and update transferability requirements for Spanish 157 to articulate with UC/CSU.
- › Continue to expand online and Honors courses (SPA 103, SPA 101 (H)/SPA 102 (H), ASL 109/110).
- › Improve student pass rates for all MLD courses.
- › Expand partnerships with community organizations/Student Services to improve MLD visibility.
- › Continue to support the Spanish and ASL clubs.
- › Revise ASL SLOs to reflect course expectations.

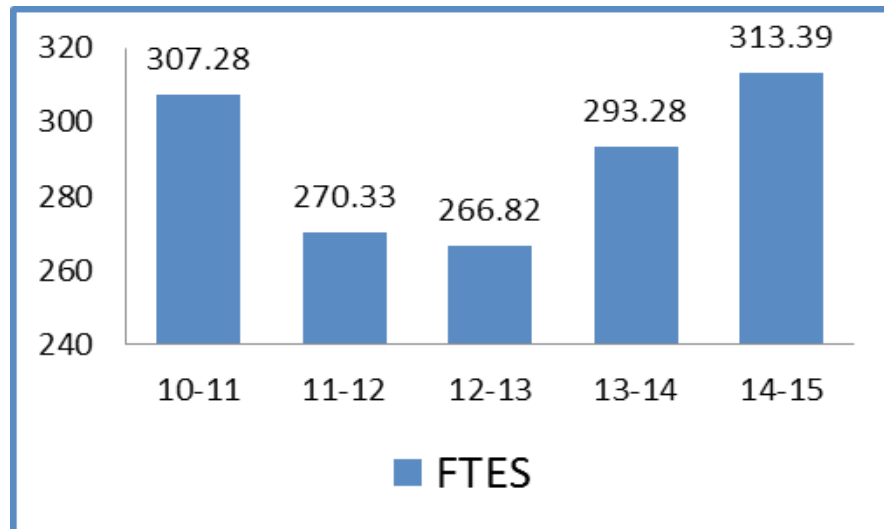
#### Challenges & Opportunities: Review + update

- › Take the opportunity during content review to revise and adopt uniform textbooks for ASL 109/110.
- › Find ways to reinstitute a study abroad program.
- › Create a more comprehensive language program to offer intermediate courses (SPA 104), to continue offering beginning Arabic courses.

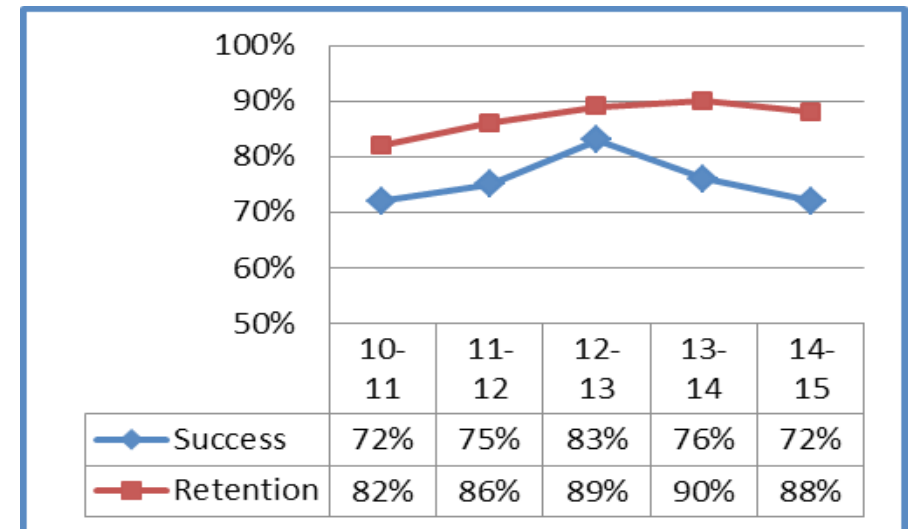
- › Continue to expand online language offerings without reducing the number of on-campus classes.

#### Action Plan: Review + update

- › Create Spanish 156 as a prerequisite for 157 in Curricunet and update/revise Spa 157 to be accepted as a transfer course at the state level.
- › Create ASL 109 (H) course.
- › Refer students to Student Success center as well as SI program.
- › Continue to outreach and participate in community events.
- › MLD faculty continue to serve as advisors to SPA/ASL clubs.
- › ASL faculty will meet to discuss, review and revise ASL SLOs.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,993	1,755	1,677	1,879	2,012
FTEF	17.75	15.48	15.47	18.06	19.33
WSCH per FTEF	519	524	517	487	486



	10-11	11-12	12-13	13-14	14-15
Sections	59	51	52	59	63
% of online enrollment	9%	16%	14%	9%	11%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	N/A	N/A	N/A	N/A	N/A



## Individual Data Sheets By Division

# ARTS + HUMANITIES DIVISION (INSTRUCTION) *(cont.)*

### MUSIC – 2014-2015

#### Description:

- › The faculty and students in the music department share a deep love for their art and a common desire to achieve excellence. The curriculum provides preparation for careers in music while also preparing student for further study at four-year institutions. The department offers a balanced education within a multi-faceted musical experience. It is the goal of the department to help students develop their musical and intellectual potential to each student's highest possible level.

#### Assessment:

- › The figure (14-15) represents a significant drop of nearly 30 FTES from the previous year of 2013-2014.
- › The loss of FTES can be quite clearly seen in our "performance classes". This very significant drop in our performance classes is directly attributable to the state's emphasis on students "getting in and getting out" as quickly as possible!
- › While our academic classes meet certain fundamental requirements, our performance classes do not fulfill the same requirements.

Hence, students that are NOT music majors (or are minoring in music) are being told that financial aid is reluctant to pay for such classes and that only classes on their Ed plan will be covered.

- › Success and retention rates have remained the same while our need for additional full-time faculty has grown to 5.56.

#### Department Goals:

- › Continue to increase the number of music majors and degrees awarded.
- › Continue toward implementation of the new TMC degree (AA-T Music)
- › Significantly increase the number of students enrolled in "performance classes."

#### Challenges & Opportunities:

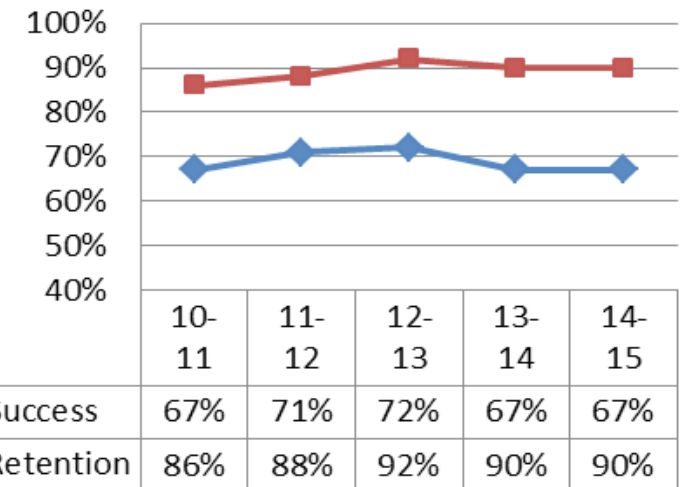
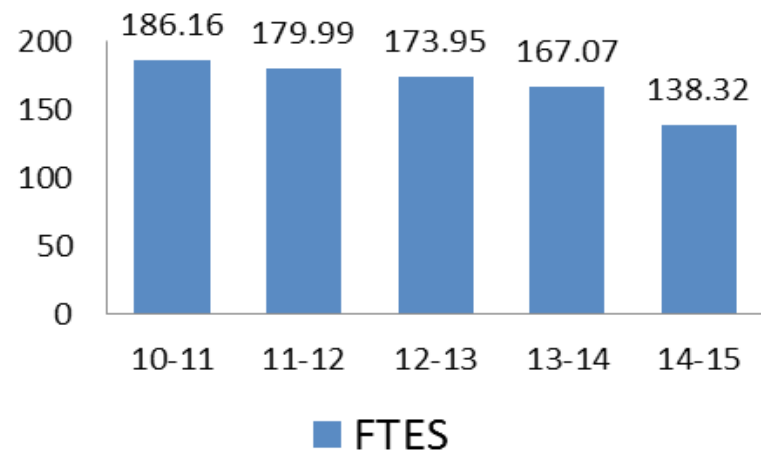
- › One of the challenges to our department is the load and responsibility of leading nine adjunct professors, sculpting a program, maintaining a music major emphasis in a time of diminishing class size (in our performance classes) while growing the performance level of choral, opera and vocal studies. It is overwhelming without (full-time) faculty participation.
- › A successful performance program requires a full-

time faculty member to manage school concerts, contracts and a burgeoning schedule of community performances.

- › In order to have a fully developed music major program another full-time faculty member, equally dedicated to theory, appreciation, world-music and history classes and curriculum is needed!
- › This year an increasing number of "outreach" performances, community performances college performances and faculty concerts are proving to generate a substantial increasing number of interested students in our performance classes!

#### Action Plan:

- › Increase the number of music majors
- › Increase communication with counseling regarding career paths in music
- › Present additional concerts in K-12 (Urbita School, Richardson Prep, Middle College/High School, Colton High etc.
- › Further engage part time in the evaluation of SLO data.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,588	1,424	1,313	1,312	1,127
FTEF	9.14	9.23	8.76	9.58	11.12
WSCH per FTEF	611	585	517	523	373

	10-11	11-12	12-13	13-14	14-15
Sections	57	53	50	55	75
% of online enrollment	0%	0%	0%	6%	8%
Degrees awarded	0	0	0	0	2
Certificates awarded	N/A	N/A	N/A	N/A	N/A

## Individual Data Sheets By Division

# ARTS + HUMANITIES DIVISION (INSTRUCTION) *(cont.)*

### READING + STUDY SKILLS – 2014-2015

#### Description:

- The reading and study skills department offers courses designed to improve reading comprehension, vocabulary development, and study skills. The department prepares students for success in college-level courses. Prior to beginning the English composition remediation sequence, some entering students are placed in developmental reading classes, based on their individual assessment scores. In addition to the basic skills reading series, the department offers two college-level reading courses: READ 100, Academic Reading, a course designed for students who want to improve academic reading; and READ 102, Critical Reading for Critical Thinking, which meets the CSU “critical thinking” requirement, GE Breadth A3.

#### Assessment:

- Enrollment has increased from 1,043 in 10-11 to 1,326 in 14-15.
- FTEF has also increased from 12.70 in 10-11 to 18.40 in 14-15.
- WSCH/FTEF has decreased from 469 in 10-11 to 416 in 14-15
- Retention has increased from 82% in 10-11 to 90%

in 14-15

- Success rate has increased from 47% in 10-11 to 69% in 14-15
- Sections have increased from 39 in 10-11 to 56 in 14-15
- The department has load for nine (9) full-time faculty, but functions with four (4) full-time faculty
- Online sections have increased from 8% in 10-11 to 16% in 14-15

#### Department Goals:

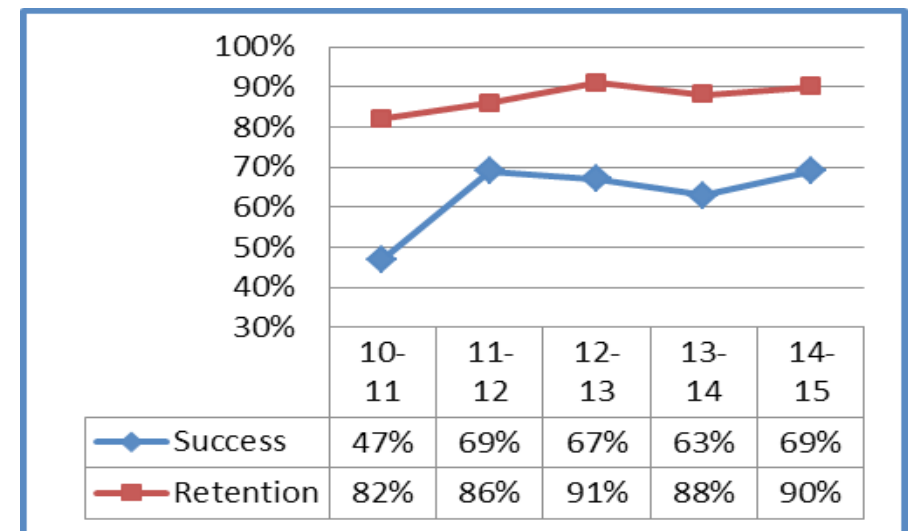
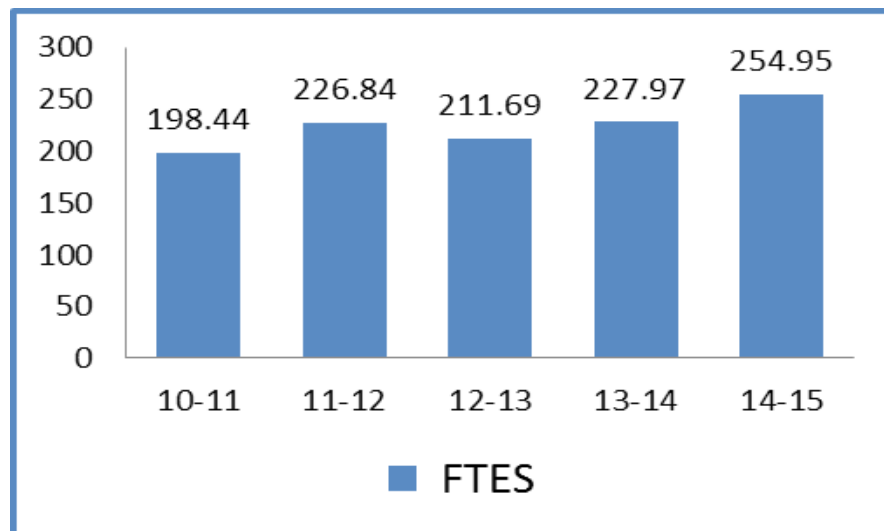
- Increase the number of sections offered in both developmental and college-level reading classes.
- Analyze the success and retention rates of accelerated courses and accelerated-learning cohorts to determine future alternative scheduling options.
- Strengthen reading and study skills curriculum and instruction to better prepare students for the 1st class in the English composition remedial sequence: ENGL 914.
- Improve student success and retention rates across disciplinary-specific reading.
- Renew commitment to providing quality curriculum and instruction across the full span of adult literacy: pre-primer-level to college-level reading comprehension, disciplinary-specific vocabulary, and critical thinking skills.

#### Challenges & Opportunities:

- With the anticipated implementation of statewide, common assessment for CCC's, the department may need to add more courses across its remedial sequence to meet the needs of students who assess into 920, 950, and 015.
- Since 2010, the department continues to operate its reading lab without a computerized, diagnostic, prescriptive, adaptive reading intervention program.
- There is a need for a dept. common pretest, posttest & final exam for all courses preceding ENGL 914.
- There is limited reading lab space to schedule lab classes.
- Receive reading lab technology support through SSSP funding.

#### Action Plan:

- Offer a variety of classes: morning, afternoon, evening, weekend, online, hybrid, late-start, and full-term.
- Implement new technology in the reading lab.
- Practice strategies to improve success and retention rates.
- Launch 1, new reading course designed to address the instructional needs of students who require remediation in phonemic awareness and syllabication, and to also serve as a prerequisite for



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,043	1,183	1,150	1,255	1,326
FTEF	12.70	15.08	15.62	17.53	18.40
WSCH per FTEF	469	452	407	390	416

	10-11	11-12	12-13	13-14	14-15
Sections	39	46	48	53	56
% of online enrollment	8%	20%	17%	15%	16%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	N/A	N/A	N/A	N/A	N/A

READ 920, Reading Skills I.

- › Commit to offering a range of courses to improve adult literacy, from pre-primer-level to college-level reading abilities.
- › Improve the department's WSCH per FTEF ratio.

## Individual Data Sheets By Division

# ARTS + HUMANITIES DIVISION (INSTRUCTION) *(cont.)*

### RADIO, TELEVISION & FILM – 2014-2015

#### Description:

- › The RTVF department offers a comprehensive instructional program in radio and television broadcasting, digital film production, and digital audio and video production. The department provides a two-year curriculum for students majoring in the field resulting in the Associate of Arts Degree and/or transfer to a four-year institution and provides elective courses for students interested in related fields such as marketing, journalism, theater arts, and multimedia. Students may opt for 21-unit certificates in radio, television, film, or RTVF. The instructional program includes internships at local stations and businesses, on-air experience using the facilities of the student radio or TV station and public television station KVCR-TV, which is licensed to the San Bernardino Community College District.

#### Assessment:

- › While our FTES dropped in 14-15 from a high in 13-14, it remains above all previous years.
- › Our WSCH per FTEF remains in the mid to high 300s. Our retention rates remain in the low 90 percent, and our success rate continues to rise

slowly from a low of 66% to a current 75%.

- › In spring 2015 we awarded ten degrees and two certificates. The IEMA (Media Academy) is offering the fourth annual student film festival, provided internships to students who have produced numerous projects for KVCR-TV and departments around campus and offers students the opportunity to run student television and radio stations.
- › With stacked classes and only one full time faculty member, we serve a unique population of students interested in a career in radio, television, and/or film.

#### Department Goals:

- › Our first priority is to continue the rise in student success and maintain or increase our retention rates. Our second priority is to encourage student completion of degrees and/or certificates.
- › Our next goal is to get the adjunct faculty teaching video editing as a certified Avid instructor and review curriculum for RTVF 131 and 232 to match the Avid curriculum for certification as an Avid User (RTVF 131) and an Avid Professional (RTVF 232).
- › Despite the decrease in enrollments, our number of degrees is a record for the department—our goal is to encourage more students to complete their degrees or certificates and maintain this rate of

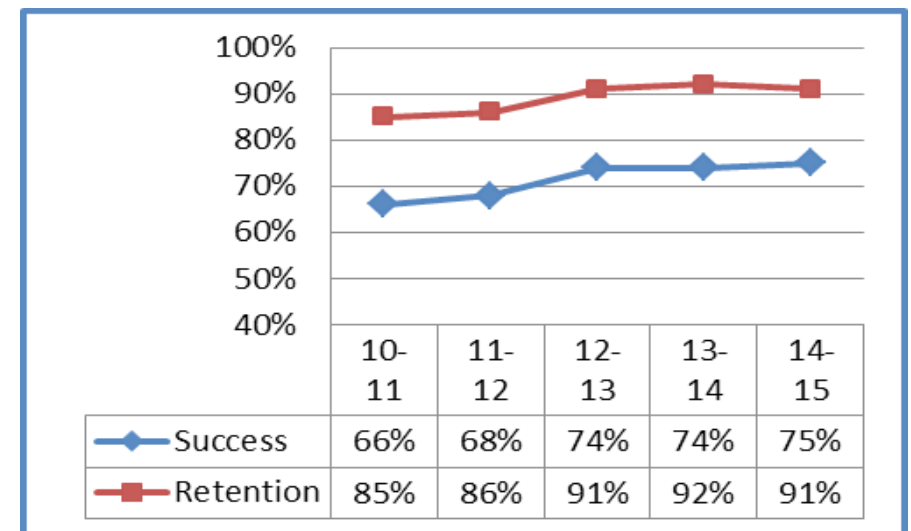
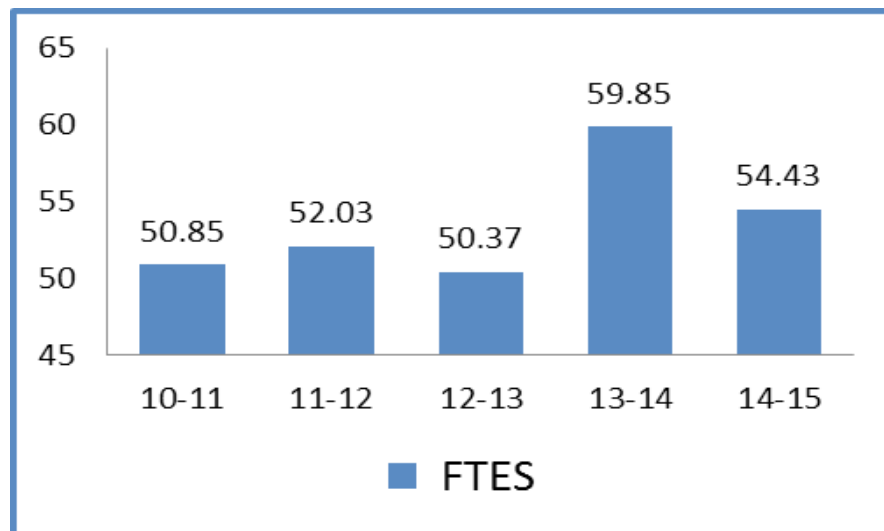
increase in degrees.

#### Challenges & Opportunities:

- › In spring 2014, the RTVF department received a \$25k grant to partner with Chaffey College's television/film program to increase the number of programs produced by students for KVCR.
- › In fall 2015, the RTVF Department received a \$5k grant to work with AQMD for students to produce a promotional video for AQMD regarding the Inland Empire air quality.
- › SBVC administration provided funding for student interns to produce videos for the counseling department.
- › The RTVF Department and the IEMA continue to work with Rialto Police to develop a series on cold case murders for KVCR-TV. Two projects have already been completed.

#### Action Plan:

- › Design and purchase a set background with the CTE grant.
- › Get editing instructor Avid-certified.
- › Rewrite curriculum for RTVF 131 and 232 to match the Avid curriculum for certification as an Avid User (RTVF 131) and an Avid Professional (RTVF 232).
- › Continue to pursue grant opportunities for the



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	353	376	388	424	370
FTEF	4.20	3.92	3.81	5.05	4.43
WSCH per FTEF	363	398	396	355	369

RTVF Department and the IEMA.

- › Continue to provide guidance to students on degree and certificate completion/
- › Ensure faculty work closely with students to increase the success and retention rates.

	10-11	11-12	12-13	13-14	14-15
Sections	37	33	32	39	34
% of online enrollment	49%	61%	41%	23%	21%
Degrees awarded	0	2	5	7	10
Certificates awarded	0	3	3	1	2



Individual Data Sheets By Division

ARTS + HUMANITIES DIVISION (INSTRUCTION) *(cont.)*

SPANISH – 2014-2015

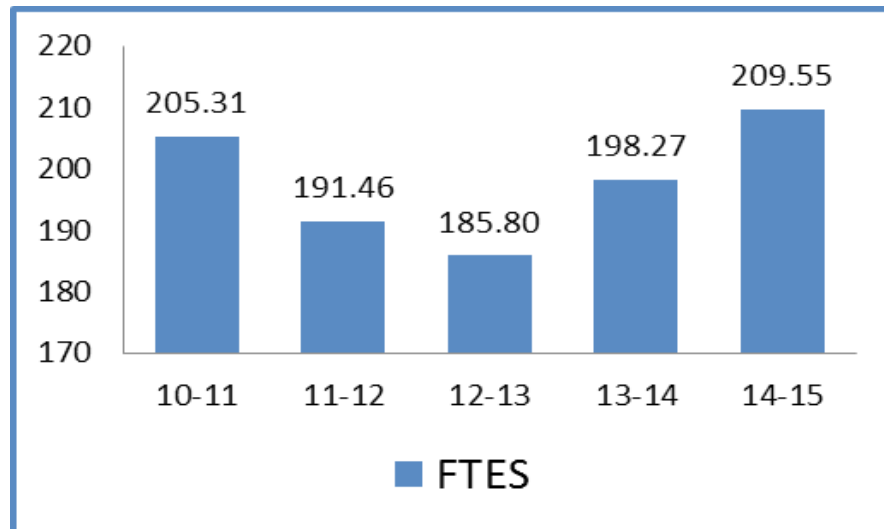
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Assessment:

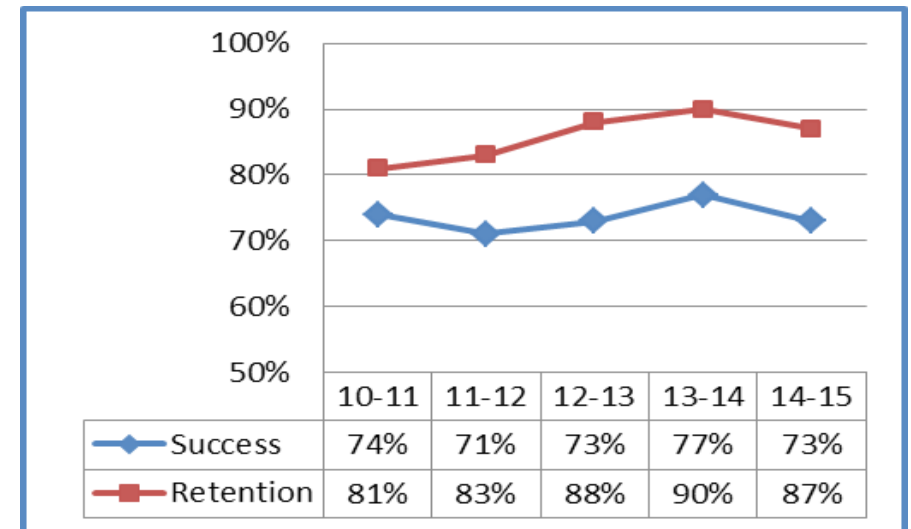
Department Goals:

Challenges & Opportunities:

Action Plan:



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,244	1,122	1,094	1,197	1,262
FTEF	11.69	10.89	10.70	11.92	12.92
WSCH per FTEF	527	527	521	499	486



	10-11	11-12	12-13	13-14	14-15
Sections	37	34	35	37	40
% of online enrollment	14%	24%	20%	14%	18%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	N/A	N/A	N/A	N/A	N/A

## Individual Data Sheets By Division

# ARTS + HUMANITIES DIVISION (INSTRUCTION) *(cont.)*

### THEATER ARTS – 2014-2015

#### Description:

- › Theatre arts is the study of human expression which culminates in live performance. The play is the medium used to tell a story performed by actors. Theatre arts includes the study of the literature and related disciplines and technologies required for performances. The department coordinates several student performances each year.

#### Assessment:

- › The theatre arts department experienced a decrease in enrollment during the 2014-2015 academic year. The decrease was due, in part, to the decrease in sections offered. Also, students report being steered away from performing arts classes by the counseling department when developing educational plans. The success and retention rates also experienced a slight decrease.

#### Department Goals:

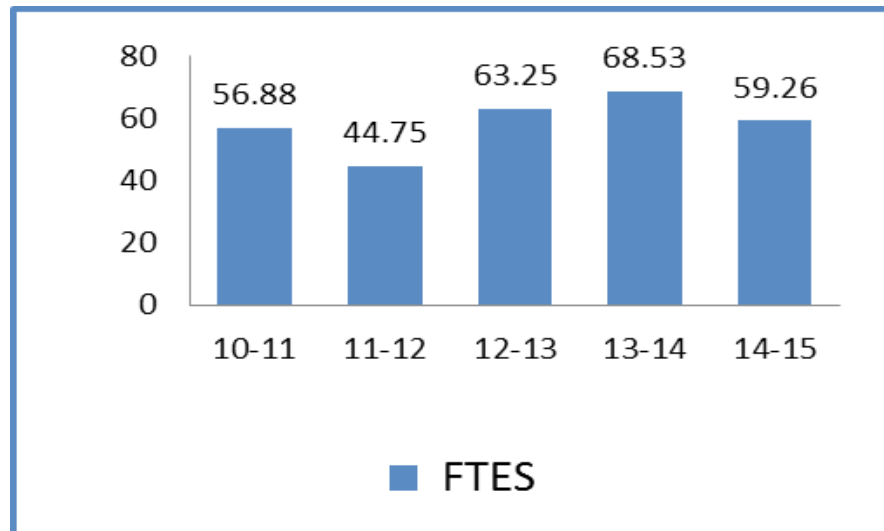
- › The department:
  - › strives to offer high quality theatre productions, in terms of experience and outcome.

- › will continue to offer a variety of productions to the community including drama, comedy, musical theatre, etc.
- › will seek out opportunities to increase exposure and recognition for the theatre arts students, the department, and the college.
- › will continue to explore marketing strategies to increase audience size.
- › will continue to re-establish itself in the auditorium and rebuild the student and audience base.
- › continue to integrate online offerings into the curriculum to serve a larger, more diverse population.

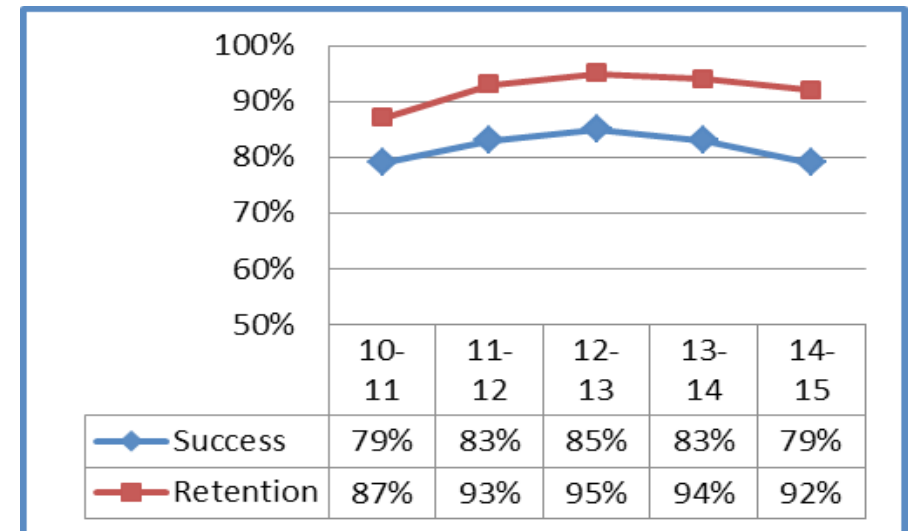
#### Challenges & Opportunities:

- › The SBVC theatre arts department entered productions of Romeo & Juliet and Into the Woods in the Kennedy Center American College Theatre Festival. Four SBVC students were nominated for the Regional Festival in Utah. The nominees and three acting partners competed in Utah in February 2015, with one of our students winning the Critic Competition for the entire Region VIII.
- › Three Into the Woods performers have been nominated for the Regional Festival in Hawaii in February 2016.

- › The department has entered the fall 2015 production of Completely Hollywood into the KCACTF.
- › The theatre arts department worked with other departments across campus for artistic collaboration and space utilization.
- › SBVC theatre created a partnership with Redlands Theatre Festival. SBVC Theatre students performed improv as part of the RTF 2015 summer season.
- › SBVC acting students performed at local high schools.
- › SBVC theatre students attended several tapings of Let's Make a Deal as a KCACTF fundraising effort.
- › The department defined its identity and mission with the creation of a logo/motto.
- › One theatre technician position was increased to full time.
- › The creation of the theatre arts transfer degree requires a higher level commitment to the technical theatre courses and lab experience.
- › The renovation removed the office space for theatre faculty and technical staff from the auditorium. This creates difficulties for staff and students in terms of communication, efficiency, and safety.
- › The renovation removed the dance studio from the auditorium which leaves the dance classes without



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	371	338	398	447	389
FTEF	3.64	2.38	3.44	4.35	4.43
WSCH per FTEF	469	564	552	472	401



	10-11	11-12	12-13	13-14	14-15
Sections	15	13	14	18	17
% of online enrollment	0%	0%	0%	6%	6%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	N/A	N/A	N/A	N/A	N/A

## Individual Data Sheets By Division

# ARTS + HUMANITIES DIVISION (INSTRUCTION) *(cont.)*

### THEATER ARTS – 2014-2015 *(cont.)*

a facility and makes collaboration more difficult.

- › The technical theatre staff are assisting with events across campus, spreading their time thinly.

#### Action Plan:

- › Return the faculty and theatre tech offices to the auditorium.
- › Create selected topics courses to allow the department to offer courses on current topics in the field.
- › The department will work with the SBVC Foundation and other campus groups to raise funds to support KCACTF participants.
- › Promote theatre in the inland empire by connecting with students in the K-12 schools.
- › Promote SBVC theatre students, the department, and the college by entering SBVC productions into the Kennedy Center American College Theatre Festival and the Inland Theatre League competition.
- › Establish and maintain connections with local theatre groups.
- › Promote the arts on campus by supporting the SBVC performing arts club.





## Individual Data Sheets By Division

# MATHEMATICS, BUSINESS + COMPUTER TECHNOLOGY DIVISION (INSTRUCTION)

### ACCOUNTING – 2014-2015

#### Description:

- › We offer high quality accounting programs which will prepare our students for successful careers in business and government. We provide students with a broad based understanding of the concepts of the accounting field. The courses offered satisfy transfer requirements and/or offer the specialized training required by the industry for successful employment.

#### Assessment:

- › We experienced a 12% increase in FTES as a result of increased course offerings.
- › We were able to add four additional courses this year (total 34 sections).
- › Our online enrollment increased by 24%.
- › Our success and retention rates remain strong at 58% and 82% respectively. In addition, we awarded 3% more degrees.
- › Certificates awarded decreased by 46%, most likely due to the changes in education requirements for the profession, which include required additional units to become licensed.
- › The additional online course offerings were a leading factor in the increased FTES.

#### Department Goals:

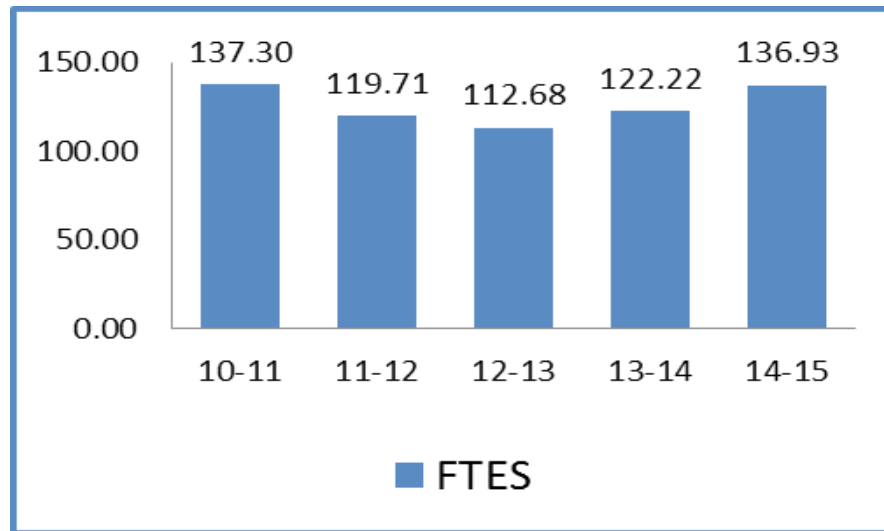
- › Increase the accounting offerings to meet community needs.
- › Continue to evaluate the accounting programs for possible re-configuration to meet the needs of students
- › Continue to increase the use of technology to improve learning skills.
- › Develop materials for accounting ethics.
- › Strengthen the accounting program through strategic allocation of funds, development of community connections, and recruitment in the local communities

#### Challenges & Opportunities:

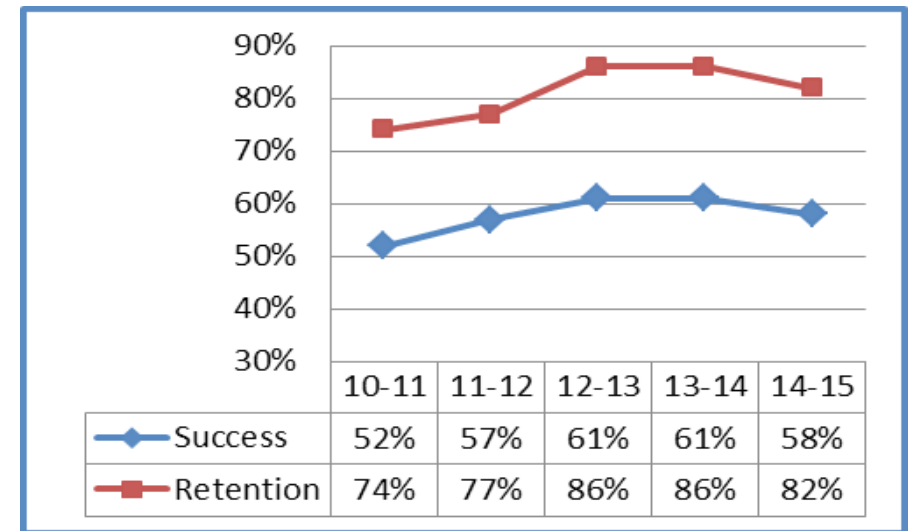
- › The budget crisis in California has caused the district to be more frugal with funds. We will continue to reevaluating our course offerings to increase efficiency and effectiveness in all accounting courses.
- › Our biggest challenge is staffing classes. We have one full-time faculty member—a CPA. We have continued to search for qualified adjunct instructors who can teach during the day and evening. This has proved close to impossible. Fortunately, we were just awarded an accounting position and are in the early stages of the recruiting process

#### Action Plan:

- › Continue to develop new course/program offerings or improve existing courses as recommended by the community advisory board.
- › Continue to increase the course offerings
- › Continue to assess the accounting SLO's at both the program and course level.
- › Develop a plan to communicate current information about careers in accounting to students.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,166	1,008	935	1,025	1,142
FTEF	7.52	6.45	6.52	7.14	8.01
WSCH per FTEF	548	557	519	514	513



	10-11	11-12	12-13	13-14	14-15
Sections	32	28	28	30	34
% of online enrollment	31%	43%	38%	50%	62%
Degrees awarded	6	12	23	29	30
Certificates awarded	7	8	11	28	15

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 050200

## Individual Data Sheets By Division

# MATHEMATICS, BUSINESS + COMPUTER TECHNOLOGY DIVISION (INSTRUCTION) *(cont.)*

### BUSINESS ADMINISTRATION – 2014-2015

#### Description:

- › We inspire our students to pursue productive careers in the business world. We provide them with high-quality learning opportunities in business and business related topics. The program serves students pursuing transfer, certificate, and skill upgrade objectives—both from a hard skills and soft skills perspective. The program offers an AA and AA-T degree in business administration. The program also offers certificates of achievement in business administration, retail management and management/leadership.

#### Assessment:

- › As a result of unemployment (reported August 2014) being at 8.7%, many employees are returning to school to better their odds of employment.
- › Local employers are requiring employees to further education for personal/business growth.
- › Through continual efforts to offer distributed education (hybrid and/or online), community involvement and counseling (on campus and local universities), our efforts have continued to garner a 34% growth in degrees/certificates awarded.

- › The success rate has dipped slightly—believed to be a result of more online/hybrid offerings. It appears that there is a slightly lower rate as a result of reduced face-to-face contact.

#### Department Goals:

- › Continue to increase offerings to meet community needs.
- › Expanding partnerships regionally with employers and 4-Year academic institutes.
- › Explore the potential for re-invigorating the Business offerings.
- › Continue to develop new online and hybrid courses.
- › Continue the use of technology to improve orientation to learning objectives and the requirements for success in the overall program.

#### Challenges & Opportunities:

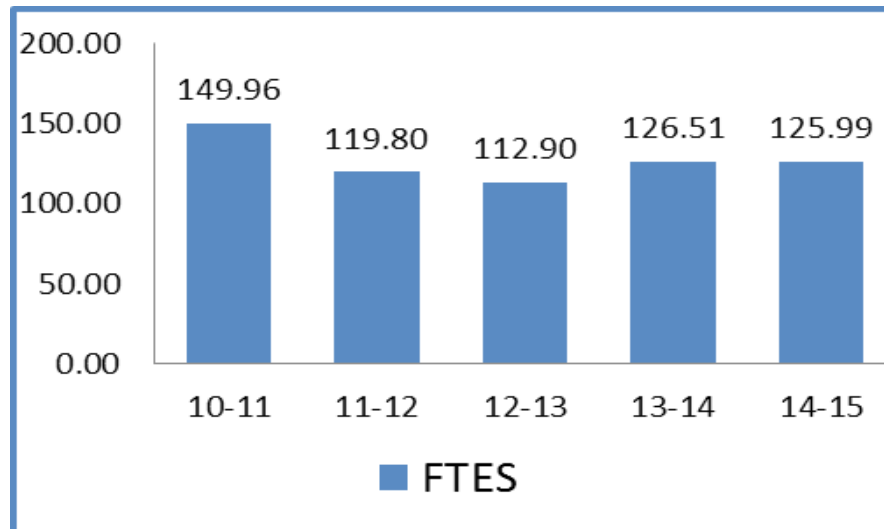
- › Though the state budget has loosened up, we have not been able to add full-time faculty to assist in this scheduled growth.
- › We have evaluated efficiency and effectiveness in every course within the discipline.
- › Similar challenges at transfer institutions force many students back to community colleges to complete general education requirements—and

lower level business requirements—increasing the need for more sections and the importance of articulation agreements.

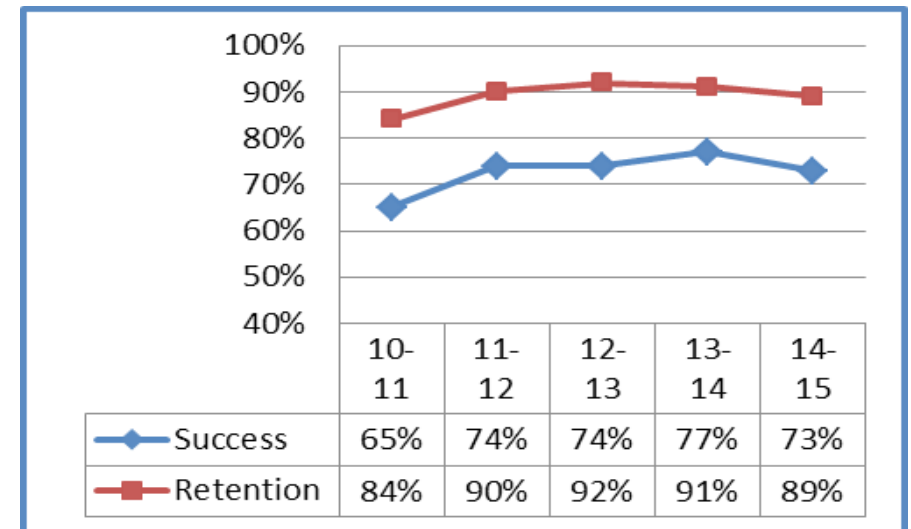
- › With the increase in demand, modification of existing certificates and added faculty, we should see a greater concentrated growth in 2015-16 reportings.

#### Action Plan:

- › Create a NEW certificate in Entrepreneurship.
- › Continue to implement and adjust curriculum offerings recommended by advisory committee.
- › Adjust current certificates to assure quicker completion for students.
- › Expand hybrid and online offerings to assure growth and proper connection with the community.
- › Develop and implement SLO assessment at the program level.
- › Continue to reassess course level SLO's.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,502	1,198	1,097	1,259	1,265
FTEF	7.00	5.80	5.80	7.20	7.20
WSCH per FTEF	643	620	584	527	525



	10-11	11-12	12-13	13-14	14-15
Sections	35	29	29	38	36
% of online enrollment	17%	31%	31%	40%	36%
Degrees awarded	34	48	53	59	78
Certificates awarded	14	13	3	7	8

\*A.S.-T Degrees were established in 2013.

TOP Code: 050500

## Individual Data Sheets By Division

# MATHEMATICS, BUSINESS + COMPUTER TECHNOLOGY DIVISION (INSTRUCTION) *(cont.)*

### COMPUTER INFORMATION TECHNOLOGY – 2014-2015

#### Description:

- › The CIT program serves students needs in three ways:
- › Acquisition of basic through advanced computer technology skills
- › Acquisition of computer skills applicable to current work requirements
- › Preparation for pursuing education in computer technology at a four-year institution.

#### Assessment:

- › There is a 35% drop in FTES between 10-11 and 12-13. This drop is associated with budget cuts to SBCCD by the State of California.
- › The FTES since 12-13 shows a moderate 14% recovery. The student success and retention is negatively correlated with FTES. Success and retention are highest when FTES is lowest (12-13) and lowest when FTES is highest (10-11).
- › There is a 30% increase in the number of degrees and certificates awarded from 10-11 to 14-15.

#### Department Goals:

- › Maintain academic standards of courses
- › Promote student academic achievement
- › Offer courses that are relevant to local job market
- › Maintain hardware and software currency
- › Promote SBVC CS and CIT programs to local HS students
- › Enhance transferability and articulation of courses

#### Challenges:

- › State approval of degrees and certificates
- › Streamlining student completion process
- › Book cost and availability at SBVC bookstore.

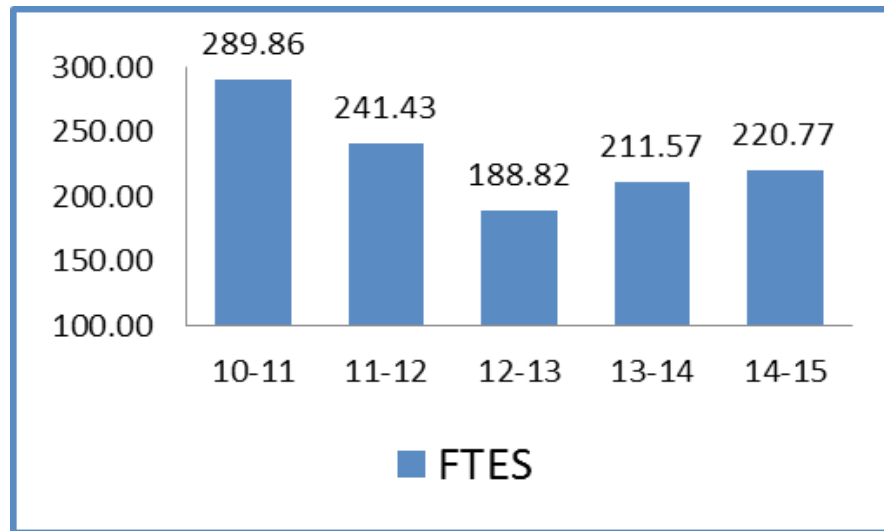
#### Opportunities:

- › Career opportunities created by emerging technologies
- › C-ID AS-T degree
- › CSUSB new Information Systems & Technology BS degree
- › Active student club.

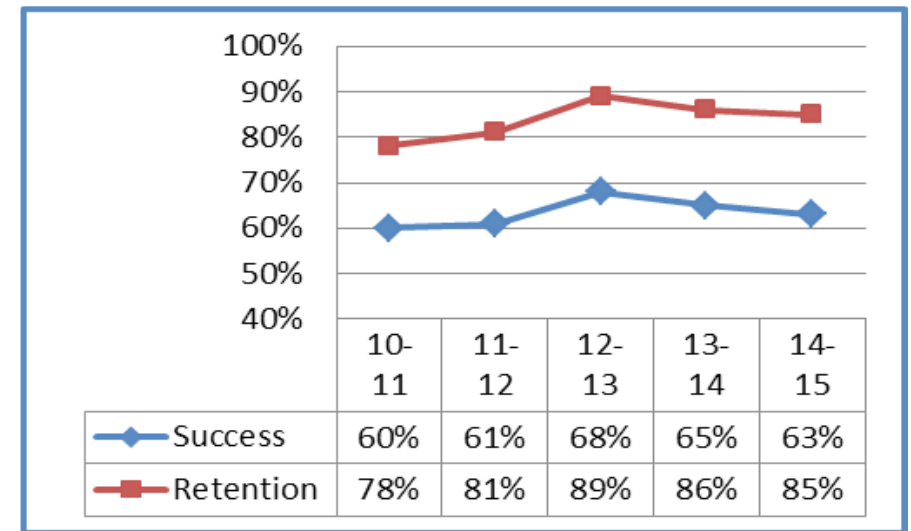
#### Action Plan:

- › Monitor progress of certificate and degree approvals

- › Create an AS degree aligned with new CSUSB IS&T BS degree
- › Expand use of academy models
- › Develop outreach and articulation for HS programs
- › Develop non-credit CIT program
- › Develop non-credit computer lab course.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	2,564	2,089	1,924	2,159	1,945
FTEF	17.31	14.48	14.75	16.59	16.78
WSCH per FTEF	502	500	384	383	395



	10-11	11-12	12-13	13-14	14-15
Sections	90	71	72	77	79
% of online enrollment	67%	72%	75%	77%	85%
Degrees awarded	5	9	10	13	18
Certificates awarded	13	7	15	13	8

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 051400/070200



## Individual Data Sheets By Division

# MATHEMATICS, BUSINESS + COMPUTER TECHNOLOGY DIVISION (INSTRUCTION) *(cont.)*

### COMPUTER SCIENCE – 2014-2015

#### Description:

- › The computer science program provides preparation for students planning to transfer to a four-year institution, experience in computer programming for students enrolled in science or engineering disciplines and academic computer science preparation for students interested in pursuing employment after San Bernardino Valley College

#### Assessment:

- › 2014-15 has a remarkable 140% increase in computer science FTES.
- › This is accompanied by a small increase in retention (81% to 85%) and a small increase in success (63% to 65%).
- › The number of students who complete certificates and degrees is quite low. The failure of department efforts to obtain approval of an AS-T degree is probably associated with this situation.
- › The CS AS-T degree is not approved because it requires too many units at SBVC to complete the requirements.

#### Department Goals:

- › Increase the number of students who earn a CS degree and certificate.
- › Gain approval of the CS AS-T degree.
- › Offer a certificate aligned with Microsoft programming certification(s).

#### Challenges:

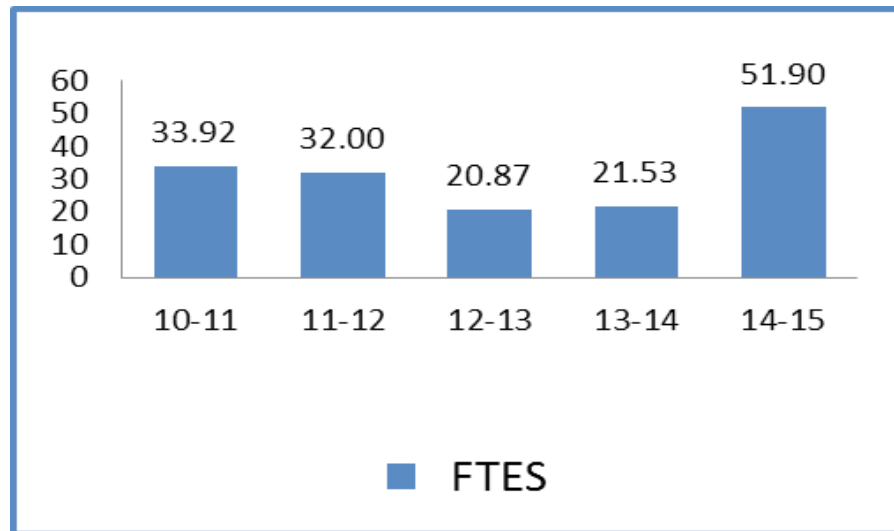
- › Cancellation of classes due to low enrollment.
- › High unit courses required for CS AS-T degree.
- › Proliferation of programming languages.
- › No game development certificate.

#### Opportunities:

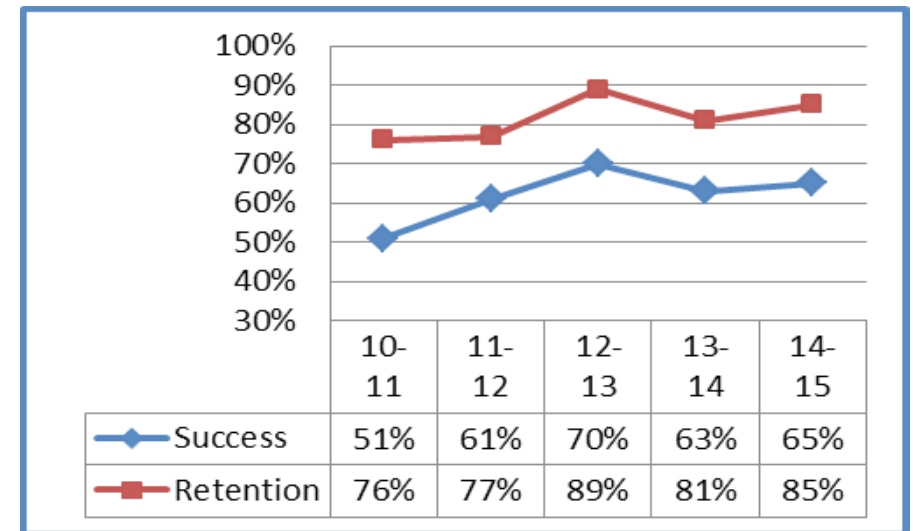
- › Virtual Lab
- › Microsoft IT Academy
- › Growth in FTES

#### Action Plan:

- › Advocate for offering low-enrolled classes that complete degrees and certificates.
- › Work through academic senate to address high unit courses offered by other departments.
- › Investigate Microsoft IT Academy membership.
- › Investigate game development certificate.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	185	175	183	191	295
FTEF	2.44	2.10	2.38	2.68	3.98
WSCH per FTEF	417	457	263	241	391



	10-11	11-12	12-13	13-14	14-15
Sections	9	8	9	9	13
% of online enrollment	89%	88%	89%	89%	92%
Degrees awarded	0	0	0	1	0
Certificates awarded	0	0	2	1	0

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 0707XX

## Individual Data Sheets By Division

# MATHEMATICS, BUSINESS + COMPUTER TECHNOLOGY DIVISION (INSTRUCTION) *(cont.)*

### MATH – 2014-2015

#### Description:

- › The department offers courses in mathematics from arithmetic through differential equations and linear algebra. Students desiring basic skills and advanced mathematical methods find meaningful activities in the math program. Job opportunities in pure mathematics exist and even more in education, business, engineering, nursing, manufacturing, computer technology, and many other technical fields that rely on mathematics. Students planning to transfer to four-year institutions should consult with a counselor regarding the process and requirements.

#### Assessment:

- › Data show the department continues to grow. During a 5-year period, FTES has risen from 1178 to 1316 (11.71%).
- › While there was decline in 12-13, the growth continued in 13-14 and 14-15.
- › Likewise, FTEF has increased from 66.87 to 77.31 (15.61%).
- › Efficiency has fallen from 528 to 507 during the three years 2010-13, increased in 2013-14 then slightly fell in 2014-15 to 511.

- › Success rates have been steady between holding steady running at 54% to 57% in the last five years.
- › Retention rose in 2012-13 and then have stayed steady as well at 85%.
- › Sections decreased from 2010-13 and have since increased a total of 19.2% in the last two years.

#### Department Goals:

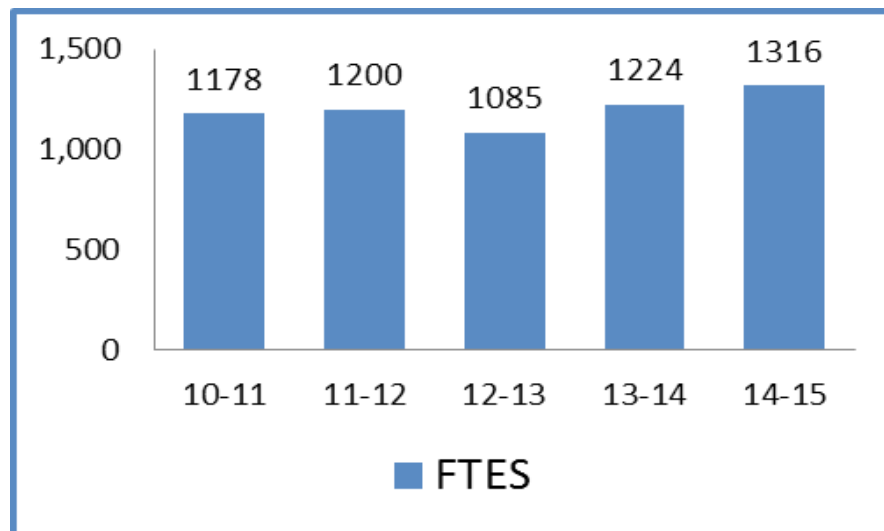
- › To continue growth, particularly in the number of sections offered and FTES.
- › To continue growth in success and retention rates.
- › To improve access to the math courses students need for a degree and /or to transfer.

#### Challenges & Opportunities:

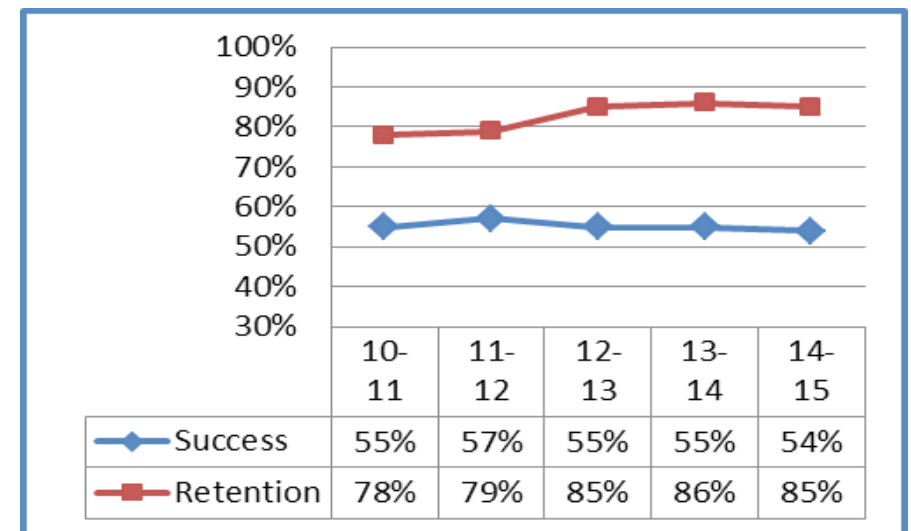
- › Maintaining growth is difficult in scarcity. Finding available classrooms and computer labs for our classes can be difficult.
- › The department offers many courses, making content review arduous, especially with the expectations of maintaining and assessing student learning outcomes. Faculty is aware of course content and makes improvements.
- › With the resources available through the AB86 grant, the department has the opportunity to increase access to classes for adult learners unprepared to take college level math classes.

#### Action Plan:

- › Continue to provide preassessment opportunities throughout the year including offering workshops and testing on the feeder high school campuses.
- › Continue to search for viable solutions for limited space; continue to offer online and hybrid courses, short term classes, and weekend classes.
- › Write curriculum for noncredit basic skills level courses with flexibility to increase the number of students transitioning to college level courses.
- › Write curriculum for a non-credit staffed lab math course to support student success in the basic skills classes.
- › Continue to increase the number of upper division classes needed for student to attain a degree in Math and/or transfer to a four-year school.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	9,248	9,226	8,396	9,558	10,132
FTEF	66.87	67.27	64.26	71.22	77.31
WSCH per FTEF	528	536	507	516	511



	10-11	11-12	12-13	13-14	14-15
Sections	278	261	250	280	299
% of online enrollment	5%	12%	15%	14%	17%
Degrees awarded	12	7	20	18	
Certificates awarded	N/A	N/A	N/A	N/A	

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 170100

## Individual Data Sheets By Division

# MATHEMATICS, BUSINESS + COMPUTER TECHNOLOGY DIVISION (INSTRUCTION) *(cont.)*

### REAL ESTATE + ESCROW – 2014-2015

#### Description:

- › People study real estate (RE) at SBVC's 50+ year-old program for a wide range of reasons. Some attend SBVC to become RE agents, RE brokers, informed customers, investors, or to find employment in RE-related fields. Others attend to receive a RE certificate from the SBVC certificate program or an AA real estate degree (which requires a total of 60 units, including general education). There are also those who study RE at SBVC in order to transfer to a CSU to earn an advanced degree as a Business Major/RE Minor.

#### Assessment:

- › FTES is on a decline since 2012/13—largely due the retirement of a full-time professor and the change in the real estate agent qualifications (only need principles, practices and one more course to be able to sit for the licensing exam).
- › Courses are now offered 100% online and are now showing higher enrollment numbers per class than in the past.
- › REALST 100 classes are now having wait lists.
- › FTEF has decreased from 2.20 in 2013-14 to 1.60

in 2014-15, largely to the 39% reduction in our course offerings from 11 courses to eight courses.

- › There has been a reduction in the number of certificates and degrees that were awarded due to the change in the licensing requirements.
- › The success rates are the highest reported for the last five years.

#### Department Goals:

- › Have a clear pathway for students to receive an AA degree and/or certificate in a timely fashion.
- › Make adjustments to certificates and/or degrees to meet the changes in the REALST offerings.
- › Have all RE courses approved for online education, which provides greater access for students.
- › Increase the number of RE courses that are transferable to CSUs.

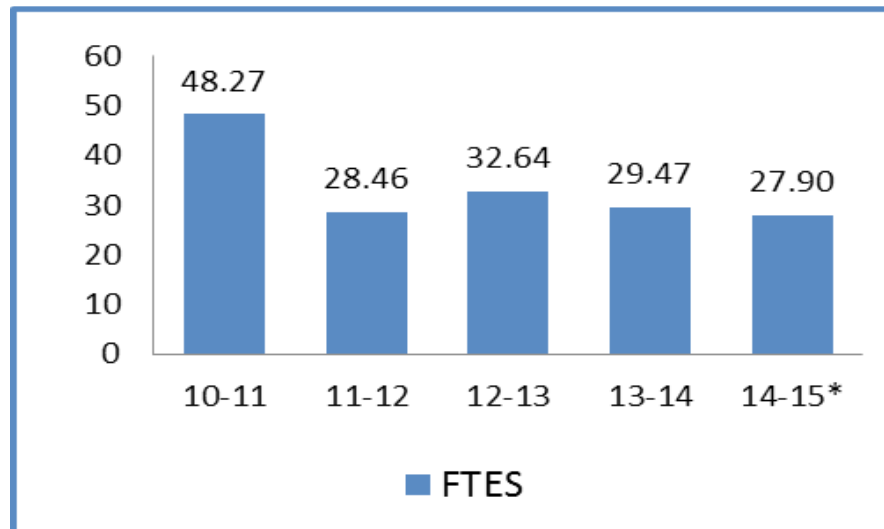
#### Challenges & Opportunities:

- › With the most recent upturn in the economy, we are seeing an increase in the opportunities in the RE industry. Many people are either coming back to the RE industry and are in need of recertifications, or are looking to capitalize financially, and are looking to get their RE license. The change in the RE license requirements has forced us to

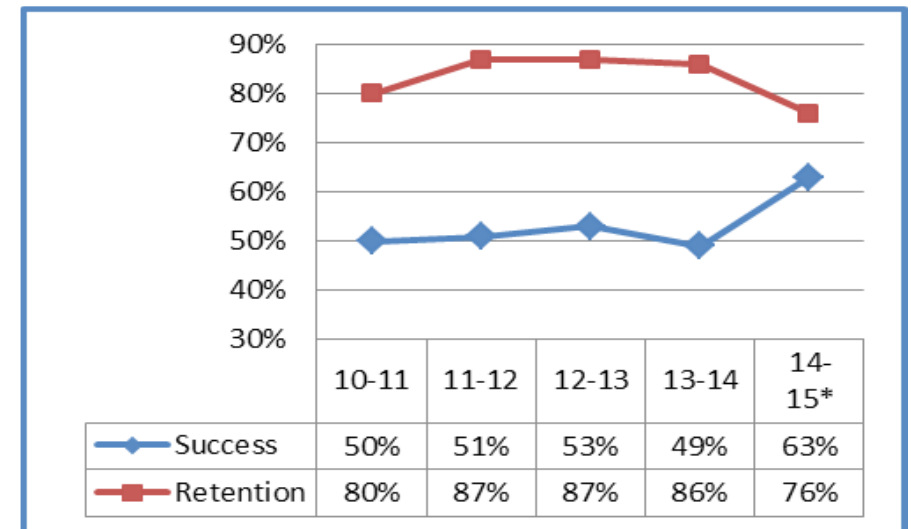
reexamine our offerings, the manner in which we offer them, and the content of our offerings. This is difficult to accomplish as a result of having no full-time instructor applied to the discipline—only part-time adjuncts are employed at this point in time. The full-time instructor retired in spring 2014.

#### Action Plan:

- › Continue to implement and adjust curriculum offerings recommended by advisory committee and industry needs.
- › Adjust current certificates to assure quicker completion for students.
- › Expand hybrid and online offerings to assure growth and proper connection with the community.
- › Develop and implement SLO assessment at the program level.
- › Continue to reassess course level SLO's.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	494	286	327	297	179
FTEF	2.80	2.00	2.00	2.20	1.60
WSCH per FTEF	517	427	490	402	523



	10-11	11-12	12-13	13-14	14-15*
Sections	16	10	10	11	8
% of online enrollment	56%	80%	80%	73%	100%
Degrees awarded	2	2	3	2	1
Certificates awarded	5	5	4	4	1

\*Excludes escrow.

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 0511XX



## Individual Data Sheets By Division

# SCIENCE DIVISION (INSTRUCTION)

### ARCHITECTURE – 2014-2015

#### Description:

- › The architecture, environmental design, and drafting program serves a variety of students through instructional course offerings. The architectural history courses serve both as major's preparation and as general education courses. The architectural design sequence serves as major's preparation for transfer students to a variety of architectural related fields. The drafting classes serve career and technical education students as well as support major's preparation.

#### Assessment:

- › The FTES generation of the program grew significantly until the college was forced to scale back instructional offerings. The program has not yet recovered. The success and retention rates of students are good. The retention rates raised and have remained at a relatively level 90%. The FTES rates have dropped but will increase as soon as the ARCH 200 and 201 courses can be offered again.

#### Department Goals:

- › The program has accomplished much of redesign based on lengthy conversations within the division

and with an advisory group. The program now has the possibility of some lecture content in an online format for design students and has increased the number of units to better align with the transfer universities. The department has achieved student success in terms of transfer to universities without fulfillment of AA degrees. The department seeks to offer more courses more frequently.

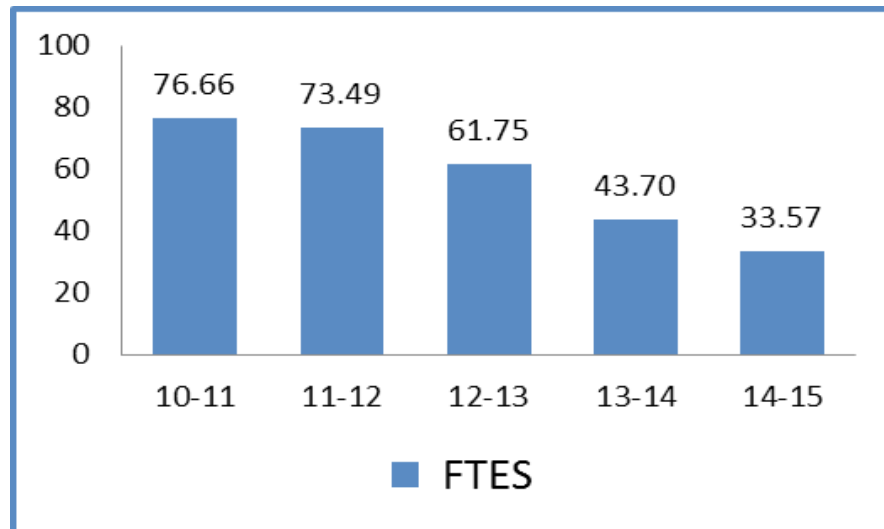
#### Challenges & Opportunities:

- › One major challenge is articulation with transfer institutions. Most universities award credit only by portfolio review for transfer students. The program continues to explore mechanisms to public and private institutions to ease the transfer process in a variety of related fields. We have achieved articulation with private universities and an agreement relative to the Architectural History courses with Cal Poly Pomona. We have aligned our 100 and 101 design courses with the state university as well. The architectural history classes are now UC transferable.

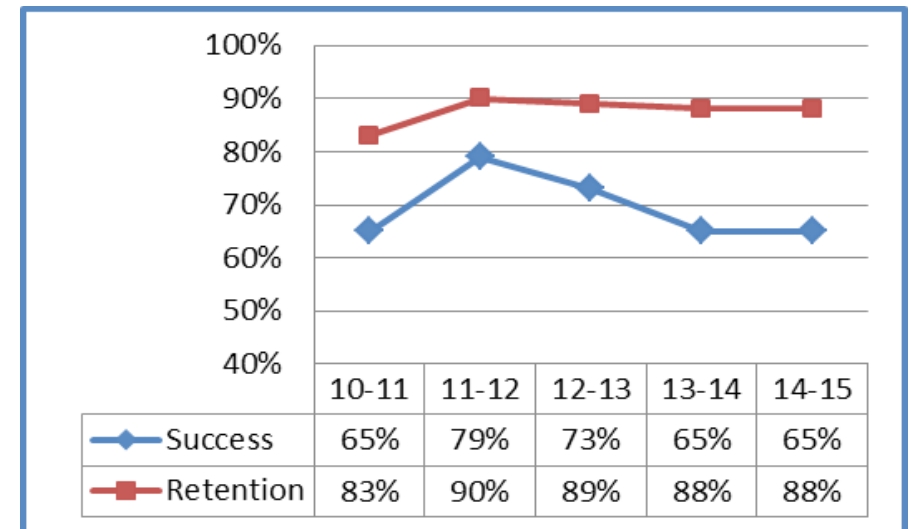
#### Action Plan:

- › The program will:
  - › Submit needs request for model construction studio and other needs through program review

- › Continue to explore transfer & career programs in alternative segments including urban planning, landscape, & construction management
- › Work with campus administration to get certificates approved, offer second level courses
- › Implement on-line and hybrid offerings
- › Investigate ways to improve degree and certificate awards
- › Make efforts to document the number of students successfully transferring into the university without degrees or with general degrees specifically into the Architecture and related fields at the university



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	539	463	357	283	239
FTEF	6.24	4.99	4.67	4.20	2.94
WSCH per FTEF	369	442	397	312	342



	10-11	11-12	12-13	13-14	14-15
Sections	25	20	17	15	11
% of online enrollment	32%	20%	12%	13%	27%
Degrees awarded	1	0	0	1	0
Certificates awarded	1	0	0	1	0

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 020100

## Individual Data Sheets By Division

# SCIENCE DIVISION (INSTRUCTION) *(cont.)*

### BIOLOGY – 2014-2015

#### Description:

- › The biology department offers courses to prepare students for opportunities towards four major areas: 1) General education science requirements; 2) allied health careers; 3) biology major transfer students; and, 4) Biotechnology related careers. The development of student skills as they relate to creative critical thinking, assessment of quantitative information, deductive/ inductive reasoning, and written communication are stressed.

#### Assessment:

- › Success and retention is stabilizing at about 60% and 84% respectively.
- › The learning support via Student Success Center is essential.
- › FTES started decreasing in 2011-2013 due to sections cut but has increased and average of 5% since 2012-2013.
- › Enrollment and WSCH per FTEF has increased from the past academic year.

#### Department Goals:

- › Continue to collaborate with general & STEM

counselors to guide biology majors to new majors course sequence:

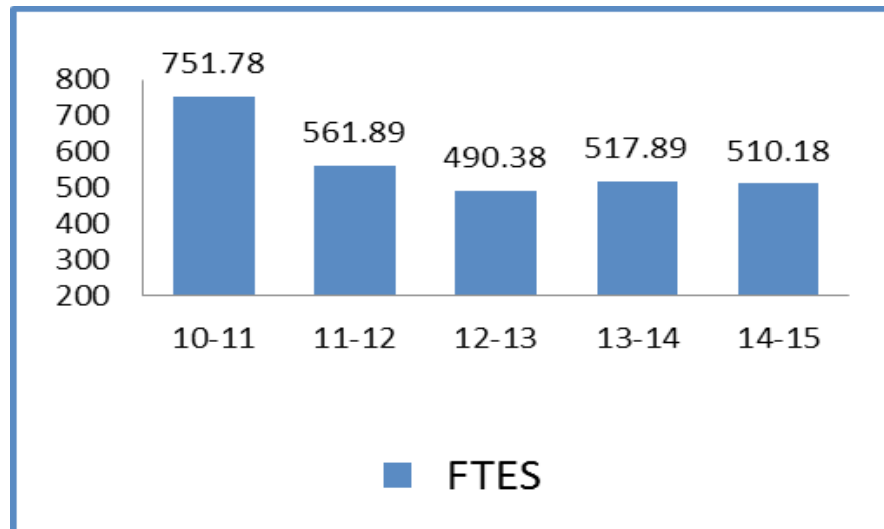
- › Hire replacement faculty.
- › Increase the number of degrees awarded under the new AA-T degree and revised AS degree.
- › Implement the new department philosophy plan for the re-expansion of sections and new courses.
- › Continue to support SBVC's transformation to a drought tolerant landscape.
- › Maintain lab equipment and increase supplies for quality education.
- › Plan for adjunct mentoring.

#### Challenges & Opportunities:

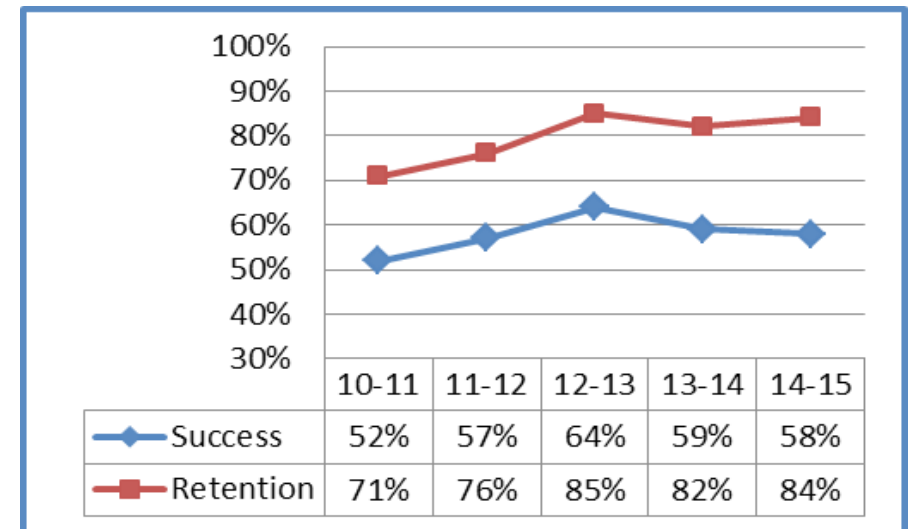
- › Loss of faculty member resulted in low percentage of classes taught by full time faculty.
- › Poor lightning and sound issues in all rooms makes teaching difficult.
- › Work out the new snorkel system.
- › Lack of funds for supplies.
- › Lack of funds maintenance of equipment.
- › Implementation of the transition from a two semester biology majors program to a three semester program.

#### Action Plan:

- › Advocate for faculty, increased budget, and maintenance.
- › Identify ideal characteristics in hiring new, full-time faculty and develop a job announcement that reflects these characteristics.
- › Develop a strategic plan for growth in the department consistent with departmental philosophy.
- › Create new opportunities in the SI program in Biology to improve student success.
- › Initiate a process of systematic data gathering of student entrance and exit skills from each biology course in a sequence.
- › Review and refine SLO course level assessments.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	3,752	2,744	2,406	2,659	2,587
FTEF	34.46	29.94	29.58	31.41	30.73
WSCH per FTEF	654	563	497	495	498



	10-11	11-12	12-13	13-14	14-15
Sections	135	105	100	107	108
% of online enrollment	2%	3%	4%	6%	9%
A.S. Biology Degrees Awarded	4	4	6	6	8
A.A. Lib Arts: Bio & PhySci Degrees Awarded	54	92	129	151	148

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 040100

## Individual Data Sheets By Division

# SCIENCE DIVISION (INSTRUCTION) *(cont.)*

### CHEMISTRY + PHYSICAL SCIENCE – 2014-2015

#### Description:

- › The chemistry program provides instruction and laboratory experience appropriate for general education requirements in the area of physical sciences, pre-nursing and allied health preparation courses, and lower division preparation required for chemistry and biochemistry transfer students. The same lower- division courses service transfer students in nearly every field of science engineering, and pre-professional school preparation, such as pharmacy, dental, and medical schools.

#### Assessment:

- › The efficiency of the program has decreased to a lower but still acceptable level for laboratory-based instruction. Some of the factors that have decreased efficiency include the need to generate more FTES by offering single sections at a variety of times. Another factor has been fulfilling the goal of generating more chemistry and STEM related degrees. Those classes required for majors have lower caps due to safe laboratory practices and therefore decrease efficiency. The department has increased the number of STEM majors prepared

for transfer by offering and filling additional sections of general and organic chemistry. The department has also expanded our offerings in non-laboratory based general education classes to increase enrollment and options for students.

#### Department Goals:

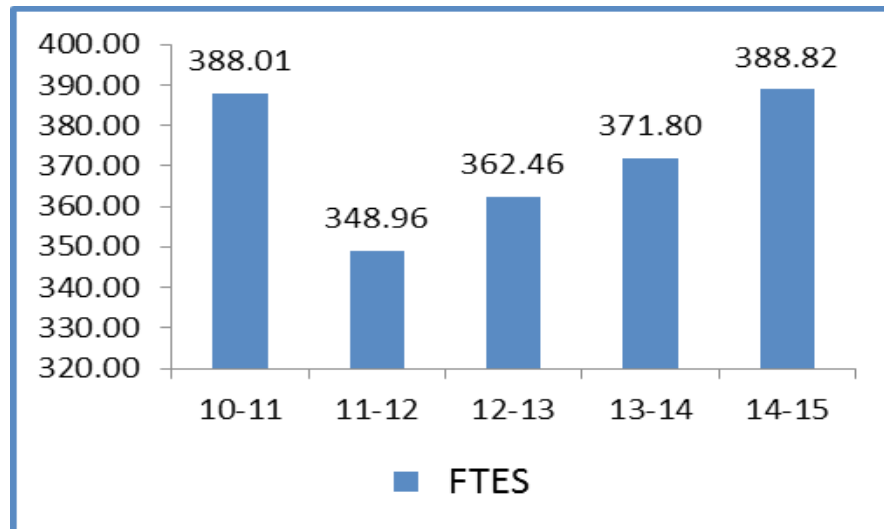
- › Continue to increase the number of science, math, and engineering majors to affect the economic viability of our region.
- › Continue to increase the number of STEM degrees granted.
- › Improve student success.
- › Maintain laboratories with equipment and supplies needed for quality education.

#### Challenges & Opportunities:

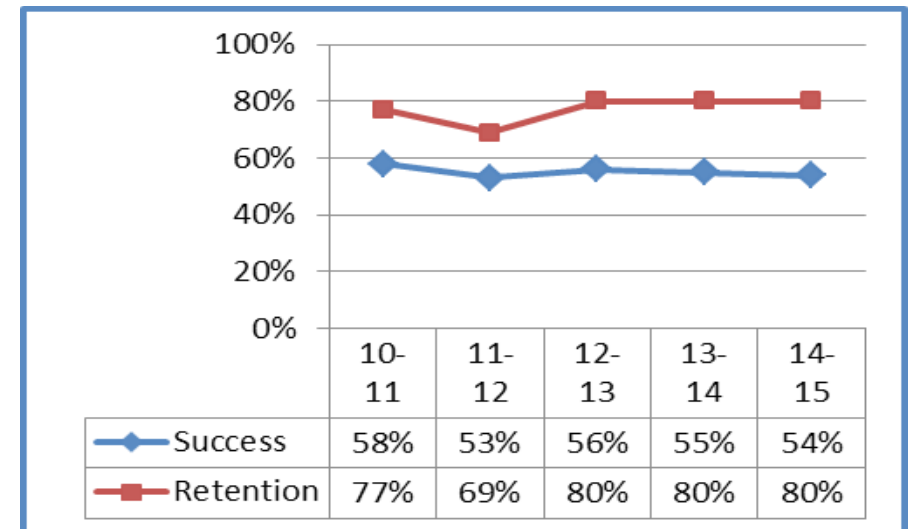
- › Identifying and retaining adjunct faculty to teach. Every semester we must scramble to identify part-time faculty as our current pool finishes grad school and/or finds full-time employment. For the last six semesters we have cancelled classes or asked for waivers for faculty to teach above 67%. The unemployment rate for chemists is low.
- › The success rate continues to be an issue for the program as we attempt ways to improve student success.

#### Action Plan:

- › We must continue to increase the number of major's preparation sections to increase student access to pathways that lead to STEM degrees.
- › Implement and evaluate supplemental instruction for major's preparation courses.
- › Evaluate effects of prerequisite implementation on student success.
- › Maintain our position in the region as the largest community college chemistry program in the Inland Empire.
- › Design an allied health course in general, organic, and biochemistry for CSU transfer nursing students.
- › Test online general education courses for efficacy.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,839	1,611	1,678	1,737	1,801
FTEF	23.06	20.03	22.01	24.81	25.84
WSCH per FTEF	505	523	494	450	451



	10-11	11-12	12-13	13-14	14-15
Sections	84	75	78	91	94
% of online enrollment	4%	3%	4%	7%	3%
Degrees awarded*	5	5	9	8	7
Certificates awarded	N/A	N/A	N/A	N/A	N/A

\*These degrees are in chemistry.

## Individual Data Sheets By Division

# SCIENCE DIVISION (INSTRUCTION) *(cont.)*

### GEOGRAPHY – 2014-2015

#### Description:

- › The spatial science of geography examines both physical and cultural landscapes with an emphasis on human-environmental interactions. Geography integrates multiple natural and social sciences and includes the study of: nature and interactions of the atmosphere and the land; plants and animals; earth's waters; weather and climate; earth's dynamic surface; landforms and soils; and human interaction with the physical environment through forms of agriculture, language, religion, and cities.

#### Assessment:

- › FTES numbers have increased from a recession-induced low ebb in 2011-12.
- › Until 2014-15, efficiency rates have remained above the college goal of 525. The recent decline may be attributed to offering an array of new and cross-listed geography courses.
- › FTEF has increased during 2013-14 and 2014-15, potentially demanding additional faculty in the coming years.
- › Success and retention rates have exceeded college averages and, in general, have been stable since 2011-12.

- › The number of degrees awarded must increase.

#### Department Goals:

- › Increase the number of degrees awarded under the new AA-T degree and revised AS degree.
- › Collaborate with other departments to offer service based learning opportunities.
- › Develop learning communities with other disciplines, as well as support for tutors and SI leaders.
- › Increase the number of funded field trips and maintain laboratories with equipment and supplies needed for quality education.
- › Identify study abroad opportunities.
- › Cultivate relationships with four-year institutions and area employers as a means to increase transfer and career opportunities.

#### Challenges & Opportunities:

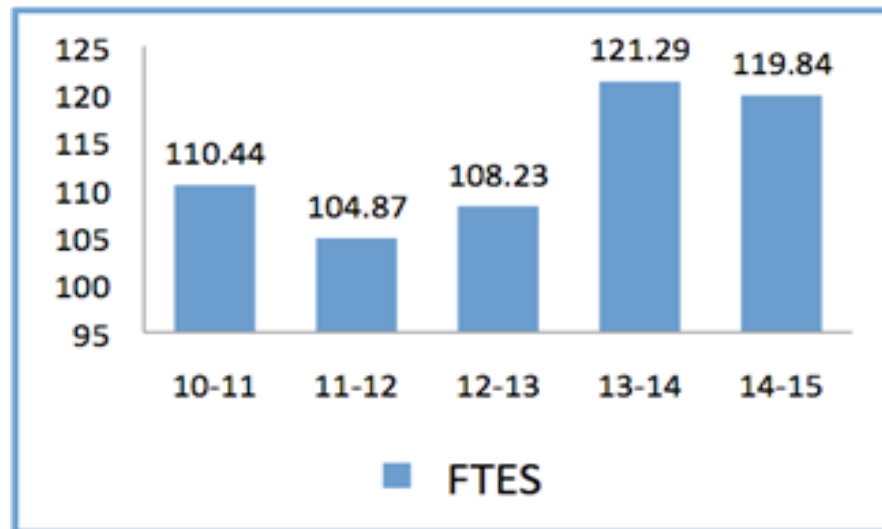
- › The AA-T geography transfer degree should increase the number of degrees awarded, but additional student recruitment is needed.
- › Continue to fund field study opportunities, as budgets remain flat or decline.
- › As the field of geospatial technology grows, emphasize how GIS can be used in the study of geography and environmental science/studies.

- › FTEF growth supports hiring an additional full-time faculty member in the future.

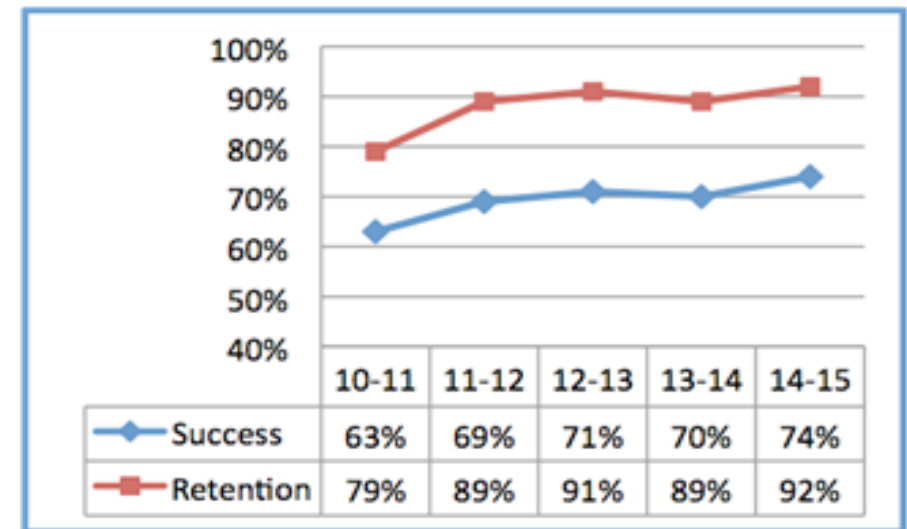
#### Action Plan:

- › Advertise the geography department more effectively, both on and off campus.
- › Increase the number of geography graduates and transfer students by cultivating grant, scholarship, research, internship, and career opportunities.
- › Increase the number of online/hybrid sections in geography.
- › Continue to revise curriculum, including new course development.
- › Hire another full-time geography faculty in the coming years.





	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,124	1,044	1,031	1,179	1,157
FTEF	5.94	5.74	5.74	6.60	7.90
WSCH per FTEF	558	548	566	551	455



	10-11	11-12	12-13	13-14	14-15
Sections	33	33	35	40	49
% of online enrollment	0%	0%	3%	0%	2%
Degrees awarded	2	3	1	2	4
Certificates awarded	N/A	N/A	N/A	N/A	N/A

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 220600

## Individual Data Sheets By Division

# SCIENCE DIVISION (INSTRUCTION) *(cont.)*

### GEOLOGY/OCEANOGRAPHY – 2014-2-15

#### Description:

- › The geology-oceanography department offers courses that examine the Earth's geological history, structure, and economic resources. These courses meet the needs of students: (1) planning to transfer to a four-year institution and to prepare for careers in research, mining, energy, hydrogeology, environmental sciences, hazards, and related fields; (2) fulfilling the undergraduate general education science requirement; and (3) who wish to better understand the planet on which we live.

#### Assessment:

- › FTES, enrollment, and FTEF have increased from 2013-14 to 2014-15.
- › Efficiency has fallen below the institutional goal of 525 since 2013-14, as the department retools courses and schedules.
- › Retention has remained above institutional averages. However, success declined in 2014-15.
- › Geology AS and AS-T degrees have not been awarded, however, curriculum has recently been updated to align with C-ID requirements and should allow students to earn degrees.

#### Department Goals:

- › Hire a full-time faculty, as well as a tutor and supplemental instruction (SI) leader.
- › Maintain curricular and SLO updates to meet changing transfer and career demands, including distance education (DE) courses.
- › Incorporate environmental and energy (fossil fuel and alternative) research and careers into course curriculum.
- › Offer historical, mineralogy, national parks, California, and field courses on a rotating basis to increase options for students, including the number of majors, degrees, transfers, and career-prepared students.
- › Maintain laboratories with equipment and supplies needed for quality education.

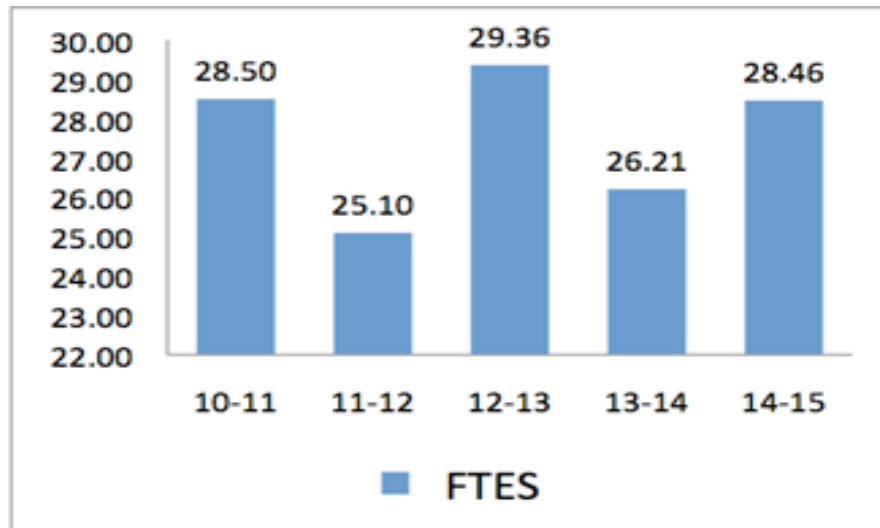
#### Challenges & Opportunities:

- › Lack of a full-time faculty member has curtailed growth, including: FTES, enrollment, FTEF, efficiency, success, retention, and degrees awarded.
- › Renewed hiring within the environmental, energy, and geotechnical sectors should increase student interest in the program.
- › Stagnant budgets over the last decade have curtailed program development.

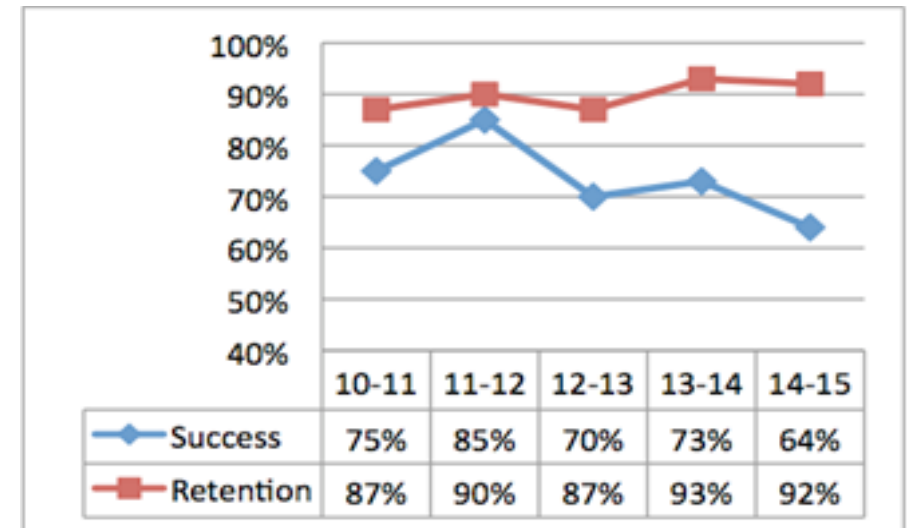
- › Lack of a dedicated tutor and SI leader continues to restrict growth and student success.

#### Action Plan:

- › Hire a full-time faculty member.
- › Offer diverse courses, including DE format, so that students can earn AS/AS-T degrees, successfully transfer to four-year institutions, and prepare for geotechnical careers.
- › Coordinate with the institution to increase the department budget for crucial field trip, equipment, tutor, and SI leader expenses and services.
- › Increase the visibility of the program and better link it with other SBVC science and CTE programs, as well as off-campus entities.
- › Pursue grant and scholarship opportunities to better prepare students for four-year schools and geotechnical industries.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	485	251	289	268	286
FTEF	2.36	1.25	1.48	1.98	2.18
WSCH per FTEF	617	588	595	397	392



	10-11	11-12	12-13	13-14	14-15
Sections	14	8	11	15	16
% of online enrollment	0%	0%	9%	8%	0%
Degrees awarded	0	0	0	0	0
Certificates awarded	N/A	N/A	N/A	N/A	N/A

## Individual Data Sheets By Division

# SCIENCE DIVISION (INSTRUCTION) *(cont.)*

### **GEOGRAPHIC INFORMATION SYSTEMS – 2014-2015**

#### Description:

- › The GIS certificate is designed to provide the skills and knowledge necessary for immediate entry-level employment for persons interested in Geographic Information Systems (GIS) and automated mapping technology. The GIS certificate provides a foundation for transfer to four year and graduate education within the fields of GIS, geography, remote sensing, environmental and earth sciences.

#### Assessment:

- › FTES and enrollment rates have declined since 2012-13, possibly due to curricular updates. On- and off-campus recruitment efforts must be increased. This may be partially addressed through Perkins and CTE Enhancement grants.
- › Success and retention rates have increased since 2011-12.
- › Program lacks a full-time faculty assigned 100% to this discipline.
- › Efficiency will increase with a larger student population. This may be addressed through ongoing grant activities.

#### Department Goals:

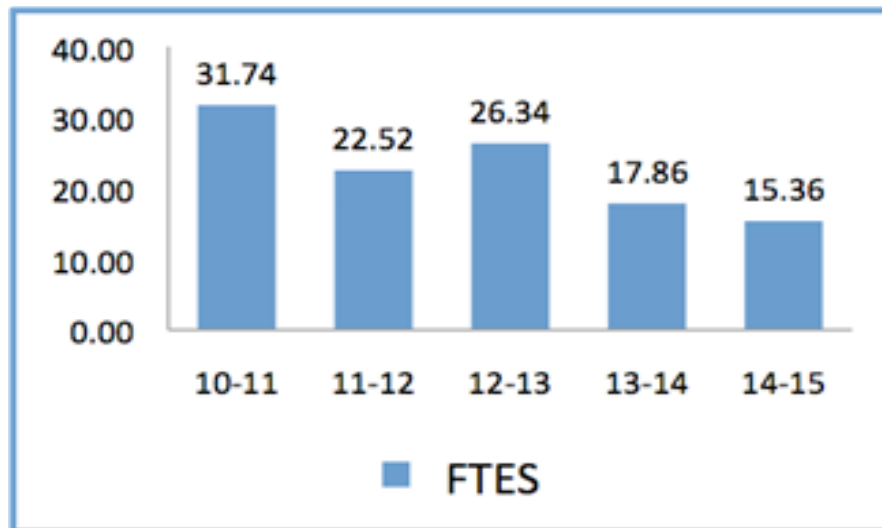
- › Provide students with the skills needed to enter geospatial technology related fields.
- › Maintain laboratories with equipment and supplies needed for quality education.
- › Advocate for full time faculty that could be shared with geography and possibly earth science.
- › Use grant funding to increase GIS awareness on and off campus.
- › Develop a service based learning course.
- › Increase student participation in GIS related events.
- › Cultivate additional internship and employment opportunities.
- › Expand online and hybrid courses.

#### Challenges & Opportunities:

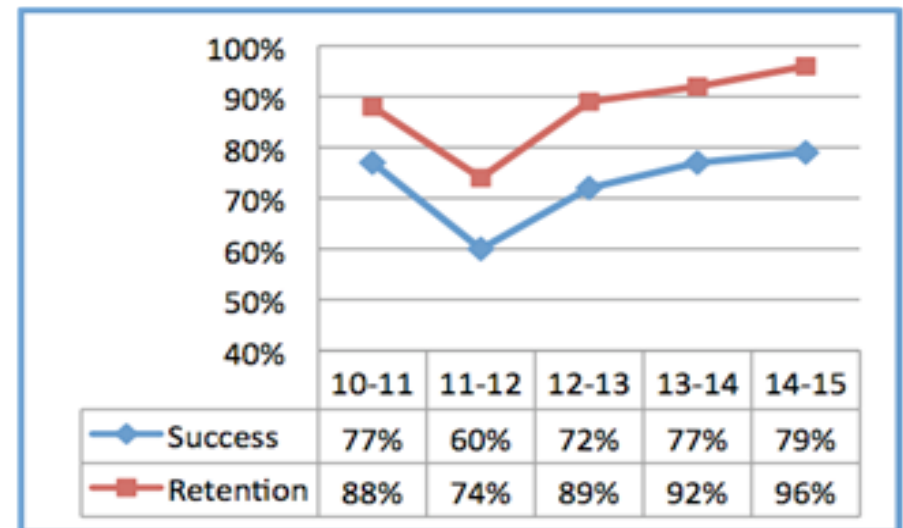
- › Increase awareness of entry-level geospatial technology courses for non-GIS certificate oriented students.
- › Strengthen partnership with local high schools, offering entry-level GIS courses, including ROP programs.
- › Leverage grant funding for GIS tutors and SI leaders to extend lab hours.
- › Lack of computer lab infrastructure to host simultaneous labs creates scheduling issues.
- › Lack of a full-time GIS faculty member.

#### Action Plan:

- › Partner with local agencies and businesses to provide internship opportunities, including short non-credit options through PDC and on campus.
- › Incorporate entry-level classes in other certificate programs, including water supply technology, architecture and environmental design, real estate, and others.
- › Offer colloquium series—open to campus and community—focused on industry based GIS applications.
- › Build on existing faculty, curricular, institutional, and industry relationships to increase student enrollment, transfer, and career placement.
- › Hire a full-time GIS faculty member.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	239	173	187	134	101
FTEF	2.45	2.45	1.95	2.22	1.66
WSCH per FTEF	389	276	405	241	278



	10-11	11-12	12-13	13-14	14-15
Sections	15	15	12	17	20
% of online enrollment	27%	0%	0%	0%	0%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	0	14	7	17	5

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

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## Individual Data Sheets By Division

# SCIENCE DIVISION (INSTRUCTION) *(cont.)*

### NURSING – 2014-2015

#### Description:

- › The nursing department offers a sequence of courses leading to an Associate of Science degree with a major in nursing. Graduates are eligible to take the national licensing exam and become licensed as a registered nurse in the state of California. licensed vocational nurses may also take courses to prepare for RN licensure.

#### Assessment:

- › Program meets the standards of and is accredited by the California Board of Registered Nursing (BRN) and the Accreditation Commission for Education in Nursing (ACEN) formerly NLN.
- › FTES increased from 40 students to 54 students admitted in Spring 2015 and 57 students admitted in Fall 2015 due to Enrollment & Growth Grant 2014-2015.
- › NCLEX licensing exam year to date pass rate for 2014-2015 is 80.77%.

#### Department Goals:

- › To have state of art technology that supports student learning for the discipline.

- › To improve student success rate to greater than or equal to 94% in program.
- › As per ACEN and BRN recommendations to have sufficient staff for student success.
- › Faculty to continue to expand knowledge and skills to remain current with advancing practice.
- › Maintain qualified and consistent adjunct clinical faculty.
- › To have adequate space, adding more skills lab space, to provide for expectations by accrediting agencies ACEN and BRN for increase use of technology and simulation.
- › To hire nursing counselor for remediation from Enrollment & Retention Grant.
- › Increase incorporation of human-patient simulation as per BRN and ACEN recommendation and provide more training for faculty.

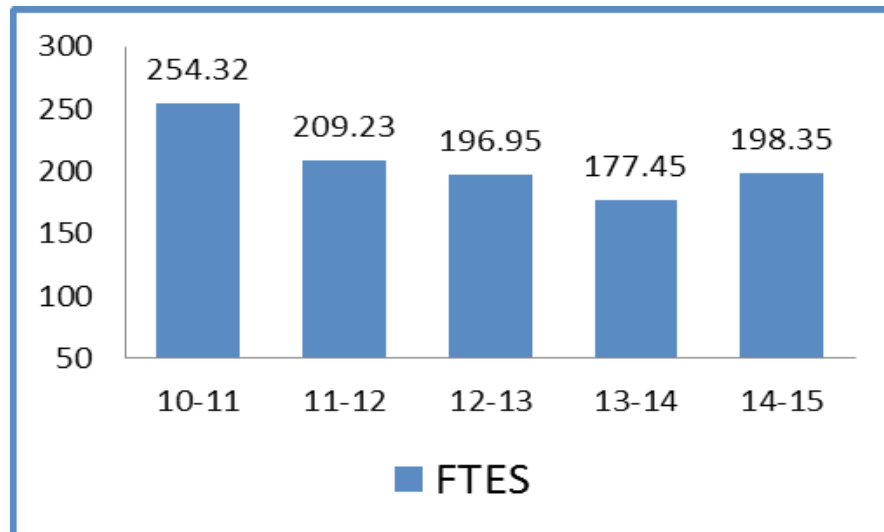
#### Challenges & Opportunities:

- › Improving the NCLEX pass rate.
- › Funding for professional development.
- › Expanding clinical sites.
- › Incorporation human-patient simulation into all courses.
- › Seeking a half-time simulator technician support specialist as recommended by BRN and ACEN.

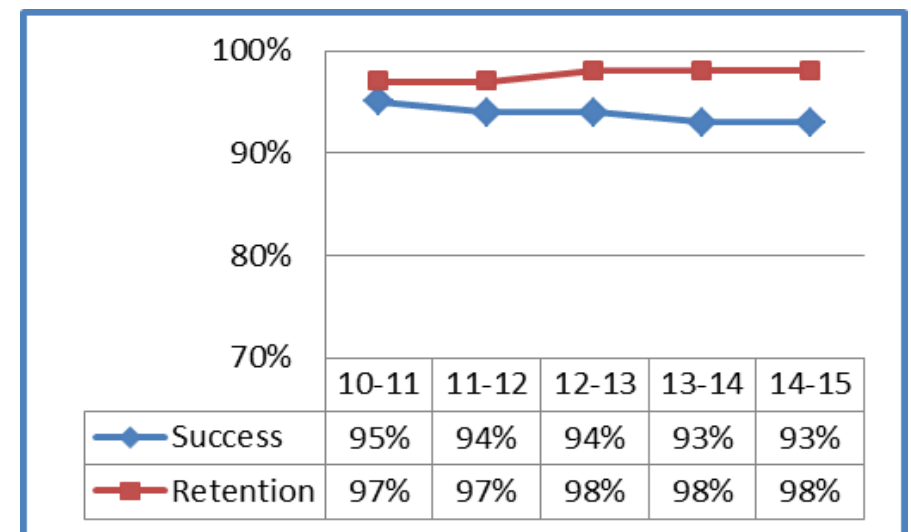
- › Funding from Enrollment & Growth Grant for HESI examinations and remediation materials for all courses.
- › Finish curriculum revision by end of fall 2015.
- › Continue conversations with institutions to provide pathways to earn a Baccalaureate in Nursing (BSN).

#### Action Plan:

- › Develop evidence-based skills in writing and revising NCLEX-style test items.
- › Curricular innovations to help students build skills and knowledge.
- › Identify professional development opportunities to improve faculty exposure to advancing practice.
- › Complete curriculum revision fall 2015 with initiation fall 2017.
- › Work with community to build clear pathways from high school to RN to BSN.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,326	1,122	1,047	952	1,050
FTEF	30.03	30.28	29.98	29.56	32.16
WSCH per FTEF	254	207	197	180	185



	10-11	11-12	12-13	13-14	14-15
Sections	66	64	62	57	58
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	83	87	76	73	58
Certificates awarded	N/A	N/A	N/A	N/A	N/A

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

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## Individual Data Sheets By Division

# SCIENCE DIVISION (INSTRUCTION) *(cont.)*

### PHARMACY TECHNOLOGY – 2014-2015

#### Description:

- › The program prepares students to assist pharmacists as pharmacy technicians in community or institutional pharmacies by providing medications and healthcare products to patients. The program also prepares students to pass the Pharmacy Technician Certification Board exam. A pharmacy technology certificate requires 24-36 units, including prerequisites of BIOL 155, ENGL 015, and MATH 090 with two semesters of pharmacy technology courses. The AS degree has the addition of general breadth requirements.

#### Assessment:

- › FTES and enrollment have decreased due to the combined effects curricular changes requiring additional prerequisites.
- › Efficiency has declined as a result of smaller class sizes brought about changing curricular requirements needed to meet ASHP accreditation.
- › Success and retention have slightly declined due to a more rigorous program.
- › New curriculum with prerequisites started in fall 2013 to meet accreditation standards has impacted enrollment.

#### Department Goals:

- › Hire a full-time faculty as load will increase after ASHP accreditation.
- › Continue development of an accreditation action plan.
- › Finalize informational brochures for the program.
- › Improve the PHT 067 courses, as well as the modified PHT 062, PHT 070, and PHT 072 courses in 2015-2016.
- › Successfully complete the ASHP accreditation process.
- › Procure a faculty office and dedicated laboratory facility.
- › Expand community pharmacy and institutional pharmacy clinical internship opportunities for students.
- › Maintain laboratories with equipment and supplies needed for quality education.

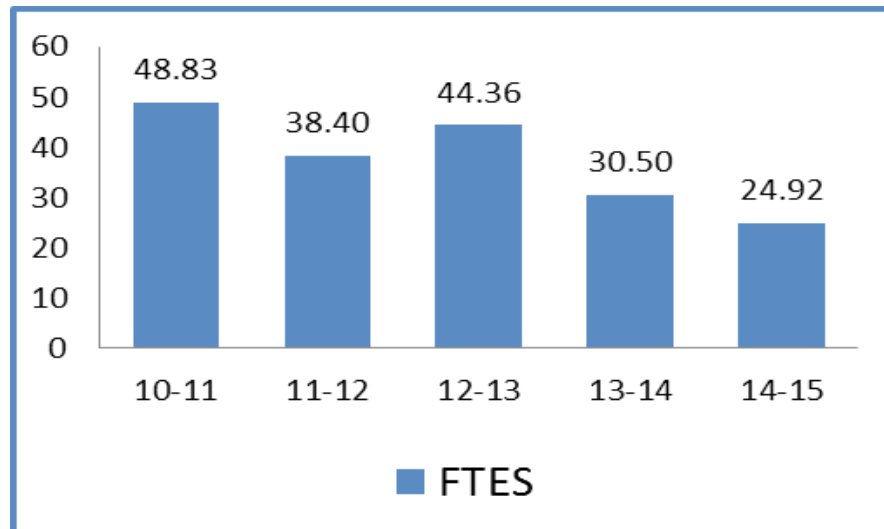
#### Challenges & Opportunities:

- › There are no full-time faculty for this program making student success difficult.
- › Pharmacy technology programs will be required to be accredited and the program will have increased needs to meet ASHP accreditation standards.
- › For-profit institutions offering pharmacy technology are closing in the face of the need for ASHP accreditation/

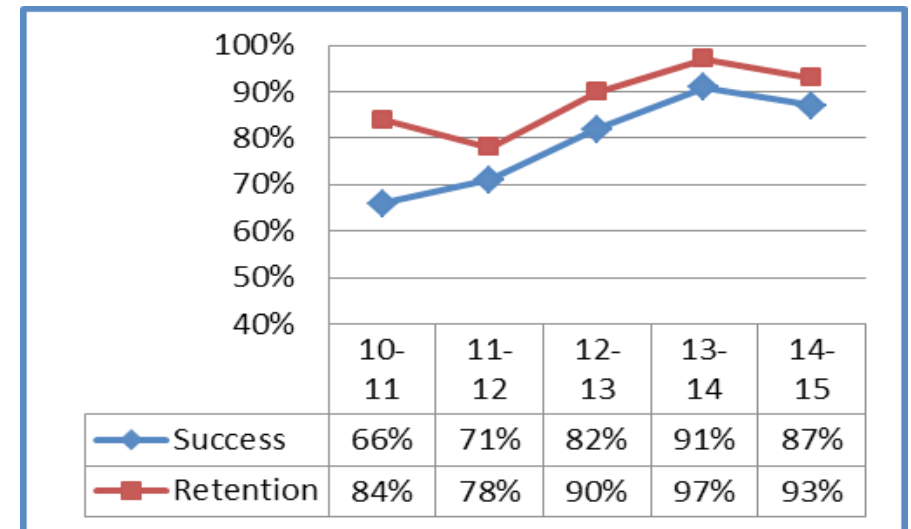
- › Our institution needs to provide greater job placement assistance.
- › Lack of a dedicated faculty office and student laboratory jeopardizes data privacy, student success, and accreditation status.

#### Action Plan:

- › Provide information sessions on the program and finalize an information packet.
- › Hire a full time faculty.
- › Become the premier pharmacy technology program in the Inland Empire.
- › Work with ASHP and PTEC to become fully accredited.
- › Expand the advisory committee to establish a greater network for students and our graduates.
- › Work with community and/or other CTE programs.
- › Create a pathway from high school to the pharm tech program.
- › Make changes to curriculum to meet ASHP standards.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	351	281	335	194	167
FTEF	3.02	3.02	3.35	3.18	3.18
WSCH per FTEF	485	381	397	288	235



	10-11	11-12	12-13	13-14	14-15
Sections	12	12	14	12	12
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	6	13	6	20	8
Certificates awarded	21	6	9	23	2

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 122100

## Individual Data Sheets By Division

# SCIENCE DIVISION (INSTRUCTION) *(cont.)*

### PHYSICS/ASTRONOMY – 2014-2015

#### Description:

- › The physics/astronomy/engineering department offers general education physics/astronomy courses; a physics sequence for majors in the life sciences, biology, pre-nursing/medicine, and allied health programs; a physics sequence for majors in astronomy, chemistry, engineering, geology, physics, and other physical sciences; and engineering courses. The department operates a planetarium and an observatory supporting instruction and offering astronomy programs for local schools and community.

#### Assessment:

- › FTES, enrollment, and WSCH/FTEF increased steadily, on average, through 13-14 since the slight drop in 11-12 resulting from section cutbacks and budget restrictions.
- › Retention rates generally increased and leveled off through 13-14; success rates dropped slightly from 11-12 to 13-14.
- › With new sections opening, FTES, enrollment, and WSCH/FTEF have increased in 13-14 after dropping significantly in 11-12 due to cutbacks.

- › Number of degrees awarded has remained fairly constant, but with a slight, steadily increase since 10-11.

#### Department Goals:

- › Create more tutoring/workshop opportunities for department students through the student success center and the SI program.
- › Strengthen/build the engineering program and offer more Engineering courses.
- › Offer Physics 101 as a hybrid course, with online lectures and on-campus labs and/or tests.
- › Maintain lab equipment and supplies for quality education.
- › Update the physics/astronomy labs and their related equipment needs.
- › Incorporate the use of on-line practice problem-solving software as Mastering Physics or Web-Assign in upper level courses.

#### Challenges & Opportunities:

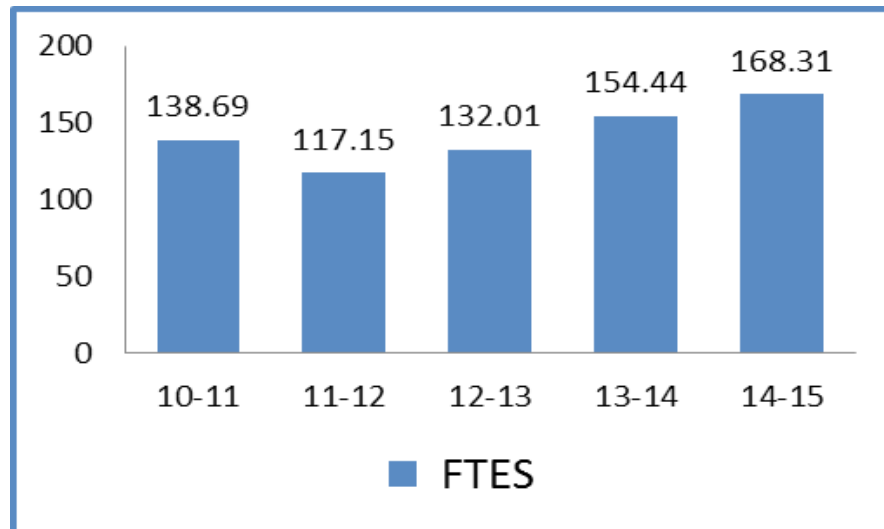
- › Develop strategies to increase retention and student success rates.
- › Develop strategies to increase the productivity of classes determined by WSCH/FTEF.
- › Develop ways to encourage more students to

major in the physical sciences to increase the number of degrees awarded.

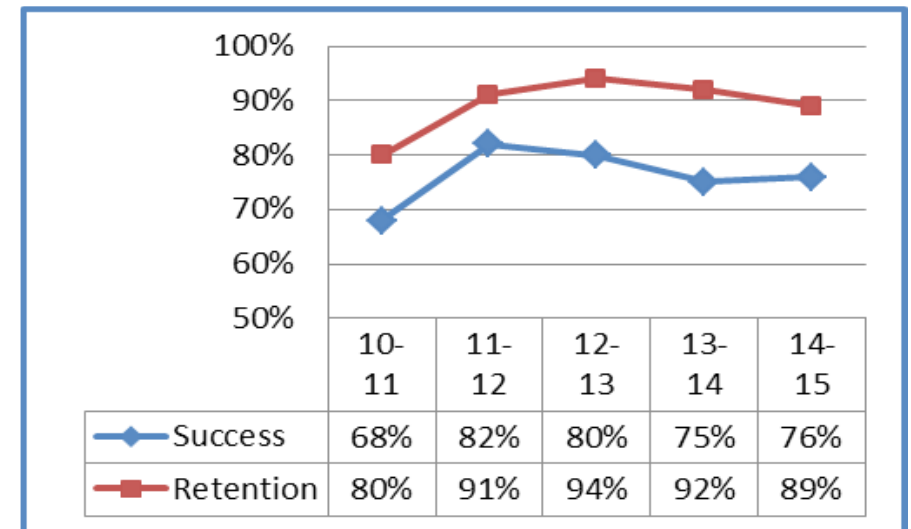
- › Enhance the department's curriculum with more engineering-related offerings and encourage more pre-engineering students to attend SBVC.
- › Encourage more pre-med students to attend SBVC.

#### Action Plan:

- › Consult other on-line instructors to formulate a hybrid Physics course.
- › Update/revise the physics/astronomy labs and related equipment with department lab technician.
- › Work with local universities to enhance the department curriculum with more engineering courses and to encourage more pre-engineering and pre-med students to attend SBVC.
- › Incorporate and support the operation of the SI program in all physics, astronomy, and engineering courses.
- › Test existing practice problem-solving software and consult with other colleges using such software to determine the most appropriate software for use at SBVC.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	814	604	656	771	797
FTEF	6.08	5.95	6.29	7.20	8.42
WSCH per FTEF	684	591	630	643	599



	10-11	11-12	12-13	13-14	14-15
Sections	36	26	27	33	38
% of online enrollment	6%	8%	7%	6%	5%
Degrees awarded	0	2	1	4	1
Certificates awarded	N/A	N/A	N/A	N/A	N/A

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

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## Individual Data Sheets By Division

# SCIENCE DIVISION (INSTRUCTION) *(cont.)*

### PSYCHIATRIC TECHNOLOGY – 2014-2015

#### Description:

- › The psychiatric technician program is a one year program consisting of two, 18 weeks (17 units each) and one, 10 week term summer session (12 units). The program content areas include: nursing science, developmental disabilities and mental disorders. Twenty to thirty students are admitted each fall and spring semesters. The program is accredited by the Board of Vocation Nurses and Psychiatric Technicians. Upon completion, the students are eligible to take the BVNPT licensing exam.

#### Assessment:

- › Retention and success rates are high and stable.
- › State licensing first-time pass rates have been 95% for January through December 2014 testing dates.
- › Retention and success rates exceed the college average.
- › Shows a four-year period of small decrease in FTES.

#### Department Goals:

- › Continue prerequisites at a college level.

- › Expand the multimedia collection for students and faculty use.
- › Maintain first time pass rate at 95% or higher the next three years.
- › Encourage faculty to improve and expand knowledge, skills, and teaching approaches.
- › Provide adequate funding to meet program needs.

#### Challenges & Opportunities:

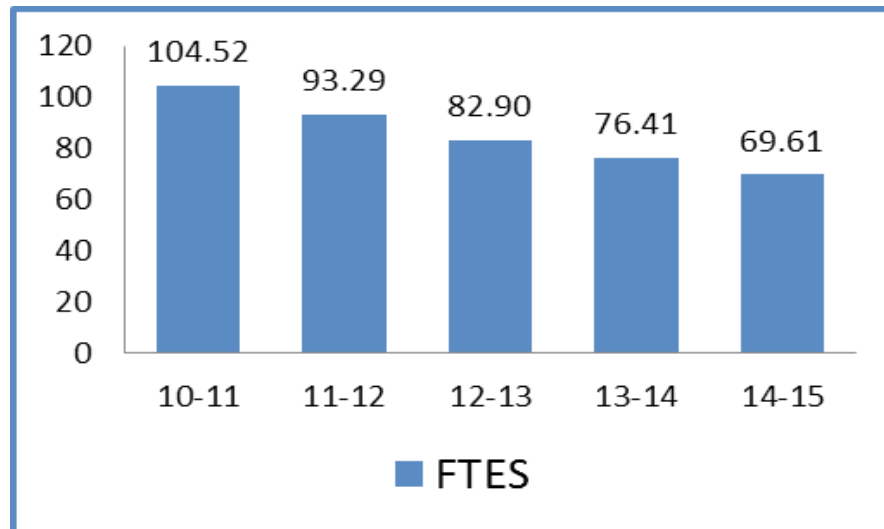
- › Continue to meet the faculty to student ratio of 1:10 as required by our clinical facilities.
- › Build a pool of adjunct faculty. Knowledgeable, experienced and qualified faculty are difficult to find.
- › Enhance support for annual advisory meetings.
- › Utilize Perkins funds to support our program's supply budget.
- › Strengthening the partnerships between SBVC and community agencies.
- › Utilize funding for professional development, i.e., for all full time instructors to attend our association's annual meeting.

#### Action Plan:

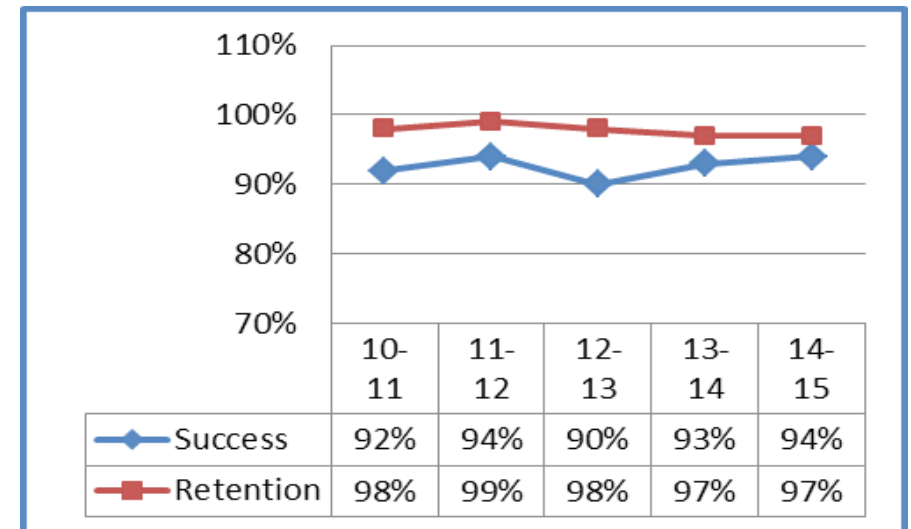
- › Utilize funding and support for annual advisory meetings.
- › Seek qualified instructors with experience and

expertise in areas of developmental disabilities, mental disorders and nursing science.

- › Strengthen advisory committee by providing liaisons for increased clinical sites.
- › Update equipment and software used in the course.
- › Evaluate courses offered each semester to ensure degrees and certificates can continue to be earned by students in a reasonable amount of time.
- › Distribute our program brochure to prospective students.
- › Find funding source for required fields trips.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	101	92	80	74	67
FTEF	12.18	11.88	11.18	10.46	9.74
WSCH per FTEF	257	236	222	219	214



	10-11	11-12	12-13	13-14	14-15
Sections	4	4	4	4	4
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	15	8	19	16	18
Certificates awarded	38	37	36	28	34

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 123900

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION)

### ADMINISTRATION OF JUSTICE – 2014-2015

#### Description:

- › The administration of justice department strives to provide students with the legal, ethical, and educational background necessary to pursue a career in a criminal justice-related field and to successfully transition into a four-year academic program.

#### Assessment:

- › Enrollment recovering from severe cuts in 2011-12.
- › WSCH per FTEF significantly above college norm.
- › FTEF demonstrates need for more faculty.
- › Retention and success rates consistently high.
- › Online access between 25-30%.
- › Degrees and certificates awarded significantly higher in 2014-15.
- › Charts demonstrate more faculty needed.

#### Department Goals:

- › Direct more students into more rigorous AS-T degree which began in FA13.
- › Continue to offer more online courses as funding increases.
- › Increase diversity of program adjunct faculty.

- › Revise and update courses for relevancy and currency to comply with C-ID requirements.
- › Recover two more sections lost to budget cuts.
- › Maintain high retention rates.
- › Update SLOs for content review next school year.

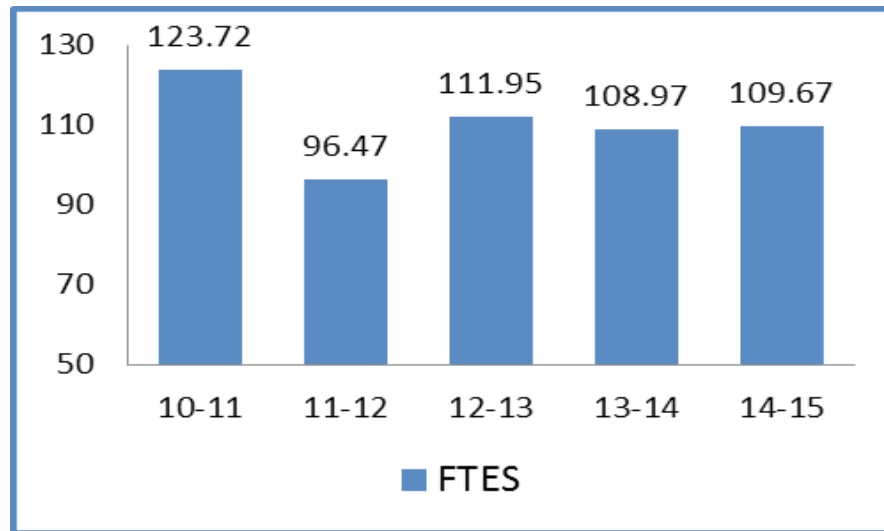
#### Challenges & Opportunities:

- › Maintain academically rigid program while keeping high retention and success rates.
- › Continue course revisions as directed by C-ID.
- › Continue fighting for sections lost in budget cuts.

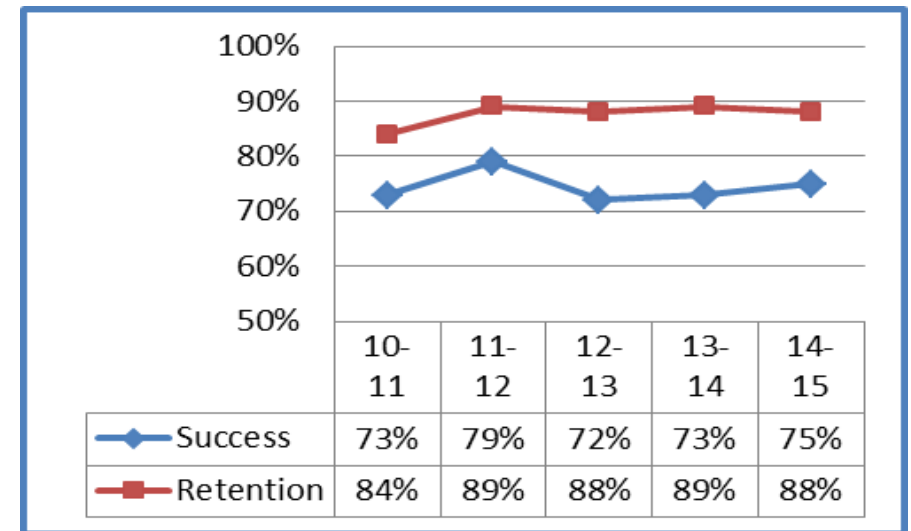
#### Action Plan:

- › Give students campus resource lists, especially for tutoring in reading and writing skill enhancement.
- › Hold advisory committee meeting in SP16.
- › Hire first black male adjunct faculty in SP15.
- › Hire first female Latina adjunct faculty to start in SP16.
- › Continue course SLO assessment every semester until directed otherwise.
- › Go over course and program SLO assessments with faculty each semester making changes as necessary.
- › Update and publish the AOJ/Corrections color brochure widely used by students and counselors.





	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,235	934	1,095	1,081	1,098
FTEF	6.00	4.60	5.40	5.40	5.60
WSCH per FTEF	619	629	622	605	588



	10-11	11-12	12-13	13-14	14-15
Sections	30	23	27	27	28
% of online enrollment	23%	17%	30%	30%	25%
Degrees awarded	23	50	44	46	54
Certificates awarded	18	26	21	16	27

\*A.A.-T Degrees were established in 2013.

TOP Code: 210500

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### ANTHROPOLOGY – 2014-2015

#### Description:

- › The origins, physical and cultural development, technologies, social customs, and beliefs of mankind. Anthropology is the study of humanity in all times and places. As such, it has the broadest scope of any of the social sciences. The program offers course work in the four subspecialties of anthropology and other areas related to art, religion and indigenous populations. With the goal of understanding people in all parts of the world, anthropology is useful to anyone living or working in a multicultural environment and provides students with survival skills for the global community.

#### Assessment:

- › FTES have increased yearly to regain their position prior to budget cuts, and from 2013-14 there was a 21.7% increase.
- › Efficiency is maintained above the institutional average and the program has load for two full time instructors.
- › Retention rates appear stable just below 90%.
- › Success rates have increased but are close to the five-year average of 62%. Thirty-five percent of sections are offered online.

- › The institution awarded one AA-T anthropology degree during the first year that the degree became available to students.

#### Department Goals:

- › Maintain retention and improve success rates.
- › Continue to assess and evaluate SLOs with an emphasis on increasing student success rates.
- › Continue to assess equipment and supply needs.
- › Keep faculty in the program informed of professional development related to technology and student success.

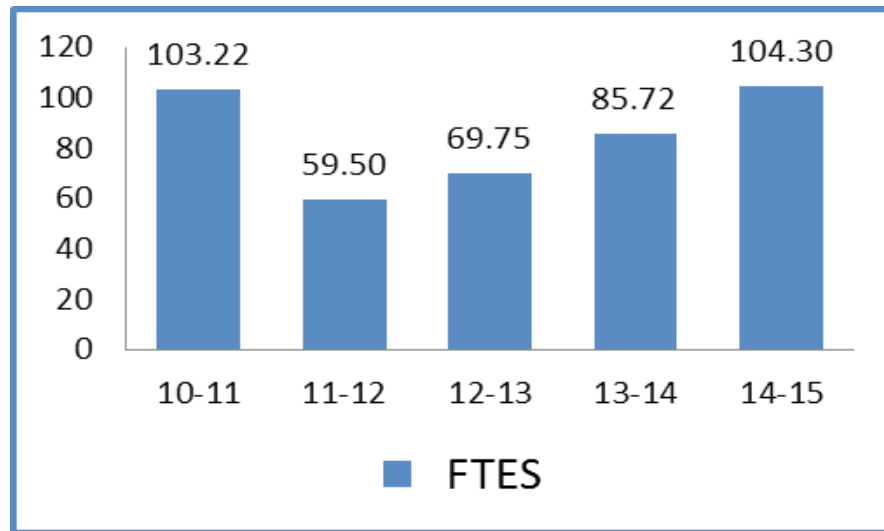
#### Challenges & Opportunities:

- › A significant challenge facing the department is lack of a budget. The request for an annual departmental budget was approved and ranked highly (2nd) through the program review process in 2014-15, but funding has not yet been institutionalized. A budget will allow for the building and maintenance of instructional equipment and supplies to contribute to student success.

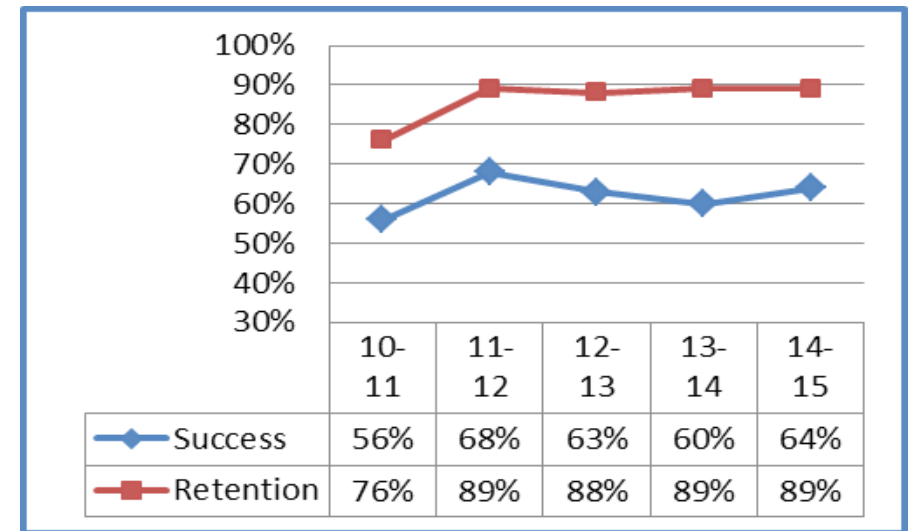
#### Action Plan:

- › Resubmit, if necessary, a program budget request to program review.

- › Continue to follow the articulation process of new courses.
- › Continue to send Anthro bulletins to faculty and update faculty Blackboard shell.
- › Seek to hold departmental meetings at part-time orientation.
- › Continue to promote the AA-T anthropology degree.
- › Update program website.
- › Seek partnerships for field projects and continue improving and discussing amongst faculty experiential learning opportunities.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1034	595	681	27	1045
FTEF	5.20	2.80	3.20	4.20	5.20
WSCH per FTEF	595	638	654	570	602



	10-11	11-12	12-13	13-14	14-15
Sections	29	17	18	27	34
% of online enrollment	52%	36%	44%	37%	35%
Degrees awarded*	N/A	N/A	N/A	1	
Certificates awarded*	N/A	N/A	N/A	N/A	

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### CHILD DEVELOPMENT – 2014-2015

#### Description:

- › The child development department has an academic as well as a vocational orientation which prepares students for transfer and immediate employment. The department currently has eight certificates and three degrees, including an ECE AS-T degree. All programs and respective courses went through content review in 2012-13 and are curriculum and board approved. All courses in the TMC are C-ID approved. The department has strong articulation agreements and partnerships with secondary institutions, public and private universities and community agencies, including a special MOU with ULV. Currently, there are three full-time faculty and 65% of courses are taught by adjunct faculty. Child development has two state contracts. Courses are offered to provide access to students during the day, in the afternoons, on Fridays and Saturdays and in a hybrid and ITV formats. SLOs/PLOs are assessed regularly.

#### Assessment:

- › Increase in section offerings from 74 in 12-13 to 76 in 14-15—FTES are down slightly to 260.31.

Efficiency has dropped to 536, but is still higher than average/

- › Success rates are at 70%. Retention rates remain high at 89%.
- › Sixteen percent of courses were offered in a hybrid format—50% increase since 10-11.
- › Degrees awarded have increased with 33 degrees awarded doubling the number of degrees awarded since 10-11.
- › Fifty certificates awarded in 13-14 remaining very high.
- › There is enough load for six full-time faculty—currently, there are three FT faculty—65% of sections are taught by adjunct faculty.

#### Department Goals:

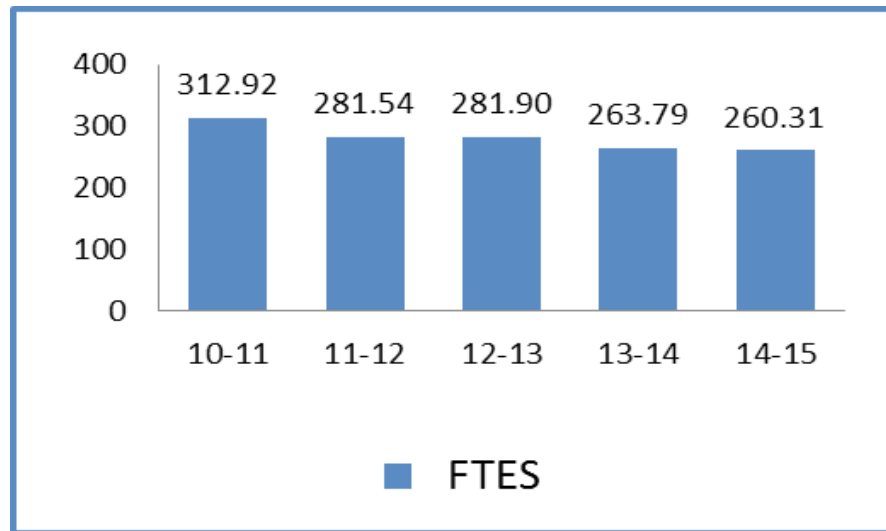
- › Continue to Increase course offerings especially feeder sections to meet the needs in the community for work, career attainment and transfer (Access).
- › Continue to maintain and increase partnerships in the community, such as California ECE Mentor Program (state contract), Director Meetings, CD Planning Council, Special Needs Committee, CD Training Consortium (State Contract), University of La Verne CD BA program, Head Start Friday

program, Adult Ed and ROP and other university including CSUSB Articulations, etc. (Access and Student Success).

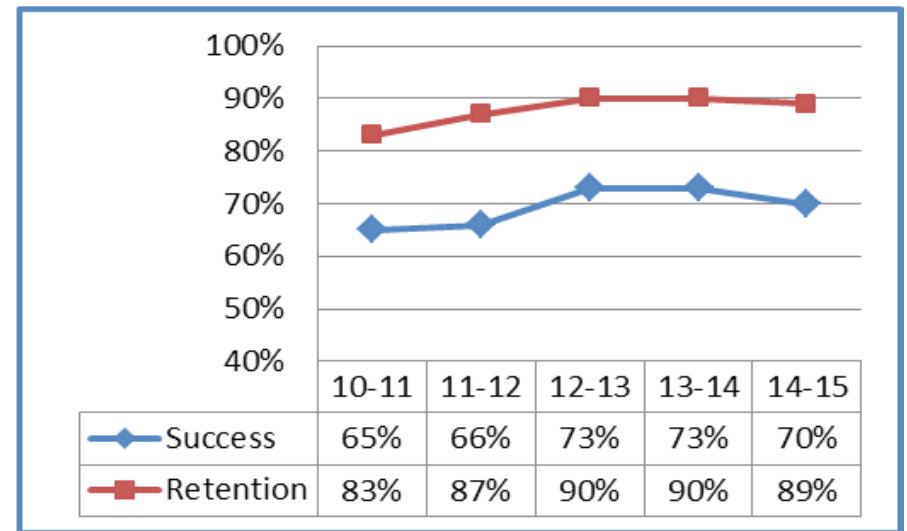
- › Hire a full-time faculty to help with the departmental work, load, assessment, curriculum, and partnerships acquire Perkins funding to meet the needs of students, and bring back Education Program (Student Success).

#### Challenges & Opportunities:

- › Decrease in full-time faculty/increased work load since 2009.
- › Departmental advising for eight certificates and three degrees is a challenge—lost education program due to lack of FT faculty.
- › Maintaining departmental responsibilities including vocational and academic responsibilities including articulation, advisory boards, community partnerships, site visits, vocational and academic advising and maintaining state contracts.
- › Many partnerships are beneficial to students including work, transfer, student support and career advancement, but increase work load for faculty/ need more support for students (Success).



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	2,869	2,499	2,494	2,336	2,293
FTEF	15.92	13.74	14.01	13.49	14.57
WSCH per FTEF	590	615	604	587	536



	10-11	11-12	12-13	13-14	14-15
Sections	86	73	74	71	76
% of online enrollment	8%	8%	12%	10%	16%
Degrees awarded	16	12	26	31	33
Certificates awarded	29	22	46	55	50

Award Source: [http://datamart.cccco.edu/Outcomes/Program\\_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

TOP Code: 1305XX

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### CHILD DEVELOPMENT – 2014-2015 *(cont.)*

#### Action Plan:

- › Continue to maintain and increase partnerships and contracts (Access and Student Success).
- › Increase pipeline feeder sections into programs (Access).
- › Offer all courses in certificate and degrees in 1-2 years and maintain quality programs (Access & Student Success).
- › To increase support resources for students—CD meetings, brochures, smooth career pathway, academic advising to ensure success, grants (Student Success).
- › Hire full-time faculty to help with department work, education program, Perkins, partnerships (Student Success).





## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### CORRECTIONS – 2014-2015

#### Description:

- › The corrections department strives to provide our students with the legal, ethical and educational background necessary to pursue a career in a corrections-related field.

#### Assessment:

- › Enrollment rebounding from extreme budget cuts in 2011-12 and 2012-13.
- › Student retention rates still significantly above college averages.
- › Student success rates at state averages.
- › WSCH per FTEF above college goals.
- › FTEF shows need for a full-time faculty.
- › Online enrollment significantly higher (33%) and above college levels.

#### Department Goals:

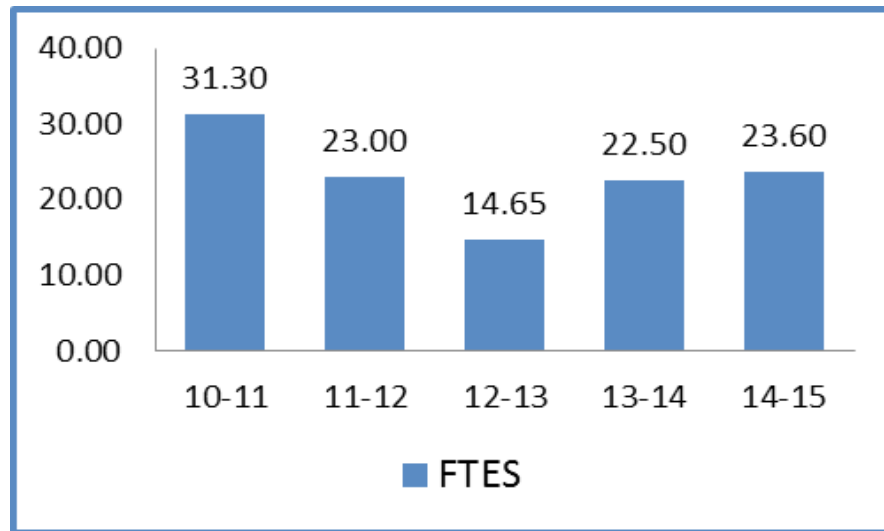
- › Continue SLO assessments and make improvements as needed.
- › Maintain C-ID designation on CORREC 101.
- › Increase certificates achieved.
- › Increase diversity of instructional staff.
- › Maintain/increase daytime and online class offerings.

#### Challenges & Opportunities:

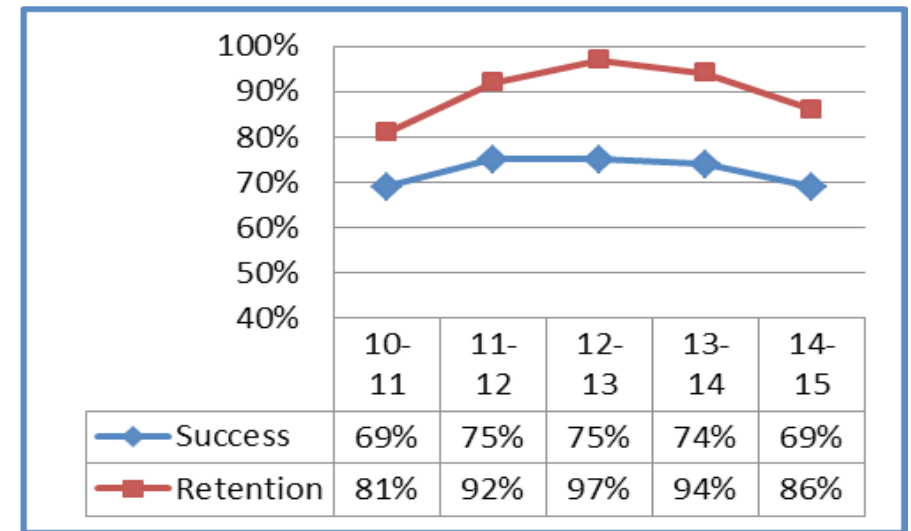
- › It will be a challenge to maintain such high student success and retention rates with more effort on success.
- › Funding drives section offerings.
- › Hard to market program with no funds while competing with for-profit tech schools.
- › Keeping C-ID designation as statewide elements change.

#### Action Plan:

- › Give each student lists of college resources for tutoring to help low reading and writing skills improve.
- › Update AOJ/Corrections color brochure.
- › Add more online classes.
- › Hired African American instructor beginning SP15.
- › Hire Hispanic bilingual female instructor to begin SP16.
- › Continue course/program SLO assessment each semester until notified otherwise.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	313	225	144	225	236
FTEF	1.60	1.20	0.80	1.20	1.20
WSCH per FTEF	587	575	549	562	590



	10-11	11-12	12-13	13-14	14-15
Sections	8	6	4	6	6
% of online enrollment	0%	17%	0%	0%	33%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	2	6	2	3	3

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### ECONOMICS – 2014-2015

#### Description:

- › Economics provides excellent preparation for careers in industry, government, and many professions including management, law, education, public administration and consulting. Economics is concerned with how people produce various goods and services, with scarce resources, and how these are distributed within society, now and in the future.

#### Assessment:

- › Since 2011-2015:
  - › FTES has grown by 13%.
  - › Duplicated enrollment has increased 12%.
  - › FTEF has improved by 8%.
  - › WSCH per FTEF increased by 4%.
  - › Success rates have remained similar high 60s to low 70s.
  - › Retention rates have also remained fairly constant at high 80s to low 90s.
  - › The percent of online enrollment has improved by five percentage points.

#### Department Goals:

- › To work with department faculty and curriculum committee to insure all courses transfer for credit to all colleges and universities.
- › To review SLOs for all economic courses.
- › To provide tutors early in the semesters.
- › To continue to select high quality low priced text books.

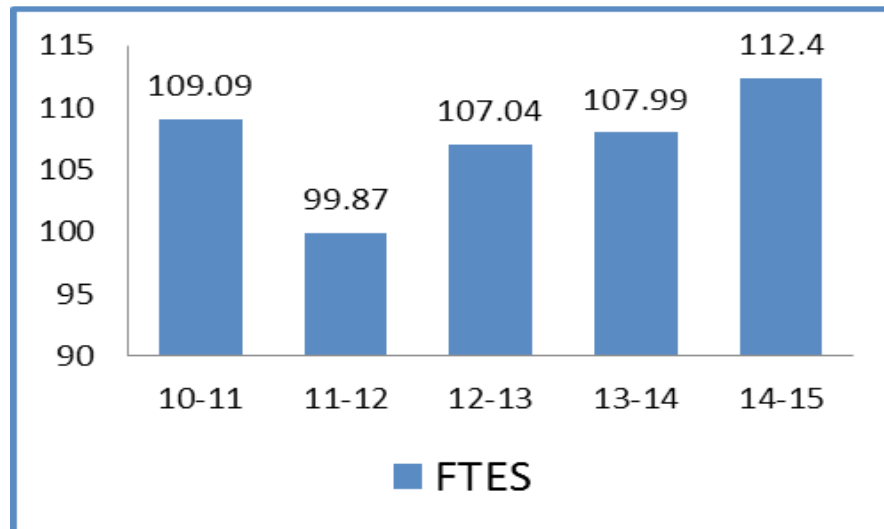
#### Challenges & Opportunities:

- › The biggest challenge is to secure a computer lab for our business and economics statistics classes. The division does not have one single computer lab to support this course and has relied on other divisions for a lab room. This does not always work out well.
- › Our greatest opportunity is to serve the growing number of economics students.

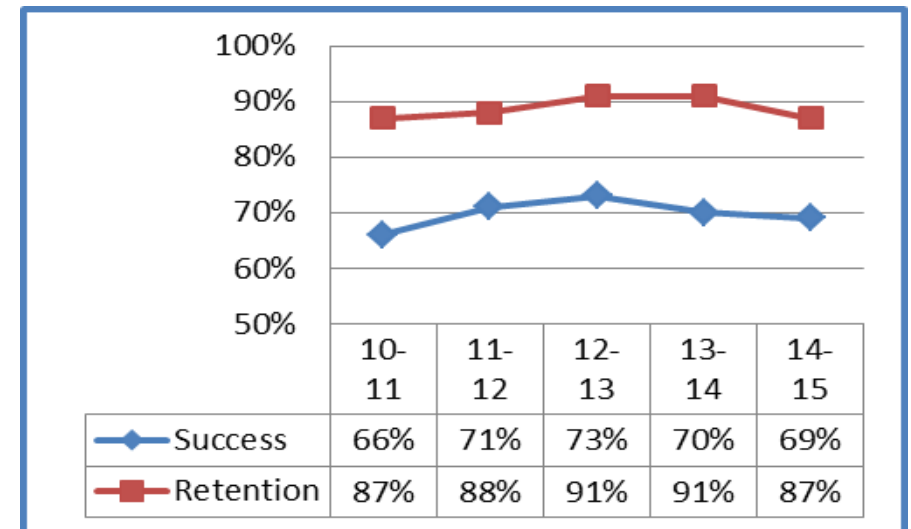
#### Action Plan:

- › To work with colleagues and the program review committee to secure a computer lab for the division.
- › Work with curriculum committee, department and division to insure all courses in economics transfer for credit.

- › Review all SLOs.
- › Work with tutor center so tutors are available.
- › Hold monthly meetings to monitor progress.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,069	982	1,025	1,078	1,104
FTEF	5.34	5.14	4.94	5.34	5.53
WSCH per FTEF	613	583	650	607	609



	10-11	11-12	12-13	13-14	14-15
Sections	28	27	28	30	31
% of online enrollment	29%	30%	36%	33%	35%
Degrees awarded	N/A	N/A	N/A	N/A	
Certificates awarded	N/A	N/A	N/A	N/A	

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### HEALTH EDUCATION – 2014-2015

#### Description:

- › The health education department offers transfer level courses that fulfill general education requirements for local universities and colleges. Additionally, the department courses fulfill a general education requirement for the SBVC associates degrees. Health 101 is a required course for the newly created AA degree starting in fall 2016. Health courses provide students with guidelines for healthy living, which may improve their overall health and quality of life.

#### Assessment:

- › Enrollment slightly declined from 2010-11 to 2011-12 before increasing again starting in 2012-13. The drop in enrollment is consistent with the budget decreases. Enrollment continues to increase as sections are added. Health is a very strong program offering students a way to fulfill the degree requirements without having to exercise.
- › Success rates have remained relatively steady until the 2014-15 year dropping to 63%. Faculty have discussed a possible reasons for decreased success. High text cost is a possible reason for

decreased success. Students are struggling to afford the text. Many students rely on sharing the text, using older versions and/or utilizing reserve texts at library. Retention rates remain steady.

#### Department Goals:

- › To increase number of sections offered as budget allows and demand requires.
- › To provide a diverse course offering to allow for nontraditional students by giving varying times/days/formats for enrollment.
- › To add courses to the pallette of available classes as college increases sections. A possible course to include is holistic health.

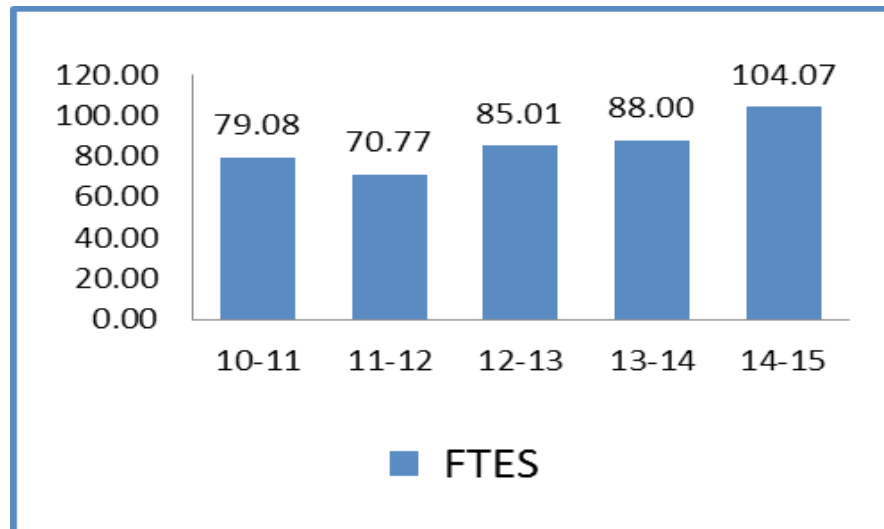
#### Challenges & Opportunities:

- › The variety of courses offered is somewhat limited by the lack of curriculum and section additions.
- › Department needs to hire a replacement position for a retiree with a background as a generalist.
- › Use professional development resources to encourage faculty to develop new courses the represent current trends in health education.
- › Many students are unwilling to participate in “activity” classes so enrollment in health is high. Capture this trend by increasing sections.

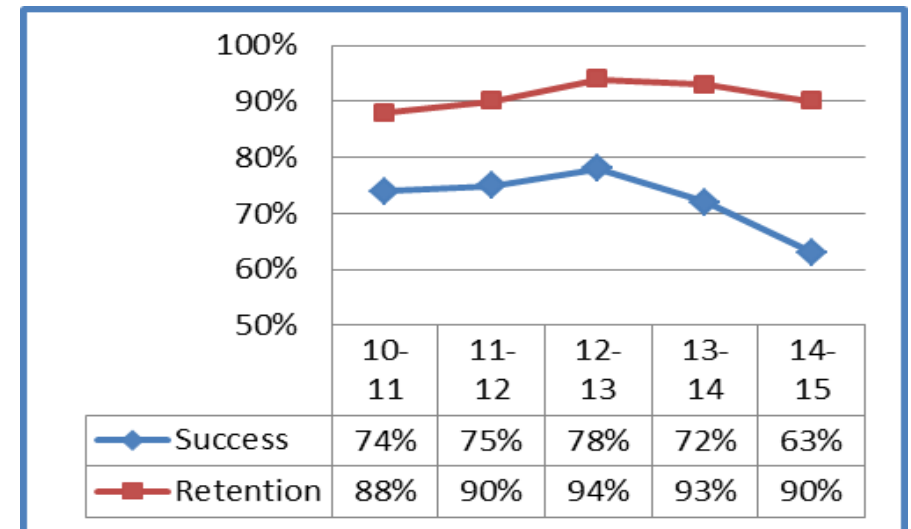
- › Our student population demographics correlate with a higher incidence of lifestyle related illnesses. Education is essential to improve health and wellbeing of students, their families and our community.

#### Action Plan:

- › Develop new courses.
- › Develop relationships with departments across campus to create more collaborative opportunities for healthy lifestyle development.
- › Continue to search for alternative text options to lower cost to student.
- › Network with other departments on campus to help promote enrollment.
- › Hire a new faculty member with diverse expertise to spearhead new curriculum development and enrollment expansion.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	789	709	821	880	1046
FTEF	3.80	3.40	4.00	4.20	5.20
WSCH per FTEF	624	624	638	629	600



	10-11	11-12	12-13	13-14	14-15
Sections	19	17	20	21	27
% of online enrollment	26%	29%	35%	38%	41%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	N/A	N/A	N/A	N/A	N/A

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### HISTORY – 2014-2015

#### Description:

- › The history department offers a variety of transfer level courses to serve a diverse community of learners. Course offerings include US history courses, including two honors courses, which meet the Cal State requirement for American Institutions. Additionally, multicultural courses are offered including Native American history, Chicano history, African American history (2 courses), World history, and an Ethnic Minorities course. We have created a course that analyzes the History of Genocide that was created in partnership with Rialto School District. All of our courses can be used for AA requirements and all transfer to universities. Most importantly, we have developed a transfer history major (AA-T) for our prospective history majors.

#### Assessment:

- › In the past year, we have increased our section offerings from 87 to 94, and we have dramatically increased our FTES from 309.56 to 333.14. Duplicated enrollment reflects this increase from 3,099 to 3,335. WSCH/FTEF has stayed at essentially the same level (580-574).
- › In terms of retention, we have stayed the same at

the impressive level of 88%. These statistics show that the department does an excellent job keeping students engaged in their attempts to complete the course. Success rates dropped a small amount from 68% to 65%, but that can be explained by the increased numbers of online sections, which are known campus-wide to have a lower success rate.

- › This is an extremely successful department in terms of our enrollment, retention, and success rates considering that all of our coursework is transfer level and all courses meet degree requirements.

#### Department Goals:

- › We met several department goals in a productive year.
- › We updated all coursework for program review, at least a semester early in all cases.
- › We had our AA-T History Degree accepted through the curriculum process.
- › A new course on Genocide has been developed, in a partnership with Rialto Unified School District.
- › Two new adjunct were hired to help support the increase in our course offerings.

#### Challenges & Opportunities:

- › The greatest challenge is finding faculty who can teach World History. The majority of our current

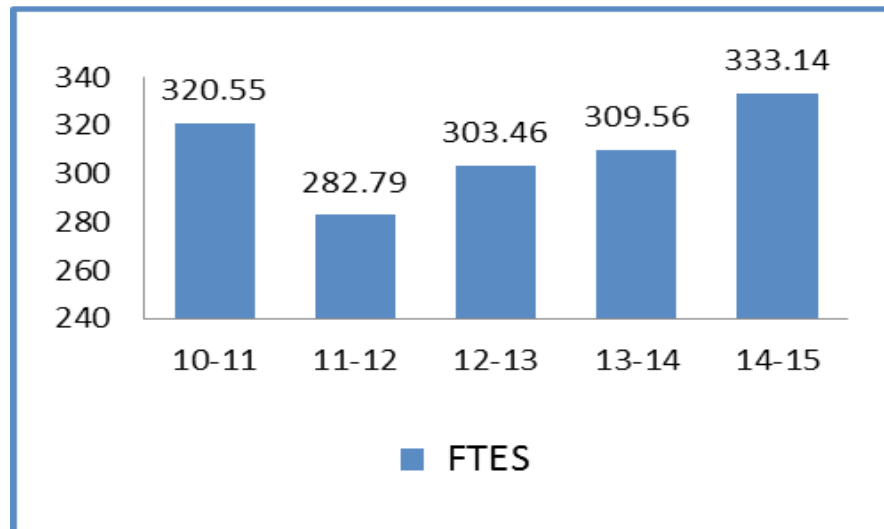
and prospective faculty do not have the necessary specialization to teach World History. Currently, we have US historians teaching World History simply to be able to offer the course. There are two World History courses that are required for our AA-T degree in History. We are struggling to meet the demand for these courses, and as students begin to enroll in this class for our degree, we will be hard pressed to have the World specialists we need to offer these courses. We are developing a Women in United States history course that will also need a specialist to teach that course.

- › In terms of opportunities, we are working with the counseling department to develop an Ethnic Studies program that can develop into another AA-T degree. Considering that UCR has an Ethnic Studies major, we feel that this is an appropriate transfer program.

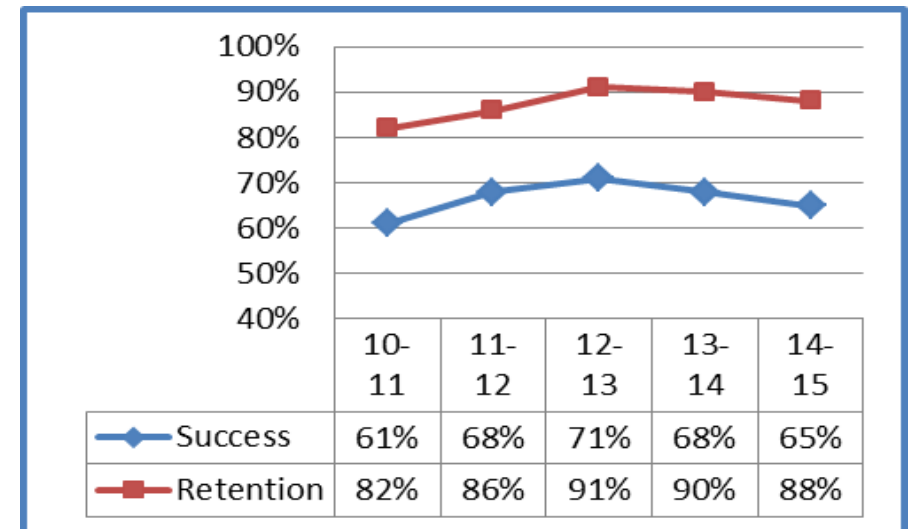
#### Action Plan:

- › Hire a full time World History faculty member.
- › Continue recruitment and professional development of current history department faculty.
- › Have the Women in US History course accepted through the curriculum process this year.
- › Continue completion of SLOs and SLO evaluation.





	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	3,230	2,754	2,981	3,099	3,335
FTEF	16.40	14.20	14.80	16.00	17.40
WSCH per FTEF	586	597	615	580	574



	10-11	11-12	12-13	13-14	14-15
Sections	83	73	77	87	94
% of online enrollment	36%	36%	38%	37%	39%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	N/A	N/A	N/A	N/A	N/A

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### KINESIOLOGY/ATHLETICS – 2014-2015

#### Description:

- › Courses in kinesiology and health department are designed to increase student's skills in activities that produce positive physiological results and promote lifelong habits in fitness. Varsity classes allow students to perform at maximum levels while competing in intercollegiate sports. Kin-X classes satisfy the kinesiology requirement for graduation and, or transfer.

#### Assessment:

- › Kinesiology (Kin-X) shows a substantial increase from the 13-14 to the 14-15 years with the same amount of section offered. Possible reason for the increase is the concerted effort of our coaching staff to raise the number of recruits/participants of each sport. In the past couple of years coaches have intensified their recruiting efforts. The high success rate of our programs is directly related to the coaches recruiting efforts.
- › Retention and success rate continue to be extremely high. This is also a reflection of how well our coaching staff performs in the class/practice setting.

- › Data shows effectiveness of the Kin-X classes.

#### Department Goals:

- › To increase opportunities for students to participate in intercollegiate sports.
- › To increase graduation and transfer rates.
- › To become fully compliant with Title IX.
- › To add more full-time faculty to our coaching staff.
- › To add more support staff to our department.
- › To increase the budget to meet the yearly increase in cost of basic day to day operations.

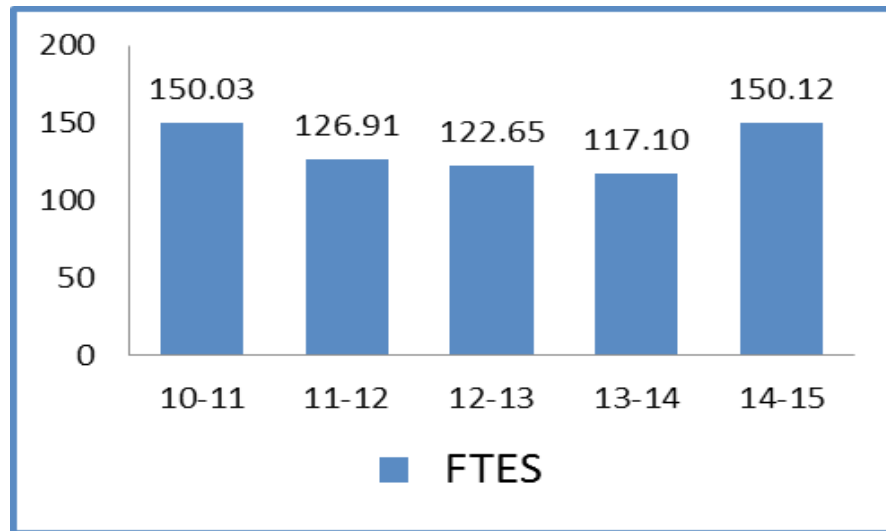
#### Challenges & Opportunities:

- › If the athletic department is to build upon the success it has experienced in the past, it will need to meet every goal stated above.
- › The data clearly shows if we are to increase our numbers we need to increase our support for our students.

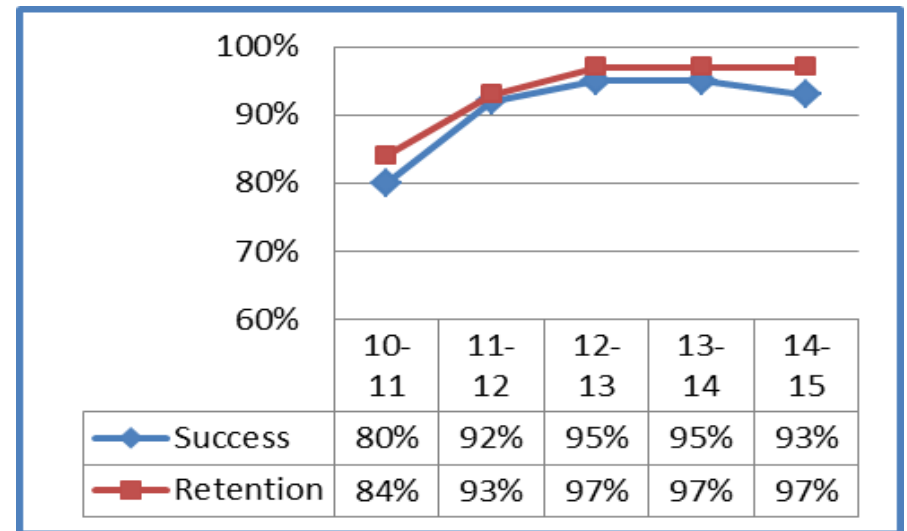
#### Action Plan:

- › Continue to participate in the program review process.
- › Become more transparent, open and informative.
- › Develop a complete academic support program for our student/athletes.

- › Develop collaborative relationships with other program on campus.
- › Strengthen relationships with the foundation, alumni and the community.
- › Continue and increase our fundraising efforts.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	479	382	370	347	644
FTEF	4.32	5.28	5.76	5.71	8.58
WSCH per FTEF	1,042	721	639	615	525



	10-11	11-12	12-13	13-14	14-15
Sections	47	40	45	45	31
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	N/A	N/A	N/A	N/A	N/A

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### KINESIOLOGY: TEAM/FITNESS/ADAPTED – 2015-2015

#### Description:

- › The kinesiology department offers a variety of laboratory courses which offer students the opportunity to improve their current health/fitness levels while acquiring the skills to promote a lifelong wellness lifestyle. All of the courses can be used for electives in Category V: which is required for graduation and/or transfer.

#### Assessment:

- › Enrollment is gradually decreasing throughout the years represented. Some of the decrease is reflective of the budget cuts seen across campus which resulted in fewer sections offered. The decreases may also be due in part to the transfer of many sections to the KINX courses.
- › Success and retention rates are stable and acceptable.
- › The efficiency rate of the department is still relatively high with a WSCH of 586.

#### Department Goals:

- › To expand sections for more popular courses.

- › To increase the variety of courses offered through the development of new courses to stay current with popular trends.
- › To purchase a variety of equipment to allow more students to participate safely.

#### Challenges & Opportunities:

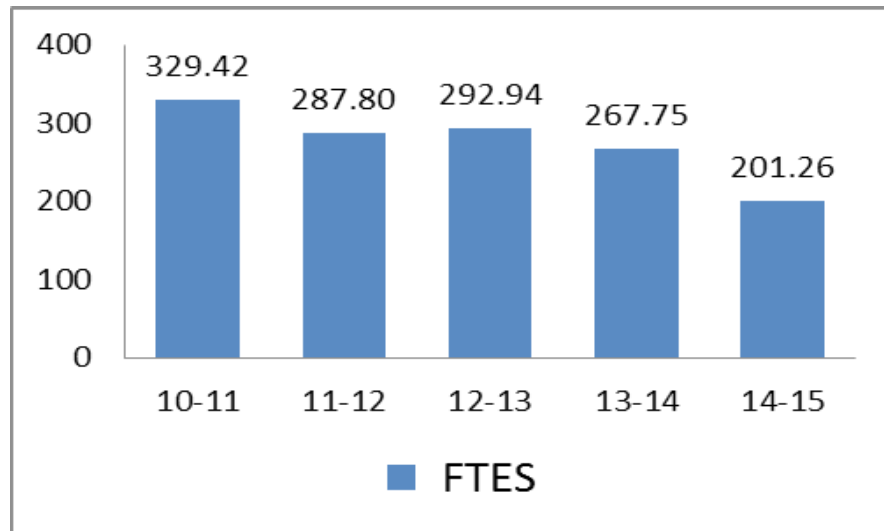
- › Since we have leveled the courses, students may only take each course one time which will limit the number of students who can participate in our courses.
- › Sharing the gym spaces with dance has limited our ability to schedule classes in our facilities
- › Construction has decreased visibility and access to our area. Fencing, lack of signage and reduced locker/shower access has decreased enrollment
- › Expand programs and services for the disabled population. We have a faculty member with expertise in this area that can work with curriculum and DSPS for funding and recommendations
- › New facilities opening in Fall 2016 should help create a resurgence of activity class enrollment

#### Action Plan:

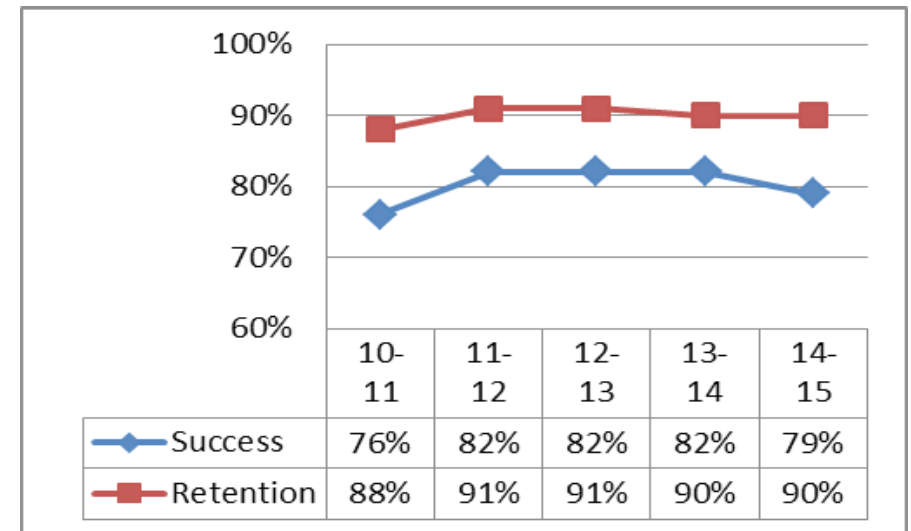
- › Develop new courses.
- › Develop relationships with departments across

campus to create more collaboration opportunities for healthy lifestyles.

- › Discuss expanded course development with DSPS.
- › Follow-up on sharing the MAC classroom.
- › Advertise and develop more team sports to capture enrollment for sport related classes.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	3,299	2,697	2,759	2,680	2,015
FTEF	12.32	10.22	10.75	11.46	10.30
WSCH per FTEF	802	845	818	701	586



	10-11	11-12	12-13	13-14	14-15
Sections	88	73	77	81	202*
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	N/A	N/A	N/A	N/A	N/A

\*Includes all sections of team, fitness, and adapted kinesiology courses.

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### KINESIOLOGY – 2014-2015

#### Description:

- › The kinesiology department offers a variety of lecture based courses that provide students with foundational knowledge in fitness, sport, physical education, athletics and related fields. The classes result in improvements in conditioning, performance for self or teams and/or training for career opportunities in related fields. All of the courses can be used for electives in Category V, which is required for graduation and/or transfer. Some KIN courses are required or electives for the KIN AA and AA-T degrees starting fall 2016.

#### Assessment:

- › Enrollment slightly decreased 10/11 to 11/12 with gradual increases through 13/14.
- › There was an enrollment decline in 14/15.
- › Success rates and retention rates remain relatively stable.
- › Both rates represent good retention and success.
- › The efficiency rate is low with a WSCH of 442.

#### Department Goals:

- › To increase number of sections offered as

registration rates improve with the addition of the degrees to the program.

- › To pursue offering courses in hybrid or online formats to possibly improve enrollment.
- › To increase the variety of courses offered through the development of new courses.

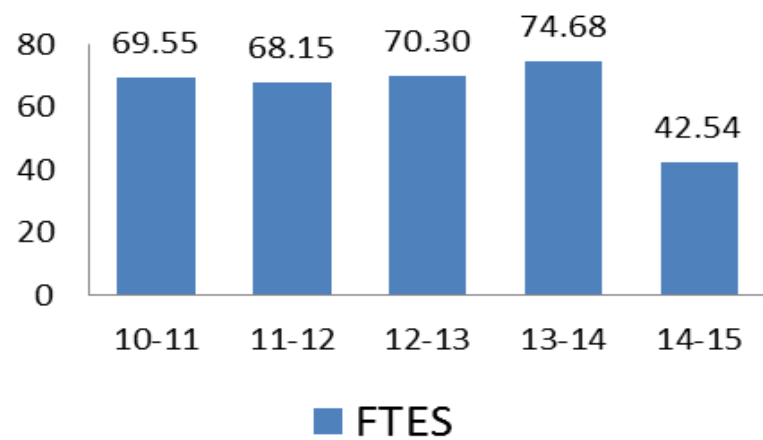
#### Challenges & Opportunities:

- › The variety of courses offered is somewhat limited.
- › A lack of smart classroom space limits our ability to offer more sections of our courses.
- › Offering online, hybrid or ITV courses is a possible avenue for making more courses available.
- › Explore the possibility of creating personal trainer certification programs.
- › Changing our certification agency for CPR/First Aid to Red Cross or American Heart Association to capture our Nursing Program and Loma Linda student enrollment.

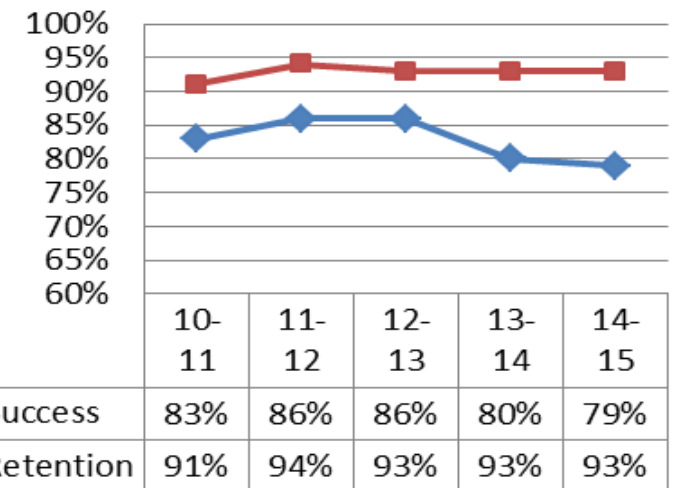
#### Action Plan:

- › Develop new courses.
- › Develop relationships with departments across campus to create more collaboration opportunities for healthy lifestyles.
- › Acquire proper smart classroom space in order to offer more sections.

- › Adjust schedule to provide more diverse offerings to capture non-traditional student enrollment.
- › Pursue certification of faculty in CPR to more recognized agency through professional development.
- › Advertise new courses and degree programs across campus to increase enrollment.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	614	602	612	667	395
FTEF	3.93	3.93	3.92	4.05	2.89
WSCH per FTEF	531	520	538	554	442



	10-11	11-12	12-13	13-14	14-15
Sections	24	21	21	22	14
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	N/A	N/A	N/A	N/A	N/A



## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### PHILOSOPHY/RELIGIOUS STUDIES – 2014-2015

#### Description:

- › Philosophy and religious studies courses require critical analysis of ideas, clarity of thought, and openness to understanding the human project in all its dimensions. These skills are achieved through careful and close reading of texts, images, and symbols, as well as through descriptive and analytic writing. Although anyone can benefit from courses in the two disciplines, the primary function of each class is to fill requirements for students transferring to four-year colleges.

#### Assessment:

- › FTES vary depending on the sections offered. FTES are now stable after several years of cutting sections.
- › Retention and success rates are both stable and mirror the rates for both the college and the division.
- › WSCH per FTEF vary slightly but are stable.
- › Percentage of online enrollment is now stable at approximately 60%.

#### Department Goals:

- › Offer at least one online section of every course offered each semester.
- › Offer at least 50% of sections online each semester.
- › Improve success and retention by 2% between fall and spring semesters.
- › Publicize and market the AA-T in Philosophy to interested students.

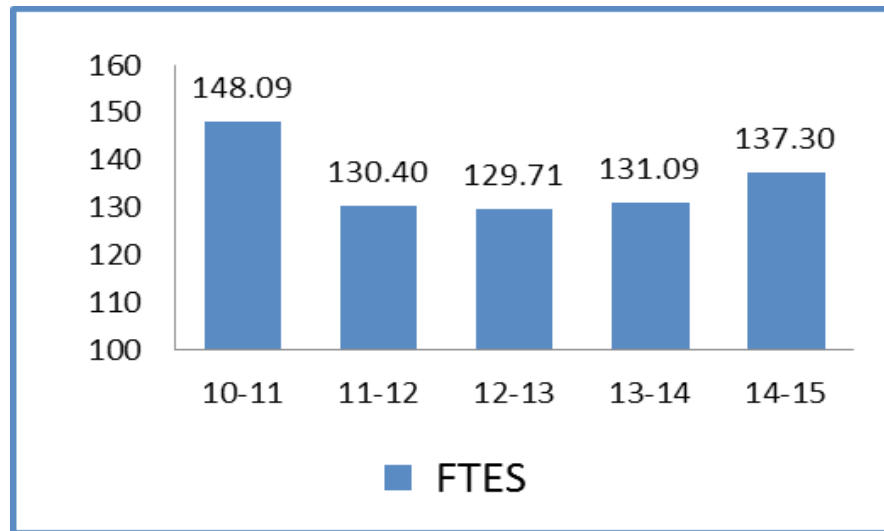
#### Challenges & Opportunities:

- › The primary challenge and opportunity is to imagine, create, and deliver high-quality undergraduate educational opportunities at a time in the culture when resources and support for public higher education have been reduced over the last several years.
- › As a leader in online learning at the college, a challenge and opportunity is to learn from the increasing MOOC movement to maintain and improve the quality of our online offerings.

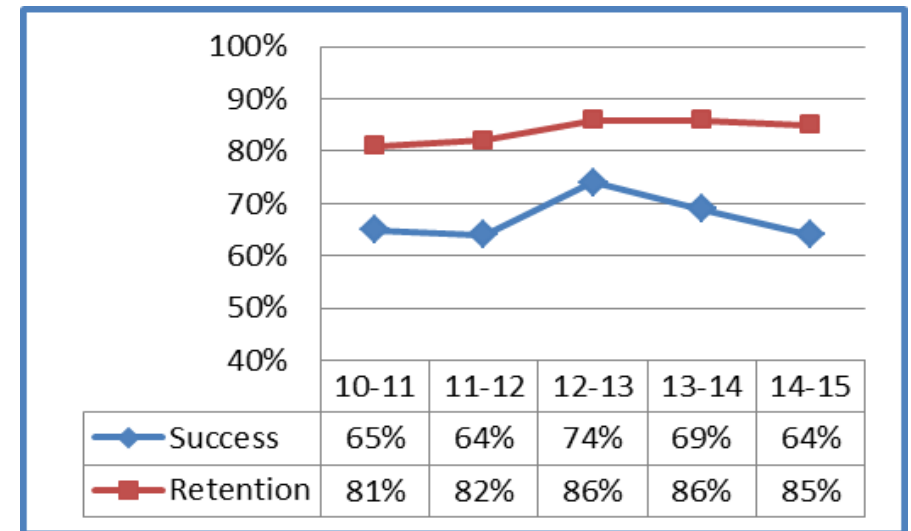
#### Action Plan:

- › Publicize and market the AA-T in Philosophy.
- › Develop departmental strategies for improving success and retention.

- › Work collegially with other departments in the division to improve success and retention.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,479	1,303	1,259	1,308	1,373
FTEF	9.00	7.80	7.40	7.80	8.20
WSCH per FTEF	494	502	526	504	502



	10-11	11-12	12-13	13-14	14-15
Sections	53	46	44	45	52
% of online enrollment	62%	61%	61%	58%	60%
Degrees awarded	N/A	N/A	N/A	N/A	N/A
Certificates awarded	N/A	N/A	N/A	N/A	N/A

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### POLITICAL SCIENCE – 2014-2015

#### Description:

- › The political science department offers courses that are transferrable to the UC and CSU systems. In addition, it offers an AA-T degree under the transfer model curriculum which allows a student to simultaneously earn an AA degree and be able to transfer to CSU as a junior. Political science courses help to prepare students for careers in government (including the foreign and national security bureaucracy), politics, law, journalism, business, teaching, industry, and community relations.

#### Assessment:

- › Political science continues to register growth in student enrollment; 2014-15 FTEs recorded a slight rise over the previous year's strong showing.
- › Efficiency dropped significantly from 614 in 2013-14 to 546 in 2014-15. This precipitous decline is hard to explain. However, it may be explained in part by our having to cancel POLIT 141-H when we were informed belatedly that the articulation process with UCR had not been done.
- › Success rate took a dip from 64% in 2013-14 to

61% in 2014-15. This is worrisome since it is the second time in a row we witnessed a dip. Joining the supplemental instruction (SI) program has enabled the department to get a tutor for political science classes. Hopefully, this will help stop the downward slide—or at least slow it down to a crawl.

- › Retention rate also saw a dip, but is still higher than the 2010-11 and 2011-12 levels. While it is not what I like to see, it is not cause for major concern at present.
- › The number of sections we offered rose by 13% over 2013-14 level. We hope to maintain or exceed this achievement in the next cycle.
- › At 20% of enrollment, our online enrollment held steady at last year's level. We hope to maintain or exceed this level during the next cycle.
- › In 2013-14 we got approved to offer an AA-T degree. Since then we have awarded two degrees. This is the first time to my knowledge that the department has awarded any degree. We will work to raise that number sharply.

#### Department Goals:

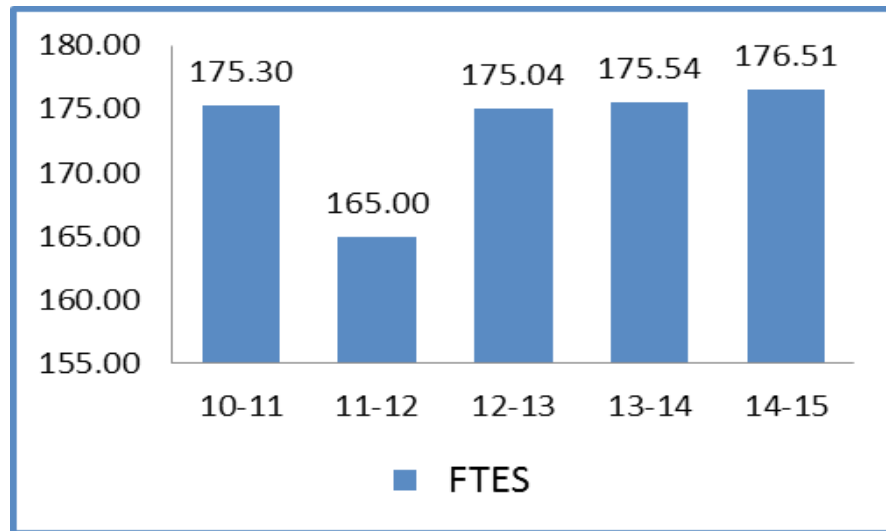
- › Increase the number of degrees awarded in political science. In this respect, raising awareness of our

AA-T program remains a goal from the last cycle.

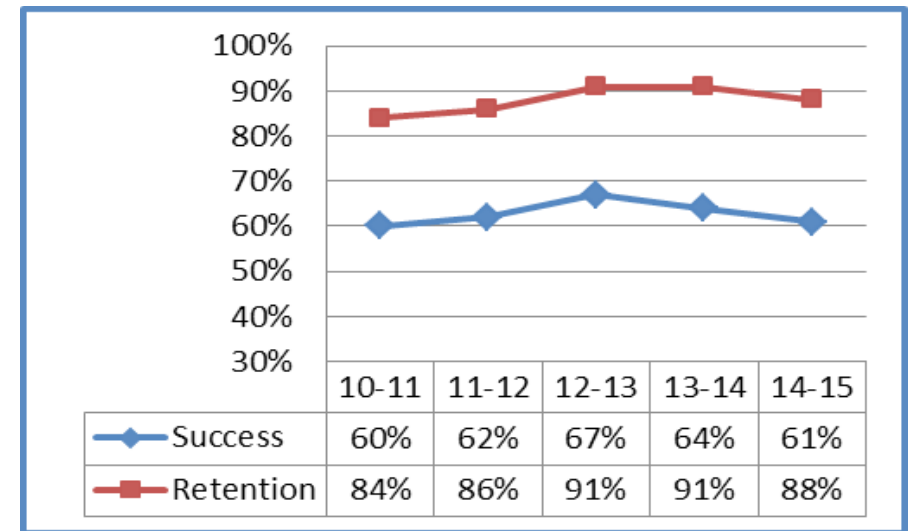
- › Create an internship program for our students who enroll in POLIT 139. This course is one of the two service learning courses we offer.
- › Raise the number of sections offered—or at least maintain current levels; and promote student success and retention rates.
- › Create a Model United Nations program, if we can get funding commitment from the college for the first two to three years of the program. During that time, we will explore alternative avenues of support.
- › Create two courses in Constitutional Law/Politics. This should increase our offerings and raise the appeal of our AA-T program. We have had in the past instructors with a background in law and politics who could teach such courses. We can hire new ones at the appropriate time.

#### Challenges & Opportunities:

- › Our main challenge is to increase the number of students who major in Political science. If we can achieve this, it will give us grounds to create new Political science courses—and raise the levels of enrollment in existing courses. We are more likely, for example, to create courses in Constitutional Law and Politics in California if we had more



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,800	1,631	1,720	1,674	1,726
FTEF	9.20	8.60	8.40	8.58	9.71
WSCH per FTEF	572	576	625	614	546



	10-11	11-12	12-13	13-14	14-15
Sections	48	45	45	45	51
% of online enrollment	19%	20%	22%	20%	20%
Degrees awarded	N/A	N/A	N/A	N/A	2
Certificates awarded	N/A	N/A	N/A	N/A	N/A

\*A.A.-T Degrees were established in 2013.

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### POLITICAL SCIENCE – 2014-2015 *(cont.)*

students majoring in Political science. (Right now, our course in American Government and Politics is the only course in high demand because it is one of the courses required for graduation.)

- › A long-standing challenge noted in 2013-14, is the less-than-satisfactory compensation our adjunct colleagues receive. If we want to obtain and maintain a faculty with an élan and esprit de corps, we need to continue to place this issue on the front burner.
- › With respect to opportunities, the expected increases in allocations the college will receive from the state is a sign of hope. We also hope to locate some modest funding for a Model United Nations program.

- › Ask every department instructor to let students know the career possibilities for political science majors and to make a pitch for political science in their classes. (Political science is a good brand!)
- › Seek insights from departments in the division which already have internship programs on how this department can go about creating an internship program for POLIT 139.

#### Action Plan:

- › Step up collaborative efforts with counselors and the associated student government to attract students into political science.
- › Continue to work with the SI program so that we can maintain a tutor for our courses which will help maintain student success and retention rates.



## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### PSYCHOLOGY – 2014-2015

#### Description:

- › Psychology offers classes that meet general education requirements for AA degrees and transfer as well as classes that are prerequisites for career and technical programs such as nursing and psych tech. The AA-T in Psychology provides students with a clear path to transfer to CSU. The psychology program has made contributions to the strategic plan goals of 1. Access and 2. Student Success despite having only one full time faculty member.

#### Assessment:

- › Faculty load, FTEF, success rates and WSCH/FTEF demonstrate the urgent need for at least four more full time faculty
- › Efficiency rates remain high rates despite section cuts
- › Fluctuating FTES rates are based on section cuts
- › Success rates have improved 6% since 09-10, however, success rates will continue to be low without more full time faculty
- › Retention rates have improved 10% since 09-10
- › The 11 degrees awarded in 13-14 are on par with other division disciplines that offer degrees

- › Number of online sections slightly increased to 23% and this has impacted success rates

#### Department Goals:

- › To increase strategic plan goals, 1. Access and 2. Student Success by:
- › Hiring at least four more full time faculty (with at least one faculty in 14-15 specializing in teaching research methods and statistics, which are core courses for the AA-T in Psychology)
- › Developing and implementing strategies for increasing student success in psychology classes
- › Having a computer lab available for students taking statistics classes (also a general ed requirement) and research methods classes to help increase Student Success and AA-T degree achievement
- › Increasing the number of sections offered for general ed and core classes in the AA-T and maintain an updated curriculum.

#### Challenges & Opportunities:

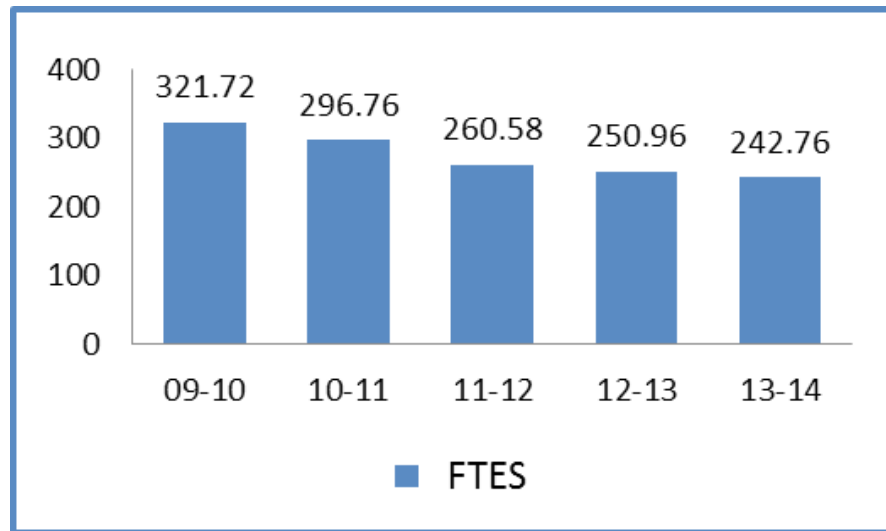
- › To hire at least one new full time faculty in 14-15 capable of teaching Statistics and Research Methods classes (with 4 total future hires)
- › To develop and implement strategies to continue to improve student success rates and maintain retention rates as course offerings increase

- › To have a computer lab for Statistics and Research Methods classes that can also be used by other disciplines in the division to support Student Success
- › To continue to offer quality instruction and diversity in course offerings with a department consisting of 93% adjunct faculty

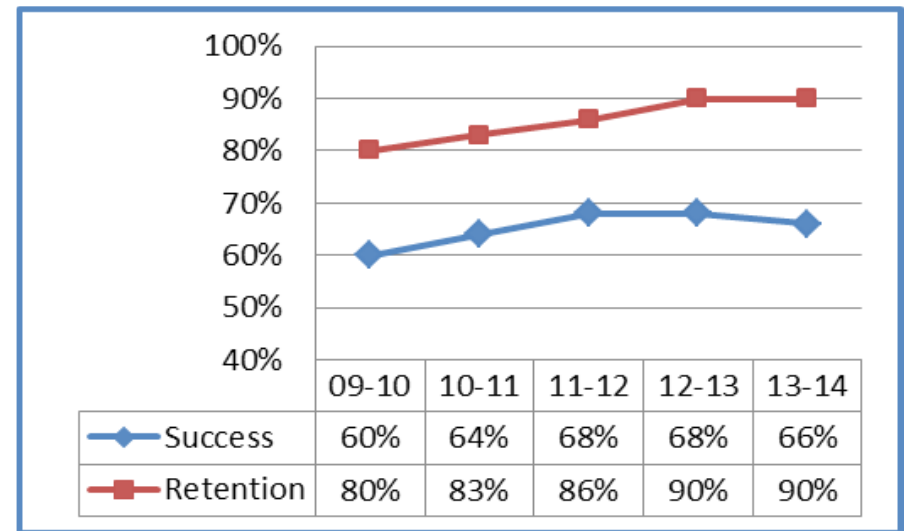
#### Action Plan:

- › To increase access and student success by submitting requests for more psychology full-time faculty hires
- › To improve student success rates while maintaining retention rates by requesting a computer lab in SSHDPE and support other faculty with similar requests
- › To increase access and student success by offering more courses that help students meet general ed requirements and Psychology AA-T requirements
- › To work with adjunct faculty to develop strategies to increase student success.





	09-10	10-11	11-12	12-13	13-14
Duplicated Enrollment	3,199	2,985	2,511	2,434	2,434
FTEF	15.20	15.20	12.60	12.20	12.40
WSCH per FTEF	635	586	620	617	587



	09-10	10-11	11-12	12-13	13-14
Sections	82	80	68	65	66
% of online enrollment	18%	20%	19%	20%	23%
Degrees awarded	N/A	N/A	N/A	N/A	11
Certificates awarded	N/A	N/A	N/A	N/A	N/A

\*A.A.-T Degrees were established in 2013.

## Individual Data Sheets By Division

# SOCIAL SCIENCE (INSTRUCTION) *(cont.)*

### SOCIOLOGY – 2014-2015

#### Description:

- › Sociology is a social science involving the study of societies. Through analyses of society, its institutions, groups, processes, and social lives of people, sociologists attempt to understand and predict social interactions and change. Sociology prepares students for further study of and careers in social work and counseling, social services, probation, corrections, law enforcement, research, public policy, law, education, and other fields which require an understanding of social life. The sociology program includes basic introductory courses in sociology, social problems, institutions, and social inequality.

#### Assessment:

- › FTES have been steadily increasing as the college district is funding additional class sections.
- › WSCH/FTEF continues to remain above the 525 average. Both success and retention rates have dipped from previous year and this is most likely due to the increased availability of courses to students. Still, the dip in the success rate is a major concern for the department.
- › The department also continues to offer half of its

course offerings online and online success rates tend to be lower when compared to F2F classes.

- › The program now offers an AA-T degree in sociology and there was a 42% increase in degree attainment year-year.

#### Department Goals:

- › Long term planning of course offerings to increase access to students seeking transfer degree and student success rates.
- › Monitor how new advisories which were placed on sociology courses are impacting student success rates.
- › Promote the AA-T sociology degree to increase productivity.
- › Continue to advocate for a full time sociology instructor through the program review needs assessment processes.
- › Continue to monitor SLO data as it relates to student success.
- › Continue to develop strategies to increase retention and success.

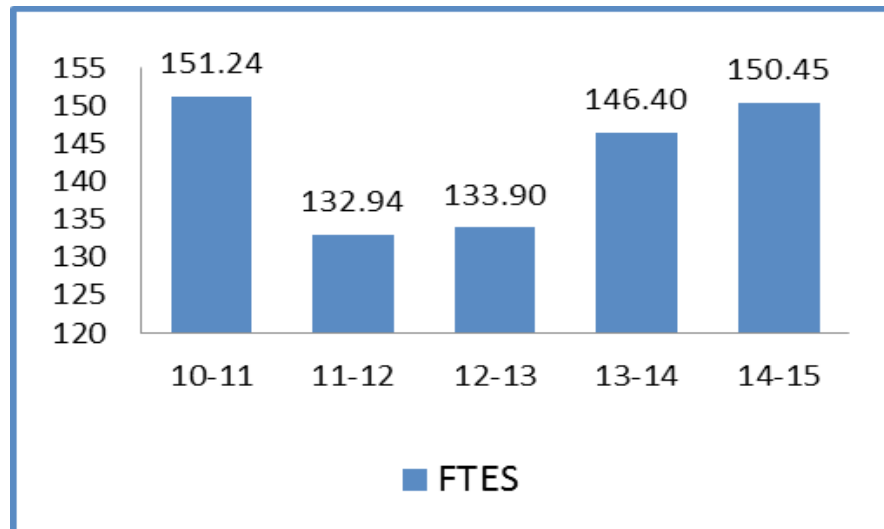
#### Challenges & Opportunities:

- › Physical classroom space is limited and subsequently the program offers a higher number of sections online.

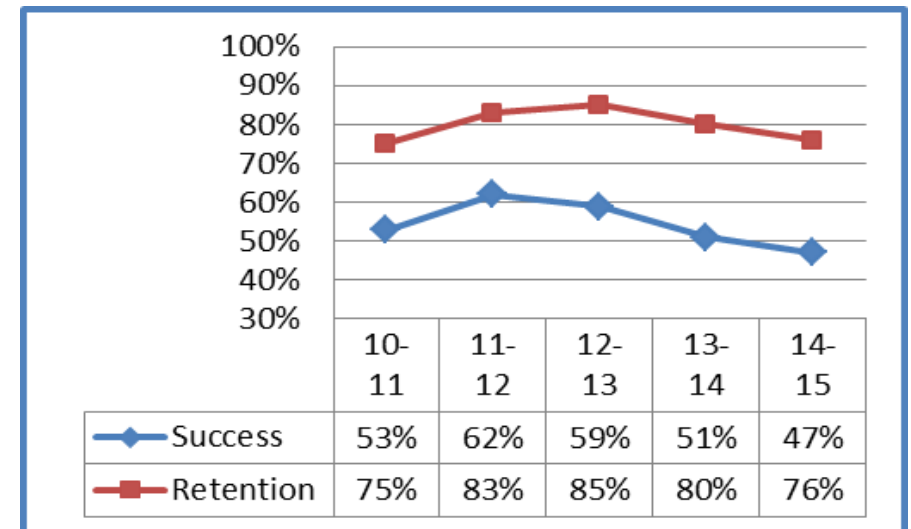
- › The program continues to operate with only full time instructor.
- › Campus wide resources continue to be scarce.
- › The 2015-16 academic year is the first year in which all sociology courses have both English and Math advisories. This presents an opportunity for an increase in student success rates.
- › The district goals include the hiring of additional new full time instructors and the college budget has a surplus. There is an opportunity for the sociology program to be the beneficiary of some of these resources.

#### Action Plan:

- › Continue to move more online sections to on-campus and monitor enrollment trends.
- › Continue to increase access to students seeking AA-T degree by offering non SOC 100 courses on-campus.
- › Submit needs assessment paperwork requesting instructor.
- › Continue to participate in the sociology peer-tutor program and encourage all program faculty to utilize services.
- › Continue SLO assessment and evaluation.
- › Modify departmental Blackboard shell and encourage faculty to make contributions.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,517	1,303	1,315	1,472	1,505
FTEF	8.00	6.80	6.80	7.40	7.60
WSCH per FTEF	567	574	591	594	594



	10-11	11-12	12-13	13-14	14-15
Sections	42	36	36	40	40
% of online enrollment	48%	50%	50%	48%	48%
Degrees awarded*	N/A	N/A	N/A	12	17
Certificates awarded	N/A	N/A	N/A	N/A	N/A

\*A.A.-T Degrees were established in 2013

# Individual Data Sheets By Division

## STUDENT SERVICES

### ADMISSIONS & RECORDS – 2014-2015

#### Description:

- › Admission to the college & registration
- › Residency determination
- › Evaluation of prior credit
- › Evaluation of graduation requirements
- › Maintenance of student academic records in perpetuity
- › Processing of grade changes, incompletes
- › Processing of add/drop
- › Late add petitions
- › Veteran's certification, information, and referral
- › Online application, registration, and transcript request services

- › Petitions for Academic Exception
- › Eligibility determination of concurrently enrolled high school students
- › Acceptance of payment for enrollment and auxiliary fees
- › Adjudicating and processing petitions for academic exception
- › Adjudicating and processing petitions for readmission
- › Requests for background checks in accordance with FERPA
- › Response to subpoenas in accordance with FERPA
- › Welcome letters sent to every new applicant
- › Drops for nonpayment
- › Reinstatement of registration

- › Communication with faculty and campus about important admissions, records, and registration deadlines and processes

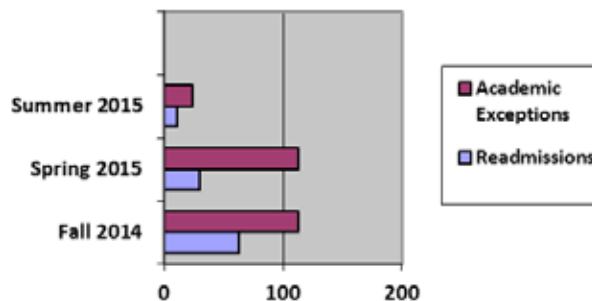
#### Assessment:

- › Table 1 shows the number of petitions: readmissions & academic exceptions reviewed and processed within the last year.
- › Table 2 shows the number of late adds we process per term after the initial two-week add period.
- › Table 3 shows the number of first-time students enrolled for the 2014-15 year.

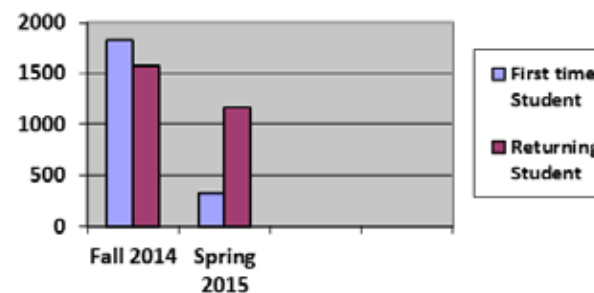
#### Program Goals:

- › More staff professional development participation

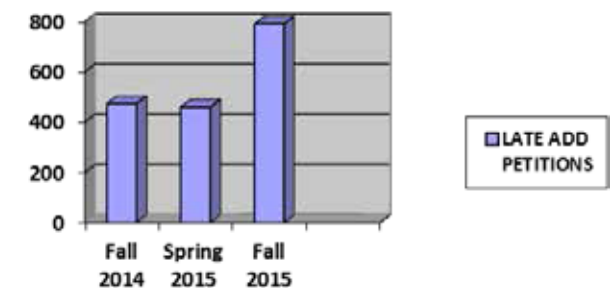
**Readmissions/Academic Exceptions**



**Enrollment Status**



**LATE ADDS**



- › Improve and streamline the prerequisite clearance process
- › Improve technology services in admissions & records
- › Increase customer service efficiency
- › Challenges and Opportunities:
- › Staffing: funding issues and support are ongoing challenges
- › Physical conditions: carpet needs replacing and front counter space too high is another challenge.
- › Opportunities for innovation and partnership abound

Action Plan:

- › Increase use of electronic communication with students
- › Reduce the number of late-add petitions that are processed per term

## Individual Data Sheets By Division

# STUDENT SERVICES *(cont.)*

### CalWORKS – 2014-2015

#### Description:

- › CalWORKS is the welfare reform program established January 1998 by Assembly Bill (AB) 1542. San Bernardino Valley College CalWORKS program is designed to assist students receiving county CalWORKS to enhance and achieve their educational goals and employment self-sufficiency. Qualified students are eligible to receive the following services: book vouchers, book loans, access to computer lab, parking permit vouchers, gas cards, child care assistance, educational counseling, and employment assistance.

#### Assessment:

- › Data captured at the State Chancellor's Office indicates the program made a significant enrollment increase for fiscal year 2013-14 compared to fiscal year 2012-13. The SBVC CalWORKS program enrollment was increased by an additional 156 students for the 2013-14 fiscal year; thus, increasing the CalWORKS allocation for the 2014-15 fiscal year.
- › The CalWORKS program provides supportive services to over 300 students, male and female

from different age groups and ethnicities as well as students with disabilities.

#### Department Goals:

- › Increase job placement (ongoing)
- › Increase program enrollment (ongoing)
- › Increase educational goal completion (ongoing)

#### Challenges & Opportunities:

- › Challenges: Tracking completion of certificate, degree and transfer rates for CalWORKS students (data captured by SBVC Research and Planning Department).
- › "Same-Day-Pay" process continues to impact CalWORKS students' course enrollment. Students are continually dropped due to non-payment.
- › Opportunities: Priority registration has afforded CalWORKS students the opportunity to enroll in courses to accommodate their educational timeline.
- › Due to the success of last year's free tax preparation service, San Bernardino County Transitional Assistance Department (TAD) partnered with SBVC again to provide free tax preparation services through their Volunteer Income Tax Assistance Program (VITA) for the 2015 tax season.

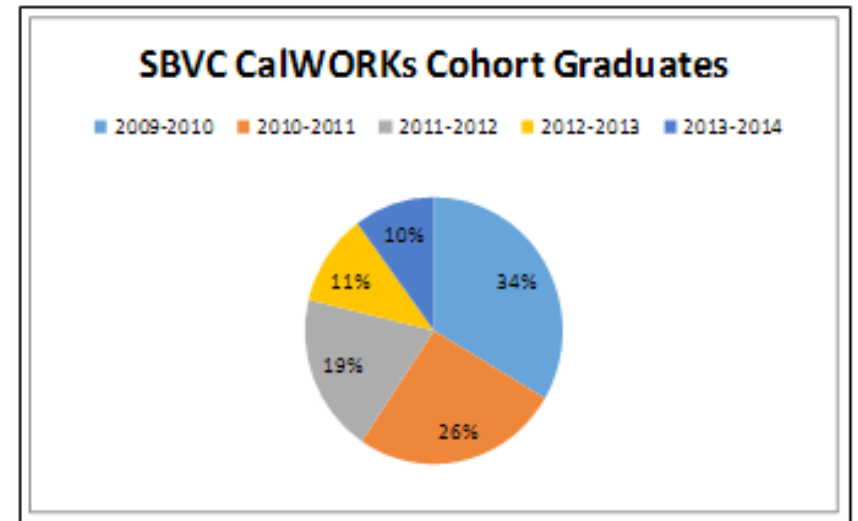
#### Action Plan:

- › Continue to obtain data from the Research and Planning Department to assist in identifying the cause of the decline in CalWORKS graduates.
- › Probe administration to seek possible remedy for "Same-Day-Pay" issue that affects CalWORKS student enrollment status.

	Annual 2012-2013	Annual 2013-2014
	Student Count	Student Count
San Bernardino Total	306	462
Female	255	388
Male	51	74

	Annual 2012-2013	Annual 2013-2014
	Student Count	Student Count
San Bernardino Total	306	462
County-Referred Program Participant	84	173
Exempt Program Participant	38	42
Self-Initiated Program Participant	2	2
Self-Referred Program Participant	182	245

CalWORKs Cohort	09-10	10-11	11-12	12-13	13-14
Count of SBVC Graduates	99	77	57	33	30





## Individual Data Sheets By Division

# STUDENT SERVICES *(cont.)*

### COUNSELING – 2014-15

#### Description:

- › The counseling department is committed to enhancing college success and career readiness of students in the general population within the framework of the Student Success Act. During the 2014-15 of mandates implementation, counseling conducted an intentional focus on all prospective and new students who were provided core services of college orientation, assessment, counseling, academic advising, abbreviated education plans, and other related services including career counseling and follow-up services. Thus, registration of prospective and new students was contingent on receipt of mandatory services. After 2014-15, these students are required to have an academic goal and course of study or major as well as possess comprehensive education plan and use follow-up services whenever necessary until goal achievement. Additionally, the department rendered all services to continuing students albeit not made a condition to registration except when students are underachieving. Overall, the counseling services revolve around the areas of general counseling, academic advising and education plans, career,

transfer, and personal counseling including approximately 22 other distinct services. Assistance to students is conducted in a developmental and comprehensive manner throughout the students' college experience for the completion of educational goals within a reasonable time frame. Counseling services are delivered via individual, group, and online formats for all students including those in special populations, such as basic skills, veterans, athletes, PUENTE learning community, among others. The department undertakes SBVC's Student Success and Support Program (SSSP) Plan.

#### Assessment:

- › Marked increase in services utilization.
- › Burgeoning need for all counseling services by all students made more pronounced due to the Student Success Act mandates.
- › Ethnicities of counseling recipients more nearly reflect the diverse cultures of the student body and mirror the 2014 census data for San Bernardino County and California as reported in [www.quickfacts.census.gov](http://www.quickfacts.census.gov).
- › Closely maintained performance outcomes of counseling recipients with the imperative to elevate overall academic success.

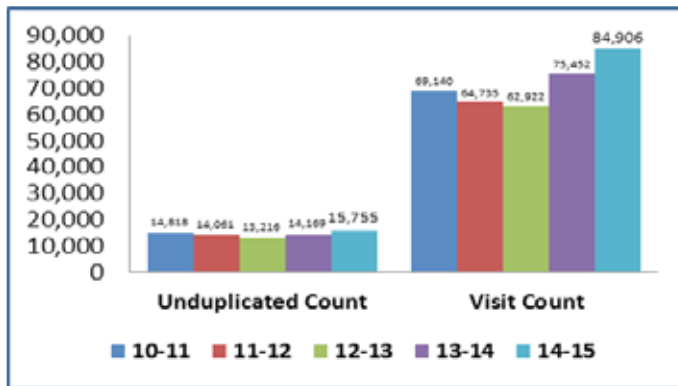
- › Sustained demand for three heavily utilized services related to general counseling, basic skills, and education plans.

#### Department Goals:

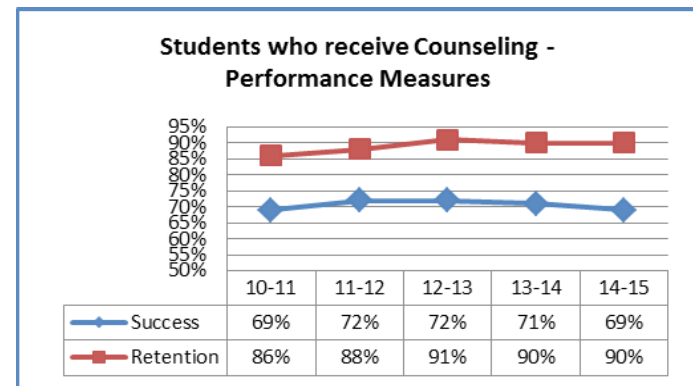
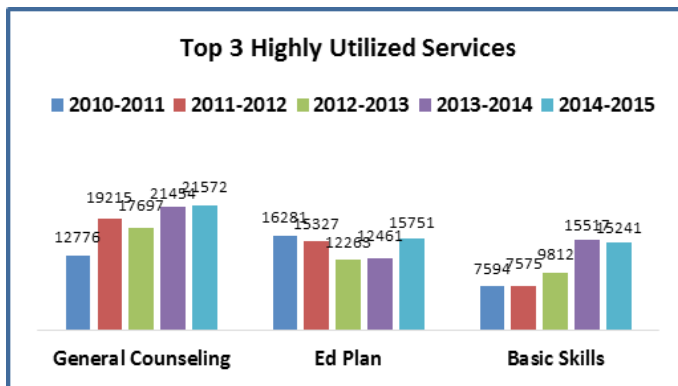
- › Intensify accessibility of services and forge year 2 implementation of the Student Success Act.
- › Augment counseling interventions to increase retention and success of students and instill accountability for demonstrated academic success behaviors.
- › Continue to enhance service delivery practices including considerable use of counseling-related technology and other innovative ways to engage the greatest number of students.
- › Maintain effective developmental as well as comprehensive services to increase performance outcomes among targeted segments of the population, particularly at-risk groups, i.e., basic skills, underachievers--students undecided in their academic goals and those undecided in their major or course of study.

#### Challenges & Opportunities:

- › Increased demand for counseling services and continued disproportionate ratio of counselors to students in the general population.



Ethnicity %	10-11	11-12	12-13	13-14	14-15
African-American	17.1%	16.1%	15.2%	15.5%	14.7%
American Native	0.7%	0.7%	0.6%	0.7%	0.7%
Asian	3.7%	3.5%	4.0%	3.9%	3.5%
Filipino	1.5%	1.6%	1.5%	1.5%	1.5%
Hispanic	42.4%	44.9%	47.9%	50.9%	51.2%
Pacific Islander	0.7%	0.6%	0.5%	0.5%	0.5%
White	13.2%	13.1%	13.8%	12.4%	12.5%
Unknown	20.8%	19.6%	16.6%	14.6%	15.3%



## Individual Data Sheets By Division

# STUDENT SERVICES *(cont.)*

### COUNSELING – 2014-15 *(cont.)*

- › Greater demand for counseling resulting from SSSP Plan and changes in Title 5 including federal mandates relative to financial aid.
- › Heightened need for additional clerical staff to inter-act with the public and to further strengthen documentation of services utilization due to accountability and funding requirements.
- › Increased awareness among the college community as well as feeder high schools for more robust collaboration due to the Student Success Act.
- › Provide enhanced services to basic skills/ESL students and other targeted groups and afford expanded interventions to probation and dismissal students via individual and group sessions.
- › Design greater collaboration mechanisms in the implementation of early alert to decrease the number of at-risk students, particularly students on probation/dismissal status .
- › Promote enhanced partnership with instruction for integrative approaches within the counseling and teaching environments.

#### Action Plan:

- › Advocate for additional four to five full-time counselors and a clerk to accomplish the SSSP Plan.
- › Reinforce training among counseling faculty and staff on the newer features of technology and other counseling related databases to further promote best practices.
- › Sustain delivery of competent services and interventions to students and fortify campaigns for comprehensive education plans and students' preemptive use of counseling services.



## Individual Data Sheets By Division

# STUDENT SERVICES *(cont.)*

### DISABLED STUDENTS SERVICES & PROGRAMS – 2014-2015

#### Description:

- Disabled student programs & services (DSP&S) provides support services and educational accommodations to students with disabilities so that they can participate as fully and benefit as equitably from the college experience as their non-disabled peers. The specific disability must be verified, and there must be an educational limitation that precludes the student from fully participating in general education without additional specialized services. A Student Educational Contract (SEC) is developed for each student which links student's goals, curriculum program, and academic accommodations to his/her specific disability related educational limitation. Examples of services available through DSPS that are over and above those regularly offered by the college would be academic support, assessment for learning disabilities, specialized counseling, interpreter services for hard-of-hearing or deaf students, note taker services, alternate media, access to adaptive equipment, adaptive physical education, and registration assistance.

#### Assessment:

- African-American and Hispanic students comprise 71% of the program.
- The age distribution of DSP&S students shows a wide diversity between all age groups. 63% are under 30 with 37% age 30 and above.
- We serve a wide range of disabilities with the highest percentage of students having psychological, mobility, and learning disabilities, and other disabling conditions. The lowest percentages of students served have speech/ language impairments, acquired brain injuries, and are developmentally delayed learners.

DSPS Disability Types 2014-2015	
Acquired Brain Injury	2.04%
Developmentally Delayed Learner	2.82%
Hearing Impaired	5.73%
Learning Disabled	11.36%
Mobility Impaired	14.95%
Other Disability	38.45%
Psychological Disability	21.36%
Speech/Language Impaired	0.49%
Visually Impaired	2.82%

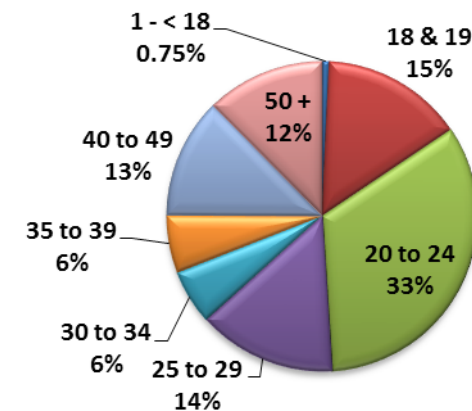
#### Program Goals:

- Increase enrollment of students with disabilities from feeder high schools by 5%.
- Increase the number of student enrollment in Student Development 900, 905, and 906 courses.

#### Challenges and Opportunities:

- Improve students' understanding of their rights and responsibilities in regards to their accommodations through yearly mandated appointments.
- Continue to provide accommodations to students despite reduction in funding.
- Maintain compliance with Title 5 and ADA regulations.

**DSPS Age Group 2014-2015**



- › Continue to develop workshops/trainings for staff regarding accommodating students with disabilities.
- › Conduct student service satisfaction surveys.
- › Add classified staff and faculty as the budget permits.

Action Plan:

- › Dialog with the campus regarding DSP&S students' needs that can be served in their areas.
- › Collect data related to Service Area Outcomes (SAO).
- › Collect data related to Student Learning Outcomes (SLO).

Source: [http://datamart.cccco.edu/Services/FinAid\\_Summary.aspx](http://datamart.cccco.edu/Services/FinAid_Summary.aspx)

## Individual Data Sheets By Division

# STUDENT SERVICES *(cont.)*

### FINANCIAL AID – 2014-2015

#### Description:

- › The Financial Aid Department oversees and is in charge of administering federal and state financial aid programs. The programs encompass grants, loans and work study. These programs assist students in paying for their educational expenses, i.e., registration fees, books, supplies, room and board, transportation, and personal miscellaneous expenses.

#### Assessment:

- › The number of students receiving a Board of Governors Fee Waiver (BOGW) has increased

over the past two years. The number of students receiving a Pell Grant has decreased over the last two years. It is believed the number of Pell Grant recipients decreased due to the extended processing time during the 2015-2016 award year. Additionally, the overall number of FAFSA applications received also decreased. The financial aid office anticipates a gradual increase in these numbers for future award years.

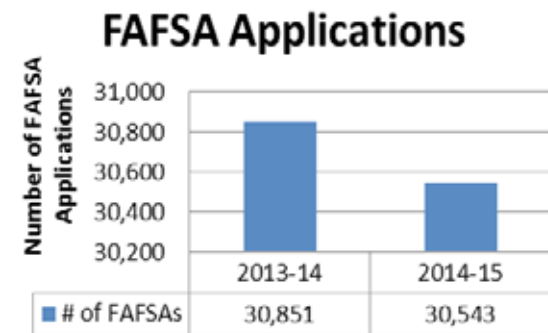
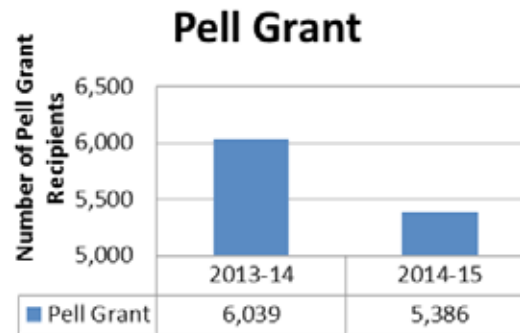
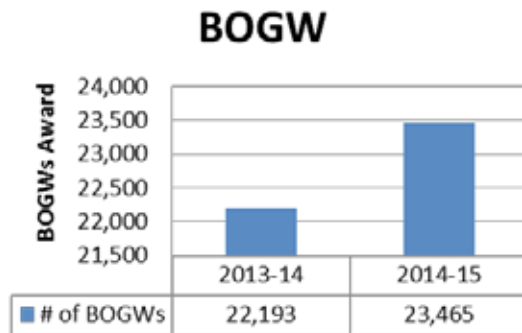
#### Department Goals:

- › Increase the number of students who file a FAFSA application.
- › Expedite the turnaround time from application submission to disbursement of aid.

- › Implement auto-packaging and train staff.
- › Implement financial aid student prepaid card.
- › Train staff on AB540 as well as all facets of financial aid programs and regulations to ensure compliance.

#### Challenges & Opportunities:

- › The department is serving more students,
- › The number of student requests for consideration for special circumstances has increased.
- › Need to reduce the turnaround time from when an application is received to disbursement.
- › Cross train staff, particularly in AB540.





Action Plan:

- › The financial aid department plans to improve the office functions by implement auto-packaging and train staff on the new process.
- › Expedite processing of student files for disbursement. Increase the number of financial aid workshops. Implement student financial aid prepaid card.
- › Involve staff in staff development and/or training opportunities.
- › Assess the use of technology for the overall processing of files.
- › Evaluate the SAO assessments to determine further areas of needed improvement.

## Individual Data Sheets By Division

# STUDENT SERVICES *(cont.)*

### FIRST YEAR EXPERIENCE – 2014-2015

#### Description:

- › The First Year Experience (FYE) program is designed to successfully transition first year students into college. FYE oversees other student support programs: Valley-Bound Commitment (VBC), Dreamers, Tumaini, and Guardian Scholars. All of these programs provide a supportive and welcoming environment where students connect with student support services on campus to ensure student success.

#### Assessment:

- › Students participating in the First Year Experience and Valley-Bound Commitment programs will develop tools (steps to success) to assist students in navigating their first year of college.
- › Measurements:
  - › End of the year evaluation
  - › Students who complete the First Year Experience and Valley-Bound Commitment programs will have a clear understanding of the student support services on campus to transition into for their second year.

- › Measurements:
  - › End of the year evaluation
  - › FYE Survey Satisfaction

#### Department Goals:

- › Increase the number of students who successfully complete their courses in their first year.
- › Provide resources and services that promote student success: Summer Bridge, orientation, counseling, tutoring, course completion, degree completion, and transfer.
- › Successfully transition students to another student support services program for the duration of their academic career at Valley College.

#### Challenges & Opportunities:

- › Some challenges are getting the FYE program up and going. This is the first year of the program's existence at Valley College. However, the FYE program has an opportunity to establish itself to be one of the premier programs on campus that assist first year college students to transition into a college environment.

#### Action Plan:

- › Provide more access to students in our service area to Valley College.
- › Enhance the relationships in the K-12 school districts and community-based organizations to ensure a seamless pipeline to Valley College.
- › Market and promote all student equity programs.

**FIRST-YEAR EXPERIENCE**

Gender	2014-15
Female	31
Male	36
Unknown	0

Ethnicity	2014-15
African-American	30
Asian	1
Hispanic	34
Multi-Ethnicity	3
White	1
Other	1

**VALLEY BOUND COMMITMENT**

Gender	2014-15
Female	112
Male	110
Unknown	0

Ethnicity	2014-15
African-American	21
American Indian/Alaskan	1
Asian	6
Hispanic	159
Multi-Ethnicity	17
Pacific Islander	1
White	17
Other	0

## Individual Data Sheets By Division

# STUDENT SERVICES *(cont.)*

### STUDENT SUCCESS & SUPPORT (FORMERLY MATRICULATION) – 2014-2015

#### Description:

- Student Success & Support Program (SSSP) is the tool that interfaces with Student Services and Instruction to support and drive student success. Matriculation provides the impetus for the student services needed to ensure the delivery of the core services to enhance student success. The core services instrumental in student accomplishments are: orientation, assessment, and counseling/ advisement, education plans, and follow-up. These core components are derived to provide access to students and to facilitate the avenues for achievement. The core services are required and their accountability is key in the allocation of funds to colleges.

#### Assessment:

- Assessment is mandatory for all first time students. Overall, there has been no need for adjustments in the assessment procedures and/or processes.
- One recognizable change is that by students being able to make the assessment appointment online, there are less not shows.

- However, coupled with the current enrollment trend and low high school graduation rates, the number of students assessed has decreased. Nevertheless, since its inception, on-site assessment services has increased students yearly.

#### Department Goals:

- Continue building on the growth revealed by the data, particularly in orientation and assessment.
- Build on the online assessment appointments.
- Research cost and options to develop and implement an online bilingual orientation/ assessment component.
- Research cost and options to purchase STARFISH Alert; student follow-up that would replace the current SARS Alert System.
- Continue expanding the on-site SBVC admission application, online orientation, assessment, academic advising at target feeder high schools.

#### Challenges & Opportunities:

- Based on required core SSSP services and the expected outcomes the concerns are: the number of staff needed in assessment, the number of generalist counselors needed in the Counseling Department to provide the mandated services.

The accountability of the core services are very important as they have a key role in the funding provided to colleges.

- Opportunity to work with Student Services Programs and Instruction to explore new partnerships to enhance student support, retention, and success.
- Opportunity for college and feeder high schools staff to meet and discuss common core and teaching across the curriculum in an effort to increase success in college courses.

#### Action Plan:

- Expand the on-site SBVC admission application, online orientation, assessment, academic advising at target feeder high schools.
- Develop and implement an online bilingual orientation/assessment component.
- Enhance early alert component to students.
- Work with DCS staff re: SSSP core requirements for MIS reporting.
- More dissemination of information and staff development to enhance faculty and staff regarding SSSP.

Assessment Tests	11-12	12-13	13-14	14-15
General Population	8014	7831	8213	7921

Assessment Tests	11-12	12-13	13-14	14-15
High School Students	447	596	870	1232

## Individual Data Sheets By Division

# STUDENT SERVICES *(cont.)*

### OUTREACH & RECRUITMENT – 2014-2015

#### Description:

- The Outreach and Recruitment Office disseminates information to prospective high school students regarding SBVC's programs and support services. The primary focus is to target and provide services to feeder high schools. The emphasis of these educational opportunities is meant to attract and recruit students to the College. The services are provided through a variety of mechanisms that include but are not limited to: presentations (assembly/classroom), college fairs, parent nights, student follow-up, etc. Outreach and Recruitment coordinates on campus programs such as, high school senior day, sport/educational fairs, BSU conference, campus tours, etc. Additionally, it maintains on-going partnerships with are churches, community groups, and governmental agencies.

#### Assessment:

- Outreach and Recruitment does an excellent job in the coordination and delivery of services to service area high schools and the community at large. It maintains a collaborative partnership with superintendents, principals, high school personnel, and the community. These collaborative

partnerships also extend to the College's program staffs in the coordination and delivery of SBVC services both on and off campus to prospective students. Never-theless, due to the current enrollment trend, and the decrease in the number of students graduating from high school, the number of prospective student contacts has somewhat decreased as indicated in the total number of student contact chart.

#### Department Goals:

- Continue with a systematic and comprehensive outreach and recruitment component.
- Enhance the outreach component to middle high schools.
- Extend services at non-traditional outreach and recruitments areas to recruit prospective student who are out of high school, i.e., churches, malls, community centers, etc.

- Increase the number of student contacts thus, increasing the number of enrolled students
- Work with College constituents to coordinate a systematic and balanced delivery of outreach services

#### Challenges & Opportunities:

- One of the key challenges is that the Inland Empire has one of the lowest college going rates for students. Consequently, it requires greater recruitment efforts, direct student contacts, and frequent student follow-up. It also requires the coordination of far reaching target recruitment with high school counselors and career technicians. Outreach and Recruitment needs to be provided with an annual budget that will support needed staff, technology, and general operational expenses.

Contacts	11-12	12-13	13-14	14-15	Total
High School Students	6985	6100	5225	4110	22,420
Middle School Students	1200	925	550	375	3,050
Tours	1975	1250	1010	915	5,150
<b>Totals</b>	<b>10,160</b>	<b>8,275</b>	<b>6,785</b>	<b>5,400</b>	<b>30,620</b>

**Action Plan:**

- › Increase the number of contacts of prospective high school students.
- › Enhance and expand partnerships with middle schools.
- › Establish with College constituents a systematic and balanced delivery of outreach services to feeder high schools.
- › Work with the College's PIO Officer to develop recruitment materials.
- › Coordinate and expand recruitment activities to churches, community centers, malls, etc., to reach non- traditional students.
- › Pursue the allocation of a bona fide annual outreach and recruitment budget that will support staff needs, technology, and general operational needs



## Individual Data Sheets By Division

# STUDENT SERVICES *(cont.)*

### STUDENT SUCCESS CENTER/TUTORING – 2014-2015

Description:

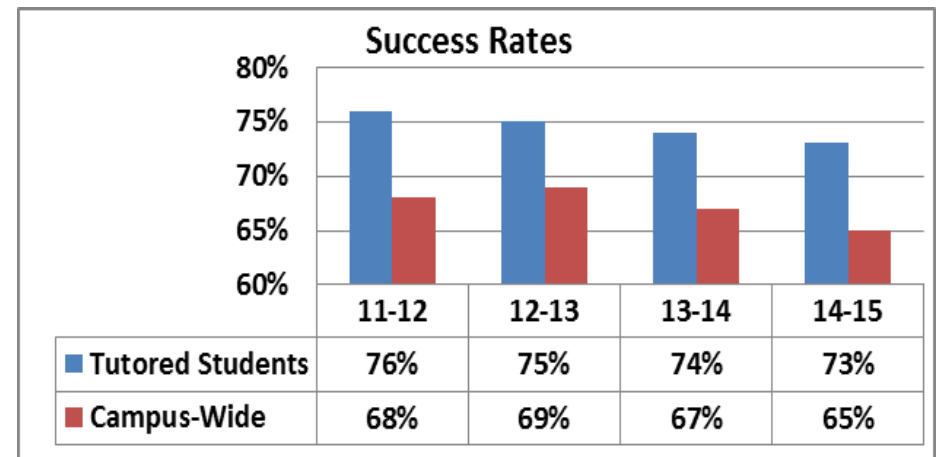
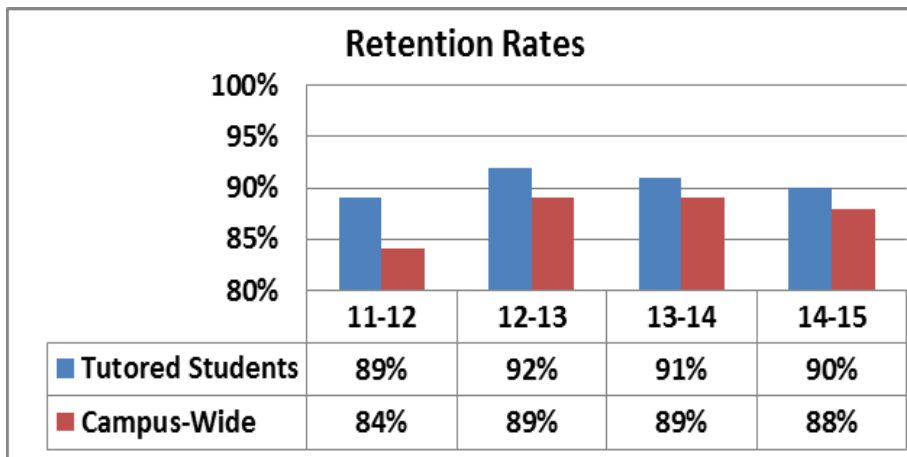
Assessment:

Department Goals:

Challenges & Opportunities:

Action Plan:

Unduplicated Headcount	Campus-wide		Success Center	
	Count	% of Campus	Count	% of Campus
2014-2015	17,044	100%	2,352	14%
2013-2014	16,080	100%	2,875	18%
2012-2013	15,441	100%	2,644	17%
2011-2012	16,593	100%	1,842	11%



Ethnicity	12-13	13-14	14-15
Asian/Nat.American/Pac.Is.	10%	8%	8%
Black	17%	17%	18%
Hispanic	58%	61%	62%
White	13%	12%	11%
Gender	12-13	13-14	14-15
Female	61%	61%	63%
Male	39%	39%	37%

Success Center Student Contact Hours	
2014-2015	32,291
2013-2014	42,902
2012-2013	46,218
2011-2012	25,480

## Individual Data Sheets By Division

# STUDENT SERVICES *(cont.)*

### STAR PROGRAM – 2014-15

#### Description:

- › The Success Through Achievement and Retention (STAR) program is a federally funded TRIO Student Support Services program which provides opportunities for academic development, assists students with college requirements, and serves to motivate students toward the successful completion of their AA/AS degree, certificate and/or transfer to a four-year university.

#### Assessment:

- › Documentation will be collected and kept in student files indicating enrollment status and progress. (Class schedules & transcripts, registration, program application, and program completion data, transfer acceptance letter.)

#### Department Goals:

- › Provide outstanding services to students
- › Empower students to achieve their educational goals allowing them to graduate and/or transfer to a four-year university
- › Teach students the importance of an educational goal plan and how to make adjustments to the plan when needed

- › Maintain a positive learning environment for STAR students

#### Challenges & Opportunities:

- › The program has many opportunities to help new students each year. With students successfully completing their graduation objectives, the program normally brings in 35-60 new students each academic year. This gives the program a chance to help a different cohort of students, as well as continuing students, each fall semester.
- › Challenges continue with the budget cuts from the past three years.

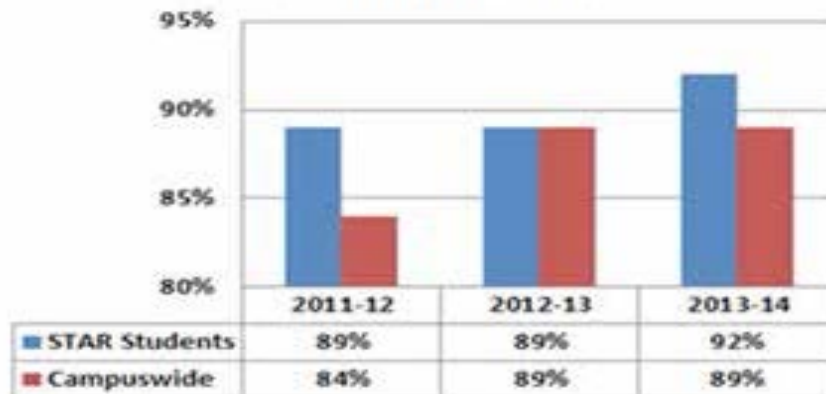
#### Action Plan:

- › Continue to enhance the following areas:
- › Academic success strategies that begin as soon as a student is accepted into the program.
- › Track student participation, academic standing and review student progress to ensure that participants will meet or have met requirements for academic success and graduation and/or transfer.
- › Students will work directly with STAR counselors to create a full educational plan.
- › STAR will offer support services, grant aid, and a privately funded book scholarship to assist students to persist towards graduation and/or transfer.

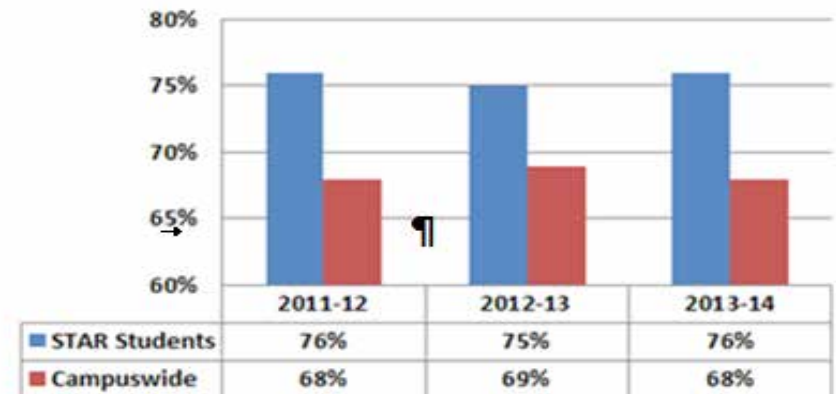
- › Students will participate in the STAR Academic Intervention plan if their GPA falls below 2.3. Overall, staff will continue work to increase participant persistence rates.

**CHART 1**

Retention Rates Below Pertain to Student Course Completion

**Retention Rates****CHART 2**

Success Rates Below Pertain to Course Completion With A Grade of C or Better

**Success Rates****CHART 3**Summary of PE Scores for 2012-13 Assessment Year  
(P042A100257)

PE Criteria	Maximum Points Allowed	Approved Rate	Actual Attained Rate	PE Points Earned
Persistence	4	60%	77%	4
Good Academic Standing	4	70%	92%	4
Associate's Degree or Certificate	2	6%	33%	2
Associate's Degree or Certificate and Transfer to a 4-Year Institution	2	4%	50%	2
Funded Number	3	Number of Participants Funded to Serve 200	Number of Participants Served 200	Percent Served 100%
Total Points	15			15

**Table 4 - Graduation ( 2009-10 to 2013-14 Cohort Data)**

Comparison of SSS eligible students, who do not receive SSS services, with students in the general student population.

Population	*SSS eligible	General student population
African-American	14.8%	15.5%
Hispanic	15.2%	15.8%
Native American	10.5%	11.1%
White	15.7%	15.1%
Asians	18.0%	18.6%
Filipino	19.8%	20.2%
Pac Islander	18.0%	17.2%
All Groups	15.2	16.8

(Table 4 Source: SBVC Office of Research and Planning)

## Individual Data Sheets By Division

# STUDENT SERVICES *(cont.)*

### STUDENT SUCCESS CENTER – 2014-2015

#### Description:

- › The Student Success Center offers academic support through Tutoring and Supplemental Instruction through a variety of venues including drop-in, scheduled, and group tutoring as well as facilitated workshops and supplemental instruction.

#### Assessment:

- › Data shows that the department continues to show significant positive gains for students receiving academic support versus students who do not. While the numbers show decreases within the SSC of unduplicated headcount the data does not accurately reflect the impact as the SSC has significantly increased supplemental instruction (SI) which is not currently captured through the SSC data gathering system. Slight decreases in SSC success and retention rates can also be attributed to the increase in the SI program which is reflected in separate graphs.

#### Department Goals:

- › Provide a stable academic support program which meets student academic support needs.

- › Partner with faculty to support classroom instruction through tutoring and supplemental instruction.
- › Increase student's understanding of course materials which translates to increases in student success and retention.

#### Challenges & Opportunities:

- › Current budget allotment for academic support will allow for 7 tutors for the campus across all disciplines. Relying on grant funding does not allow for stability within the program.
- › Currently, the SSC supports 44 Academic Tutors and 46 Supplemental Instructors across 22 academic disciplines within Science, Mathematics, CIT, Humanities, and Social Science with 1 Tutorial Coordinator. To provide a stable and manageable academic support program that will support student usage and provide adequate campus coverage, the SSC will request funding which will employ 30 Academic Tutors and 30 Supplemental Instructors.
- › A SI Coordinator position is needed to coordinate SI services which are currently being done through 4 people across 2 divisions.
- › Work through curriculum/State Chancellor/faculty

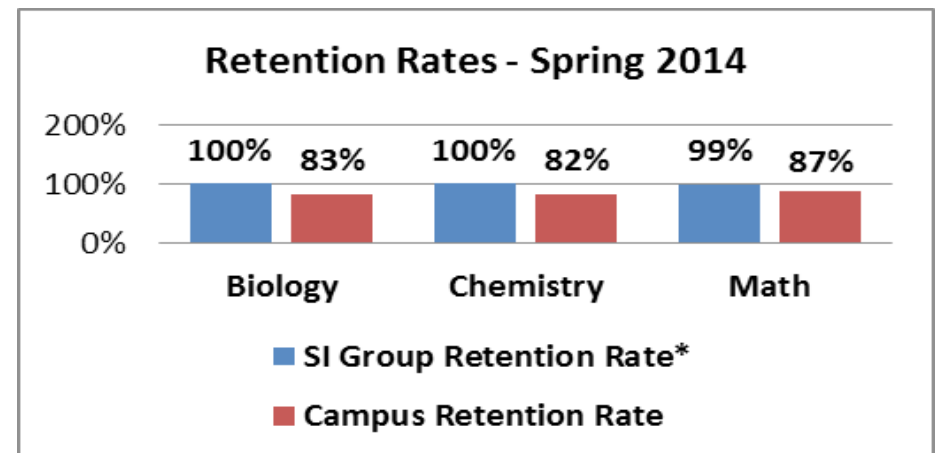
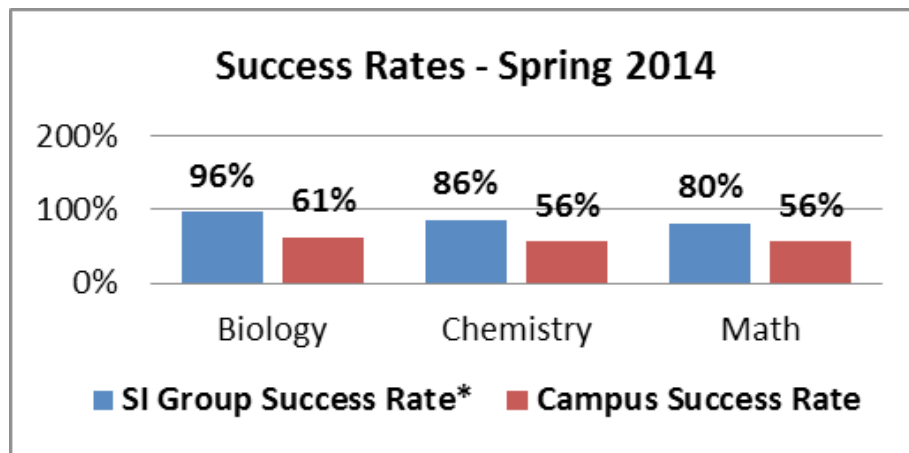
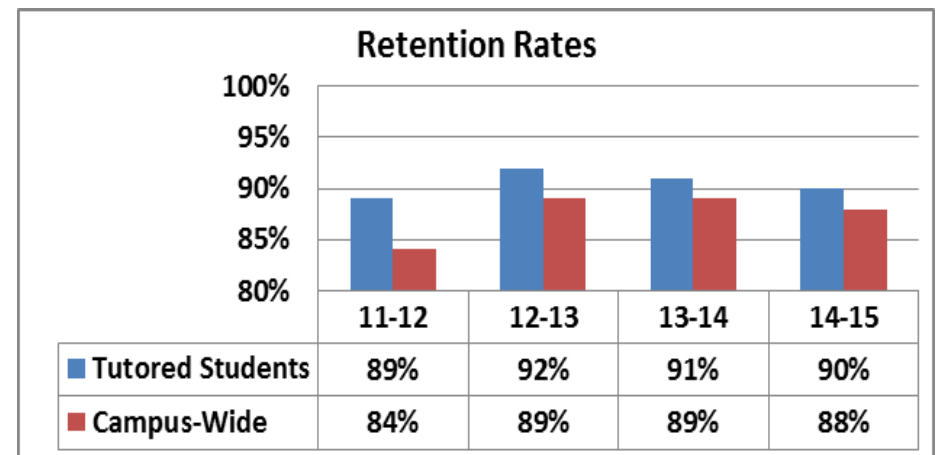
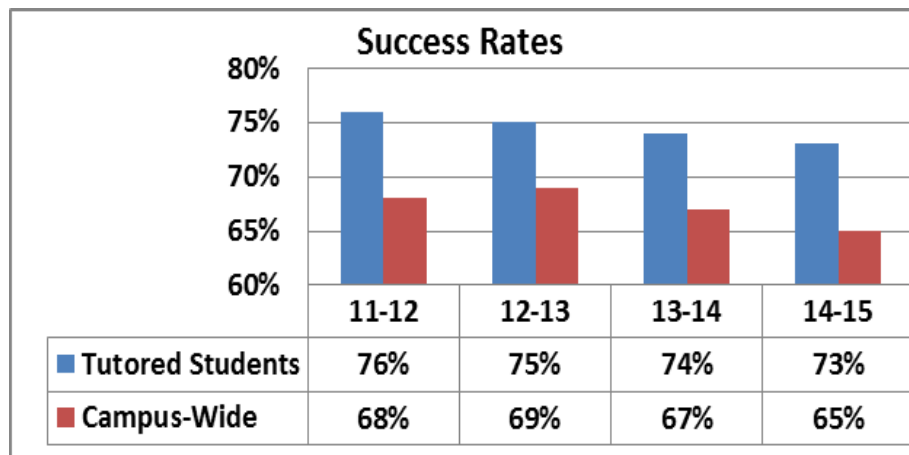
support to provide positive attendance funding opportunities.

- › Capturing consistent attendance data will be a challenge without full implementation of SARS and a staff member to facilitate data capture.

#### Action Plan:

- › Work with faculty/curriculum for a non-credit staffed lab courses to support student success in the basic skills classes.
- › Submit needs assessments for stable budget for academic support staff including tutoring, SI, and SI coordinator.
- › Expand current faculty support within the SSC to provide needed content expert support to academic support staff/students.
- › Track unmet requests for academic support to identify areas of need and provide academic support for them.
- › Increase SARS usage to capture accurate student usage data.

Unduplicated Headcount	Campus-wide		Success Center	
	Count	% of Campus	Count	% of Campus
2014-2015	17,044	100%	2,352	14%
2013-2014	16,080	100%	2,875	18%
2012-2013	15,441	100%	2,644	17%
2011-2012	16,593	100%	1,842	11%



## Individual Data Sheets By Division

# STUDENT SERVICES *(cont.)*

### TRANSFER CENTER – 2014-2015

#### Description:

- › The transfer center designs, develops and implement a variety of transfer and career strategies that increase the number of San Bernardino Valley College students prepared to transfer to a baccalaureate level institution and ensure students are knowledgeable of their career goals and how that relates in the global market place. The department works to foster a transfer culture on campus and to enhance student awareness of their educational options beyond the community college while increasing the number of students, especially historically underrepresented students, who apply to transfer from SBVC to a four-year institution.

#### Assessment:

- › The numbers reported under services do not reflect the total services we offered this just reflects what it reported in SARS. Other fall 2014 services included: table the on Quad by staff or university reps 1,895; fall transfer fair 675; application workshops and class presentations 277; four-year university campus visits 69.

- › CSUSB contacts have changed because our representative is only coming twice a month rather than every Wednesday and Cal Ploy has increased their visits to twice a month thus increase in contacts. The number of students who are using our computer lab has decreased due to the number of application workshops that we facilitate where students can work on the application in the workshop. We have also worked with several student development classes by providing their students with career assessment tools either in the center or in the classroom 120.

#### Program Goals:

- › Program goals are established by Title 5 requirements:
  - › Enhance and strengthen services that foster transfer awareness and readiness, transfer culture and increase transfer applications.
  - › Provide space that will centralize transfer center staff so they can adequately accommodate and streamline transfer services and programs that are accessible to students, faculty and staff.
  - › Ensure targeted student populations are identified, contacted and provided transfer

support services in collaboration with faculty.

- › Ensure that students receive accurate and up-to-date academic and transfer information through counseling services.
- › In cooperation with the four-year college and university personnel, develop a schedule of services to transfer students.

#### Challenges and Opportunities:

- › Full-time transfer and career counseling faculty are needed to serve more transfer students and to be able to provide much needed career services. There has only been a PT counselor for the past several years who does transfer, career and honors twice a week.
- › There is a greater need to assist our students in finding part-time jobs while going to school. Students are dropping out of school daily because they need to work.
- › Targeting underrepresented groups to increase transfer. Campus-wide African-American students are not transferring and rate is not increasing.

#### Action Plan:

- › Gain additional access to a database so transfer students can be identified, so that targeted



information can be sent to those students who identify transfer as a goal on their application to SVBC.

- › Hire a full-time transfer counselor.
- › Provide some type of job listing services for students.
- › Increase the number of African-American students participating in the Tumaini learning community to support them.

## DEMOGRAPHICS

Gender	Fall 2011 (n=600)	Fall 2012 (n=440)	Fall 2013 (n=419)	Fall 2014* (n=526)
Female	59%	62%	60%	53%
Male	41%	38%	40%	37%

\*10% = unreported

## ETHNICITY

Gender	Fall 2011 (n=600)	Fall 2012 (n=440)	Fall 2013 (n=419)	Fall 2014 (n=526)
Asian	6%	6%	5%	6%
Black	19%	13%	16%	13%
Hispanic	56%	63%	65%	61%
Native American	1%	1%	1%	<1%
Pacific Islander	2%	<1%	0%	<1%
White	14%	13%	11%	8%
Declined to State	3%	3%	1%	11%

## Individual Data Sheets By Division

# NON-INSTRUCTIONAL DEPARTMENTS/SERVICES

### CAMPUS TECHNOLOGY SERVICES

#### Description:

- › The CTS Department is a service oriented department that supports all technology located on the SBVC campus. Installs, maintains, configures and services computer based hardware and software along with the network infrastructure that includes switches, cabling, servers, and other networking equipment. Uses the helpdesk system to support campus/district owned systems used by students, faculty and staff. Maintains all of the academic/service/open computer labs and classroom technology. Consults with the campus community as needed to evaluate, specify, and purchase software/equipment that is then deployed to the campus. Works with the technology committee to develop standards and procedures for technology.

#### Assessment:

- › Assessment of Campus Technology services is based on campus surveys and feedback from helpdesk tickets.

#### Department Goals:

- › Goals are set by the technology committee. These are the Goals from the 2013-2016 technology plan:
  - › Goal 1. Provide exemplary technology resources and support while maintaining fiscal and environmental responsibility.
  - › Goal 2. Support the Online Program Committee's Plans and Goals.
  - › Goal 3. Encourage partnerships and promote awareness with businesses, other organizations, and the surrounding community.
  - › Goal 4. Collaborate with the District on projects that are beneficial to all.
  - › Goal 5. Work cooperatively through the Office of Professional Development to provide appropriate technology training.
  - › Goal 6. Identify and meet accessibility standards set by Section 508.

#### Challenges & Opportunities:

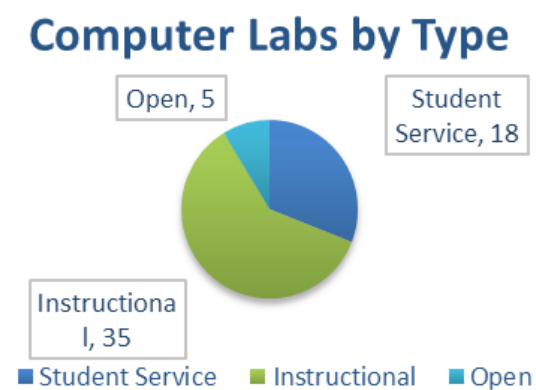
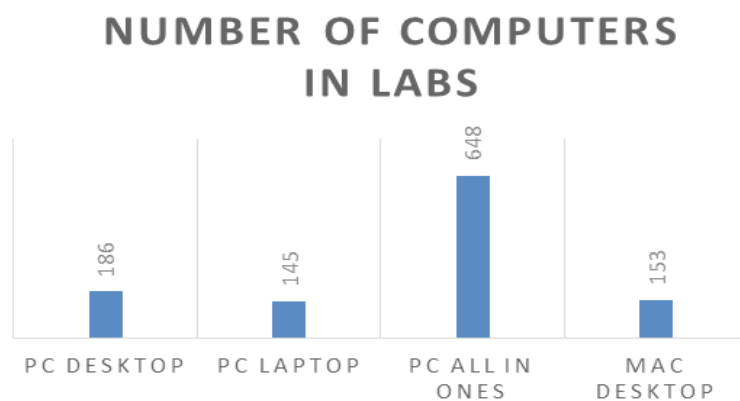
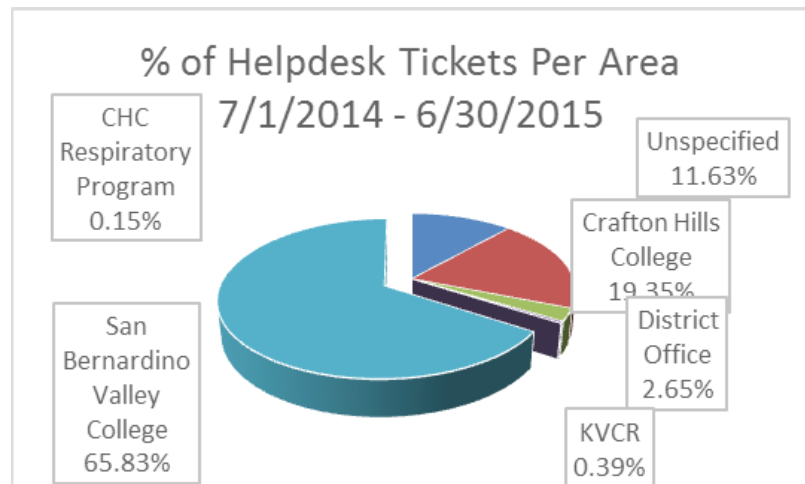
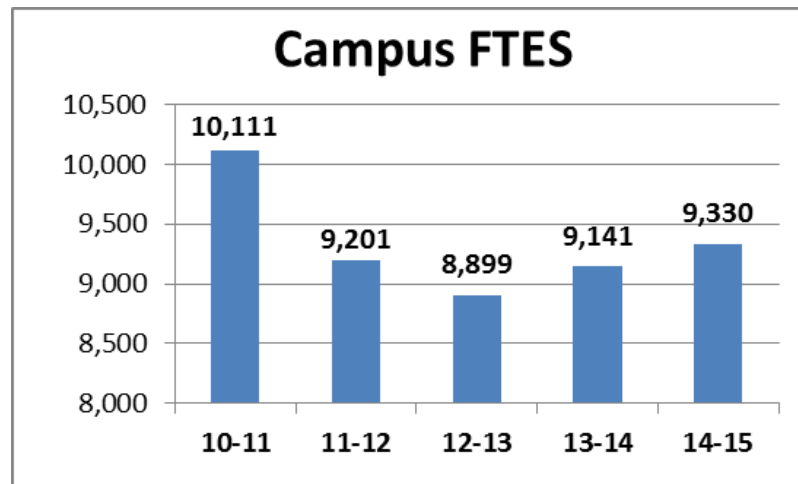
- › Use of technology continues to rise. Faculty, students, and staff are using multiple systems that require support.
- › Many new systems need to be connected to the network and requires technical configuration. HVAC, security cameras, door locks, alarms,

PA systems, and marquees are just a few of the items that only recently have been added to the campuses computer systems.

- › Cloud computing is pushing more systems to the network these system require configuration.
- › While budgets and demands for technology have increased staffing levels have remained the same.
- › Many of the new grants and categorical programs (especially in student services) come with funds for new equipment but no funds to support it.

#### Action Plan:

- › Continued support for technology is essential to our campus community. The department will continue to meet the needs of the community as well as it can with the resource it has. Increased staffing would go a long way toward implementing the technology needs of the Campus Community in a timely manner.



## Individual Data Sheets By Division

# NON-INSTRUCTIONAL DEPARTMENTS/SERVICES *(cont.)*

### GRANT DEVELOPMENT & MANAGEMENT – 2014-15

#### Description:

- › The Grant Development and Management Office is responsible for the development, submission, and management of grant projects awarded by federal, state, and private entities. The grants team researches opportunities and ensures they are a good fit with college and district priorities. Additionally, the office administers and manages the project after funding is awarded. Grants are tools of change for an institution. Innovative grants projects raise community awareness of the college and build prestige. Grants assume an even more important role in supporting college priorities as state funding fluctuates.

#### Assessment:

- › The Grants Office is fulfilling its purpose on campus and operating at a high level of performance as indicated by benchmarks for the profession.
- › As shown in the performance measure comparisons table, grant awards have provided the foundation for the development of programs and resources that contribute to student success.

- › Grants management is a time-consuming process. The more effective the Grants Office is at bringing in awards, the less effective the department will become unless staffing ratios match the workload created by new awards.

#### Department Goals:

- › Increase collaboration with campus population and focus on success.
- › Increase grant applications and awards and enhance student access and success through grant funded projects.
- › Educate campus population re: grant timelines, process, and proper grant management.

#### Challenges & Opportunities:

- › Institutionalization of programs and positions that have been identified as a campus priority.
- › Ample grants exist for colleges with SBVC social-economic base and demographics.
- › Instability in staffing and resources have created a situation where at times there is limited ability to respond to funding opportunities. Regular funding for a grant writer is a must.

#### Action Plan:

- › Desire to build partnerships with adult education, K-12, and ROP institutional segments, as well as with business and industry.
- › Initiate and manage projects as lead institution, with partners such as UC Riverside, CSUSB, and other colleges and universities; also participate as a partner in others' grants
- › Create ongoing funding streams to support campus initiatives such as StrengthsQuest, supplemental instruction, and tutoring.
- › Continue working with deans (instruction and student services) to prioritize and respond to grant opportunities.

Programs and Services Supported by Ongoing Major Grant Awards			
2011-12	2012-13	2013-14	2014-15
\$1,699,253	\$1,767,571	\$1,932,789	\$3,109,269

Departmental Efficiency and Productivity (Ratio of Salary to Income Generated)			
2011-12	2012-13	2013-14	2014-15
\$206,710	\$212,623	\$214,703	\$233,799
\$1,699,253	\$1,767,571	\$1,932,789	\$3,109,269
1:8	1:8	1:9	1:13

Ongoing Major Grand Awards — 2014-15	
HSI STEM PASS GO	\$1,102,349
MSEIP	\$235,124
MCHS	\$99,000
AB86	\$348,137
CTE	\$43,269
TAAACT	\$636,844
Nursing Enrollment	\$126,737
Ramp-up	\$409,235
NSF Water Grant	\$58,574
Campus Mental Health	\$50,000

Performance Measures by Group — 2014-15	Success	Retention
HSI STEM—SI Groups	63%	99%
Campus-wide— courses without SI*	\$212,623 57%	\$214,703 85%
MCHS—All SBVC Courses	90%	99%
Campus-wide—All Courses	66%	88%

\*same courses as the HSI STEM\_SI Group

## Individual Data Sheets By Division

# NON-INSTRUCTIONAL DEPARTMENTS/SERVICES *(cont.)*

### MARKETING & PUBLIC RELATIONS – 2014-2015

#### Description:

- Marketing and Public Relations leads all strategic and tactical marketing and public relations activities at the college, including, but not limited, to: press releases, media relations, crisis communications, campus-wide publications, special event coordination, website development, social media, photography, and other duties, as assigned, under direct supervision of the campus president. The department consists of one director-level position and part-time support from an administrative assistant.

#### Assessment:

- Assessing the effectiveness of Marketing and Public Relations takes on different strategies depending on the evolving enrollment environment at the campus. When SBCCD campuses were over-enrolled from 2009 -2011, the marketing budget was greatly reduced and nearly all advertising/promotional activities were discontinued, requiring a departmental shift in focus to public relations, reputation management, event planning and internal communications. After a drop in enrollment in 2012, the college was

directed to assist with increasing FTES, placing advertising/promotional activities at the forefront of department duties.

#### Department Goals:

- The economic downturn in 2009-2011 temporarily eliminated enrollment growth goals, which resulted in the department focusing on a redesign of the website, development of an internal newsletter, distribution of press releases, and the establishment of a college presence on social media. For the 2014-2015 academic year, the college was focused on enrollment growth in an environment of increasing competition for online publicity and recruitment from local nonprofit and for-profit colleges. The department's activities were focused on:
  - Increasing community awareness about the college and its programs via social media, digital, print, broadcast, and outdoor advertising;
  - Maintaining accurate, up-to-date information on the college website;
  - Stewarding the college's reputation in a time of increased negative press coverage of the college and district.

#### Challenges & Opportunities:

- After the departure of the Director of Marketing and Public Relations in 2013, the department experienced a loss in momentum that resulted in decreased student and community engagement, decreased online visibility for the college, and a negative impact to the college's local reputation. The interim director faced a number of challenges, including a lack of resources and staff to develop compelling digital media that matches the content being produced by competitor colleges.

Year	Social Media Posts			Press Release	Total
	Twitter	Facebook	Instagram		
2010-11	223	89		37	349
2011-12	193	237		41	471
2012-13	961	440	23	47	1,471
2013-14	41	205	30	12	288
2014-15	88	157	13	9	267

Year	Social Media Followers			Total
	Twitter	Facebook	Instagram	
2010-11		1,250		1,250
2011-12		4,150		4,150
2012-13	1,050	6,050		7,100
2013-14	1,460	7,465	305	9,230
2014-15	2,008	8,459	502	10,969

Student Headcount	10-11	11-12	12-13	13-14	14-15
Unduplicated	63%				99%
Enrollment	19,169	16,593	15,441	16,080	17,044
Day Class Enrollment*	9,789	9,158	8,781	9,220	9,639

\*Reporting period is fall term only of the academic year.

Student Campus Climate Survey Results Students' Overall Impression of the Reputation of SBVC					
Rating %	10-11	11-12	12-13	13-14	14-15
Excellent	31	26	30	36	29
Good	48	39	44	49	45
Average	15	19	17	10	18
Below Average	2	5	5	3	5
Poor	1	1	3	2	3



## Individual Data Sheets By Division

# NON-INSTRUCTIONAL DEPARTMENTS/SERVICES *(cont.)*

### PROFESSIONAL & ORGANIZATIONAL DEVELOPMENT – 2014-2015

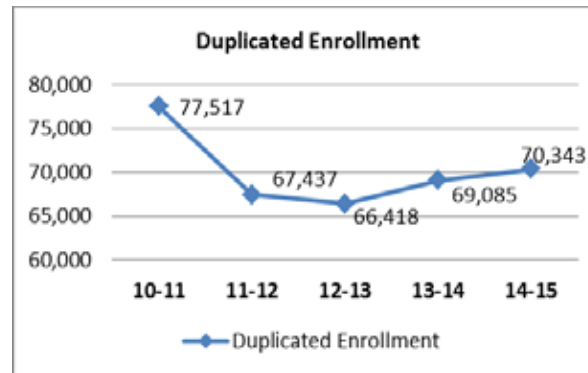
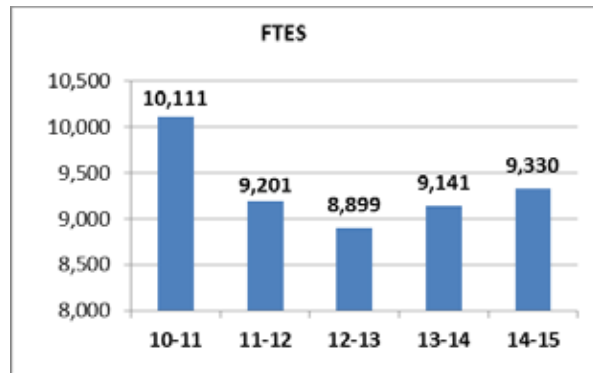
Description:

Assessment:

Department Goals:

Challenges & Opportunities:

Action Plan:



Employee Count	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
Administrators	18	18	17	15	17
Classified Staff	219	219	218	199	193
Adjunct Faculty	364	309	336	344	386
Tenured Faculty	154	151	148	146	147

Campus Events	2012-13	2013-14	2014-15
Workshops			
Great Teachers Retreat			
Flex Day			
Staff Appreciation			

## Individual Data Sheets By Division

NON-INSTRUCTIONAL DEPARTMENTS/SERVICES *(cont.)***RESEARCH, PLANNING & INSTITUTIONAL  
EFFECTIVENESS – 2014-2015**

## Description:

- Research, Planning, & Institutional Effectiveness (RPIE) serves all campus constituents by creating detailed data reports that support campus planning, grants, and continuous program improvement. Reports assess and track student performance, assessment placement, enrollment projection, graduation and transfer rates, demographic, workforce, and economic data. RPIE assists with developing methods, measures, and databases to assess and evaluate programs. ORPIE also supports SLO data collection, tracking, and analysis. It provides data to all student service departments and campus committees, including the program review committee. RPIE supports the district office by gathering requested data and administering surveys for district-level planning and evaluation. It maintains webpages with tables, graphs, maps, summary reports,

gainful employment information, and other college planning documents to communicate information to the campus and surrounding community. RPIE is also responsible for most local, state, and federal, mandated reporting of campus data.

## Assessment:

- The department has maintained campus-wide data support in a timely manner despite the increasing state and federal demands for empirical accountability. The increased campus awareness of the research request process has allowed the generation of 65% more request completions than during 13-14; however, the department is greatly pressed by an increased quantity of projects and only one researcher and dean, responding to last minute requests and deadlines, with no time for creative investigation. Ideally, this department would like to write investigative statistical reports outside the scope of our regular reports. Unfortunately, a lack of time and staff does not allow this to occur.

## Department Goals:

- The department would like to expand its staff so that investigative statistical reports can be written.
- We are beginning to create research briefs for camps-wide and community access, but this process is slow, as time does not usually allow for this.
- If additional staff is provided, more time for these research projects will be available.
- Open forum Q&A sessions throughout campus may also increase our visibility and campus-wide awareness of the campus planning processes to which we contribute.

## Challenges &amp; Opportunities:

- Fulfilling growing state and federal requirements is a continuous challenge, as well as the increased data-tracking and program evaluation for grant-funded programs. We accomplished our goal of becoming more visible, as shown in the 65% increase in research requests. However, staffing

Research Requests	10-11	11-12	12-13	13-14	14-15
Research requests using online RR Form	39	36	31	55	91
Research requests without RR Form (via email/phone)	34	37	38	6	8
Percentage of requests completed within 10 working days	Not Recorded	Not Recorded	65%	97%	86%

\*One of many grants supported by RPIE

has remained the same, and the three department staff (Dean, Analyst, and Secretary) is not sufficient to accomplish required duties in addition to informational research papers and presentations.

- Low survey response rates also continue to be a challenge. Increased marketing of the surveys will be needed to generate a greater return rate.

#### Action Plan:

- Fill the classified position of research assistant in order to increase productivity and institutional effectiveness.
- Create a budget for OPIE so that additional staff, such as professional experts, may be employed.
- Raise the visibility of the department via research briefs, presentations, open forums, and marketing.
- Create research papers and presentations to share with the campus and institutional research community.
- Establish more on-campus and off-campus partnerships.
- Maintain and update the webpage as tool to share institutional and community information.
- Improve survey return rates so the opinions of the campus climate survey will encompass a greater portion of the campus.

Department Service	10-11	11-12	12-13	13-14	14-15
Number of SBVC departments served	62	58	58	58	58
Number of focus groups held	3	4	13	3	5
Number of IRB requests fulfilled requests	4	5	4	6	5
Number of partnerships	3	3	4	4	4

Survey/Evaluation Count	11-12		12-13		13-14		14-15	
	Sent	Ret	Sent	Ret	Sent	Ret	Sent	Ret
Campus Climate	12,929	311	13,568	651	12,944	710	13,077	689
Community Surveys (phone)	N/A	N/A	N/A	N/A	N/A	N/A	10,000	1,242
District Program Review	16,80	511	1,686	622	1677	810	1,681	792
Placement & Prerequisite	8,902	4109	8,816	5019	3,150	2626	N/A	N/A
STEM	3,587	1,570	3,166	2,506	2,844	2,187	3,493	3,004
<b>Evaluations</b>								
Mgmt—SNAP	14		6		11		9	

Campus-wide Employee Count	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
Classified Staff	219	219	218	199	193
Faculty (FT & Adjuncts)	518	460	484	490	533
Administrators	18	18	17	15	17
<b>RPIE Employees</b>					
SBVC Employees	2	3	3	3	3
Temp/Student Workers	N/A	N/A	1	3	2
Volunteers	N/A	N/A	N/A	1	2



# Full Listing Of Service Area + Regional Job Openings By Occupation (2015–2025)

## SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
ACCT	Accountants and Auditors	111	2,103	2,522	419	20%	\$34.16
ACCT	Bookkeeping, Accounting, and Auditing Clerks	101	3,688	4,318	630	17%	\$19.14
ACCT	Tellers	73	1,176	1,278	102	9%	\$13.94
ACCT	Billing and Posting Clerks	64	1,453	1,790	337	23%	\$17.22
ACCT	Financial Managers	37	1,114	1,256	142	13%	\$55.32
ACCT	Loan Officers	25	621	742	121	19%	\$37.75
ACCT	Payroll and Timekeeping Clerks	24	643	730	87	14%	\$19.69
ACCT	Insurance Claims and Policy Processing Clerks	23	601	664	63	10%	\$16.53
ACCT	Securities, Commodities, and Financial Services Sales Agents	21	550	609	59	11%	\$28.47
ACCT	Loan Interviewers and Clerks	13	455	546	91	20%	\$19.66
ACCT	Financial Analysts	9	157	201	44	28%	\$41.22
ACCT	Personal Financial Advisors	7	181	216	35	19%	\$40.08
ACCT	Tax Preparers	7	199	225	26	13%	\$19.60
ACCT	Budget Analysts	6	133	138	5	4%	\$31.12
ACCT	Financial Specialists, All Other	6	305	327	22	7%	\$24.89
ACCT	Credit Counselors	5	141	164	23	16%	\$22.74
ACCT	Credit Analysts	4	74	91	17	23%	\$35.37
ACCT	Financial Clerks, All Other	3	67	78	11	16%	\$18.98
ACCT	Tax Examiners and Collectors, and Revenue Agents	2	72	67	(5)	(7%)	\$34.31
ACCT	New Accounts Clerks	2	59	60	1	2%	\$17.11
ACCT	Credit Authorizers, Checkers, and Clerks	2	59	69	10	17%	\$15.77
ADJUS/CORREC	Security Guards	77	2,693	3,014	321	12%	\$12.60
ADJUS/CORREC	Protective Service Workers, All Other	54	633	706	73	12%	\$15.39
ADJUS/CORREC	Dispatchers, Except Police, Fire, and Ambulance	47	982	1,133	151	15%	\$19.29
ADJUS/CORREC	Police and Sheriff's Patrol Officers	18	440	479	39	9%	\$42.30
ADJUS/CORREC	Correctional Officers and Jailers	13	390	407	17	4%	\$34.64
ADJUS/CORREC	First-Line Supervisors of Protective Service Workers, All Other	5	140	159	19	14%	\$25.53
ADJUS/CORREC	Detectives and Criminal Investigators	4	178	176	(2)	(1%)	\$45.03
ADJUS/CORREC	Police, Fire, and Ambulance Dispatchers	3	83	91	8	10%	\$24.91
ADJUS/CORREC	Transportation Security Screeners	3	97	99	2	2%	\$19.78



Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
ADJUS/CORREC	Probation Officers and Correctional Treatment Specialists	2	81	82	1	1%	\$40.30
ADJUS/CORREC	First-Line Supervisors of Correctional Officers	2	50	51	1	2%	\$45.79
ADJUS/CORREC	Private Detectives and Investigators	2	19	27	8	42%	\$28.02
ADJUS/CORREC	First-Line Supervisors of Police and Detectives	1	26	30	4	16%	\$59.84
ADJUS/CORREC	Administrative Law Judges, Adjudicators, and Hearing Officers	Insf. Data	17	16	(1)	(6%)	\$59.53
ADJUS/CORREC	Judges, Magistrate Judges, and Magistrates	Insf. Data	12	13	1	8%	\$103.50
AERO	Aircraft Mechanics and Service Technicians	8	172	201	29	17%	\$28.03
AERO	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	2	50	57	7	14%	\$24.25
AERO	Air Traffic Controllers	Insf. Data	14	15	1	7%	\$50.52
AERO	Avionics Technicians	Insf. Data	12	15	3	25%	\$31.79
ANTHRO	Anthropologists and Archeologists	1	29	36	7	24%	\$25.59
ARCH	Architectural and Engineering Managers	9	280	298	18	6%	\$63.84
ARCH	Interior Designers	5	82	104	22	27%	\$25.00
ARCH	Architects, Except Landscape and Naval	5	66	92	26	39%	\$44.10
ARCH	Architectural and Civil Drafters	3	161	162	1	1%	\$28.12
ARCH	Urban and Regional Planners	2	39	44	5	13%	\$38.29
ARCH	Landscape Architects	2	36	44	8	22%	\$37.08
ARCH	Drafters, All Other	Insf. Data	22	25	3	13%	\$25.07
ART	Graphic Designers	11	289	316	27	9%	\$21.66
ART	Photographers	4	133	154	21	16%	\$21.97
ART	Photographic Process Workers and Processing Machine Operators	2	56	62	6	11%	\$14.27
ART	Fine Artists, Including Painters, Sculptors, and Illustrators	2	46	49	3	6%	\$38.37
ART	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	1	34	34	0	0%	\$15.07
ART	Fashion Designers	1	21	25	4	19%	\$27.45
ART	Art Directors	Insf. Data	24	26	2	8%	\$39.50
ART	Designers, All Other	Insf. Data	13	15	2	16%	\$24.48
ART	Multimedia Artists and Animators	Insf. Data	15	18	3	20%	\$30.40
ART	Artists and Related Workers, All Other	Insf. Data	18	19	1	5%	\$28.60
AUTO	Maintenance and Repair Workers, General	109	3,016	3,478	462	15%	\$18.75
AUTO	Automotive Service Technicians and Mechanics	101	2,350	2,707	357	15%	\$19.74

## SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
AUTO	First-Line Supervisors of Mechanics, Installers, and Repairers	43	1,048	1,177	129	12%	\$34.52
AUTO	Industrial Machinery Mechanics	37	663	813	150	23%	\$26.05
AUTO	Tire Repairers and Changers	30	685	737	52	8%	\$12.99
AUTO	Installation, Maintenance, and Repair Workers, All Other	13	444	488	44	10%	\$18.20
AUTO	Mobile Heavy Equipment Mechanics, Except Engines	12	316	337	21	7%	\$26.18
AUTO	Maintenance Workers, Machinery	9	304	350	46	15%	\$21.61
AUTO	Automotive Body and Related Repairers	8	327	284	(43)	(13%)	\$21.44
AUTO	Recreational Vehicle Service Technicians	3	58	61	3	5%	\$20.09
AUTO	Motorboat Mechanics and Service Technicians	2	38	49	11	29%	\$18.05
AUTO	Motorcycle Mechanics	2	48	54	6	13%	\$24.15
AUTO	Outdoor Power Equipment and Other Small Engine Mechanics	2	40	46	6	15%	\$16.08
AUTO	Engine and Other Machine Assemblers	2	53	59	6	11%	\$20.27
AUTO	Automotive Glass Installers and Repairers	1	41	30	(11)	(27%)	\$14.66
AUTO	Farm Equipment Mechanics and Service Technicians	Insf. Data	17	15	(2)	(11%)	\$20.32
AUTO	Electronic Equipment Installers and Repairers, Motor Vehicles	Insf. Data	56	55	(1)	(2%)	\$16.24
AUTO	Insurance Appraisers, Auto Damage	Insf. Data	24	21	(3)	(12%)	\$25.17
BIOL	Physicians and Surgeons, All Other	51	943	1,177	234	25%	\$59.30
BIOL	Family and General Practitioners	24	509	602	93	18%	\$101.26
BIOL	Medical and Clinical Laboratory Technicians	21	319	427	108	34%	\$19.56
BIOL	Medical and Clinical Laboratory Technologists	11	163	220	57	35%	\$33.10
BIOL	Medical Scientists, Except Epidemiologists	10	238	277	39	16%	\$43.14
BIOL	Surgeons	9	152	195	43	28%	\$103.52
BIOL	Forest and Conservation Technicians	8	202	185	(17)	(8%)	\$19.94
BIOL	Veterinary Assistants and Laboratory Animal Caretakers	6	255	268	13	5%	\$13.89
BIOL	Anesthesiologists	6	102	134	32	31%	\$112.30
BIOL	Veterinary Technologists and Technicians	6	152	191	39	26%	\$15.58
BIOL	Internists, General	5	74	103	29	39%	\$85.18
BIOL	Life, Physical, and Social Science Technicians, All Other	5	86	100	14	16%	\$24.95
BIOL	Veterinarians	5	103	117	14	14%	\$45.07
BIOL	Pediatricians, General	5	92	114	22	24%	\$89.48

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
BIOL	Health Diagnosing and Treating Practitioners, All Other	5	163	172	9	6%	\$32.31
BIOL	Biological Technicians	4	86	101	15	17%	\$19.63
BIOL	Obstetricians and Gynecologists	4	67	83	16	24%	\$114.46
BIOL	Biomedical Engineers	3	83	81	(2)	(2%)	\$48.14
BIOL	Biological Scientists, All Other	3	86	81	(5)	(6%)	\$32.72
BIOL	Chiropractors	2	59	68	9	15%	\$44.31
BIOL	Microbiologists	2	27	32	5	19%	\$35.44
BIOL	Life Scientists, All Other	Insf. Data	15	18	3	21%	\$45.07
BIOL	Soil and Plant Scientists	Insf. Data	11	13	2	18%	\$30.99
BIOL	Zoologists and Wildlife Biologists	Insf. Data	24	25	1	4%	\$32.59
BIOL	Forest and Conservation Workers	Insf. Data	19	20	1	5%	\$12.02
BIOL	Genetic Counselors	Insf. Data	14	18	4	29%	\$31.40
BUSAD	Office Clerks, General	265	8,271	9,081	810	10%	\$14.58
BUSAD	General and Operations Managers	205	5,653	6,550	897	16%	\$51.26
BUSAD	First-Line Supervisors of Office and Administrative Support Workers	179	4,033	4,766	733	18%	\$25.41
BUSAD	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	149	5,094	5,910	816	16%	\$17.90
BUSAD	Receptionists and Information Clerks	131	2,656	3,167	511	19%	\$13.52
BUSAD	Business Operations Specialists, All Other	47	1,865	2,061	196	11%	\$31.15
BUSAD	Office and Administrative Support Workers, All Other	45	1,361	1,409	48	4%	\$13.19
BUSAD	Sales Managers	43	1,171	1,334	163	14%	\$54.11
BUSAD	Management Analysts	40	985	1,212	227	23%	\$39.36
BUSAD	Market Research Analysts and Marketing Specialists	39	747	1,011	264	35%	\$27.70
BUSAD	Human Resources Specialists	37	1,053	1,207	154	15%	\$28.28
BUSAD	Production, Planning, and Expediting Clerks	37	890	1,013	123	14%	\$19.92
BUSAD	Order Clerks	31	838	915	77	9%	\$16.52
BUSAD	Cost Estimators	28	643	679	36	6%	\$31.88
BUSAD	Executive Secretaries and Executive Administrative Assistants	26	1,343	1,425	82	6%	\$25.88
BUSAD	Transportation, Storage, and Distribution Managers	24	481	594	113	23%	\$41.14
BUSAD	Administrative Services Managers	23	641	752	111	17%	\$39.84

## SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
BUSAD	Chief Executives	18	518	577	59	11%	\$87.79
BUSAD	Paralegals and Legal Assistants	17	475	555	80	17%	\$24.15
BUSAD	Managers, All Other	17	492	545	53	11%	\$50.57
BUSAD	Claims Adjusters, Examiners, and Investigators	16	638	606	(32)	(5%)	\$29.26
BUSAD	First-Line Supervisors of Non-Retail Sales Workers	16	517	600	83	16%	\$29.95
BUSAD	Purchasing Agents, Except Wholesale, Retail, and Farm Products	16	556	603	47	8%	\$26.62
BUSAD	File Clerks	15	546	565	19	3%	\$15.01
BUSAD	Human Resources Assistants, Except Payroll and Timekeeping	15	415	452	37	9%	\$18.38
BUSAD	Education Administrators, Postsecondary	14	276	330	54	20%	\$52.22
BUSAD	Compliance Officers	14	497	533	36	7%	\$34.05
BUSAD	Marketing Managers	11	253	301	48	19%	\$58.91
BUSAD	Human Resources Managers	11	218	260	42	19%	\$48.39
BUSAD	Procurement Clerks	10	204	221	17	8%	\$20.21
BUSAD	Advertising Sales Agents	7	193	177	(16)	(8%)	\$20.29
BUSAD	Purchasing Managers	5	131	144	13	10%	\$46.51
BUSAD	Compensation, Benefits, and Job Analysis Specialists	4	130	148	18	14%	\$29.93
BUSAD	Legal Secretaries	4	166	181	15	9%	\$17.50
BUSAD	Sales Engineers	4	88	109	21	24%	\$46.05
BUSAD	Labor Relations Specialists	3	183	172	(11)	(6%)	\$32.53
BUSAD	Insurance Underwriters	3	85	84	(1)	(1%)	\$28.51
BUSAD	Court, Municipal, and License Clerks	2	76	86	10	13%	\$21.02
BUSAD	Training and Development Managers	2	41	50	9	22%	\$49.74
BUSAD	Advertising and Promotions Managers	2	47	50	3	6%	\$39.05
BUSAD	Legal Support Workers, All Other	2	95	94	(1)	(1%)	\$21.88
BUSAD	Correspondence Clerks	1	20	25	5	25%	\$12.60
BUSAD	Arbitrators, Mediators, and Conciliators	Insf. Data	14	15	1	7%	\$35.89
BUSAD	Compensation and Benefits Managers	Insf. Data	22	25	3	14%	\$57.24
CD	Elementary School Teachers, Except Special Education	187	5,414	6,019	605	11%	\$35.16
CD	Teacher Assistants	138	4,410	4,745	335	8%	\$14.34
CD	Substitute Teachers	95	4,343	4,535	192	4%	\$18.57

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
CD	Childcare Workers	86	2,082	2,289	207	10%	\$12.70
CD	Secondary School Teachers, Except Special and Career/Technical Education	84	2,317	2,500	183	8%	\$33.44
CD	Middle School Teachers, Except Special and Career/Technical Education	57	1,528	1,733	205	13%	\$34.95
CD	Kindergarten Teachers, Except Special Education	37	919	1,013	94	10%	\$31.29
CD	Preschool Teachers, Except Special Education	37	893	991	98	11%	\$15.11
CD	Teachers and Instructors, All Other	27	970	1,064	94	10%	\$27.41
CD	Education Administrators, Elementary and Secondary School	22	633	680	47	7%	\$50.70
CD	Special Education Teachers, Kindergarten and Elementary School	18	691	743	52	8%	\$36.51
CD	Special Education Teachers, Secondary School	8	301	325	24	8%	\$33.50
CD	Special Education Teachers, Middle School	6	246	263	17	7%	\$31.80
CD	Education Administrators, All Other	5	132	145	13	10%	\$44.33
CD	Career/Technical Education Teachers, Secondary School	5	116	128	12	10%	\$32.76
CD	Education Administrators, Preschool and Childcare Center/Program	4	103	116	13	13%	\$25.32
CD	Special Education Teachers, All Other	4	119	134	15	13%	\$37.72
CD	Special Education Teachers, Preschool	3	61	81	20	33%	\$24.36
CHEM	Chemists	5	105	127	22	21%	\$31.11
CHEM	Chemical Technicians	4	63	80	17	27%	\$20.75
CHEM	Chemical Plant and System Operators	2	36	36	0	0%	\$28.17
CHEM	Chemical Equipment Operators and Tenders	2	29	32	3	10%	\$18.12
CHEM	Forensic Science Technicians	1	24	27	3	12%	\$31.73
CHEM	Chemical Engineers	Insf. Data	25	27	2	8%	\$47.40
CIT/CS	Computer User Support Specialists	32	846	1,020	174	21%	\$25.64
CIT/CS	Software Developers, Applications	26	733	890	157	21%	\$48.76
CIT/CS	Computer Systems Analysts	23	489	629	140	29%	\$37.33
CIT/CS	Network and Computer Systems Administrators	18	534	626	92	17%	\$41.97
CIT/CS	Computer and Information Systems Managers	14	419	492	73	17%	\$56.45
CIT/CS	Computer Programmers	10	204	242	38	19%	\$37.42
CIT/CS	Software Developers, Systems Software	9	155	217	62	40%	\$50.25
CIT/CS	Computer Occupations, All Other	7	268	287	19	7%	\$37.33

## SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
CIT/CS	Computer Network Support Specialists	6	224	250	26	12%	\$31.84
CIT/CS	Web Developers	6	161	190	29	18%	\$31.00
CIT/CS	Database Administrators	5	106	129	23	22%	\$40.57
CIT/CS	Computer Network Architects	4	72	94	22	31%	\$50.69
CIT/CS	Information Security Analysts	3	44	64	20	45%	\$46.27
CIT/CS	Computer Operators	2	114	115	1	1%	\$19.30
CIT/CS	Computer Hardware Engineers	1	18	24	6	34%	\$53.23
CIT/CS	Computer and Information Research Scientists	1	36	41	5	14%	\$50.70
COMMST	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	145	3,127	3,886	759	24%	\$31.53
COMMST	Sales Representatives, Services, All Other	90	1,957	2,276	319	16%	\$27.26
COMMST	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	24	454	590	136	30%	\$34.28
COMMST	Public Relations Specialists	8	230	274	44	19%	\$25.82
COMMST	Audio and Video Equipment Technicians	5	155	172	17	11%	\$17.66
COMMST	Radio and Television Announcers	4	124	138	14	11%	\$14.49
COMMST	Fundraisers	4	71	91	20	28%	\$26.71
COMMST	Public Relations and Fundraising Managers	3	63	77	14	22%	\$45.79
COMMST	Media and Communication Workers, All Other	1	50	54	4	8%	\$18.92
COMMST	Broadcast Technicians	Insf. Data	13	14	1	8%	\$26.34
COMMST	Audio-Visual and Multimedia Collections Specialists	Insf. Data	43	42	(1)	(2%)	\$18.65
COMMST	Reporters and Correspondents	Insf. Data	24	<10	Insf. Data		\$18.83
COMMST	Media and Communication Equipment Workers, All Other	Insf. Data	32	30	(2)	(6%)	\$31.60
COMMST	Sound Engineering Technicians	Insf. Data	13	14	1	8%	\$20.45
CULART	First-Line Supervisors of Food Preparation and Serving Workers	150	2,678	3,316	638	24%	\$14.93
CULART	Bakers	41	989	1,117	128	13%	\$12.43
CULART	Cooks, Institution and Cafeteria	37	788	982	194	25%	\$13.96
CULART	Food Service Managers	27	861	962	101	12%	\$23.91
CULART	Butchers and Meat Cutters	21	493	574	81	16%	\$14.78
CULART	Food Batchmakers	20	452	485	33	7%	\$13.49

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
CULART	Chefs and Head Cooks	12	382	431	49	13%	\$17.50
CULART	Food Processing Workers, All Other	4	93	106	13	14%	\$14.19
CULART	Food Cooking Machine Operators and Tenders	3	86	94	8	9%	\$14.23
CULART	Cooks, All Other	2	36	48	12	33%	\$12.87
CULART	Cooks, Private Household	Insf. Data	15	16	1	7%	\$20.90
DANCE	Choreographers	Insf. Data	15	18	3	20%	\$28.78
DANCE	Dancers	Insf. Data	22	20	(2)	(9%)	\$14.38
DIESEL	Bus and Truck Mechanics and Diesel Engine Specialists	49	1,374	1,549	175	13%	\$21.75
ECON	Economists	2	47	56	9	19%	\$33.80
ELEC/ELECTR	Electricians	44	1,290	1,450	160	12%	\$29.52
ELEC/ELECTR	Electrical Power-Line Installers and Repairers	27	448	529	81	18%	\$44.14
ELEC/ELECTR	Telecommunications Line Installers and Repairers	18	398	473	75	19%	\$25.86
ELEC/ELECTR	Telecommunications Equipment Installers and Repairers, Except Line Installers	14	432	502	70	16%	\$28.94
ELEC/ELECTR	Home Appliance Repairers	14	254	303	49	19%	\$22.76
ELEC/ELECTR	Electrical and Electronic Equipment Assemblers	10	278	328	50	18%	\$15.45
ELEC/ELECTR	Control and Valve Installers and Repairers, Except Mechanical Door	8	195	195	0	0%	\$31.40
ELEC/ELECTR	Power Plant Operators	8	192	196	4	2%	\$31.42
ELEC/ELECTR	Electronics Engineers, Except Computer	8	254	264	10	4%	\$46.21
ELEC/ELECTR	Electrical and Electronics Engineering Technicians	7	232	246	14	6%	\$29.18
ELEC/ELECTR	Computer, Automated Teller, and Office Machine Repairers	6	125	156	31	25%	\$17.44
ELEC/ELECTR	Electrical Engineers	6	131	154	23	18%	\$46.42
ELEC/ELECTR	Medical Equipment Repairers	6	69	101	32	46%	\$26.70
ELEC/ELECTR	Helpers--Electricians	5	110	137	27	25%	\$13.98
ELEC/ELECTR	Electrical and Electronics Repairers, Commercial and Industrial Equipment	5	140	154	14	10%	\$28.15
ELEC/ELECTR	Electronic Home Entertainment Equipment Installers and Repairers	4	81	86	5	6%	\$21.84
ELEC/ELECTR	Meter Readers, Utilities	3	109	92	(17)	(16%)	\$22.65
ELEC/ELECTR	Solar Photovoltaic Installers	2	54	61	7	13%	\$23.77
ELEC/ELECTR	Electrical and Electronics Drafters	2	64	69	5	8%	\$29.00



## SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
ELEC/ELECTR	Electromechanical Equipment Assemblers	2	47	52	5	11%	\$14.31
ELEC/ELECTR	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	1	28	33	5	18%	\$38.78
ELEC/ELECTR	Precision Instrument and Equipment Repairers, All Other	1	25	29	4	16%	\$25.72
ELEC/ELECTR	Electro-Mechanical Technicians	Insf. Data	13	14	1	8%	\$27.61
ELEC/ELECTR	Radio, Cellular, and Tower Equipment Installers and Repairs	Insf. Data	34	36	2	6%	\$23.21
ELEC/ELECTR	Electric Motor, Power Tool, and Related Repairers	Insf. Data	18	21	3	17%	\$23.76
ELEC/ELECTR	Electrical and Electronics Installers and Repairers, Transportation Equipment	Insf. Data	13	14	1	8%	\$25.72
ENGL	Adult Basic and Secondary Education and Literacy Teachers and Instructors	4	160	176	16	10%	\$39.59
ENGL	Technical Writers	3	53	65	12	23%	\$38.11
ENGL	Editors	2	48	42	(6)	(12%)	\$21.86
ENGL	Writers and Authors	1	37	40	3	8%	\$31.18
ENGL	Court Reporters	Insf. Data	23	24	1	4%	\$40.85
ENGR	Civil Engineers	16	502	530	28	6%	\$46.07
ENGR	Industrial Engineers	12	250	282	32	13%	\$37.34
ENGR	Engineering Technicians, Except Drafters, All Other	5	197	200	3	2%	\$31.38
ENGR	Engineers, All Other	5	194	202	8	4%	\$46.07
ENGR	Environmental Engineers	3	67	78	11	16%	\$43.01
ENGR	Environmental Engineering Technicians	2	37	44	7	19%	\$24.60
ENGR	Civil Engineering Technicians	1	49	49	0	0%	\$30.26
FN	Dietitians and Nutritionists	7	173	219	46	27%	\$33.00
FN	Dietetic Technicians	4	138	164	26	19%	\$14.51
FN	Agricultural and Food Science Technicians	4	81	86	5	6%	\$14.22
FN	Food Scientists and Technologists	3	56	63	7	12%	\$28.26
GEOG	Surveyors	3	82	90	8	10%	\$34.47
GEOG	Surveying and Mapping Technicians	2	47	55	8	17%	\$28.40
GEOG	Cartographers and Photogrammetrists	1	32	38	6	19%	\$27.22
GEOL	Geoscientists, Except Hydrologists and Geographers	2	46	52	6	13%	\$37.26
GEOL	Geological and Petroleum Technicians	Insf. Data	11	13	2	18%	\$25.54

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
HIST	Library Technicians	10	156	169	13	8%	\$18.40
HIST	Museum Technicians and Conservators	Insf. Data	12	12	0	0%	\$18.45
HUMSERV	Marriage and Family Therapists	3	88	99	11	13%	\$24.86
HUMSV	Social and Human Service Assistants	67	1,055	1,383	328	31%	\$15.70
HUMSV	Healthcare Social Workers	34	534	731	197	37%	\$31.15
HUMSV	Rehabilitation Counselors	25	504	623	119	24%	\$16.58
HUMSV	Educational, Guidance, School, and Vocational Counselors	24	755	826	71	9%	\$30.88
HUMSV	Social and Community Service Managers	18	303	407	104	34%	\$38.18
HUMSV	Child, Family, and School Social Workers	15	364	429	65	18%	\$24.61
HUMSV	Community and Social Service Specialists, All Other	15	260	327	67	26%	\$19.75
HUMSV	Mental Health Counselors	14	350	408	58	17%	\$20.41
HUMSV	Substance Abuse and Behavioral Disorder Counselors	10	260	298	38	15%	\$19.11
HUMSV	Social Workers, All Other	10	292	319	27	9%	\$28.86
HUMSV	Mental Health and Substance Abuse Social Workers	9	203	247	44	22%	\$22.90
HUMSV	Occupational Therapists	9	227	282	55	24%	\$43.41
HUMSV	Community Health Workers	9	131	177	46	35%	\$21.24
HUMSV	Health Educators	7	131	158	27	21%	\$24.92
HUMSV	Occupational Therapy Assistants	4	69	90	21	30%	\$30.98
HUMSV	Recreational Therapists	3	55	67	12	22%	\$34.05
HVAC/R	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	25	599	684	85	14%	\$24.50
HVAC/R	Cooling and Freezing Equipment Operators and Tenders	Insf. Data	13	16	3	22%	\$15.22
INSPEC	Inspectors, Testers, Sorters, Samplers, and Weighers	50	1,258	1,437	179	14%	\$17.45
INSPEC	Construction and Building Inspectors	5	127	141	14	11%	\$38.22
INSPEC	Transportation Inspectors	3	56	65	9	16%	\$23.65
KIN	Physical Therapists	22	401	505	104	26%	\$41.70
KIN	Fitness Trainers and Aerobics Instructors	15	525	611	86	16%	\$18.73
KIN	Physical Therapist Assistants	9	157	202	45	29%	\$29.93
KIN	Massage Therapists	8	231	283	52	23%	\$20.35
KIN	Physical Therapist Aides	5	102	124	22	22%	\$13.69
KIN	Athletic Trainers	2	28	35	7	25%	\$20.95

## SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
KIN	Exercise Physiologists	Insf. Data	11	14	3	28%	\$25.08
MACH	Machinists	39	1,012	1,144	132	13%	\$17.25
MACH	Assemblers and Fabricators, All Other	20	556	643	87	16%	\$13.41
MACH	Mixing and Blending Machine Setters, Operators, and Tenders	15	372	391	19	5%	\$15.14
MACH	Computer-Controlled Machine Tool Operators, Metal and Plastic	13	256	305	49	19%	\$17.42
MACH	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	9	265	311	46	17%	\$12.90
MACH	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	8	612	600	(12)	(2%)	\$16.49
MACH	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	6	93	118	25	27%	\$15.43
MACH	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	6	217	223	6	3%	\$16.39
MACH	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	6	374	355	(19)	(5%)	\$14.84
MACH	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	5	162	149	(13)	(8%)	\$12.97
MACH	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	5	219	194	(25)	(11%)	\$14.34
MACH	Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	4	60	85	25	42%	\$14.71
MACH	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	4	61	80	19	31%	\$24.72
MACH	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	4	145	146	1	1%	\$16.95
MACH	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	3	141	140	(1)	(1%)	\$17.00
MACH	Paper Goods Machine Setters, Operators, and Tenders	3	238	220	(18)	(8%)	\$18.40
MACH	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	3	107	110	3	3%	\$15.68
MACH	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	3	140	133	(7)	(5%)	\$16.52
MACH	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	3	97	101	4	4%	\$14.01

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
MACH	Mechanical Drafters	2	123	120	(3)	(2%)	\$25.73
MACH	Metal Workers and Plastic Workers, All Other	2	101	108	7	7%	\$13.26
MACH	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	2	59	51	(8)	(14%)	\$17.89
MACH	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	2	97	83	(14)	(14%)	\$15.29
MACH	Cutting and Slicing Machine Setters, Operators, and Tenders	1	74	64	(10)	(13%)	\$17.33
MACH	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1	67	61	(6)	(9%)	\$13.74
MACH	Millwrights	1	38	43	5	13%	\$21.85
MACH	Roustabouts, Oil and Gas	1	29	31	2	7%	\$20.67
MACH	Patternmakers, Metal and Plastic	Insf. Data	25	25	0	0%	\$15.08
MATH	Logisticians	11	285	360	75	26%	\$36.81
MATH	Operations Research Analysts	3	48	68	20	42%	\$41.53
MATH	Statisticians	1	16	22	6	39%	\$31.66
MODLANG	Interpreters and Translators	7	149	196	47	32%	\$19.93
MUS	Musicians and Singers	4	97	99	2	2%	\$32.89
MUS	Music Directors and Composers	3	68	72	4	6%	\$25.52
MUS	Musical Instrument Repairers and Tuners	Insf. Data	12	16	4	32%	\$20.14
NURS	Registered Nurses	368	8,305	10,147	1,842	22%	\$42.92
NURS	Nursing Assistants	198	3,597	4,755	1,158	32%	\$13.58
NURS	Home Health Aides	172	1,596	2,854	1,258	79%	\$13.22
NURS	Licensed Practical and Licensed Vocational Nurses	134	2,327	2,994	667	29%	\$23.13
NURS	Medical Assistants	123	2,603	3,257	654	25%	\$14.07
NURS	Medical Secretaries	89	2,008	2,613	605	30%	\$15.71
NURS	Medical Records and Health Information Technicians	30	550	685	135	25%	\$21.75
NURS	Nurse Practitioners	22	366	499	133	36%	\$55.05
NURS	Health Technologists and Technicians, All Other	19	601	726	125	21%	\$21.00
NURS	Phlebotomists	19	409	505	96	23%	\$16.63
NURS	Physician Assistants	16	236	344	108	46%	\$49.38

## SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
NURS	Healthcare Practitioners and Technical Workers, All Other	14	340	375	35	10%	\$29.42
NURS	Healthcare Support Workers, All Other	13	378	428	50	13%	\$16.86
NURS	Surgical Technologists	12	279	367	88	32%	\$23.48
NURS	Medical Equipment Preparers	9	236	276	40	17%	\$19.98
NURS	Cardiovascular Technologists and Technicians	8	180	231	51	28%	\$25.18
NURS	Nurse Anesthetists	3	39	62	23	59%	\$68.78
NURS	Medical Transcriptionists	3	71	88	17	24%	\$23.08
NURS	Nurse Midwives	Insf. Data	13	17	4	31%	\$48.52
PHIL	Lawyers	20	541	639	98	18%	\$57.01
PHT	Pharmacists	42	849	1,039	190	22%	\$63.37
PHT	Pharmacy Technicians	38	981	1,250	269	27%	\$17.98
PHT	Pharmacy Aides	9	252	289	37	15%	\$14.73
PHYS	Materials Engineers	1	27	29	2	7%	\$42.95
PHYSICS	Mechanical Engineers	13	289	313	24	8%	\$41.17
PHYSICS	Aerospace Engineers	2	50	53	3	6%	\$46.38
PHYSICS	Mechanical Engineering Technicians	1	41	45	4	10%	\$22.07
PS	Environmental Scientists and Specialists, Including Health	12	257	297	40	16%	\$38.30
PS	Environmental Science and Protection Technicians, Including Health	3	39	53	14	36%	\$24.51
PS	Conservation Scientists	Insf. Data	17	17	0	0%	\$37.52
PS	Physical Scientists, All Other	Insf. Data	28	27	(1)	(4%)	\$47.70
PSYCH	Clinical, Counseling, and School Psychologists	17	431	474	43	10%	\$41.37
PSYCH	Psychiatrists	4	73	87	14	19%	\$111.90
PSYCH	Counselors, All Other	2	58	67	9	16%	\$14.59
PSYCH	Therapists, All Other	1	28	35	7	25%	\$36.23
PSYCH	Psychologists, All Other	Insf. Data	27	28	1	4%	\$39.53
PSYTCH	Psychiatric Technicians	4	245	256	11	4%	\$27.39
PSYTCH	Psychiatric Aides	3	112	119	7	6%	\$13.37
REALST	Property, Real Estate, and Community Association Managers	17	390	465	75	19%	\$29.81
REALST	Real Estate Sales Agents	7	208	248	40	19%	\$25.63
REALST	Title Examiners, Abstractors, and Searchers	3	129	136	7	5%	\$27.41

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
REALST	Real Estate Brokers	2	111	119	8	7%	\$30.89
REALST	Appraisers and Assessors of Real Estate	1	43	52	9	21%	\$34.12
RELIG	Clergy	8	155	196	41	27%	\$28.77
RELIG	Directors, Religious Activities and Education	7	114	138	24	21%	\$22.16
RELIG	Religious Workers, All Other	1	24	31	7	29%	\$23.80
SOC	Social Science Research Assistants	1	12	18	6	50%	\$22.15
SOC	Social Scientists and Related Workers, All Other	1	53	54	1	2%	\$36.09
THART	Actors	7	179	183	4	2%	\$34.35
THART	Producers and Directors	2	49	53	4	8%	\$32.96
THART	Costume Attendants	1	19	19	0	0%	\$20.94
THART	Entertainers and Performers, Sports and Related Workers, All Other	Insf. Data	13	16	3	22%	\$18.76
THRAT	Set and Exhibit Designers	Insf. Data	11	12	1	9%	\$21.36
WELD	Welders, Cutters, Solderers, and Brazers	29	950	908	(42)	(4%)	\$17.53
WELD	Structural Metal Fabricators and Fitters	10	219	198	(21)	(10%)	\$16.24
WELD	Sheet Metal Workers	9	296	294	(2)	(1%)	\$23.14
WELD	Structural Iron and Steel Workers	6	175	146	(29)	(17%)	\$33.68
WELD	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	4	73	86	13	18%	\$15.40
WELD	Boilermakers	1	22	23	1	5%	\$36.26
WELD	Pourers and Casters, Metal	1	77	71	(6)	(8%)	\$14.50
WST	Water and Wastewater Treatment Plant and System Operators	6	116	126	10	9%	\$31.20
WST	Plant and System Operators, All Other	Insf. Data	19	20	1	5%	\$25.25

## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
ACCT	Accountants and Auditors	393	7,554	9,014	1,460	19%	\$43.04
ACCT	Bookkeeping, Accounting, and Auditing Clerks	347	13,270	15,416	2,146	16%	\$14.57
ACCT	Tellers	199	3,782	3,963	181	5%	\$51.21
ACCT	Billing and Posting Clerks	193	4,507	5,495	988	22%	\$12.10
ACCT	Bill and Account Collectors	164	3,586	4,136	550	15%	\$25.37
ACCT	Financial Managers	124	3,970	4,426	456	11%	\$35.11
ACCT	Cost Estimators	118	2,486	2,763	277	11%	\$31.15
ACCT	Insurance Claims and Policy Processing Clerks	88	2,051	2,344	293	14%	\$13.61
ACCT	Payroll and Timekeeping Clerks	80	2,173	2,463	290	13%	\$15.07
ACCT	Loan Officers	70	1,990	2,302	312	16%	\$17.85
ACCT	Securities, Commodities, and Financial Services Sales Agents	64	2,009	2,163	154	8%	\$13.32
ACCT	Loan Interviewers and Clerks	35	1,444	1,690	246	17%	\$18.77
ACCT	Financial Analysts	31	564	719	155	28%	\$14.32
ACCT	Personal Financial Advisors	29	705	863	158	22%	\$13.51
ACCT	Budget Analysts	26	561	591	30	5%	\$33.59
ACCT	Tax Preparers	26	663	774	111	17%	\$23.06
ACCT	Financial Specialists, All Other	20	1,066	1,145	79	7%	\$19.07
ACCT	Credit Counselors	17	450	530	80	18%	\$13.80
ACCT	Tax Examiners and Collectors, and Revenue Agents	13	369	370	1	0%	\$19.46
ACCT	Credit Analysts	12	252	305	53	21%	\$27.17
ACCT	Financial Clerks, All Other	10	238	269	31	13%	\$18.55
ACCT	Credit Authorizers, Checkers, and Clerks	5	195	224	29	15%	\$15.64
ACCT	New Accounts Clerks	5	200	197	(3)	(2%)	\$33.39
ACCT	Brokerage Clerks	5	160	158	(2)	(1%)	\$42.09
ACCT	Actuaries	3	29	45	16	56%	\$12.69
ACCT	Financial Examiners	2	41	49	8	20%	\$15.37
ADJUS/CORREC	Security Guards	650	15,768	19,495	3,727	24%	\$14.22
ADJUS/CORREC	Police and Sheriff's Patrol Officers	253	5,832	6,428	596	10%	\$17.05
ADJUS/CORREC	Protective Service Workers, All Other	202	2,457	2,692	235	10%	\$33.49
ADJUS/CORREC	Correctional Officers and Jailers	178	4,801	5,237	436	9%	\$34.91



Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
ADJUS/CORREC	Dispatchers, Except Police, Fire, and Ambulance	132	2,766	3,217	451	16%	\$15.89
ADJUS/CORREC	First-Line Supervisors of Protective Service Workers, All Other	36	745	913	168	23%	\$13.21
ADJUS/CORREC	Police, Fire, and Ambulance Dispatchers	35	819	914	95	12%	\$28.91
ADJUS/CORREC	Detectives and Criminal Investigators	30	1,127	1,173	46	4%	\$31.48
ADJUS/CORREC	Probation Officers and Correctional Treatment Specialists	29	995	1,021	26	3%	\$16.64
ADJUS/CORREC	First-Line Supervisors of Correctional Officers	26	588	633	45	8%	\$34.30
ADJUS/CORREC	First-Line Supervisors of Police and Detectives	17	314	377	63	20%	\$53.83
ADJUS/CORREC	Private Detectives and Investigators	9	104	158	54	52%	\$39.81
ADJUS/CORREC	Transportation Security Screeners	8	281	290	9	3%	\$21.40
ADJUS/CORREC	Judges, Magistrate Judges, and Magistrates	4	163	176	13	8%	\$17.44
ADJUS/CORREC	Parking Enforcement Workers	4	115	116	1	1%	\$27.93
ADJUS/CORREC	Administrative Law Judges, Adjudicators, and Hearing Officers	2	109	111	2	2%	\$59.06
ADJUS/CORREC	Bailiffs	1	14	23	9	62%	\$63.40
ADJUS/CORREC	Transit and Railroad Police	Insf. Data	10	12	2	19%	\$17.34
AERO	Aircraft Mechanics and Service Technicians	43	862	1,032	170	20%	\$19.06
AERO	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	5	168	186	18	11%	\$17.97
AERO	Avionics Technicians	3	56	72	16	29%	\$55.56
AERO	Air Traffic Controllers	3	43	49	6	14%	\$28.35
ANTHRO	Anthropologists and Archeologists	4	101	118	17	17%	\$31.63
ARCH	Architectural and Engineering Managers	34	1,114	1,173	59	5%	\$19.91
ARCH	Urban and Regional Planners	24	414	456	42	10%	\$26.08
ARCH	Interior Designers	18	372	439	67	18%	\$24.11
ARCH	Architects, Except Landscape and Naval	17	284	376	92	32%	\$25.42
ARCH	Architectural and Civil Drafters	12	680	667	(13)	(2%)	\$12.47
ARCH	Landscape Architects	7	163	191	28	17%	\$16.23
ARCH	Drafters, All Other	2	84	94	10	12%	\$31.23
ART	Graphic Designers	48	1,294	1,417	123	10%	\$14.84
ART	Photographers	12	470	529	59	13%	\$14.02
ART	Photographic Process Workers and Processing Machine Operators	9	203	226	23	11%	\$17.50
ART	Fashion Designers	8	127	167	40	31%	\$24.23

## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
ART	Fine Artists, Including Painters, Sculptors, and Illustrators	5	166	176	10	6%	\$48.03
ART	Art Directors	4	98	110	12	12%	\$12.99
ART	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	3	111	105	(6)	(5%)	\$31.49
ART	Multimedia Artists and Animators	2	58	65	7	12%	\$16.83
ART	Designers, All Other	2	47	55	8	17%	\$56.90
ART	Artists and Related Workers, All Other	2	63	66	3	5%	\$34.07
ART	Camera and Photographic Equipment Repairers	1	18	23	5	27%	\$25.80
ART	Craft Artists	Insf. Data	22	21	(1)	(5%)	\$21.70
AUTO	Maintenance and Repair Workers, General	413	12,074	13,722	1,648	14%	\$27.38
AUTO	Automotive Service Technicians and Mechanics	326	7,882	9,010	1,128	14%	\$36.96
AUTO	First-Line Supervisors of Mechanics, Installers, and Repairers	158	3,831	4,311	480	13%	\$45.79
AUTO	Industrial Machinery Mechanics	116	2,163	2,627	464	21%	\$19.63
AUTO	Tire Repairers and Changers	90	1,984	2,157	173	9%	\$39.81
AUTO	Installation, Maintenance, and Repair Workers, All Other	49	1,659	1,856	197	12%	\$14.92
AUTO	Mobile Heavy Equipment Mechanics, Except Engines	45	1,157	1,262	105	9%	\$41.69
AUTO	Automotive Body and Related Repairers	31	1,050	1,058	8	1%	\$41.14
AUTO	Maintenance Workers, Machinery	25	1,023	1,136	113	11%	\$30.89
AUTO	Recreational Vehicle Service Technicians	7	177	179	2	1%	\$38.47
AUTO	Outdoor Power Equipment and Other Small Engine Mechanics	6	173	196	23	13%	\$24.16
AUTO	Motorboat Mechanics and Service Technicians	6	130	156	26	20%	\$25.21
AUTO	Motorcycle Mechanics	5	145	155	10	7%	\$29.91
AUTO	Engine and Other Machine Assemblers	5	209	219	10	5%	\$50.61
AUTO	Roustabouts, Oil and Gas	4	115	126	11	10%	\$19.63
AUTO	Automotive Glass Installers and Repairers	4	125	112	(13)	(10%)	\$18.37
AUTO	Insurance Appraisers, Auto Damage	4	112	116	4	4%	\$29.71
AUTO	Farm Equipment Mechanics and Service Technicians	3	116	105	(11)	(10%)	\$43.38
AUTO	Electronic Equipment Installers and Repairers, Motor Vehicles	2	178	180	2	1%	\$29.56
BIO	Physicians and Surgeons, All Other	140	2,740	3,364	624	23%	\$51.19
BIO	Family and General Practitioners	63	1,452	1,684	232	16%	\$28.59
BIO	Surgeons	23	423	534	111	26%	\$99.35

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
BIO	Anesthesiologists	16	280	361	81	29%	\$41.72
BIO	Internists, General	14	207	283	76	37%	\$16.79
BIO	Health Diagnosing and Treating Practitioners, All Other	14	504	532	28	6%	\$13.37
BIO	Pediatricians, General	13	255	309	54	21%	\$54.25
BIO	Biological Technicians	12	284	307	23	8%	\$29.84
BIO	Obstetricians and Gynecologists	9	186	225	39	21%	\$38.28
BIO	Chiropractors	9	222	263	41	18%	\$16.74
BIO	Biological Scientists, All Other	8	274	259	(15)	(5%)	\$41.33
BIO	Biomedical Engineers	7	222	210	(12)	(5%)	\$26.83
BIO	Zoologists and Wildlife Biologists	4	118	127	9	8%	\$24.18
BIO	Microbiologists	4	94	99	5	5%	\$20.70
BIO	Soil and Plant Scientists	3	54	65	11	20%	\$34.45
BIO	Genetic Counselors	3	42	55	13	31%	\$36.49
BIO	Life Scientists, All Other	2	52	62	10	19%	\$19.34
BIO	Biochemists and Biophysicists	2	40	47	7	17%	\$14.90
BIO	Foresters	2	41	47	6	15%	\$18.14
BIOL	Medical and Clinical Laboratory Technicians	67	1,013	1,362	349	34%	\$13.49
BIOL	Environmental Scientists and Specialists, Including Health	59	1,334	1,499	165	12%	\$30.57
BIOL	Medical and Clinical Laboratory Technologists	36	531	724	193	36%	\$56.21
BIOL	Forest and Conservation Technicians	27	676	634	(42)	(6%)	\$21.91
BIOL	Medical Scientists, Except Epidemiologists	26	825	903	78	9%	\$17.77
BIOL	Veterinary Assistants and Laboratory Animal Caretakers	25	1,020	1,067	47	5%	\$38.66
BIOL	Veterinary Technologists and Technicians	23	612	769	157	26%	\$18.40
BIOL	Veterinarians	20	416	472	56	13%	\$41.45
BIOL	Life, Physical, and Social Science Technicians, All Other	17	297	343	46	16%	\$26.09
BIOL	Environmental Science and Protection Technicians, Including Health	14	186	239	53	28%	\$17.47
BIOL	Environmental Engineers	13	307	354	47	15%	\$19.78
BIOL	Environmental Engineering Technicians	6	158	186	28	18%	\$20.57
BIOL	Forest and Conservation Workers	4	149	151	2	1%	\$48.53
BUSAD	Office Clerks, General	926	29,566	32,330	2,764	9%	\$28.49

## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
BUSAD	General and Operations Managers	716	20,281	23,346	3,065	15%	\$29.54
BUSAD	First-Line Supervisors of Office and Administrative Support Workers	607	14,391	16,735	2,344	16%	\$21.84
BUSAD	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	516	17,907	20,732	2,825	16%	\$51.87
BUSAD	Receptionists and Information Clerks	401	8,579	10,048	1,469	17%	\$17.02
BUSAD	Office and Administrative Support Workers, All Other	170	5,245	5,446	201	4%	\$19.41
BUSAD	Business Operations Specialists, All Other	164	6,672	7,344	672	10%	\$29.13
BUSAD	Sales Managers	157	4,351	4,930	579	13%	\$15.14
BUSAD	Management Analysts	151	3,747	4,600	853	23%	\$59.22
BUSAD	Market Research Analysts and Marketing Specialists	142	2,795	3,754	959	34%	\$37.27
BUSAD	Human Resources Specialists	121	3,486	4,010	524	15%	\$33.37
BUSAD	Production, Planning, and Expediting Clerks	117	3,049	3,417	368	12%	\$48.48
BUSAD	Order Clerks	112	3,146	3,396	250	8%	\$24.05
BUSAD	Executive Secretaries and Executive Administrative Assistants	85	5,113	5,337	224	4%	\$37.65
BUSAD	Administrative Services Managers	77	2,343	2,698	355	15%	\$20.04
BUSAD	Transportation, Storage, and Distribution Managers	73	1,479	1,819	340	23%	\$24.71
BUSAD	Paralegals and Legal Assistants	70	2,106	2,434	328	16%	\$22.91
BUSAD	Claims Adjusters, Examiners, and Investigators	68	2,283	2,373	90	4%	\$23.45
BUSAD	Managers, All Other	63	1,891	2,089	198	10%	\$64.21
BUSAD	First-Line Supervisors of Non-Retail Sales Workers	60	1,982	2,306	324	16%	\$20.41
BUSAD	Purchasing Agents, Except Wholesale, Retail, and Farm Products	54	2,016	2,176	160	8%	\$36.77
BUSAD	Compliance Officers	53	1,995	2,136	141	7%	\$16.28
BUSAD	File Clerks	49	1,955	1,992	37	2%	\$20.61
BUSAD	Human Resources Assistants, Except Payroll and Timekeeping	46	1,363	1,464	101	7%	\$20.66
BUSAD	Education Administrators, Postsecondary	39	847	993	146	17%	\$37.83
BUSAD	Marketing Managers	37	903	1,065	162	18%	\$21.96
BUSAD	Human Resources Managers	36	784	921	137	17%	\$49.71
BUSAD	Procurement Clerks	34	718	782	64	9%	\$41.84
BUSAD	Court, Municipal, and License Clerks	32	1,048	1,195	147	14%	\$17.04
BUSAD	Advertising Sales Agents	21	699	634	(65)	(9%)	\$23.19

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
BUSAD	Legal Secretaries	16	769	834	65	8%	\$14.71
BUSAD	Compensation, Benefits, and Job Analysis Specialists	16	501	565	64	13%	\$45.64
BUSAD	Purchasing Managers	15	468	514	46	10%	\$43.48
BUSAD	Insurance Underwriters	14	351	384	33	9%	\$38.62
BUSAD	Sales Engineers	13	338	407	69	20%	\$29.92
BUSAD	Labor Relations Specialists	9	419	415	(4)	(1%)	\$42.63
BUSAD	Legal Support Workers, All Other	8	427	435	8	2%	\$26.17
BUSAD	Advertising and Promotions Managers	8	199	213	14	7%	\$46.89
BUSAD	Training and Development Managers	7	140	169	29	21%	\$20.03
BUSAD	Compensation and Benefits Managers	3	77	86	9	12%	\$31.19
BUSAD	Correspondence Clerks	3	58	71	13	22%	\$15.83
BUSAD	Arbitrators, Mediators, and Conciliators	2	79	87	8	10%	\$26.40
BUSAD	Chief Executives	(16)	1,919	2,114	195	10%	\$20.28
BUSAD	Agents and Business Managers of Artists, Performers, and Athletes	Insf. Data	21	24	3	14%	\$20.42
CD	Elementary School Teachers, Except Special Education	569	16,400	18,248	1,848	11%	\$25.99
CD	Teacher Assistants	413	13,372	14,340	968	7%	\$31.37
CD	Substitute Teachers	295	13,120	13,766	646	5%	\$44.06
CD	Secondary School Teachers, Except Special and Career/Technical Education	255	7,032	7,592	560	8%	\$18.58
CD	Childcare Workers	245	6,327	6,822	495	8%	\$43.87
CD	Middle School Teachers, Except Special and Career/Technical Education	172	4,628	5,256	628	14%	\$21.54
CD	Kindergarten Teachers, Except Special Education	111	2,791	3,073	282	10%	\$29.61
CD	Preschool Teachers, Except Special Education	109	2,851	3,096	245	9%	\$13.86
CD	Teachers and Instructors, All Other	83	3,035	3,319	284	9%	\$21.44
CD	Education Administrators, Elementary and Secondary School	68	1,929	2,071	142	7%	\$25.28
CD	Special Education Teachers, Kindergarten and Elementary School	52	2,075	2,230	155	7%	\$38.04
CD	Special Education Teachers, Secondary School	23	908	980	72	8%	\$33.48
CD	Special Education Teachers, Middle School	19	744	797	53	7%	\$101.48
CD	Education Administrators, All Other	16	411	453	42	10%	\$31.60
CD	Career/Technical Education Teachers, Secondary School	14	352	392	40	11%	\$35.70

## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
CD	Education Administrators, Preschool and Childcare Center/Program	12	322	355	33	10%	\$15.55
CD	Special Education Teachers, All Other	11	347	389	42	12%	\$38.03
CD	Special Education Teachers, Preschool	8	166	215	49	30%	\$16.43
CD	Career/Technical Education Teachers, Middle School	1	17	23	6	35%	\$30.68
CHEM	Forensic Science Technicians	15	300	324	24	8%	\$24.94
CHEM	Chemists	14	372	404	32	9%	\$21.56
CHEM	Chemical Technicians	10	219	259	40	18%	\$32.95
CHEM	Chemical Plant and System Operators	8	204	179	(25)	(12%)	\$45.01
CHEM	Chemical Equipment Operators and Tenders	5	131	133	2	2%	\$28.04
CHEM	Chemical Engineers	3	101	104	3	3%	\$25.26
COMMST	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	541	11,759	14,587	2,828	24%	\$28.21
COMMST	Sales Representatives, Services, All Other	321	7,053	8,187	1,134	16%	\$14.56
COMMST	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	86	1,811	2,267	456	25%	\$13.81
COMMST	Public Relations Specialists	28	867	1,016	149	17%	\$31.77
COMMST	Audio and Video Equipment Technicians	17	583	642	59	10%	\$25.20
COMMST	Fundraisers	9	212	259	47	22%	\$21.69
COMMST	Public Relations and Fundraising Managers	9	218	259	41	19%	\$32.71
COMMST	Radio and Television Announcers	8	282	282	0	0%	\$47.01
COMMST	Media and Communication Workers, All Other	4	202	213	11	5%	\$13.68
COMMST	Reporters and Correspondents	3	123	75	(48)	(39%)	\$27.56
COMMST	Media and Communication Equipment Workers, All Other	1	114	104	(10)	(9%)	\$15.15
COMMST	Film and Video Editors	1	54	57	3	6%	\$25.24
COMMST	Sound Engineering Technicians	1	55	57	2	4%	\$23.03
COMMST	Audio-Visual and Multimedia Collections Specialists	1	134	134	0	0%	\$41.65
COMMST	Broadcast News Analysts	Insf. Data	12	11	(1)	(8%)	\$18.05
COMMST	Camera Operators, Television, Video, and Motion Picture	Insf. Data	41	44	3	7%	\$31.77
COMST	Broadcast Technicians	1	55	54	(1)	(2%)	\$59.61
CS/CIT	Computer User Support Specialists	113	3,031	3,633	602	20%	\$46.74

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
CS/CIT	Software Developers, Applications	93	2,706	3,248	542	20%	\$109.78
CS/CIT	Computer Systems Analysts	83	1,841	2,337	496	27%	\$17.35
CS/CIT	Network and Computer Systems Administrators	63	1,937	2,232	295	15%	\$31.90
CS/CIT	Computer and Information Systems Managers	48	1,562	1,810	248	16%	\$29.89
CS/CIT	Computer Programmers	33	739	862	123	17%	\$44.21
CS/CIT	Software Developers, Systems Software	31	584	808	224	38%	\$21.39
CS/CIT	Computer Network Support Specialists	23	866	952	86	10%	\$46.77
CS/CIT	Computer Occupations, All Other	22	891	966	75	8%	\$40.40
CS/CIT	Web Developers	22	613	723	110	18%	\$39.62
CS/CIT	Database Administrators	15	387	460	73	19%	\$31.15
CS/CIT	Computer Network Architects	13	279	358	79	28%	\$12.83
CS/CIT	Information Security Analysts	10	160	229	69	43%	\$32.73
CS/CIT	Computer Hardware Engineers	4	70	95	25	36%	\$14.20
CS/CIT	Computer Operators	4	409	405	(4)	(1%)	\$14.36
CS/CIT	Computer and Information Research Scientists	3	117	128	11	9%	\$83.69
CS/CIT	Desktop Publishers	Insf. Data	39	40	1	3%	\$24.43
CULART	First-Line Supervisors of Food Preparation and Serving Workers	528	9,361	11,627	2,266	24%	\$31.57
CULART	Bakers	112	2,640	3,059	419	16%	\$32.72
CULART	Cooks, Institution and Cafeteria	108	2,382	2,926	544	23%	\$29.06
CULART	Food Service Managers	97	3,140	3,507	367	12%	\$31.22
CULART	Butchers and Meat Cutters	75	1,631	1,931	300	18%	\$45.37
CULART	Food Batchmakers	49	1,126	1,222	96	9%	\$34.70
CULART	Chefs and Head Cooks	47	1,645	1,832	187	11%	\$14.16
CULART	Food Processing Workers, All Other	13	269	322	53	20%	\$31.02
CULART	Food Cooking Machine Operators and Tenders	9	225	251	26	12%	\$43.20
CULART	Cooks, All Other	6	117	149	32	27%	\$50.26
CULART	Cooks, Private Household	1	39	42	3	8%	\$23.85
DANCE	Choreographers	2	43	52	9	21%	\$24.91
DANCE	Dancers	2	70	69	(1)	(1%)	\$87.60
DIESEL	Bus and Truck Mechanics and Diesel Engine Specialists	144	3,917	4,458	541	14%	\$24.86



## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
ECON	Economists	9	197	226	29	15%	\$27.61
ELECT/ELECTR	Electricians	169	5,155	5,717	562	11%	\$35.82
ELECT/ELECTR	Telecommunications Line Installers and Repairers	68	1,519	1,788	269	18%	\$14.55
ELECT/ELECTR	Electrical Power-Line Installers and Repairers	65	1,184	1,386	202	17%	\$22.26
ELECT/ELECTR	Telecommunications Equipment Installers and Repairers, Except Line Installers	63	2,146	2,459	313	15%	\$27.24
ELECT/ELECTR	Home Appliance Repairers	40	776	912	136	18%	\$41.77
ELECT/ELECTR	Computer, Automated Teller, and Office Machine Repairers	31	535	710	175	33%	\$12.95
ELECT/ELECTR	Electronics Engineers, Except Computer	28	1,081	1,115	34	3%	\$20.05
ELECT/ELECTR	Control and Valve Installers and Repairers, Except Mechanical Door	27	646	692	46	7%	\$22.30
ELECT/ELECTR	Electrical and Electronic Equipment Assemblers	27	1,285	1,392	107	8%	\$33.44
ELECT/ELECTR	Medical Equipment Repairers	27	295	457	162	55%	\$15.46
ELECT/ELECTR	Electrical and Electronics Engineering Technicians	25	967	1,003	36	4%	\$24.36
ELECT/ELECTR	Electrical and Electronics Repairers, Commercial and Industrial Equipment	19	581	649	68	12%	\$111.56
ELECT/ELECTR	Helpers--Electricians	19	467	570	103	22%	\$37.83
ELECT/ELECTR	Electronic Home Entertainment Equipment Installers and Repairers	18	384	417	33	9%	\$38.17
ELECT/ELECTR	Electrical Engineers	18	477	543	66	14%	\$19.26
ELECT/ELECTR	Power Plant Operators	16	473	478	5	1%	\$23.09
ELECT/ELECTR	Meter Readers, Utilities	11	488	438	(50)	(10%)	\$20.57
ELECT/ELECTR	Solar Photovoltaic Installers	6	226	249	23	10%	\$46.05
ELECT/ELECTR	Precision Instrument and Equipment Repairers, All Other	6	107	130	23	21%	\$13.46
ELECT/ELECTR	Electrical and Electronics Drafters	5	254	263	9	4%	\$15.65
ELECT/ELECTR	Electromechanical Equipment Assemblers	5	214	233	19	9%	\$27.41
ELECT/ELECTR	Radio, Cellular, and Tower Equipment Installers and Repairs	4	155	164	9	6%	\$26.20
ELECT/ELECTR	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	3	75	87	12	16%	\$46.38
ELECT/ELECTR	Electric Motor, Power Tool, and Related Repairers	3	82	92	10	12%	\$33.06
ELECT/ELECTR	Electrical and Electronics Installers and Repairers, Transportation Equipment	2	62	70	8	13%	\$34.11
ELECT/ELECTR	Electro-Mechanical Technicians	2	50	56	6	12%	\$28.22

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
ELECT/ELECTR	Signal and Track Switch Repairers	Insf. Data	16	18	2	12%	\$112.08
ENGL	Adult Basic and Secondary Education and Literacy Teachers and Instructors	15	552	604	52	9%	\$14.23
ENGL	Technical Writers	10	190	229	39	21%	\$17.23
ENGL	Editors	6	235	226	(9)	(4%)	\$67.97
ENGL	Court Reporters	5	209	225	16	8%	\$46.94
ENGL	Writers and Authors	4	132	144	12	9%	\$16.22
ENGL	Proofreaders and Copy Markers	Insf. Data	38	38	0	0%	\$37.51
ENGR	Civil Engineers	80	2,557	2,717	160	6%	\$33.09
ENGR	Industrial Engineers	36	862	950	88	10%	\$14.32
ENGR	Engineering Technicians, Except Drafters, All Other	17	682	706	24	4%	\$33.99
ENGR	Engineers, All Other	16	675	712	37	5%	\$24.60
ENGR	Civil Engineering Technicians	7	330	326	(4)	(1%)	\$13.95
FN	Dietitians and Nutritionists	20	552	680	128	23%	\$22.23
FN	Agricultural and Food Science Technicians	14	316	333	17	5%	\$16.47
FN	Dietetic Technicians	12	414	491	77	19%	\$17.87
FN	Food Scientists and Technologists	9	181	205	24	13%	\$27.63
GEOG	Surveyors	11	368	393	25	7%	\$27.04
GEOG	Surveying and Mapping Technicians	8	227	263	36	16%	\$20.11
GEOG	Cartographers and Photogrammetrists	7	179	205	26	14%	\$33.76
GEOL	Geoscientists, Except Hydrologists and Geographers	9	190	217	27	14%	\$40.36
GEOL	Geological and Petroleum Technicians	2	40	47	7	17%	\$25.77
GEOL	Mining and Geological Engineers, Including Mining Safety Engineers	2	45	53	8	18%	\$14.29
HIST	Library Technicians	66	1,010	1,098	88	9%	\$14.50
HIST	Museum Technicians and Conservators	2	60	68	8	13%	\$28.50
HIST	Curators	2	30	39	9	30%	\$19.21
HUMSERV	Social and Human Service Assistants	172	2,942	3,749	807	27%	\$29.56
HUMSERV	Healthcare Social Workers	88	1,458	1,957	499	34%	\$33.49
HUMSERV	Educational, Guidance, School, and Vocational Counselors	72	2,281	2,488	207	9%	\$35.64
HUMSERV	Rehabilitation Counselors	62	1,318	1,615	297	23%	\$49.66

## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
HUMSERV	Child, Family, and School Social Workers	54	1,436	1,641	205	14%	\$34.31
HUMSERV	Social and Community Service Managers	47	855	1,111	256	30%	\$49.33
HUMSERV	Community and Social Service Specialists, All Other	44	895	1,071	176	20%	\$17.83
HUMSERV	Mental Health Counselors	44	1,151	1,324	173	15%	\$26.98
HUMSERV	Substance Abuse and Behavioral Disorder Counselors	38	1,003	1,149	146	15%	\$16.80
HUMSERV	Social Workers, All Other	38	1,278	1,369	91	7%	\$24.64
HUMSERV	Mental Health and Substance Abuse Social Workers	31	732	866	134	18%	\$23.09
HUMSERV	Occupational Therapists	29	684	867	183	27%	\$25.32
HUMSERV	Community Health Workers	24	389	509	120	31%	\$16.01
HUMSERV	Health Educators	21	454	532	78	17%	\$22.09
HUMSERV	Occupational Therapy Assistants	13	205	274	69	34%	\$13.27
HUMSERV	Marriage and Family Therapists	11	314	351	37	12%	\$12.90
HUMSERV	Counselors, All Other	8	203	232	29	14%	\$17.43
HUMSERV	Recreational Therapists	7	174	204	30	17%	\$25.62
HUMSERV	Occupational Therapy Aides	2	25	37	12	47%	\$46.42
HVACR	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	115	2,929	3,299	370	13%	\$14.72
HVACR	Cooling and Freezing Equipment Operators and Tenders	2	40	48	8	20%	\$15.84
INSPEC	Inspectors, Testers, Sorters, Samplers, and Weighers	143	4,095	4,583	488	12%	\$17.47
INSPEC	Construction and Building Inspectors	32	918	1,010	92	10%	\$21.80
INSPEC	Transportation Inspectors	13	242	283	41	17%	\$38.63
KIN	Physical Therapists	73	1,254	1,619	365	29%	\$39.87
KIN	Fitness Trainers and Aerobics Instructors	50	1,962	2,211	249	13%	\$17.15
KIN	Massage Therapists	32	923	1,134	211	23%	\$22.82
KIN	Physical Therapist Assistants	29	487	645	158	32%	\$18.47
KIN	Physical Therapist Aides	18	327	417	90	28%	\$21.14
KIN	Athletic Trainers	5	88	111	23	26%	\$23.86
KIN	Exercise Physiologists	1	31	39	8	26%	\$28.95
MACH	Machinists	138	3,564	4,068	504	14%	\$15.14
MACH	Assemblers and Fabricators, All Other	61	1,803	2,101	298	17%	\$22.17
MACH	Computer-Controlled Machine Tool Operators, Metal and Plastic	45	890	1,065	175	20%	\$24.00

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
MACH	Mixing and Blending Machine Setters, Operators, and Tenders	38	1,158	1,174	16	1%	\$14.60
MACH	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	22	1,759	1,713	(46)	(3%)	\$20.25
MACH	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	19	1,419	1,320	(99)	(7%)	\$36.04
MACH	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	17	298	356	58	19%	\$21.20
MACH	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	15	533	488	(45)	(8%)	\$32.75
MACH	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	14	686	613	(73)	(11%)	\$19.52
MACH	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	13	211	271	60	28%	\$53.75
MACH	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	12	789	717	(72)	(9%)	\$32.10
MACH	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	10	366	371	5	1%	\$19.28
MACH	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	9	450	441	(9)	(2%)	\$31.75
MACH	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	9	382	385	3	1%	\$99.89
MACH	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	8	315	316	1	0%	\$15.02
MACH	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	8	423	399	(24)	(6%)	\$22.21
MACH	Paper Goods Machine Setters, Operators, and Tenders	8	736	708	(28)	(4%)	\$22.95
MACH	Mechanical Drafters	8	453	441	(12)	(3%)	\$13.87
MACH	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	7	228	219	(9)	(4%)	\$25.60
MACH	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	7	332	321	(11)	(3%)	\$36.57
MACH	Metal Workers and Plastic Workers, All Other	6	296	324	28	9%	\$25.92
MACH	Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	5	191	210	19	10%	\$41.39

## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
MACH	Millwrights	5	143	172	29	20%	\$19.86
MACH	Cutting and Slicing Machine Setters, Operators, and Tenders	5	263	241	(22)	(8%)	\$12.03
MACH	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	5	267	231	(36)	(13%)	\$22.63
MACH	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	4	215	191	(24)	(11%)	\$36.26
MACH	Patternmakers, Metal and Plastic	2	80	76	(4)	(5%)	\$37.08
MACH	Rotary Drill Operators, Oil and Gas	1	22	23	1	5%	\$20.60
MATH	Logisticians	37	929	1,172	243	26%	\$22.90
MATH	Operations Research Analysts	12	169	239	70	41%	\$57.47
MATH	Statisticians	4	57	78	21	37%	\$51.88
MATH	Statistical Assistants	2	45	54	9	20%	\$43.10
MATH	Mathematicians	Insf. Data	19	22	3	16%	\$15.07
MODERNLANG	Interpreters and Translators	27	533	716	183	34%	\$31.92
MUSIC	Musicians and Singers	7	216	224	8	4%	\$12.52
MUSIC	Music Directors and Composers	6	190	200	10	5%	\$20.00
MUSIC	Musical Instrument Repairers and Tuners	3	50	62	12	24%	\$40.64
NURS	Registered Nurses	1,076	24,849	30,146	5,297	21%	\$25.38
NURS	Nursing Assistants	533	9,577	12,714	3,137	33%	\$31.90
NURS	Home Health Aides	437	4,029	7,240	3,211	80%	\$48.16
NURS	Licensed Practical and Licensed Vocational Nurses	359	6,562	8,286	1,724	26%	\$39.30
NURS	Medical Assistants	331	7,415	9,118	1,703	23%	\$19.15
NURS	Medical Secretaries	256	5,911	7,631	1,720	29%	\$47.57
NURS	Medical Records and Health Information Technicians	85	1,612	1,977	365	23%	\$31.19
NURS	Nurse Practitioners	60	1,059	1,415	356	34%	\$38.06
NURS	Phlebotomists	58	1,261	1,566	305	24%	\$51.39
NURS	Health Technologists and Technicians, All Other	53	1,753	2,090	337	19%	\$23.82
NURS	Physician Assistants	44	661	947	286	43%	\$24.89
NURS	Healthcare Practitioners and Technical Workers, All Other	41	1,006	1,119	113	11%	\$16.08
NURS	Healthcare Support Workers, All Other	39	1,125	1,280	155	14%	\$28.95

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
NURS	Surgical Technologists	35	804	1,055	251	31%	\$25.15
NURS	Medical Equipment Preparers	28	700	828	128	18%	\$21.00
NURS	Cardiovascular Technologists and Technicians	24	522	677	155	30%	\$30.38
NURS	Medical Transcriptionists	10	223	276	53	24%	\$44.98
NURS	Nurse Anesthetists	9	110	172	62	56%	\$19.52
NURS	Nurse Midwives	2	37	49	12	32%	\$24.51
PHARM	Pharmacists	139	2,777	3,411	634	23%	\$35.67
PHARM	Pharmacy Technicians	131	3,256	4,185	929	29%	\$25.59
PHARM	Pharmacy Aides	31	834	966	132	16%	\$49.68
PHIL	Lawyers	87	2,597	3,008	411	16%	\$49.15
PHIL	Judicial Law Clerks	1	38	44	6	16%	\$36.53
PHYS	Aerospace Engineering and Operations Technicians	Insf. Data	25	27	2	8%	\$59.02
PHYSICS	Mechanical Engineers	46	1,077	1,147	70	6%	\$74.00
PHYSICS	Aerospace Engineers	6	176	187	11	6%	\$15.23
PHYSICS	Mechanical Engineering Technicians	5	160	172	12	8%	\$17.40
PHYSICS	Materials Engineers	3	79	83	4	5%	\$47.61
PHYSICS	Physicists	1	27	33	6	23%	\$24.15
PHYSICS	Materials Scientists	Insf. Data	22	22	0	0%	\$32.74
POLIT	Political Scientists	Insf. Data	15	19	4	27%	\$29.46
PS	Physical Scientists, All Other	2	97	96	(1)	(1%)	\$15.06
PS	Atmospheric and Space Scientists	Insf. Data	20	24	4	20%	\$15.16
PS	Conservation Scientists	3	80	83	3	4%	\$22.92
PSYCH	Clinical, Counseling, and School Psychologists	55	1,371	1,522	151	11%	\$27.71
PSYCH	Psychiatrists	11	259	297	38	15%	\$24.77
PSYCH	Psychologists, All Other	3	79	86	7	9%	\$14.46
PSYCH	Therapists, All Other	3	92	113	21	23%	\$24.91
PSYCHT	Psychiatric Technicians	12	1,221	1,185	(36)	(3%)	\$32.42
PSYCHT	Psychiatric Aides	10	451	448	(3)	(1%)	\$58.60
REALST	Property, Real Estate, and Community Association Managers	65	1,713	1,948	235	14%	\$19.71

## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - RELATED TO EXISTING PROGRAMS (GROUPED BY DEPARTMENT) (cont.)

Related Program	Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
REALST	Real Estate Sales Agents	26	1,025	1,177	152	15%	\$30.09
REALST	Title Examiners, Abstractors, and Searchers	18	586	659	73	12%	\$20.99
REALST	Real Estate Brokers	14	612	667	55	9%	\$24.77
REALST	Appraisers and Assessors of Real Estate	9	314	369	55	17%	\$42.19
RELIG	Clergy	20	418	519	101	24%	\$18.64
RELIG	Directors, Religious Activities and Education	16	286	336	50	17%	\$20.33
RELIG	Religious Workers, All Other	3	60	77	17	28%	\$25.35
SOC	Social Science Research Assistants	4	45	62	17	38%	\$32.50
SOC	Social Scientists and Related Workers, All Other	3	172	175	3	2%	\$22.70
SOC	Survey Researchers	2	28	43	15	53%	\$26.31
THART	Actors	23	614	609	(5)	(1%)	\$87.60
THART	Producers and Directors	9	204	212	8	4%	\$22.57
THART	Costume Attendants	4	66	64	(2)	(3%)	\$17.72
THART	Set and Exhibit Designers	2	46	51	5	11%	\$44.79
THART	Entertainers and Performers, Sports and Related Workers, All Other	1	43	50	7	16%	\$27.50
THART	Makeup Artists, Theatrical and Performance	Insf. Data	10	11	1	10%	\$33.13
WATER	Water and Wastewater Treatment Plant and System Operators	49	1,017	1,127	110	11%	\$22.22
WATER	Plant and System Operators, All Other	3	64	69	5	8%	\$32.16
WELD	Welders, Cutters, Solderers, and Brazers	98	3,159	3,149	(10)	(0%)	\$23.17
WELD	Sheet Metal Workers	35	1,168	1,223	55	5%	\$37.90
WELD	Structural Metal Fabricators and Fitters	33	715	699	(16)	(2%)	\$32.45
WELD	Structural Iron and Steel Workers	18	579	475	(104)	(18%)	\$40.79
WELD	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	11	246	290	44	18%	\$36.67
WELD	Boilermakers	5	85	89	4	5%	\$40.35
WELD	Pourers and Casters, Metal	2	132	115	(17)	(13%)	\$31.42





## SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - UNRELATED TO EXISTING PROGRAMS

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Adhesive Bonding Machine Operators and Tenders	3	75	76	1	1%	\$16.94
Agricultural Equipment Operators	2	85	65	(20)	(24%)	\$12.11
Agricultural Inspectors	Insf. Data	30	29	(1)	(3%)	\$24.68
Agricultural Workers, All Other	Insf. Data	20	16	(4)	(20%)	\$14.40
Airline Pilots, Copilots, and Flight Engineers	2	63	66	3	5%	\$54.36
Animal Control Workers	Insf. Data	16	17	1	6%	\$22.16
Audiologists	1	14	22	8	55%	\$38.45
Automotive and Watercraft Service Attendants	19	327	411	84	26%	\$12.76
Barbers	1	26	32	6	23%	\$13.10
Bicycle Repairers	1	12	17	5	43%	\$12.08
Bill and Account Collectors	51	1,081	1,255	174	16%	\$16.65
Brickmasons and Blockmasons	3	201	118	(83)	(41%)	\$26.12
Brokerage Clerks	1	36	38	2	5%	\$22.32
Building Cleaning Workers, All Other	2	46	50	4	9%	\$12.67
Bus Drivers, School or Special Client	47	1,432	1,605	173	12%	\$16.39
Bus Drivers, Transit and Intercity	4	134	131	(3)	(2%)	\$18.93
Buyers and Purchasing Agents, Farm Products	Insf. Data	25	28	3	12%	\$37.70
Cabinetmakers and Bench Carpenters	16	476	511	35	7%	\$14.40
Cargo and Freight Agents	14	191	268	77	40%	\$18.68
Carpenters	61	2,597	2,584	(13)	(1%)	\$23.09
Carpet Installers	3	90	104	14	16%	\$20.43
Cement Masons and Concrete Finishers	16	712	703	(9)	(1%)	\$22.69
Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	1	46	48	2	4%	\$12.37
Coaches and Scouts	22	458	525	67	15%	\$17.52
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	8	370	354	(16)	(4%)	\$16.77
Coil Winders, Tapers, and Finishers	2	35	49	14	40%	\$13.96
Coin, Vending, and Amusement Machine Servicers and Repairers	2	80	90	10	12%	\$17.39
Commercial and Industrial Designers	3	65	73	8	12%	\$29.98
Commercial Pilots	4	57	79	22	39%	\$36.58
Concierges	3	39	52	13	33%	\$13.57

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Construction and Related Workers, All Other	4	130	136	6	5%	\$21.31
Construction Laborers	105	3,153	3,288	135	4%	\$20.07
Construction Managers	18	543	605	62	11%	\$52.72
Continuous Mining Machine Operators	1	22	25	3	14%	\$21.29
Conveyor Operators and Tenders	7	134	159	25	19%	\$17.36
Counter and Rental Clerks	59	1,728	1,817	89	5%	\$14.74
Couriers and Messengers	4	222	230	8	4%	\$12.75
Crane and Tower Operators	4	60	77	17	28%	\$26.05
Customer Service Representatives	232	4,471	5,432	961	21%	\$17.62
Data Entry Keyers	6	507	445	(62)	(12%)	\$13.88
Demonstrators and Product Promoters	23	472	545	73	15%	\$13.28
Dental Assistants	59	1,496	1,743	247	17%	\$15.23
Dental Hygienists	26	444	568	124	28%	\$42.55
Dental Laboratory Technicians	6	215	127	(88)	(41%)	\$16.67
Dentists, General	17	362	430	68	19%	\$54.78
Diagnostic Medical Sonographers	10	154	225	71	46%	\$34.02
Driver/Sales Workers	35	681	899	218	32%	\$16.09
Drywall and Ceiling Tile Installers	5	279	197	(82)	(29%)	\$26.69
Earth Drillers, Except Oil and Gas	2	55	58	3	5%	\$36.15
Education, Training, and Library Workers, All Other	7	589	607	18	3%	\$18.72
Eligibility Interviewers, Government Programs	11	426	444	18	4%	\$20.09
Embalmers	Insf. Data	16	12	(4)	(25%)	\$23.77
Emergency Medical Technicians and Paramedics	23	558	626	68	12%	\$14.84
Entertainment Attendants and Related Workers, All Other	1	13	19	6	47%	\$12.94
Etchers and Engravers	Insf. Data	17	18	1	6%	\$12.32
Excavating and Loading Machine and Dragline Operators	2	68	78	10	15%	\$26.79
Extraction Workers, All Other	Insf. Data	11	11	0	0%	\$17.63
Farmers, Ranchers, and Other Agricultural Managers	2	132	79	(53)	(40%)	\$35.35
Farmworkers, Farm, Ranch, and Aquacultural Animals	3	132	94	(38)	(29%)	\$13.15
Fence Erectors	7	186	202	16	9%	\$18.42

## SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - UNRELATED TO EXISTING PROGRAMS (cont.)

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Fiberglass Laminators and Fabricators	2	71	68	(3)	(4%)	\$15.62
Firefighters	9	269	286	17	6%	\$28.35
First-Line Supervisors of Construction Trades and Extraction Workers	29	1,173	1,256	83	7%	\$34.36
First-Line Supervisors of Farming, Fishing, and Forestry Workers	1	63	46	(17)	(27%)	\$19.32
First-Line Supervisors of Fire Fighting and Prevention Workers	1	20	22	2	10%	\$49.72
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	61	1,054	1,329	275	26%	\$24.55
First-Line Supervisors of Housekeeping and Janitorial Workers	15	365	418	53	15%	\$18.00
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	8	288	329	41	14%	\$20.18
First-Line Supervisors of Personal Service Workers	27	498	657	159	32%	\$19.30
First-Line Supervisors of Production and Operating Workers	36	1,545	1,630	85	6%	\$25.91
First-Line Supervisors of Retail Sales Workers	160	3,576	4,308	732	20%	\$20.82
First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	43	810	988	178	22%	\$27.38
Floor Layers, Except Carpet, Wood, and Hard Tiles	2	52	60	8	15%	\$16.09
Floor Sanders and Finishers	Insf. Data	20	24	4	20%	\$20.20
Floral Designers	2	90	64	(26)	(29%)	\$15.94
Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	1	31	35	4	13%	\$16.82
Foundry Mold and Coremakers	Insf. Data	38	35	(3)	(8%)	\$13.15
Funeral Attendants	2	85	74	(11)	(13%)	\$14.18
Funeral Service Managers	Insf. Data	20	19	(1)	(5%)	\$30.20
Furniture Finishers	3	52	71	19	36%	\$12.40
Gaming Cage Workers	1	50	50	0	0%	\$12.58
Gaming Change Persons and Booth Cashiers	3	72	73	1	1%	\$12.18
Gaming Dealers	6	268	277	9	3%	\$12.22
Gaming Service Workers, All Other	4	137	146	9	7%	\$13.93
Gaming Supervisors	Insf. Data	26	26	0	0%	\$23.73
Gaming Surveillance Officers and Gaming Investigators	Insf. Data	24	25	1	4%	\$16.56
Gas Plant Operators	2	51	45	(6)	(12%)	\$35.54
Glaziers	4	74	73	(1)	(1%)	\$30.33
Grinding and Polishing Workers, Hand	4	130	119	(11)	(8%)	\$13.82
Grounds Maintenance Workers, All Other	1	17	23	6	35%	\$18.90

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Hairdressers, Hairstylists, and Cosmetologists	23	514	609	95	18%	\$12.14
Hazardous Materials Removal Workers	3	46	59	13	28%	\$18.36
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	1	27	31	4	15%	\$40.86
Hearing Aid Specialists	Insf. Data	22	26	4	18%	\$21.26
Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	1	39	42	3	8%	\$16.92
Heavy and Tractor-Trailer Truck Drivers	406	11,393	13,428	2,035	18%	\$23.12
Helpers, Construction Trades, All Other	2	73	70	(3)	(4%)	\$17.40
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	3	127	79	(48)	(38%)	\$17.68
Helpers--Carpenters	3	66	75	9	14%	\$13.41
Helpers--Extraction Workers	Insf. Data	15	18	3	20%	\$16.56
Helpers--Installation, Maintenance, and Repair Workers	15	342	380	38	11%	\$14.87
Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	Insf. Data	22	18	(4)	(18%)	\$13.57
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	4	141	157	16	11%	\$15.23
Helpers--Roofers	1	37	45	8	22%	\$12.71
Highway Maintenance Workers	1	36	41	5	14%	\$23.63
Industrial Engineering Technicians	3	92	97	5	5%	\$24.52
Industrial Production Managers	11	422	437	15	4%	\$47.15
Industrial Truck and Tractor Operators	138	3,317	3,837	520	16%	\$15.93
Information and Record Clerks, All Other	9	342	345	3	1%	\$18.73
Instructional Coordinators	11	525	583	58	11%	\$36.41
Insulation Workers, Floor, Ceiling, and Wall	Insf. Data	32	27	(5)	(16%)	\$30.42
Insulation Workers, Mechanical	Insf. Data	15	20	5	33%	\$27.43
Insurance Sales Agents	33	862	972	110	13%	\$25.03
Interviewers, Except Eligibility and Loan	16	423	490	67	16%	\$18.82
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	173	5,265	5,932	667	13%	\$13.56
Jewelers and Precious Stone and Metal Workers	2	39	45	6	15%	\$16.90
Laborers and Freight, Stock, and Material Movers, Hand	835	14,935	17,997	3,062	21%	\$13.46
Landscaping and Groundskeeping Workers	118	2,965	3,343	378	13%	\$12.35
Laundry and Dry-Cleaning Workers	16	331	382	51	15%	\$12.16
Layout Workers, Metal and Plastic	Insf. Data	14	14	0	0%	\$21.38

## SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - UNRELATED TO EXISTING PROGRAMS (cont.)

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Legislators	Insf. Data	25	28	3	12%	\$25.03
Librarians	5	114	132	18	16%	\$28.63
Library Assistants, Clerical	8	130	146	16	12%	\$13.44
Light Truck or Delivery Services Drivers	96	2,922	3,374	452	15%	\$19.22
Locksmiths and Safe Repairers	3	71	77	6	8%	\$24.88
Lodging Managers	2	41	50	9	22%	\$23.57
Machine Feeders and Offbearers	34	608	802	194	32%	\$14.97
Magnetic Resonance Imaging Technologists	3	49	66	17	35%	\$36.81
Mail Clerks and Mail Machine Operators, Except Postal Service	2	88	87	(1)	(1%)	\$13.71
Material Moving Workers, All Other	11	243	276	33	14%	\$19.19
Mechanical Door Repairers	2	37	47	10	27%	\$21.66
Medical and Health Services Managers	43	793	1,001	208	26%	\$57.94
Medical Appliance Technicians	2	58	42	(16)	(28%)	\$23.20
Meeting, Convention, and Event Planners	7	149	191	42	28%	\$20.01
Merchandise Displayers and Window Trimmers	9	142	189	47	33%	\$16.55
Metal-Refining Furnace Operators and Tenders	1	33	40	7	21%	\$17.59
Models	Insf. Data	13	17	4	31%	\$15.25
Molders, Shapers, and Casters, Except Metal and Plastic	10	244	237	(7)	(3%)	\$16.00
Morticians, Undertakers, and Funeral Directors	Insf. Data	30	28	(2)	(7%)	\$37.60
Motor Vehicle Operators, All Other	17	401	447	46	11%	\$15.34
Natural Sciences Managers	2	70	75	5	7%	\$51.36
Nuclear Medicine Technologists	2	60	74	14	23%	\$46.28
Occupational Health and Safety Specialists	5	111	125	14	13%	\$34.93
Occupational Health and Safety Technicians	Insf. Data	17	20	3	18%	\$28.06
Office Machine Operators, Except Computer	4	186	176	(10)	(5%)	\$17.03
Operating Engineers and Other Construction Equipment Operators	28	770	833	63	8%	\$31.16
Ophthalmic Laboratory Technicians	2	35	42	7	20%	\$14.17
Ophthalmic Medical Technicians	4	81	110	29	36%	\$18.74
Opticians, Dispensing	13	218	272	54	25%	\$16.81
Optometrists	4	71	90	19	27%	\$51.58

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Oral and Maxillofacial Surgeons	Insf. Data	12	15	3	24%	\$104.88
Orderlies	6	122	152	30	25%	\$17.26
Orthotists and Prosthetists	Insf. Data	12	15	3	24%	\$38.96
Packaging and Filling Machine Operators and Tenders	53	1,407	1,551	144	10%	\$13.62
Packers and Packagers, Hand	180	3,794	4,465	671	18%	\$12.08
Painters, Construction and Maintenance	14	592	582	(10)	(2%)	\$21.28
Painters, Transportation Equipment	3	157	128	(29)	(19%)	\$19.09
Painting, Coating, and Decorating Workers	3	118	110	(8)	(7%)	\$13.43
Parts Salespersons	34	873	980	107	12%	\$18.08
Paving, Surfacing, and Tamping Equipment Operators	4	183	171	(12)	(7%)	\$30.58
Pest Control Workers	12	319	344	25	8%	\$13.99
Petroleum Pump System Operators, Refinery Operators, and Gaugers	3	61	57	(4)	(7%)	\$33.71
Pile-Driver Operators	Insf. Data	16	16	0	0%	\$27.25
Pipelayers	2	53	59	6	11%	\$26.05
Plasterers and Stucco Masons	1	157	99	(58)	(37%)	\$18.59
Plumbers, Pipefitters, and Steamfitters	18	695	785	90	13%	\$23.61
Podiatrists	Insf. Data	16	18	2	13%	\$70.27
Postal Service Clerks	3	203	154	(49)	(24%)	\$25.40
Postal Service Mail Carriers	28	907	720	(187)	(21%)	\$25.65
Postal Service Mail Sorters, Processors, and Processing Machine Operators	2	248	197	(51)	(21%)	\$23.03
Postmasters and Mail Superintendents	Insf. Data	23	20	(3)	(13%)	\$37.66
Postsecondary Teachers	127	3,189	3,907	718	23%	\$41.67
Power Distributors and Dispatchers	2	32	36	4	12%	\$41.44
Prepress Technicians and Workers	1	48	39	(9)	(19%)	\$17.44
Print Binding and Finishing Workers	Insf. Data	43	38	(5)	(12%)	\$16.55
Printing Press Operators	4	186	170	(16)	(9%)	\$17.05
Production Workers, All Other	24	548	619	71	13%	\$13.89
Public Address System and Other Announcers	Insf. Data	40	40	0	0%	\$15.53
Radiation Therapists	3	70	84	14	20%	\$49.23
Radiologic Technologists	20	443	565	122	28%	\$30.34



## SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - UNRELATED TO EXISTING PROGRAMS (cont.)

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Rail Car Repairers	Insf. Data	17	19	2	12%	\$16.99
Recreation Workers	39	987	1,242	255	26%	\$12.19
Refuse and Recyclable Material Collectors	21	376	489	113	30%	\$18.90
Reinforcing Iron and Rebar Workers	4	223	162	(61)	(27%)	\$28.71
Reservation and Transportation Ticket Agents and Travel Clerks	1	53	57	4	8%	\$15.48
Residential Advisors	10	83	129	46	56%	\$16.75
Respiratory Therapists	14	427	497	70	16%	\$32.02
Respiratory Therapy Technicians	Insf. Data	21	26	5	24%	\$28.88
Retail Salespersons	784	12,621	15,575	2,954	23%	\$12.48
Riggers	Insf. Data	20	23	3	15%	\$26.69
Roofers	13	318	368	50	16%	\$20.59
Sales and Related Workers, All Other	11	280	332	52	19%	\$13.93
Sawing Machine Setters, Operators, and Tenders, Wood	10	216	240	24	11%	\$14.06
Security and Fire Alarm Systems Installers	6	174	194	20	11%	\$24.02
Self-Enrichment Education Teachers	18	424	524	100	24%	\$17.57
Semiconductor Processors	Insf. Data	22	16	(6)	(28%)	\$16.41
Septic Tank Servicers and Sewer Pipe Cleaners	3	51	65	14	28%	\$24.08
Shipping, Receiving, and Traffic Clerks	124	2,882	3,291	409	14%	\$15.33
Skincare Specialists	5	111	153	42	38%	\$14.50
Slot Supervisors	Insf. Data	17	17	0	0%	\$21.99
Speech-Language Pathologists	9	234	280	46	20%	\$38.62
Stationary Engineers and Boiler Operators	4	101	105	4	4%	\$29.78
Stock Clerks and Order Fillers	363	7,774	8,856	1,082	14%	\$12.84
Stonemasons	1	88	60	(28)	(32%)	\$18.55
Switchboard Operators, Including Answering Service	6	319	307	(12)	(4%)	\$13.55
Tailors, Dressmakers, and Custom Sewers	2	68	83	15	22%	\$14.46
Tapers	1	68	45	(23)	(34%)	\$23.78
Taxi Drivers and Chauffeurs	16	265	382	117	44%	\$12.31
Team Assemblers	90	3,054	3,267	213	7%	\$12.89
Telemarketers	7	146	185	39	27%	\$12.07

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Telephone Operators	Insf. Data	22	24	2	9%	\$20.16
Terrazzo Workers and Finishers	Insf. Data	29	32	3	11%	\$22.30
Textile Bleaching and Dyeing Machine Operators and Tenders	1	25	31	6	24%	\$15.06
Textile Knitting and Weaving Machine Setters, Operators, and Tenders	10	18	107	89	502%	\$12.59
Textile, Apparel, and Furnishings Workers, All Other	1	14	24	10	74%	\$12.55
Tile and Marble Setters	8	269	280	11	4%	\$21.36
Tool and Die Makers	2	124	138	14	11%	\$23.66
Tool Grinders, Filers, and Sharpeners	Insf. Data	22	23	1	4%	\$16.88
Tour Guides and Escorts	2	33	37	4	12%	\$12.71
Training and Development Specialists	19	448	541	93	21%	\$27.14
Transportation Attendants, Except Flight Attendants	Insf. Data	12	14	2	17%	\$16.29
Transportation Workers, All Other	6	96	111	15	16%	\$14.80
Travel Agents	Insf. Data	56	45	(11)	(20%)	\$15.01
Tree Trimmers and Pruners	6	123	152	29	24%	\$14.59
Umpires, Referees, and Other Sports Officials	1	24	27	3	12%	\$13.85
Upholsterers	12	158	222	64	41%	\$15.63
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	18	405	479	74	18%	\$13.54
Wholesale and Retail Buyers, Except Farm Products	13	251	307	56	22%	\$29.76
Wind Turbine Service Technicians	2	35	45	10	28%	\$25.06
Word Processors and Typists	Insf. Data	221	179	(42)	(19%)	\$18.84

## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - UNRELATED TO EXISTING PROGRAMS

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Adhesive Bonding Machine Operators and Tenders	8	289	279	(10)	(3%)	\$16.68
Agricultural Engineers	Insf. Data	12	14	2	17%	\$37.49
Agricultural Equipment Operators	17	610	551	(59)	(10%)	\$12.23
Agricultural Inspectors	4	133	133	0	0%	\$24.98
Agricultural Workers, All Other	3	112	100	(12)	(11%)	\$14.54
Aircraft Cargo Handling Supervisors	3	52	61	9	17%	\$18.22
Airfield Operations Specialists	1	11	16	5	45%	\$23.56
Airline Pilots, Copilots, and Flight Engineers	10	436	289	(147)	(34%)	\$54.61
Animal Breeders	Insf. Data	19	16	(3)	(16%)	\$20.23
Animal Control Workers	7	211	226	15	7%	\$22.04
Athletes and Sports Competitors	1	36	37	1	3%	\$40.93
Audiologists	4	44	68	24	55%	\$38.21
Automotive and Watercraft Service Attendants	76	1,253	1,594	341	27%	\$12.63
Barbers	5	104	127	23	22%	\$13.40
Bicycle Repairers	5	54	79	25	46%	\$12.09
Brickmasons and Blockmasons	13	612	524	(88)	(14%)	\$26.56
Building Cleaning Workers, All Other	5	180	197	17	9%	\$12.41
Bus Drivers, School or Special Client	135	4,850	5,256	406	8%	\$16.39
Bus Drivers, Transit and Intercity	34	1,124	1,245	121	11%	\$18.57
Buyers and Purchasing Agents, Farm Products	4	103	119	16	16%	\$38.30
Cabinetmakers and Bench Carpenters	18	1,528	1,179	(349)	(23%)	\$14.46
Captains, Mates, and Pilots of Water Vessels	1	19	22	3	16%	\$31.64
Cargo and Freight Agents	41	572	789	217	38%	\$19.04
Carpenters	257	10,463	10,793	330	3%	\$23.01
Carpet Installers	15	423	477	54	13%	\$20.24
Cement Masons and Concrete Finishers	71	2,687	2,885	198	7%	\$22.55
Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	4	130	132	2	2%	\$12.40
Coaches and Scouts	69	1,528	1,731	203	13%	\$17.64
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	24	1,146	1,083	(63)	(5%)	\$16.72
Coil Winders, Tapers, and Finishers	3	133	146	13	10%	\$14.97

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Coin, Vending, and Amusement Machine Servicers and Repairers	10	434	483	49	11%	\$17.23
Commercial and Industrial Designers	10	272	291	19	7%	\$29.86
Commercial Pilots	17	246	331	85	35%	\$35.63
Communications Equipment Operators, All Other	Insf. Data	33	34	1	3%	\$16.88
Concierges	12	200	258	58	29%	\$14.09
Construction and Related Workers, All Other	16	577	613	36	6%	\$21.11
Construction Laborers	418	11,705	12,926	1,221	10%	\$20.01
Construction Managers	71	2,220	2,517	297	13%	\$52.43
Continuous Mining Machine Operators	4	92	106	14	15%	\$21.15
Conveyor Operators and Tenders	24	481	569	88	18%	\$17.22
Counter and Rental Clerks	231	6,342	6,905	563	9%	\$14.68
Couriers and Messengers	13	839	860	21	3%	\$12.74
Crane and Tower Operators	12	161	218	57	35%	\$25.65
Customer Service Representatives	833	16,189	19,613	3,424	21%	\$17.62
Data Entry Keyers	19	1,740	1,543	(197)	(11%)	\$13.81
Demonstrators and Product Promoters	75	1,601	1,858	257	16%	\$13.58
Dental Assistants	190	4,713	5,520	807	17%	\$15.56
Dental Hygienists	83	1,400	1,803	403	29%	\$43.50
Dental Laboratory Technicians	11	429	262	(167)	(39%)	\$16.79
Dentists, All Other Specialists	1	30	33	3	10%	\$62.86
Dentists, General	53	1,149	1,364	215	19%	\$55.86
Derrick Operators, Oil and Gas	Insf. Data	15	15	0	0%	\$23.28
Diagnostic Medical Sonographers	30	468	684	216	46%	\$34.06
Driver/Sales Workers	136	2,430	3,321	891	37%	\$16.17
Drywall and Ceiling Tile Installers	130	2,915	3,578	663	23%	\$24.70
Earth Drillers, Except Oil and Gas	10	239	268	29	12%	\$36.88
Education, Training, and Library Workers, All Other	23	1,887	1,948	61	3%	\$18.74
Elevator Installers and Repairers	3	71	90	19	27%	\$44.61
Eligibility Interviewers, Government Programs	88	3,114	3,342	228	7%	\$19.94
Embalmers	Insf. Data	41	34	(7)	(17%)	\$22.59

## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - UNRELATED TO EXISTING PROGRAMS (cont.)

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Emergency Management Directors	2	53	61	8	15%	\$40.31
Emergency Medical Technicians and Paramedics	117	2,027	2,550	523	26%	\$14.45
Entertainment Attendants and Related Workers, All Other	6	55	79	24	44%	\$12.97
Epidemiologists	1	31	35	4	13%	\$27.71
Etchers and Engravers	2	69	74	5	7%	\$12.34
Excavating and Loading Machine and Dragline Operators	7	240	283	43	18%	\$26.57
Explosives Workers, Ordnance Handling Experts, and Blasters	Insf. Data	19	22	3	16%	\$28.24
Extraction Workers, All Other	Insf. Data	42	44	2	5%	\$17.53
Fabric and Apparel Patternmakers	Insf. Data	37	37	0	0%	\$19.90
Farm and Home Management Advisors	Insf. Data	11	14	3	27%	\$29.60
Farmers, Ranchers, and Other Agricultural Managers	10	716	545	(171)	(24%)	\$36.37
Farmworkers, Farm, Ranch, and Aquacultural Animals	18	677	553	(124)	(18%)	\$13.24
Fence Erectors	24	601	677	76	13%	\$18.02
Fiberglass Laminators and Fabricators	6	300	276	(24)	(8%)	\$15.10
Fire Inspectors and Investigators	2	45	53	8	18%	\$34.51
Firefighters	133	3,534	3,852	318	9%	\$28.28
First-Line Supervisors of Construction Trades and Extraction Workers	128	4,868	5,470	602	12%	\$34.10
First-Line Supervisors of Farming, Fishing, and Forestry Workers	8	413	348	(65)	(16%)	\$19.78
First-Line Supervisors of Fire Fighting and Prevention Workers	17	265	309	44	17%	\$49.62
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	196	3,477	4,338	861	25%	\$24.45
First-Line Supervisors of Housekeeping and Janitorial Workers	56	1,459	1,648	189	13%	\$18.11
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	38	1,401	1,612	211	15%	\$20.08
First-Line Supervisors of Personal Service Workers	72	1,397	1,804	407	29%	\$19.77
First-Line Supervisors of Production and Operating Workers	104	5,164	5,314	150	3%	\$25.90
First-Line Supervisors of Retail Sales Workers	608	13,373	16,191	2,818	21%	\$20.79
First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	129	2,423	2,964	541	22%	\$27.23
Fish and Game Wardens	Insf. Data	27	29	2	7%	\$26.94
Fishers and Related Fishing Workers	Insf. Data	11	<10	Insf. Data	Insf. Data	\$16.98
Flight Attendants	1	39	36	(3)	(8%)	\$19.79
Floor Layers, Except Carpet, Wood, and Hard Tiles	8	238	268	30	13%	\$15.85

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Floor Sanders and Finishers	3	91	104	13	14%	\$19.77
Floral Designers	7	313	255	(58)	(19%)	\$17.11
Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	4	81	94	13	16%	\$16.90
Foundry Mold and Coremakers	1	115	93	(22)	(19%)	\$13.22
Funeral Attendants	6	223	214	(9)	(4%)	\$13.53
Funeral Service Managers	2	53	55	2	4%	\$28.71
Furniture Finishers	4	153	157	4	3%	\$12.40
Gaming Cage Workers	13	503	531	28	6%	\$12.65
Gaming Change Persons and Booth Cashiers	42	841	887	46	5%	\$12.21
Gaming Dealers	70	3,027	3,192	165	5%	\$12.24
Gaming Managers	3	105	112	7	7%	\$37.54
Gaming Service Workers, All Other	18	614	676	62	10%	\$13.96
Gaming Supervisors	8	304	321	17	6%	\$23.87
Gaming Surveillance Officers and Gaming Investigators	7	314	332	18	6%	\$16.47
Gas Plant Operators	7	148	146	(2)	(1%)	\$34.97
Glaziers	10	239	227	(12)	(5%)	\$29.42
Grinding and Polishing Workers, Hand	12	412	376	(36)	(9%)	\$13.82
Grounds Maintenance Workers, All Other	5	80	105	25	31%	\$18.90
Hairdressers, Hairstylists, and Cosmetologists	92	2,033	2,414	381	19%	\$12.21
Hazardous Materials Removal Workers	7	135	176	41	30%	\$18.23
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	5	107	122	15	14%	\$41.00
Hearing Aid Specialists	3	73	90	17	23%	\$21.49
Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	2	89	95	6	7%	\$16.78
Heavy and Tractor-Trailer Truck Drivers	1,022	26,335	31,860	5,525	21%	\$22.84
Helpers, Construction Trades, All Other	9	299	318	19	6%	\$17.06
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	11	404	354	(50)	(12%)	\$17.87
Helpers--Carpenters	11	262	303	41	16%	\$13.46
Helpers--Extraction Workers	3	59	70	11	19%	\$16.72
Helpers--Installation, Maintenance, and Repair Workers	57	1,304	1,465	161	12%	\$14.79
Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	3	132	127	(5)	(4%)	\$13.42

## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - UNRELATED TO EXISTING PROGRAMS (cont.)

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	20	718	797	79	11%	\$15.05
Helpers--Roofers	5	130	161	31	24%	\$12.74
Highway Maintenance Workers	15	428	506	78	18%	\$23.29
Hydrologists	2	40	44	4	10%	\$45.24
Industrial Engineering Technicians	8	335	337	2	1%	\$24.88
Industrial Production Managers	31	1,387	1,390	3	0%	\$47.19
Industrial Truck and Tractor Operators	398	9,849	11,357	1,508	15%	\$15.89
Information and Record Clerks, All Other	28	1,178	1,189	11	1%	\$19.03
Instructional Coordinators	33	1,694	1,872	178	11%	\$36.28
Insulation Workers, Floor, Ceiling, and Wall	23	311	462	151	49%	\$28.20
Insulation Workers, Mechanical	10	104	182	78	75%	\$27.02
Insurance Sales Agents	112	2,752	3,171	419	15%	\$25.79
Interviewers, Except Eligibility and Loan	51	1,361	1,582	221	16%	\$19.02
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	610	18,992	21,282	2,290	12%	\$13.55
Jewelers and Precious Stone and Metal Workers	13	215	289	74	34%	\$16.95
Laborers and Freight, Stock, and Material Movers, Hand	2,624	47,382	57,228	9,846	21%	\$13.45
Landscaping and Groundskeeping Workers	576	14,111	16,053	1,942	14%	\$12.33
Laundry and Dry-Cleaning Workers	59	1,322	1,490	168	13%	\$12.13
Layout Workers, Metal and Plastic	1	49	48	(1)	(2%)	\$21.31
Legislators	13	353	400	47	13%	\$24.93
Librarians	20	501	580	79	16%	\$28.58
Library Assistants, Clerical	61	968	1,121	153	16%	\$13.43
Light Truck or Delivery Services Drivers	323	9,684	11,232	1,548	16%	\$19.14
Locksmiths and Safe Repairers	8	177	198	21	12%	\$24.59
Locomotive Engineers	Insf. Data	21	19	(2)	(10%)	\$28.23
Lodging Managers	15	328	367	39	12%	\$25.67
Logging Equipment Operators	Insf. Data	14	14	0	0%	\$19.28
Machine Feeders and Offbearers	92	1,853	2,344	491	26%	\$14.98
Magnetic Resonance Imaging Technologists	9	161	218	57	35%	\$37.03
Mail Clerks and Mail Machine Operators, Except Postal Service	8	311	312	1	0%	\$13.90

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Manufactured Building and Mobile Home Installers	Insf. Data	28	25	(3)	(11%)	\$12.06
Material Moving Workers, All Other	35	784	903	119	15%	\$19.15
Mechanical Door Repairers	10	171	211	40	23%	\$21.42
Medical and Health Services Managers	126	2,385	2,979	594	25%	\$58.00
Medical Appliance Technicians	4	132	107	(25)	(19%)	\$23.42
Meeting, Convention, and Event Planners	29	685	870	185	27%	\$20.34
Merchandise Displayers and Window Trimmers	35	538	721	183	34%	\$16.53
Metal-Refining Furnace Operators and Tenders	2	53	63	10	19%	\$17.57
Mine Cutting and Channeling Machine Operators	1	25	30	5	20%	\$22.68
Model Makers, Metal and Plastic	Insf. Data	21	23	2	10%	\$19.65
Model Makers, Wood	Insf. Data	14	13	(1)	(7%)	\$16.83
Models	3	52	68	16	31%	\$15.28
Molders, Shapers, and Casters, Except Metal and Plastic	27	736	694	(42)	(6%)	\$15.62
Morticians, Undertakers, and Funeral Directors	3	79	82	3	4%	\$35.81
Motor Vehicle Operators, All Other	58	1,322	1,500	178	13%	\$15.24
Motorboat Operators	Insf. Data	13	16	3	23%	\$23.69
Natural Sciences Managers	6	256	263	7	3%	\$52.77
Nuclear Engineers	1	26	31	5	19%	\$55.97
Nuclear Medicine Technologists	7	179	221	42	23%	\$46.42
Nuclear Power Reactor Operators	Insf. Data	20	23	3	15%	\$43.62
Nuclear Technicians	Insf. Data	13	17	4	31%	\$41.12
Occupational Health and Safety Specialists	17	406	460	54	13%	\$35.09
Occupational Health and Safety Technicians	3	69	83	14	20%	\$28.19
Office Machine Operators, Except Computer	16	649	629	(20)	(3%)	\$16.91
Operating Engineers and Other Construction Equipment Operators	114	3,032	3,444	412	14%	\$31.03
Ophthalmic Laboratory Technicians	8	104	138	34	33%	\$14.33
Ophthalmic Medical Technicians	11	236	317	81	34%	\$18.20
Opticians, Dispensing	47	800	1,003	203	25%	\$16.66
Optometrists	16	263	332	69	26%	\$50.33
Oral and Maxillofacial Surgeons	2	38	47	9	24%	\$107.07



## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - UNRELATED TO EXISTING PROGRAMS (cont.)

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Orderlies	17	351	440	89	25%	\$17.33
Orthodontists	1	21	28	7	33%	\$94.80
Orthotists and Prosthetists	1	32	43	11	34%	\$39.41
Packaging and Filling Machine Operators and Tenders	151	4,434	4,843	409	9%	\$13.60
Packers and Packagers, Hand	584	12,300	14,577	2,277	19%	\$12.09
Painters, Construction and Maintenance	82	3,244	3,280	36	1%	\$21.10
Painters, Transportation Equipment	12	509	482	(27)	(5%)	\$19.40
Painting, Coating, and Decorating Workers	8	459	417	(42)	(9%)	\$13.45
Paperhangers	1	56	49	(7)	(13%)	\$17.18
Parts Salespersons	111	2,784	3,148	364	13%	\$17.86
Paving, Surfacing, and Tamping Equipment Operators	17	692	728	36	5%	\$30.48
Pest Control Workers	58	1,258	1,456	198	16%	\$13.97
Pesticide Handlers, Sprayers, and Applicators, Vegetation	5	61	89	28	46%	\$14.51
Petroleum Engineers	1	24	28	4	17%	\$54.26
Petroleum Pump System Operators, Refinery Operators, and Gaugers	7	154	155	1	1%	\$34.20
Pile-Driver Operators	2	56	63	7	13%	\$27.30
Pipelayers	9	293	339	46	16%	\$26.56
Plasterers and Stucco Masons	20	974	992	18	2%	\$17.70
Plumbers, Pipefitters, and Steamfitters	90	3,440	3,881	441	13%	\$23.29
Podiatrists	2	52	57	5	10%	\$67.98
Postal Service Clerks	9	668	507	(161)	(24%)	\$25.47
Postal Service Mail Carriers	92	2,983	2,379	(604)	(20%)	\$25.72
Postal Service Mail Sorters, Processors, and Processing Machine Operators	5	817	650	(167)	(20%)	\$23.09
Postmasters and Mail Superintendents	2	77	68	(9)	(12%)	\$37.79
Postsecondary Teachers	392	10,851	12,959	2,108	19%	\$41.66
Power Distributors and Dispatchers	4	86	92	6	7%	\$42.07
Prepress Technicians and Workers	6	241	207	(34)	(14%)	\$17.58
Print Binding and Finishing Workers	5	227	215	(12)	(5%)	\$16.66
Printing Press Operators	18	894	852	(42)	(5%)	\$17.12
Production Workers, All Other	72	1,663	1,923	260	16%	\$13.92

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Public Address System and Other Announcers	3	127	129	2	2%	\$15.72
Pump Operators, Except Wellhead Pumpers	1	17	23	6	35%	\$17.94
Radiation Therapists	9	201	242	41	20%	\$49.06
Radiologic Technologists	59	1,345	1,715	370	28%	\$30.39
Rail Car Repairers	4	50	68	18	36%	\$18.83
Railroad Brake, Signal, and Switch Operators	Insf. Data	12	13	1	8%	\$27.57
Railroad Conductors and Yardmasters	Insf. Data	24	23	(1)	(4%)	\$26.83
Rail-Track Laying and Maintenance Equipment Operators	1	21	29	8	38%	\$28.25
Recreation Workers	127	3,957	4,701	744	19%	\$12.24
Refractory Materials Repairers, Except Brickmasons	Insf. Data	15	14	(1)	(7%)	\$20.46
Refuse and Recyclable Material Collectors	60	1,369	1,649	280	20%	\$19.02
Reinforcing Iron and Rebar Workers	11	719	515	(204)	(28%)	\$27.89
Reservation and Transportation Ticket Agents and Travel Clerks	6	500	410	(90)	(18%)	\$16.42
Residential Advisors	23	208	319	111	53%	\$16.85
Respiratory Therapists	43	1,247	1,478	231	19%	\$32.18
Respiratory Therapy Technicians	2	62	77	15	24%	\$29.12
Retail Salespersons	3,052	49,183	60,673	11,490	23%	\$12.46
Riggers	3	69	80	11	16%	\$26.56
Roofers	47	1,123	1,331	208	19%	\$20.74
Sailors and Marine Oilers	1	16	19	3	19%	\$16.72
Sales and Related Workers, All Other	40	1,016	1,200	184	18%	\$13.90
Sawing Machine Setters, Operators, and Tenders, Wood	21	618	563	(55)	(9%)	\$14.16
Security and Fire Alarm Systems Installers	18	482	552	70	15%	\$23.58
Self-Enrichment Education Teachers	53	1,286	1,569	283	22%	\$17.57
Semiconductor Processors	3	160	123	(37)	(23%)	\$18.13
Septic Tank Servicers and Sewer Pipe Cleaners	9	204	250	46	23%	\$23.87
Service Unit Operators, Oil, Gas, and Mining	Insf. Data	15	17	2	13%	\$22.96
Shipping, Receiving, and Traffic Clerks	409	9,840	11,155	1,315	13%	\$15.24
Shoe and Leather Workers and Repairers	1	52	51	(1)	(2%)	\$13.28
Shoe Machine Operators and Tenders	Insf. Data	20	17	(3)	(15%)	\$12.94

## REGIONAL JOB OPENINGS BY OCCUPATION (2015-2025) - UNRELATED TO EXISTING PROGRAMS (cont.)

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Skincare Specialists	20	422	579	157	37%	\$14.63
Slot Supervisors	6	207	220	13	6%	\$22.07
Speech-Language Pathologists	27	705	857	152	22%	\$38.66
Stationary Engineers and Boiler Operators	12	309	327	18	6%	\$29.50
Stock Clerks and Order Fillers	1,209	26,373	29,870	3,497	13%	\$12.83
Stonemasons	6	294	270	(24)	(8%)	\$18.67
Switchboard Operators, Including Answering Service	21	1,198	1,138	(60)	(5%)	\$13.56
Tailors, Dressmakers, and Custom Sewers	9	267	321	54	20%	\$14.37
Tank Car, Truck, and Ship Loaders	4	23	48	25	109%	\$22.25
Tapers	31	733	876	143	20%	\$21.99
Taxi Drivers and Chauffeurs	44	816	1,138	322	39%	\$12.39
Team Assemblers	243	10,003	10,484	481	5%	\$12.87
Telemarketers	36	820	996	176	21%	\$12.14
Telephone Operators	3	109	105	(4)	(4%)	\$20.50
Terrazzo Workers and Finishers	3	125	137	12	10%	\$21.69
Textile Bleaching and Dyeing Machine Operators and Tenders	1	45	44	(1)	(2%)	\$14.86
Textile Knitting and Weaving Machine Setters, Operators, and Tenders	12	24	126	102	425%	\$12.80
Textile, Apparel, and Furnishings Workers, All Other	2	45	62	17	38%	\$12.62
Tile and Marble Setters	36	1,206	1,293	87	7%	\$20.94
Tire Builders	Insf. Data	26	23	(3)	(12%)	\$15.93
Tool and Die Makers	6	417	451	34	8%	\$23.53
Tool Grinders, Filers, and Sharpeners	2	79	82	3	4%	\$17.03
Tour Guides and Escorts	14	226	248	22	10%	\$13.13
Training and Development Specialists	62	1,526	1,831	305	20%	\$27.13
Transportation Attendants, Except Flight Attendants	2	53	65	12	23%	\$16.47
Transportation Workers, All Other	28	485	554	69	14%	\$15.13
Travel Agents	5	345	275	(70)	(20%)	\$16.72
Travel Guides	3	61	61	0	0%	\$16.56
Tree Trimmers and Pruners	29	547	684	137	25%	\$14.26
Umpires, Referees, and Other Sports Officials	6	139	153	14	10%	\$14.01

Description	Annual Openings	2015 Jobs	2025 Jobs	2015 - 2025 Change	2015 - 2025 % Change	Avg. Hourly Earnings
Upholsterers	17	426	455	29	7%	\$15.61
Watch Repairers	2	23	34	11	48%	\$22.07
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	58	1,432	1,669	237	17%	\$13.45
Wholesale and Retail Buyers, Except Farm Products	49	932	1,154	222	24%	\$29.48
Wind Turbine Service Technicians	4	100	126	26	26%	\$24.76
Word Processors and Typists	4	1,260	1,032	(228)	(18%)	\$18.71





