Comprehensive Master Plan

CRAFTON HILLS COLLEGE SAN BERNARDINO COMMUNITY COLLEGE DISTRICT



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2017 Comprehensive Master Plan

CRAFTON HILLS COLLEGE SAN BERNARDINO COMMUNITY COLLEGE DISTRICT

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Letter from the President



"

Since its inception in fall 1972, Crafton Hills College has been committed to meeting the evolving educational needs of students and the local community. In its inaugural year, the College served approximately 1,000 students and included a library, laboratories, classrooms, gymnasium, student services, a dining hall, and a central campus quad, which still forms the center of the campus today. By 1980, the campus expanded to include the Performing Arts Center and the Occupational Education Building; by year 2000, the Student Services Building and Child Development Center were constructed. With the financial support of the community through the approval of the Measure P bond in 2002 and the Measure M bond in 2008, Crafton Hills College has replaced campus infrastructure, constructed a Learning Resource Center, Kinesiology Health and Aquatics Complex, Public Safety and Allied Health Building, Canyon Hall (science building), Crafton Center (student services and administration), and renovated and modernized several of the original buildings while preserving their iconic architecture. Today, our College serves over 8,000 students each year with a capacity to serve 10,000.

This Comprehensive Master Plan has been developed through a series of collaborative discussions and workshops with faculty, students, staff, the community, and the governing board. These discussions have built upon the college's framework of integrated planning and informative data reservoirs, including program review, facilities planning, local employment trends, forecasted student enrollment, and the overall economic condition of the regional area. This work will guide us in the next decade as we enter an era of unprecedented growth and student success.

Ultimately, our vision is for Crafton Hills College to be a regional resource for life-transforming educational opportunities; we will be the statewide leader in transfer and completion rates, we will have a reputation for unparalleled expertise in and commitment to student services, employers will seek our graduates, and we will inspire economic, cultural, and civic development.

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Wei Zhou, Ph.D. President

Mission, Vision, Values

Mission

The mission of Crafton Hills College is to advance the educational, career, and personal success of our diverse campus community through engagement and learning.

Vision

Crafton Hills College will be the college of choice for students who seek deep learning, personal growth, a supportive community and a beautiful collegiate setting.

Values

Crafton Hills College values academic excellence, inclusiveness, creativity, and the advancement of each individual.

Engage-Learn-Advance

At Crafton Hills College we encourage students and campus personnel to Engage, Learn and Advance. These are three essential areas of emphasis for success; and through this common nomenclature the college constantly reminds students and employees of the important role we all play in helping each other learn. v

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CRAFTON HILLS COLLEGE

Comprehensive Master Plan Overview

This chapter provides an overview of Crafton Hills College's 2017 Comprehensive Master Plan— an integrated plan that comprises both the Educational Master Plan and the Facilities Master Plan.

The following sections are included in this chapter:

- Intent + Purposes of the Comprehensive Master Plan
- Integrated Planning + Collegial Consultation Process
- Facilities Planning Process
- Crafton Hills College Planning History +
 Context
- Glossary of Terms

Overview INTENT + PURPOSES OF THE COMPREHENSIVE MASTER PLAN

Intent of the Educational Master Plan

The *Crafton Hills College (CHC) 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 informed by core values and goals within other College and District-wide plans, such as the *San Bernardino Community College District (SBCCD) Strategic Plan.*

While the *Educational Master Plan* is intended to provide a direction for Crafton Hills College over the next five years (2015-20), it is not a rigid script with little deviation. This document helps to determine the institution's current level of effectiveness and produces key goals to evoke action and dialogue as the College embraces the future. An educational master plan is a living document that should be reviewed and updated regularly. Thus, this document is an evolving description of the College's needs and, although past performance data can greatly inform future growth, emerging regional issues, as well as unforeseen events, can alter a community's path. The EMP will provide guidance and support for the College's emerging strategic directions 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 work in coordinated fashion toward longterm 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 current situation and future planning decisions.
- Serve as an instrument to promote the College and communicate its strengths and capabilities to its community and other constituent groups.

 Guide further planning and decision-making at all levels, and remain a living, 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 Crafton Hills 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 and Goals 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 Crafton Hills College *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 Crafton Hills College *Facilities Master Plan, Technology Plan, Matriculation Plan, Enrollment Management Plan, Student Equity Plan, Grants Plan, Budget Plan* and *Marketing/Public Relations Plan.*

The Crafton Hills College 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 Crafton Hills College Facilities Master Plan was developed through an inclusive, participatory, and transparent process that engaged and sought input from the College's many constituencies. Crafton Hills College Council (Crafton Council)—which represents the committees within Crafton Hills 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 Crafton Hills College website.

The contributions of Crafton 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 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 time frame at both Crafton Hills College and San Bernardino Valley 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 below.



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 Crafton Council and is documented in the *Facilities Analysis* section.

03

FRAME

The educational planning process is an extension and validation of work that the College began more than a year before the panning team's involvement. During spring 2016, as final adjustments were made to the strategic directions and objectives, 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 Current + Future Instructional 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 Crafton Council, who provided insightful input. Faculty in the Art and the Kinesiology programs provided further input for program-related recommendations. A draft list of recommended projects was reviewed with Crafton Council during the second workshop.

05

REVIEW

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 Crafton Council and the Crafton Hills College Educational Master Plan Committee, yielding more specific implications for facilities planning that were included in the FMP document and addressed in its recommendations.

$\begin{array}{l} \hline \textbf{Overview} \\ \hline \textbf{CRAFTON HILLS COLLEGE PLANNING HISTORY + CONTEXT} \end{array}$

In 1967, the SBCCD Board of Trustees approved the transition from a single-college to a multi-college district. Crafton Hills College first opened its doors to about 1,000 students in fall 1972. From the start, this hillside site's beauty, views, and sense of place inspired the development of the College. The campus sits on former ranch land donated by Ruben and Lester Finkelstein, who noted that "...education should be elevating and elevated." Throughout its history, the College has benefited from the generosity and forwardthinking values of the community that it serves.

The site and five original buildings were designed by E. Stewart Williams, of Williams and Williams, an architectural firm based in Palm Springs, California. At the time of its opening, the campus included five facilities—the library, laboratories (Central Complex), classrooms (West Complex), student services (Clock Tower Building), and a dining hall (Crafton Hall). Of these buildings, all but the library remain to serve the College, testifying to their durability and functionality.

During the 1970s, many more buildings were designed for the campus by three architectural firms under the guidance of the original architect, resulting in a campus design that is harmonious and unified. In 1978, the 452-seat Ruben and Lester Finkelstein Performing Arts Center opened and was dedicated to the College's original benefactors. At the dedication of the Performing Arts Center, the brothers gave as one reason for their donation, the desire to be part of "lasting educational values."

Additional buildings were added during the 1980s and 1990s, including the Gymnasium, Central Complex 2, and the Occupational Education Buildings. 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.

Crafton Hills College collaborated to establish an academic plan for the growth of their enrollment and development of their programs. In 2005, a *Facilities Master Plan* was put in place to prepare for the development of facilities to accommodate the planned growth. The 2005 FMP planned for facilities and campus-wide infrastructure, based on a study of utilization and needs. It established architectural and landscaping design guidelines intended to align future development with the best attributes of the existing campus. The 2005 FMP recommended the construction

of projects, including the Learning Resources Center, the Kinesiology, Health Education, and Aquatic Complex and the East Complex. It also served as the foundation to seek bond funds for additional projects.

With the passage of Measure M in February 2008, \$500 million in funding capacity was approved by the voters. The drop in property values throughout the District during the Great Recession reduced SBCCD's ability to sell bonds 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 and a wellness pool, were postponed.

Following the adoption of the *2010 Educational Master Plan*, it became apparent that the College's facilities plan needed an update. The *2011 Facilities Master Plan Update* reprioritized development for Measure M funded projects, as well as visualized a concept for the full build-out of the campus.

Based on the recommendations of the 2011 FMP update, Crafton Center, Canyon Hall, and the Public Safety Allied Health Building were built and opened for the spring 2016 semester. These three projects represent a significant increase in the campus' space inventory and have necessitated a reorganization of much of the campus' space.

Currently, "secondary-effect" projects are underway to repurpose space that was vacated in the Central Complex, the Clock Tower Building, and the Student Support Building. The *Facilities Analysis* describes the campus in 2017 when it is anticipated that these projects will have been completed.

The College is learning to live in its newly expanded campus and confirming its planning assumptions. As economic conditions continue to recover and enrollment grows, Crafton Hills College has reassessed its needs and reset its priorities through the development of a new educational master plan and a related facilities master plan.









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 "head count") 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. It may include external and internal elements that are evaluated for their potential impact on an institution's 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 head count students a college enrolls for every 1,000 persons within the service area population.

Regional Area

The geographic boundary that 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 students 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 member's 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.

CRAFTON HILLS COLLEGE



Educational Master Plan

CRAFTON HILLS COLLEGE



Plan Overview

The Crafton Hills College *Educational Master Plan* defines our strategy to change lives. With this plan we seek to inspire our students, support our colleagues, and embrace our community through a learning environment that is transformational.

Crafton Hills College welcomes everyone and is particularly committed to working with students from backgrounds where the odds are stacked against them. This plan presents specific strategies to help students from cycles of low income, from recent immigrant histories, from underrepresented communities, and from first generation families. The College intends to build the best learning environment in the country (literally) and believes it has the ingredients to achieve this—a tradition of excellence, a talented faculty, a diverse student body, a committed staff, professional leadership, and a supportive community.

The Educational Master Plan took several years to write, primarily developed by the Educational Master Plan Committee. A wide range of committees and constituent groups were consulted throughout the process. The plan represents a serious and collective effort, charting the direction we expect to grow. We believe the plan is bold, insightful, student-centered, and intelligent. Above all, this plan articulates our commitment to the Crafton Community—a commitment to the people who study here, the people who work here, and the people who live here.

Plan Overview STRATEGIC DIRECTIONS 1

PROMOTE STUDENT SUCCESS

Crafton Hills College students encounter life-changing experiences that promote their academic success, career advancement, and personal development.

1.1 Support, guide, and empower every student to achieve their goals.

1.2 Use every area on campus to promote student learning

How?

- Excellent teaching and critical thinking skills lead to high student success rates. Professional development programs geared to best practices will be offered for full and part-time faculty. Instruction and student support activities will support critical thinking, written, and oral communication.
- Target measures may include student satisfaction surveys, employee satisfaction surveys, course success, and student learning outcomes assessments.

BUILD CAMPUS COMMUNITY

College structures, processes, and groups are inclusive, celebrating diversity, and nurturing relationships.

- 2.1 Promote inclusiveness and community.
- 2.2 Seek, respect, and celebrate diversity.

How?

- With the belief that the feeling of inclusiveness increases engagement and life/job satisfaction, Crafton Hills College will undertake deliberate programmatic activities and events to ensure students and staff feel included and important.
- Target measures may include demographic diversity, student satisfaction surveys, and employee satisfaction surveys.

DEVELOP TEACHING + LEARNING PRACTICES

Crafton Hills College promotes innovative and effective teaching and learning strategies.

- 3.1 Develop a culture of mastery in teaching.
- 3.2 Teach students to be great learners.

How?

- Excellent teaching and critical thinking skills lead to high student success rates. Professional development programs geared to best practices will be offered for full and part-time faculty. Instruction and student support activities will support critical thinking, written and oral communication.
- Target measures may include student satisfaction surveys, employee satisfaction surveys, course success, and student learning outcomes assessments.

EXPAND ACCESS

Crafton Hills College is dedicated to increasing the community's college-going rate and will promote equitable access to higher education.

4.1 Promote a college-going culture in the core service area.

4.2 Increase college capacity to serve the core service area.

How?

- The College wants to increase the education levels in the Inland Empire by sharing the advantages of a college degree through outreach events, high school relations, and K-12 and community partnerships. Crafton Hills College will also focus on expanding access by providing classes and services in times and ways that are convenient to students.
- Target measures may include head count, FTES, demographic diversity, and the number of students choosing Crafton Hills College as their college.

ENHANCE VALUE TO THE SURROUNDING

Crafton Hills College is actively engaged with the surrounding community.

5.1 Be recognized as the college of choice in the communities we serve.

5.2 Expand the reputation of Crafton Hills College as an essential partner and valued asset.

5.3 Distinguish Crafton Hills College as a

respected resource for local employers and the workplace.

How?

COMMUNITY

- Crafton will help promote a culture of educational value throughout the community by highlighting the importance of a higher education in the workforce and beyond. The College will participate in and lead partnerships with area employers and provide valued services to the community. The Crafton Hills College Foundation will act as ambassadors for the College, promoting education and College resources.
- Target measures may include demographic diversity, the number of students choosing Crafton Hills College as their college, and job placement rates.

6

PROMOTE EFFECTIVE DECISION MAKING

Crafton Hills College uses decision making processes that are effective, efficient, transparent, and evidencebased.

- 6.1 Value and engage in shared governance.
- 6.2 Promote a culture of evidence-based decision making.
- 6.3 Implement college-wide integrated planning.

How?

- Crafton relies on data and collegial participation to inform decisions. Crafton Hills College will continue to encourage participation in committee work at all levels, and emphasize research and data in college planning.
- Target measures may include employee satisfaction surveys and committee evaluations.

Plan Overview STRATEGIC DIRECTIONS *(cont.)*

DEVELOP PROGRAMS + SERVICES

Crafton Hills College is committed to providing excellent and responsive programs and services.

- 7.1 Improve and expand services.
- 7.2 Improve and expand programs.

How?

- To meet the needs of the workforce and our community, Crafton Hills College will provide educational programs that lead to transfer to a four-year institution or a viable career, life-long learning, and skills building. Crafton Hills College will align program offerings with community needs and provide the appropriate services to our diverse student body.
- Target measures may include head count, FTES, number of degrees and certificates awarded, student satisfaction surveys, and the number of employees.

SUPPORT EMPLOYEE GROWTH

Crafton Hills College is committed to developing the full potential of every employee.

8.1 Become an organization that embraces a culture of continuous learning.

How?

- Crafton Hills College will continue to provide and enhance opportunities for its employees to grow professionally and be happy working here. Steps to achieve that will include professional development activities, mentoring, and developing hiring and evaluation practices that support employee growth.
- Target measures may include employee satisfaction surveys and committee evaluations.

OPTIMIZE RESOURCES

Crafton Hills College develops, sustains, and strengthens its resources.

- 9.1 Plan for growth and align resources.
- 9.2 Value the Crafton Hills College environment.

9.3 Support the implementation of streamlined processes.

How?

- Crafton Hills College is aiming to become a comprehensive community college with 5,300+ FTES. To achieve and sustain that role, Crafton Hills College will refine its budgetary needs, continue to seek special-purpose funding for priority populations and needs, streamline processes to increase operational efficiencies, and ensure the College's growth, while sustaining its beautiful campus.
- Target measures may include employee satisfaction surveys, student satisfaction surveys, and class fill rates.

CRAFTON HILLS COLLEGE



Planning Framework

This section provides a succinct description of assumptions made and the integration with other District and College plans.

Planning Framework PLANNING ASSUMPTIONS

A common model of developing planning assumptions, building strategies to support those assumptions, expecting certain outcomes, and assessing outcomes has been used for this plan and is part of the integrated planning process. The following are the most current assumptions using data received from internal and external sources.

- The economy is unpredictable and the District's funding cap determined by the state is subject to frequent change
- The FTES targets for the Colleges in the District must be within a flexible range to increase or decrease, based on information from the State and the District regarding the budget
- The College will focus on evidence to inform the scheduling of its programs and courses
- Current enrollment patterns and staffing ratios limit near-term program development

- Enrollments are constrained by facility and staff availability. Large numbers of part-time instructors constrain program expansion
- The need to replace a substantial number of retiring personnel will be challenging. It will be important to maintain high quality programs and services during the transition
- Legislative mandates will impact enrollment and college goals.
- The development of the athletics program and its associated facilities, the renovation of the performing arts building, and other building modifications remain priorities.
Planning Framework DISTRICT PLANS

District Strategic Plan

The San Bernardino Community College District's mission is to transform lives through the education of its students for the benefit of its diverse communities. The District's vision is to be known for student success.

The District's four strategic goals are:

1. Student Success — Provide the programs and services necessary to enable all students to achieve their educational and career goals.

2. Enrollment and Access — Increase access to higher education for the population in our region.

3. Partnerships of Strategic Importance — Invest in strategic relationships and collaborate with partners in higher education, PreK-12 education, business and workforce development, government, and other community organizations.

4. District Operational Systems — Improve the District systems to increase administrative and operational efficiency and effectiveness.

District Technology Strategic Plan

The District Technology Strategic Plan represents a macro view of the District's technology needs. It provides a long-range view that anticipates the emerging technological needs of the Colleges and District entities and requires an understanding and accommodation for federal, state, and local requirements.

Goals:

- Develop policies, communication tools, and training, requiring all district materials meet accessibility requirements.
- Work closely with the Colleges and other District entities to cohesively maintain and support multiple forms and methods of communication.
- Work with collegial consultation groups to ensure broad input on decisions regarding the adoption and implementation of applications and technologies.
- Explore options to fund and sustain instructional technology initiatives.

- Implement mobile technologies that facilitate access and interaction with campus and district resources.
- Ensure updated and robust infrastructure to provide a fully integrated and cohesive computing environment.
- Develop fully integrated resolution oriented technical support services with digitized online customer service.
- Develop and expand face-to-face and online training programs and services to empower and improve employee competence and performance.
- Improve District systems to increase administrative and operational efficiency and effectiveness with an emphasis on student records, human resources, facilities, technology, financial systems, and other workflow operational systems.

Long-Range Financial Plan

The SBCCD Resource Allocation Model provides a comprehensive, annual forecast of college revenues and planned expenditures. The model is based on final budget amounts calculated through the developmental budget process. The Resource Allocation Model (RAM) is compiled utilizing the Board Directives, RAM Guidelines, and RAM Assumptions. These three factors are reviewed each year to ensure applicability to Strategic Plan, Program Review, and Accreditation. In order to create a multi-year Resource Allocation Model, SBCCD takes into account economic conditions and funding projections. Furthermore, SBCCD makes assumptions based on all the information received from the California Community College Chancellor's Office, the Legislative Analyst's Office, and Schools Services of California. SBCCD uses the following assumptions to formulate the multi-year Resource Allocation Model: FTES funding, Cost of Living Adjustments (COLA), projected FTES funded growth, state revenue shortfall, FTES Target Growth, local revenue projections, anticipated District assessments, site budget assumptions (including step and column increases, benefits, and inflation for Object Codes 4000's-6000's).

Crafton Hills College utilizes the District's long-range resource allocation model to develop projected college funding and enrollments.

Enrollment Management Plan

The SBCCD Enrollment Management Plan is a threeyear plan designed to support and enhance the District's mission, goals and objectives. It is intended to align with the District Strategic Plan and be updated accordingly. The Enrollment Management Plan outlines strategies, based on relevant data, that help the Colleges develop enrollment targets, and strategies for reaching those targets. The strategies and targets developed will consider the District's resource allocation model and be focused on student success.

The SBCCD Enrollment Management Plan is designed to support the College plans by providing resources, coordinating efforts, increasing communication, and sharing data in order to help the Colleges achieve their goals.

The following goals are included in the SBCCD Enrollment Management Plan:

- Goal 1: Provide the data and information SBCCD and Colleges need to inform enrollment management decision-making.
- Goal 2: Develop recommendations to support the achievement of SBCCD and the Colleges' enrollment management goals.

Planning Framework CAMPUS PLANS

Student Success and Support Program Plan

The purpose of the *Student Success and Support Program* (SSSP) is to outline and document how the college will provide SSSP services to students. The goal of this program is to increase student access and success by providing students with core SSSP services to assist them achieving their educational goals.

Student Equity Plan

The Student Equity Plan outlines the activities and interventions that are aimed at eliminating disproportionate impact among identified groups. Over the past five years, great strides have been made in increasing our enrollment, especially among the traditionally less advantaged groups. The goals are to:

- Serve a higher proposition of veterans, the disabled, 30-34 and 35-39 year olds in the primary service area.
- Improve the course completion rate of Crafton Hills College foster youth students.
- Increase the English throughput rate of African American and Hispanic students and increase the math throughput rate of African American and economically disadvantaged students.

- Increase the degree/certificate completion rate of males, African American, Hispanic, Native American, and students 20-34 years old.
- Increase the transfer rate of African American, Hispanic, and students 20-24 years old.

Distance Education Plan

Distance Education Vision:

Students have access to a dynamic, high-quality and comprehensive education that advances student success in an engaging, student-centered online learning environment.

Distance Education Mission:

In support of Crafton Hills College's Mission, Vision and Values, the Crafton Hills College Distance Education program engages students through quality online instruction and support services as an alternative approach to advancing the educational, career, and personal goals of our students.

The Crafton Hills College *Distance Education Plan* (DE Plan) represents the institution's commitment to nurturing the Distance Education program, to ensuring the success of all distance education students, to fostering and promoting innovation, excellence, and best practice for Distance Education and providing Crafton Hills College faculty with assistance, leadership, expertise, and training in emerging Distance Education teaching and learning strategies and technologies.

The 2016-2020 Distance Education Student Success Initiatives build on the prior DE successes and focus on deploying best practices including regular and ongoing faculty and student support to ensure student success through continuous quality improvement of the DE program.

The Crafton Hills College *Distance Education Plan* 2016-2020 initiatives also support the College's EMP strategic directions and goals. The initiatives and related goals and objectives will be reviewed annually and updated as needed to support emerging state and national standards as well as new technological trends.

The college-wide adoption of this revised plan serves as an acknowledgement by the Crafton Hills College administrators, faculty and staff that these initiatives will promote student success and quality of instruction in Distance Education.

Enrollment Management Plan

Crafton Hills College is currently working on revising and updating its *Enrollment Management Plan*. The purpose of Crafton Hills College's *Enrollment Management Plan* is to address the recruitment, admission, retention, and success of students. The overall goal of the committee is to develop processes and strategies to predict and manage enrollment at the campus and program level. To achieve the above referenced purpose, specific goals have been developed that address specific facets of enrollment management, each aligned with the goals of Crafton Hills College's *Educational Master Plan*:

- Goal 1: Develop an evidence-based Enrollment Management Plan.
- Goal 2: Develop processes and strategies to attract and retain students from initial contact through goal completion.
- Goal 3: Identify and implement strategies to reach college-wide goals for certificate and degree completion.
- Goal 4: Develop strategies to effectively prepare students for transfer and to increase the Crafton Hills College transfer rate.

 Goal 5: Develop strategies to ensure effective levels of instructional productivity and efficiency while maintaining high quality instruction.

Foundation Strategic Plan

Crafton Hills College provides quality instruction and support services that allow its students, many of whom face serious obstacles to completion, to pursue and achieve their educational goals. The College is extremely proud to be the pathway to social and economic advancement for many who would otherwise not have the opportunity to pursue a college education. The mission of the Foundation is to enhance educational excellence at Crafton Hills College. Funds received provide direct financial support to students through grants and scholarships, improve programs and services at the College, and support the vocational and academic disciplines which best serve the needs of students and the community. The Crafton Hills College Foundation has been instrumental in providing financial support to students and helping underwrite programs and activities at the College that cannot be funded through other means.

The Crafton Hills College Foundation Strategic Plan spans three years and includes three major goals: enhance student programs and services, increase financial contributions, and respond to the evolving needs of the college. The Foundation is dedicated to supporting the college by developing strategies to help bolster the college when, where, and how the college needs it most. Through objectives such as recognizing student achievement, supporting student outreach and engagement, and identifying and nurturing individuals who share the college vision, the Foundation will continue to support the dreams of students so they can have meaningful and productive lives in their communities and chosen professions.

CRAFTON HILLS COLLEGE



Planning Environment Internal Scan Findings

The *Planning Environment* section presents findings from the external and internal environmental scans and labor market information that were used in the decision-making processes that led to the identification of Strategic Directions and Objectives. This section culminates in a SWOT analysis and stated implications/ trends.

The internal scan of Crafton Hills College is an opportunity to assess demographics and other characteristics of the student and employee population based on historical data. It is utilized to identify and understand patterns and trends within Crafton Hills College to inform institutional planning decisions. Internal scan data presented in this plan will analyze student and employee data on an overall College level.

The data that supports the internal scan findings can be found in the *Appendix*, beginning on page A.001.

Planning Environment INTERNAL SCAN FINDINGS

Analysis of data regarding the internal college profile at Crafton Hills College provides insight for making informed planning decisions. The following findings are derived from the internal scan data which can be found in the *Appendix*, beginning on page A.001:

Student Demographics

- Students 20-24 years old is the largest age group within the College (3,193 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 19 years old and younger (-427 students).
- Hispanic students accounted for 44% of College enrollment in 2014-15 (3,537 students). From 2010-11 to 2014-15, the number of white students decreased by 1,205 students (-27.6%).
- Female students accounted for 53.1% of College enrollment in 2014-15 (4,268 students). From 2010-11 to 2014-15, the number of female students decreased by 219

students (-4.9%), while the number of male students declined by 447 students (-10.6%).

Enrollment Trends

- From 2008-09 to 2012-13, overall College enrollment decreased by 2,421 students (-25.44%). However, from 2013-14 to 2014-15, Crafton Hills College's enrollment increased by 944 students (13.3%). In 2014-15, the College was still 1,477 students shy of its most recent peak enrollment (9,517 students in 2008-09 compared to 8,040 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, 85.9% of students at Crafton Hills College enrolled in only traditional face-to-face courses (7,412 students). By 2014-15, 79.1% of students at Crafton Hills College enrolled in only traditional face-to-face courses (6,151 students). During the same time, online only course enrollment increased by 192 students (282.4%).

- Although California residents account for over 96% of students, California resident students declined by 671 students (-7.9%) from 2010-11 to 2014-15. During the same time, California non-resident students increased by 33 students (25%), while foreign country residents decreased by 13 students (-10.4%).
- Continuing students account for the majority of Crafton Hills College enrollment (4,457 students or 55.4% of unduplicated enrollment in 2015-16). First-time college students account for approximately 12% of enrollment, however only increased by 77 students from 2012-13 to 2014-15. During the same time, under age 18 or K-12 special admit students decreased by 146 students (-19.9%).
- Yucaipa High School and Redlands East Valley High School have consistently been among to top three feeder high schools for Crafton Hills College, accounting for 181 and 120 first-time students in fall 2014, respectively. Citrus Valley High School went from the 6th ranked feeder high school for Crafton Hills College in fall 2012 to the 3rd ranked feeder high school in fall 2014.

- From 2010-11 to 2014-15:
 - Total WSCH generation decreased by 3,027 WSCH (-2.1%)
 - Total unduplicated enrollment decreased by 668 students (-7.7%)
 - Total section offerings increased by 396 sections (7.12%)
 - Total FTEF increased by 48.71 FTEF (18.6%)
 - Total productivity decreased by 96.75
 WSCH/FTEF (-17.5%)
- In 2011-12, the College generated 111.95
 WSCH per section. However, in 2014-15 the College generated 86.02 WSCH per section.
- In 2010-11, the College had 261.34 FTEF that reached a productivity level of 553.72 WSCH/ FTEF. However, in 2014-15 the College had 310.05 FTEF that reached a productivity level of 456.97 WSCH/FTEF.
- The majority of students at Crafton Hills College stated an educational goal of obtaining a BA/BS upon transfer to a four-year institution (4,975 students or 61.6% 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 8.2% (303 students).

Student Success and Completion

- From 2010-11 to 2014-15, CHC experienced an average retention rate of 90.7% and an average success rate of 73.3%. In 2014-15, the College's retention rate was 91.4% (statewide retention rate for fall 2014 was 86.3%). In 2014-15, the College's success rate was 73.3% (statewide success rate for fall 2014 was 69.01%).
- From 2010-11 to 2014-15, total degrees and certificates awarded increased by 219 awards (30.5%). The most significant growth was experienced in AS degrees, which increased by 83 awards (52.9%) during the same time period. Certificates requiring 6 to less than 18 semester units constituted the most awards at Crafton Hills College in 2014 (275 awards).
- Student cohorts from 2004-05 to 2008-09, had an average completion rate of 40.8%

within 6 years, while the statewide average completion rate was 48.3%.

 From 2009-10 to 2013-14, the average transfer volume at Crafton Hills College was 457 students. During the same period, the average proportion of CSU transfers was 45.2%, while the average proportion of instate private school transfers was 27.3%, approximately 19.3% of transfers went to outof-state schools, and 8.1% of transfer students enrolled in UC schools.

Employee Demographics

- In fall 2014, adjunct faculty accounted for 53.8% of all employees (205 persons), while full-time faculty accounted for 18.4% of all employees (70 persons). Approximately 25.5% of the College's faculty were full-time employees (70 full-time faculty of 275 total faculty members).
- In fall 2014, 105 employees were within the 50-59 age group (27.6% of all employees) and 56 employees were age 60 or older (14.7% of all employees. Data suggest that

Planning Environment INTERNAL SCAN FINDINGS (cont.)

it is reasonable to expect up to 42% of the College's employees to retire within the next 15 years.

- In fall 2014, 62.5% of Crafton Hills College employees were white (238 persons), 19.9% of employees were Hispanic (76 persons), 8.4% of employees were Asian (32 persons), and 6.3% were African American (24 persons). From fall 2010 to fall 2014, white employees increased by 25 persons (11.7%), while Hispanic employees increased by 16 persons (26.7%) and Asian employees increased by 10 persons (45.5%).
- In fall 2014, 53.5% of the College's employees were female (204 persons), while 46.5% of employees were male (177 persons). From fall 2010 to fall 2014, the number of male employees increased by 34 persons (23.8%) while females increased by 24 employees (13.3%).

Planning Environment External Scan Findings

The intent of the external scan for Crafton Hills College 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 findings presented in this plan are based on an analysis of the 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.

The data supporting these External Scan Findings can be found in the *Appendix*, beginning on page A.023.

Planning Environment 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 which can be found in the *Appendix*, beginning on page A.023:

Population Demographics

- From 2005 to 2015:
 - Service area total population is estimated to have grown by 13% (113,686 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 5.13% (50,687 persons)
 - Regional area total population is projected to grow by 5.55% (318,658 persons)
 - State total population is projected to grow by 5.08% (604,271 persons)
- Population projections suggest that between 2015 and 2025, the number of people in the 19 and under age group will increase by 0.8%

within the service area (2,427 persons) and 1.45% in the region (19,651 persons), which is less than the projected 2.07% increase statewide (212,632 persons).

- Between 2015 and 2025, population
 projections indicate that the number of
 people in the 20-24 age group will decrease
 by 22.04% in the service area population
 (-18,903 persons) and 20.23% in the regional
 population (-76,153 persons), both of which
 are larger than the projected 16.75% decrease
 expected statewide (-522,916 persons).
- Population projections suggest that the number of people in the 50 and over age group will increase by 17.02% in the service area (46,496 persons) and 16.55% in the region (216,825 persons) by the year 2025. The projected increase for the same age group in the state is 15.38% (1,884,696 persons).
- By 2025, Hispanics are expected to account for:
 - 57.26% of the service area population (594,718 persons)

- 52.51% of the regional population (2,519,083 persons)
- 40.3% of the State population (16,555,395 persons)
- > By 2025, whites are expected to account for:
 - 24.97% of the service area population (259,315 persons)
 - 30.51% of the regional population (1,463,684 persons)
 - 35.71% of the state population (14,670,529 persons)
- By 2025, African Americans are expected to constitute:
 - 9.11% of the service area population (94,626 persons)
 - 6.96% of the regional population (333,696 persons)
 - 5.5% of the state population (2,259,304 persons)
- > By 2025, Asians are expected to comprise:
 - 6.31% of the service area population (65,527 persons)
 - 6.99% of the regional population (335,560 persons)

- 14.85% of the state population (6,101,547 persons)
- From 2015 to 2025, the service area male population is projected to increase by 5.83% (28,309 persons) and the female population is projected to increase by 5.78% (29,124 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.

Educational Attainment

- 49.84% of the service area residents age 25 and older do not have any higher education experience (293,711 persons) while 47.72% of regional residents age 25 and older do not have any higher education experience (1,271,594). 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 older with a BA/BS degree is 11.31%, which is approximately 1.7 times less than that of the state's 19.2%. 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 (\$33,687) 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 make-up and availability of blue collar jobs in the area.

Household Size, Income & Poverty

- The average household size in the service area is 2.96 persons and 2.92 persons in the region, both of which are slightly higher than the state's average of 2.76 persons.
- Median household income in the service area is \$54,059.32, as compared to \$55,346 in the region, and \$61,489 within the state.
- > Per capita income in the service area is

\$22,525 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 15.27%. 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, Redlands Senior High produced the most proficient students, with 77% and 45% of students having either met or exceeded CAASPP standards for English and math, respectively. The next most proficient students were from Citrus Valley High, with 69% and 37% of students having met or exceeded the standards for English and math, respectively. The least proficient high school was Orangewood High Continuation, with 12% and 1% of students having either met or exceeded the standards for English and math, respectively.

Planning Environment EXTERNAL SCAN FINDINGS (cont.)

- In the 2014-15 academic year, the average percentage of students from the top ten feeder high schools who either met or exceeded the CAASPP standards for English was 51%, which is 7% higher than the state average of 44%.
- In the 2014-15 academic year, the average percentage of students from the top ten feeder high schools who either met or exceeded the CAASPP standards for math was 22%, which is 11% lower than the state average of 33%.

Neighboring Higher Education Institutions:

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- There are 47 higher education institutions that are approximately one driving hour away from Crafton Hills College. Those 47 neighboring institutions are comprised of:
 - > 20 California Community Colleges
 - Two vocational colleges
 - > One private vocational college
 - > One private junior college
 - 17 private four-year colleges
 - Four California State Universities (Cal Poly Pomona, CSU San Bernardino, CSU Fullerton and CSU Los Angeles)

 Two University of California institutions (UC Riverside and UC Irvine)

Crafton Hills Community College 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 analysis 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 Market Information Findings

The data supporting the Labor Market Information Findings can be found in the *Appendix*, beginning on page A.039.

Planning Environment 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, which can be found in the *Appendix*, beginning on page A.039:

Labor Force, Employment and Unemployment

- The labor force in 2015 was:
 - 487,800 in the service area
 - 1,961,800 in the region
 - 18,981,800 in the state
- The number of employed persons in 2015 was:
 - 455,600 in the service area
 - 1,832,300 in the region
 - > 17,798,600 in the state
- > The unemployment rate for 2015 was:
 - > 6.66% 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 (47,528 jobs) – 46.44% growth from 2010

- Government (35,679 jobs) –0.45% growth from 2010
- Retail Trade (32,193 jobs) –10.95% growth from 2010
- Accommodation and Food Services
 (9.16% or 21,564 jobs) growth 22.16%
 from 2010
- Transportation and Warehousing (17,659 jobs) growth 45.35% 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 (62,111 jobs) – 30.68% growth from 2015
 - Retail Trade (38,455 jobs) 19.45% growth from 2015
 - Government (36,547 jobs) 2.43%
 growth from 2015
 - Accommodation and Food Services
 (25,643 jobs) 18.92% growth from 2015
 - Transportation and Warehousing (23,091 jobs) 30.76% 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 approximately 8,026 average annual job 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 hourly wages. The 8,026 annual openings can be broken down by typical entry level education as follows:
 - 2,002 (24.94%) openings less than high school
 - 3,018 (37.6%) openings high school diploma or equivalent
 - 123 (1.54%) openings some college, no degree
 - 765 (9.54%) openings postsecondary non-degree award
 - 451 (5.62%) openings Associate's degree
 - 1,208 (15.05%) openings Bachelor's degree
 - 174 (2.17%) openings Master's degree
 - 285 (3.55%) openings Doctoral or professional degree
- Of the top thirty annual job openings within the service area between 2015 and 2025, approximately 825 annual openings are

related to medical occupations, approximately 819 are related to business professions, and approximately 328 jobs are related to education/teaching.

- Of the projected 8,026 average annual occupation openings in the service area between 2015 and 2025, approximately 3,409 openings belong to occupations that are related to programs currently offered by Crafton Hills College. The 3,409 openings can be divided by typical entry level education as follows:
 - 1,260 (36.97%) openings high school diploma or equivalent
 - 120 (3.52%) openings some college, no degree
 - 308 (9.03%) openings postsecondary non-degree award
 - 376 (11.04%) openings Associate's degree
 - 1,022 (29.99%) openings Bachelor's degree
 - 159 (4.66%) openings Master's degree
 - 163 (4.79%) openings Doctoral of 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 (30.79% or 1,050 openings)
 - Biology (19.92% or 679 openings)
 - Child Development and Education (16.79% or 572 openings)
 - Accounting (10.44% or 356 openings)
 - Psychology (5.98% or 204 openings)

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- 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:
 - Biology (31.42% or 675 openings)
 - Child Development and Education (23.13% or 497 openings)
 - Business Administration (14.42% or 310 openings)
 - Psychology (6.95% or 149 openings)
 - Accounting (6.66% or 143 openings)

Planning Environment LABOR MARKET INFORMATION FINDINGS (cont.)

- 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 44,181 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, approximately 5,090 are related to business professions, and approximately 1,374 jobs are related to education/teaching.
- Of the 44,103 average annual job openings in the region, approximately 17,538 openings belong to occupations related to current programs offered by Crafton Hills College. The 17,538 openings can be divided by typical entry level education as follows:
 - 7,013 (39.99%) openings high school diploma or equivalent
 - 549 (3.13%) openings some college, no degree
 - 1,319 (7.52%) openings postsecondary non-degree award
 - 1,592 (9.08%) openings Associate's degree
 - 5,715 (32.59%) openings Bachelor's degree
 - 641 (3.66%) openings Master's degree
 - 710 (4.05%) 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 (34.74% or 6,093 openings)
 - Biology (14.46% or 2,536 openings)
 - Child Development and Education (14.42% or 2,529 openings)
 - > Accounting (10.65% or 1,869 openings)
 - Communication Studies (6.75% or 1,185 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:
 - Biology (23.86% or 2,511 openings)
 - Child Development and Education (21.19% or 2,230 openings)
 - Business Administration (18.71% or 1,969 openings)
 - Accounting (7.65% or 805 openings)
 - Psychology (5.9% or 621 openings)

Planning Environment CONSIDERATIONS FROM INTERNAL + EXTERNAL SCAN DATA COMPARISON

The 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, Crafton Hills College had a participation rate of 8.24 students per 1,000 persons within the service area. During the most recent enrollment peak (2008-09) the College's participation rate was 10.44 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 Crafton Hills College to increase its participation rate.

While the service area population age 20-29 years old increased by 22,000 persons from 2010 to 2015, enrollment from students age 20-29 years old increased by only 104 students 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 23,501 persons (-14.46%). 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.



2005-06 2006-07 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15

EXHIBIT 1.01: PARTICIPATION RATE (PER 1,000 PERSONS IN TOTAL POPULATION)

The College has made significant progress towards increasing student diversity, particularly with respect to Hispanic students. In 2010-11, Hispanics accounted for 33.6% of unduplicated enrollment (2,925 students). By the 2014-15 academic year, Hispanics accounted for 44% of unduplicated enrollment (3,537 students).

2.00

0.00

In 2015, Hispanics accounted for 54.92% of the service area population (543,442 persons) and by the year 2025 Hispanics are expected to make-up 57.26% of the service area population (594,718 persons). Additionally, Asians are the second fastest growing population within the service area with an increase of 8,463 persons expected between 2015 and 2025 (14.83% growth). The College has an opportunity to continue increasing student diversity, particularly with respect to Hispanic and Asian students.

During the fall 2014 term Crafton Hills College enrolled 181 first-time college students from Yucaipa High School. During the 2013-14 academic year Yucaipa High School produced 559 graduates. It is reasonable to expect that some of the fall 2014 enrollment from Yucaipa High School graduates were not from the high school class of 2013-14. However, assuming that a majority of those enrolled at Crafton Hills College from Yucaipa High School in fall 2014 were from the high school class of 2013-14, then approximately 32.4% of Yucaipa High School graduates enrolled at Crafton Hills College. During the fall 2014 term Crafton Hills College captured approximately 20% of 2013-14 graduates from Redlands East Valley, Citrus Valley and Redlands Senior high schools. The College captured less than 12% of graduates from Beaumont Senior, San Gorgonio, Green Valley, Orangewood Continuation, and Rim of the World Senior high schools. The College has an opportunity to capture a larger proportion of feeder high school graduates.

During the fall 2014 term Crafton Hills College produced 8,900 WSCH from English courses, however, 3,428 WSCH was attributable to below college level English (38.5% of total English WSCH). Reading courses accounted for 1,396 WSCH of which 100% are considered below college level courses. Combined, English and reading accounted for 10,296 WSCH during fall 2014, of which 4,824 WSCH (47%) was attributable to below college level courses. During the fall 2014 term Crafton Hills College produced 9,964 WSCH from mathematics courses, however 6,359 WSCH was generated from below college level math (64% of total mathematics WSCH).

The high demand for below college level courses, particularly for mathematics, 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 49%, while 78% tested below standards in mathematics. The College has an opportunity to address needs of unprepared/under prepared students, particularly in mathematics.

Planning Environment SWOT ANALYSIS

STRENGTHS:

- Spirit of innovation
- A dedication to and focus on students
- > Culture of evidence and reliable data
- New Facilities (Crafton Hills College has the additional capacity it needs to grow)
- Course success and program completion rates
- Collegial community
- Outstanding public safety and allied health programs
- Strong student support programs including DSPS, Transfer Center, Tutoring Center, Honors Institute, etc.
- Existing relationships with four-year partners
- Great leadership for all constituencies
- > Students like Crafton Hills College
- Beautiful campus with a park-like setting
- > Safe, quiet, inviting campus

WEAKNESSES:

- > Turnover of senior administrators
 - Some morale issues due to uncertainty
- High turnover of full-time faculty (due to upcoming retirements)
- High turnover of part-time faculty (due to being hired for full-time positions elsewhere)
- A low proportion of full-time faculty (compared to adjunct) reduces the College's ability to expand programs
- Small departments and "orphan disciplines" (without any full-time faculty) are widespread (e.g., anthropology)
- Too few faculty, and faculty that serve on too many committees, resulting in burnout
- GF Budget (not sufficient to sustain new expansion of facilities)
- Bureaucracy
- Most students are not completely college ready, lacking adequate college level skills in at least one area (e.g., English, reading, math)
 - Students who enroll in math and English first receive a good foundation, but they may find it difficult to get excited about new courses and programs
- Disproportionate impact on student groups as identified in the Equity Plan

- Weak integrated planning between District office and campus, with competition for resources
- Follow up with students who drop out is needed to determine causes
- More office space for adjunct faculty is needed and ability to hold office hours

OPPORTUNITIES:

- K-12 partnerships (e.g., dual enrollment, Middle College)
- International Student Program
- Adult Education
- > Non-Credit Courses including ESL
- College Village
- City Partnerships
- Regional Fire Training Center
- Grant Funding
- Foundation Support
- Statewide initiatives (e.g., OEI, CAI, OER) are bringing new resources and clarified standards
- Athletics programs can attract new students, especially from those demographics that have been previously under served, and can create additional ties to those students to increase their retention and success rates
- Baccalaureate programs
- Increasing number of jobs that require certificates
- > Large need for community colleges in the area
- Some 4 year college students still need lower division coursework and could take those classes at Crafton Hills College

THREATS:

- Unclear relationship with regional accrediting agency (e.g., sanction from ACCJC)
- > State budget fluctuations
- Competition from neighboring private and forprofit colleges
- Increasing number of state mandates and control over classes and programs
- Decreasing enrollment due to economic upturn and job availability

CRAFTON HILLS COLLEGE



College Snapshot

This section outlines and briefly describes the culture at Crafton Hills College; the instructional, student services, and administrative services departments; delivery of services; staffing information; and space utilization.

College Snapshot OVERVIEW OF CRAFTON HILLS COLLEGE

Crafton Hills College was established in 1972 as one of two colleges in the San Bernardino Community College District. The college currently serves nearly 8,000 students each year, many of whom attend part-time while working. This translates to a full time equivalent number of approximately 4,600. 21% of students at Crafton Hills College are the first in their family to attend college. The college offers over 50 different programs and in 2014-2015, the College awarded over 900 degrees and certificates.

The College strives to give every student the opportunity to succeed, providing research-based support services such as intensive tutoring and counseling, mentoring, and accelerated courses. The recently expanded Honors Program, STEM Programs, and Transfer Center have contributed to a dramatic increase in the number of successful transfer students. Work is currently underway to develop streamlined pathways from K-12 to Crafton Hills College to 4-Year institutions and the workforce. An athletics program is scheduled to begin in fall 2016 with golf and will grow to include swimming, water polo, and tennis.

Two construction bond programs supported by local taxpayers have helped to physically transform the campus with five new buildings, including the Learning

Resource Center; the Kinesiology, Health and Aquatics Center; the Public Safety and Allied Health building; a new Science building; and the Crafton Center. Additional capital improvement projects have been identified and prioritized within the *Facilities Master Plan*.

Crafton Hills College most recently conducted a comprehensive Self-Evaluation Report for the Accrediting Commission for Community and Junior Colleges (ACCJC) in October 2014. Crafton Hills College continues to embrace a culture of institutional improvement and refinement. The Crafton Hills College Educational Master Plan is a testament to the College's determination to sustain a culture of accountability and integrated planning.

The Crafton Hills College Foundation plays a vital role in supporting the College. Established in 1973, the Foundation has been instrumental in providing financial support to students and helping to underwrite items or activities at the College that cannot be funded through other means. The Foundation Board is also instrumental in building relationships in the community.

College Snapshot CRAFTON HILLS COLLEGE ORGANIZATIONAL STRUCTURE

Instructional Services

The Instructional Area at Crafton Hills College values best practices and innovative strategies aimed at enhancing student success. Specific strategies already implemented include learning communities, integration with support services, student learning outcomes assessment, improved classroom technology, and identification of teaching best practices.

As the state's budget has returned to healthier levels, the instructional area has shifted to placing significant emphasis on enrollment growth. In coordination with the District, the College is developing a comprehensive enrollment plan that seeks to grow Crafton Hills College toward 5,300+ FTES. The growth effort has placed some strains on hiring, enrollment efficiencies, and space utilization.

The following clusters are the focal points for the Instruction Area:

Transfer Math, English, and Reading—Faculty in these programs not only serve developmental needs, but have provided rich opportunities for advanced students as well. The College will continue to support and enhance upper-level classes and activities in these areas.

- Public Safety and Health Career—The College has an excellent reputation in the business community, with these programs training hundreds of qualified first responders and allied health professionals each year. The high-quality instruction in this area will continue. Faculty in these programs have excellent relationships with employers and strive to keep their curriculum current.
- Developmental Education and Support Service— The College's Basic Skills Plan concentrates on creating a cohesive and integrated developmental education program. Pre-collegiate courses in math, English, reading, library science, and college life are designed to prepare students for success in higher-level courses and provide foundational skills necessary for lifelong success. Progress continues with the integration of learning resource services such as tutoring with classroom experiences
- Science—Courses in the natural sciences are in high demand at the College. These disciplines are essential for transfer preparation and for entrance into health programs such as nursing and allied health. Efforts will continue to expand the number

of sections and resources available to the sciences, as well as support the growing needs of STEM majors.

- Fine Arts—These disciplines provide students and the community the opportunity to be involved in the arts at every level, from creative inception to performances, productions, and events. The courses are focused primarily on transfer preparation and provide rich co-curricular experiences for students, whether they are taking the courses to satisfy general education requirements or desire a career in the field. These programs promote a campus-wide appreciation of the arts.
- Child Development and Education—These courses prepare students to become educators whether their desire is to work with young children or to become teachers in a K-12 setting. Human Development theories are the underpinning of the program, and faculty collaborate with the psychology and sociology disciplines.
- Business and Information Technology—Courses in this cluster include both transfer and workforce

College Snapshot CRAFTON HILLS COLLEGE ORGANIZATIONAL STRUCTURE *(cont.)*

development opportunities for students. Instruction will strengthen the transfer components and determine how to use limited resources for workforce development classes

- Communication and Language—Coursework in communication and language prepares students to succeed in an increasingly multicultural world. The languages have been expanded to offer a variety of transfer options and to expose students to different cultures. Clubs and co-curricular activities enhance the classroom experience.
- Health and Kinesiology—The mission in this area is to provide students with knowledge and skills for lifelong healthful living. Many of the courses transfer; others will be reviewed for relevance as budget problems continue or if funding levels change. Expansion into sports related clubs (including aquatics, tennis, and golf) is being explored, particularly in light of the activation of new facilities.
- Humanities, Social Science, and Behavioral Science—These programs offer students tremendous opportunities for transfer preparation

and a variety of ways to meet general education requirements. Faculty in many of these areas provide leadership to clubs and service organizations.

More broadly, Instructional Area program directions include the following:

- Identify and meet student needs related to the College vision and mission.
- Implement best practices for managing and teaching, including experimentation and innovation.
- Model and reinforce collaborative approaches to meeting student needs.
- Seek out additional revenue streams, including grants and private donations.
- Encourage co-curricular activities such as clubs, participation in professional organizations, and internships.
- Maintain and expand Student Learning Outcomes assessment and continuous improvement.
- Strengthen developmental education and support services.
- Expand honors curriculum and activities.

Student Services

Student Services is responsible for all student services matters including counseling and matriculation, student development and success, and special services. The area's strategic directions include:

- Integrated and mandatory key intake programs, placement in appropriate programs of study, careful monitoring of student success, and creation of student success
- Promoting equity, access, and inclusion, valuing diversity, and supporting student connection
- Promotion of deep learning through experiences and courses
- Inclusion, development, and empowerment of staff
- Continuous quality improvement and effective resource utilization

Crafton Hills College currently offers the following student services:

- Admissions and Records Provides enrollment services, including registration, transcripts and graduation.
- California Work Opportunity and Responsibility to Kids (CalWORKs) – Administers this program designed for students who receive public assistance. The program provides education, training and supportive services to eligible students.
- Career Services Provides specialized services and information to assist students with career planning, including, career assessment/exploration, labor market statistics, and career education/training requirements.
- Child Development Center Provides a preschool program with extended care hours, for those children ages 3-5 of students, staff and the community. The Center also serves as a facility for the College's early education program.

- 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 & Services (DSPS)

 Ensures access to educational opportunities for students with visual, hearing, physical, learning, and mental disabilities.
- Extended Opportunities Programs and Services (EOPS) – Provides supplemental services and financial aid for academically and financially at-risk students.
- Financial Aid Oversees application for and disbursement of federal and state financial aid.
- Health and Wellness Provides first aid, urgent care, and mental health services.
- International Students The College is approved by the Immigration and

Naturalization Service to admit non-immigrant F-1 Visa international students.

- Resources, Encouragement, and Advocacy for Crafton's Homeless (REACH) – Provides access, advocacy, resources, and support for homeless and at-risk students.
- Student Life Promotes student engagement in clubs and co-curricular activities, and supports and guides the Associated Student Government.
- Student Success and Support Program Provides assistance for students to obtain the resources and support they need to be successful in college.
- Study Abroad Program As a member of the Southern California Foothills Consortium, Crafton Hills College offers students the opportunity to spend a semester of study in England or Spain.

College Snapshot CRAFTON HILLS COLLEGE ORGANIZATIONAL STRUCTURE *(cont.)*

- Technical Preparation Articulation Allows students to earn college credit for articulated career-technical courses they have successfully completed at their high school or local Regional Occupational Program (ROP)
- University Transfer Center Provides transfer assistance to CSU, UC, private and out-ofstate universities.
- Veterans Provides veteran students with referral, certification, and liaison support services.

Administrative Services

Administrative Services consists of the Campus Business Office, the Facilities Use office, the Communications Office, Aquatics, Technology Services, Maintenance, Grounds, Custodial, Warehouse, Bookstore, and the Cafeteria. The mission of the Administrative Services is to support the various departments, programs, students, and services of Crafton Hills College and provide a quality learning environment.

Administrative Services is responsible for budget development, budget management, safety compliance, physical facility scheduling, financial support services, parking services, construction coordination, campus operator functions, food services, bookstore services, aquatics center management, and technology support services.

Facilities (Maintenance, Grounds, Custodial) – The Crafton Hills College Facilities Department is a combination of the four facilities service centers (facilities use, custodial, grounds, and maintenance) that provide the physical support services to all of the campus facilities, programs, and occupants. The mission of the Facilities Department is: "As an integral part of Crafton Hills College, we pledge to help provide a welcoming, safe, clean, comfortable, and efficient environment for the students, faculty, and staff. We value the diverse campus community and will treat everyone with respect and courtesy."

- Aquatics Aquatics management is a responsibility of Administrative Services.
 The purpose of this service is to increase opportunities for instructional course offerings, maintain the health and safety of the pool, and increase revenues to offset the operational cost. In addition, aquatics management enhances community partnerships.
- Technology Services Technology Services supports the delivery and dissemination of information through the following units: Network/Desktop support, Audio/Visual support and Computer Lab support. These areas provide all the constituencies of Crafton Hills College with a number of vital resources, such as a stable and dependable data infrastructure, a current and purposeful

desktop computing environment, technology equipped "Smart" classrooms, as well as instructional support for audio/visual needs, e.g. classroom support, media conversion/ duplication. Campus Technology Services also works in conjunction with District Technology and Educational Support Services (TESS) to ensure that District managed systems utilized by campus constituents are readily available through the campus network.

Bookstore/Cafeteria – The bookstore/cafeteria provides course materials and supplies, convenience foods, and programs and services to support the quality of education to a diverse community of learners. The bookstore/cafeteria supports the campus community by partnering with programs such as EOPS/CARE, Scholarships, and Foundation to provide course materials to students. Food services completes the campus store services by providing food to meet student and employee needs.

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Departments Reporting to the President

The following departments report directly to the Crafton Hills College President:

- Community Relations and Resource Development – Responsible for strengthening external and internal support through fundraising and friend-raising, managing student scholarships, overseeing the Foundation, and planning and coordinating outreach and advancement activities and events.
- Marketing and Public Relations Responsible for all college media relations, advertising, publications, website, and social media.
- Research, Planning, and Institutional Effectiveness – Responsible for collecting, analyzing and reporting data, coordinating campus planning, and grants.

College Snapshot CRAFTON HILLS COLLEGE ORGANIZATIONAL STRUCTURE *(cont.)*

EXHIBIT 2.01: COLLEGE ORGANIZATIONAL CHART


CRAFTON HILLS COLLEGE



Growth of a Comprehensive College

This section provides the narrative and graphic/tabular representations that illustrate and project growth for the College's instructional programs, services, and space needs. The discussion ties together the plan document by concluding:

- > Where we are now
- > Where we need to be
- > How we get there

The themes identified and discussed in this section were drawn from a number of sources: interviews with personnel at the College during spring semester 2016, review of College and other relevant documents, and discussion with College committees. The Crafton Council, chaired by Past President Cheryl Marshall and the Crafton Hills College Education Master Plan Committee were the primary consultation bodies for the *Educational Master Plan*. The themes and actions related to them (identified by bullets) specify activities and conditions needed to realize the desired goals. The Major Strategies, Strategic Directions and Supporting Actions listed support the themes and are consistent with them.

Growth Of A Comprehensive College MAJOR THEMES

Expansion of Existing Programs & Development of New Programs

The desire of the College community to expand the curriculum at Crafton Hills College was prominent in discussions with faculty and administrators and in goals stated in program review documents during the development of the EMP. A campus-wide focus on expanding, developing, and offering new programs comes from the awareness that the College has the capacity to grow and a need to better serve a community with a low participation rate compared to other areas in the state. More importantly, interviewees expressed the desire to serve their students more fully.

Enrollment decline and limited staffing in recent years has been a problem for program expansion and development. As many as 11 programs are staffed by one full-time faculty member and supported by a varying population of adjunct faculty who are hired from term to term. Campus-wide, there are 68 full-time faculty and 201 adjuncts (Fall 2014). The employment of large numbers of part-time faculty is common practice in California's community colleges, and creates a system-wide challenge, but it is a problem that has a greater impact at small colleges, such as Crafton Hills College, a campus seeking to provide a comprehensive program of instruction and services. Under these circumstances, it is important that the programs currently offered are responsive to community needs and support the College's need for growth.

Enrollment growth is a primary objective of Crafton Hills College in its desire to expand its academic offerings and services to students. Hard hit by the recession at the end of the last decade, enrollment dropped to 7,095 students by 2012-13. The slow economic recovery that followed the economic crisis continues to the present. The 8,040 students enrolled at the College in 2014-15 is more than 1,500 students lower than the enrollment peak of 2008-09. With improved state funding currently, resources have grown, but the effect of cutting classes and limiting services, as well as the economic and social disruption in the region has harmed enrollment.

The recent augmentations to district budgets from state funds awarded through competitive grant awards have been of benefit to Crafton Hills College. A Hispanicserving institution award, a Basic-Skills Grant and a STEM Grant, have been a benefit to targeted groups of students. Additional sources of funding, such as private gifts, partnerships and Foundation grants will be important in the future development of the College. Relief from regulatory constraints on community college effectiveness is a District and community college system matter, but it is an important issue for the success of individual campuses. Barriers that limit growth is one of a number of constraints on efficacy.

- A necessary component of expansion and development of programs is growth in the College.
- The College needs to address and mitigate regulatory barriers to grow faster than California is allowing us.
- Develop and advocate legislation that allows Crafton Hills College to grow beyond California Community Chancellor's Office statewide growth allowances.
- Develop schedule and facility use to better utilize Fridays, weekends, and weeknight courses, increasing WSCH creation within current and projected instructional space.
- Develop campus-based activities, festivals, and events such as outdoor concerts to increase awareness of campus within the

community and access to otherwise under served populations.

- Use workforce data and program data to inform which courses and programs need to be expanded, updated, realigned, or are no longer needed.
- Development or expansion of new or existing programs that prepare students for emerging job sectors, such as a digital communications certificate, logistics certificate, etc.

Flexible Learning Environments and Alternative Delivery Systems

New concepts about teaching, learning, and the availability of technology for classroom practice are in productive harmony in teaching spaces today. To a surprising degree, faculty, even those whose skills in technology lag, see the benefit of teaching in a "smart" or flexible classroom and in incorporating online instruction as a source of information and expertise.

As with any comprehensive change, the transformation of classrooms to accommodate new approaches in teaching and learning styles is challenging. Not only are there facility challenges, but also the technology required and the adaptations to specific uses require extensive planning and resources. Collaboration with other colleges, including university partners, with regard to resource-sharing and innovative approaches to expand access to under served populations is particularly important for students in remote areas.

- To connect with contemporary students, we need contemporary learning environments and delivery systems.
- Refine training and development of instructors to effectively teach in online and hybrid environments increasing student success and completion.
- Develop and include interview questions about online teaching in faculty hiring interviews to hire a diverse, talented pool of faculty and expand professional development offerings as needed.
- Prototype and pilot shortened and overlapping coterminous schedules (e.g. 5 week, 9 week, 13 week, and 18 week) as part of the academic calendar to increase access to non-

traditional student populations and improve the efficient use of college facilities.

- Develop non-credit courses and programs to address student needs in ESL and basic skills, expanding access to under served populations in the service area and improving success and completion rates.
- Develop articulation with university partners, so students may enjoy a "degree with a guarantee" transfer agreements with other four-year institutions in addition to the California State University.
- Create a cohort program to help re-entry and other non-traditional student populations earn associates degrees in a structured format that is linked to transfer to university partners, such as Brandman University.

Growth Of A Comprehensive College MAJOR THEMES *(cont.)*

Building Partnerships

Building partnerships during the upcoming years will be a major component of Crafton Hills College's quest to establish itself as a comprehensive college. Partnership development will be essential to public relations and to extending services in the service area. In addition, private sector relationships, especially those with the service area employer community, are direct steps to internships, job training, and employment for students. Long-term steps and benefits of partnerships with business and industry will result in up-to-date and innovative education and training programs, new teaching methods, stronger support for the College, and fundraising success.

Stronger ties with educational partners, including K-12, Adult Schools, and four-year institutions, are high priorities of policy-makers in public education in the state. The current concern for the economy of the state calls for additional and improved workforce preparation and greater productivity in moving students from high schools through the tiers of higher education. Curriculum alignment from high school and beyond will be a major step toward addressing student readiness and success. The progress that has been made between community colleges and their four-year education partners with course articulation and guaranteed transfer agreements is evidence that curriculum alignment can be successful. The recently developed Transfer Pathways of popular UC majors, with the promise of more majors to be identified is good news for students and community college educators.

Careful planning for how to allocate the limited resources of Crafton Hills College toward this effort will be important. Priorities and timelines will clarify the focus. Formative evaluation of progress toward reasonable, long-term goals is important.

- As Crafton Hills College improves its external facing identity and attempts to grow, we need additional well-developed partnerships. We need to methodically and systematically partner with K-16 education, civic, business and political partners in a manner that moves our strategic goals forward.
- Develop a flexible and user-friendly internship program to link our students with local employers in order to increase success and completion.

- Develop partnership with local employers for internships, apprenticeships, and similar pedagogical approaches.
- Develop a contract education partnership with Amazon and similar companies for logistics and distribution center training of staff and future employees. Further the partnership for development of a logistics certificate and degree pathway.
- Build business and community partnerships with local leaders and institutions toward areas of future expansion of programs. For example, Crafton Hills College can develop a partnership with ESRI, University of Redlands, and local high schools in further developing a geographic information systems program and pathway.
- Create new advisory groups for our programs to ensure alignment with local business needs.
- Create and expand partnerships with local public safety agencies by exploring a fire training facility and command center.

- Work closely with K-12 districts for curriculum alignment, pathway projects, outreach efforts targeting under-represented groups, and counselor advisory group.
- Maintain regular content alignment and mutual advice with academic department of receiving institution (e.g.: LLU, U of R, CSULB, UCR) when setting the curriculum.
- Expand partnerships with four-year institutions for a university center to increase access for non-traditional students.
- Construct a College Village with accessible retail and student housing for international students, veterans, athletes, single parents, and traditional students.
- Build stronger ties to the community for public relations and fundraising efforts where businesses and employers see the success of the College and its students as central to the success of the businesses and the community.

 Design a space on campus where community members, businesses, and donors can engage with students.

Improved Pathways from High School to College

While this theme focuses on high schools and the transition of students to college, it has implications for student access, success, outreach to the community, and the creation of new programs. Collaborative engagement of community college personnel with high school administrators, faculty and counselors has the potential to dramatically improve success at the College as well as high school levels. Articulation of curriculum between feeder high schools and community colleges is a direct way of addressing student readiness and delineating levels of competence.

Engagement in learning is a major challenge from middle through high school. A number of the activities identified below address the need for engagement in learning, with establishing a clear path to success as a major motivating factor for students. Dual enrollment is an option that promises a shorter timeline to completion. In CTE, for example, dual enrollment brings high school, college, and employers together to provide CTE pathways. Students who see a payoff in a reasonable amount of time are more likely to persist. Outreach to middle school students is an option, based on the finding that public school students make choices in middle school that are likely to determine their later success or failure in college courses, particularly in math. Students and families who are unfamiliar with college requirements and/or college culture need opportunities for early awareness of curriculum choices. Middle College and other early awareness actions address this need. Middle College is an initiative that has been considered at Crafton Hills College. Work with service area public schools is a key strategy to advance student success.

- Align math, English and basic skills curriculum with local high schools for appropriate placement of students into college-level courses.
- Develop meta-majors to empower exploration and guide students on their journey in selecting a college major.
- Build deep and meaningful relationships with every high school in the region, using dual enrollment partnerships that serve the needs of students.

Growth Of A Comprehensive College MAJOR THEMES *(cont.)*

- Develop a culture of connection and deeprooted relationships with high school counselors, so Crafton Hills College is seen as a viable, important, and select choice for students within the service area, especially those from traditionally under served populations.
- Enlist alumni to return to their local high schools and pitch Crafton Hills College as a viable, important, and select choice.
- Expand outreach to local middle and elementary school students to provide positive first impressions of Crafton Hills College and build a college-going culture to traditionally under served populations.
- Invite more elementary school students to campus to explore academic programs and life on a college campus.
- Pursue the feasibility of implementing a Middle College program.

Student Readiness & Preparedness

Through its Strategic Plan, the College shows that it is keenly aware of the desired academic improvements it wishes to undertake. What the College proposes is in line with statewide and District goals and priorities as well as national studies. Scans of the internal and external environments of the College and interviews with College personnel support the choices of actions to address student preparation. A number of the items for action address course placement and alignment. Others address the need for classroom support. A third category addresses issues of cultural sensitivity of students whose backgrounds require active efforts to make potential students and entering students at home at Crafton Hills College. Many Hispanic students and students who are entering college as first generation enrollees in higher education are in particular need of support. Progress can be monitored through college evaluation procedures and will be reflected in QEIs.

- Equitize Crafton Hills College by building an institutional mindfulness around student equity in access and opportunity for success.
- Purposefully serve more Latino/a students to keep pace with growth of Latino/a populations in the service area.

- Expand SOA³R to reach students in the service area who may otherwise not consider going to college.
- Develop early outreach programs to high school, middle school, and elementary students and their parents to increase collegegoing culture to traditionally under served populations.
- Implement common assessment and multiple measures, and use additional multiple measures to place students into higher-level math and English courses.
- Alignment of math and English with local high schools for better placement of students into college-level courses.
- Examine basic skills pathways in math and English to potentially redesign remedial pathways, reduce levels of courses below transfer, develop non-credit offerings, and/or develop accelerated pathways.
- Explore adding and refining prerequisites for transfer courses.

- Continue exploring and implementing online tutoring and other distance education support.
- Offer additional instructional support, such as supplemental instruction and structured learning activities, directly to developmental courses.
- Offer additional counseling support to students with developmental, remedial, and basic skills needs. Consider embedding counseling support in the classroom.
- Use an embedded counseling model to enhance students' affective skills; build/ develop their ability to persevere, especially in gateway courses.
- Expand concurrent and dual enrollment to better serve students and improve knowledge of academic programs offered at Crafton Hills College.
- Support, expand, and learn from local programs that have demonstrated positive impacts on student success.

Growth Of A Comprehensive College MAJOR STRATEGIES

Strategic Direction 1: Promote Student Success

Goal 1: Support, Guide and Empower Every Student to Achieve Goals

Supporting Actions:

- Work towards aligning the College's curriculum with high school curriculum to effect smooth transitions and better prepared incoming students
- Pilot and implement high impact practices in basic skills courses and programs to improve throughput rate to college level courses
- Ensure student placement that is systematic, consistent with emerging standards, and appropriate for the College's courses
- Achieve the applicable goals in the Distance Education (DE) Plan
 - > Develop a Quality DE Program
 - > Promote Student Success in DE courses
 - DE Students will have the same access to both academic and student services resources as traditional students. Continue implementation of online support for students through tutoring and counseling services

- Crafton Hills College will monitor and evaluate student achievement in DE courses
- Crafton Hills College will develop a Plan for DE program growth
- Achieve the applicable goals in the *Student Equity Plan*. Specifically, the College will focus
 on the traditionally disadvantaged groups
 that have been identified in our *Equity Plan*:
 economically disadvantaged, Hispanic,
 African-American, foster youth, disabled, and
 veteran populations. This will require targeted
 outreach, counseling and tutoring programs.
- Encourage the majority of students to access instructional support services and ensure high service levels to under-represented or disproportionately impacted groups
- 80% of Crafton Hills College students will develop and follow a comprehensive education plan
- Provide up-to-date assistive technology to increase the access, success and independence of students with disabilities and learning differences

 Provide increased access to low cost / no cost educational materials (e.g., software, textbooks, tutoring) which will greatly assist economically disadvantaged students

Goal 2: Use Every Area on Campus to Promote Student Learning

- Foster community on the campus by encouraging the use of gathering places for study and socializing
- Maintain and improve the technology infrastructure to support the ongoing and expanding use of technology (e.g. Bring Your Own Device classes)
- Utilize technology to reach out to and engage students

Strategic Direction 2: Build Campus Community

College structures, processes and groups are inclusive, celebrate diversity, and nurture relationships.

Goal 1: Promote inclusiveness and community

Supporting Actions:

- Provide professional development to increase cultural competency
- Create and enhance programs and services for disproportionately impacted groups
- Increase the number of Crafton Hills College students and employees who indicate they feel included in the campus community as measured by surveys
- Achieve interpersonal and Group Skills outcomes as defined by Institutional Learning Outcome (ILO) 3
- Increase student engagement activities
- Improve ADA accessibility throughout campus

Goal 2: Seek, respect and celebrate diversity

Objectives:

- Increase collaboration between instruction programs and student services to improve learning for all students through universal design concepts
- Increase number of students who demonstrate competency in social and cultural awareness, as defined by ILO4
- Increase number of students who demonstrate competency in ethical and values appreciation, as defined by IL05
- Increase participation of students and staff in study and teaching abroad programs, and expand opportunities for intercultural exchange.

Strategic Direction 3: Develop Teaching and Learning Practices

Crafton Hills College promotes innovative and effective teaching and learning strategies.

Goal 1: Develop a culture of mastery in teaching

- > Encourage and support classroom innovation
 - Flipped classrooms
 - Integration of electronic equipment (e.g., the Bring Your Own Device Initiative)
 - Flexibly arranged classrooms
 - Identification and sharing of best practices and other topics of professional interest among colleagues will continue to be an important means of professional development
- Increase full time faculty who participate in professional development programming focused on pedagogy
- Increase part-time faculty who participate in professional development programming focused on pedagogy
- Make sure all new faculty participate in a comprehensive orientation with emphasis on pedagogy (or andragogy)

Growth Of A Comprehensive College MAJOR STRATEGIES *(cont.)*

Goal 2: Teach students to be great learners

Supporting Actions:

- Develop positive mentoring relationships between faculty and students
- Increase the number of students who achieve the "Critical Thinking" outcomes, as defined by IL01
- Increase the number of students who achieve Written and Oral Communication outcomes, as defined by IL02
- Increase the number of students who achieve Information Literacy outcomes, as defined by IL05

Strategic Direction 4: Expand Access

Crafton Hills College is dedicated to increasing the community's college-going rate and will promote equitable access to higher education.

Goal 1: Promote a college-going culture in our core service area

Supporting Actions:

- Participate actively in the Regional Adult Education Consortium
- Make working with feeder high schools a high priority
- Take advantage of state initiatives to address workforce training for high-end jobs
- Increase the number of community members who attend Crafton Hills College
- Increase the number of residents who see college as vital to a successful future
- Increase the use of the Transfer Center by underrepresented students

Goal 2: Increase college capacity to serve our core service area

- Increase courses and programs to accommodate growth
- > Increase services to accommodate growth
- Expand enrollment and services to underrepresented groups
- > Expand alternative modes of delivery
 - Increase online course offerings to serve more students in remote areas and those with scheduling limitations

Strategic Direction 5: Enhance Value to the Surrounding Community

Crafton Hills College is actively engaged with the surrounding community.

Goal 1: Be recognized as the college of choice in the communities they serve

Supporting Actions:

- Use public school connections to make the college visible to parents and community members
- Enhance the Crafton Hills College image through community outreach and marketing
- Develop and implement a comprehensive marketing plan to increase market share
- Expand the number of student ambassadors to represent the college at schools and civic organizations to develop productive partnerships

Goal 2: Expand the reputation of Crafton Hills College as an essential partner and valued asset

Supporting Actions:

 Invite the community to use campus facilities during down time

- Enlist the help of the college foundation in building networks of support in the community
- Pursue the feasibility of developing College Village as a multi-purpose location for education
- Increase the number of community, civic and business leaders who see Crafton Hills College as a valued asset
- Expand the number and quality of educational partnerships with a broad range of public and private organizations
- Strengthen cultural and artistic connections between the campus and the local community

Goal 3: Distinguish Crafton Hills College as a respected resource for local employers and the workplace

Supporting Actions:

- Increase the number of businesses who look to Crafton Hills College for new employees
- Increase the number of businesses who look to Crafton Hills College for employee training
- Work with business and community partners to provide internship opportunities that prepare students for careers in a global economy as defined by ILO4

Strategic Direction 6: Promote Effective Decision Making

Crafton Hills College uses decision making processes that are effective, efficient, transparent, and evidencebased.

Goal 1: Value and engage in shared governance

Supporting Actions:

 Maintain/achieve a high level of employee and student engagement in local and regional shared governance committees

Goal 2: Promote a culture of evidence-based decision making

- Promote degree completion, transfer, life-long learning and skills building
- Incorporate outcomes data throughout college decision-making processes
- Develop additional dashboards to support evidence-based decision making
- Identify and implement procedures to gather data and evaluate SSSP processes and services on an annual basis

Growth Of A Comprehensive College MAJOR STRATEGIES *(cont.)*

Goal 3: Implement college-wide integrated planning

Objectives:

- Continue to align all college plans with the EMP
- Strengthen connections between annual plan/ program review and the EMP

Strategic Direction 7: Develop Programs and Services

Crafton Hills College is committed to providing excellent and responsive programs and services.

Goal 1: Improve and expand services

Supporting Actions:

- Maintain a high level of satisfaction with Crafton Hills College services
- Expand and maintain the variety and quality of online and automated student services
- Streamline enrollment verification process

Goal 2: Improve and expand programs

- Align course offerings with student need/ demand
- Maintain a high level of satisfaction with Crafton Hills College programs
- Explore offering, or affiliating with, adult education to address basic skills and ESL needs
- > Develop and implement the athletics program
 - Engage the community as participants and boosters

- Expand and strengthen the College's online program
 - Increase online course offerings to serve more students in remote areas and those with scheduling limitations
 - Implement the DE Plan and continue the DE Coordinator role
- > Expand access to programs
 - Develop a comprehensive international student program
 - > Expand transfer model curriculum
 - Expand dual enrollment with K-12 partners

Strategic Direction 8: Support Employee Growth

Crafton Hills College is committed to developing the full potential of every employee.

Goal 1: Become an organization that embraces a culture of continuous learning

Supporting Actions:

- Increase knowledge, skills and expertise among Crafton Hills College employees
- Enlist employees in the selection of training of replacement and new staff
- Leverage the talents and strengths of all Crafton Hills College employees
- Develop hiring and evaluation practices that support employee growth

Strategic Direction 9: Optimize Resources

CHC develops, sustains, and strengthens its resources.

Goal 1: Plan for growth and align resources

Supporting Actions:

- Achieve 5400 FTES
- Continue to seek special-purpose funding for priority populations and needs
- Refine and revise the Resource Allocation Model (RAM) to meet campus needs
- Develop an enrollment management strategy that addresses the needs and demands of the service area
- Ensure institutional planning informs the allocation of resources

Goal 2: Value the Crafton Hills College environment

Supporting Actions:

- > Maintain a safe and secure environment
- Maintain and leverage Crafton Hills College's beautiful environment

Goal 3: Support the implementation of streamlined processes.

Supporting Actions:

 Provide input and support to the development of the District's Enterprise Resource Planning (ERP) software

CRAFTON HILLS COLLEGE





Program of Instruction + Space Needs

This section provides the narrative and graphic/ tabular representations that illustrate enrollment & WSCH projections based on State Chancellor's Office projections for the District. WSCH projections are also provided on a departmental level and are analyzed with Title 5 space standards to estimate lecture and lab space needs by department.

Program Of Instruction + Space Needs OVERVIEW

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. Crafton Hills College 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 Crafton Hills College 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 variable growth model by academic area is being utilized to estimate the future program of instruction and space needs. 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 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 Crafton Hills College is responsible for 31.65% 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 Crafton Hills College
- 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 academic area and establish a baseline program of instruction.

Math and English comprise the largest WSCH generating subjects for the College, constituting 14.7% and 13.1% of WSCH during the fall 2014 semester, respectively. The next highest group of WSCH generating subjects at the College generated between

EXHIBIT 3.01: PROGRAM OF INSTRUCTION (FALL 2014 - FALL 2031)

4.4% and 4.7% of total WSCH during the fall 2014 semester, which include Anatomy, Emergency Medical Services and Chemistry. Natural Science was the largest WSCH generating academic area in fall 2014, constituting 19.6% of WSCH.

Future program of instruction projections anticipate that the College may see a fractional decrease in WSCH generation by the fall 2016 term, from 67,571 WSCH during fall 2014 to 67,106 WSCH during fall 2016 (0.95% decline over 2 years). From fall 2016 to fall 2021, the College is expected to increase its WSCH generation to 72,969 WSCH (8.74% growth over 5 years). From fall 2021 to fall 2026, the College is expected to increase its WSCH generation to 78,274 WSCH (7.27% growth over 5 years). From fall 2026 to fall 2031, the College is expected to grow to generating 83,909 WSCH (7.2% growth over 5 years).

	AREA		CHC - FALL WSCH BY COURSE											
SUBJECT		BLENDED LEC:LAB RATIO	GROWTH	2014	2015	2016	2021	2026	2031					
Allied Health (AH)														
Radiologic Technology (RADIOL)	ALLIED HEALTH	57:43	Stable	3,595	3,017	3,033	3,113	3,180	3,245					
Respiratory Care (RESP)														
Art (ART)														
Dance (DANCE)		20.70		0 070	0.000	0.050	0 5 0 5	0.700	4 000					
Music (MUS/MUSIC)	ARIS	30.70	woderate	3,072	3,300	3,302	3,360	3,790	4,003					
Theatre Arts (THART)														
Kinesiology Team/Sport + Skill (KINS)	ATHLETICS	0:100	Strong	255	404	413	460	502	548					

Program Of Instruction + Space Needs PROGRAM OF INSTRUCTION (cont.)

				CHC -	FALL WSCH	BY COURSE			
SUBJECT	AREA	BLENDED LEC:LAB RATIO	GROWTH	2014	2015	2016	2021	2026	2031
Accounting (ACCT)	BUSINESS	100.0	Moderate	1 330	1 /132	1 //52	1 553	1.642	1 73/
Business Administration (BUSAD)	DOGINEOO	100.0	Woderate	1,000	1,402	1,402	1,000	1,042	1,704
College Life (CHC)	COLLEGE	100.0	Moderate	572	403	409	437	462	488
	SUCCESS	100.0	Moderate	072	100	100	107	102	100
English (ENGL)	ENGLISH	100.0	Strong	10 296	10 454	10 689	11 892	12 998	14 188
Reading + Skills Study (READ)	ENGLIGIT	100.0	otiong	10,230	10,404	10,003	11,032	12,000	14,100
Arabic (ARAB/ARABIC)									
American Sign Language (ASL)									
Communication Studies (COMMST)									
Humanities (HUM)									
Japanese (JAPN)	HUMANITIES	100:0	Moderate	6,034	6,274	6,361	6,803	7,192	7,596
Journalism (JOUR)									
Philosphy/Religious Studies (PHIL)									
Religious Studies (RELIG)									
Spanish (SPAN)									
Health Education (HEALTH)									
Kinesiology (KIN)		20.61	Ctoble	0 700	0 510	0 500	0.604	0 701	0 770
Kinesiology Dance (KIN/D)	KINESIOLOGY	39:01	Stable	3,700	3,312	3,330	3,024	3,701	3,770
Kinesiology Fitness (KINF)									
Library Science (LIBR)	LIBRARY	0:100	Stable	0	87	87	90	92	94
Mathematics (MATH)	MATH	90:10	Strong	9,964	10,299	10,531	11,715	12,805	13,878

				CHC -	FALL WSCH	BY COURSE			
SUBJECT	AREA	BLENDED LEC:LAB RATIO	GROWTH	2014	2015	2016	2021	2026	2031
Anatomy (ANAT)									
Astronomy (ASTRON)									
Biology (BIOL)									
Chemistry (CHEM)									
Computer Information Systems (CIS)									
Computer Science (CSCI)	NATURAL	60:40	Strong	13.070	12 600	12 883	1/ 333	15 666	17 101
Environmental Science (ENVS)	SCIENCE	00.40	Strong	10,272	12,600	12,000	14,000	13,000	17,101
Geography (GEOG)									
Geology (GEOL)									
Microbiology (MICRO)]								
Oceanography (OCEAN)]								
Physics (PHYSIC)									
Emergency Medical Services (EMS)									
Public Safety + Services (PBSF)	PUBLIC SAFETY	77:23	Moderate	4,710	4,224	4,282	4,580	4,842	5,114
Fire Technology (FIRET)									
Anthropology (ANTHRO)									
Child Development (CD)									
Economics (ECON)									
Education (EDU)									
History (HIST)	SOCIAL	100:0	Moderate	8,901	8,737	8,858	9,474	10,016	10,578
Multicultural Studies (MCS)	SOILINGL								
Political Science (POLIT)									
Psychology (PSYCH)]								
Sociology (SOC)									
Learning Resources (LRC)	TUTORING	10:90	Moderate	1,162	1,210	1,227	1,312	1,387	1,465
G	RAND TOTAL			67,751	65,959	67,106	72,969	78,274	83,909

Program Of Instruction + Space Needs CURRENT + FUTURE INSTRUCTIONAL SPACE NEEDS

The amount of assignable square footage (ASF) required at Crafton Hills College 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 3.02: TITLE 5 RECOMMENDATIONS FOR INSTRUCTIONAL SPACE (FALL 2014 - FALL 2031)

		TITLE 5 SPACE RECOMMENDATIONS: LECTURE + LAB												
SUBJECT	AREA		20	14	2015		2016		2021		2026		2031	
		LEC:LAB RATIO	LECT.	LAB	LECT.	LAB	LECT.	LAB	LECT.	LAB	LECT.	LAB	LECT.	LAB
			ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF
Allied Health (AH)														
Radiologic Technology (RADIOL)		57:43	969	3,308	813	2,776	818	2,791	839	2,865	857	2,926	875	2,986
Respiratory Care (RESP)														
Art (ART)														
Dance (DANCE)		20.70	E 40	6.066	460	E 0.17	176	6 020	500	6 4 4 0	500	6 0 1 0	EGO	7 001
Music (MUS/MUSIC)	ARIS	30.70	549	0,900	409	0,947	470	0,030	209	0,449	030	0,010	000	7,201
Theatre Arts (THART)														
Kinesiology Team/Sport + Skill (KINS)	ATHLETICS	0:100	0	819	0	1,297	0	1,326	0	1,475	0	1,612	0	1,760

		TITLE 5 SPACE RECOMMENDATIONS: LECTURE + LAB													
SUBJECT	AREA		2014		2015		2016		20	21	20	26	20	31	
		LEC:LAB RATIO	LECT. ASF	LAB ASF											
Accounting (ACCT)		100:0	620	0	677	0	697	0	794	0	776	0	820	0	
Business Administration (BUSAD)	DUSINESS	100.0	029	0	077	0	007	0	7.04	0	110	0	020	0	
College Life (CHC)	COLLEGE SUCCESS	100:0	271	0	191	0	193	0	207	0	219	0	231	0	
English (ENGL)		100:0	1 070	0	1 0 1 5	0	5 056	0	5 605	0	6110	0	6 711	0	
Reading + Skills Study (READ)	ENGLISH	100:0	4,870	0	4,940	0	5,056	0	0,020	0	0,140	0	0,711	0	
Arabic (ARAB/ARABIC)															
American Sign Language (ASL)		100:0													
Communication Studies (COMMST)]														
Humanities (HUM)															
Japanese (JAPN)	HUMANITIES		100:0	100:0	2,854	0	2,968	0	3,009	0	3,218	0	3,402	0	3,593
Journalism (JOUR)	1														
Philosphy/Religious Studies (PHIL)															1
Religious Studies (RELIG)															
Spanish (SPAN)															
Health Education (HEALTH)															
Kinesiology (KIN)		20.61	600	7 117	640	6 077	CE 1	6.010	660	7 000	600	7 0 4 0	607	7,397	
Kinesiology Dance (KIN/D)	KINESIOLOGY	39:01	699	7,417	648	0,877	1 60	6,912	669	7,096	683	7,248	697		
Kinesiology Fitness (KINF)															
Library Science (LIBR)	LIBRARY	0:100	0	0	0	131	0	131	0	135	0	138	0	140	
Mathematics (MATH)	MATH	90:10	4,242	1,495	4,384	1,545	4,483	1,580	4,987	1,757	5,451	1,921	5,950	2,097	

Program Of Instruction + Space Needs CURRENT + FUTURE INSTRUCTIONAL SPACE NEEDS *(cont.)*

			TITLE 5 SPACE RECOMMENDATIONS: LECTURE + LAB											
SUBJECT	AREA	BLENDED	2014		2015		2016		2021		2026		2031	
		LEC:LAB BATIO	LECT.		LECT.		LECT.		LECT.		LECT.		LECT.	
Anatomy (ANAT)			AGI	AGI	AOI		AOI	AOI	AGI	AOI	AGI	AGI	AOI	
Astronomy (ASTRON)														
Biology (BIOL)														17,580
Chemistry (CHEM)			2 767										4,853	
Computer Information Systems (CIS)]													
Computer Science (CSCI)	NATURAL	60.40		12 6/4	2 5 7 6	12.052	2 656	12 244	4 069	11 724	1 1 16	16,105		
Environmental Science (ENVS)	SCIENCE	00.40	3,707	13,044	44 0,070	12,900	0,000	10,244	4,000	14,734	4,440			
Geography (GEOG)														
Geology (GEOL)														
Microbiology (MICRO)														
Oceanography (OCEAN)														
Physics (PHYSIC)														
Emergency Medical Services (EMS)														2,517
Public Safety + Services (PBSF)	SAFETY	77:23	1,715	2,318	1,538	2,079	1,560	2,108	1,668	2,254	1,764	2,383	1,863	
Fire Technology (FIRET)	OALLI													

	AREA	TITLE 5 SPACE RECOMMENDATIONS: LECTURE + LAB												
SUBJECT		AREA BLENDED LEC:LAB	2014		2015		2016		2021		2026		2031	
			LECT.	LAB	LECT.	LAB	LECT.	LAB	LECT.	LAB	LECT.	LAB	LECT.	LAB
		RATIO	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF
Anthropology (ANTHRO)														0
Child Development (CD)												0	5,003	
Economics (ECON)														
Education (EDU)														
History (HIST)		100:0	4,210	0	4,133	0	4,190	0 4,481	4,481	0	4,737			
Multicultural Studies (MCS)	SCIENCE													
Political Science (POLIT)														
Psychology (PSYCH)														
Sociology (SOC)														
Learning Resources (LRC)	TUTORING	TORING 10:90	55	2,688	57	2,799	58	2,837	62	3,035	66	3,208	69	3,388
GRAND TOTAL			24,830	38,654	24,399	36,403	24,836	36,959	27,066	39,800	29,086	42,358	31,233	45,067

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 Crafton Hills College's capacity load ratios determines that the College currently requires space in only one of the five capacity load categories: AV/TV.

When accounting for future construction projects on campus, such as the Central Complex 1 renovation, Crafton Hall renovation, Clock Tower Building renovation and removal of various temporary portables, the College is anticipated to have a need for 2,547 ASF in laboratory space by the year 2021. The need for laboratory space is anticipated in grow to 10,345 ASF by the year 2031. However, the College is significantly overbuilt in classroom, library 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.

CHC Capacity Load	F2015	F2016	F2017	F2017 ADJ*	F2021	F2026	F2031
Classroom Capacity	75,930	75,930	100,190	94,368	94,368	94,368	94,368
Classroom WSCH Load	41,479	42,180	42,893	42,893	45,864	49,199	52,741
Classroom Capacity Load	183%	180%	234%	220%	206%	192%	179%
Space Need/Surplus	-16,295	-15,964	-27,102	-24,348	-22,942	-21,365	-19,690
Laboratory Capacity	20,379	20,379	23,007	21,138	21,138	21,138	21,138
Laboratory WSCH Load	20,102	20,441	20,786	20,786	22,227	23,843	25,559
Laboratory Capacity Load	101%	100%	111%	102%	95%	89%	83%
Space Need/Surplus	-649	145	-5,197	-823	2,547	6,329	10,345
Office Capacity	263	262	297	295	295	295	295
Office Load	178	181	184	184	199	207	213
Office Capacity Load	148%	145%	161%	160%	148%	143%	139%
Space Need/Surplus	-11,891	-11,398	-15,770	-15,558	-13,458	-12,338	-11,498
Library Capacity	28,825	28,825	30,284	30,284	30,284	30,284	30,284
Library Load	18,872	18,989	19,241	19,241	19,980	21,223	22,062
Library Capacity Load	153%	152%	157%	157%	152%	143%	137%
Space Need/Surplus	-9,953	-9,836	-11,043	-11,043	-10,304	-9,061	-8,222
AV/TV Capacity	2,745	2,745	2,745	2,745	2,745	2,745	2,745
AV/TV Load	5,853	5,866	5,877	5,877	5,944	6,051	6,152
AV/TV Capacity Load	47%	47%	47%	47%	46%	45%	45%
Space Need/Surplus	3,108	3,121	3,132	3,132	3,199	3,306	3,407

EXHIBIT 3.03: CAPACITY LOAD RATIOS AND SPACE NEEDS/SURPLUS

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

CRAFTON HILLS COLLEGE

03 FACILITIES MASTER PLAN



Facilities Master Plan

Together, the 2017 Educational Master Plan and Facilities Master Plan comprise a comprehensive guide toward the future of Crafton Hills 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 decisionmaking in the key area of campus facilities development. The 2017 Facilities Master Plan translates these goals, actions, and needs into a holistic and implementable vision of the future campus.

- Facilities Analysis
- > Needs
- Recommendations

CRAFTON HILLS COLLEGE


Facilities Analysis

This chapter documents the analysis of existing conditions that shape the use of the Crafton Hills 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.

For the purposes of this FMP, campus conditions as they are anticipated to exist in 2018 are shown as the baseline existing conditions. It is anticipated that by that time, renovation projects that are currently underway will have been completed.

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 Conditions
- 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 and traders to coastal Southern California, as well as the home to people of many cultures. It continued 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 commercial air passenger, air cargo and logistics, general aviation, and aircraft maintenance services.

The 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.

Crafton Hills College is situated at the center of the SBCCD service area. It is the eastern-most of SBCCD's three sites, furthest from the population centers of the Los Angeles metropolitan area and San Bernardino County. Communities in this area value their small-town feel and rural, agricultural origins, even as suburban development fills in the remaining open spaces.







Facilities Analysis NEIGHBORHOOD CONTEXT

Crafton Hills College campus is situated on the foothills of the Crafton Hills, in the growing City of Yucaipa, near Redlands, Mentone, Highland, and Calimesa. The hilly geography in this area defines the valley communities that the College serves. To the south, Yucaipa's semirural, but growing Gateway Corridor can be viewed from the hillside campus, and beyond it, Redlands and Calimesa. Uphill from the campus, the rugged open space of the Crafton Hills abuts a natural habitat that comprises much of the campus. To the north, beyond the Crafton Hills, is the eastern part of the City of Highland, where the Harmony Specific Plan provides for the development of a large new residential community.

The College's neighborhood has been growing and is poised for more growth. Along Yucaipa Boulevard the City plans for commercial, retail, and mixed land uses and has invested in street improvements and infrastructure to attract development. Nearby, singlefamily residential communities have been recently developed. The City recently enhanced the 13th Street Sports Complex between the College's campus and the campus of Yucaipa High School, with the addition of a BMX park and ball fields. To the south of the campus is a 45-acre site that is the subject of plans to develop Crafton Hills College Village (College Village), a mixed-use, transit-oriented development, envisioned to include educational uses that align with the mission and goals of Crafton Hills College.

- The campus is very visible from its immediate neighborhood in the City of Yucaipa. It is splendidly situated on the elevated hillside of the Crafton Hills, surrounded by natural habitat to the west, north, and east. The College may benefit from improved wayfinding from Interstate Highway 10, via the development of an entryway corridor.
- The uniqueness and beauty of its campus has the potential to attract students from across SBCCD's service area and beyond.







Facilities Analysis EXISTING CAMPUS

The existing campus comprises 527 acres. Most of the campus has been set aside as open space and is managed in partnership with the Crafton Hills Open Space Conservancy. The conservancy has certain easement rights, although those rights are not well known and may not place SBCCD under legal obligations. This part of the campus is characterized by hills and arroyos. A developed trail head and parking for College Trail are provided on the campus.

Embedded within its boundaries is land owned by others, including a triangular parcel along Campus Drive to the east of the College's buildings that is owned by the Church of Jesus Christ of Latter-day Saints (LDS). The local water district owns land that is used for water storage tanks. SBCCD leases land to both Verizon and American Tower for their radio tower.

The developed portion of the campus, which houses college functions, occupies the area near Sand Canyon Road. It holds 385,546 gross square feet of building area and 274,189 square feet of assignable space—36% of all assignable space held by SBCCD. This area is shown in more detail on page 3.021.

Plans are being implemented for a joint-use tennis facility on a part of the campus to the east of the intersection of Sand Canyon and Chapman Heights Roads. Adjacent Parking Lot Q is being used by both the City and the College under the terms of a memorandum of understanding.





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EXISTING CAMPUS

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D	Boilding Name
ART	VISUAL ARTS
CYN	CANYON HALL
CNTL1	CENTRAL COMPLEX
CNTL2	CENTRAL COMPLEX 2
CDC	CHILD DEVELOPMENT CENTER
СТВ	CLOCK TOWER BUILDING
CCR	CRAFTON CENTER
CHL	CRAFTON HALL
EAST	EAST COMPLEX
GYM	GYMNASIUM
КНА	KINESIOLOGY, HEALTH EDUCATION &
	AQUATIC COMPLEX
LRC	LEARNING RESOURCES CENTER
M&0	MAINTENANCE & OPERATIONS
NRTH	NORTH COMPLEX
PAC	PERFORMANCE ARTS CENTER
PSAH	PUBLIC SAFETY & ALLIED HEALTH
SSB	STUDENT SUPPORT BUILDING
WEST	WEST COMPLEX

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Facilities Analysis EXISTING CAMPUS *(cont.)*

The graphic on the opposing page illustrates the developed portion of the campus. Permanent buildings are shown with a dark gray color. There are a few temporary buildings on the campus and these are shown with a yellow color. Facilities used for SBCCD functions, such as the campus office of the SBCCD Police Department are indicated on the graphic.

The existing campus is built on a series of terraces that have been built on a south-facing hillside that overlooks Yucaipa Valley. Most of the college buildings and courtyards are organized along two axes that cross at the Main Quad. The plan of the campus highlights the drama inherent in its hillside site. After seeing the campus buildings up on the hillside while approaching from the valley below, visitors travel to parking lots within a park-like zone behind the buildings and from which they enter the building zone. Once among the buildings, the campus is experienced as a series of open spaces, each framed and defined by the adjacent buildings. The expansive views to valley and hillside are used to great effect as a backdrop and constant reminder of the uniqueness of this place.

- Recently built facilities have been designed to align with the original campus design concept.
- The campus may benefit from further development of open spaces for student gathering in the eastern section of the campus.
- North Complex, East Complex 1 and 2 are modular buildings and are not intended for longterm use.





DEVELOPED PORTION OF EXISTING CAMPUS

BUILDING KEY

1D	Building Name
ART	VISUAL ARTS
CYN	CANYON HALL
CNTL1	CENTRAL COMPLEX
CNTL2	CENTRAL COMPLEX 2
CDC	CHILD DEVELOPMENT CENTER
CTB	CLOCK TOWER BUILDING
CCR	CRAFTON CENTER
CHL	CRAFTON HALL
EAST	EAST COMPLEX
GYM	GYMNASIUM
кна	KINESIOLOGY, HEALTH EDUCATION & AQUATIC COMPLEX
LRC	LEARNING RESOURCES CENTER
M&0	MAINTENANCE & OPERATIONS
NRTH	NORTH COMPLEX
PAC	PERFORMANCE ARTS CENTER
PSAH	PUBLIC SAFETY & ALLIED HEALTH
SSB	STUDENT SUPPORT BUILDING
WEST	WEST COMPLEX

LEGEND

PROPERTY LINE EXISTING PERMANENT FACILITIES

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Facilities Analysis ENVIRONMENTAL CONDITIONS

The Crafton Hills College campus is one of the most unique and beautiful among California's community colleges, in great part due to its hillside location among natural habitat and its mild, dry climate. Understanding the campus' environmental conditions will lead to recommendations for sustainable campus design strategies.

Climate

The Crafton Hills College hillside surroundings are influenced by the geography of interior hills and valleys that create thermal belts. This climate is only nominally influenced by the ocean, but hillsides and slopes (from which cold air drains and warm air rises) remain warmer in the winter and cooler in the summer than hilltops and valley floors. Days are quite sunny and the conditions are favorable for solar energy production, as demonstrated by the College's Solar Farm. 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 natural occurrence in chaparral habitat, but it is a growing concern during an increasingly lengthening fire season. This is true especially during the fall and winter when Santa Ana Winds are more frequent and sweep down from the Crafton Hills. There have been four nearby wildfires in the last five years. In 2013, a wildfire caused the campus to be evacuated and highlighted the need to keep students and staff informed during emergencies.

Natural Habitat

The chaparral covered slopes and arroyos of the Crafton Hills provide habitat for over 200 species of plants and animals. This land benefits the community as an educational and recreational connection to the natural ecology and an important watershed for recharging the ground water that supplies municipal wells. Trails are maintained for hiking, horseback riding, mountain biking, as well as overnight camping areas. As a large landowner within the Crafton Hills, SBCCD and Crafton Hills College have contributed greatly to the protection and enjoyment of this resource through their active leadership within the Crafton Hills Open Space Conservancy (CHOSC).

Geology

The campus is in a region of active tectonic forces and is approximately 4 miles from the San Andreas Fault. In the early 2000s, SBCCD and Crafton Hills College studied the structural strength of campus buildings to understand their vulnerability to earthquake forces. Each building was assessed and based on the standard of maintaining structural integrity in a likely earthquake, the demolition of several buildings, including the Gymnasium, was recommended. A later study revisited these results, using a lesser standard of maintaining life safety for evacuation. Based on this lesser standard, these buildings were allowed to remain.



Facilities Analysis DEVELOPMENT HISTORY

The Crafton Hills College campus opened in 1972. The 1970s was a decade of rapid campus growth, which followed a unified architectural design approach. During the next 25 years, the campus evolved at a slower pace, but over the last decade, it has once again been growing significantly.

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 letter 'R' inside a circle.

- Three new buildings opened in 2016, adding significantly to the College's space inventory.
- Many of the older buildings, which were built in the 1970s, are being renovated and repurposed to address the secondary effects of bringing the new buildings on line.







Facilities Analysis VEHICULAR CIRCULATION + PARKING

The Crafton Hills College campus is situated on a series of terraces built into the hillside above Yucaipa Boulevard, a major highway that provides connections to Interstate Highway 10 to the southwest and downtown Yucaipa to the east. The campus is linked to Yucaipa Boulevard via Sand Canyon Road, which provides a secondary approach from the City of Mentone to the west, through the Crafton Hills.

Yucaipa Boulevard is planned to be a walkable, multimodal route supporting an important local commercial, retail, and mixed-use corridor. The two vehicular entries into campus are located where both ends of Campus Drive terminate on Sand Canyon Road. These entries are separated enough to provide two options for emergency evacuation. Campus Drive is the primary vehicular circulation route on campus and it provides access to a series of surface parking lots in which most students and staff park their vehicles. Through-traffic on Emerald View Drive to the south of Campus Drive is restricted to emergency and service vehicles.

Parking

The available parking facilities include 1,817 parking spaces in 16 permanent and temporary surface parking lots, plus 180 on-street spaces on Campus Drive. Crafton Hills College students pay \$30 per semester in fall and spring for a parking permit. Students park at no charge in overflow Parking Lot Q and can get to campus via the OMNITRANS bus that runs every 30 minutes.

Transit

Through the Go Smart Program, Crafton Hills College encourages students to commute by bus. OMNITRANS is the primary bus transit provider in the region. Students can ride for free on any regular OMNITRANS route with their student identification card. OMNITRANS buses stop at both overflow Parking Lot Q and a bus stop in Lot D at the center of campus.

Bicycling and Walking

Yucaipa Boulevard is a Class 2 route that provides onstreet bike lanes along sections of the street. Several city streets, including portions of Yucaipa Boulevard, have been furnished with sidewalks and safe crossing points, some of which were funded by CALTRANS State Safe Routes to School grants (mostly paths that lead to the elementary school).







Facilities Analysis VEHICULAR CIRCULATION + PARKING (cont.)

Observations

- The two vehicular entry points could benefit from consistently branded and highly visible signage.
 The clearance around the center divider in Campus Drive at the western entry is constricted.
- The ratio of 1,817 parking spaces to the unduplicated student head count (fall 2015 enrollment), yields a ratio of 1 to 3.28. This would indicate that the parking capacity is adequate for current needs.
- The campus could benefit from additional convenient parking near the center of campus.
 A third of the 1,817 campus parking spaces are located away from the center of campus. These include spaces in Parking Lots I, J, and Q.
- Curb-side on-street parking spaces on Campus Drive are convenient and fill quickly, however, a solution should be investigated to eliminate jaywalking along this route to improve safety.

- Passenger loading occurs in designated zones and informally in parking lots near paths to buildings.
- Parking Lot L would benefit from an engineering assessment and repair to avoid settling and cracking of the pavement.
- The campus location on the hillside above much of Yucaipa and Mentone limits the ability for students and staff to walk or bike to campus.
- Solutions should be considered to alleviate the challenges faced in the event of an emergency that prevent the use of one vehicular entrance/ exit. In such circumstances, it has proved to be difficult to direct people to the remaining available exit.

















Facilities Analysis PEDESTRIAN CIRCULATION

Crafton Hills College's hillside campus is constructed on a series of terraces. Within the western part of the developed campus, courtyards, quads, and The Promenade are well-integrated within and around buildings. Vertical transitions between levels are graceful and accessible.

In the eastern part of the developed campus, vertical transitions are more circuitous and the main pedestrian axis is located on the north side of the buildings, which block primary views to the valley. Existing buildings crowd the area between the two new facilities, Canyon Hall and PSAH, offering little open space for students to gather.

The hillside topography presents a challenge for safety and accessibility. To ensure universal access to all campus facilities, SBCCD and Crafton Hills College studied accessibility compliance across the campus and prepared a plan to remove 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. In order to prevent injuries from slips and falls by students and employees walking on landscaped slopes, the College has been building more walking paths, such as the paths to Parking Lots M and N. The College maintains an emergency evacuation plan that designates areas of refuge on campus.

- Campus open space is important and should be integrated consistently with all new projects.
- For the most part, campus facilities are linked by accessible paths of travel. The remaining barriers occur at the crossing of Campus Road near Parking Lot H and the path between Lot K and Lot L at the Child Development Center.







Facilities Analysis SITE FACILITIES INFRASTRUCTURE

In the last decade, the College prepared for the campus to grow by implementing an infrastructure project that built pathways for communication, power, gas, and chilled and hot water to the sites of planned buildings. It has upgraded its campus-wide mechanical and electrical systems equipment, which is located in the Central Complex. The newest buildings-Crafton Center, Canyon Hall, PSAH-were built with storm water retention and treatment systems that employ bio-swales or underground retention tanks. The College built its 1.3 MW Solar Farm, which supplies the campus with renewable power using PV platforms that track the movement of the sun. The Solar Farm supplied 1.2 million kWh of carbon free electricity in 2012-13, a large part of the campus' electrical needs. The sun is also harnessed to help heat the College's Olympic-sized swimming pool.

CHC's students, faculty, and staff are working to make this 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 and renovation projects have been designed and constructed to meet increasingly stringent goals for efficient and healthy places to work and learn. For example, recently constructed buildings, Crafton Center, Canyon Hall, and the PSAH, have been designed and constructed to be certified though the Leadership in Energy and Environmental Design (LEED) rating system. These buildings were designed to be certified by the US Green Building Council at the LEED Silver level, but may achieve LEED Gold.

- WiFi access is important for 24/7 instruction.
 As additional devices are brought on campus, it will be important to expand the infrastructure to accommodate ever-expanding technology needs.
- Instructional technology support needs to be robust enough to include streaming of live video, as deemed appropriate for the instructional design.
- As the campus grows, the College must seek additional sources of renewable energy and increase the cooling capacity of its central plant.
- The utilities infrastructure surrounding the gymnasium is aged and must be upgraded if future development occurs in this area.
- The campus dry utilities infrastructure is fairly new and in good condition.
- Due to current water quality regulations, adequate space must be set aside for the storm water retention and treatment systems of future building projects.







Facilities Analysis SITE FACILITIES INFRASTRUCTURE *(cont.)*

Energy Use

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 (CO2e) 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 9.4 CO2e/square foot/year, the level of energy use at CHC falls below 12.9 CO2e/SF/year, the level of the average higher education building in this climate zone, as reported by the California Energy Commission. And just higher than 8.2 CO2e/SF/ year, the Energy Star benchmark, which represents the level of a green building in this climate zone.

Opportunities

 Older buildings would benefit from improved insulation and energy-efficient equipment.





SBCOD Elwectricity Use 2015 (kWh)



Campus Carbon Footprint from Energy Use

Natural Gas and Electricity (CO2e/gsf/yr expressed in metric tons)



Facilities Analysis SITE FACILITIES INFRASTRUCTURE *(cont.)*

Water Use

The two graphs at right compare the use of water on SBCCD's three main sites. In 2015, Valley College used 17,904,277 gallons for non-irrigation purposes and 19,172,307 gallons for irrigation, for a total of 37,076,584 gallons. The water usage for Crafton Hills College is not metered separately for irrigation and non-irrigation use. Crafton Hills College used 31,606,740 gallons in total for both irrigation and within buildings. 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, counting both building usage and irrigation, Crafton Hills College used an average of 81 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.

Opportunities

 In recent years, the College has actively implemented water conservation measures, such as efficient irrigation controls, drought-tolerant landscaping design, and regular use of swimming pool covers. The campus has some purple pipe installed, but not activated. All of the campus' irrigation systems will be connected to non-potable water in December 2016/January 2017.



SBCCD Water Use 2015 (total gallons)

*Water readings for CHC were taken from the same main.

Therefore CHC's water use values include both building water use and irrigation.





*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

Crafton Hills 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, Crafton Hills 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

Opportunities

 Plans are underway to renovate many of the older buildings. As of 2018, most of the buildings will be in good condition, being fairly new or recently renovated.







Facilities Analysis SPACE UTILIZATION

The EMP includes a study of the utilization of Crafton Hills College's lecture and laboratory space. The study looks at usage in fall 2014, the most recent information available for the study. At that time, Crafton Center, Canyon Hall and PSAH were not yet open.

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 *Crafton Hills College Space Utilization*, dated April 2016 for the full report.

- In fall 2014, the average number of contact hours that occurred in classrooms and labs was acceptable when compared to Title 5 space utilization standards.
- Since 2014 the amount of instructional space has grown considerably and the College is exploring ways to best utilize the current inventory of instructional space.
- Often a perceived shortage of classrooms and labs is due to competition for desirable timeslots.







Facilities Analysis CAMPUS ZONING

The programmed use of facilities on the Crafton Hills College campus is clearly defined and well-zoned. The Main Quad is clearly the heart of campus and the opening of Crafton Center, which houses most student services and student activities, has done much to create a hub of student life.

Campus space zoned for instruction, which includes faculty offices, is distributed to the east and west of the central student and administrative hub. Space zoned for library functions, include the Learning Resources Center, as well as tutoring centers and open computer labs that are located among instructional spaces.

Opportunities

Several facilities are currently inactive or being used temporarily. The Gymnasium is currently inactive due to the condition of the building. A comprehensive renovation would be required to make it suitable for occupation, however, it would not be feasible to upgrade its structure to the level of earthquake resistance that would be required for a new building.

- The former bookstore in the East Complex was vacated when a new bookstore opened in Crafton Center. Discussion is ongoing to determine the temporary and future use of this facility.
- The former kitchen, server, and dining hall in Crafton Hall was vacated when a new dining hall and food service facility opened in Crafton Center.







CRAFTON HILLS 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 Crafton Hills College's vision for an intellectually stimulating, welcoming, and inclusive campus environment.

- Educational Linkages
- Quantified Space Needs
- Planning Objectives

Needs EDUCATIONAL LINKAGES

PROMOTE STUDENT SUCCESS

GOALS

Support, guide, and empower every student to achieve goals.

Use every area on campus to promote student learning.

FACILITIES LINKAGES

Create universally accessible spaces that address the need for an inclusive learning and social environment (classrooms with adjacent counseling and tutoring space, a Learning Lab, and campus-wide learning environment upgrades).

A comprehensive testing and assessment center.

Provide Distance Education testing, tutoring, and support service space.

Provide collaboration space - indoors and outdoors.

Provide current technology, including support for BYOD.

Build a cultural center that supports the exploration of all cultures, the appreciation of a global perspective, and the development of multi-cultural competency.

Provide all-gender facilities throughout the campus.



BUILD CAMPUS COMMUNITY

GOALS

Promote inclusiveness and community.

Seek, respect, and celebrate diversity.

FACILITIES LINKAGES

Create a universally accessible and welcoming campus, including gathering spaces, circulation paths, and wayfinding signage. Create pathways and connections between buildings that encourage students and staff to stop, interact, and collaborate.

Outfit existing space and build new facilities designed for gathering, study and recreation, including outdoor food kiosks, performance venues for formal and impromptu events, a basketball court, and spaces that encourage students to relax and interact.

Support PE + athletic program expansion by replacing nonfunctional facilities, such as the gymnasium, and improving existing and building new facilities and outdoor instructional laboratories.

Create spaces of a variety of sizes to house many types of meetings and events.

Build spaces that encourage a culture of arts appreciation and maintain the highest level of campus aesthetic quality.



DEVELOP TEACHING + LEARNING PRACTICES

GOALS

Develop a culture of mastery in teaching.

Teach students to be great learners.

FACILITIES LINKAGES

Provide up-to-date, flexible and comfortable classrooms and labs that are fully accessible to every student, regardless of academic background, disability, learning style, race, or other status.

Provide up-to-date and well-equipped Professional Development Center and Learning Lab.

Provide mentoring and collaboration space, that includes space for adjunct faculty to get more involved with departments and campus culture.

Create spaces that address the need for an inclusive learning and social environment (classrooms with adjacent counseling and tutoring space).

Provide facilities and infrastructure to support the expansion of online instruction.

Update and improve learning environments campus-wide.
OA EXPAND ACCESS

GOALS

Promote a college-going culture in our core service area.

Increase college capacity to serve our core services area.

FACILITIES LINKAGES

Provide sufficient student support services space.

Provide sufficient marketing, outreach, and college foundation space. Consider spaces on campus where K-12 students could come and be exposed to the campus and college culture.

Improve CHC's visibility from Sand Canyon Rd and create a physical connection to services in the community. College Village would be an opportunity to do this.

Create an International Student Center.

Provide a comfortable Veterans Center. This could be a location to introduce non-CHC veteran students to the campus.

Create a Language Lab for foreign language students.

Improve signage and wayfinding to the Crafton Hills Conservancy preserve and hiking/biking trails.



ENHANCE VALUE TO THE SURROUNDING COMMUNITY

GOALS

Be recognized as the college of choice in the communities we serve.

Expand CHC's reputation as an essential partner and valued asset.

Distinguish CHC as a respected resource for local employers and the workplace.

FACILITIES LINKAGES

Provide sufficient marketing, outreach, and college foundation space. Include event and meeting space.

Potential Innovation Center for partnerships with community businesses and college.

Continue to explore the development of College Village to provide the community with collaborative opportunities with the college.

Expand the Aquatic Center by adding the teaching pool and consider a joint-use tennis facility, which will be used by the community and local schools.

Create a campus that encourages visitation from the community and K-12 students, to build relationships and comfort level with the college.

Build the East Valley Public Safety Training Center.

Provide space for non-credit instruction in ESL, life-long learning, and skills-building.



PROMOTE EFFECTIVE DECISION MAKING

GOALS

Promote a culture of evidence-based decision making.

Implement college-wide integrated planning.

FACILITIES LINKAGES

Provide additional Institutional Research office space outfitted and equipped with robust technology support, in a location convenient to the faculty and staff they assist.

Create meeting and collaboration spaces of various sizes for collegial discussion and decision-making.

Provide an updated and well-equipped Professional Development Center.

Needs EDUCATIONAL LINKAGES *(cont.)*

07

DEVELOP PROGRAMS + EXPAND SERVICES

GOALS

Improve and expand services.

Improve and expand programs.

FACILITIES LINKAGES

Provide athletic program facilities to support a comprehensive college.

Provide Distance Education testing, tutoring, and support service space.

Provide International Student program support space and a cultural center.

Build the East Valley Public Safety Training Center and the Command Tranining Center.

Institute ongoing technology infrastructure improvements to keep abreast of growing demands and BYOD usage.



SUPPORT Employee growth

GOALS

Become an organization that embraces a culture of continuous learning.

FACILITIES LINKAGES

Provide an updated and well-equipped Professional Development Center.

Provide sufficient collaboration and meeting space.

Provide sufficient adjunct faculty office space.



GOALS

Plan for growth and align resources.

Value the Crafton Hills College environment.

Support the implementation of streamlined processes.

FACILITIES LINKAGES

Provide sufficient work space for marketing, outreach, resource development, and the college foundation.

Upgrade safety and security. Improve circulation and parking.

Provide facilities that promote and support sustainability and environmental stewardship among students, faculty, and staff. Include non-potable water to entire campus, recycling bins, electric vehicle charging stations, daylight controls, sub-metering, and environmental care and awareness signage across campus. Continue to build alternative energy projects and water-efficient landscaping.

Improve landscaping and outdoor space to maximize its functionality. Design, furnish, and equip outdoor spaces to optimize them for socializing, studying, learning, and performing.

Make better use of existing available indoor space with furnishings and equipment to support student life and activities.

Remove non-functional facilities and build space that is flexible and adaptable to new uses.

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 Crafton Hills 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 capcity/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 CCCCO 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 3.044, 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 THAN140,000 WSCH

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

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

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

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

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.

TABLE 5: EXISTING SPACE

CHC Space Inventory Analysis The Crafton Hills 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.

Space Type	Current Inventory (ASF)*	Current Space Needs**	Current Cap/ Load Ratios
Lecture	35,915	(16,295)	183%
Lab	47,687	(649)	101%
Office	36,811	(11,891)	148%
Library	28,825	(9,953)	153%
Instructional Media	2,745	3,108	47%
Other	122,206		
TOTALS	274,189		

* 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 83,909 WSCH, which equates to 7,364 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.
- TABLE 6: 2031 SPACE NEEDS

Space Type	2017 Inventory (ASF)*	Adjusted Inventory (ASF)	2031 Space Needs	Difference
Lecture	47,390	44,636	24,676	(19,960)
Lab	53,837	49,463	59,808	10,345
Office	41,530	41,318	29,820	(11,498)
Library	30,284	30,284	22,062	(8,222)
Instructional Media	2,745	2,745	6,152	3,407
Other	99,627	98,681		
TOTALS	275,413	267,127		

* Temporary buildings (CDC portable (CD3) and North Complex) have been removed from and renovated space in the Clock Tower Building and Central Complex have been added to the 2017 inventory.

 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 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 College Council were informed by the vision of a campus that is imbued with the desired character and qualities. Meetings have been held with members of each department to discuss departmental directions and needs. The *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:

- Perceived demand for classroom and office space vs. Title 5 standards – concern for lack of space when needed
- Flexible classrooms to support various modes of learning and collaboration
- · Appropriate instructional tools and equipment
- Consistency of instructional space standards
- Space to support online courses testing rooms, etc.
- Dedicated open labs with program-specific software
- Growing need for student support services space
- A campus-wide approach to providing space for learning resources, supplemental instruction, tutoring, & study

- Keeping current with technology capabilities, including WiFi coverage, power everywhere for charging devices
- Student gathering and activity space indoor and outdoor
- > More testing space for online courses, etc.
- > Relocate current parking on Campus Drive to lots
- Concentrate parking closer to the center of campus
- Address access from main campus to CDC
- Safety/security of students and employees on campus
- Create more usable outdoor space (incorporate furnishings such as picnic tables with umbrellas, lounge chairs, strategically placed trash and recycling cans, audio system for music, lighting for nighttime use, and art)

Planning Objectives

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

- Align campus space with educational priorities
- Respect the original architectural style of the campus
- Maximize the functionality of outdoor spaces, including space for PE/athletics, student study/ gathering
- > Ensure a student-centered and friendly campus
- Provide flexible, consistent and well-equipped instructional spaces
- > Plan for future teaching and learning opportunities
- Showcase student projects and successes

- Create faculty office space that encourages collaboration
- > Provide a safe and secure campus environment
- > Allocate resources to care for facilities

Needs PLANNING PRINCIPLES

This list of planning principles represents good planning practices that guided the evaluation and discussion of facilities development options with 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

CRAFTON HILLS COLLEGE

03 RECOMMENDATIONS

Recommendations

The 2017 Facilities Master Plan recommendations translate Crafton Hills College's educational master planning goals, objectives, and needs into a series of facilities and site recommendations. While drawings presented in this section appear specific, the forms are intended to be conceptual sketches that highlight the location and purpose of improvements. The photographs shown in this chapter are intended to illustrate concepts and ideas to inspire the design process. The final design of each site and facility project will take place as projects are funded and detailed programming and design occurs.

The recommendations included in this section are described in the following subsections:

- Recommended Demolition + Replacement
- Opportunities
- > 2017 Long-range Campus Master Plan
- Facilities Projects
- Campus-wide Improvements
- 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 Crafton Hills 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.

Through discussions with Crafton College Council, the demolition of the existing Gymnasium has been deemed a high priority due to the Council's desire to end the expenditure of resources to maintain this structure.

Facilities to be Demolished and Removed

- Gymnasium
- Visual Arts
- East Complex
- North Complex
- > Option: Tennis Courts







Facilities Analysis OPPORTUNITIES

Removal of buildings opens up opportunities to improve the campus and address educational program needs. The removal of the Gymnasium allows for a new facility that meets current structural and green building codes and that is located near the Aquatic Center to allow lockers and showers to be shared. Space will be available to develop outdoor kinesiology labs and the fields and training facilities needed to support the development of collegiate athletic programs.

Removal of the Visual Arts Building clears the way to develop a larger instructional building that will provide modern laboratories, classrooms, and instructional support spaces—spaces that will soon be needed by programs with great potential for growth.

Removal of the East Complex opens up a studentoriented outdoor space that will join the Main Quad and Crafton Hall courtyard as valued places for socializing, studying, or contemplating the view from this privileged place that welcomes every student.



Over the past decades, the campus has grown within a number of functional zones, confirming that the cluster concept is an enduring and logical organizing principle for the campus. Functional clusters make sense for a hillside campus where adjacencies reduce the need to traverse vertical distances. It makes sense that future campus development will reinforce this concept.

For example, the Civic Zone, which houses student services and activities, is very important to the vitality of the campus. It has been greatly strengthened by the recent opening of Crafton Center.



Recommendations 2017 LONG-RANGE CAMPUS MASTER PLAN

The 2017 Facilities Master Plan presents an overall picture of development that supports the strategic directions and priorities of the 2017 Educational Master Plan. The recommendations are intended to support the growth of the College into a mature and comprehensive institution.

Crafton Hills College is actively developing the skills of faculty and preparing students to learn in new ways. It is reaching out to serve an increasing proportion of students in its community. Through the projects listed below, the College will continue to develop its campus facilities, both indoors and outdoors, to better support these initiatives.

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 Crafton Hills College 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

- Gymnasium
- Teaching Pool
- > Outdoor Kinesiology Laboratories
- Joint-Use Tennis Facility
- East Instructional Building
- Maintenance & Operations Addition
- > East Valley Public Safety Training Center

Renovation of Facilities

- > Enriched Environments for Student Activities
- > Performing Arts Center Renovation
- Crafton Hall Renovation
- West Complex Renovation
- Student Support Building Renovation
- Central Complex 2 Renovation
- > Child Development Center Renovation

Campus-Wide Improvements

- Campus-Wide Learning Environment Upgrades
- > Vehicular Circulation and Parking
- > Enriched Outdoor Environments
- Security and Safety
- > Ancillary Logistics and Infrastructure

Exploration of Future Options

Crafton Hills College Village

2016 LONG-RANGE CAMPUS MASTER PLAN

BUILDING KEY

10	Building Name
CYN	CANYON HALL
CNTL1	CENTRAL COMPLEX
CNTL2	CENTRAL COMPLEX 2
CDC	CHILD DEVELOPMENT CENTER
CTB	CLOCK TOWER BUILDING
CCR	CRAFTON CENTER
CHL	CRAFTON HALL
EIB	EAST INSTRUCTIONAL BUILDING
EVPSTC	EAST VALLEY PUBLIC SAFETY
	TRAINING CENTER
GYM	GYMNASIUM
KHA	KINESIOLOGY, HEALTH EDUCATION
	& AQUATIC COMPLEX
LRC	LEARNING RESOURCES CENTER
M&0	MAINTENANCE & OPERATIONS
PAC	PERFORMANCE ARTS CENTER
PSAH	PUBLIC SAFETY & ALLIED HEALTH
SSB	STUDENT SUPPORT BUILDING
WEST	WEST COMPLEX



CENTRAL PARKING LOT

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PROPOSED RENOVATIO	INS	

NEW FACILITIES

HMC Architects

200 LOTM

LOTL

LOTK

10 20 LOT

EDTB

CRAFTON VIELAGE (FUTURE)

MAIN OUAD

LOTP

SAND CANYON RD

Recommendations PERFORMING ARTS CENTER RENOVATION

The Finkelstein Performing Arts Center has served the College and the community since 1978 when it was dedicated to Lester and Ruben Finkelstein, the brothers who donated Crafton Hills College's campus. This signature arts education and performance venue will be modernized to provide students with up-to-date learning environments in which to explore their creativity and develop their skills. Improvements will support interdisciplinary learning of the increasingly merging fields of theatre arts and music by enhancing the functionality and flexible use of the 452-seat main theatre, black box theatre, music recital room, and classrooms.

In 2014, the College completed a comprehensive investigation, programming, and conceptual design effort that confirmed the PAC's structural integrity. Upgrades will include stage rigging, lighting controls, audio-visual and live recording capability. The audience experience will be enhanced with new seating, an enlarged lobby, improved entrance plaza, front façade, signage, and exterior lighting. Universal access to performance and instructional spaces will be provided. Equally importantly, the renovation will update life-safety systems and repair building systems, such as waterproofing, electrical, and mechanical systems—thus renewing the Finkelstein Performing Arts Center and preparing it to serve the next generation of students and community members. The PAC is located very prominently at the edge of the Main Quad, however, because it sits below quad level, it is not very visible. This project will give the PAC a stronger presence by creating a gateway feature between the Main Quad and the PAC's rooftop plaza. This plaza will be furnished for student gathering and enhanced with public art. The façade of the expanded lobby will be designed to enhance the presence of the PAC and serve as a backdrop to activities and gatherings in the plaza.



Vignette Plan



Key Plan



The photographs on this page are intended to illustrate ideas and inspire the design process for this project.

Recommendations KINESIOLOGY + ATHLETICS FACILITIES

Crafton Hills College seeks to engage students and support the community through kinesiology instruction and competitive training and events. These projects will build and improve facilities to support Crafton Hills College's expanding kinesiology and athletic programs completing the aquatic center, replacing the gymnasium, and building or improving its outdoor learning labs. All facilities will have the connectivity and infrastructure system to support modern instructional technologies and events. Universal accessibility and circulation linkages among all facilities will be brought up to current building code requirements. The preparation of a Kinesiology Precinct Plan is recommended to determine program needs and to test site options.

Gymnasium Replacement

The new Gymnasium replaces aged facilities with modern kinesiology instructional labs. It will provide instructional studio space for dance and fitness dance, classes in basketball, volleyball, badminton, and other programs. The Gymnasium will house work space for faculty and the athletic coaching and maintenance staff. It will provide two large event spaces and be equipped with catering support space and storage for portable furnishings and a stage. The Gymnasium will be solarready for the installation of a rooftop solar PV system. Two alternative locations are shown for the Gymnasium. Option 1 is a location that will best support the KHA Building and the expanding aquatic center. Users of those facilities will be able to use showers and lockers in the Gymnasium. This location for the Gymnasium will limit the athletic field area and potentially require a realignment of the fire road to convert the existing multi-purpose athletic field into a regulation-sized soccer field.

Option 2 is a location closer to the core of the campus, a better location for campus event space. Option 2 also simplifies the conversion to a regulation-sized soccer field. Option 2 includes a field house that incorporates audience seating with additional lockers and showers near the KHA Building and the Aquatic Center.





Gymnasium Option 1



Gymnasium Option 2













The photographs on this page are intended to illustrate ideas and inspire the design process for this project.

Recommendations KINESIOLOGY + ATHLETICS FACILITIES (cont.)

Teaching Pool

Since 2010 the College's aquatic facility has been wellused for joint-use by the City of Yucaipa's competitive aquatics teams, and has been increasingly used for the College's instructional swimming classes, lifeguard training, high school competitive aquatics teams, and other regional aquatics clubs. This modern facility uses solar heat and smart pumps to operate sustainably. Its popularity has spurred the need to expand this facility with the addition of a teaching pool that will support additional instructional programs and use by community programs. The facility will house a team room, as well as pool circulation pumps and filtration equipment. The option for solar heating will be explored.

Outdoor Kinesiology Laboratories

Improvements will be made to outdoor athletic facilities that students use to develop and practice their skills in soccer, golf, track, and other instructional programs. The multipurpose field will be fully developed into a regulation-sized collegiate soccer field with water-wise synthetic turf, a synthetic running track, and lighting for nighttime use. Options to provide audience seating will be explored. The golf skills laboratory may be expanded to include instructional areas for chipping and driving. Maintenance of the greens will be reduced by the conversion to synthetic greens. The existing 6-court tennis facilities may be remodeled with new paving and court markings.



Vignette Plan



Joint-Use Tennis Facility

Crafton Hills College is providing a campus location for a tennis facility that is being planned through a partnership among the College, the City of Yucaipa, and the Yucaipa-Calimesa Joint Unified School District. Construction will be funded by a redevelopment grant obtained through the City of Yucaipa. The 12-court facility, which will be built at the intersection of Sand Canyon Road and Chapman Heights Road adjacent to the East City Sports Complex, includes a competition court with spectator seating. Parking for the use of this facility will be provided in Parking Lot Q.



Vignette Plan



Key Plan

Recommendations CRAFTON HALL RENOVATION

One of the iconic original campus buildings, Crafton Hall has served the College as its main food service and dining facility until 2016, when Crafton Center opened its doors. Crafton Hall will serve the College once again as its primary facility for visual and digital media arts instruction. Its airy, light-filled dining hall will be repurposed to house laboratories for painting, 2-D design, ceramics and sculpture. A digital media computer lab will provide robust graphic and audio processing that will be shared by both the visual and performing arts programs. The renovation will upgrade the building's technology network infrastructure and connectivity, as well as other building systems, to simplify operation and increase efficiency.

Crafton Hall will also house the College's art gallery, providing a location that is visible and that will be adjacent to the arts instructional space. The adjacent Crafton Hall Courtyard and patios provide an excellent opportunity to infuse art within campus open spaces. Outfitted as a sculpture garden, the courtyard could include permanent, as well as changing exhibits, including student work. The existing delivery access and patios are well-suited to house outdoor labs and makers space for 3-D art and ceramics.



Vignette Plan



Key Plan



The photographs on this page are intended to illustrate ideas and inspire the design process for this project.

Recommendations WEST COMPLEX RENOVATION

The West Complex will be renovated and repurposed to enhance its functionality. Its location near Crafton Center places it well to provide needed additional space for the College's student and academic support services. Repurposed facilities for the Assessment Center and the Honors Student Center will be housed on the upper level, which is at the same level as the ground floor of Crafton Center and near the Crafton Center Patio. The expansion of the Assessment Center will help to promote student success by expanding the College's capacity to assess and track students' progress toward their goals. The center will support the delivery of distance education by providing a testing space for students taking online classes.

The Honors Student Center will also be housed within the upper level of the West Complex. It will accommodate expanded space for the Honors Lounge, a center that provides the highly motivated students in Crafton Hills College's Honors Institute Program with collaborative study space and support services. The mailroom and adjunct faculty workspace will also be housed within the West Complex.

The option to bring natural light into the upper level spaces will be explored. The remaining classrooms will be renovated to be more flexible and to better support current instructional modes. The renovation will upgrade the building's technology network infrastructure and connectivity, as well as other building systems, to simplify operation and increase efficiency.



Vignette Plan



Key Plan



The photographs on this page are intended to illustrate ideas and inspire the design process for this project.

Recommendations STUDENT SUPPORT BUILDING RENOVATION

Following the construction of Crafton Center, many student services offices moved out of the Student Support Building. The vacated space will be renovated to expand existing services and house new services. The Student Health & Wellness Center will expand on the lower level to accommodate needed growth, including additional examination rooms, work and storage space, and counseling space for expanded mental health services.

Crafton Hills College's Cultural Center and the Language Lab will both be housed on the upper level. The Cultural Center will include the International Student Center, as well as programs that promote the global awareness and cultural competence of all Crafton Hills College's students. The college will explore the option to also house a Language Lab within the Student Support Building, providing resources for students taking classes in the Foreign Language Programs.

The renovation will upgrade the building's technology network infrastructure and connectivity, as well as other building systems, to simplify operation and increase efficiency.



Vignette Plan





The photographs on this page are intended to illustrate ideas and inspire the design process for this project.

Recommendations CENTRAL COMPLEX 2 RENOVATION

Following the construction of new science laboratories in Canyon Hall, older labs in Central Complex 2 will be repurposed to provide new instructional space for other programs. This project presents the opportunity to help optimize utilization by resizing these spaces to rebalance the space inventory and align it with class sizes. In addition, space will be repurposed for open computer labs; flexible rooms for mobile counseling, supplemental instruction, and study; and an adjunct faculty workspace. The renovation will upgrade the building's technology network infrastructure and connectivity, as well as other building systems, to simplify operation and increase efficiency. As one of the campus' early buildings, this renovation will extend CC2's useful life and help to preserve an important part of the College's architectural heritage.



Vignette Plan



Key Plan




"The only real mistake is the one from which

industrialis

we learn nothing."









Recommendations EAST INSTRUCTIONAL BUILDING

The East Instructional Building will provide lecture and laboratory space for growing programs, especially in the sciences and career pathways. It replaces aged space in the Visual Arts Building, as well as the North Annex and East Complex, which are semi-permanent modular buildings. Instructional spaces will be aligned with class sizes to help optimize utilization. In addition, space will be provided for an open computer lab, a tutoring center, and adjunct faculty workspace. Flexible rooms will be provided for a wide range of uses, including mobile counseling and supplemental instruction.

The first level of this multi-story facility will be matched with the lower level of Canyon Hall, which is situated to the west, providing a direct and accessible pedestrian path between two levels of the campus that currently lack a direct link. Replacing the single-story Visual Arts Building with a multi-story building makes better use of a prime location at the heart of the campus.

The East Instructional Building will open onto the proposed East Quad, which will provide the key open space in this part of the campus. A secondary food service facility is recommended in this location, either as a wing of the East Instructional Building or as an adjacent stand-alone structure within the East Quad.



The photographs on this page are intended to illustrate ideas and inspire the design process for this project.

Key Plan



The photographs on this page are intended to illustrate ideas and inspire the design process for this project.

Recommendations MAINTENANCE + OPERATIONS ADDITION

The staff that cares for and runs the campus facilities are seeing their responsibilities grow with the campus. The College's staff need additional space in order to do their work and respond to increasingly complex requirements to keep outdoor areas maintained and buildings running safely, efficiently, and in compliance with regulations.

This project will build additional staff work space and maintenance vehicle storage space and replace temporary storage bins and containers with durable permanent storage space. It will also explore the potential to upgrade existing and new rooftop areas to receive a solar photovoltaic system that will help to power the campus and recharge electric maintenance vehicles.



Vignette Plan







Recommendations CHILD DEVELOPMENT CENTER RENOVATION

This project will modernize the Child Development Center (CDC) facilities, which house the Early Education Program's instructional demonstration classrooms and the preschool program that serves the community. The facilities include three buildings and outdoor instructional play areas, which have been in service for two decades.

Visual screening and security of the outdoor play areas will be upgraded. Vehicular circulation will be improved within the parking lot and an accessible pedestrian path of travel to the CDC will be completed. The aesthetic quality of the front entrance to the CDC will be improved with landscaping and enhanced paving.



Vignette Plan







Recommendations EAST VALLEY PUBLIC SAFETY TRAINING CENTER

Crafton Hills College's highly regarded Public Safety Programs train fire, rescue, EMS, and hazardous material personnel to respond to multi-hazard/multijurisdictional emergency incidents. These programs draw new students and working professionals and generate revenue for the College. Specialized trainings are developed within a partnership among San Bernardino Community College District, Crafton Hills College, and local and regional fire agencies.

This project provides facilities in which to train students in conditions that replicate real-life emergency incidents. It will complete the training facilities at Crafton Hills College's Public Safety and Allied Health Building, which opened in 2016.

This project will add two components: the Fire Safety Command Training Center and the East Valley Public Safety Training Center. The Command Training Center will be a simulation laboratory that is outfitted within the PSAH Building and will offer trainings for command-level professionals. The East Valley Public Safety Training Center will include a smoke-less burn tower and other training props. The center will be located in a portion of existing Parking Lot I, adjacent to the PSAH Building and will be designed to harmonize with the architectural style of that building.









Recommendations ENRICHED ENVIRONMENTS FOR STUDENT ACTIVITIES

Building on the success of Crafton Center, which opened in 2016, this project will take the next step to fully outfit key existing interior and outdoor spaces into studentcentered environments that invite social interaction and enjoyment of all that Crafton Hills College has to offer.

Civic Zone

Consider following the example of popular community dining spots and coffee houses, and provide furniture, fixtures, and equipment to create the atmosphere of a student hub within and around Crafton Center. Equipment and furniture should be portable and readily storable for times when these spaces are needed for other uses.

- Furnish a portion of the Road Runner Cafe with a variety of seating options and table heights.
 Include a number of locations equipped for small music performances and poetry readings.
- Provide lounge furniture and recreational equipment to fully furnish the Office of Student Life and the Crafton Center lobby.
- The Crafton Center Patio and Courtyard, the Living Wall, the Main Quad will be fully equipped

and furnished to support student gathering, recreation, and informal learning. Include outdoor dining tables with umbrellas for shade and lighting for night time gathering and social activities.

- Explore performance opportunities of many types as focal points for student gathering. Build and equip a small outdoor performance area with a permanent stage and open mic in the Crafton Center Patio outside the Bookstore.
- 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.
- Music has the power to enliven the campus environment in a way that speaks to students of all backgrounds. In addition to hosting live music performances, explore an audio system with the flexibility to provide music and other content that is synchronized through selected interior and exterior spaces where students gather. Consider portable and scalable WiFi-based systems that are commercially available.

 Encourage a culture of arts appreciation by providing public spaces to display visual art created by students throughout the campus.

Learning Resource Center

The large entry halls on the first and second floor of the Learning Resources Center often attract students who enjoy the expansive views and quiet atmosphere. Fully furnish these spaces, as well as the outdoor atrium and patios, to better accommodate students who wish to study and socialize.







Vignette Plan





Recommendations CAMPUS-WIDE LEARNING ENVIRONMENT UPGRADES

Learning and student development can and should take place in all areas of the 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 current needs of students and faculty for today's learning. These redeveloped spaces should be flexible to allow for a variety of instructional approaches, including direct presentation, group work, project-based learning, class discussion, and role playing. All of these learning and collaboration experiences can take place in a variety of spaces all over the campus.

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 rather than restricting process, thought, and collaborative development. 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 also 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 technology 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. A Distance Learning Support Center should be considered to serve these needs.

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 all 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 within easy-to-locate areas, such as lobbies, corridors, outside classrooms and offices, and outdoors. Consideration should be given to designing a variety of configurations of spaces 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 using technology devices. All areas should consider the need for power to charge technology devices.











Recommendations CAMPUS-WIDE VEHICULAR CIRCULATION + PARKING

Campus Entries

Improvements are recommended for the two vehicular campus entry points. More visible and consistently designed signage is recommended at both entrances. Improvements are recommended for the western entry at the intersection at Sand Canyon Road and Campus Drive. Consider widening Campus Drive to provide more maneuvering space for vehicles that are entering and leaving the campus and a wider separation between vehicles and bicycles.

Removal of On-Street Parking

Currently 180 on-street parking spaces exist on the north side of Campus Drive within the campus property. Removal of these stalls will reduce the number of pedestrians that jaywalk across Campus Drive and improve safety and the flow of traffic.

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 shuttles, 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. Parking Lot D currently functions well as a transit stop and passenger loading zone at the center of campus. The development of a secondary loading zone near the East Quad and accessed from Lot G is recommended.

Bicycle Facilities

Due to the campus' hillside location, commuting by bicycle is not common, however, the benefits of cycling, with regard to fitness and sustainability, make it worth encouraging. Yucaipa Boulevard is a Class 2 bicycle route and Sand Canyon Road provides a connection to Campus Drive. It recommended that the College and City explore options to make improvements that extend a bike route from Yucaipa Boulevard to both campus entries.

Once on-street parking is removed, Campus Drive is recommended as a shared bicycle route. Signage along Campus Drive and other paths shared with vehicles or pedestrians will promote awareness of bicycle traffic. Many existing campus pedestrian and vehicle routes have the capacity to serve as bicycle routes and should be designated with signage placed next to or painted on the pavement. Signage should be extend to Parking Lot J near the Gymnasium, where secure parking and access to showers would be provided. Secure bicycle parking areas should be created. Options should be explored for the addition of electric bicycle rental stations.

Parking

Although Crafton Hills College's existing parking capacity is sufficient to accommodate the level of enrollment that is planned for 2031, the FMP recommends a modest redistribution and increase in the number of parking spaces that will improve circulation flow, safety, and convenience.

- Central Parking Lot: Once the inactive gymnasium is removed, a permanent parking lot will be built on its site. Accessible pedestrian paths will connect the new parking lot to the two existing Campus Drive crosswalks at Lot D and F. The Central Parking Lot will be visually screened with landscaping along its southern and western edges to maintain a park-like appearance. Please refer to *Considerations for the Future, Central Campus* for further recommendations regarding the ultimate use of the Central Parking Lot.
- Permanent Parking Lot N: The portion of Parking Lot N that is surfaced with gravel will be provided with permanent paving.
- Temporary Parking Lot O: Parking Lot O will be maintained for construction vehicles in the near term. Please refer to Considerations for the

Future for further recommendations regarding the ultimate use of Parking Lot O.

 Emerald View Drive, Parking Lot L, and the CDC Parking Lot: An accessible pedestrian path will be built between Lot K-with a connection to the western end of The Promenade-and Lot L. via a raised and highly visible crosswalk. Nighttime lighting will be provided for Emerald View Drive along the approach to the crosswalk from both directions. The accessible path will be extended to the entrance of the Child Development Center and the accessible parking in the CDC Parking Lot. In Lot L, the damage due to settling of improperly placed earthen fill will be addressed. The CDC Parking Lot will be reconfigured to provide universally accessible and improved access for parents and their children. Landscape planters and enhanced paving will be incorporated into the CDC Parking Lot to provide a more welcoming appearance that complies with college design standards.

Considerations for the Future

Looking beyond the planning horizon for this FMP, SBCCD and Crafton Hills College should continue to implement policies and programs that encourage the use of alternative transportation modes that help to reduce the parking utilization rate among students and employees. Given the suburban and semi-rural nature of the College's neighborhood context and the initiative to attract students from a wider geographical area, it is likely that the College will need more parking capacity in the decade following 2031. To address this need, the College is encouraged to seek community partnerships and joint-use agreements for nearby off-campus parking. The development of College Village will present an opportunity to build shared parking at College Village. With a shuttle providing frequent service between the two sites, parking could be planned to serve the needs of both the College and its partners in College Village.

Three potential parking structure sites are identified. Although the decision to build a parking structure need not be made at this time, a site or sites should be reserved for the time when a parking structure is needed.

 Central Campus: This hillside site; which encompasses the existing gymnasium, the tennis facility, North Complex, and a portion of Parking Lot O; could be accessed from both Campus Drive and the Fire Road. A structure could be built into the hillside, and could serve facilities in the upslope and downslope directions. This central location is near to most of the other facilities, and yet it would not claim prime space along either of the main building axes. The top deck of a parking structure provides a potential location for many uses; including athletic facilities, such as tennis courts, or an additional solar photovoltaic installation.

- East Campus: A site in Parking Lot I at the eastern and uphill end of the developed campus is closest to the Science & Career Pathways and Kinesiology Clusters. A parking structure in this location would draw in vehicles approaching from the east and lessen traffic in the surface parking lots.
- West Campus: A site near the western and downhill end of the developed campus is closest to the Arts and Civic Clusters. Previously, SBCCD planned for a parking structure in Parking Lot K.
 Another site option lies in the area of Parking Lot A and B, which is set at a lower level behind the main building axis along The Promenade and is less desirable as a location for a building.

Recommendations CAMPUS-WIDE ENRICHED OUTDOOR ENVIRONMENTS

Every part of the campus is an opportunity to promote learning and reinforce Crafton Hills College's vision and values. A rich campus experience is one that attracts and engages students and invites them to use the campus to further their growth and educational goals. Providing opportunities for students to interact with and actively use the campus should be a key driver of campus design. As the programming is determined for the renovation and construction of buildings and outdoor spaces, such opportunities should be sought with input from students, faculty, and staff.

Embracing the Importance of the Arts on Campus

One of the College's goals is to embrace the importance and appreciation of art on campus, as a way to solidify the College's identity and sense of community. Public art displays amongst different campus environments create a cohesive tone throughout. These spaces can be both indoors, in common areas—not just in facilities that serve the arts department—as well as outdoors. Outdoor spaces for intimately-scaled performance art (music, theatre) could also be incorporated in many places, encouraging the integration of arts in students' lives. The widespread incorporation of the arts across campus can also serve to make the campus a cultural destination for its students, staff, and the surrounding community.

East Quad

The East Quad will be the primary open space for the eastern campus—extending the original building spacing and massing concept. Students will be engaged within a social environment enriched with opportunities for gathering, studying, having coffee or eating a quick meal with fellow students. The East Quad creates a space for students to pause and orient themselves via the expansive views that characterize this campus. Located between the PSAH Building and the East Instructional Building, the Quad is an opportunity to express themes that relate to the instructional disciplines being learned therein. Incorporating a secondary food service facility into the East Quad or within the East Instructional Building is recommended.

The Campus as a Living Laboratory

The Science Learning Garden at Canyon Hall is an example of an outdoor space that reinforces the instructional theme of disciplines being learned. This concept will be applied throughout the campus, guided by the zoning of the campus as shown on page 3.053. In recent years, the campus has been transformed through the ongoing development of new facilities. Both existing and planned future developed areas will be seen as opportunities for Living Lab enhancements that grow organically out of available opportunities. Ideas heard from many quarters include:

- Themed learning gardens
- Student performance opportunities mini-stages, musical instruments
- Display of student work pop-up project platforms, display walls and kiosks, flat screens
- Community garden and the coaches pantry
- > Display of individual and team achievements
- Fitness stations and par course

Service Zone

The Crafton Hills College campus is a large and complex entity to manage and operate. Knowledgeable and forward-thinking staff have set ambitious goals for efficiency, health and safety, and sustainability. To achieve these goals, they have implemented cutting-edge solutions such as the Solar Farm. The campus should be viewed as a living laboratory for teaching about solar power generation, operational systems, water quality, district heating and cooling. Doing so is one of the best opportunities to incorporate sustainability into the College's curriculum.



Recommendations CAMPUS-WIDE ENRICHED OUTDOOR ENVIRONMENTS (cont.)

Natural Habitat Learning Lab

Explore opportunities to develop the land owned by the College and managed through the partnership with the Crafton Hills Open Space Conservancy. As the land owner and a key member of the conservancy, the College is well-positioned to use this unique asset. For example, explore the opportunity to engage students in research focused on management and preservation.

Consider building new trail connections, a cross-country and mountain biking circuit, educational exhibits and outdoor classrooms in which to learn about subjects such as native ecology and bio-diversity, local history, geology, wildfire management, and astronomy.

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 campus 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 and other key areas of the campus.
- Expand the intrusion alarm system on campus to include key spaces on campus.

- Install a campus-wide emergency notification system through the fire alarm system and include exterior speakers to cover key areas of the campus.
- Set in place emergency evacuation procedures and guidance systems that direct occupants to the preferred campus exit.





Recommendations ANCILLARY LOGISTICS + INFRASTRUCTURE

Developing new facilities, roads, and infrastructure on an active campus requires a rigorous and logisticallysound 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

San Bernardino Community College District and Crafton Hills 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 be occupied.

Sustainability Planning

Continued sustainable facilities planning is recommended to build upon Crafton Hills College'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
- EV charging stations

Gymnasium Rooftop Solar Photovoltaic Plant

Crafton College has been reaping energy from the sun with its Solar Farm since 2012. The planned Gymnasium is an opportunity to expand the Colleges solar generating capacity with a rooftop solar PV plant.

Maintenance & Operations Rooftop Solar Photovoltaic Plant

The existing and planned addition will be upgraded and solar-ready for the next renewable energy plant. The electricity generated will help to power the facility and charge the College's fleet of electric vehicles.

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.

The Kinesiology Precinct will required a greater degree of improvement than the other more developed parts of campus. It is known that the electrical system capacity and the communications network central core backbone must be expanded in this precinct. In addition, recently enacted water quality regulations have applied more stringent requirements for retention and treatment on college projects. The development of the Kinesiology Precinct must be accompanied by upgrades to the existing storm water system. 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 Plant Expansion

The College's existing central plant is being utilized near its full capacity for cooling. To support the future development of the campus, capacity for additional cooling will be developed and hydronic piping will be extended to serve new buildings. This FMP will serve as the basis to model and plan for future needs. As noted above, the infrastructure in the Kinesiology Precinct will require a greater degree of development, and this holds true with regard to the hydronic pipe loop. This precinct should also be considered for a secondary central plant if one should be recommended by the infrastructure study.

Learning Resources Center Repurposing

Although not intended to be a capital construction project, this work will play an important role in rezoning functions across the campus and addressing the secondary effects of recently completed buildings. It will update technology systems and connectivity and repurpose space to keep pace with changes in the delivery of academic support services and learning resources. It will expand and update the Professional Development Center to better support and prepare faculty to take advantage of emerging tools and modes of instruction. In addition, it will provide homes for the following:

- Office of Institutional Effectiveness, Research, & Planning
- Distance Education Support Center
- Update technology systems and connectivity

Equitable Access to Facilities

As part of Crafton Hills College's initiative to welcome and accommodate every person in the community that it serves, the College plans to provide all-gender restroom facilities for students, staff, and faculty in convenient locations throughout the campus. These facilities will provide safe and private single-user spaces for the use of all people.

Recommendations EXPLORATION OF FUTURE OPTIONS

Crafton Hills College Village

SBCCD, Crafton Hills College, and the City of Yucaipa are laying the groundwork for the development of Crafton Hills College Village, which is being planned as a mixeduse, transit-oriented development on the 45-acre site that abuts the southern boundary of the campus. College Village is envisioned to be a sustainable mix of land uses including educational, retail, and housing that would appeal to students. Plans would potentially include the following:

- > Small business incubator
- Makers space
- > Student center, including a bookstore
- > Outdoor student recreation space
- Restaurants and eateries
- Retail and commercial space
- > Middle college high school
- > Student and faculty housing
- Short-term commercial housing for professional trainees and others

The College Village site also abuts Yucaipa Boulevard along a wide frontage and its development would further the city's transportation and land use plans. College Village would potentially attract students and provide Crafton Hills College with more space on which to build facilities and expand programs through partnerships with educational and civic institutions. The mixed-use alternative zoning plan on the opposing page was developed by the College and City with a grant from the Southern California Association of Governments to test the potential of the College Village vision. The next steps will include market and feasibility studies considering many potential combinations of land uses and educational programs in order to find a financially viable mix that will achieve the College's objectives. SBCCD and the College will explore different types of partnership arrangements to develop and potential uses such as student housing, a small business incubator, and a middle college high school, among others. A university center with classrooms and meeting space would bring classes taught by four-year institutions to students.

A pedestrian and bicycle path between Crafton Hills College and College Village is recommended. This path would start at the Learning Resources Center, cross Emerald View Drive, and run along the southern side of the arroyo to the intersection of Sand Canyon Road and 16th Street, where a bridge or crosswalk at this signalized intersection would complete the path to College Village. Such a path would have the added benefit of being an additional emergency evacuation route. Walking and bicycle paths would extend through College Village to Yucaipa Boulevard, linking the College to stores, eateries, and other community services. The development of College Village would present an opportunity to build parking facilities that can be shared among the College and its partners. With a shuttle providing frequent service between the two sites, shared parking could be accessed conveniently.









Recommendations EXPLORATION OF FUTURE OPTIONS (cont.)



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 multidiscipline study of the campus' utilities infrastructure systems that must be ready to support each new facility.

During the planning process, Crafton College Council discussed the prioritization of future facilities projects. Taking into account educational priorities, time-sensitive opportunities, logistics, potential funding, and program growth; the Council recommended the following order of priority.

New Construction, Renovation, and Repurposing Projects

- 1. Enriched Environments for Student Activities
- 2. Performing Arts Center Renovation
- 3. Crafton Hall Renovation
- 4. East Valley Public Safety Training Center
- 5. West Complex Renovation
- 6. Student Support Building Renovation
- 7. Gymnasium Demolition
- 8. Joint-use Tennis Facilities (New Construction)
- New Gymnasium (New Construction), including Soccer Field and Outdoor Kinesiology Laboratories
- 10. Maintenance and Operations Addition (New Construction)
- 11. East Instructional Building (New Construction)
- 12. Teaching Pool (New Construction)
- 13. Central Complex 2 Renovation
- 14. Child Development Center Renovation

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

Campus-wide Improvements

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









Comprehensive Master Plan APPENDIX

CRAFTON HILLS COLLEGE SAN BERNARDINO COMMUNITY COLLEGE DISTRICT

Internal Scan Data

This section includes the supporting data referenced in the *Planning Environment: Internal Scan Findings* section of the *Educational Master Plan*.

Internal Scan Data STUDENT DEMOGRAPHICS

From 2010-11 to 2014-15, students in the 20-24 age group accounted for an average of 37.4% of unduplicated enrollment (2,918 students), while students age 19 and under accounted for an average of 32.43% of unduplicated enrollment (2,531 students), and students 25-29 years old accounted for an average of 13% of unduplicated enrollment (1,015 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 (128 students). The age group that experienced the most decline during the same time period was from students age 19 or younger (-427 students).

EXHIBIT A.01: UNDUPLICATED ENROLLMENT BY AGE GROUP



From 2010-11 to 2014-15, Hispanic students at Crafton Hills College increased from 33.6% of unduplicated enrollment to 44% of enrollment, an increase of 612 students. Conversely, white students decreased from 50.2% of students to 39.4% of unduplicated enrollment, a decrease of 1,205 students. During the same time, Asian students decreased by 55 students, while students identifying themselves of two or more races increased by 71 students.

EXHIBIT A.02: UNDUPLICATED ENROLLMENT BY RACE/ETHNICITY



Internal Scan Data STUDENT DEMOGRAPHICS (cont.)

From 2010-11 to 2014-15, females accounted for an average of 51.8% of unduplicated enrollment (4,406 students), while males accounted for an average of 48.1% of unduplicated enrollment (3,752 students). During the same time, females decreased by 219 students (-4.9%) and males decreased by 447 students (-10.6%)

EXHIBIT A.03: UNDUPLICATED ENROLLMENT BY GENDER



Internal Scan Data ENROLLMENT TRENDS

The most recent peak enrollment at Crafton Hills College was during the 2008-09 academic year, when the College enrolled 9,517 students. From 2008-09 to 2012-13 overall College unduplicated enrollment decreased by 2,421 students (-25.44%). The decline equates to a 7.08% 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 944 students (13.3%). The increase is equivalent to a 6.44% average annual increase in enrollment over two academic years. Overall, Crafton Hills College students account for approximately 30% of District-wide unduplicated enrollment.

EXHIBIT A.04: HISTORICAL UNDUPLICATED ENROLLMENT



Internal Scan Data ENROLLMENT TRENDS *(cont.)*

From 2010-11 to 2014-15, students who enrolled in face-to-face courses only at Crafton Hills College accounted for an average of 83.5% of unduplicated enrollment (6,515 students). During the same years, students who only enrolled in online classes accounted for an average of 1.54% of unduplicated enrollment (120 students) and students who only enrolled in hybrid courses accounted for an average of 0.1% of unduplicated enrollment (8 students). Students who took courses using multiple instructional methods accounted for an average of 14.86% of unduplicated enrollment (1,166 students).

From 2010-11 to 2014-15, enrollment in face-to-face only courses decreased by 1,261 students (-17%) and hybrid only enrollment decreased by 8 students (-72.7%). During the same time period, students who only enrolled in online classes increased by 192 students (282.4%) and enrollment in courses with multiple instructional methods increased by 409 students (33.6%).

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 A.05: UNDUPLICATED ENROLLMENT BY INSTRUCTIONAL METHOD



California (CA) residents accounted for an average of 96.42% of unduplicated enrollment at Crafton Hills College between 2010-11 and 2014-15. During the same time, unduplicated enrollment of California residents decreased by 671 students (-7.98%). From 2010-11 to 2014-15, CA non-resident (AB 540) students increased by 33 students (25%) while foreign county resident enrollment at Crafton Hills College decreased by 13 students (-10.4%). AB 540 allowed students to qualify for an exemption from paying out-ofstate tuition if they met certain criteria.

EXHIBIT A.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
Total Unduplicated Enrollment	19,313	16,636	15,974	16,759	17,635

Internal Scan Data ENROLLMENT TRENDS *(cont.)*

From 2012-13 to 2014-15, continuing students accounted for an average of 54.5% of unduplicated enrollment (4,119 students), while returning college students accounted for an average of 17.66% of unduplicated enrollment (1,333 students), and first-time college students accounted for an average of 12.76% of unduplicated enrollment (963 students). During the same three year period, unduplicated enrollment from continuing students increased by 600 students (15.6%) and by 77 students (8.5%) for first-time college students. However, unduplicated enrollment from under 18 (or K-12 special admit) students decreased by 146 students (-19.9%).

EXHIBIT A.07: UNDUPLICATED ENROLLMENT BY ENROLLMENT STATUS


Yucaipa High School and Redlands East Valley High School have consistently been among to top three feeder high schools for Crafton Hills College, accounting for 181 and 120 first-time students in fall 2014, respectively. The College enrolls a high number of students who are home schooled. In fall 2014, 60 firsttime college students at Crafton Hills College reported that they were home schooled (ranked 5th amongst feeder high schools).

EXHIBIT A.08: ENROLLMENT FROM FALL 2014 TOP 10 FEEDER HIGH SCHOOLS

Institution	Fall 20	10	Fall 20	11	Fall 20	12	Fall 20	13	Fall 20	14
	Rank	#								
YUCAIPA HIGH	3	100	2	107	1	117	1	146	1	181
REDLANDS EAST VALLEY HIGH	1	147	1	140	2	86	3	92	2	120
CITRUS VALLEY HIGH			68	1	6	33	4	70	3	119
REDLANDS SENIOR HIGH	2	102	3	96	3	78	2	106	4	115
OTHER HOME SCHOOL	5	34	5	41	5	40	6	48	5	60
BEAUMONT SENIOR HIGH	4	70	4	60	4	45	5	55	6	59
SAN GORGONIO HIGH	6	31	6	28	7	26	7	27	7	40
GREEN VALLEY HIGH	10	14	9	15	8	23	9	17	8	28
ORANGEWOOD HIGH CONT	8	17	7	18	9	18	12	14	9	17
RIM WORLD SENIOR HIGH	7	29	14	9	11	15	8	19	10	15

Internal Scan Data ENROLLMENT TRENDS *(cont.)*

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 term accounted for an average of 48.7% of total WSCH, spring term accounted for an average of 46.9% of total WSCH and summer accounted for an average of 4.4% of WSCH. During this period overall WSCH at Crafton Hills College decreased by 2.1% (-3,027 WSCH). From 2010-11 to 2014-15, spring term WSCH decreased by 6.1% (-4,050 WSCH) and fall term WSCH decreased by 2.2% (-1,525 WSCH). However, summer WSCH increased by 30% (2,548 WSCH). Since 2012-13, Crafton Hills College's WSCH generation has increased by 19.1% (22,674 WSCH) over two academic years (2013-14 and 2014-15).

EXHIBIT A.09: WSCH GENERATION



From 2010-11 to 2014-15, the average annual growth rate of section offerings was 7.12% (equivalent to 99 sections added per year). Section offerings reached their most recent low during the 2011-12 academic year (1,133 sections). However, Crafton Hills College generated 111.95 WSCH per section in 2011-12. From 2011-12 to 2014-15, course offerings increased by 514 sections (45.37%) while WSCH per sections offered decreased to 86.02 WSCH/section. The most WSCH generation per sections offered was realized in 2010-11 when the College produced 115.67 WSCH/section.

EXHIBIT A.10: SECTION OFFERINGS



Source: SBCCD Office of Institutional Effectiveness, Research & Planning

Internal Scan Data ENROLLMENT TRENDS *(cont.)*

From 2010-11 to 2014-15, Crafton Hills College achieved its highest productivity in 2010-11 when the College had 261.34 full time equivalent faculty (FTEF) and produced 553.72 WSCH/FTEF. From 2012-13 to 2014-15, the College increased faculty by 84.06 FTEF (37.2%); however productivity decreased by 69.65 WSCH/FTEF (-13.2%). The California community college recommended standard for productivity is 525 WSCH/FTEF, which represents the approximate point of financial break even for a college.

EXHIBIT A.11: PRODUCTIVITY (WSCH/FTEF)



In 2014-15, 61.6% of Crafton Hills College students (4,975 students) stated that their educational goal was to obtain a bachelor's degree (BA/BS) upon transfer. During the same academic year, 14% of students (1,123 students) had an educational goal of obtaining an associate degree (AA/AS) or certificate without transfer, and 7.5% of students (605 students) identified their goals as related to job skill 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 8.2% (303 students). During the same time, the proportion of students with goals related to job skills or maintaining a certification/license decreased by 2.4% (-258 students). It should also be noted that the number of students with an undecided goal decreased by 220 students during the same time period.

EXHIBIT A.12: UNDUPLICATED ENROLLMENT BY EDUCATIONAL GOAL

Current Education Goal	Acader	nic Year								
	2010-2	011	2011-2	012	2012-2013		2013-2014		2014-2015	
	#	%	#	%	#	%	#	%	#	%
BA/BS Degree after Assoc.	3,677	42.2%	3,524	45.9%	3,484	49.1%	3,751	49.8%	3,928	48.9%
BA/BS degree w/o Assoc.	995	11.4%	992	12.9%	950	13.4%	932	12.4%	1,047	13.0%
Assoc. Degree w/o trans.	929	10.7%	827	10.8%	744	10.5%	815	10.8%	841	10.5%
Voc. Assoc. w/o transfer	101	1.2%	76	1.0%	85	1.2%	105	1.4%	77	1.0%
Voc. Certif. w/o transfer	201	2.3%	176	2.3%	182	2.6%	183	2.4%	205	2.5%
Career Exploration	136	1.6%	113	1.5%	80	1.1%	73	1.0%	100	1.2%
Acquire Job Skills	406	4.7%	321	4.2%	256	3.6%	257	3.4%	278	3.5%
Update Job Skills	198	2.3%	157	2.0%	143	2.0%	123	1.6%	141	1.8%
Maintain Cert/License	123	1.4%	109	1.4%	91	1.3%	90	1.2%	86	1.1%
Basic Skills	123	1.4%	77	1.0%	63	0.9%	70	0.9%	74	0.9%
H.S Diploma/GED	16	0.2%	6	0.1%	3	0.04%	6	0.1%	13	0.2%
Non-credit to credit	7	0.1%	5	0.1%	4	0.1%	6	0.1%	2	0.02%
4-yr student taking classes	469	5.4%	351	4.6%	243	3.4%	294	3.9%	358	4.5%
Educational Development	185	2.1%	135	1.8%	97	1.4%	130	1.7%	164	2.0%
Personal Interest	28	0.3%	10	0.1%	8	0.1%	5	0.1%	2	0.02%
Undecided Goal	782	9.0%	640	8.3%	520	7.3%	542	7.2%	562	7.0%
Uncollected/Unreported	332	3.8%	155	2.0%	143	2.0%	146	1.9%	162	2.0%
Total	8,708	100%	7,674	100%	7,096	100%	7,528	100%	8,040	100%

Internal Scan Data STUDENT SUCCESS AND COMPLETION

From 2010-11 and 2014-15, Crafton Hills College experienced an average retention rate of 90.7% and an average success rate of 73.3%. The most recent peak retention rate at Crafton Hills College was 91.5% in 2012-13, while the most recent peak success rate was 74.3% in 2011-12. From 2012-13 to 2014-15, Crafton Hills College's retention rate declined at an average annual rate of 0.02% while success rate declined at an average annual rate of 0.13%. From 2010-11 to 2014-15, the average gap between success and retention rates was 17.4%. In fall 2014, statewide averages for success and retention rates were 69.01% and 86.3%, respectively.

EXHIBIT A.13: SUCCESS + RETENTION RATES



The total number of degrees and certificates awarded at Crafton Hills College increased by 30.5% (219 awards) from 2010-11 to 2014-15. During the same time period, the number of AS degrees awarded increased by 52.9% (83 degrees), while certificates requiring 60+ semester units decreased by 78% (-32 certificates). From 2012-13 to 2014-15, the number of associate for transfer degree (AA-T/AS-T) awards increased by 84 awards over just two academic years. In 2014-15, associate for transfer degrees accounted for 24.03% of all associate degrees awarded (149 AA-T/AS-T awards of 620 total AA/AS awards).

EXHIBIT A.14: DEGREES + CERTIFICATES AWARDED

Degree / Certificate Type	2010-11	2011-12	2012-13	2013-14	2014-15
Associate in Science for Transfer (A.ST) Degree	0	0	34	48	74
Associate in Arts for Transfer (A.AT) Degree	0	0	31	69	75
Associate of Science (A.S.) degree	157	141	174	207	240
Associate of Arts (A.A.) degree	201	191	201	184	231
Certificate requiring 60+ semester units	41	12	8	8	9
Certificate requiring 30 to < 60 semester units	39	20	28	34	29
Certificate requiring 18 to < 30 semester units	6	2	4	2	4
Certificate requiring 6 to < 18 semester units	195	268	178	268	275
Other Credit Award, < 6 semester units	79	0	72	3	0
Total Degrees / Certificates Awarded	718	634	730	823	937

Source: California Community Colleges Chancellor's Office - Datamart

Internal Scan Data STUDENT SUCCESS AND COMPLETION (cont.)

Completion rate or Student Progress and Attainment Rate (SPAR) may be defined as the percentage of first-time students with 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 >=2.0)

Student cohorts from 2004-05 to 2008-09, had an average completion rate of 40.8% within 6 years, while the statewide average completion rate was 48.3%. During the same time period, the average gap between Crafton Hills College's completion rate and the statewide average completion rate was 7.5%.

CHC State-wide 60.0% 50.0% Completion/SPAR 40.0% 30.0% 48.1% 49.0% 46 ō 18.2% 42.2% 41.8% 41.2% 40.0% 38.8% .8% 20.0% 10.0% 0.0% Cohort 2004- Cohort 2005- Cohort 2006- Cohort 2007- Cohort 2008-05 (Outcomes 06 (Outcomes 07 (Outcomes 08 (Outcomes 09 (Outcomes by 2009-10) by 2010-11) by 2011-12) by 2012-13) by 2013-14)

Source: California Community Colleges Chancellor's Office – Datamart

EXHIBIT A.15: COMPLETION/STUDENT PROGRESS + ATTAINMENT RATE (SPAR)

Crafton Hills College transfer volume most recently peaked in 2011-12 with 512 total transfers. From 2009-10 to 2013-14, the average proportion of California State University (CSU) transfers was 45.2%, the average proportion of in-state private school transfers was 27.3%, the average proportion of out-ofstate transfers was 19.3% and the average proportion of University of California (UC) transfers was 8.1%. During the same time period, total transfer volume at Crafton Hills College increased by 60 students (14.4%).

EXHIBIT A.16: TRANSFER VOLUME



Source: California Community Colleges Chancellor's Office - Datamart

Internal Scan Data EMPLOYEE DEMOGRAPHICS

From fall 2010 to fall 2014, the average proportion of adjunct faculty at Crafton Hills College was 46.9%, classified/confidential employees accounted for an average of 27% of all employees, the average proportion of full-time faculty was 20.8% and managers accounted for an average of 5.3% of all employees. Full-time faculty increased by 1.4% (1 employee) over the same five fall terms, while adjunct faculty increased by 39.5% (58 employees), classified/confidential employees decreased by 6.5% (-6 employees) and managers increased by 33.3% (5 employees). From fall 2010 to fall 2014, the total number of employees at Crafton Hills College increased by 18% (58 employees). In fall 2014, 25.5% of the College's faculty were full-time employees (70 full-time faculty of 275 total faculty).

EXHIBIT A.17: UNDUPLICATED EMPLOYEES BY TYPE (FALL TERM)



From fall 2010 to fall 2014, employees age 18-34 years old increased by 37.9% (25 employees) and employees age 60-64 years old increased by 45.8% (11 employees). During the same time, employees age 50-54 decreased by 13.2% (-7 employees). In fall 2014, 105 employees were within the 50-59 age group (27.6%) and 56 employees were age 60 or older (14.7%). Employee data by age group suggests that it may be reasonable to expect approximately 42% of the College's employees to retire within the next 15 years.

EXHIBIT A.18: UNDUPLICATED EMPLOYEES BY AGE (START OF FALL TERM)



Internal Scan Data EMPLOYEE DEMOGRAPHICS *(cont.)*

From fall 2010 to fall 2014, the number of White employees at Crafton Hills College increased by 11.7% (25 employees), the number of Hispanic employees increased by 26.7% (16 employees) and the number of Asian employees increased by 45.5% (10 employees). During the same time period, whites accounted for an average of 66.3% of employees, Hispanics accounted for an average of 18.7% of employees and Asians accounted for an average of 7.2% of employees.

EXHIBIT A.19: UNDUPLICATED EMPLOYEES BY RACE/ETHNICITY (FALL TERM)



From fall 2010 to fall 2014, females accounted for an average of 54.6% of Crafton Hills College employees, while males accounted for an average of 45.4% of employees. During the same time, female employees increased by 13.3% (24 persons) while males increased by 23.8% (34 employees).

EXHIBIT A.20: UNDUPLICATED EMPLOYEES BY GENDER (FALL TERM)



External Scan Data

This section includes the supporting data referenced in the *Planning Environment: External Scan Findings* section of the *Educational Master Plan*.

External Scan Data CRAFTON HILLS COLLEGE SERVICE AREA

The Crafton Hills College service area includes 18 cities/ areas: Banning, Beaumont, Grand Terrace, Big Bear, Calimesa, Colton, Crestline, Fontana, Highland, Lake Arrowhead, Loma Linda, Mentone, Redlands, Rialto, Running Springs, Yucaipa, San Bernardino, and Moreno Valley. Regionally, Crafton Hills College serves the counties of Riverside and San Bernardino.

EXHIBIT A.21: CHC SERVICE AREA MAP



External Scan Data POPULATION ESTIMATES + PROJECTIONS

Population data provides an opportunity to understand the make-up of the population Crafton Hills College primarily serves, relative to the region and state. From 2005 to 2015, the service area population grew by 13% (113,686 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 5.13% (50,687 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).

Area	2010	2011	2012	2013	2014	2015	2020	2025
Service Area	931,224	943,457	952,304	967,154	976,089	987,862	1,028,052	1,038,549
Region	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

EXHIBIT A.22: TOTAL POPULATION ESTIMATES + PROJECTIONS

Source: EMSI

External Scan Data POPULATION ESTIMATES + PROJECTIONS (cont.)

In 2015, the proportion of the service area population age 19 and under was 32.49% (303,262 persons). This is more than the regional proportion of 29.8% (1,353,226 persons) and statewide proportion of 26.2% (10,248,339 persons) during the same year.

Between 2015 and 2025, population projections suggest that the number of those in the 19 and under age group will increase by 0.8% within the service area (2,427 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 Crafton Hills College's core age demographic. The 20-24 age group accounted for 8.67% of the service area population in 2015 (85,783 persons). The proportion of the service area population in the 20-24 age group exceeds the regional proportion of 8.3% (376,421 persons) and the state proportion of 8% (3,122,810 persons).

Between 2015 and 2025, population projections suggest that the number of those in the 20-24 age group will decrease by 22.04% (-18,903 persons) in the service area population and 20.23% (-76,153 persons)

EXHIBIT A.23: SERVICE AREA POPULATION BY AGE GROUP



Source: EMSI

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.

From 2015 to 2025, population projections indicate that the number of those in the 50 and over age group will increase by 17.02% (46,496 persons) in 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 A.24: REGIONAL AREA POPULATION BY AGE GROUP



Source: EMSI

External Scan Data POPULATION ESTIMATES + PROJECTIONS (cont.)

The service area is estimated to have seen an increase in the number of Hispanics between 2010 and 2015 by approximately 11.61% (56,550 persons). By 2025, the proportion of Hispanics in the service area is projected to reach 57.26% of the population (594,718 persons) and 52.51% of the 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 whites by approximately 4.45% (-12,741 persons). Whites in the regional population are estimated to have decreased by approximately 2.2% in the same time period (-34,730 persons). Whites 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 whites in the service area is projected to decrease by 5.29% (-14,488 persons) and 3.77% in the region (-57,336 persons). The number of whites in the state is projected to decrease by 0.77% in the same time period (-113,913 persons).

EXHIBIT A.25: SERVICE AREA POPULATION BY RACE/ETHNICITY



Source: EMSI

In 2015, the proportion of African Americans within the service area population was 9.39% (92,937 persons). By 2025 the proportion of African Americans is projected to make up 9.11% of the service area population (94,626 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 5.77% (57,064 persons). By 2025, the proportion of Asians in the service area is projected to be 6.31% (65,527 persons) and 6.99% in the region (335,560 persons), as compared to 14.85% in the state (6,101,547 persons).

EXHIBIT A.26: REGIONAL POPULATION BY RACE/ETHNICITY



Source: EMSI

External Scan Data POPULATION ESTIMATES + PROJECTIONS (cont.)

Between 2010 and 2015, the service area male population proportion stayed steady at 49.1% of the population. In the same time period, the regional male population proportion increased marginally by 0.1%. The statewide male population proportion increased by an even smaller amount of 0.01% during the same time period.

Between 2015 and 2025, the service area male population is projected to increase by 5.83% (28,309 persons) and the female population is projected to increase by 5.78% (29,124 persons). The number of males in the region is projected to increase by 5.39% (121,906 persons) and 5.71% for females (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 A.27: SERVICE AREA POPULATION BY GENDER



Source: EMSI

EXHIBIT A.28: REGIONAL POPULATION BY GENDER



Source: EMSI

2017 Comprehensive Master Plan Appendix / SBCCD / HMC Architects + ALMA Strategies

External Scan Data EDUCATIONAL ATTAINMENT

College service area, regional and state data regarding educational attainment provides 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 23.58% (138,997 persons), which is slightly 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 26.25% (154,715 persons), which is slightly higher than the regional proportion of 25.89% (689,898 persons). The proportion of population with at most a high school diploma or equivalent in the service area and region exceeds the state's proportion of 20.91%.

Almost half of the population in the service area (49.84%) 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 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 11.31%, which is approximately 1.7 times less than that of the state's 19.2%. The proportion of the regional population with a BA/BS degree is slightly higher than the service area proportion at 12.51%. Approximately 10.9% of the state population has a Graduate or Professional degree, while the service area proportion is 6.9% (6.68% regionally).







Source: Census 2010, ACS 5-Year Estimates

The average median income of the population age 25 and over in the service area (\$35,687) 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 \$5,807 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 \$14,573 when compared to those with only some college experience or an AA/AS degree, and increases by \$20,380 when compared to those with only a high school diploma or equivalent.

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 make-up and availability of blue collar jobs in the area.

EXHIBIT A.30: MEDIAN INCOME BY EDUCATIONAL ATTAINMENT (FIVE-YEAR ESTIMATES)



Source: Census 2010, ACS 5-Year Estimates

External Scan Data HOUSEHOLD SIZE, INCOME + POVERTY

The service area average household size (2.96 persons) is fractionally 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 \$1,286.68 less than in the region and \$7,429.68 less than the statewide median household income. Average per capita income in the service area is \$3 more than in the region and \$7,381 less than the statewide per capita income.

The poverty rate of families within the service area (15.27%) is 1.08 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 rate of 12.3%.

EXHIBIT A.31: HOUSEHOLD SIZE, INCOME + POVERTY (FIVE-YEAR ESTIMATE)

Area	Avg. Household Size	Median Household	Per Capita Income	Families Below
		Income		Poverty (%)
Service Area	2.96	\$54,059.32	\$22,525.00	15.27%
Region	2.92	\$55,346.00	\$22,522.00	14.10%
California	2.76	\$61,489.00	\$29,906.00	12.30%

Source: Census 2010, ACS 5-Year Estimates

External Scan Data 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, Redlands Senior High produced the greatest percentage of proficient students, with 77% of students having either met or exceeded the CAASPP standards for English and 45% of students having either met or exceeded the CAASPP standards for math. Citrus Valley High produced the second largest percentage of proficient students, with 69% and 37% of students having met or exceeded the standards for English and math, respectively. The least proficient feeder high school was Orangewood High Continuation, with 12% and 1% of students having either met or exceeded the standards for English and math, respectively.

In the 2014-15 academic year, the average percentage of students from the top 10 feeder higher schools who either met or exceeded the CAASPP standards for English was 51%, which is 7% 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 22%, which is 11% lower than the state average of 33%. It should be noted that although home schooled students constituted the 5th ranked feeder high school in 2014-15, there are no CAASPP scores available for those students.

EXHIBIT A.32: FALL 2014 TOP TEN FEEDER HIGH SCHOOL CAASPP RESULTS (ADMINISTERED IN 11TH GRADE)

School	Percent of Students Who M	let or Exceeded Standards
	English	Math
Yucaipa High	52%	24%
Redlands East Valley High	64%	33%
Citrus Valley High	69%	37%
Redlands Senior High	77%	45%
Other Home School	N/A	N/A
Beaumont Senior High	55%	22%
San Gorgonio High	45%	18%
Green Valley High	26%	2%
Orangewood High Continuation	12%	1%
Rim of the World Senior High	60%	16%
Feeder Average	51%	22%
California	44%	33%

Source: Census 2010, ACS 5-Year Estimates

External Scan Data NEIGHBORING HIGHER EDUCATION INSTITUTIONS

Recognizing other higher educational institutions located within a reasonable distance of the Crafton Hills College 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 47 higher education institutions are within approximately one driving hour away from Crafton Hills College. Of those institutions, 20 are California Community Colleges (excluding San Bernardino Valley College). There are also two vocational colleges, one private vocational college and a private junior college within one driving hour from Crafton Hills College. Among neighboring higher educational institutions, 17 are private four-year colleges and four are California State Universities (Cal Poly Pomona, CSU San Bernardino, CSU Fullerton and CSU Los Angeles). Two of the neighboring higher educational institutions from Crafton Hills College belong to the University of California system (UC Riverside and UC Irvine).

EXHIBIT A.33: NEIGHBORING HIGHER EDUCATION INSTITUTIONS

Institution	Туре	Distance from CHC (mi)	Approx. Drive time from CHC
University of Redlands	Private 4-Year	4.3	9 min
National University	Private 4-Year	12	15 min
Loma Linda University	Private 4-Year	12.3	18 min
Concorde Career College	Vocational College	12.9	17 min
Moreno Valley College	Community College	17.8	28 min
CSU San Bernardino	California State University	20.9	24 min
UC Riverside	University of California	21	25 min
University of Riverside	Private 4-Year	21.8	23 min
Riverside City College	Community College	22	26 min
Mt. San Jacinto College	Community College	22.6	27 min
California Baptist University	Private 4-Year	25.9	29 min
San Joaquin Valley College	Private Junior College	28.9	29 min
La Sierra University	Private 4-Year	31.4	33 min
Chaffey College	Community College	33.9	35 min
Claremont-McKenna College	Private 4-Year	38.6	43 min
Norco College	Community College	39.7	41 min
University of La Verne	Private 4-Year	41.5	43 min
Cal Poly Pomona	California State University	43.8	44 min
San Antonio College	Community College	46.7	49 min
Santiago Canyon College	Community College	51.6	52 min
Asuza Pacific University	Private 4-Year	53	50 min
Citrus College	Community College	53.7	51 min
College of the Desert	Community College	54.7	53 min

Institution	Туре	Distance from	Approx. Drive
		CHC (mi)	time from CHC
Chapman University	Private 4-Year	55.6	59 min
CSU Fullerton	California State University	56.9	1 hr 1 min
Anaheim University	Private 4-Year	57.3	1 hr 5 min
Brownson Technical School	Vocational College	57.7	1 hr
Hope International University	Private 4-Year	58.2	56 min
Rio Honda College	Community College	59.1	59 min
Fullerton College	Community College	60.2	59 min
Southern California University of Health Sciences	Private Vocational College	60.3	1 hr 7 min
Santa Ana College	Community College	60.5	1 hr 3 min
UC Irvine	University of California	61.9	1 hr 13 min
Coastline Community College	Community College	62.6	1 hr 7 min
Whittier College	Private 4-Year	63.6	1 hr 9 min
Concordia University Irvine	Private 4-Year	64.1	1 hr 6 min
CSU Los Angeles	California State University	64.9	1 hr 11 min
Cypress College	Community College	65	1 hr 8 min
Vanguard University of Southern California	Private 4-Year	65	1 hr 4 min
Biola University	Private 4-Year	65.1	1 hr 7 min
Orange Coast College	Community College	65.3	1 hr 8 min
California Institute of Technology	Private 4-Year	67.1	1 hr 14 min
Cerritos College	Community College	68	1 hr 10 min
Golden West College	Community College	68.4	1 hr 11 min
Saddleback College	Community College	70.6	1 hr 9 min
Glendale Community College	Community College	74.3	1 hr 10 min
East Los Angeles College	Community College	75.7	1 hr 12 min

Labor Market Information

This section includes the supporting data referenced in the *Planning Environment: Labor Market Information Findings* section of the *Educational Master Plan*.

Labor Market Information LABOR FORCE, EMPLOYMENT + UNEMPLOYMENT

Labor force is defined as the working age population (16 years or older) that is employed (part or full time) or actively seeking employment. The Crafton Hills College service area labor force is composed of approximately 487,700 residents age 16 or older. Approximately 1,961,800 persons within the regional population age 16 or older made up the regional labor force.

In 2015, the unemployment rate of the service area (6.66%) and region (6.6%) was fractionally higher than the state's estimated unemployment rate of 6.2%.

EXHIBIT A.34: LABOR FORCE, EMPLOYMENT + UNEMPLOYMENT (ANNUAL AVERAGE 2015)

Area	Labor Force	Employment	Unemployment	Unemployment Rate
Service Area	487,800	455,600	32,500	6.66%
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 in the service area were the following: Healthcare and Social Assistance (20.19% or 47,528 jobs), Government (15.16% or 35,679 jobs), Retail Trade (13.68% or 32,193 jobs), Accommodation and Food Services (9.16% or 21,564 jobs), and Transportation and Warehousing (7.5% or 17,659 jobs).

Between 2010 and 2015, the top five employment industries named above grew by the following: Healthcare and Social Assistance (46.44% or 15,072 jobs), Government (0.45% or 160 jobs), Retail Trade (10.95% or 3,176 jobs), Accommodation and Food Services (22.16% or 3,912 jobs), and Transportation and Warehousing (45.35% or 5,510 jobs).

By 2025, the top five employment industries in the service area in terms of people employed are projected to be: Healthcare and Social Assistance (22.61% or 62,111 jobs), Retail Trade (14% or 38,455 jobs), Government (13.3% or 36,547 jobs), Accommodation and Food Services (9.33% or 25,643 jobs), and Transportation and Warehousing (8.4% or 23,091 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 (14,583 jobs or 30.68%), Retail Trade (6,262 jobs or 19.45%), Transportation and Warehousing (5,432 jobs or 30.76%), and Accommodation and Food Services (4,079 jobs or 18.92%).

Description	2010 Jobs	2015 Jobs	2010 - 2015 Change	2025 Jobs	2015 - 2025 Change
Health Care and Social Assistance	32,456	47,528	15,072	62,111	14,583
Retail Trade	29,017	32,193	3,176	38,455	6,262
Government	35,519	35,679	160	36,547	868
Accommodation and Food Services	17,652	21,564	3,912	25,643	4,079
Transportation and Warehousing	12,149	17,659	5,510	23,091	5,432
Administrative and Support and Waste Management and Remediation Services	11,326	13,517	2,191	15,272	1,755
Manufacturing	10,222	12,421	2,199	12,732	311
Construction	7,392	9,839	2,447	9,881	42
Wholesale Trade	6,538	7,752	1,214	9,358	1,606
Other Services (except Public Administration)	10,166	7,101	(3,065)	8,050	949
Professional, Scientific, and Technical Services	5,662	6,464	802	7,902	1,438
Educational Services	4,780	5,324	544	6,744	1,420
Finance and Insurance	4,666	5,153	487	5,824	671
Arts, Entertainment, and Recreation	1,751	2,337	586	2,650	313
Management of Companies and Enterprises	2,622	2,741	119	2,590	(151)
Real Estate and Rental and Leasing	2,279	2,420	141	2,435	15
Utilities	2,389	2,240	(149)	2,290	50
Information	1,631	1,371	(260)	1,349	(22)
Unclassified Industry	331	874	543	984	110
Crop and Animal Production	1,231	1,034	(197)	633	(401)
Mining, Quarrying, and Oil and Gas Extraction	106	197	91	223	26
Total	199,884	235,407	35,523	274,763	39,356

EXHIBIT A.35: SERVICE AREA EMPLOYMENT PROJECTIONS BY INDUSTRY (2010-2025)

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 (21% or 16,430 jobs). Manufacturing dropped from the 5th ranked employment industry in the region to the 6th ranked employment industry. By 2025, the top five employment industries 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 and 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%)
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
Total	1,145,149	1,327,444	182,294	1,534,418	206,973

EXHIBIT A.36: REGIONAL EMPLOYMENT PROJECTIONS BY INDUSTRY (2010-2025)

There are projected to be approximately 8,026 average annual job 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, 5,020 (62.54%) have a typical entry level education of a high school diploma/ equivalent or less, 123 (1.54%) have a typical entry level education of some college, 765 (9.54%) have a typical entry level education of a postsecondary non-degree award, 451 (5.62%) have a typical entry level education of an Associate's degree, 1,208 (15.05%) have a typical entry level education of a Bachelor's degree, and 459 (5.72%) 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 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 in obtaining that particular job.



EXHIBIT A.37: SERVICE AREA AVERAGE ANNUAL JOB OPENINGS BY TYPICAL ENTRY LEVEL EDUCATION (2015-2025)

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

sales representatives in wholesale and manufacturing, secretaries/administrative assistants, and accountants/ auditors.

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

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Retail Salespersons	502	7,916	9,852	1,936	24%	\$12.49
Laborers and Freight, Stock, and Material Movers, Hand	469	7,866	9,675	1,809	23%	\$13.46
Registered Nurses	281	6,351	7,762	1,411	22%	\$42.89
Stock Clerks and Order Fillers	245	5,050	5,828	778	15%	\$12.84
Heavy and Tractor-Trailer Truck Drivers	219	5,899	7,026	1,127	19%	\$23.17
Office Clerks, General	165	5,171	5,662	491	9%	\$14.59
Nursing Assistants	157	2,818	3,741	923	33%	\$13.57
Customer Service Representatives	139	2,683	3,256	573	21%	\$17.63

EXHIBIT A.38: TOP 30 SERVICE AREA AVERAGE ANNUAL JOB OPENINGS BY OCCUPATION (2015-2025)

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Elementary School Teachers, Except Special Education	126	3,699	4,096	397	11%	\$35.22
General and Operations Managers	125	3,439	3,987	548	16%	\$51.27
Home Health Aides	125	1,131	2,047	916	81%	\$13.19
First-Line Supervisors of Office and Admin. Support Workers	119	2,660	3,153	493	19%	\$25.42
Janitors/Cleaners, Except Maids and Housekeeping Cleaners	117	3,598	4,040	442	12%	\$13.57
Postsecondary Teachers	108	2,874	3,461	587	20%	\$41.67
First-Line Supervisors of Retail Sales Workers	107	2,354	2,849	495	21%	\$20.84
Licensed Practical and Licensed Vocational Nurses	104	1,788	2,314	526	29%	\$23.15
Packers and Packagers, Hand	102	2,003	2,406	403	20%	\$12.08
First-Line Supervisors of Food Prep. and Serving Workers	99	1,786	2,200	414	23%	\$14.84
Teacher Assistants	94	3,027	3,248	221	7%	\$14.37
Secretaries & Admin. Assts, Except Legal, Medical, & Executive	93	3,292	3,790	498	15%	\$17.91
Medical Assistants	92	1,956	2,446	490	25%	\$14.11
Receptionists and Information Clerks	92	1,831	2,198	367	20%	\$13.52
Industrial Truck and Tractor Operators	85	1,888	2,234	346	18%	\$15.94
Automotive Service Technicians and Mechanics	75	1,672	1,957	285	17%	\$19.81
Landscaping and Grounds keeping Workers	72	1,885	2,099	214	11%	\$12.36
Maintenance and Repair Workers, General	71	1,921	2,225	304	16%	\$18.74
Sales Reps, Wholesale & Manuf., Except Tech./Sci. Products	70	1,550	1,904	354	23%	\$31.60
Shipping, Receiving, and Traffic Clerks	69	1,560	1,795	235	15%	\$15.35
Accountants and Auditors	67	1,305	1,545	240	18%	\$34.23
Medical Secretaries	66	1,492	1,941	449	30%	\$15.73

Of the projected 8,026 average annual job openings between 2015 and 2025 in the service area. approximately 3,409 openings belong to occupations that are related to programs offered by Crafton Hills College. 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, Crafton Hills College's biology program often feeds into several nursing programs in the area, thus, nursing occupations are considered to be related to Crafton Hills College's biology program). None of the 3,409 openings have a typical entry level education of less than a high school diploma/equivalent. Approximately 1,260 jobs (36.97%) have a typical entry level education of a high school diploma or equivalent, 120 (3.52%) have a typical entry level education of some college, 308 (9.03%) have a typical entry level education of a postsecondary nondegree award, 376 (11.04%) have a typical entry level education of an Associate's degree, 1,022 (29.99%) have a typical entry level education of a Bachelor's degree, 159 (4.66%) have a typical entry level education of a Master's degree and 163 (4.79%) have a typical entry level education of a Doctoral or professional degree.



EXHIBIT A.39: SERVICE AREA ANNUAL JOB OPENINGS RELATED TO CHC PROGRAMS BY TYPICAL ENTRY LEVEL EDUCATION (2015-2025)

Crafton Hills College programs with the highest number of related average annual openings in the service area were the following: Business Administration (30.79% or 1,050 openings), Biology (19.92% or 679 openings), Child Development and Education (16.79% or 572 openings), Accounting (10.44% or 356 openings), and Psychology (5.98% or 204 openings).

EXHIBIT A.40: SERVICE AREA AVERAGE ANNUAL JOB OPENINGS BY PROGRAM (2015-2025)

Program	Annual Openings	Avg. Hourly Wage	
	%	#	
Business Administration	30.79%	1,050	\$31.90
Biology	19.92%	679	\$52.77
Childhood Development/Education	16.79%	572	\$29.39
Accounting	10.44%	356	\$27.02
Psychology	5.98%	204	\$32.20
Communication Studies	5.20%	177	\$25.99
Comp. Info. Tech./Comp. Science	3.08%	105	\$40.39
Kinesiology	1.28%	44	\$24.17
Chemistry	1.10%	38	\$33.81
Emergency Medical Services	0.88%	30	\$18.78
Engineering	0.77%	26	\$41.42
Geology	0.57%	20	\$31.94
Radiology	0.44%	15	\$30.33
Religious Studies	0.40%	14	\$25.07
Philosophy	0.38%	13	\$57.03

Program	Annual Openings	Avg. Hourly Wage	
	%	#	
History	0.32%	11	\$21.91
Respiratory Care	0.32%	11	\$30.42
Art	0.29%	10	\$27.20
Theatre Arts	0.20%	7	\$29.29
Fire Technology	0.20%	7	\$28.34
Mathematics	0.19%	7	\$36.57
Music	0.16%	6	\$29.24
Modern Languages	0.14%	5	\$19.73
English	0.08%	3	\$30.33
Economics	0.05%	2	\$33.70
Geography	0.04%	1	\$27.90
Anthropology	-	-	\$25.48
Dance	-	-	\$14.22
Physics	_	-	\$46.04
Sociology	_	_	\$35.64

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 be related to the following programs: Biology (31.42% or 675 openings), Child Development and Education (23.13% or 497 openings), Business Administration (14.42% or 310 openings), Psychology (6.95% or 149 openings), and Accounting (6.66% or 143 openings).

EXHIBIT A.41: SERVICE AREA AVERAGE ANNUAL JOB OPENINGS BY PROGRAM, POSTSECONDARY NON-DEGREE AWARD OR HIGHER (2015-2025)

Program	Annual Openings	Avg. Hourly Wage	
	%	#	
Biology	31.42%	675	\$54.39
Child Development and Education	23.13%	497	\$31.07
Business Administration	14.42%	310	\$41.92
Psychology	6.95%	149	\$33.85
Accounting	6.66%	143	\$34.90
Comp. Info. Tech./Comp. Science	4.89%	105	\$41.90
Chemistry	1.75%	38	\$33.81
Kinesiology	1.35%	29	\$28.18
Communication Studies	1.33%	29	\$29.49
Emergency Medical Services	1.29%	28	\$15.73
Engineering	1.21%	26	\$41.42
Geology	0.91%	20	\$34.43
Radiology	0.70%	15	\$30.33
Religious Studies	0.63%	14	\$25.07
Philosophy	0.60%	13	\$57.03

Program	Annual Openings	Avg. Hourly Wage	
	%	#	
History	0.51%	11	\$21.91
Respiratory Care	0.50%	11	\$30.42
Theatre Arts	0.32%	7	\$33.52
Fire Technology	0.31%	7	\$28.34
Mathematics	0.31%	7	\$36.57
Art	0.29%	6	\$29.35
Modern Languages	0.22%	5	\$19.73
English	0.13%	3	\$30.33
Music	0.09%	2	\$25.67
Economics	0.07%	2	\$33.70
Anthropology	-	-	\$25.48
Geography	-	-	\$27.26
Physics	-	-	\$46.04
Sociology	_	-	\$35.64

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%) typically require an 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 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 A.42: REGIONAL AVERAGE ANNUAL JOB OPENINGS BY ENTRY LEVEL EDUCATION (2015-2025)

Of the occupations with the most expected annual openings within the region by the year 2025, Crafton Hills College may be in a position to provide instruction that would supply workers for the following jobs: registered nurses, nursing assistants, licensed practical/ vocational nurses, home health aides, medical secretaries, elementary & postsecondary teachers, teacher assistants, customer service representatives, general and operations managers, first-line supervisors of office/administrative support/retail sales/food prep. workers, sales representatives in wholesale and manufacturing, secretaries/administrative assistants, and accountants/auditors. For a full listing of average annual job openings by occupation in the region please refer to the *Appendix*.

EXHIBIT A.43: TOP 30 REGIONAL AVERAGE ANNUAL JOB OPENINGS BY OCCUPATION (2015-2025)

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	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
General and Operations Managers	716	20,281	23,346	3,065	15%	\$51.21

Description		2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
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 Preparation & 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		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

Of the 44,181 average annual job openings in the region, approximately 17,538 openings belong to occupations related to programs offered by Crafton Hills College. None of the 17,538 openings have a typical entry level education of less than a high school degree/equivalent. Approximately 7,013 jobs (39.99%) have a typical entry level education of a high school diploma or equivalent, 549 (3.13%) have a typical entry level education of some college, 1,319 (7.52%) have a typical entry level education of a postsecondary nondegree award, 1,592 (9.08%) have a typical entry level education of an Associate's degree, 5,715 (32.59%) have a typical entry level education of a Bachelor's degree, 641 (3.66%) have a typical entry level education of a Master's degree and 710 (4.05%) have a typical entry level education of a Doctoral or professional degree.



EXHIBIT A.44: REGIONAL AVERAGE ANNUAL JOB OPENINGS RELATED TO OFFERED PROGRAMS BY ENTRY LEVEL EDUCATION (2015-2025)

The programs with the highest number of related average annual job openings in the region were the following: Business Administration (34.74% or 6,093 openings), Biology (14.46% or 2,536 openings), Child Development and Education (14.42% or 2,529 openings), Accounting (10.65% or 1,869 openings), and Communication Studies (6.75% or 1,185 openings).

EXHIBIT A.45: REGIONAL AVERAGE ANNUAL JOB OPENINGS BY PROGRAM (2015-2025)

Program	Annual Openings		Avg. Hourly Wage
	%	#	
Business Administration	34.74%	6,093	\$33.23
Biology	14.46%	2,536	\$50.83
Child Development & Education	14.42%	2,529	\$29.14
Accounting	10.65%	1,869	\$28.42
Communication Studies	6.75%	1,185	\$26.99
Psychology	4.89%	857	\$31.39
Comp. Info. Tech./Comp. Science	3.31%	580	\$39.94
Kinesiology	1.58%	277	\$23.67
Engineering	1.25%	220	\$39.39
Emergency Medical Services	1.20%	211	\$24.05
Chemistry	1.16%	203	\$33.90
History	0.87%	153	\$20.55
Fire Technology	0.86%	152	\$37.47
Geology	0.67%	118	\$34.58
Art	0.55%	96	\$25.60
Philosophy	0.52%	92	\$66.33

Program	Annual Openings	Avg. Hourly Wage	
	%	#	
Radiologic Technology	0.34%	59	\$30.39
Geography	0.26%	46	\$27.94
Respiratory Care	0.26%	45	\$30.65
Mathematics	0.25%	43	\$32.07
Religious Studies	0.22%	39	\$24.11
Theatre Arts	0.22%	38	\$27.58
Modern Languages	0.15%	27	\$20.28
English	0.12%	21	\$28.79
Music	0.09%	16	\$25.99
Economics	0.05%	9	\$34.11
Sociology	0.05%	9	\$27.81
Physics	0.05%	9	\$47.06
Dance	0.02%	4	\$22.09
Anthropology	0.02%	4	\$25.92
Political Science	-	-	\$32.08

Between 2015 and 2025, regional job openings with a typical entry level education of at least a postsecondary non-degree award or higher are expected to primarily relate to the following programs: Biology (23.86% or 2,511 openings), Child Development and Education (21.19% or 2,230 openings), Business Administration (18.71% or 1,969 openings), Accounting (7.65% or 805 openings), and Psychology (5.9% or 621 openings).

EXHIBIT A.46: REGIONAL AVERAGE ANNUAL JOB OPENINGS BY PROGRAM, POSTSECONDARY NON-DEGREE AWARD OR HIGHER (2015-2025)

Program	Annual Openings	Avg. Hourly Wage	
	%	#	
Biology	23.86%	2,511	\$52.10
Child Development & Education	21.19%	2,230	\$30.70
Business Administration	18.71%	1,969	\$42.83
Accounting	7.65%	805	\$36.61
Psychology	5.90%	621	\$34.10
Comp. Info. Tech./Comp. Science	5.47%	576	\$41.23
Engineering	2.09%	220	\$39.39
Kinesiology	1.99%	209	\$26.06
Chemistry	1.93%	203	\$33.90
Emergency Medical Services	1.68%	176	\$23.83
Fire Technology	1.42%	150	\$38.95
Communication Studies	1.41%	148	\$29.74
Geology	1.08%	114	\$37.08
Philosophy	0.87%	92	\$66.33
History	0.87%	91	\$21.98

Program	Annual Openings		Avg. Hourly Wage
	%	#	
Art	0.63%	66	\$28.29
Radiologic Technology	0.56%	59	\$30.39
Respiratory Care	0.43%	45	\$30.65
Mathematics	0.41%	43	\$32.07
Religious Studies	0.37%	39	\$24.11
Geography	0.36%	38	\$28.01
Theatre Arts	0.32%	33	\$30.78
Modern Languages	0.26%	27	\$20.28
English	0.20%	21	\$28.79
Economics	0.09%	9	\$34.11
Sociology	0.09%	9	\$27.81
Physics	0.09%	9	\$47.06
Music	0.06%	6	\$25.32
Anthropology	0.03%	4	\$25.92
Political Science		-	\$32.08

Qualitative Effectiveness Indicators

Quantitative Effectiveness Indicators (QEIs) assess progress Crafton Hills College is making in its efforts to meet the nine Strategic Directions. The QEIs are listed below with data available through 2014-2015. Complete data are also updated and maintained with more recent years through Crafton Hills College's Office of Institutional Effectiveness, Research, and Planning website at http://www.craftonhills.edu/research.

Qualitative Effectiveness Indicators COURSE SUCCESS RATE

The Course Success Rate indicator assesses how well Crafton Hills College is meeting its Strategic Directions to Promote Student Success and Develop Teaching and Learning Practices as measured by the percentage of students earning a grade on record of A, B, C, or CR/P in a credit course.



Qualitative Effectiveness Indicators ENGLISH, READING, + MATH THROUGHPUT RATES

The English, Reading, and Math Throughput Rates indicator assesses how well Crafton Hills College is meeting its Strategic Direction to Promote Student Success as measured by the percentage of students successfully completing the basic skills and developmental course pathway to transfer-level math or English.





Qualitative Effectiveness Indicators RETENTION (PERSISTENCE) RATE

The Retention (Persistence) Rate indicator assesses how well Crafton Hills College is meeting its Strategic Direction to Promote Student Success as measured by the percentage of students earning a grade on record in the Spring term after earning a grade on record in the preceding Fall term.



Qualitative Effectiveness Indicators DEGREES + CERTIFICATES

The Degrees & Certificates indicator assesses how well Crafton Hills College is meeting its Strategic Direction to Promote Student Success as measured by the number of awards conferred annually.



Qualitative Effectiveness Indicators TRANSFER RATE

The Transfer Rate indicator assesses how well Crafton Hills College is meeting its Strategic Direction to Promote Student Success as measured by the percentage students who transfer within a cohort of first-time college students who earn 12 or more units and attempted transfer-level math or English within six years of first enrolling at Crafton Hills College.



Qualitative Effectiveness Indicators OUTCOMES ASSESSMENT

The Outcomes Assessment indicator assess how well Crafton Hills College is meeting its Strategic Direction to Develop Teaching & Learning Practices as measured by the percentage of students who are meeting the Institutional Learning Outcomes.



Qualitative Effectiveness Indicators DEMOGRAPHIC DIVERSITY

The Demographics Diversity indicator assesses how well Crafton Hills College is meeting its Strategic Directions to Build Campus Community, Expand Access, and Enhance Value to the Surrounding Community as measured by the percentage of students enrolling in the Fall term by ethnicity, gender, and age.





EXHIBIT A.54

EXHIBIT A.55

Qualitative Effectiveness Indicators HEADCOUNT

The Headcount indicator assesses how well Crafton Hills College is meeting its Strategic Direction to Expand Access as measured by the number of students enrolling in the Fall term.



Qualitative Effectiveness Indicators FULL-TIME EQUIVALENT STUDENTS (FTES)

The FTES indicator assess how well Crafton Hills College is meeting its Strategic Direction to Expand Access as measured by the number of annual credit FTES.



Qualitative Effectiveness Indicators CAPTURE RATE

The Capture Rate indicator assesses how well Crafton Hills College is meeting its Strategic Directions to Expand Access and Enhance Value to the Surrounding Community as measured by the percentage of community college students living in cities within Crafton Hills College's service area who choose to enroll at Crafton Hills College.



Qualitative Effectiveness Indicators FILL RATE

The Fill Rate indicator assesses how well Crafton Hills College is meeting its Strategic Direction to Optimize Resources as measured by the proportion of seats filled at census to the total number of seats available.



Qualitative Effectiveness Indicators JOB PLACEMENT RATE

The Job Placement Rate indicator assesses how well Crafton Hills College is meeting its Strategic Direction to Enhance Value to the Surrounding Community as measured by the percentage of students who are employed after earning a grade on record in an occupational course.


Qualitative Effectiveness Indicators NUMBER OF EMPLOYEES

The Number of Employees indicator assesses how well Crafton Hills College is meeting its Strategic Direction to Develop Programs and Services as measured by the number of employees at Crafton Hills College each Fall term by employee type.



Qualitative Effectiveness Indicators STUDENT SATISFACTION

The Student Satisfaction indicator assesses how well Crafton Hills College is meeting its Strategic Directions to Promote Student Success, Build Campus Community, Develop Teaching and Learning Practices, Develop Programs and Services, and Optimize Resources as measured by students' average level of agreement and satisfaction on a four-level scale on the Crafton Hills College Student Satisfaction Survey.



Qualitative Effectiveness Indicators EMPLOYEE SATISFACTION

The Employee Satisfaction indicator assesses how well Crafton Hills College is meeting its Strategic Directions to Build Campus Community, Develop Teaching and Learning Practices, Promote Effective Decision Making, Support Employee Growth, and Optimize Resources as measured by employees' average level of satisfaction on a four-level scale on the Crafton Hills College Employee Campus Climate Survey.



Qualitative Effectiveness Indicators COMMITTEE SELF-EVALUATION

The Committee Self-Evaluation indicator assesses how well Crafton Hills College is meeting its Strategic Directions to Promote Effective Decision Making and Support Employee Growth as measured on the Crafton Hills College Annual Committee Self-Evaluation by employees' average level of agreement on a five-level scale of how often Crafton Hills College's committees are collaborative, transparent, evidence-based, effective, and efficient.



Instructional Program-Level Data

2017 Comprehensive Master Plan Appendix / SBCCD / HMC Architects + ALMA Strategies

DEPARTMENT	DISCIPLINE	ACADEMIC	TOTAL	COMPLETION	SUCCESS	PERCENT	FTES	WSCH	FTEF	WSCH /
		YEAR	AWARDS	RATE	RATE	DISTANCE				FTEF
						ED				
		20102011		93.56	86.69	12.5	40.40	1,212.09	1.40	865.78
		20112012		96.96	90.87	0	17.74	532.11	0.70	760.16
	Allied Health (AH)	20122013		96.83	89.59	0	16.41	492.34	0.70	703.35
		20132014		94.67	89.97	25.0	27.37	821.17	1.30	631.67
		20142015		92.49	83.05	45.6	36.97	1,108.97	2.10	528.08
		20102011	18	100	100	0	93.53	2,805.89	6.93	404.89
Allied Health		20112012	19	100	100	0	47.91	1,437.15	6.93	207.38
Services	Radiologic Technology (RADIOL)	20122013	11	100	100	0	64.55	1,936.60	6.93	279.45
Oel VICes		20132014	16	100	100	0	63.48	1,904.39	6.89	276.48
		20142015	17	100	100	0	62.27	1,868.21	6.89	271.15
		20102011	62	94.02	91.73	0	155.33	4,659.93	14.06	331.43
		20112012	30	97.38	93.33	0	168.14	5,044.30	15.55	324.39
	Respiratory (RESP)	20122013	28	96.02	93.36	0	150.60	4,518.12	13.70	329.86
		20132014	34	95.45	93.56	0	158.04	4,741.15	15.03	315.36
		20142015	27	96.02	91.88	0	132.74	3,982.19	14.71	270.69
		20102011	39	86.81	67.96	0	181.33	5,439.94	6.80	799.99
		20112012	50	83.06	60.78	0	175.90	5,277.09	6.48	814.37
	Anatomy (ANAT)	20122013	50	89.1	60.33	0	159.31	4,779.40	6.00	796.57
		20132014	50	84.47	56.68	0	193.25	5,797.63	8.41	689.54
Biological and		20142015	50	86.38	61.48	0	224.39	6,731.66	9.05	743.50
Physical Sciences		20102011	1	70.85	52.66	0	33.20	996.00	2.20	452.73
		20112012		84.92	58.66	0	18.00	540.00	1.38	391.30
	Astronomy (ASTRON)	20122013		75.48	62.58	0	15.50	465.00	0.68	683.82
		20132014		82.33	61.45	0	25.18	755.31	1.37	550.52
		20142015	1	82.84	65.69	0	19.90	597.00	1.23	485.76

DEPARTMENT	DISCIPLINE	ACADEMIC YEAR	TOTAL AWARDS	COMPLETION RATE	SUCCESS RATE	PERCENT DISTANCE	FTES	WSCH	FTEF	WSCH / FTEF
						ED				
		20102011		89.17	71.6	0	139.18	4,175.34	5.34	781.90
		20112012		89.49	74.64	0	114.35	3,430.60	4.52	758.98
	Biology (BIOL)	20122013	1	92.49	77.11	0	112.51	3,375.20	4.52	746.73
		20132014	7	94.95	83.18	0	139.53	4,185.92	5.34	783.88
		20142015	4	92.42	74.9	0	155.39	4,661.77	6.32	737.86
		20102011	1	89.59	81.75	6.1	173.63	5,208.75	8.00	651.09
		20112012		93.42	87.86	0	136.47	4,093.99	7.12	575.00
	Chemistry (CHEM)	20122013	2	94.87	85.13	0	131.25	3,937.40	6.44	611.40
		20132014	4	88.96	74.07	6.1	173.78	5,213.51	9.37	556.52
		20142015	9	87.98	73.07	14.0	222.33	6,669.86	12.89	517.32
	Engineering (ENGR)	20122013		80.77	69.23	0	4.09	122.72	0.24	511.33
	Engineering (ENGR)	20102011		85.71	61.9	0	16.70	501.00	0.88	569.32
Biological and		20112012	1	85.41	66.49	0	18.75	562.40	0.88	639.09
Physical Sciences	Geography (GEOG)	20122013	2	89.81	72.82	0	20.87	626.20	0.88	711.59
		20132014		86.36	67.42	0	13.80	414.00	0.89	467.27
		20142015	1	87.43	66.47	0	17.05	511.60	1.09	471.09
		20102011	1	79.68	70.12	0	34.46	1,033.93	1.93	535.72
		20112012	2	86.94	73.88	0	31.97	958.97	1.82	526.91
	Geology (GEOL)	20122013	1	86.22	71.56	0	32.82	984.63	1.96	502.36
		20132014	1	92.35	70.49	0	24.74	742.26	1.88	395.66
		20142015	3	90.14	73.71	0	28.64	859.25	2.39	359.82
		20102011		83.01	76.04	0	99.91	2,997.40	4.86	616.75
		20112012		79.77	71.39	0	97.69	2,930.60	4.86	603.00
	Microbiology (MICRO)	20122013		75.08	62.46	0	79.53	2,385.80	4.08	584.75
		20132014		71.68	58.96	0	88.96	2,668.91	4.96	538.63
		20142015		74.29	60.19	0	81.45	2,443.63	5.35	457.01

DEPARTMENT	DISCIPLINE	ACADEMIC YEAR	TOTAL AWARDS	COMPLETION RATE	SUCCESS RATE	PERCENT DISTANCE	FTES	WSCH	FTEF	WSCH / FTEF
		20102011		88.85	71 15		26.60	798.00	0.80	997 50
		20102011		91.72	71.13	0	15 79	130.00	0.00	1 184 00
	Oceanography (OCEAN)	20122013		92.5	66.88	0	17 19	515.66	0.40	859.43
		20132014		83.5	56.5	0	20.82	624.60	0.80	780.75
Biological and		20142015		88.64	65.91	0	13.32	399.51	1.00	399.51
Physical Sciences		20102011	6	80.45	62.41	0	52.56	1,576.70	1.88	838.67
		20112012	2	79.92	66.53	0	53.41	1,602.17	2.34	684.69
	Physics (PHYSIC)	20122013		85.6	73.25	0	52.47	1,574.20	2.66	591.80
		20132014	7	82.96	68.16	0	45.22	1,356.60	3.32	409.11
		20142015	11	88.63	77.59	0	58.82	1,764.71	5.12	344.87
		20102011	6	81.68	66.03	0	35.07	1,052.00	1.89	556.61
		20112012	1	84.92	72.62	0	34.93	1,048.00	1.62	646.91
	Accounting (ACCT)	20122013	1	85.43	69.29	0	33.66	1,009.71	1.97	513.59
		20132014	1	91.19	81.61	0	34.67	1,040.03	1.95	534.17
		20142015	1	81.21	59.73	0	40.04	1,201.14	3.28	366.20
		20102011	22	88.74	71.56	13.0	54.13	1,623.83	2.27	715.34
		20112012	25	91.49	66.92	0	53.87	1,616.00	1.80	897.78
Business	Business Administration (BUSAD)	20122013	55	93.39	72.11	0	50.43	1,512.80	1.60	945.50
Economics and IT		20132014	43	92.12	68.29	0	54.61	1,638.40	2.00	819.20
		20142015	57	92.73	76.97	0	51.79	1,553.69	2.80	554.89
		20102011	22	85.9	67.65	8.5	130.81	3,924.30	9.81	400.03
		20112012	14	86.81	67.56	20.0	128.99	3,869.80	8.06	480.12
	Computer Information Systems (CIS)	20122013	20	88.31	64.17	10.0	114.65	3,439.49	7.95	432.64
		20132014	17	91.76	66.76	11.6	107.13	3,213.90	8.18	392.71
		20142015	20	85.34	64.87	14.6	96.33	2,889.76	8.17	353.79
	Computer Science (CSCI)	20132014		89.8	75.51	0	10.45	313.60	1.03	304.76
		20142015		82.03	73.44	14.3	24.78	743.38	2.26	329.22

DEPARTMENT	DISCIPLINE	ACADEMIC	TOTAL	COMPLETION	SUCCESS	PERCENT	FTES	WSCH	FTEF	WSCH /
		YEAR	AWARDS	RATE	RATE	DISTANCE				FTEF
						ED				
		20102011	2	80.08	60.56	10.0	50.33	1,509.89	2.00	754.94
		20112012	2	83.23	61.13	0	66.44	1,993.11	2.00	996.56
	Economics (ECON)	20122013	8	87.54	64.49	0	63.82	1,914.49	2.00	957.24
		20132014	1	89.46	71.25	0	55.37	1,661.21	2.20	755.09
Business,		20142015	1	91.33	76.61	13.3	49.94	1,498.29	2.80	535.10
Economics, and IT		20102011		90.8	74.71	0	9.00	270.00	0.40	675.00
		20112012		88.64	70.45	0	4.50	135.00	0.20	675.00
	Marketing (MARKET)	20122013		90	78	0	5.00	150.00	0.20	750.00
		20132014		95.35	81.4	0	4.30	129.00	0.20	645.00
		20142015		86.11	77.78	0	3.50	105.00	0.20	525.00
		20102011		91.48	78.36	0	19.99	599.71	1.35	444.23
		20112012		93.66	77.43	0	26.31	789.31	1.84	428.98
College Life	College Life (CHC)	20122013		88.97	73.18	0	19.27	578.00	1.52	381.52
		20132014		93.3	72.07	37.5	9.31	279.31	0.88	316.68
		20142015		92.26	71.43	25.0	29.28	878.37	2.14	410.84
		20102011		93.25	79.22	0	52.00	1,560.00	2.97	525.25
		20112012	9	90.94	80.94	0	43.60	1,308.00	2.70	484.44
	American Sign Language (ASL)	20122013	20	94.75	77.55	0	45.47	1,364.00	2.70	505.00
		20132014	8	94.65	74.61	0	59.30	1,779.09	4.01	443.88
		20142015	24	90.23	70.51	0	67.57	2,027.09	5.61	361.53
Communication		20122013		96.88	90.63	0	5.55	166.40	0.33	504.24
and Language	Arabic (ARABIC)	20132014		89.61	67.53	0	12.97	389.12	1.33	292.79
and Language		20142015		88.24	82.35	0	2.95	88.40	0.33	265.47
		20102011	4	89.23	78.38	16.7	123.94	3,718.14	7.80	476.68
		20112012		90.62	81.54	18.9	103.26	3,097.80	6.60	469.36
	Communication Studies (COMMST)	20122013	5	90.14	78.05	16.7	99.89	2,996.57	6.27	477.92
		20132014	16	92.4	81.15	0	99.16	2,974.80	6.80	437.47
		20142015	11	92.6	82.52	11.1	130.14	3,904.09	8.67	450.45

DEPARTMENT	DISCIPLINE	ACADEMIC YEAR	TOTAL AWARDS	COMPLETION RATE	SUCCESS RATE	PERCENT DISTANCE ED	FTES	WSCH	FTEF	WSCH / FTEF
		20102011		83.12	75.32	0	13.33	400.00	0.99	404.04
	French (FRENCH)	20112012		93.18	59.09	0	7.63	228.80	0.66	346.67
		20122013		90.48	66.67	0	7.11	213.20	0.66	323.03
		20102011		81.69	67.61	0	24.50	735.00	1.32	556.82
		20112012		85.47	66.67	0	20.63	618.80	0.99	625.05
	Japanese (JAPN)	20122013		90.91	72.73	0	18.89	566.80	0.99	572.53
		20132014	5	85.16	70.33	0	30.32	909.60	2.00	455.26
		20142015	1	89.12	68.39	0	33.07	992.00	3.00	331.00
Communication		20102011		90	43.33	100.0	3.00	90.00	0.00	
and Language		20112012		100	78.57	100.0	1.70	51.00	0.00	
	Journalism (JOUR)	20122013		97.22	63.89	100.0	3.60	108.00	0.20	540.00
		20132014		85.37	46.34	0	4.09	122.59	0.20	612.94
		20142015		84.21	63.16	0	1.74	52.11	0.00	
		20102011	5	85.02	70.88	0	100.41	3,012.36	6.75	446.28
		20112012	2	82.93	75.23	0	91.45	2,743.60	5.43	505.27
	Spanish (SPAN)	20122013	5	86.44	72.69	0	85.61	2,568.40	5.44	472.31
		20132014	10	87.77	73.37	0	86.67	2,600.00	5.99	433.77
		20142015	10	85.57	71.48	0	99.59	2,987.60	7.33	407.81
		20102011	3	86.37	71.27	5.5	503.69	15,110.83	37.87	399.02
		20112012	5	88.31	74.52	4.9	477.08	14,312.47	36.39	393.31
	English (ENGL)	20122013	7	89.81	74.74	3.9	447.30	13,418.92	36.59	366.73
		20132014	12	90.01	71.67	5.1	565.75	16,972.46	47.37	358.31
English and		20142015	16	89.88	71.12	10.4	607.29	18,218.66	51.56	353.38
Reading		20102011		85.84	72.28	0	104.34	3,130.05	6.64	471.39
		20112012		93.27	79.37	0	93.39	2,801.61	4.96	564.84
	Reading (READ)	20122013		94.78	72.43	0	92.99	2,789.56	4.96	562.41
		20132014		90.36	68.7	0	77.09	2,312.80	5.47	422.58
		20142015		91.76	70.76	0	81.57	2,447.09	5.81	421.40

DEPARTMENT	DISCIPLINE	ACADEMIC	TOTAL	COMPLETION	SUCCESS	PERCENT	FTES	WSCH	FTEF	WSCH /
		YEAR	AWARDS	RATE	RATE	DISTANCE				FTEF
						ED				
		20102011	6	88.82	72.87	6.9	131.70	3,950.91	6.59	599.53
		20112012	7	88.57	76	16.7	97.21	2,916.23	5.00	583.25
	Art (ART)	20122013	3	91.14	78.38	17.4	90.64	2,719.11	5.00	543.82
		20132014	11	91.98	77.1	19.4	105.17	3,155.20	6.28	502.74
		20142015	15	89.63	79.4	11.9	103.64	3,109.29	7.13	435.90
		20132014		98.18	90.91	0	5.92	177.49	0.35	502.79
		20142015		94.32	81.82	0	9.86	295.67	0.42	703.99
		20102011	2	90.74	74.51	13.6	125.90	3,776.95	6.79	556.25
Fine Arts		20112012	1	90.04	77.4	10.5	111.70	3,350.89	6.05	553.87
	Music (MUSIC)	20122013	3	92.62	79.93	3.1	101.87	3,056.04	5.49	556.66
		20132014	4	93.46	81.19	9.8	102.58	3,077.52	6.58	467.35
		20142015	1	91.48	77.02	14.3	102.41	3,072.24	7.39	415.95
	-	20102011	1	89.24	68.46	0	76.72	2,301.60	4.27	539.02
		20112012	5	91.49	74.96	0	72.54	2,176.12	3.94	552.31
	Theatre Arts (THART)	20122013	3	93.9	68.8	0	72.43	2,172.83	4.46	487.18
		20132014	7	93.24	76.6	0	57.59	1,727.79	4.51	383.19
		20142015	3	94	80.14	0	58.73	1,761.86	4.42	398.34
		20102011		94.31	73.14	0	139.02	4,170.63	4.60	906.66
		20112012		95.26	79.01	0	136.58	4,097.37	4.00	1,024.34
	Health (HEALTH)	20122013		95.13	78.41	0	106.55	3,196.57	4.00	799.14
		20132014		95.83	78.76	20.8	109.45	3,283.49	4.80	684.06
Hoalth and		20142015		95.41	78.04	28.1	112.22	3,366.69	6.00	561.11
Kiposiology	Kinesiology – Dance (KIN/D	20142015		91.84	83.67	0	4.95	148.40	0.57	259.44
Rifesiology		20102011		89.53	76.93	0	211.67	6,349.96	8.56	741.82
	Kinosiology - Fitness (KINI/E)	20112012		90.9	83.43	0	173.74	5,212.29	7.02	742.49
	Formally DE/I	20122013		93.19	82.27	0	161.09	4,832.75	6.68	723.68
		20132014		92.03	80.8	0	143.50	4,305.06	8.31	518.24
		20142015		91.92	78.68	0	117.95	3,538.69	7.69	460.17

DEPARTMENT	DISCIPLINE	ACADEMIC	TOTAL	COMPLETION	SUCCESS	PERCENT	FTES	WSCH	FTEF	WSCH /
		YEAR	AWARDS	RATE	RATE	DISTANCE				FTEF
						ED				
		20102011		94.64	91.07	0	4.79	143.61	0.25	574.43
	Kinesiology - Sports (KIN/S) -	20112012		96.72	86.89	0	6.29	188.80	0.28	674.29
	Formally PE/T	20122013		90.91	85.45	0	5.57	167.09	0.21	795.65
Health and		20132014		100	91.67	0	3.84	115.20	0.29	402.80
Kinesiology		20142015		93.26	81.87	0	19.24	577.09	2.00	288.25
T threshology		20102011		91.37	68.35	0	14.01	420.21	0.20	2,101.07
	Kinesiology (KIN) – Formally PE	20112012		94.16	69.34	0	14.30	429.00	0.40	1,072.50
		20132014		95.59	75	0	6.48	194.29	0.40	485.71
	Kinesiology (KIN)	20142015		96.79	84.97	0	25.03	751.03	1.62	463.88
		20102011	27	92.07	58.96	9.1	81.45	2,443.49	4.69	521.00
		20112012	30	89.34	63.66	10.0	78.10	2,342.93	4.29	546.14
	Child Development (CD)	20122013	13	89.63	64.44	10.0	76.97	2,309.16	4.29	538.27
		20132014	11	92.47	67.43	9.5	65.21	1,956.39	4.49	435.82
		20142015	17	92.86	68.88	8.7	68.81	2,064.20	4.83	427.46
		20102011		68.42	55.26	0	3.80	114.00	0.20	570.00
Llumon		20112012		90	73.33	0	3.00	90.00	0.20	450.00
	Education (EDU)	20122013		70.27	48.65	0	3.60	108.00	0.20	540.00
Development		20132014		88.24	58.82	0	1.70	51.00	0.20	255.00
		20142015		86.67	80	0	3.00	90.00	0.20	450.00
		20102011	8	91.54	73.26	9.8	158.02	4,740.51	6.88	689.03
		20112012	11	89.95	72.65	11.1	130.67	3,920.23	5.75	681.78
	Psychology (PSYCH)	20122013	26	93.84	76.09	14.3	132.27	3,967.97	5.68	698.59
		20132014	43	93.49	77.38	10.0	138.98	4,169.31	7.01	595.11
		20142015	54	93.02	75.59	15.1	152.69	4,580.60	8.87	516.47
		20102011		85.81	58.71	0	13.86	415.95	0.56	742.77
Instructional		20112012		94.76	76.42	0	32.10	963.05	0.89	1,082.07
Support	Learning Resources (LRC)	20122013		95.61	75.44	0	55.07	1,651.96	1.03	1,603.85
Support		20132014		90.66	68.68	0	18.15	544.57	1.82	299.87
		20142015		93.86	83.33	0	65.65	1,969.51	1.13	1,750.68

DEPARTMENT	DISCIPLINE	ACADEMIC	TOTAL	COMPLETION	SUCCESS	PERCENT	FTES	WSCH	FTEF	WSCH /
		YEAR	AWARDS	RATE	RATE	DISTANCE				FTEF
						ED				
Instructional	Librany (LIBR)	20102011		94.44	66.67	0	1.20	36.00	0.07	514.29
Support		20142015		94.74	78.95	100.0	1.80	54.00	0.20	270.00
		20102011	7	84.53	62.9	0	689.07	20,672.00	37.59	549.93
		20112012	5	85.12	63.51	0	568.19	17,045.74	31.48	541.48
Mathematics	Mathematics (MATH)	20122013	10	87.8	58.3	0	531.06	15,931.70	31.49	505.96
		20132014	18	89.8	62.04	0	638.91	19,167.19	40.15	477.39
		20142015	26	90.62	64.75	1.6	687.21	20,616.43	44.95	458.63
		20102011	255	91.56	84.62	0	228.19	6,845.82	12.91	530.27
		20112012	251	94.58	86.57	0	203.43	6,102.85	13.48	452.73
	Emergency Medical Services (EMS	20122013	214	94.25	88.51	0	184.94	5,548.20	11.98	463.01
		20132014	257	94.4	90.32	0	198.83	5,964.86	13.19	452.29
		20142015	234	94.44	88.67	0	202.78	6,083.35	12.83	474.22
		20102011	81	90.49	70.52	0	136.60	4,097.98	11.26	363.94
Public Safaty and		20112012	55	87.41	63.58	0	101.41	3,042.30	9.04	336.54
Sonvices	Fire Technology (FIRET)	20122013	67	88.71	64.52	0	91.72	2,751.65	8.96	307.10
		20132014	60	88.67	60.88	0	94.10	2,823.04	8.50	332.08
		20142015	74	96.6	82.17	0	106.78	3,203.53	9.41	340.29
		20102011		94.65	89.3	0	8.83	265.01	1.06	250.01
		20112012		100	86.67	0	0.90	27.00	0.20	135.00
	Public Safety (PBSF)	20122013		92.31	84.62	0	1.30	39.00	0.20	195.00
		20132014		94.12	90.2	0	5.10	153.00	0.40	382.50
		20142015		86.96	76.09	0	4.60	138.00	0.40	345.00
		20102011	1	94.93	71.43	0	21.02	630.57	0.60	1,050.95
		20112012	1	94.39	81.31	0	22.83	684.80	0.60	1,141.33
Social Science	Anthropology (ANTHRO)	20122013	1	96.02	76.12	0	21.44	643.20	0.60	1,072.00
		20132014		93.2	71.6	0	25.43	762.97	1.00	762.97
		20142015	4	93.49	77.2	0	31.35	940.51	1.40	671.80

DEPARTMENT	DISCIPLINE	ACADEMIC YEAR	TOTAL AWARDS	COMPLETION RATE	SUCCESS RATE	PERCENT DISTANCE	FTES	WSCH	FTEF	WSCH / FTEF
		20102011	1	88.52	69.61	20 7 2	173.65	5 209 46	4.80	1 085 30
		20102011	3	89.41	70.25	0	126.80	3 803 92	3.60	1,000.00
	History (HIST)	20122013	12	93.99	73.2	2.9	121.32	3.639.74	3.40	1,000.01
		20132014	12	92.81	75.71	12.8	152.96	4.588.89	5.20	882.48
		20142015	13	92.28	69.84	30.2	155.25	4,657.60	7.60	612.84
-		20132014		61.54	42.31	0	5.33	159.80	0.40	399.50
	Humanities (HUM)	20142015		88.89	79.63	0	10.80	323.89	0.80	404.86
		20112012		94.87	89.74	0	4.16	124.80	0.20	624.00
		20122013		91.67	83.33	0	3.84	115.20	0.20	576.00
	Multicultural Studies (MCS)	20132014		91.67	86.11	0	3.84	115.20	0.20	576.00
		20142015		92.86	78.57	0	2.99	89.60	0.20	448.00
	Philosophy (PHIL)	20102011		87.43	68.71	11.8	68.95	2,068.41	3.40	608.36
Social Science		20112012		88.27	78.21	14.3	56.44	1,693.11	2.60	651.20
Social Science		20122013		89.82	75.54	14.3	52.46	1,573.94	2.40	655.81
		20132014	1	88.36	74.22	7.1	49.75	1,492.54	2.60	574.05
		20142015	1	90.5	73.84	31.6	57.09	1,712.63	3.40	503.71
		20102011	1	88.06	66.09	0	100.22	3,006.57	3.40	884.29
		20112012	2	91.84	72.28	0	99.82	2,994.49	3.20	935.78
	Political Science (POLIT)	20122013	3	91.4	72.06	0	81.13	2,433.94	2.80	869.27
		20132014	12	91.05	74.29	0	91.96	2,758.89	3.40	811.44
		20142015	5	91.67	79.67	0	82.50	2,474.93	3.80	651.30
		20102011		88.71	66.45	40.0	31.86	955.80	1.40	682.71
		20112012		92.38	71.3	0	23.75	712.40	0.80	890.50
	Religion (RELIG)	20122013		91.71	70.47	16.7	19.52	585.49	0.80	731.86
		20132014	1	91.6	74.05	20.0	26.13	783.91	1.60	489.95
		20142015		90.51	70.89	41.7	32.61	978.20	2.00	489.10

DEPARTMENT	DISCIPLINE	ACADEMIC	TOTAL	COMPLETION	SUCCESS	PERCENT	FTES	WSCH	FTEF	WSCH /
		YEAR	AWARDS	RATE	RATE	DISTANCE				FTEF
						ED				
		20102011	15	91.13	76.54	0	129.93	3,897.91	4.00	974.48
		20112012	14	92.77	81.23	0	112.35	3,370.37	3.60	936.21
Social Science	Sociology (SOC)	20122013	26	94.48	82.64	0	100.48	3,014.43	3.20	942.01
		20132014	37	95.34	80.58	11.5	121.34	3,640.06	4.20	866.68
		20142015	35	93.07	74.88	26.7	129.97	3,898.97	5.60	696.24

Note: Total awards include both degrees and certificates. The environmental science award was included with Geology because most of the units to earn the award were in Geology. In addition, the Health Sciences Degree was included with Anatomy because most of the units to earn the award were in Anatomy. The Liberal Studies awards were included with Child Development. The awards in Liberal Arts, Multiple Sciences, and Social Sciences are not illustrated here because they are too diverse to match with anyone discipline.

Individual Data Sheets By Division

Individual Data Sheets By Division ALLIED HEALTH SERVICES

ALLIED HEALTH - 2014-2015

Description:

 Allied Health classes introduce students to the usage, spelling, pronunciation, and meaning of terminology used to describe the human body, as well as introducing students to the field of radiologic technology.

Assessment:

- Decreases in FTES correspond with decreases in FTEF.
- WSCH per FTEF has been steadily decreasing over the past five academic years.
- After seeing an increase in student success and retention rates in the 2011-12 academic year, success and retention rates have been steadily declining since.
- Online enrollment constituted a quarter of overall enrollment in 2013-14 and nearly half of overall enrollment in 2014-15.

Department Goals:

> None specified.

Challenges & Opportunities:

> None specified.

Action Plan:

> None specified.





	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	299	157	184	278	352
FTEF	1.4	0.7	0.7	1.3	2.1
WSCH per FTEF	866	760	703	632	528

	10-11	11-12	12-13	13-14	14-15
Sections	8	4	4	7	11
% of online enrollment	13%	0%	0%	25%	46%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division ALLIED HEALTH SERVICES (cont.)

RADIOLOGIC TECHNOLOGY - 2014-2015

Description:

The Radiologic Technology program is a fully accredited hospital-based 23-month program operated cooperatively by Crafton Hills College and Arrowhead Regional Medical Center. The program accepts eight students per year. Students who complete the program curriculum will be eligible to take the examinations prepared by the American Registry of Radiologic Technologists and Radiologic Health Section of the California State Department of Health, and for entry-level employment in radiography.

Assessment:

- FTES decreased from 2010-11 but has remained steady for the past three academic years.
- Decreases in WSCH per FTEF are primarily a function of lower enrollments rather than FTEF.
- With the exception of the 2012-13 academic year, the number of degrees awarded has been steady. As each cohort is only eight students, the number of degrees awarded in 2013-14 and 2014-15 is impressive.
- The number of certificates awarded has remained steady.

Department Goals:

- Maintain a 1:1 student to teacher ratio in order to provide hands on education in a clinical environment.
- Maintain accreditation through the Joint Review Committee on Education in Radiologic Technology – accreditation was reaffirmed in 2015.
- Research and find new clinical sites in order to grow the program.

Challenges & Opportunities:

- Current facilities are a challenge in terms of growing the program.
- The program would like to investigate alternative instructional delivery methods and the utilization of tablets for students.
- Additional opportunities for professional development have been identified as a future need.
- Students have opportunities to attend conferences and volunteer at hospital events.
- The program has been involved in multiple career fairs at local high schools as a recruitment tool.
- Some students have had difficulty finding fulltime work following completion – the program offers additional specialty courses such as mammography and fluoroscopy, which can help those students secure full-time work.

Action Plan:

- Explore and develop partnerships with local institutions to hopefully locate new clinical sites.
- Consider expanding the offerings of specialty courses in order to help graduating students locate full-time work.
- Contemplate the use of alternative instructional delivery methods and new technologies.
- Pursue opportunities for additional professional development.



EXHIBIT A.69



	10-11	11-12	12-13	13-14	14-15
Sections	29	29	29	29	29
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	8	7	3	8	8
Certificates Awarded	10	12	8	8	9

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1225XX

	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	451	320	298	269	297
FTEF	6.93	6.93	6.93	6.89	6.89
WSCH per FTEF	405	207	280	277	271

Individual Data Sheets By Division ALLIED HEALTH SERVICES *(cont.)*

RESPIRATORY CARE – 2014-2015

Description:

Registered respiratory therapists (RRTs) often treat people who have asthma, chronic bronchitis and emphysema, cystic fibrosis and sleep apnea, but also those experiencing a heart attack or suffering a stroke. The associate of science degree in respiratory care can lead to a career as a registered respiratory therapist at a hospital, clinic, doctor's office or nursing homes, or selling respiratory equipment.

Assessment:

- FTES has remained steady with a slight decrease in the past year.
- Duplicated enrollment has also remained steady, but experienced a decrease in the past year.
- FTEF has remained steady in the past five academic years.
- WSCH per FTEF has also remained steady, except for a slight decrease in the past year, which is likely a function of the decrease in FTES.
- Success and retention rates are high and have remained so for the past five years.

Department Goals:

> None specified.

Challenges & Opportunities:

> None specified.

Action Plan:

> None specified.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	772	775	794	744	571
FTEF	14.06	15.55	13.7	15.03	14.71
WSCH per FTEF	331	324	330	315	271

EXHIBIT A.71



	10-11	11-12	12-13	13-14	14-15
Sections	29	28	28	29	30
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	31	30	28	34	27
Certificates Awarded	31	N/A	N/A	N/A	N/A

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1210XX

Individual Data Sheets By Division BIOLOGICAL + PHYSICAL SCIENCES

ANATOMY - 2014-2015

Description:

Anatomy is the study of the structures associated with the human body and how the body parts are organized. An associate's degree of science in anatomy and physiology can lead to a range of professions with additional study, from pharmacology and forensic science to scientific writing. Many people go into physiotherapy-related occupations or exercise physiology.

Assessment:

- The program has experienced growth since the 2012-13 academic year in terms of FTES, duplicated enrollment, and FTEF.
- WSCH per FTEF has grown as well, but not as significantly.
- While retention rates have remained high and steady, success rates have dropped.
- Enrollment in the introductory class is growing at a faster rate than enrollments in the advanced classes.
- Program has one full-time faculty and seven adjunct faculty.

Department Goals:

- > Increase the student success rate.
- Accommodate the increasing enrollment in the introductory classes.
- Address facilities issues relating to program growth, such as lab space, storage space, and prep rooms.
- Address staffing issues relating to program growth, such as ensuring the program has an adequate number of faculty and laboratory technicians.

Challenges & Opportunities:

- The program does not have space in the current facilities to accommodate any growth, despite the fact that demand for anatomy courses is growing.
- The program's budget and staffing has not changed, however, demand for the program has grown significantly.
- There is an opportunity to explore alternative instructional delivery systems in order to address growing demand – however, challenges exist as all anatomy courses are laboratory courses.

Action Plan:

- Explore opportunities for facilities growth and expansion in order to meet the growing demand.
- Explore creative strategies for scheduling sections in order to meet the growing demand.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	873	801	870	986	991
FTEF	6.8	6.48	6	8.41	9.05
WSCH per FTEF	800	814	797	690	744

EXHIBIT A.73



	10-11	11-12	12-13	13-14	14-15
Sections	29	29	27	37	39
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	1	3	2	N/A	N/A
Certificates Awarded	N/A	N/A	N/A	N/A	N/A

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 0410XX

Individual Data Sheets By Division BIOLOGICAL + PHYSICAL SCIENCES (cont.)

ASTRONOMY - 2014-2015

Description:

 The Astronomy program introduces students to the ideas, concepts, and theories of astronomy including celestial motion, properties and evolutions of the solar system, stars, galaxies, and cosmology.

Assessment:

- FTES and duplicated enrollment have not achieved 2010-11 levels.
- > FTEF has declined since 2010-11.
- WSCH per FTEF has increased since 2010-11.
- Success rates, while low, have been improving since the 2010-11 academic year.
- > Retention rates have remained relatively steady.
- > Section offerings are down since 2010-11.

Department Goals:

- > Hire more full-time faculty.
- Increase student success rates.
- Increase the number of degrees awarded.
- Increase enrollment in the program.
- Address basic skills needs among students.

Challenges & Opportunities:

- Students often lack reading and critical thinking skills due to the lack of prerequisites.
- The number of dedicated full-time and part-time faculty is a challenge in terms of growing the program and addressing the needs of incoming students, as well as maintaining the College's 75/25 split between full-time and part-time instructors.

Action Plan:

 Address the need for more full-time instructors through program review.





	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	287	179	155	247	200
FTEF	2.2	1.38	0.68	1.37	1.23
WSCH per FTEF	453	391	684	551	486

	10-11	11-12	12-13	13-14	14-15
Sections	15	10	4	9	7
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	1	0	0	0	1
Certificates Awarded	N/A	N/A	N/A	N/A	N/A

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1911XX

Individual Data Sheets By Division BIOLOGICAL + PHYSICAL SCIENCES (cont.)

BIOLOGY - 2014-2015

Description:

Our curriculum covers anatomy and physiology, microbiology, ecology and the environment, cellular and molecular biology and more. An associate of science degree in biology can lead to an eventual career in fields such as research, health care, applied/field biology, education, business and consulting, technology and communication. Courses can be the foundation for four-year college studies in various biology fields.

Assessment:

- Enrollment and demand for biology classes have been increasing.
- The majority of students feed into healthcare programs rather than transfer to four-year institutions.
- A significant number of students are older students who are trying to change careers.
- Program has two full-time faculty and four adjunct faculty.

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:

- Program does not have enough dedicated labs in the new building – biology has one dedicated lab and must share two labs with anatomy and microbiology.
- There is no room in the current facilities to accommodate growth. Instructional space and office space are both already at maximum capacity.

Action Plan:

None specified.



EXHIBIT A.77



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	591	554	545	593	764
FTEF	5.34	4.52	4.52	5.34	6.32
WSCH per FTEF	782	759	747	784	738

	10-11	11-12	12-13	13-14	14-15
Sections	24	18	18	24	28
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	59	62	92	109	136
Certificates Awarded	N/A	N/A	N/A	N/A	N/A

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 0401XX

Individual Data Sheets By Division BIOLOGICAL + PHYSICAL SCIENCES (cont.)

CHEMISTRY - 2014-2015

Description:

The associate of science degree in chemistry prepares students for entry-level positions in the biochemistry and industrial chemical industries. Because it is a versatile science, chemistry can be applied to almost any industrial, educational, scientific or government field.

Assessment:

- Demand for the program is increasing, as evidenced by the increases in FTES, duplicated enrollment, and sections offered.
- Success and retention rates have been falling in recent years.
- FTEF has increased in recent years, due to new hires.
- More classes are being offered online or hybridonline.
- Approximately twice as many students in the Chemistry program are feeding into Allied Health programs as students who transfer to four-year institutions.

Department Goals:

- > Hire six more adjunct faculty.
- > Secure a tutor for Organic Chemistry.
- Hire another laboratory technician that can work past 1:30pm and service evening classes.
- Expand the number of course offerings to accommodate increasing demand.
- Address the basic skills needs of incoming students.

Challenges & Opportunities:

- Organic Chemistry is only offered in the fall, so that students who are out of sequence have to wait a semester or go to another college to take the class.
- Access to classes is a challenge as classes are filled during Priority B registration.
- Program is beginning to reach maximum capacity in the current facility.
- Current minimum qualifications make hiring faculty very difficult.
- Students are coming in with inadequate math, reading, writing, and study skills.
- There is an opportunity to further utilize the tutoring center and distance education.
- Safety issues are a challenge as Chemistry classes are one of the last classes held at night on campus,

and there is often only one faculty running those labs.

Tutors for Organic Chemistry are hard to find as the class is often taken by students immediately prior to graduating.

Action Plan:

- Hire more adjunct faculty.
- > Hire more laboratory technicians.
- Expand the number of courses offered and the time they are offered.
- Explore opportunities in distance education and online tutoring.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	700	577	652	782	942
FTEF	8	7.12	6.44	9.37	12.89
WSCH per FTEF	651	575	611	557	517

EXHIBIT A.79



	10-11	11-12	12-13	13-14	14-15
Sections	33	25	23	33	43
% of online enrollment	6.1%	0%	0%	6.1%	14%
Degrees awarded	1	0	2	4	9
Certificates Awarded	N/A	N/A	N/A	N/A	N/A

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1905XX

Individual Data Sheets By Division BIOLOGICAL + PHYSICAL SCIENCES (cont.)

ENGINEERING - 2014-2015

Description:

 Engineering is one of the most popular and potentially profitable college academic programs. Add to that, engineers are frequently in high demand. An engineering-based education provides exposure to various technical subjects and skill sets and can lead to further study and a career in the field of engineering. It is also an excellent foundation for transfer to a four-year university as an engineering major.

Assessment:

 Engineering classes were only offered during the 2012-13 academic year. Only one section was offered. Engineering classes are no longer offered.

Department Goals:

 There is no longer an engineering department on campus.

Challenges & Opportunities:

None specified.

Action Plan:

None specified



EXH	IBI'	F A.81



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	0	0	26	0	0
FTEF	0	0	0.24	0	0
WSCH per FTEF	0	0	511	0	0

	10-11	11-12	12-13	13-14	14-15
Sections	0	0	1	0	0
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division BIOLOGICAL + PHYSICAL SCIENCES (cont.)

GEOGRAPHY - 2014-2015

Description:

Geography is much more than the location of places on a map. It's a multifaceted discipline that bridges the social sciences, humanities and physical sciences in a study of place and space. It provides a holistic look at land, sea and air and the distribution of plant, animal and human life. An associate of science degree in geography can lead to employment opportunities in a wide range of professions that require computer, research and analytical skills. It is also the foundation for fouryear college studies in geography or geology.

Assessment:

- FTES has increased in the past year, and is slightly higher than what it was in 2010-11.
- Duplicated enrollment has increased in the past year, and is at approximately the same level as in 2010-11.
- FTEF has increased in the last year.
- WSCH per FTEF has decreased since 2010-11.
- Success rates have remained steady except for an increase in 2012-13.
- Retention rates have increased slightly in the past year and since 2010-11.

Department Goals:

- > Explore the usefulness of certificates.
- > Address the basic skills needs of students.
- Would like to have earth science programs collocated in a central facility.
- > Align curriculum with those of transfer universities.

Challenges & Opportunities:

- The nature of courses in program makes distance education difficult.
- Under-preparedness of students is a problem. Lots of class time is spent playing catch up.

Action Plan:

- Address the basic skills needs of incoming students.
- > Align curriculum with those of transfer universities.
- > Explore the usefulness of establishing certificates.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	168	186	208	133	167
FTEF	0.88	0.88	0.88	0.89	1.09
WSCH per FTEF	569	639	712	467	471

EXHIBIT A.83



	10-11	11-12	12-13	13-14	14-15
Sections	7	8	10	9	8
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	1	2	0	1
Certificates Awarded	N/A	N/A	N/A	N/A	N/A

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 2206XX

Individual Data Sheets By Division BIOLOGICAL + PHYSICAL SCIENCES (cont.)

GEOLOGY - 2014-2015

Description:

Geology is the study of the earth, its structure, the materials from which it is made, and its physical, chemical and biological forces – and its 4.5 billion-year history. An associate of science degree in geology is the foundation for four-year college studies in geography or geology. Advanced degrees often qualify for a career with natural resource companies, environmental companies, government agencies and universities, either doing field work or in laboratories, classrooms or offices.

Assessment:

- FTES increased since the last year, but has decreased overall since 2010-11.
- Duplicated enrollment increased since the last year, and has increased overall since 2010-11.
- FTEF has increased since the last year and overall since 2010-11.
- WSCH per FTEF has been decreasing steadily since 2010-11.
- Success rates have decreased since the last year but have increased overall since 2010-11.
- Retention rates have decreased in the last year but have increased overall since 2010-11.

- The number of sections offered has been increasing.
- The number of degrees awarded has been increasing.

Department Goals:

- Address the basic skills needs of incoming students.
- > Explore the usefulness of certificates.
- > Align curriculum with those of transfer universities.
- Locate the earth science programs together in a central facility.

Challenges & Opportunities:

- The nature of the program makes distance and online education difficult to conduct effectively.
- A significant portion of valuable class time is dedicated to remediation due to the underpreparedness of students.

Action Plan:

- Address the basic skills needs of incoming students.
- Work with transfer universities to align the program's curriculum.
- Investigate the usefulness of different certificates in the workforce.


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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	168	213	205	162	188
FTEF	1.93	1.82	1.96	1.88	2.39
WSCH per FTEF	536	527	502	396	360

	10-11	11-12	12-13	13-14	14-15
Sections	22	16	18	21	36
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	1	1	3
Certificates Awarded	N/A	N/A	N/A	N/A	N/A

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1914XX

Individual Data Sheets By Division BIOLOGICAL + PHYSICAL SCIENCES (cont.)

MICROBIOLOGY- 2014-2015

Description:

The world we live in is filled with microscopic organisms too small to be seen by the unaided eye. Discover the roles and effects – both good and bad – of bacteria, protozoa, viruses, and certain algae and fungi, and how microbiology has helped us to control or kill the bad microbes and make maximum use of good microbes. An associate of science degree in microbiology can lead to a variety of employment opportunities in education, government, medicine, and research. It is also the foundation for four-year college studies in the biological sciences.

Assessment:

- FTES has decreased slightly since the last year and overall since 2010-11.
- Duplicated enrollment has remained steady in the past few years with a slight decrease since 2010-11.
- FTEF has increased in the past year and overall since 2010-11.
- WSCH per FTEF has been steadily decreasing.

- Success rates are low and have increased slightly since the last year, but have decreased overall since 2010-11.
- Retention rates have decreased steadily since 2010-11.
- The number of sections offered has increased by 72% since 2010-11.
- Majority of students feed into Allied Health programs.
- Declining enrollment may be a function of the chemistry pre-requisite, as chemistry classes are some of the most heavily impacted at the College.

Department Goals:

- Hire more laboratory technicians so as to have lab support for evening classes.
- Maintain and replace equipment on a timely schedule so as to not negatively impact instruction.

Challenges & Opportunities:

- There is no space in the current building to accommodate growth in enrollment or growth in staffing.
- > There is no running water in the current building.
- There are no laboratory technicians that can work during evenings.

- There is only one entrance/exit to the second floor of the current building – is a security concern.
- There are opportunities to explore alternative instructional delivery systems.
- There is a lack of storage space in the current building, and preparation rooms are inadequate.

Action Plan:

- Hire more laboratory technicians.
- > Develop an equipment maintenance plan.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	367	326	308	332	332
FTEF	4.86	4.86	4.08	4.96	5.35
WSCH per FTEF	617	603	585	539	457



	10-11	11-12	12-13	13-14	14-15
Sections	18	21	20	25	31
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division BIOLOGICAL + PHYSICAL SCIENCES (cont.)

OCEANOGRAPHY - 2014-2015

Description:

 Students taking Oceanography courses will study the basic principles of oceanography, including the structure of the Earth and sea floor, the physics and chemistry of the ocean, atmospheric and ocean circulation, waves, currents, tides, marine plants and animals, ecosystems, and environmental concerns. Students will work with the tools of oceanographic inquiry including maps, remote sensing, Geographic Information Systems (GIS), Global Positioning Systems (GPS), and other data collection analysis and display methods.

Assessment:

- FTES has decreased in the last year and is approximately 50% of what it was in 2010-11.
- Duplicated enrollment has decreased in the last year and is less than half of what it was in 2010-11.
- > FTEF has increased in the last year.
- WSCH per FTEF has decreased since the last year and has dropped by more than half since 2010-11.
- Success rates have increased since last year but have declined overall since 2010-11.
- > Retention rates have increased since the last year

and are the same as in 2010-11.

 The number of sections offered has increased by one since the last year.

Department Goals:

- Address the basic skills needs of incoming students.
- > Explore the usefulness of certificates.
- > Align curriculum with those of transfer universities.
- Locate the earth science programs together in a central facility.

Challenges & Opportunities:

- The nature of the program makes distance and online education difficult to conduct effectively.
- A significant portion of valuable class time is dedicated to remediation due to the underpreparedness of students.

Action Plan:

- Address the basic skills needs of incoming students.
- Work with transfer universities to align the program's curriculum.
- Investigate the usefulness of different certificates in the workforce.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	261	148	160	225	124
FTEF	0.8	0.4	0.3	0.8	1
WSCH per FTEF	998	1184	859	781	400



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

Individual Data Sheets By Division BIOLOGICAL + PHYSICAL SCIENCES (cont.)

PHYSICS - 2014-2015

Description:

The Physics Program offers three series. Physics 100 is a one semester series that is mostly conceptual physics with little to no math. The Physics 110/111 series incorporates algebra and trigonometry, and is mostly intended for those going into the Allied Health programs. The Physics 250/251/252 series is a three semester series utilizing calculus that is intended for transfer students looking for careers as scientists or engineers.

Assessment:

- The decline in enrollment seen in 2013-14 is a result of transitions from way lectures and labs are run.
- The Physics Program has one full time faculty and four adjunct faculty.
- Success rates have improved since the previous year and overall since 2010-11.
- Retention rates have improved since the last year and overall since 2010-11.
- The number of course offerings has increased from the previous year, but has declined overall since 2010-11.

Department Goals:

- > Hire another full time instructor.
- , Grow the Physics Club.
- > Increase success and retention rates.

Challenges & Opportunities:

- Students are generally prepared for classes due to prerequisites. However, many lack experience turning word problems into math problems.
- The Physics 250 series is the only one that utilizes Supplemental Instruction – there is an opportunity to utilize Supplemental Instruction for the other series as well.
- The program has needed more full time instructors for the past four years, and will definitely need more if the program is to grow.

Action Plan:

 Demonstrate the need for more full time instructors through program review.



EXHIBIT A.91



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	291	198	259	263	308
FTEF	1.88	2.34	2.66	3.32	5.12
WSCH per FTEF	839	685	592	409	345

	10-11	11-12	12-13	13-14	14-15
Sections	31	28	27	12	19
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	6	2	0	7	11
Certificates Awarded	0	0	0	0	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1902XX

Individual Data Sheets By Division BUSINESS, ECONOMICS, + IT

ACCOUNTING - 2014-2015

Description:

 An education in accounting can lead to a position preparing financial statements, balance sheets and tax returns at an accounting/CPA firm, small business, large corporation, financial institution, government agency or any number of organizations. This is also the foundation for fouryear college studies in accounting.

Assessment:

- FTES has remained relatively steady since 2010-11 except for an increase in the most recent year.
- Duplicated enrollment has remained steady with a slight increase in the most recent year.
- FTEF has steadily increased since 2010-11.
- WSCH per FTEF has declined in the last year.
- Success rates have decreased in the last year and overall since 2010-11.
- Retention rates have remained steady since 2010-11 with the exception of an increase in 2013-14.
- The number of sections offered and almost doubled since 2010-11.
- The number of degrees and certificates awarded has decreased since 2010-11.

Department Goals:

- > Hire full-time faculty members.
- > Increase outreach to local business partners.
- Increase the visibility and reputation of program in surrounding community.

Challenges & Opportunities:

- The lack of full-time faculty in the program is a challenge.
- There are opportunities to increase outreach to the local community.
- The reliance on temporary facilities is a challenge to the program.
- Reliance on adjuncts is contributing to high burn out rates.

Action Plan:

 Demonstrate the need for full-time faculty through program review.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	262	256	237	271	288
FTEF	1.89	1.62	1.97	1.95	3.28
WSCH per FTEF	557	647	514	534	366

EXHIBIT A.93



	10-11	11-12	12-13	13-14	14-15
Sections	7	6	7	8	13
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	3	0	0	0	1
Certificates Awarded	3	1	1	1	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 0502XX

Individual Data Sheets By Division BUSINESS, ECONOMICS, + IT (cont.)

BUSINESS ADMINISTRATION - 2014-2015

Description:

 Learn what it takes to manage a company, whether it's a major corporation or a small private business. No matter your management role, the size of the business or whether it's public or private, all businesses and government agencies need skilled leaders and administrators to succeed. The AA in business administration can lead to a position requiring leadership skills and knowledge of organizational principles, financial management, and office management and information technology.

Assessment:

- FTES has remained steady over the past few years, with a slight decrease since the last year.
- > Duplicated enrollment has declined in the past year.
- , FTEF has increased in the past two years.
- WSCH per FTEF has decreased significantly since the last year.
- Success rates have remained steady over the last few years, and improved in 2014-15.
- Retention rates have improved slightly since 2010-2011.

The number of sections has declined by approximately 50% since last year.

Department Goals:

- Develop a strategic business plan to outreach and form partnerships with local businesses and surrounding community.
- Explore opportunities related to developing a logistics program.
- > Hire more full-time faculty.
- > Promote distance education training opportunities.

Challenges & Opportunities:

- The number of full-time faculty in the program is a challenge in terms of managing and growing the program.
- There are opportunities to develop strategic partnerships and relationships with local businesses in the community.
- > Outdated facilities and equipment are a challenge.
- There is an opportunity to explore alternative instructional delivery systems.

Action Plan:

 Explore opportunities related to developing a logistics program.

- Demonstrate the need for more full-time faculty and updated equipment through program review.
- Develop a strategic business plan to outreach with local businesses.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	518	519	492	548	488
FTEF	2.27	1.8	1.6	2	2.8
WSCH per FTEF	715	898	946	819	555

EXHIBIT A.95



	10-11	11-12	12-13	13-14	14-15
Sections	30	27	27	31	15
% of online enrollment	13%	0%	0%	0%	0%
Degrees awarded	21	25	51	42	57
Certificates Awarded	1	0	4	1	1

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx

TOP Code: 0505XX & 0506XX

Individual Data Sheets By Division BUSINESS, ECONOMICS, + IT (cont.)

COMPUTER INFORMATION SYSTEMS - 2014-2015

Description:

Whether your career goal is to develop software or hardware, design or support information networks, analyze existing computer systems or discover new ways to improve their performance, our program will help prepare you to become a valuable jobready IT communicator in the rapidly expanding fields of information systems and computer science. An associate of science in computer information systems can lead to a career working with information systems, data communications and networking, or information management, in jobs ranging from software designer or application developer to network administrator or systems developer.

Assessment:

- > FTES has been steadily decreasing since 2010-11.
- Duplicated enrollment has remained relatively stable.
- > FTEF has decreased slightly since 2010-11.
- WSCH per FTEF has decreased in the last year.
- Success rates remain steady in the upper 60% range.
- > Retention rates have remained steady.

- The number of sections has decreased slightly since 2010-11.
- The number of degrees awarded has increased since 2010-11.
- The number of certificates awarded has decreased in the last year and overall since 2010-11.

Department Goals:

- > Hire more full-time faculty to grow the program.
- Increase enrollment in digital media and networking classes.
- Update current technology equipment to match industry standards.
- Hire a full-time instructor with a specialization in digital media.
- Increase the number of online course offerings.

Challenges & Opportunities:

- Computer equipment that does not match what is used in the industry is a challenge to preparing students for careers in the industry.
- The number of full-time faculty and the lack of full-time faculty with experience in digital media is a challenge to growing the program.
- There is an opportunity to expand distance education offerings.

 Server strength is a challenge in terms of allowing students to fully utilize virtual technology.

Action Plan:

 Demonstrate the need for more full-time faculty and updated computer equipment through the program review process.



EXHIBIT A.97



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,152	1,134	1,121	1,129	1,059
FTEF	9.81	8.06	7.95	8.18	8.17
WSCH per FTEF	400	480	433	393	354

	10-11	11-12	12-13	13-14	14-15
Sections	50	42	44	44	44
% of online enrollment	8.5%	20%	10%	11.6%	14.6%
Degrees awarded	5	3	5	3	10
Certificates Awarded	17	11	15	14	11

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 0702XX

Individual Data Sheets By Division BUSINESS, ECONOMICS, + IT (cont.)

COMPUTER SCIENCE - 2014-2015

Description:

 Today's world is dependent on computer technology, and studying computer science will help you develop problem solving skills and analytical abilities that can be used in every aspect of your life. Computer science college graduates are among the most sought-after new employees upon earning a bachelor's degree. An associate of science in computer science can prepare you for entry-level employment within the Information Technology field or for further study to pursue a bachelor's degree. There are many growing fields related to computer science, including information security analysis, bioinformatics, game programming, medicine, communications, forensics and law.

Assessment:

- The program was established in the 2013-14 academic year.
- , FTES has more than doubled in the past year.
- Duplicated enrollment has more than doubled in the past year.
- FTEF has more than doubled in the past year.

- WSCH per FTEF has increased slightly in the past year.
- Success rates have dropped slightly in the past year.
- Retention rates have dropped slightly in the past year.
- The number of sections has more than doubled since the past year.

Department Goals:

- > Hire more full-time faculty to grow the program.
- Update current technology equipment to match industry standards.
- Hire a full-time instructor with a specialization in digital media.
- > Increase the number of online course offerings.

Challenges & Opportunities:

- Computer equipment that does not match what is used in the industry is a challenge to preparing students for careers in the industry.
- The number of full-time faculty and the lack of full-time faculty with experience in digital media is a challenge to growing the program.
- There is an opportunity to expand distance education offerings.

 Server strength is a challenge in terms of allowing students to fully utilize virtual technology.

Action Plan:

 Demonstrate the need for more full-time faculty and updated computer equipment through the program review process.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	0	0	0	59	134
FTEF	0	0	0	1.03	2.26
WSCH per FTEF	0	0	0	305	329

	10-11	11-12	12-13	13-14	14-15
Sections	0	0	0	3	7
% of online enrollment	0%	0%	0%	0%	14.3%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division BUSINESS, ECONOMICS, + IT *(cont.)*

ECONOMICS - 2014-2015

Description:

- Learn what it takes to succeed in our increasingly knowledge-based and interdependent global economy by understanding the logical, social and economic impacts of the choices individuals, families, companies and governments make every day. A degree in economics can lead to employment opportunities in such diverse fields as financial services, banking, real estate, insurance, health care or manufacturing. CHC courses can be the foundation for four-year college studies in various economic fields.
- The number of sections offered has increased since 2010-11.
- The number of degrees awarded has declined since 2010-11.

Department Goals:

> None specified.

Challenges & Opportunities:

None specified.

Action Plan:

None specified.

Assessment:

- FTES has decreased since the last year and overall since 2010-11.
- Duplicated enrollment has decreased in the last year and overall since 2010-11.
- > FTEF has increased slightly in the last two years.
- WSCH per FTEF has decreased in the last year and overall since 2010-11.
- Success rates have been increasing since 2010-11.
- Retention rates have been increasing since 2010-11.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	507	665	698	550	485
FTEF	2	2	2	2.2	2.8
WSCH per FTEF	755	997	957	755	535

EXHIBIT A.101



	10-11	11-12	12-13	13-14	14-15
Sections	10	10	10	11	16
% of online enrollment	10%	0%	0%	0%	13.3%
Degrees awarded	2	2	8	1	1
Certificates Awarded	N/A	N/A	N/A	N/A	N/A

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 2204XX

Individual Data Sheets By Division BUSINESS, ECONOMICS, + IT (cont.)

MARKETING - 2014-2015

Description:

 No matter where your career takes you, nearly every type of business and industry utilizes some form of marketing – the process of promoting and selling goods and services. Learn the basic skills, concepts, functions, terminology and procedures of creating, communicating, pricing and delivering your products and services. The Marketing Management Certificate will prepare you for entry-level employment in a variety of related occupations, including retail sales clerk, outside sales representative, advertising, merchandiser, distribution or customer service representative. It is also the foundation for four-year college studies in marketing or related fields.

Assessment:

- FTES has decreased in the last year and overall since 2010-11.
- > Duplicated enrollment has been decreasing.
- FTEF has been decreasing.
- WSCH per FTEF has decreased in the last year and overall since 2010-11.
- Success rates have stayed relatively steady.
- > Retention rates have remained relatively steady.

Department Goals:

- Develop a strategic business plan to outreach and form partnerships with local businesses and surrounding community.
- Hire more full-time faculty.
- > Promote distance education training opportunities.

Challenges & Opportunities:

- The number of full-time faculty in the program is a challenge in terms of managing and growing the program.
- There are opportunities to develop strategic partnerships and relationships with local businesses in the community.
- > Outdated facilities and equipment are a challenge.
- There is an opportunity to explore alternative instructional delivery systems.

Action Plan:

- Demonstrate the need for more full-time faculty and updated equipment through program review.
- Develop a strategic business plan to outreach with local businesses.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	87	45	50	43	35
FTEF	0.4	0.2	0.2	0.2	0.2
WSCH per FTEF	675	675	750	645	525



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

Individual Data Sheets By Division COLLEGE LIFE

COLLEGE LIFE — 2014-2015

Description:

 College Life courses are designed to introduce students to skills and strategies for success in an academic setting. Students will explore and apply theories of physical, social and psychological development towards the goal of success in college. Students will survey the tools necessary to excel academically, socially, physically, and emotionally. Introductory courses to online learning and community service and leadership are included.

Assessment:

- FTES has increased in the past year and overall since 2010-11.
- Duplicated enrollment has increased since the last year, but has decreased overall since 2010-11.
- > FTEF has increased.
- WSCH per FTEF has decreased in the last year and overall since 2010-11.
- Success rates have been declining since 2010-11.
- > Retention rates have remained relatively steady.
- The number of sections has more than doubled in the last year.

Department Goals:

> None specified.

Challenges & Opportunities:

> None specified.

Action Plan:

> None specified.





	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	334	461	413	78	231
FTEF	1.35	1.84	1.52	0.88	2.14
WSCH per FTEF	444	429	382	317	411

	10-11	11-12	12-13	13-14	14-15
Sections	11	18	17	8	20
% of online enrollment	0%	0%	0%	37.5%	25%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division COMMUNICATION + LANGUAGE

AMERICAN SIGN LANGUAGE - 2014-2015

Description:

The American Sign Language program at Crafton Hills College provides student an opportunity to communicate in American Sign Language as well as gain an understanding of Deaf culture.

Assessment:

- After declining in 2011-12, FTES and duplicated enrollment have been steadily increasing.
- > FTEF has grown in recent years.
- WSCH per FTEF has declined in recent years.
- Success rates have been slowly declining since 2011-12.
- Retention rates have remained steady with a slight decrease in the last year.
- The number of sections offered has recently increased.
- The number of degrees and certificates awarded has increased since last year.
- The program currently does not offer enough classes to prepare students for employment – but the program does prepare students for transfer to certificate programs or four-year institutions.
- > There is an annual conference hosted by CHC and

SBVC for ASL educators in its fourth year that is growing in popularity.

Department Goals:

- Hire another full-time instructor to meet growing demand.
- Would like to create an ASL for medical personnel class.
- > Would like to grow the interpretation course.
- Would like deaf-friendly spaces natural, indirect lighting that is easier on the eyes and a furniture layout that allows for all occupants to see each other simultaneously.

Challenges & Opportunities:

- The program lacks lab space to do hands on activities in.
- Coursework requires lots of video recording, and the majority of computers on campus lack the processing power needed for video recording and streaming.
- There are only two computer labs on campus that have machines with the right software for test taking. These computer labs are shared with the entire campus so scheduling is difficult.
- > The strict focus on academic credentials by the

equivalency committee makes hiring full-time instructors difficult.

There are opportunities for designing new curriculums.

Action Plan:

- Demonstrate the need for more full-time faculty through the program review process.
- Demonstrate the need for greater access to higher quality computer equipment through the program review process.
- Continue designing new curriculum with employment in mind.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	384	325	378	450	521
FTEF	2.97	2.7	2.7	4.01	5.61
WSCH per FTEF	525	484	505	444	362

	10-11	11-12	12-13	13-14	14-15
Sections	11	10	10	15	21
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	6	9	4	14
Certificates Awarded	0	3	11	3	8

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 0850XX

Individual Data Sheets By Division COMMUNICATION + LANGUAGE *(cont.)*

ARABIC - 2014-2015

Action Plan:

The program is no longer offered.

- Description:
- With the growing presence and importance of the Middle East in the global economy, the need for Western workers who are versed in Arabic language and culture has never been greater. One of the world's oldest languages, Arabic is one of the most commonly spoken native languages in the world and the official language of more than 20 countries. An associate of arts in Arabic degree can lead to a career in a wide variety of fields, including journalism, business, education, finance and banking, translation and interpretation, consulting, foreign service, intelligence and more.

Assessment:

 The program existed from 2012-13 to 2014-15 before being cancelled for the 2015-16 academic year due to low enrollments.

Department Goals:

• The program is no longer offered.

Challenges & Opportunities:

> The program is no longer offered.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	N/A	N/A	46	61	17
FTEF	N/A	N/A	0.33	1.33	0.33
WSCH per FTEF	N/A	N/A	504	293	265

	10-11	11-12	12-13	13-14	14-15
Sections	0	0	1	4	1
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division COMMUNICATION + LANGUAGE *(cont.)*

COMMUNICATION STUDIES - 2014-2015

Description:

Effective face-to-face, interpersonal, group and mass communication skills help us better understand a person or situation, resolve differences and build trust and respect. An associate of arts in communication studies degree can lead to a variety of positions in journalism, public relations, broadcasting, social media, teaching, sales, law, politics, advertising, marketing, business and more.

Assessment:

- FTES declined from 2010-11 to 2013-14, but has begun to increase since then.
- Duplicated enrollment declined from 2010-11 to 2012-13, but has been increasing since.
- FTEF decreased from 2010-11 to 2012-13, but has been increasing since.
- WSCH per FTEF has remained steady with a slight overall downward trend.
- Success and retention rates have been steadily increasing.
- > The number of sections offered has increased.
- Enrollment has declined slightly due to new English prerequisites.

Department Goals:

- > Hire more full-time faculty.
- > Improve relationship with counseling department.
- Continue to offer a diverse array of course offerings

 intercultural communication, communication in a
 technological world, business communication etc.
- Place a communication studies tutor in the tutoring center.

Challenges & Opportunities:

- The current number of full-time faculty is a challenge to the day-to-day operations of the program and to efforts at growing the program.
- There are opportunities to expand the distance education course offerings, either online or hybrid.

Action Plan:

- Demonstrate the need for more full-time faculty through the program review process.
- Work with the tutoring center to try and place a communication studies tutor.
- Continue to develop new curriculums to meet the emerging needs of a rapidly changing society.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,212	1,007	1,050	1,110	1,286
FTEF	7.8	6.6	6.27	6.8	8.67
WSCH per FTEF	477	469	478	437	450

EXHIBIT A.111



	10-11	11-12	12-13	13-14	14-15
Sections	48	41	45	42	55
% of online enrollment	17%	19%	17%	0%	11%
Degrees awarded	4	0	4	16	11
Certificates Awarded	N/A	N/A	N/A	N/A	N/A

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1506XX

Individual Data Sheets By Division COMMUNICATION + LANGUAGE *(cont.)*

FRENCH - 2014-2015

Action Plan:

The program is not currently offered.

Description:

The beautiful, rich melodious French language is spoken by more than 200 million people around the world. It is the international language of diplomacy, cooking, fashion, theatre, the visual arts, dance and architecture, and is often called the language of love. Learn to communicate in French and understand the French culture. An associate of arts in French degree can lead to a career in a wide variety of fields where translating and interpreting are essential. It is also the foundation for four-year college studies in French language and culture.

Assessment:

 The program was offered up to the 2012-13 academic year, after which it was no longer offered due to low enrollment and staffing issues.

Department Goals:

• The program is not currently offered.

Challenges & Opportunities:

• The program is not currently offered.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	78	44	42	N/A	N/A
FTEF	0.99	0.66	0.66	N/A	N/A
WSCH per FTEF	404	347	323	N/A	N/A



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

Individual Data Sheets By Division COMMUNICATION + LANGUAGE *(cont.)*

JAPANESE - 2014-2015

Description:

Many of the world's largest and most efficient companies are from Japan. Even if your interest is only in Japanese pop culture, politics, art, music, history or literature, Japanese language and culture are a part of business, engineering, manufacturing, research, economics and politics. An associate of arts in Japanese degree can lead to a career in international business or a variety of fields requiring translating and interpreting. It is also a steppingstone to learning other Asian languages and the foundation for four-year college studies in Japanese language and culture.

Assessment:

- FTES declined from 2010-11 to 2012-13 and has increased since.
- Duplicated enrollment has followed a similar trend to FTES.
- FTEF has been increasing since 2013-14.
- WSCH per FTEF has been decreasing since 2011-12.
- Success rates have decreased since 2012-13.
- Retention rates have been increasing overall except for a slight decline in 2013-14.

> The number of sections offered has been growing.

Department Goals:

- Hire a full-time faculty to replace the only full-time instructor that left previously.
- Grow the program and increase outreach and recruitment efforts.

Challenges & Opportunities:

- The lack of a full-time faculty member to take charge of the program is a challenge to the dayto-day operations of the program and to efforts at growing the program.
- There is an opportunity to hire a full-time instructor and grow the program.

Action Plan:

 Demonstrate the need for a full-time instructor through the program review process.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	144	117	109	178	192
FTEF	1.32	0.99	0.99	2	3
WSCH per FTEF	557	625	573	455	331

	10-11	11-12	12-13	13-14	14-15
Sections	4	3	3	6	9
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	5	1
Certificates Awarded	0	0	0	0	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1108XX

Individual Data Sheets By Division COMMUNICATION + LANGUAGE *(cont.)*

JOURNALISM - 2014-2015

Description:

 Courses in the Journalism department introduce students to the basic principles of journalism and contemporary mass media while developing the skills associated with evaluating, gathering and writing news in accepted journalistic style.

Assessment:

- FTES has remained relatively low and has seen a decrease in the past year.
- > Success rates have improved in the last year.
- Retention rates had been declining since 2011-12.
- The number of sections offered has remained at one except for the 2013-14 academic year.

Department Goals:

> None specified.

Challenges & Opportunities:

None specified.

Action Plan:

> None specified.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	0	0	0	14	0
FTEF	0	0	0.2	0.2	0
WSCH per FTEF	0	0	540	613	0

	10-11	11-12	12-13	13-14	14-15
Sections	1	1	1	2	1
% of online enrollment	100%	100%	100%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division COMMUNICATION + LANGUAGE (cont.)

SPANISH - 2014-2015

Description:

Given the continued growth of the Hispanic
 population in California and the nation, we will soon
 be the largest Spanish-speaking country in the
 world. Learning Spanish will help you in business
 and your career, and it will enable you to keep pace
 with Hispanic influence on culture. An associate
 of arts in Spanish degree can lead to a career in a
 variety of fields where translating and interpreting
 are essential. There is a huge demand in the U.S.
 for Spanish-speakers in nursing, construction,
 management and media, among other positions. It
 is also the foundation for four-year college studies
 in Spanish language and culture.

Assessment:

- After steadily declining from 2010-11 to 2013-14, FTES is nearing 2010-11 levels.
- Duplicated enrollment has remained relatively steady, with a slight increase seen in the past few years.
- FTEF has been steadily increasing since a decline in 2011-12.
- WSCH per FTEF has slowly declined since 2011-12.

- Success and retention rates have both remained steady.
- The number of sections offered have increased after a low period from 2011-12 to 2013-14.
- The number of degrees awarded has increased in the past two years.
- Spanish is currently operating at capacity and has room for growth.

Department Goals:

- Hire more full-time faculty.
- Grow the Spanish for Native-Spanish Speakers course.
- Continue building relationships with the tutoring center.
- > Expand outreach efforts.
- > Improve student success and retention rates.

Challenges & Opportunities:

- Scheduling is a challenge for increasing enrollment in the Spanish for Native-Spanish Speakers course.
- Current furniture in classrooms is a challenge

 ideally, the program would have multiple
 whiteboards, flexible furniture, and secure storage
 spaces in classrooms.
- SBVC recently eliminated its 2nd year Spanish program, and so there is an opportunity for CHC's

Spanish program to serve those students who would normally have enrolled in SBVC's Spanish program.

Action Plan:

- Explore different times to offer courses.
- Continue building relationships with the tutoring center.
- Demonstrate the need for more full-time instructors and specialized equipment and furniture through the program review process.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	563	536	506	530	582
FTEF	6.75	5.43	5.44	5.99	7.33
WSCH per FTEF	446	505	472	434	408

EXHIBIT A.119



	10-11	11-12	12-13	13-14	14-15
Sections	21	17	17	18	22
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	5	2	5	10	10
Certificates Awarded	0	0	0	0	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1105XX

Individual Data Sheets By Division ENGLISH + READING

ENGLISH - 2014-2015

Description:

The English program's curriculum offers opportunities to experience courses in writing for business and the professions, composition, creative writing, literary magazine production and an extensive array of literature options. An associate of arts in English degree can lead to teaching and professional positions in traditional and non-traditional settings. It is also the foundation for four-year college studies in English, literature, journalism, communication, film and theatre.

Assessment:

- FTES has been increasing after a steady decline from 2010-11 to 2012-13.
- Duplicated enrollment has been increasing since 2012-13.
- FTEF has been increasing since 2011-12.
- WSCH per FTEF has remained steady with a slight decline.
- > Retention rates have been slowly increasing.
- > Success rates have been slowly declining.
- The number of sections offered has increased significantly since 2010-11.

 The number of degrees awarded has been increasing since 2010-11.

Department Goals:

- > Improve student success rates.
- > Hire more full-time instructors.
- Hire more clerical support for the department.
- Offer more professional development opportunities, especially in regards to cultural sensitivity and understanding student demographics and backgrounds better in order to more effectively relate to and instruct students.

Challenges & Opportunities:

- The number of full-time faculty is a challenge to the day-to-day operations of the program.
- The difficulty in finding qualified applicants for full-time and adjunct positions is a challenge to providing adequate staffing to the department.
- The lack of uniformity in classroom equipment is a challenge to delivering quality instruction in a timely fashion.
- The high percentage of non-transfer level courses is of concern to the program.
- There is an opportunity to provide the staff with more professional development opportunities.

Action Plan:

- Address the staffing needs and lack of uniformity in classroom equipment through the program review process.
- Develop more opportunities for professional development.


	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	3,616	3,501	3,556	4,467	4,611
FTEF	37.87	36.39	36.59	47.37	51.56
WSCH per FTEF	399	393	367	358	353

EXHIBIT A.121



	10-11	11-12	12-13	13-14	14-15
Sections	146	146	156	202	220
% of online enrollment	6%	5%	4%	5%	10%
Degrees awarded	3	5	7	12	16
Certificates Awarded	0	0	0	0	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1501XX

Individual Data Sheets By Division ENGLISH + READING *(cont.)*

READING & STUDY SKILLS - 2014-2015

Description:

Reading and Study Skills courses are designed to introduce students to the fundamentals of reading comprehension, vocabulary development, phonemic awareness and usage, and to develop academic reading, critical thinking, and corresponding writing skills expected in associate degree and transfer-level courses.

Assessment:

- FTES and duplicated enrollment have been steadily declining since 2010-11 with the exception of an increase in 2014-15.
- > FTEF has remained relatively steady.
- WSCH per FTEF increased during 2011-12 to 2012-13 but has since fallen to 2010-11 levels.
- After declining during 2011-12 to 2013-14, success rates have begun to increase.
- Retention rates have remained relatively steady.
- The number of sections offered have remained steady after dropping from 2010-11 levels.

Department Goals:

None specified.

Challenges & Opportunities:

> None specified.

Action Plan:

> None specified.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,133	1,132	1,084	695	846
FTEF	6.64	4.96	4.96	5.47	5.81
WSCH per FTEF	471	565	562	423	421

	10-11	11-12	12-13	13-14	14-15
Sections	29	22	22	21	22
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division FINE ARTS

ART - 2014-2015

Description:

The Art program provides training in art fundamentals to prepare students for transfer or to pursue a career in the arts. The core program provides an introduction to various aspects of studio art and art history, from traditional to the contemporary. Students can create their own emphasis in graphic design, 3D design, sculpture, printmaking, digital video production or studies in a contemporary media such as installation art or/and performance art.

Assessment:

- > FTES has declined since 2010-11.
- Duplicated enrollment declined in 2011-12 and remained steady until 2014-15, when it declined again.
- FTEF declined from 2010-11 to 2012-13, and has been increasing since.
- WSCH per FTEF has been decreasing since 2010-11.
- Success rates have increased every year since 2010-11, with the exception of the 2013-14 academic year.

- Retention rates have been steadily increasing since 2010-11, with the exception of 2014-15, in which there was a slight decline.
- The number of sections offered has increased by 65% since 2010-11.

Department Goals:

- Hire more full-time faculty.
- > Develop a collaborative arts degree or certificate.

Challenges & Opportunities:

- Current facilities and equipment are a big challenge to delivering quality instruction. Studios do not have adequate ventilation, have asbestos in the walls, and hazmat storage is a big problem.
- There are no dedicated lecture halls to hold art history courses – last semester art history classes were held in a weight room and a chemistry lab.
- Students do not have access to the technology necessary for digital painting classes on campus or at home.
- Competing art programs are drawing enrollment away from the program by offering a wider selection of diverse and interesting classes than CHC does.
- The lack of lab technicians is a challenge in preparing rooms for instruction in a timely fashion.

Action Plan:

 Demonstrate the need for more full-time faculty and updated facilities and equipment through the program review process.



EXHIBIT A.125



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,298	1,074	1,076	1,073	943
FTEF	6.59	5	5	6.28	7.13
WSCH per FTEF	600	583	544	503	436

	10-11	11-12	12-13	13-14	14-15
Sections	29	24	23	35	48
% of online enrollment	7%	17%	17%	19%	12%
Degrees awarded	6	7	3	11	15
Certificates Awarded	0	0	0	0	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1002XX

Individual Data Sheets By Division FINE ARTS *(cont.)*

DANCE - 2014-2015

Description:

Dance has been an expression of human activity as long as there have been humans. Throughout history, cultures have communicated their emotions, beliefs, ideas, hopes and customs through the series of expressions, gestures and motions that make up dance. Experience how art, exercise, social activity, spiritual actions, movement, creativity, relationships, music, culture, expression and communication all work together as one. An education in dance can lead to a career as a dancer, choreographer or dance instructor. It is also the foundation for four-year college studies in dance-related fields.

Assessment:

- > FTES has increased by nearly 67% in the past year.
- Duplicated enrollment increased by nearly 39% in the past year.
- > FTEF has increased in the past year.
- WSCH per FTEF has increased significantly in the past year.
- Success and retention rates have fallen in the past year.

 The number of sections offered has increased significantly in the past year.

Department Goals:

- > Hire instructors within the theatre department.
- Find spaces to accommodate more classes.

Challenges & Opportunities:

 The loss of the gymnasium floor is a huge challenge to running the dance program, as that space was used to hold a number of large dance classes that now have difficulty locating spaces to hold classes in.

Action Plan:

 Work with the administration to design and advocate for a new performing arts center.



EXHIBIT A.127



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	40	0	0	61	85
FTEF	0	0	0	0.35	0.42
WSCH per FTEF	0	0	0	503	704

	10-11	11-12	12-13	13-14	14-15
Sections	0	0	0	3	13
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division FINE ARTS *(cont.)*

MUSIC - 2014-2015

Description:

Expand your creativity and artistry through our
 basic training courses in Classical theory, Western
 history, and practice and performance techniques.
 Our jazz and choir ensembles perform throughout
 the year and there are recitals each semester.
 An associate of arts degree in music can lead to
 a career as a professional musician, conductor,
 concert artist, studio musician, arranger, composer,
 accompanist, music teacher, private instructor or
 church related music such as minister of music,
 organist or choir director. These courses can be the
 foundation for four-year college studies in music.

Assessment:

- FTES decreased from 2010-11 to 2012-13, and has remained steady since.
- Duplicated enrollment decreased from 2010-11 to 2011-12, and has since been increasing.
- > FTEF has increased in the past year.
- WSCH per FTEF has remained steady except for a decrease in the 2014-15 academic year.
- Success rates increased from 2010-11 to 2013-14 before falling in 2014-15.
- Retention rates have remained stable.

 The number of sections offered in 2014-15 is approximately 35% more than the number of sections offered in 2010-11.

Department Goals:

- Help students reach situations where they can transfer or find employment in the music industry.
- Hire more full-time faculty.
- > Renovate or relocate the performing arts center.
- Develop a multidisciplinary or collaborative arts degree or certificate.

Challenges & Opportunities:

- Current facilities pose a challenge in providing quality instruction to students.
- The number of full-time instructors in the program makes the day-to-day operations of running the program difficult.
- As universities tend to ignore popular music, which is a large part of the music industry, there exists at CHC an opportunity to provide education and training in popular music to students.

Action Plan:

 Work with the administration to develop a plan to either renovate or replace the performing arts center. Demonstrate the need for more full-time faculty through the program review process.



EXHIBIT A.129



	10-11	11-12	12-13	13-14	14-15
Sections	51	45	37	48	69
% of online enrollment	14%	11%	3%	10%	14%
Degrees awarded	2	1	3	2	1
Certificates Awarded	0	0	0	2	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1004XX

	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,106	858	868	933	922
FTEF	6.79	6.05	5.49	6.58	7.39
WSCH per FTEF	556	554	557	567	416

Individual Data Sheets By Division FINE ARTS *(cont.)*

THEATRE ARTS — 2014-2015

Description:

Step into the spotlight by playing a part in a stage, television, radio, video or motion picture production. Whether it's a serious or comic role, or something behind the scenes, there are countless opportunities to act, sing, dance, produce, direct, operate a camera or simply read. An associate of arts in theatre arts degree can develop your skills and knowledge in the different aspects of theatre performance and technical skills. It also is the foundation for four-year college studies in theatre arts.

Assessment:

- FTES remained steady during 2010-11 to 2012-13, after which it decreased from 2013-14 to 2014-15.
- Duplicated enrollment increased from 2010-11 to 2012-13 before dropping in 2013-14 and beginning to increase in 2014-15.
- > FTEF has remained relatively steady.
- WSCH per FTEF has decreased.
- Success rates have been increasing since a decline in 2012-13.
- Retention rates have been steadily increasing.

 The number of sections offered has increased overall since 2010-11.

Department Goals:

- Build up student resumes with stage productions.
- Hire more full-time instructors for both theatre and dance.
- > Increase recruitment and outreach efforts.
- Hire more theatre technicians.
- > Renovate or reconstruct the performing arts center.

Challenges & Opportunities:

- Staffing is a large challenge in running the program, as instructors and technical support are both understaffed.
- The condition of the performing arts center is a challenge as there are sewage and ventilation issues and multiple leaks, one of which leaks onto the student lighting booth.
- The location of the performing arts center is a challenge in that it is not very visible, accessible, or easily found.
- The spaces within the performing arts center are a challenge as they are small and over-utilized – two rooms are used for lecture, lab, recital, and storage.

- The program lacks adequate equipment to teach students drafting in the stagecraft class.
- As there will be a large amount of MFA's retiring in the near future, there exists an opportunity to help produce graduates to fill the anticipated vacancies.

Action Plan:

- Work with the administration to develop a plan to either renovate or reconstruct the performing arts center.
- Demonstrate the need for more staff through the program review process.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	148	180	277	167	207
FTEF	4.27	3.94	4.46	4.51	4.42
WSCH per FTEF	539	552	487	383	398

EXHIBIT A.131



	10-11	11-12	12-13	13-14	14-15
Sections	31	24	39	38	42
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	1	5	3	7	3
Certificates Awarded	0	0	0	0	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1007XX

Individual Data Sheets By Division HEALTH + KINESIOLOGY

HEALTH SCIENCES - 2014-2015

Description:

Explore the many aspects of science and healthrelated fields through this multi-disciplinary program that opens your eyes to the worlds of chemistry, anatomy, physiology, microbiology, psychology, sociology, anthropology and more. The associate of science in health sciences degree prepares students for health care professional programs, including nursing, dental hygiene and other health fields. It is also the foundation for four-year college studies in these areas.

Assessment:

- FTES decreased in 2012-13 and has been increasing since.
- Duplicated enrollment decreased in 2011-12 and has been increasing since.
- FTEF has remained steady until an increase in 2014-15.
- WSCH per FTEF has been decreasing since 2011-12.
- Success and retention rates have remained relatively steady.
- The number of sections offered has increased in 2014-15.

 The program began to offer online classes starting in 2013-14 and they have proved to be quite popular.

Department Goals:

- Add a practical cooking class or aspect to existing classes, with a community service and outreach aspect, and a commercial kitchen.
- Make the food bank more visible and easily accessible on campus.
- > Equip the food bank with refrigerators.

Challenges & Opportunities:

- There is an opportunity to outreach to the community with the development of a practical cooking class.
- There is an opportunity to better service impoverished students by relocating the food bank to a more central location and increasing visibility of and access to the food bank.

Action Plan:

- Explore the possibility of installing a commercial kitchen and creating a practical cooking class.
- Work with administration to relocate the food bank and increase its visibility.

 Explore the viability of installing refrigerators in the food bank.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,388	1,405	1,077	1,195	1,133
FTEF	4.6	4	4	4.8	6
WSCH per FTEF	907	1,024	799	684	561

	10-11	11-12	12-13	13-14	14-15
Sections	24	22	20	24	32
% of online enrollment	0%	0%	0%	21%	28%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division HEALTH + KINESIOLOGY *(cont.)*

KINESIOLOGY - DANCE - 2014-2015

Description:

 The science of kinesiology is the foundation for understanding human movement – which muscles are involved, how they move and how they interact. The study of how our body moves – from psychological, biological, and physiological perspectives – is not only appropriate for athletes, but also for students pursuing a career as a sports therapist or doctor, coach, physical education teacher, sports scientist or fitness consultant. Dance courses in the Kinesiology department include Hip Hop and Funk, Ballroom, Swing, and Salsa, and Jazz.

Assessment:

 The Kinesiology department was restructured and began to offer Dance classes starting in the 2014-15 academic year.

Department Goals:

- Locate facilities that are able to accommodate large class sizes.
- Make it easier for community members to sign up for the free Zumba class held on Tuesdays and Thursdays.

Challenges & Opportunities:

The department does not have access to many facilities that can accommodate a large dance class. For example, Ballroom Dance classes used to be taught using 2/3 of a gym floor, which could hold approximately 60 people. Now, Ballroom Dance classes are taught in the same space that yoga classes are taught in, and the space reaches capacity at around 30 people.

Action Plan:

 Demonstrate the need for larger spaces through the program review process.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment*	0	0	0	0	1,924
FTEF	0	0	0	0	0.57
WSCH per FTEF	0	0	0	0	259

*The source data does not differentiate between the different programs within the Kinesiology department, thus, the total duplicated enrollment of the Kinesiology department is used.

	10-11	11-12	12-13	13-14	14-15
Sections	0	0	0	0	10
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division HEALTH + KINESIOLOGY *(cont.)*

KINESIOLOGY - FITNESS - 2014-2015

Description:

 The science of kinesiology is the foundation for understanding human movement – which muscles are involved, how they move and how they interact. The study of how our body moves – from psychological, biological, and physiological perspectives – is not only appropriate for athletes, but also for students pursuing a career as a sports therapist or doctor, coach, physical education teacher, sports scientist or fitness consultant.
 Fitness courses in the Kinesiology department are designed to improve overall physical fitness and well being.

Assessment:

- > FTES has been steadily decreasing since 2010-11.
- FTEF has decreased by approximately 10% since 2010-11.
- WSCH per FTEF has been declining since 2011-12.
- Success rates have been remained steady with a very slight downward trend.
- > Retention rates have remained steady.
- The large increase in the number of sections offered in 2014-15 is due to the restructuring of

classes in response to students no longer being able to repeat classes.

Department Goals:

- Maintain flexibility in course offerings in order to meet students' interests in fitness.
- Locate spaces in which to hold larger fitness classes.
- Impart students with the necessary knowledge so that they may safely and enjoyably engage in a variety of fitness activities with the improvement of health and performance in mind.

Challenges & Opportunities:

- The flexibility of part-time faculty is actually an advantage in fitness and kinesiology as they can more easily adapt to the changing interests of the students.
- Facilities limit the kinds of classes that can be offered, as well as the size of the classes.

Action Plan:

 Demonstrate the need for improved facilities through the program review process.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment*	2,361	2,029	1,912	1,630	1,924
FTEF	8.56	7.02	6.68	8.31	7.69
WSCH per FTEF	742	742	724	518	460

*The source data does not differentiate between the different programs within the Kinesiology department, thus, the total duplicated enrollment of the Kinesiology department is used.

	10-11	11-12	12-13	13-14	14-15
Sections	60	48	48	57	107
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division HEALTH + KINESIOLOGY *(cont.)*

KINESIOLOGY - SPORTS - 2014-2015

Description:

The science of kinesiology is the foundation for understanding human movement – which muscles are involved, how they move and how they interact. The study of how our body moves – from psychological, biological, and physiological perspectives – is not only appropriate for athletes, but also for students pursuing a career as a sports therapist or doctor, coach, physical education teacher, sports scientist or fitness consultant. Sports classes in the Kinesiology department are for players of all levels wanting to improve their performance and knowledge.

Assessment:

- FTES remained low until 2014-15, in which it increased significantly.
- > FTEF remained low until 2014-15.
- WSCH per FTEF has declined in the past two years.
- Success rates have remained steady, with a decline in the last year.
- Retention rates have remained high.
- The large increase in the number of sections offered in 2014-15 is due to the restructuring of

classes in response to students no longer being able to repeat classes.

Department Goals:

- Maintain flexibility in course offerings in order to meet students' interests in fitness.
- Locate spaces in which to hold larger sports classes.
- > Locate spaces in which to offer new sports classes.
- Impart students with the knowledge necessary to safely, enjoyably, and intelligently engage in their sport or activity of choice with respect to the tradition of the sport or activity, as well to increase their own personal performance.

Challenges & Opportunities:

- The flexibility of part-time faculty is actually an advantage in fitness and kinesiology as they can more easily adapt to the changing interests of the students.
- Facilities limit the kinds of classes that can be offered, as well as the size of the classes.

Action Plan:

 Demonstrate the need for improved facilities through the program review process.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment*	2,361	2,029	1,912	1,630	1,924
FTEF	0.25	0.28	0.21	0.29	2
WSCH per FTEF	574	674	796	403	288

*The source data does not differentiate between the different programs within the Kinesiology department, thus, the total duplicated enrollment of the Kinesiology department is used.

	10-11	11-12	12-13	13-14	14-15
Sections	2	2	2	2	32
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division HEALTH + KINESIOLOGY *(cont.)*

KINESIOLOGY - 2014-2015

Description:

The science of kinesiology is the foundation for understanding human movement – which muscles are involved, how they move and how they interact. The study of how our body moves – from psychological, biological, and physiological perspectives – is not only appropriate for athletes, but also for students pursuing a career as a sports therapist or doctor, coach, physical education teacher, sports scientist or fitness consultant. An education in kinesiology can lead to a career as a physical therapist, coach, fitness trainer or dance instructor.

Assessment:

- Kinesiology, formerly PE, was not offered during the 2012-13 academic year.
- FTES dropped during the 2013-14 academic year as a result, but increased significantly in the 2014-15 academic year.
- FTEF remained steady until an increase in 2014-15.
- WSCH per FTEF declined significantly from 2010-11 to 2011-12, and again from 2011-12 to 2013-14, after which it remained steady.
- > Success rates have been increasing.

- > Retention rates have been slightly increasing.
- The number of sections offered in 2013-14 was low as a result of 2012-13, but by 2014-15 the number of sections offered had risen again to 2010-11 levels.

Department Goals:

- Introduce students to the interdisciplinary study of human movement.
- Continue to operate the fitness assessment lab on a low cost basis.
- Locate spaces in which to offer different types and larger fitness and activity classes.
- > Find a way to safely store more equipment.

Challenges & Opportunities:

- The number of and kinds of spaces available to the department to use limits the kinds of classes the department can offer as well as the sizes of those classes.
- > Secure storage space is inadequate.
- The loss of the gymnasium is a challenge to offering large classes.

Action Plan:

 Demonstrate the need for facilities through the program review process.



EXHIBIT A.141



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment*	2,361	2,029	0	1,630	1,924
FTEF	0.2	0.4	0	0.4	1.62
WSCH per FTEF	2,101	1,073	0	486	464

*The source data does not differentiate between the different programs within the Kinesiology department, thus, the total duplicated enrollment of the Kinesiology department is used.

	10-11	11-12	12-13	13-14	14-15
Sections	9	9	0	2	10
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division HUMAN DEVELOPMENT

CHILD DEVELOPMENT - 2014-2015

Description:

The building blocks for a child's health, emotional well being and intellectual growth are formed during the first years of their lives. The need for quality child development programs continues to grow. The associate of arts in child development degree is a preparatory program to teach in an early learning environment such as preschool. This degree can also assist elementary school teachers preparing for work in primary and intermediate grades, or in settings such as day care centers, nursery schools, and Head Start programs.

Assessment:

- FTES has been declining every year except for 2014-15, in which it increased.
- Duplicated enrollment has remained steady with a slight overall decline.
- > FTEF has remained steady.
- WSCH per FTEF has slowly declined.
- > Success rates have been slowly improving.
- Retention rates have remained steady.
- The number of sections offered remains steady.
- > The program matches with statewide curriculum for

Child Development, so that degrees and certificates match across the state.

Department Goals:

- Continue working with other departments such as Fire Technology and EMS to provide them with training in working with children.
- Replace the portable facility with a permanent structure.

Challenges & Opportunities:

- Parking and parent drop off at the Child Development Center is not designed to accommodate the amount of traffic they receive.
- Security at the Child Development Center is a concern, as classes from various disciplines are held in the classrooms located there, and there is no security entrance.

Action Plan:

 Demonstrate the need for better facilities through the program review process.



EXHIBIT A.143



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	634	672	674	586	587
FTEF	4.69	4.23	4.23	4.49	4.83
WSCH per FTEF	521	546	538	436	427

	10-11	11-12	12-13	13-14	14-15
Sections	22	20	20	21	22
% of online enrollment	9%	10%	10%	10%	9%
Degrees awarded	3	5	5	5	8
Certificates Awarded	3	10	5	3	4

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1305XX

Individual Data Sheets By Division HUMAN DEVELOPMENT *(cont.)*

EDUCATION - 2014-2015

Description:

 Education courses will introduce students to the field of education and are designed to familiarize students with the broad aspects of the profession, philosophy, and principles of teaching school age children.

Assessment:

- FTES and duplicated enrollment have remained steady except for a decrease in the 2013-14 academic year.
- > FTEF has stayed the same at 0.2.
- WSCH per FTEF has stayed relatively steady except for a decline in the 2013-14 academic year.
- Success and retention rates dropped sharply in 2012-13 before increasing.
- The program has continued to offer one section since 2010-11.
- Education 290, the only class offered by this program, is required for all students transferring to California State University San Bernardino seeking a multiple subject credential.

Department Goals:

 Provide students hoping to receive a multiple subject credential from California State University San Bernardino with the education necessary to transfer.

Challenges & Opportunities:

> None specified.

Action Plan:

None specified.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	38	30	36	17	30
FTEF	0.2	0.2	0.2	0.2	0.2
WSCH per FTEF	570	450	540	255	450

	10-11	11-12	12-13	13-14	14-15
Sections	1	1	1	1	1
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division HUMAN DEVELOPMENT (cont.)

PSYCHOLOGY - 2014-2015

Description:

A background studying psychology is useful in almost all aspects of your life and career by helping you to better understand yourself and other people. An associate in arts in psychology degree can lead to a career working in research, teaching, counseling, human services, marketing, management, emergency services and law, among others. It is also the foundation for four-year college studies in psychology.

Assessment:

- After a decline in 2011-12, FTES and duplicated enrollment have been increasing each year.
- FTEF declined from 2010-11 to 2012-13, after which it began to increase.
- WSCH per FTEF remained steady from 2010-11 to 2012-13, after which it began to decrease.
- > Success and retention rates have remained steady.
- The number of sections offered has growing in the past two academic years.
- The number of degrees awarded has been increasing.
- > Online classes are popular in the program.

Department Goals:

- Continue to be adaptive to changing styles of instructional delivery that are conducive to flexible learning environments, such as flipped classrooms, spaces with flexible equipment for layout changes, media rich spaces, and online classes.
- The department sees a future where psychology converges with more traditional science such as anatomy, child development, behavioral sciences, anthropology, and biological sciences.
- Hire two more full-time faculty to replace the two that are close to retirement in time for a smooth transition of institutional knowledge.

Challenges & Opportunities:

- There is an opportunity for wet laboratory space with specialized equipment, for example, integrating cognitive/neuroscience with psychology using EMI scanners could be taught in a laboratory environment.
- The under-preparedness of students is a challenge to the program. Increasing prerequisites and starting more learning communities could be options for addressing this, as well as increasing the amount of supplemental instruction and student tutor support.

Action Plan:

- Demonstrate the need for replacement full-time faculty through the program review process.
- > Explore options in developing new curriculum.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,428	1,160	1,245	1,257	1,329
FTEF	6.88	5.75	5.68	7.01	8.87
WSCH per FTEF	689	682	699	595	516

	10-11	11-12	12-13	13-14	14-15
Sections	41	36	35	41	53
% of online enrollment	10%	11%	14%	10%	15%
Degrees awarded	8	11	26	43	54
Certificates Awarded	0	0	0	0	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 2001XX

Individual Data Sheets By Division INSTRUCTIONAL SUPPORT

LEARNING RESOURCES - 2014-2015

Description:

 Learning Resources courses provide academic and administrative support services to students enabling them to succeed in various content area classes, such as English, math, foreign language, and vocational courses. Learning Resource courses are designed to meet the needs of students from various levels of educational preparedness, ethnic backgrounds, cultures, socioeconomic levels, and of various physical and learning disabilities.

Assessment:

- FTES spiked in 2012-13 and 2014-15.
- Duplicated enrollment increased from 2011-12 to 2012-13, dropped sharply in 2013-14, and increased again in 2014-15.
- FTEF increased fro 2010-11 to 2013-14 before leveling out.
- WSCH per FTEF spiked in 2012-13 and 2014-15, and experienced a significant drop in 2013-14.
- > Success rates dropped in 2010-11 and 2013-14.
- > Retention rates have remained relatively steady.
- The number of sections offered increased dramatically from 2010-11 to 2011-12.

Department Goals:

- Provide administrative and academic support to students form various levels of educational preparedness, ethnic backgrounds, cultures, socioeconomic levels, and of various physical and learning disabilities.
- Equip students with various challenges with the skills and knowledge to advocate for themselves and succeed in an academic setting.

Challenges & Opportunities:

None specified.

Action Plan:

None specified.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	470	651	705	169	493
FTEF	0.56	0.89	1.03	1.82	1.13
WSCH per FTEF	743	1,082	1,604	300	1,751

	10-11	11-12	12-13	13-14	14-15
Sections	6	26	35	32	23
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division INSTRUCTIONAL SUPPORT (cont.)

LIBRARY SCIENCE - 2014-2015

Description:

 Library Science courses provide students with an introduction to information competency and the development of skills necessary to perform academic and personal research using library resources, electronic databases, and the Internet. Students will receive guidance through the process of selecting, analyzing and citing various information sources and the application of the research process to a variety of information needs. Library Science courses prepare students for college-level research in all disciplines.

Assessment:

- Library Science courses were only offered in the 2010-11 and 2014-15 academic years.
- The most recent offering of the Library Science course was 100% online.

Department Goals:

 Provide students with the skills necessary to perform academic and personal research using library resources, electronic databases, and the internet, as well as the tools to critically analyze and

cite various information sources.

Challenges & Opportunities:

> None specified.

Action Plan:

> None specified.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	36	0	0	0	19
FTEF	0.07	0	0	0	0.2
WSCH per FTEF	514	0	0	0	270

	10-11	11-12	12-13	13-14	14-15
Sections	1	0	0	0	1
% of online enrollment	0%	0%	0%	0%	100%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division MATHEMATICS

MATHEMATICS - 2014-2015

Description:

Math is a universal part of our everyday lives. It is the tool and language of commerce, engineering and sciences An associate of arts in mathematics degree can lead to a variety of different jobs in basic research, engineering, finance, business, government service, information technology, energy resources, data analysis and much more.

Assessment:

- FTES declined from 2010-11 to 2012-13 at which point it began to rise again to 2010-11 levels.
- Duplicated enrollment declined from 2010-11 to 2011-12 and then rose to exceed 2010-11 levels by 2014-15.
- FTEF declined from 2010-11 to 2011-12 and then started rising.
- WSCH per FTEF has been steadily declining.
- Success rates have remained steady except for a decline in 2012-13.
- > Retention rates have been steadily increasing.
- The number of sections offered declined in 2011-12 and 2012-13, but rose again the following two years.

Department Goals:

- Continue offering quality math instruction while adapting to changing technologies and instructional delivery methods.
- Enhance student-to-student and student-toteacher interaction within the classroom. For example, students upload homework assignments onto projectors and talk through the process of the problem, or instructor guided practice.
- Ensure accurate placement of students into the appropriate courses.
- The department needs unrestricted access to three more classrooms in order to grow the program and incorporate labs.

Challenges & Opportunities:

- Scheduling conflicts are a challenge due to the distances some instructors and students must walk between classes.
- The number of computers the department has access to is a challenge in terms of teaching certain classes, such as statistics or courses with lab components.
- If the department is to move towards online education, they would need a testing center on campus as UC campuses will not accept online courses unless the testing is done on campus.

• Assessment and placement is not always accurate.

Action Plan:

- Demonstrate the need for more facilities and computer access through the program planning and review process.
- Develop a method to quickly address misplaced students.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	5,015	3,985	4,420	4,944	5,639
FTEF	37.59	31.48	31.49	40.15	44.95
WSCH per FTEF	550	541	506	477	459

EXHIBIT A.153



	10-11	11-12	12-13	13-14	14-15
Sections	158	136	131	160	192
% of online enrollment	0%	0%	0%	0%	2%
Degrees awarded	7	5	9	19	26
Certificates Awarded	0	0	0	0	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1701XX

Individual Data Sheets By Division PUBLIC SAFETY + SERVICES

EMERGENCY MEDICAL SERVICES - 2014-2015

Description:

People's lives often depend on the quick reaction and competent care of Emergency Medical
Technicians, Paramedics and Mobile Intensive Care
Nurses. We are accredited by the Commission on
Accreditation of Allied Health Education Programs.
The associate of science in emergency medical
services degree can lead to an eventual career
as an Emergency Medical Technician. Those who
successfully earn the degree will be eligible to
take the National Registry of Emergency Medical
Technician-Paramedic written and practical
examinations, which could lead to employment in
a profession requiring emergency life-saving skills.
State certification is required for employment as an
EMT.

Assessment:

- FTES has remained steady except for a decline in 2012-13.
- > Duplicated enrollment has been steadily increasing.
- FTEF has remained steady except for a low in 2012-13.
- WSCH per FTEF has remained steady except for a decline in 2014-15.

- Success rates have been steadily rising each year except for 2014-15, in which it fell one percentage point.
- > Retention rates have stayed steady.
- > The number of sections offered has remained high.
- The number of certificates awarded nearly doubled beginning in 2012-13.

Department Goals:

- To provide students either a pathway into the paramedic program or fire academy or a job as an EMT.
- Stay on top of changes within the industry, especially in regards to technology and electronics.
- Continue building relationships with external industries and local institutions.

Challenges & Opportunities:

- The program lacks the ability to hire enough staff to maintain the current facilities.
- > There is not enough parking on campus.
- There is an opportunity to partner with outside industries to generate the revenue needed to maintain facility hours.
- An expanded simulation center would be very helpful to the program.

Action Plan:

- Continue offering quality education and tracking student data regarding national registry exam.
- Continue outreach efforts to local industries and educational institutions.



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	617	802	1,097	968	1,371
FTEF	12.91	13.48	11.98	13.19	12.83
WSCH per FTEF	530	543	563	542	474

EXHIBIT A.155



	10-11	11-12	12-13	13-14	14-15
Sections	47	50	48	57	54
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	12	8	7	14	6
Certificates Awarded	236	225	432	450	471

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1250XX & 1251XX

Individual Data Sheets By Division PUBLIC SAFETY + SERVICES (cont.)

FIRE TECHNOLOGY - 2014-2015

Description:

 Do you have a passion for teamwork and a commitment to public service in the control and prevention of fire, the handling of hazardous materials, investigation, rescue operations, security and safety? If so, the CHC Fire Academy is the program for you. The associate of science in fire technology degree may lead to entry-level employment as a firefighter in the public or private sectors.

Assessment:

- FTEF and duplicated enrollment declined slightly in 2011-12 and has remained relatively steady since.
- FTEF declined slightly in 2011-12 and has remained steady since.
- WSCH per FTEF has remained steady.
- Success rates increased significantly in 2014-15.
- Retention rates rose significantly in 2014-15.
- The number of sections offered declined in 2010-11 and began to rise again in 2014-15.
- The number of degrees and certificates awarded has remained high since 2010-11.

Department Goals:

- Continue offering nationally renowned fire technology education and training.
- Adapt to changes coming from State Fire Marshall's Office – specifically, the mandate that only regional academies can sign off on Firefighter 1 certificates.

Challenges & Opportunities:

 As one of the only regional academies in the state, the State Fire Marshall's Office's mandate is both a challenge and an opportunity for CHC. A large number of firefighters will come to CHC to certify or recertify their Firefighter 1 certificate. The challenge is that CHC lacks the facilities to offer a comprehensive evaluation. However, CHC has the opportunity to gain even greater recognition by constructing new facilities that can accommodate a comprehensive evaluation, as well as by offering a refresher course for firefighters looking to recertify.

Action Plan:

 Several plans and designs for various training facilities have been done, and the department will be working with the administration, State legislators, and local fire chiefs to help realize the new facilities.


	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	765	639	557	635	602
FTEF	11.26	9.04	8.96	8.5	9.41
WSCH per FTEF	364	337	307	332	340

EXHIBIT A.157



	10-11	11-12	12-13	13-14	14-15
Sections	31	24	24	22	27
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	23	16	28	20	18
Certificates Awarded	58	39	39	40	56

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 2133XX

Individual Data Sheets By Division PUBLIC SAFETY + SERVICES (cont.)

PUBLIC SAFETY & SERVICES - 2014-2015

Description:

 Public Safety and Services courses will provide students with the leadership and communication skills to effectively manage public safety emergencies. Students will be introduced to hazard mitigation, hazardous material management, disaster basics, and the roles and responsibilities of an emergency manager and various volunteer agencies.

Assessment:

- FTES and duplicated enrollment declined sharply in 2011-12 and 2012-13 before rising again.
- FTEF dropped after 2010-11 and has remained steady since.
- WSCH per FTEF declined in 2011-12 before rising again.
- Success rates remained steady until a sharp decline in 2014-15.
- Retention rates remained relatively steady except for a decline in 2014-15.
- The number of sections offered decreased significantly after 2010-11.

Department Goals:

 Provide students with the proper education and leadership and communication skills to manage public safety emergencies, as well as provide them with an education in hazardous materials, hazard mitigation, and the roles and responsibilities of emergency managers and various volunteer agencies.

Challenges & Opportunities:

> None specified.

Action Plan:



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	33	9	13	51	46
FTEF	1.06	0.2	0.2	0.4	0.4
WSCH per FTEF	250	135	195	383	345

EXHIBIT A.159



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

Individual Data Sheets By Division SOCIAL SCIENCE

ANTHROPOLOGY - 2014-2015

Description:

Anthropology is the study of humans, past and present, including human culture, societies, social relations, biology and evolution. You'll delve into languages, music, art, architecture and evidence of where and how people lived and how people have changed over time. Unearth clues about where your ancestors came from. An associate of arts in anthropology degree can lead to work doing ground-level research and writing surveys, and it also provides the foundation for further studies in anthropology, which can lead to careers in teaching, research or applied anthropology.

Assessment:

- FTES has been slowly increasing since 2012-13.
- Duplicated enrollment increased in 2013-14 and fell slightly the following year.
- FTEF began to increase in 2013-14.
- WSCH per FTEF has been slowly decreasing.
- Success rates have remained relatively steady.
- Retention rates have remained steady with a slight decrease over time.
- The number of sections offered has increased in the past two academic years.

Department Goals:

- The department currently does not have any fulltime faculty. The hiring of a full-time faculty is a hire priority goal for the department.
- Secure places to display student work would be helpful to have.
- Faculty offices often do not have windows or bookshelves.

Challenges & Opportunities:

- The lack of a full-time faculty in the department is a challenge to growing and maintaining the program.
- After dropping archaeology from the curriculum, there is an opportunity to bring it back.

Action Plan:

 Demonstrate the need for a full-time faculty member in the Anthropology program through the program planning and review process.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	218	214	201	301	272
FTEF	0.6	0.6	0.6	1	1.4
WSCH per FTEF	1,051	1,141	1,072	763	672

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

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 2202XX

Individual Data Sheets By Division SOCIAL SCIENCE *(cont.)*

HISTORY - 2014-2015

Description:

To know where we are and where we are yet to go, we look back at where we have already been. Our curriculum examines the history of the world, U.S., California, religion, culture, art, economics, literature, politics and a variety of other topics and developments that have shaped our world and lives. An associate of arts in history degree prepares you for jobs in research and analysis working in government, education, the media, public relations, film and publishing, or at a variety of institutions, including libraries. It is also the foundation for four-year college studies in history or a related field.

Assessment:

- FTES declined from 2010-11 to 2012-13 before rising again the following two years.
- Duplicated enrollment hit a low in 2011-12 and began rising again.
- FTEF decreased from 2010-11 to 2012-13 before rising again.
- WSCH per FTEF has been decreasing since 2010-11.

- Success rates increased in 2012-13 and 2013-14 but fell again in 2014-15.
- > Retention rates have remained steady.
- The number of sections offered has been increasing.
- Online enrollment has been increasingly popular, and nearly a third of students enrolled online in 2014-15.
- The number of degrees awarded has been increasing.

Department Goals:

 Hire another full-time faculty member to replace the one that retired.

Challenges & Opportunities:

 Student preparedness can be a challenge; however, prerequisites seem to help ensure that students are prepared by the time they take courses within the program.

Action Plan:

 Demonstrate the need for another full-time faculty member through the program planning and review process.



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,713	1,141	1,295	1,525	1,473
FTEF	4.8	3.6	3.4	5.2	7.6
WSCH per FTEF	1,085	1,057	1,071	882	613

	10-11	11-12	12-13	13-14	14-15
Sections	28	32	36	41	53
% of online enrollment	7%	0%	3%	13%	30%
Degrees awarded	1	3	12	12	13
Certificates Awarded	0	0	0	0	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 2205XX

Individual Data Sheets By Division SOCIAL SCIENCE *(cont.)*

HUMANITIES - 2014-2015

Description:

It's been said that the study of humanities provides a well-rounded look at the world to make us "capable and cultivated human beings." Our program offers insights into the creativity and artistic expression of cultural, literary and other activities within the context of the human experience. The associate of arts in humanities degree is the foundation for four-year college studies in history, English, philosophy, and other fields of the humanities.

Assessment:

- The program was first introduced in 2013-14. Since then, FTES has more than doubled.
- FTEF has doubled from 2013-14 to 2014-15.
- WSCH per FTEF has increased slightly.
- Success rates have improved significantly since the program's beginning in 2013-14.
- Retention rates have increased as well in that time period.
- The number of sections offered has doubled since 2013-14.

Department Goals:

> None specified.

Challenges & Opportunities:

> None specified.

Action Plan:



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	0	0	0	0	65
FTEF	0	0	0	0.4	0.8
WSCH per FTEF	0	0	0	400	405

	10-11	11-12	12-13	13-14	14-15
Sections	0	0	0	2	4
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division SOCIAL SCIENCE *(cont.)*

MULTICULTURAL STUDIES - 2014-2015

Description:

The concept of a global society has never been > more spot-on than it is today. Organizations are looking for employees who can comprehend the differences that have historically set social groups apart from one another, and those who can develop a strong capacity for intellectual open-mindedness, tolerance and multicultural relationships. Our program can prepare you for greater cultural awareness and diverse employment opportunities. An education in multicultural studies can lead to a career in a variety of fields where teaching, translating or interpreting are essential. Coursework in this area is also an excellent foundation for transfer to a four-year university in multicultural studies, ethnic studies and related fields such as liberal studies, education and the humanities.

Assessment:

- FTES and duplicated enrollment have remained steady from 2011-12 to 2013-14 and declined slightly in 2014-15.
- FTEF has remained at 0.2 since 2011-12.

- WSCH per FTEF has been decreasing since 2011-12.
- > Success rates have been slowly falling.
- > Retention rates have remained steady.
- The number of sections offered has remained at one.

Department Goals:

> None specified.

Challenges & Opportunities:

None specified.

Action Plan:



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	0	39	36	36	28
FTEF	0	0.2	0.2	0.2	0.2
WSCH per FTEF	0	624	576	576	448

	10-11	11-12	12-13	13-14	14-15
Sections	0	1	1	1	1
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	0	0	0	0	0
Certificates Awarded	0	0	0	0	0

Individual Data Sheets By Division SOCIAL SCIENCE *(cont.)*

PHILOSOPHY - 2014-2015

Description:

Philosophy asks some of the biggest questions that have ever been asked – covering everything from ethical behavior and politics to metaphysics and science. Join us as we explore the topics that have puzzled mankind forever. An associate of arts in philosophy degree can prepare you with highly marketable, highly transferable skills that are a stepping stone toward most career paths. It is also the foundation for four-year college studies in philosophy and a variety of liberal arts fields.

Assessment:

- FTES declined from 2010-11 to 2013-14, and began to rise again in 2014-15.
- Duplicated enrollment dropped in 2011-12 and 2013-14.
- FTEF declined between 2011-12 and 2013-14 and rose to 2010-11 levels in 2014-15.
- WSCH per FTEF increased from 2010-11 to 2012-13 and has been decreasing since.
- Success rates hit a high in 2011-12 and have been dropping slightly since.
- Retention rates have remained steady with a slight increase overall.

- The number of sections offered has remained steady.
- Online enrollment is popular, especially so in 2014-15.

Department Goals:

- More display cases, maps, and bulletin boards in classrooms.
- More private offices for faculty.

Challenges & Opportunities:

> None specified.

Action Plan:



10-11

FTEF

Duplicated Enrollment

WSCH per FTEF

FIES	

1	11-12	12-13	13-14	14-15			10-11	I
73	514	540	502	576	[Sections	17	l
3.4	2.6	2.4	2.6	3.4		% of online enrollment	12%	Ì
808	651	656	574	504	[Degrees awarded	0	Ï
						Certificates Awarded	0	Í

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1509XX

EXHIBIT A.169



14%

12-13

14

14%

0

0

13-14

15

7%

1

0

14-15

19

32%

1

0

Individual Data Sheets By Division SOCIAL SCIENCE *(cont.)*

POLITICAL SCIENCE - 2014-2015

Description:

If you've ever voted in a public election or have been curious about how the nation's power and resources are allocated or how governmental decisions are made, then consider studying political science. Explore the intricacies of American politics, international affairs and political issues that impact human health, the environment or civil rights. An associate of arts in political science degree can lead to a career working in federal, state and local governments; law; business; international organizations; nonprofit associations; campaign management; polling; journalism; research and teaching. It is also the foundation for four-year college studies in political science or a related field.

Assessment:

- FTES declined in 2012-13 and 2014-15.
- Duplicated enrollment has remained relatively steady except for a decline in 2014-15.
- > FTEF dropped in 2012-13.
- WSCH per FTEF dropped in 2014-15.
- > Success rates have been steadily increasing.
- > Retention rates have largely remained the same.
- The number of sections offered grew in 2014-15.

Department Goals:

None specified.

Challenges & Opportunities:

> None specified.

Action Plan:



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	996	891	852	957	752
FTEF	3.4	3.2	2.8	3.4	3.8
WSCH per FTEF	884	936	869	811	651

EXHIBIT A.171



	10-11	11-12	12-13	13-14	14-15
Sections	17	16	14	17	22
% of online enrollment	0%	0%	0%	0%	0%
Degrees awarded	1	2	3	12	5
Certificates Awarded	0	0	0	0	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 2207XX

Individual Data Sheets By Division SOCIAL SCIENCE *(cont.)*

RELIGIOUS STUDIES - 2014-2015

Description:

 Religion has been a part of virtually all civilizations and cultures forever. It is everywhere, and is the foundation for belief systems around the world from the dawn of time. Our religious studies curriculum explores classical mythology, as well as religions in America and around the world. The associate of arts in religious studies degree can be the foundation for four-year college studies in religion. The program also provides excellent preparation for additional studies in for a variety of fields, including religion, law, education, counseling, business, journalism, politics, medicine and the arts.

Assessment:

- FTES and duplicated enrollment decreased from 2010-11 to 2012-13, and rose back to 2010-11 levels by 2014-15.
- FTEF decreased in 2011-12 and 2012-13, and has been increasing since.
- WSCH per FTEF decreased in 2013-14 and 2014-15.
- > Success rates have risen since 2010-11.
- Retention rates remain steady.

- The number of sections offered has increased after declining in 2011-12 and 2012-13.
- Online enrollment is very popular, with almost half of enrollment coming from online classes in 2014-15.

Department Goals:

- > Stay adaptable to changing technologies.
- Place flexible furniture in classrooms to facilitate group work and discussion.
- More all display cases, maps, and bulletin boards in classrooms.
- More private offices for faculty.

Challenges & Opportunities:

> None specified.

Action Plan:



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	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	314	227	193	286	319
FTEF	1.4	0.8	0.8	1.6	2
WSCH per FTEF	683	891	732	490	489

	10-11	11-12	12-13	13-14	14-15
Sections	10	6	6	10	12
% of online enrollment	40%	0%	17%	20%	42%
Degrees awarded	0	0	0	1	0
Certificates Awarded	0	0	0	0	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx TOP Code: 1510XX

Individual Data Sheets By Division SOCIAL SCIENCE *(cont.)*

SOCIOLOGY - 2014-2015

Description:

 From personal and family relationships to international corporation activities, few disciplines have such broad scope and relevance as sociology. The study of social relationships and institutions, the field of sociology is broad, exploring everything from crime to religion, to family relationships to the divisions of race and social classes and much more. An associate of arts in sociology degree can prepare you for four-year college studies in sociology or related fields such as social work, criminology or social science education. It can lead to a career path in education, social work or criminal justice, among others.

Assessment:

- FTES and duplicated enrollment declined in 2011-12 and 2012-13, but had risen back to 2010-11 levels by 2014-15.
- FTEF declined in 2011-12 and 2012-13 and rose in 2013-14 and 2014-15.
- WSCH per FTEF declined in 2014-15.
- Success rates declined in 2014-15 after increasing in 2011-12 and 2012-13.

- > Retention rates have remained steady.
- The number of sections offered has been increasing.
- The program started to offer classes online in 2013-14 and online enrollment accounted for over a quarter of overall enrollment in 2014-15.
- The number of degrees awarded has been increasing.

Department Goals:

> None specified.

Challenges & Opportunities:

> None specified.

Action Plan:



	10-11	11-12	12-13	13-14	14-15
Duplicated Enrollment	1,229	1,097	1,047	1,269	1,234
FTEF	4	3.6	3.2	4.2	5.6
WSCH per FTEF	974	936	942	867	696

EXHIBIT A.175



	10-11	11-12	12-13	13-14	14-15
Sections	22	21	22	26	33
% of online enrollment	0%	0%	0%	12%	27%
Degrees awarded	15	14	26	35	35
Certificates Awarded	0	0	0	0	0

Award Source: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx

TOP Code: 2208XX

Individual Data Sheets By Division ADMINISTRATIVE SERVICES

AQUATICS CENTER

Description:

The Crafton Hills Aquatics Center features a 50 meter by 25 yard Olympic Swimming Pool kept at 80 degrees year round. The pool is 7 feet deep from end to end. It can be configured to accommodate long course and short course training, though not both at the same time. The pool totals 19 short course lanes and eight long course lanes.

Assessment:

- The use of solar heating and smart pump controllers results in very efficient pool heating.
- The City of Yucaipa Aquatics Club uses the pool for their swim team, water polo and masters programs.
- Yucaipa High School swimmers use the pool for both water polo and swimming.

Department Goals:

 The Center would like to install a shallow water wellness pool for use by the Kinesiology Department. The project was shelved due to the Colleges inability to sell bonds in 2011.

- The Center would like to expand the Athletics offerings that include use of the pool.
- > Would like to hire an Athletics Director.
- The Center would like to increase community involvement and use of the pool facilities.

Challenges & Opportunities:

- Maintenance of facilities is a challenge. The boilers will have to be replaced soon, as they have a tenyear life-cycle.
- Staffing for swim classes, water exercises, and lifeguard duties is a challenge. There is no fulltime pool attendant.
- There is an opportunity to expand the number of Athletic offerings that use the pool.
- There is an opportunity to begin offering non-credit classes.
- There is a need to hire a fulltime pool attendant.

Action Plan:

BOOKSTORE

Description:

The bookstore seeks to continually and consistently provide an assortment of products and services selected specifically to meet the needs of students, faculty and staff as well as the surrounding community. Bookstore proceeds stay on campus to benefit and support the mission of the College.

Assessment:

- Starting to offer more electronic paraphernalia
 bookstore is becoming more like a Staples/ electronics store on campus.
- The Bookstore provides program specific services.
- The Queen Bee (snack bar within the Bookstore space) hires students.

Department Goals:

- Would like to move towards open source textbooks in order to save on costs.
- Would like to partner with outside companies such as Amazon.
- Would like to broaden the range of services and products offered, for example, the Bookstore would like to be able to offer copy services to students.

Challenges & Opportunities:

- The biggest challenge is to be self-sustaining.
 The bookstore is meant to be an enterprise, not a service.
- Union restrictions are a challenge to flexible operations.
- There is an opportunity to partner with companies to create a shopping service, as well as begin offering postal and copy services.

Action Plan:

Individual Data Sheets By Division ADMINISTRATIVE SERVICES (cont.)

CAFETERIA & SNACK BAR

Challenges & Opportunities:

• N/A

Description:

 The cafeteria and snack bar provide meals and food service to students, staff and faculty. Action Plan:

• N/A

Assessment:

- In spring of 2015, the College administered a Point of Service evaluation to gain "customer satisfaction" feedback. The evaluation found that:
 - 88% of respondents felt that services provided by the cafeteria were excellent or good.
 - 93% of respondents agreed or strongly agreed that the people who helped them were courteous.
 - Respondents commented on the lack of diverse food choices (especially hot and/or healthy meals), the hours of operation (the cafeteria closes at 3:30pm), the low number of power outlets, the size of the facility, the friendliness of the staff, and the price of products.

Department Goals:

• N/A

CAMPUS BUSINESS OFFICE

Description:

 The campus business office is responsible for the management of citations, parking decals, and the handling of college funds.

Assessment:

• N/A

Department Goals:

• N/A

Challenges & Opportunities:

• N/A

Action Plan:

• N/A

Individual Data Sheets By Division ADMINISTRATIVE SERVICES (cont.)

CAMPUS TECHNOLOGY SERVICES

Description:

 Campus Technology Services is responsible for researching, specifying, acquiring, approving, installing, maintaining and replacing all campus owned computer and instructional technology resources.

Challenges & Opportunities:

 Staffing is a challenge. The department should have seven full time computer technicians for the number of computers on campus.

Action Plan:

> None specified.

Assessment:

- According to the 2009-2013 Technology Services CCSSE Results, on average 56.03% of students responded that computer labs at the College were very important to them, and 57.83% of students responded that they were very satisfied with computer labs at the College. An average of 6.5% of students responded that they were not at all satisfied with the computer labs at the College.
- Staffing consists of two fulltime tech support specialists, two part time computer specialists, one secretary, one full time AV specialist and one part time AV specialist.

Department Goals:

> Expand wifi access on campus.

CAPITAL PROJECTS

Description:

 Oversees and manages capital improvements, consultation and modernization.

Assessment:

• N/A

Department Goals:

> N/A

Challenges & Opportunities:

> N/A

Action Plan:

• N/A

Individual Data Sheets By Division ADMINISTRATIVE SERVICES (cont.)

COMMUNITY RELATIONS

Description:

The Community Relations Office is an office within the Crafton Hills Foundation. The Foundation is a nonprofit corporation devoted exclusively to raising funds for scholarships, grants, and other types of assistance for CHC students and faculty. The office is responsible for the management of all scholarships and grants, as well as the budget of the Foundation, which is funded through the General Fund.

Assessment:

- In August of 2014, the San Manuel Band of Mission Indians awarded the Foundation with a \$100,000 ISEEK (Increasing Student Engagement, Employment & Knowledge) grant to increase student employment. \$10,000 of the grant was earmarked for scholarships.
- In the 2014-15 school year, CHC accepted a check for \$15,000 from Edison International for scholarships and instruction.
- CHC awarded \$102,000 in scholarships to continuing and graduating students on Friday, May 15 2015.

- The Community Relations Office has one full time staff and one secretary.
- > The Office collaborates with the City of Yucaipa.

Department Goals:

 The Office is working with the Yucaipa City Performing Arts Center to fundraise for a new \$14 million 300 seat facility.

Challenges & Opportunities:

 The Foundation and the Office are somewhat disconnected from the College. There exists an opportunity to further integrate with the College.

Action Plan:

MAINTENANCE & OPERATIONS

Action Plan:

None specified.

- Description:
- Maintenance and Operations is responsible for the maintenance and operation of campus facilities and grounds.

Assessment:

- Campus space has grown by 40%, however, staffing has not grown to meet the added demand placed on the department.
- The golf green consumes approximately 10% of the Grounds' budget, and is used by approximately 10-18 students per semester.

Department Goals:

- Advocate for the implementation of a Total Cost of Ownership model for the campus and the District.
- The Grounds Department would like to shift towards electric vehicles (golf carts) to reduce the campus' dependence on fossil fuels.

Challenges & Opportunities:

- The lack of a supervisor position in the department is a challenge to efficient operations.
- The limited number of staff is a challenge to operations.

Individual Data Sheets By Division STUDENT SERVICES

ADMISSIONS & RECORDS

Description:

 Provides enrollment services, including registration, transcripts, and graduation.

Assessment:

- The Admission & Records Office currently has 7 staff members – one coordinator, one specialist, one lead evaluator, one evaluator, and three technicians.
- The new space in the Crafton Center is very accommodating and the Office has room for growth.
- Admissions is mostly online not 100% paperless but the majority of processes have been moved online.
- The Office coordinates with its counterpart at SBVC to try and match processes. However, Academic Senate dictates policy, so processes are not completely aligned.
- The Office currently does not have a director.
- Queuing is not a problem in the new space, as it has space to accommodate lines.

Department Goals:

- The Office would like to align its processes with SBVC.
- > The Office would like to hire a director.

Challenges & Opportunities:

- Staffing is a challenge, especially the lack of a director. However, the District believes that CHC has too many directors already, and so they are not allowed to hire another.
- There is an opportunity to greater align the Admissions & Records processes at CHC and SBVC.

Action Plan:

CAREER SERVICES

Action Plan:

None specified.

Description:

>

The Career Services department provides specialized services and information to assist students with career planning, including career assessment/exploration, labor market statistics and career education/training requirements.

Assessment:

 Three FTES are shared between this department and the Transfer Center.

Department Goals:

 The department would like to offer internships and work experiences, with the possibility of earning credit.

Challenges & Opportunities:

 Programs at Crafton Hills are not set up with career ladders, with the exception of Child Development. Crafton Hills does not offer any entry level Career Technical Education programs. Respiratory Therapy is a two-year fulltime commitment. This is a challenge to fulfilling the need amongst the community and students for career services.

Individual Data Sheets By Division STUDENT SERVICES (cont.)

CHILD DEVELOPMENT CENTER

Description:

The Childhood Development Center provides a preschool program with extended care hours, for those children ages 3-5 of students, staff and the community. The Center also serves as a facility for the College's early education program.

Assessment:

- Less than 10% of children served are the children of students, due to student schedules and Center's hours of operation. Also, the Center's fees are competitively priced and are often unaffordable for students.
- Center loses 3-5 families per year due to the families having other children whose ages fall outside the age group serviced.
- Contracted with the county superintendent of schools as well as the CDE.
- Partnered with Loma Linda University's communication studies program for speech and language screenings.
- Partnered with Families First in 2014-15 to allow screenings for children on autism spectrum.
- Partnered with California Childcare Resource Center.

- Three full time staff and four part time staff.
- Center is rare in that it is not in the red the Center is successful at fundraising and securing grant funds.
- The Center partners with the Fire Technology and Emergency Medical Services programs to provide opportunities for their students to work with children.

Department Goals:

The Center strives to be the community's first choice for an early education program. The Center provides both a laboratory setting to CHC students enrolled in child development courses and as a preschool program with extended care hours.

Challenges & Opportunities:

- Facilities limit the range of ages the Center can serve. A separate classroom would allow the Center to service more ages.
- Staffing is a challenge. The Center would like to hire two additional teachers in order to grow.
- The Center would like to able to offer a second parent fee (community based) program.
- The portable facility at the Center is too small, and is unable to serve 24 students, which is the cap.

The classes held within the portable are limited to 20 students due to its size.

- Parking is a challenge, as there are five parking spots for 40 families.
- Security is a concern at the Center, due to the use of classrooms within the Center for other programs, resulting in non-child development students coming into close proximity with young children. There are also concerns about wildlife, especially mountain lions and snakes.
- There is no shade structure over the play equipment, which is quite challenging as summer temperatures often reach the triple digits.
- Professional development has been a challenge, and it is difficult for the Center to get its teachers into good workshops and trainings.

Action Plan:

COUNSELING

Description:

 Counseling and advising services assist students in establishing educational goals and identifying support services to help meet those goals.
 Specifically, the counseling department provides educational counseling, career counseling, and personal counseling services. The counseling department is also responsible for the development of Student Educational Plans, orientations, and the administration of assessment tests.

Assessment:

- According to the Crafton Hills College (CHC) Student Placement Results: 2014-2015, which studied students who completed the CHC Accuplacer assessment test from July 1, 2014 to June 30, 2015 and students who completed a grade on record in the 2014-2015 academic year:
 - 38% of Crafton students placed into a basic skills English course
 - 70% of students placed into a basic skills or college level English course (i.e. developmental)
 - 58% of students placed into a basic skills math course

- 94% of students placed into a basic skills or college level math course (i.e. developmental)
- According to the New Student Orientation
 Evaluations: Fall 2012 to Spring 2013, produced
 July 2013:
 - 97% of respondents received the student orientation online
 - 3% of respondents received the student orientation on-campus
 - 93% or more of the respondents strongly agreed or agreed that the orientation was useful.
 - Comments received indicate that students felt that a portion of the material was selfexplanatory and that the online orientation process was too long and did not provide an adequate virtual tour of the campus.

Department Goals:

• N/A

Challenges & Opportunities:

• N/A

Action Plan:

• N/A

Individual Data Sheets By Division STUDENT SERVICES (cont.)

DISABLED STUDENT PROGRAMS & SERVICES

Description:

 The Disabled Student Programs and Services (DSPS) department provides support services, specialized equipment and educational accommodation to students with disabilities so they can participate fully in the college experience.

Assessment:

- Must comply with Federal mandates and State regulations in order to receive funding.
- Roughly 350 students qualify for services at any given time.
- The department has two trams to help move students around campus.
- The largest percentage of students serviced is learning disabled.
- The department utilizes a lot of technology to help students (books on tape, text to voice, voice to text, live scribe pen, etc.)
- By July 2016, the department will have all new staff.

Department Goals:

- The department would like to work with faculty to design curriculum so as to minimize the impact on differently-abled students.
- The department would like to hire another counselor and technology specialist.

Challenges & Opportunities:

- The lack of confidential counseling space is a big challenge to providing adequate service.
- Getting the new staff up to speed will be a huge challenge.
- There is expected to be an increase in the population of autistic students at Crafton Hills in the near future, as large numbers of children were identified as placing on the autistic spectrum in the 1990's now reach college-age. There is an opportunity to help serve that population.
- As there is a large deaf population in the surrounding communities, there is an opportunity to build upon the services offered for deaf people at Crafton Hills.

Action Plan:

EOPS/CARE/CalWORKS/FOSTER YOUTH

Description:

Extended Opportunity Programs and Services (EOPS) offers special services to educationally disadvantaged students, including counseling services, financial assistance, tutoring, orientation, and priority registration assistance. The Cooperative Agencies Resource for Education (CARE) provides educational support services designed for the academically under-prepared, low income, single parent population. California Work Opportunities & Responsibilities to Kids (CalWORKS) helps students who are receiving cash aid from the counties to become independent by providing education, training and supportive services to students. Foster Youth

Assessment:

- The department consists of one office and five staff, one of which is the director.
- The department is located near the counseling department, and the staff are seen as counselors.
- > There is no more room in the facilities for growth.
- The department services 450 foster youth with an 81% success rate.

 They are currently sharing workshop space with other student services departments.

Department Goals:

> None specified.

Challenges & Opportunities:

None specified.

Action Plan:

Individual Data Sheets By Division STUDENT SERVICES (cont.)

FINANCIAL AID

Description:

 The Financial Aid Office oversees applications for and disbursement of federal and state financial aid.

Assessment:

- A large number of students depend on financial aid.
- > Staffing is inadequate.
- Students have long wait times. Lines are very long, and it can take 20-45 minutes for the office to open a student's file.
- Students are currently required to physically come into the office for service. Additionally, all records are physical records.

Department Goals:

- The Office would very much like to go paper-less and offer its services online.
- The Office would like to be able to send out a cellphone blast to students via text.
- The Office would like to implement queue management software.

Challenges & Opportunities:

- Paper records are a big challenge. Locating paper files can be challenging and time-consuming, paper files require large amounts of storage space, and paper files require students to come into the office.
- There is a large opportunity to offer services digitally and online.

Action Plan:

HEALTH & WELLNESS CENTER

Description:

 The Health & Wellness Center provides students with wellness, illness and injury care. Services include nursing assessment and care, medication and supplies, screening tests, immunizations, women's health clinic, mental health services, and referrals.

Assessment:

> N/A

Department Goals:

• N/A

Challenges & Opportunities:

• N/A

Action Plan:

• N/A

Individual Data Sheets By Division STUDENT SERVICES (cont.)

HOMELESS STUDENT SERVICES

Description:

The REACH (Resources, Encouragement, and Advocacy for Crafton's Homeless) Project is dedicated to providing access, advocacy, resources, and support for homeless and at-risk students within the College. Services include referral for housing and social services, fast-tracked referral to EOPS, Counseling, Health and Wellness Center, Mental Health Services, and other college services, survival kits, financial aid and admissions assistance, access to a phone, and referral to the CHC COACH Cupboard.

Assessment:

 The cupboard currently stores dry, non-perishable goods, and is not well-known or highly visible on campus.

Department Goals:

> N/A

Challenges & Opportunities:

• The lack of refrigeration in the cupboard limits the types of food that can be stored.

 There is an opportunity to partner with other academic programs, such as Health (specifically, Nutrition and Health) students, in stocking the cupboard.

Action Plan:

> N/A
INTERNATIONAL STUDENTS

Description:

 The College is approved by the Immigration and Naturalization Service to admit non-immigration
F-1 Visa international students. The international students program is under the purview of the counseling department.

Assessment:

• N/A

Department Goals:

• N/A

Challenges & Opportunities:

> N/A

Action Plan:

LEFT LANE PROGRAM

Description:

The Left Lane Program helps first-year students to Crafton Hills College who test into pre-college level Math, English, or Reading courses transition into college life. Participants in the Left Lane Program receive priority registration. The purpose of the Left Lane Program is to reduce the average amount of time it takes students to earn an AA/AS Degree at Crafton from 5.3 years to four years.

Department Goals:

 The Program would like to reduce the average amount of time it takes students to earn an AA/AS Degree at Crafton from 5.3 years to four years.

Challenges & Opportunities:

> N/A

Action Plan:

• N/A

Assessment:

- According to the Relationship of the Fall 2012 and Fall 2013 Left Lane Cohorts to Student Success research brief prepared by the CHC Office of Institutional Effectiveness, Research & Planning:
 - Both cohorts were more likely to enroll in English and math courses, successfully complete those courses, and be retained from fall to spring in English and math.
 - Both cohorts struggle to successfully complete transfer level English courses in the following spring semester.
 - Data, while limited, suggests that the Left Lane Program needs to develop a strategy for helping students in the second year.

LIBRARY

Description:

 The Library offers library services to students and staff, as well as facilities for study sessions, meetings, and instruction.

Assessment:

- The library staff consists of a librarian, a classified staff, and two faculty, one of which will retire soon.
- The library has shifted more towards tutoring services and less towards traditional library services due to recent changes.

Department Goals:

- The library would like to be able to have textbook reserves for every course offered on campus.
- The library would like to have more open computers, and faster computers.
- The library would like to implement library classes to instruct students on how to use the library and the services it offers.

Challenges & Opportunities:

 The limited amount of study spaces, individual tables, instructional space, collaborative space, and meeting spaces are a challenge.

- Additionally, study spaces do not have any technology in them, which is a challenge for students.
- As the library is becoming more of a tutoring center, there is an opportunity to partner with the tutoring and technology centers.
- The library has a budget of \$10,000 to purchase books, which is a challenge.
- The high qualifications for hiring staff at the library is a challenge as well.
- The lack of a functioning fire door on the second floor is a major security challenge.

Action Plan:

> None specified.

MARKETING & PUBLIC RELATIONS

Description:

 The Office of Marketing and Public Relations includes in its areas of responsibility enrollment marketing, internet social media, emails and external reach out, direct mail, board reports for the president, photography, web development, and branding. technologically skilled staffers.

 There exists an opportunity to hire more technologically skilled people (videographers, typographic designers, photo editors, etc.) in order to more effectively connect with potential students.

Action Plan:

> None specified.

Assessment:

- The staff consists of one person who is responsible for both marketing and clerical work.
- The Office interacts with the Student Senate, but not on a day-to-day basis.

Department Goals:

- The Office would like to develop more efficient ways to reach out and connect with students.
- The Office would like to devote more time towards developing the Enrollment Management Committee.

Challenges & Opportunities:

- > The lack of staffing is a challenge.
- > Technology is a challenge specifically, the lack of

OFFICE OF RESEARCH, PLANNING & INSTITUTIONAL EFFECTIVENESS

Description:

The Office of Research, Planning and Institutional Effectiveness is responsible for program review, the development of qualitative effectiveness indicators (QEI), student learning outcomes (SLO), integrated planning, supporting enrollment growth, and identifying student demographics in need of help. Additionally, the Office is responsible for gathering data, designing and administering surveys, and embarking on research projects.

Assessment:

- > Staff consists of three fulltime employees.
- The Office has developed a culture of evidencebased decision-making at the campus.
- Funding for the Office is split 50/50 between the STEM Grant and the General Fund.
- In the past year the Office fielded 245 research requests with a staff of three.
- The Office has begun to meet with TESS & its counterpart at SBVC to work together and eliminate duplication of efforts.

Department Goals:

 The Office would like to turn Crafton Hills into a learning organization, where data is trusted and all engage in a dialogue to improve themselves, each other, and the institution.

Challenges & Opportunities:

- It is a challenge to deliver quality results with the amount of resources available, specifically, the amount of staff within the Office.
- There is an opportunity to equip faculty with the tools and skills to do their own research, as a way to manage the incredible amount of research requests – this would require giving faculty and staff direct access to databases, etc.
- The Offices at CHC and SBVC each have their own respective strengths and weaknesses, so there is an opportunity to cross-train each other.

Action Plan:

> None specified.

SCHOLARSHIPS

Description:

 Provides qualified students with internal and external scholarships.

Assessment:

• N/A

Department Goals:

• N/A

Challenges & Opportunities:

> N/A

Action Plan:

STUDENT LIFE

Description:

 Student Life promotes student engagement in clubs and co-curricular activities, and supports and guides the Associated Student Government.

Assessment:

- There are approximately 30 or more clubs on campus.
- There are approximately 20 students involved in Associated Student Government.
- There are approximately 20-40 students in the Interclub Council, which handles club rush and recruitment.
- Student Life provides leadership opportunities to students, as well as event facilitation, fundraising, and community, state, and business outreach.
- > Student Life has two staff members.

Department Goals:

> None specified.

Challenges & Opportunities:

 District policies require a 60-day lead time for event planning and funding, which makes it challenging to fund events and hold spontaneous student initiatives.

Action Plan:

> None specified.

STUDENT SUCCESS PROGRAM

Description:

 The Student Success Program is designed to help students hook up with the resources and support they need to be successful in college.
Student Success Advisors are individuals who have successfully completed their goals at Crafton and San Bernardino Valley College, and they understand the demands of being a college student and are eager to help others avoid some of the pitfalls of college life.

Assessment:

• N/A

Department Goals:

• N/A

Challenges & Opportunities:

• N/A

Action Plan:

TECHNICAL PREPARATION ARTICULATION

Description:

 Technical preparation articulation allows Crafton Hills College students to earn college credit for articulated career-technical courses they have successfully completed at their high school or local Regional Occupational Program (ROP).

Assessment:

> N/A

Department Goals:

 The department focuses on helping students avoid course-work duplication and allows students to move towards advanced classes in a more efficient and streamlined manner.

Challenges & Opportunities:

> N/A

Action Plan:

UNIVERSITY TRANSFER CENTER

Description:

Services include transfer assistance to CSU, UC, private and out-of-state universities, onsite university representatives and recruiters, university fieldtrips, college/university fairs and events, transfer workshops, transfer agreements, transfer admission guarantee, university application and personal statement assistance, computer workstations, and university catalogs and college search resources. Additionally, the University Transfer Center is responsible for college/university research.

Assessment:

- Title 5 mandates that the Center focus its efforts on underserved students (non-traditional students, returning students, students on probation, singleparent students, 1st generation students, etc.)
- > 80% of students have a transfer goal.
- The Center hosts two fairs per year (fall and spring) and over 30 universities attend.
- There are three FTE shared between the Transfer Center and Career Services.

Department Goals:

- The Center would like to increase outreach into classes with high numbers of underserved populations.
- The Center would like to expand its services to be more accessible for older and working students.
- The Center would like to have a dedicated fulltime counselor.

Challenges & Opportunities:

- The Student Services Center closes at 6pm, which is a challenge to offering services to working students.
- There is an opportunity to build on the interaction between Career Services and the Transfer Center.
- The space in the new Crafton Center is smaller than was requested – the Center is hiring two positions, after which there will be no more space for growth.
- The limited amount of staff is a significant challenge to adequately serving the student population.
- There is an opportunity for greater coordination with the Counseling department.
- There is an opportunity to increase the dissemination of information. Several students have problems with understanding their transcripts.

Action Plan:

None specified.

VETERANS SERVICES

Description:

The Veterans Services Office provides assistance to veterans and their dependents that may be eligible for various educational benefits by serving as a liaison between veteran students/dependents and the Department of Veteran Affairs. The office is equipped to assist veteran students and dependents with the appropriate forms to process claims for educational benefits. The office is also an information center to assist with any questions concerning veteran educational benefits or educational experiences at Crafton Hills College.

Assessment:

- According to the Veterans Planning & Program Review Survey, administered to students Spring through Fall 2015:
 - 48% of respondents served in the Army, 24% served in the Marine Corps, and 27% served in the Navy
 - 52% of respondents served in Afghanistan, and 42% of respondents served in Iraq.
 - 74% of respondents are utilizing the Post-9/11 GI Bill to assist in obtaining an education at CHC.

 62% of respondents are currently working in addition to going to school.

Department Goals:

- According to the Veterans Planning & Program Review Survey, administered to students Spring through Fall 2015:
 - 82% of respondents would like a Veterans Resource Center
 - 76% of respondents would like a Student veterans Club and VA Informational Workshops

Challenges & Opportunities:

- Ten of the 18 respondents who made recommendations to improve CHC Veteran services stated that additional dedicated and increased availability of personnel would improve services to students.
- From the comments received in the survey, it appears that certain students encounter difficulties reaching the right personnel in the office.

Action Plan:

Full Listing Of Service Area + Regional Job Openings by Occupation (2015–2025)

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
ACCT	Accountants and Auditors	67	1,305	1,545	240	18%	\$34.23
ACCT	Budget Analysts	4	93	97	4	4%	\$31.02
ACCT	Credit Analysts	2	43	52	9	21%	\$35.26
ACCT	Credit Counselors	3	101	114	13	13%	\$22.69
ACCT	Financial Analysts	6	102	130	28	27%	\$41.07
ACCT	Financial Managers	23	724	814	90	12%	\$55.26
ACCT	Financial Specialists, All Other	4	209	222	13	6%	\$24.79
ACCT	Loan Officers	14	340	407	67	20%	\$37.55
ACCT	Personal Financial Advisors	5	120	144	24	20%	\$39.64
ACCT	Securities, Commodities, and Financial Services Sales Agents	14	372	417	45	12%	\$28.20
ACCT	Tax Examiners and Collectors, and Revenue Agents	2	53	50	(3)	(6%)	\$34.20
ACCT	Bill and Account Collectors	30	639	740	101	16%	\$16.65
ACCT	Billing and Posting Clerks	44	991	1,223	232	23%	\$17.24
ACCT	Bookkeeping, Accounting, and Auditing Clerks	62	2,301	2,689	388	17%	\$19.16
ACCT	Brokerage Clerks	Insf. Data	26	27	1	4%	\$22.03
ACCT	Financial Clerks, All Other	2	44	50	6	14%	\$18.91
ACCT	Loan Interviewers and Clerks	6	233	278	45	19%	\$19.56
ACCT	New Accounts Clerks	1	41	42	1	2%	\$16.99
ACCT	Payroll and Timekeeping Clerks	15	406	462	56	14%	\$19.71
ACCT	Tax Preparers	4	114	126	12	11%	\$19.52
ACCT	Tellers	48	774	857	83	11%	\$13.86
ANTHRO	Anthropologists and Archeologists	Insf. Data	22	27	5	23%	\$25.48
ART	Art Directors	Insf. Data	13	14	1	8%	\$38.91
ART	Fashion Designers	Insf. Data	12	14	2	17%	\$27.53
ART	Graphic Designers	6	165	177	12	7%	\$21.61
ART	Artists and Related Workers, All Other	Insf. Data	13	13	0	0%	\$28.03
ART	Fine Artists, Including Painters, Sculptors, and Illustrators	Insf. Data	31	32	1	3%	\$38.23
ART	Photographers	2	62	73	11	18%	\$21.81
ART	Photographic Process Workers and Processing Machine Operators	2	34	39	5	15%	\$14.25
BIOL	Life, Physical, and Social Science Technicians, All Other	3	57	65	8	14%	\$24.91

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
BIOL	Registered Nurses	281	6,351	7,762	1,411	22%	\$42.89
BIOL	Biological Scientists, All Other	2	64	59	(5)	(8%)	\$32.14
BIOL	Biological Technicians	3	56	65	9	16%	\$19.55
BIOL	Biomedical Engineers	1	26	29	3	12%	\$45.28
BIOL	Microbiologists	Insf. Data	13	14	1	8%	\$35.30
BIOL	Zoologists and Wildlife Biologists	Insf. Data	17	17	0	0%	\$32.53
BIOL	Anesthesiologists	5	77	101	24	31%	\$112.61
BIOL	Chiropractors	2	42	48	6	14%	\$43.66
BIOL	Family and General Practitioners	18	384	453	69	18%	\$101.48
BIOL	Internists, General	4	56	78	22	39%	\$85.37
BIOL	Medical Scientists, Except Epidemiologists	7	169	195	26	15%	\$43.06
BIOL	Obstetricians and Gynecologists	3	51	63	12	24%	\$114.76
BIOL	Pediatricians, General	4	70	86	16	23%	\$89.70
BIOL	Physicians and Surgeons, All Other	39	718	896	178	25%	\$59.34
BIOL	Surgeons	7	115	148	33	29%	\$103.78
BIOL	Veterinarians	3	66	74	8	12%	\$45.14
BIOL	Veterinary Assistants and Laboratory Animal Caretakers	4	163	171	8	5%	\$13.93
BIOL	Genetic Counselors	Insf. Data	11	14	3	27%	\$31.43
BIOL	Health Diagnosing and Treating Practitioners, All Other	4	123	130	7	6%	\$32.16
BIOL	Physician Assistants	12	176	258	82	47%	\$49.48
BIOL	Nurse Anesthetists	3	29	47	18	62%	\$68.89
BIOL	Nurse Practitioners	17	276	377	101	37%	\$55.16
BIOL	Licensed Practical and Licensed Vocational Nurses	104	1,788	2,314	526	29%	\$23.15
BIOL	Nursing Assistants	157	2,818	3,741	923	33%	\$13.57
BUSAD	Paralegals and Legal Assistants	11	314	363	49	16%	\$24.15
BUSAD	Administrative Services Managers	15	439	513	74	17%	\$39.84
BUSAD	Advertising and Promotions Managers	1	30	30	0	0%	\$38.79
BUSAD	Chief Executives	11	328	364	36	11%	\$87.85
BUSAD	Compensation and Benefits Managers	Insf. Data	15	17	2	13%	\$57.20
BUSAD	Compensation, Benefits, and Job Analysis Specialists	3	86	97	11	13%	\$29.94

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
BUSAD	Compliance Officers	9	338	359	21	6%	\$33.94
BUSAD	Cost Estimators	14	334	343	9	3%	\$32.00
BUSAD	General and Operations Managers	125	3,439	3,987	548	16%	\$51.27
BUSAD	Human Resources Managers	7	140	169	29	21%	\$48.36
BUSAD	Human Resources Specialists	21	628	708	80	13%	\$28.26
BUSAD	Industrial Production Managers	5	190	192	2	1%	\$47.14
BUSAD	Insurance Underwriters	2	60	57	(3)	(5%)	\$28.34
BUSAD	Labor Relations Specialists	2	132	122	(10)	(8%)	\$32.48
BUSAD	Management Analysts	24	633	761	128	20%	\$39.21
BUSAD	Market Research Analysts and Marketing Specialists	23	455	612	157	35%	\$27.64
BUSAD	Marketing Managers	7	157	188	31	20%	\$58.83
BUSAD	Operations Research Analysts	2	31	43	12	39%	\$41.45
BUSAD	Purchasing Managers	3	76	83	7	9%	\$46.42
BUSAD	Training and Development Managers	1	28	34	6	21%	\$49.76
BUSAD	Training and Development Specialists	12	294	353	59	20%	\$27.14
BUSAD	Business Operations Specialists, All Other	31	1,270	1,391	121	10%	\$31.04
BUSAD	Buyers and Purchasing Agents, Farm Products	Insf. Data	14	16	2	14%	\$37.68
BUSAD	Claims Adjusters, Examiners, and Investigators	10	440	402	(38)	(9%)	\$29.04
BUSAD	Correspondence Clerks	Insf. Data	12	14	2	17%	\$12.60
BUSAD	Court, Municipal, and License Clerks	2	55	61	6	11%	\$20.98
BUSAD	Executive Secretaries and Executive Administrative Assistants	17	891	943	52	6%	\$25.90
BUSAD	File Clerks	10	367	381	14	4%	\$15.03
BUSAD	First-Line Supervisors of Office and Administrative Support Workers	119	2,660	3,153	493	19%	\$25.42
BUSAD	Human Resources Assistants, Except Payroll and Timekeeping	10	271	296	25	9%	\$18.38
BUSAD	Information and Record Clerks, All Other	6	247	248	1	0%	\$18.61
BUSAD	Insurance Claims and Policy Processing Clerks	15	398	430	32	8%	\$16.46
BUSAD	Legal Secretaries	3	108	116	8	7%	\$17.52
BUSAD	Legal Support Workers, All Other	1	68	66	(2)	(3%)	\$21.80
BUSAD	Managers, All Other	11	333	366	33	10%	\$50.40
BUSAD	Office and Administrative Support Workers, All Other	30	940	968	28	3%	\$13.19

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
BUSAD	Office Clerks, General	165	5,171	5,662	491	9%	\$14.59
BUSAD	Order Clerks	17	454	497	43	9%	\$16.58
BUSAD	Procurement Clerks	6	132	142	10	8%	\$20.14
BUSAD	Production, Planning, and Expediting Clerks	20	481	550	69	14%	\$19.92
BUSAD	Receptionists and Information Clerks	92	1,831	2,198	367	20%	\$13.52
BUSAD	Secretaries and Admin. Assistants, Except Legal, Medical, and Executive	93	3,292	3,790	498	15%	\$17.91
BUSAD	Shipping, Receiving, and Traffic Clerks	69	1,560	1,795	235	15%	\$15.35
BUSAD	Transportation, Storage, and Distribution Managers	14	280	349	69	25%	\$41.14
BUSAD	Education Administrators, Postsecondary	12	251	296	45	18%	\$52.24
CD	Preschool Teachers, Except Special Education	26	618	691	73	12%	\$15.29
CD	Career/Technical Education Teachers, Secondary School	3	79	87	8	10%	\$32.82
CD	Education Administrators, All Other	4	92	100	8	9%	\$44.40
CD	Education Administrators, Preschool and Childcare Center/Program	3	72	82	10	14%	\$25.58
CD	Elementary School Teachers, Except Special Education	126	3,699	4,096	397	11%	\$35.22
CD	Kindergarten Teachers, Except Special Education	25	629	690	61	10%	\$31.37
CD	Middle School Teachers, Except Special and Career/Technical Education	38	1,043	1,178	135	13%	\$35.01
CD	Secondary School Teachers, Except Special and Career/Technical	57	1 58/	1 703	110	8%	\$33.50
	Education	57	1,004	1,700	113	070	φ00.00
CD	Special Education Teachers, All Other	3	81	92	11	14%	\$37.61
CD	Special Education Teachers, Kindergarten and Elementary School	12	472	506	34	7%	\$36.54
CD	Special Education Teachers, Middle School	4	168	179	11	7%	\$31.84
CD	Special Education Teachers, Preschool	2	42	56	14	33%	\$24.20
CD	Special Education Teachers, Secondary School	5	205	221	16	8%	\$33.53
CD	Substitute Teachers	62	2,914	3,023	109	4%	\$18.59
CD	Teachers and Instructors, All Other	19	677	744	67	10%	\$27.43
CD	Childcare Workers	62	1,487	1,633	146	10%	\$12.71
CD	Self-Enrichment Education Teachers	13	297	372	75	25%	\$17.57
CD	Education Administrators, Elementary and Secondary School	15	433	464	31	7%	\$50.82
CD	Teacher Assistants	94	3,027	3,248	221	7%	\$14.37
CHEM	Agricultural and Food Science Technicians	2	45	47	2	4%	\$14.22

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
CHEM	Chemical Technicians	2	28	35	7	25%	\$20.81
CHEM	Chemical Engineers	Insf. Data	12	13	1	8%	\$47.25
CHEM	Chemists	2	48	55	7	15%	\$31.04
CHEM	Food Scientists and Technologists	1	23	25	2	9%	\$28.26
CHEM	Forensic Science Technicians	Insf. Data	17	19	2	12%	\$31.69
CHEM	Pharmacists	31	618	758	140	23%	\$63.36
COMMST	Fundraisers	3	56	72	16	29%	\$26.58
COMMST	Public Relations and Fundraising Managers	2	47	58	11	23%	\$45.68
COMMST	Public Relations Specialists	6	161	192	31	19%	\$25.74
COMMST	Radio and Television Announcers	4	114	128	14	12%	\$14.55
COMMST	Reporters and Correspondents	Insf. Data	23	<10	Insf. Data	Insf. Data	\$18.80
COMMST	Sales Reps., Wholesale and Manuf., Technical and Scientific Products	14	252	332	80	32%	\$34.33
COMMST	Advertising Sales Agents	4	122	101	(21)	(17%)	\$20.00
COMMST	Media and Communication Workers, All Other	Insf. Data	37	40	3	8%	\$18.77
COMMST	Public Address System and Other Announcers	Insf. Data	28	28	0	0%	\$15.46
COMMST	Purchasing Agents, Except Wholesale, Retail, and Farm Products	9	318	343	25	8%	\$26.53
COMMST	Sales and Related Workers, All Other	8	180	215	35	19%	\$13.94
COMMST	Sales Representatives, Services, All Other	52	1,118	1,300	182	16%	\$27.30
COMMST	Sales Reps., Wholesale and Manuf., Except Technical and Scientific	70	1,550	1,904	354	23%	\$31.60
	Products	~	454	105	0.1	000/	
COMMST	Wholesale and Retail Buyers, Except Farm Products		154	185	31	20%	\$29.82
COMMST	Court Reporters	Inst. Data	13	14	1	8%	\$40.78
CS/CIT	Computer Network Support Specialists	4	144	160	16	11%	\$31.90
CS/CII	Web Developers	4	105	122	17	16%	\$31.05
CS/CIT	Computer and Information Systems Managers	9	275	324	49	18%	\$56.51
CS/CIT	Computer Network Architects	2	44	58	14	32%	\$50.81
CS/CIT	Computer Occupations, All Other	4	185	196	11	6%	\$37.05
CS/CIT	Computer Programmers	6	128	153	25	20%	\$37.51
CS/CIT	Computer Systems Analysts	15	317	406	89	28%	\$37.39
CS/CIT	Database Administrators	3	70	85	15	21%	\$40.61

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
CS/CIT	Information Security Analysts	2	29	41	12	41%	\$46.32
CS/CIT	Network and Computer Systems Administrators	12	336	394	58	17%	\$42.04
CS/CIT	Software Developers, Applications	18	467	579	112	24%	\$48.90
CS/CIT	Software Developers, Systems Software	6	91	131	40	44%	\$50.40
CS/CIT	Computer and Information Research Scientists	Insf. Data	26	30	4	15%	\$50.37
CS/CIT	Computer Operators	Insf. Data	75	75	0	0%	\$19.30
CS/CIT	Computer User Support Specialists	21	547	661	114	21%	\$25.70
DANCE	Dancers	Insf. Data	17	15	(2)	(12%)	\$14.22
ECON	Economists	2	33	39	6	18%	\$33.70
EMS	Police, Fire, and Ambulance Dispatchers	2	52	57	5	10%	\$24.90
EMS	Emergency Medical Technicians and Paramedics	12	283	321	38	13%	\$14.83
EMS	Phlebotomists	16	339	421	82	24%	\$16.62
ENGL	Editors	1	34	27	(7)	(21%)	\$21.84
ENGL	Technical Writers	2	30	36	6	20%	\$38.10
ENGL	Writers and Authors	Insf. Data	25	26	1	4%	\$31.04
ENGR	Mechanical Engineering Technicians	Insf. Data	19	21	2	11%	\$22.04
ENGR	Civil Engineers	10	307	324	17	6%	\$46.13
ENGR	Electrical Engineers	3	81	94	13	16%	\$46.27
ENGR	Electronics Engineers, Except Computer	4	141	147	6	4%	\$45.90
ENGR	Engineers, All Other	3	115	117	2	2%	\$45.78
ENGR	Materials Engineers	Insf. Data	14	14	0	0%	\$42.80
ENGR	Mechanical Engineers	6	138	148	10	7%	\$41.04
FIRE	Firefighters	7	192	203	11	6%	\$28.34
GEOG	Cartographers and Photogrammetrists	Insf. Data	21	25	4	19%	\$27.26
GEOG	Surveying and Mapping Technicians	1	29	35	6	21%	\$28.53
GEOL	Environmental Engineering Technicians	Insf. Data	22	26	4	18%	\$24.59
GEOL	Environmental Science and Protection Technicians, Including Health	2	24	32	8	33%	\$24.53
GEOL	Forest and Conservation Technicians	6	151	138	(13)	(9%)	\$19.59
GEOL	Conservation Scientists	Insf. Data	13	13	0	0%	\$37.34
GEOL	Environmental Engineers	2	43	48	5	12%	\$42.95

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
GEOL	Environmental Scientists and Specialists, Including Health	8	168	190	22	13%	\$38.30
GEOL	Geoscientists, Except Hydrologists and Geographers	1	30	34	4	13%	\$37.18
GEOL	Natural Sciences Managers	1	44	46	2	5%	\$50.94
GEOL	Forest and Conservation Workers	Insf. Data	14	16	2	14%	\$12.02
HIST	Audio-Visual and Multimedia Collections Specialists	Insf. Data	31	31	0	0%	\$18.66
HIST	Librarians	4	82	96	14	17%	\$28.66
HIST	Library Technicians	7	114	124	10	9%	\$18.41
KIN	Physical Therapist Assistants	7	115	150	35	30%	\$29.93
KIN	Athletic Trainers	1	21	26	5	24%	\$20.90
KIN	Physical Therapists	16	293	372	79	27%	\$41.70
KIN	Fitness Trainers and Aerobics Instructors	11	360	425	65	18%	\$18.58
KIN	Physical Therapist Aides	3	73	89	16	22%	\$13.69
KIN	Massage Therapists	5	142	174	32	23%	\$20.21
MATH	Logisticians	7	169	213	44	26%	\$36.57
MODLANG	Interpreters and Translators	5	104	135	31	30%	\$19.73
MUSIC	Music Directors and Composers	2	51	55	4	8%	\$25.67
MUSIC	Musicians and Singers	4	82	83	1	1%	\$32.81
PHIL	Lawyers	13	358	418	60	17%	\$57.03
PHYSICS	Aerospace Engineers	Insf. Data	21	22	1	5%	\$44.98
PHYSICS	Physical Scientists, All Other	Insf. Data	20	20	0	0%	\$47.10
PSYCH	Occupational Therapy Assistants	3	51	66	15	29%	\$30.96
PSYCH	Child, Family, and School Social Workers	11	263	307	44	17%	\$24.74
PSYCH	Mental Health and Substance Abuse Social Workers	7	147	179	32	22%	\$22.82
PSYCH	Recreational Therapists	2	42	51	9	21%	\$33.96
PSYCH	Social and Community Service Managers	13	217	291	74	34%	\$38.02
PSYCH	Social Workers, All Other	7	210	229	19	9%	\$28.79
PSYCH	Therapists, All Other	Insf. Data	21	26	5	24%	\$36.23
PSYCH	Clinical, Counseling, and School Psychologists	12	307	336	29	9%	\$41.40
PSYCH	Psychiatrists	3	55	66	11	20%	\$111.95
PSYCH	Social and Human Service Assistants	47	744	977	233	31%	\$15.63

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
PSYCH	Substance Abuse and Behavioral Disorder Counselors	7	194	219	25	13%	\$19.03
PSYCH	Community and Social Service Specialists, All Other	11	184	232	48	26%	\$19.74
PSYCH	Counselors, All Other	2	42	49	7	17%	\$14.63
PSYCH	Educational, Guidance, School, and Vocational Counselors	18	544	594	50	9%	\$30.87
PSYCH	Healthcare Social Workers	25	390	534	144	37%	\$31.05
PSYCH	Marriage and Family Therapists	2	65	72	7	11%	\$24.91
PSYCH	Mental Health Counselors	11	258	300	42	16%	\$20.37
PSYCH	Occupational Therapists	7	163	205	42	26%	\$43.39
PSYCH	Psychologists, All Other	Insf. Data	20	21	1	5%	\$38.99
PSYCH	Rehabilitation Counselors	18	350	435	85	24%	\$16.50
RADIOL	Radiologic Technologists	15	341	435	94	28%	\$30.33
RELIG	Clergy	7	130	165	35	27%	\$28.91
RELIG	Directors, Religious Activities and Education	6	97	117	20	21%	\$22.34
RELIG	Religious Workers, All Other	1	20	27	7	35%	\$23.97
RESP	Respiratory Therapists	11	324	380	56	17%	\$32.00
RESP	Respiratory Therapy Technicians	Insf. Data	16	20	4	25%	\$28.84
SOC	Social Scientists and Related Workers, All Other	Insf. Data	41	42	1	2%	\$35.64
THART	Producers and Directors	2	36	40	4	11%	\$32.93
THART	Costume Attendants	Insf. Data	16	16	0	0%	\$20.84
THART	Actors	5	125	128	3	2%	\$34.10

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
ACCT	Accountants and Auditors	393	7,554	9,014	1,460	19%	\$33.59
ACCT	Actuaries	3	29	45	16	55%	\$47.57
ACCT	Budget Analysts	26	561	591	30	5%	\$31.37
ACCT	Credit Analysts	12	252	305	53	21%	\$35.82
ACCT	Credit Counselors	17	450	530	80	18%	\$23.03
ACCT	Financial Analysts	31	564	719	155	27%	\$41.84
ACCT	Financial Examiners	2	41	49	8	20%	\$36.53
ACCT	Financial Managers	124	3,970	4,426	456	11%	\$55.56
ACCT	Financial Specialists, All Other	20	1,066	1,145	79	7%	\$25.26
ACCT	Loan Officers	70	1,990	2,302	312	16%	\$38.47
ACCT	Personal Financial Advisors	29	705	863	158	22%	\$42.63
ACCT	Securities, Commodities, and Financial Services Sales Agents	64	2,009	2,163	154	8%	\$29.56
ACCT	Tax Examiners and Collectors, and Revenue Agents	13	369	370	1	0%	\$34.70
ACCT	Bill and Account Collectors	164	3,586	4,136	550	15%	\$16.64
ACCT	Billing and Posting Clerks	193	4,507	5,495	988	22%	\$17.05
ACCT	Bookkeeping, Accounting, and Auditing Clerks	347	13,270	15,416	2,146	16%	\$19.07
ACCT	Credit Authorizers, Checkers, and Clerks	5	195	224	29	15%	\$15.84
ACCT	Financial Clerks, All Other	10	238	269	31	13%	\$19.26
ACCT	Loan Interviewers and Clerks	35	1,444	1,690	246	17%	\$20.04
ACCT	New Accounts Clerks	5	200	197	(3)	(2%)	\$17.47
ACCT	Payroll and Timekeeping Clerks	80	2,173	2,463	290	13%	\$19.63
ACCT	Tax Preparers	26	663	774	111	17%	\$18.58
ACCT	Tellers	199	3,782	3,963	181	5%	\$14.22
ANTHRO	Anthropologists and Archeologists	4	101	118	17	17%	\$25.92
ART	Camera and Photographic Equipment Repairers	1	18	23	5	28%	\$22.70
ART	Art Directors	4	98	110	12	12%	\$41.39
ART	Designers, All Other	2	47	55	8	17%	\$24.51
ART	Fashion Designers	8	127	167	40	31%	\$27.04
ART	Film and Video Editors	1	54	57	3	6%	\$30.09
ART	Graphic Designers	48	1,294	1,417	123	10%	\$21.91

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
ART	Multimedia Artists and Animators	2	58	65	7	12%	\$30.38
ART	Artists and Related Workers, All Other	2	63	66	3	5%	\$29.46
ART	Craft Artists	Insf. Data	22	21	(1)	(5%)	\$17.72
ART	Etchers and Engravers	2	69	74	5	7%	\$12.34
ART	Fine Artists, Including Painters, Sculptors, and Illustrators	5	166	176	10	6%	\$38.63
ART	Photographers	12	470	529	59	13%	\$22.26
ART	Photographic Process Workers and Processing Machine Operators	9	203	226	23	11%	\$14.32
BIOL	Epidemiologists	1	31	35	4	13%	\$27.71
BIOL	Genetic Counselors	3	42	55	13	31%	\$31.19
BIOL	Health Diagnosing and Treating Practitioners, All Other	14	504	532	28	6%	\$32.72
BIOL	Physician Assistants	44	661	947	286	43%	\$48.53
BIOL	Nurse Anesthetists	9	110	172	62	56%	\$67.97
BIOL	Nurse Midwives	2	37	49	12	32%	\$47.61
BIOL	Nurse Practitioners	60	1,059	1,415	356	34%	\$54.25
BIOL	Licensed Practical and Licensed Vocational Nurses	359	6,562	8,286	1,724	26%	\$23.06
BIOL	Nursing Assistants	533	9,577	12,714	3,137	33%	\$13.61
BIOL	Life, Physical, and Social Science Technicians, All Other	17	297	343	46	15%	\$25.24
BIOL	Veterinary Technologists and Technicians	23	612	769	157	26%	\$15.55
BIOL	Registered Nurses	1,076	24,849	30,146	5,297	21%	\$43.04
BIOL	Biological Scientists, All Other	8	274	259	(15)	(5%)	\$33.76
BIOL	Biological Technicians	12	284	307	23	8%	\$20.05
BIOL	Biomedical Engineers	7	222	210	(12)	(5%)	\$49.33
BIOL	Life Scientists, All Other	2	52	62	10	19%	\$44.98
BIOL	Microbiologists	4	94	99	5	5%	\$36.57
BIOL	Zoologists and Wildlife Biologists	4	118	127	9	8%	\$32.75
BIOL	Anesthesiologists	16	280	361	81	29%	\$109.78
BIOL	Biochemists and Biophysicists	2	40	47	7	18%	\$74.00
BIOL	Chiropractors	9	222	263	41	18%	\$46.94
BIOL	Family and General Practitioners	63	1,452	1,684	232	16%	\$99.35
BIOL	Internists, General	14	207	283	76	37%	\$83.69

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
BIOL	Medical Scientists, Except Epidemiologists	26	825	903	78	9%	\$44.06
BIOL	Obstetricians and Gynecologists	9	186	225	39	21%	\$112.08
BIOL	Pediatricians, General	13	255	309	54	21%	\$87.60
BIOL	Physicians and Surgeons, All Other	140	2,740	3,364	624	23%	\$59.06
BIOL	Surgeons	23	423	534	111	26%	\$101.48
BIOL	Veterinarians	20	416	472	56	13%	\$45.01
BIOL	Veterinary Assistants and Laboratory Animal Caretakers	25	1,020	1,067	47	5%	\$13.86
BUSAD	Education Administrators, Postsecondary	39	847	993	146	17%	\$51.87
BUSAD	Paralegals and Legal Assistants	70	2,106	2,434	328	16%	\$24.16
BUSAD	Administrative Services Managers	77	2,343	2,698	355	15%	\$39.81
BUSAD	Advertising and Promotions Managers	8	199	213	14	7%	\$40.36
BUSAD	Agents and Business Managers of Artists, Performers, and Athletes	Insf. Data	21	24	3	14%	\$44.79
BUSAD	Chief Executives	62	1,919	2,114	195	10%	\$87.60
BUSAD	Compensation and Benefits Managers	3	77	86	9	12%	\$57.47
BUSAD	Compensation, Benefits, and Job Analysis Specialists	16	501	565	64	13%	\$29.89
BUSAD	Compliance Officers	53	1,995	2,136	141	7%	\$34.45
BUSAD	Cost Estimators	118	2,486	2,763	277	11%	\$31.63
BUSAD	General and Operations Managers	716	20,281	23,346	3,065	15%	\$51.21
BUSAD	Human Resources Managers	36	784	921	137	17%	\$48.48
BUSAD	Human Resources Specialists	121	3,486	4,010	524	15%	\$28.35
BUSAD	Industrial Production Managers	31	1,387	1,390	3	0%	\$47.19
BUSAD	Insurance Underwriters	14	351	384	33	9%	\$29.06
BUSAD	Labor Relations Specialists	9	419	415	(4)	(1%)	\$33.06
BUSAD	Management Analysts	151	3,747	4,600	853	23%	\$39.81
BUSAD	Market Research Analysts and Marketing Specialists	142	2,795	3,754	959	34%	\$27.93
BUSAD	Marketing Managers	37	903	1,065	162	18%	\$59.22
BUSAD	Operations Research Analysts	12	169	239	70	41%	\$41.77
BUSAD	Purchasing Managers	15	468	514	46	10%	\$46.77
BUSAD	Sales Engineers	13	338	407	69	20%	\$45.37
BUSAD	Sales Managers	157	4,351	4,930	579	13%	\$53.83

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
BUSAD	Training and Development Managers	7	140	169	29	21%	\$49.66
BUSAD	Training and Development Specialists	62	1,526	1,831	305	20%	\$27.13
BUSAD	Business Operations Specialists, All Other	164	6,672	7,344	672	10%	\$31.48
BUSAD	Claims Adjusters, Examiners, and Investigators	68	2,283	2,373	90	4%	\$29.91
BUSAD	Court, Municipal, and License Clerks	32	1,048	1,195	147	14%	\$20.66
BUSAD	Executive Secretaries and Executive Administrative Assistants	85	5,113	5,337	224	4%	\$25.80
BUSAD	File Clerks	49	1,955	1,992	37	2%	\$14.90
BUSAD	First-Line Supervisors of Office and Administrative Support Workers	607	14,391	16,735	2,344	16%	\$25.37
BUSAD	Human Resources Assistants, Except Payroll and Timekeeping	46	1,363	1,464	101	7%	\$18.40
BUSAD	Information and Record Clerks, All Other	28	1,178	1,189	11	1%	\$19.03
BUSAD	Insurance Claims and Policy Processing Clerks	88	2,051	2,344	293	14%	\$16.83
BUSAD	Insurance Sales Agents	112	2,752	3,171	419	15%	\$25.79
BUSAD	Legal Secretaries	16	769	834	65	8%	\$17.35
BUSAD	Legal Support Workers, All Other	8	427	435	8	2%	\$22.23
BUSAD	Managers, All Other	63	1,891	2,089	198	10%	\$51.19
BUSAD	Office and Administrative Support Workers, All Other	170	5,245	5,446	201	4%	\$13.21
BUSAD	Office Clerks, General	926	29,566	32,330	2,764	9%	\$14.57
BUSAD	Order Clerks	112	3,146	3,396	250	8%	\$16.23
BUSAD	Procurement Clerks	34	718	782	64	9%	\$20.41
BUSAD	Production, Planning, and Expediting Clerks	117	3,049	3,417	368	12%	\$19.91
BUSAD	Receptionists and Information Clerks	401	8,579	10,048	1,469	17%	\$13.51
BUSAD	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	516	17,907	20,732	2,825	16%	\$17.85
BUSAD	Shipping, Receiving, and Traffic Clerks	409	9,840	11,155	1,315	13%	\$15.24
BUSAD	Transportation, Storage, and Distribution Managers	73	1,479	1,819	340	23%	\$41.14
CD	Education Administrators, Elementary and Secondary School	68	1,929	2,071	142	7%	\$50.61
CD	Teacher Assistants	413	13,372	14,340	968	7%	\$14.32
CD	Preschool Teachers, Except Special Education	109	2,851	3,096	245	9%	\$14.84
CD	Career/Technical Education Teachers, Middle School	1	17	23	6	35%	\$26.31
CD	Career/Technical Education Teachers, Secondary School	14	352	392	40	11%	\$32.73

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
CD	Education Administrators, All Other	16	411	453	42	10%	\$44.21
CD	Education Administrators, Preschool and Childcare Center/Program	12	322	355	33	10%	\$24.86
CD	Elementary School Teachers, Except Special Education	569	16,400	18,248	1,848	11%	\$35.11
CD	Kindergarten Teachers, Except Special Education	111	2,791	3,073	282	10%	\$31.23
CD	Middle School Teachers, Except Special and Career/Technical Education	172	4,628	5,256	628	14%	\$34.91
CD	Secondary School Teachers, Except Special and Career/Technical Education	255	7,032	7,592	560	8%	\$33.39
CD	Special Education Teachers, All Other	11	347	389	42	12%	\$37.83
CD	Special Education Teachers, Kindergarten and Elementary School	52	2,075	2,230	155	7%	\$36.49
CD	Special Education Teachers, Middle School	19	744	797	53	7%	\$31.77
CD	Special Education Teachers, Preschool	8	166	215	49	30%	\$24.60
CD	Special Education Teachers, Secondary School	23	908	980	72	8%	\$33.48
CD	Substitute Teachers	295	13,120	13,766	646	5%	\$18.55
CD	Teachers and Instructors, All Other	83	3,035	3,319	284	9%	\$27.38
CD	Childcare Workers	245	6,327	6,822	495	8%	\$12.69
CD	Self-Enrichment Education Teachers	53	1,286	1,569	283	22%	\$17.57
CHEM	Agricultural and Food Science Technicians	14	316	333	17	5%	\$14.20
CHEM	Chemical Technicians	10	219	259	40	18%	\$20.57
CHEM	Chemical Engineers	3	101	104	3	3%	\$48.16
CHEM	Chemists	14	372	404	32	9%	\$31.57
CHEM	Food Scientists and Technologists	9	181	205	24	13%	\$28.22
CHEM	Forensic Science Technicians	15	300	324	24	8%	\$31.15
CHEM	Pharmacists	139	2,777	3,411	634	23%	\$63.40
COMMST	Court Reporters	5	209	225	16	8%	\$39.87
COMMST	Fundraisers	9	212	259	47	22%	\$27.41
COMMST	Public Relations and Fundraising Managers	9	218	259	41	19%	\$46.38
COMMST	Public Relations Specialists	28	867	1,016	149	17%	\$26.17
COMMST	Radio and Television Announcers	8	282	282	0	0%	\$14.29
COMMST	Reporters and Correspondents	3	123	75	(48)	(39%)	\$20.00
COMMST	Sales Reps, Wholesale and Manuf., Technical and Scientific Products	86	1,811	2,267	456	25%	\$34.07

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
COMMST	Advertising Sales Agents	21	699	634	(65)	(9%)	\$21.56
COMMST	Buyers and Purchasing Agents, Farm Products	4	103	119	16	16%	\$38.30
COMMST	Media and Communication Workers, All Other	4	202	213	11	5%	\$19.52
COMMST	Public Address System and Other Announcers	3	127	129	2	2%	\$15.72
COMMST	Purchasing Agents, Except Wholesale, Retail, and Farm Products	54	2,016	2,176	160	8%	\$26.83
COMMST	Sales and Related Workers, All Other	40	1,016	1,200	184	18%	\$13.90
COMMST	Sales Representatives, Services, All Other	321	7,053	8,187	1,134	16%	\$27.17
COMMST	Sales Reps., Wholesale and Manuf., Except Technical and Scientific Products	541	11,759	14,587	2,828	24%	\$31.15
COMMST	Wholesale and Retail Buyers, Except Farm Products	49	932	1,154	222	24%	\$29.48
CS/CIT	Computer User Support Specialists	113	3,031	3,633	602	20%	\$25.42
CS/CIT	Computer Network Support Specialists	23	866	952	86	10%	\$31.60
CS/CIT	Desktop Publishers	Insf. Data	39	40	1	3%	\$22.22
CS/CIT	Web Developers	22	613	723	110	18%	\$30.68
CS/CIT	Computer and Information Systems Managers	48	1,562	1,810	248	16%	\$56.21
CS/CIT	Computer Hardware Engineers	4	70	95	25	36%	\$53.75
CS/CIT	Computer Network Architects	13	279	358	79	28%	\$50.26
CS/CIT	Computer Occupations, All Other	22	891	966	75	8%	\$38.03
CS/CIT	Computer Programmers	33	739	862	123	17%	\$36.77
CS/CIT	Computer Systems Analysts	83	1,841	2,337	496	27%	\$36.96
CS/CIT	Database Administrators	15	387	460	73	19%	\$40.40
CS/CIT	Information Security Analysts	10	160	229	69	43%	\$46.05
CS/CIT	Network and Computer Systems Administrators	63	1,937	2,232	295	15%	\$41.72
CS/CIT	Software Developers, Applications	93	2,706	3,248	542	20%	\$48.03
CS/CIT	Software Developers, Systems Software	31	584	808	224	38%	\$49.71
CS/CIT	Computer and Information Research Scientists	3	117	128	11	9%	\$51.88
CS/CIT	Computer Operators	4	409	405	(4)	(1%)	\$19.28
DANCE	Choreographers	2	43	52	9	21%	\$28.95
DANCE	Dancers	2	70	69	(1)	(1%)	\$15.23
ECON	Economists	9	197	226	29	15%	\$34.11

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
EMS	Emergency Medical Technicians and Paramedics	117	2,027	2,550	523	26%	\$14.45
EMS	Phlebotomists	58	1,261	1,566	305	24%	\$16.74
EMS	Emergency Management Directors	2	53	61	8	15%	\$40.31
EMS	Police, Fire, and Ambulance Dispatchers	35	819	914	95	12%	\$24.71
ENGL	Editors	6	235	226	(9)	(4%)	\$22.09
ENGL	Proofreaders and Copy Markers	Insf. Data	38	38	0	0%	\$23.17
ENGL	Technical Writers	10	190	229	39	21%	\$38.17
ENGL	Writers and Authors	4	132	144	12	9%	\$31.75
ENGR	Civil Engineering Technicians	7	330	326	(4)	(1%)	\$29.56
ENGR	Engineering Technicians, Except Drafters, All Other	17	682	706	24	4%	\$31.77
ENGR	Mechanical Engineering Technicians	5	160	172	12	8%	\$22.17
ENGR	Civil Engineers	80	2,557	2,717	160	6%	\$45.79
ENGR	Electrical Engineers	18	477	543	66	14%	\$47.01
ENGR	Electronics Engineers, Except Computer	28	1,081	1,115	34	3%	\$46.89
ENGR	Engineers, All Other	16	675	712	37	5%	\$46.74
ENGR	Materials Engineers	3	79	83	4	5%	\$43.10
ENGR	Mechanical Engineers	46	1,077	1,147	70	6%	\$41.45
FIRE	Firefighters	133	3,534	3,852	318	9%	\$28.28
FIRE	First-Line Supervisors of Fire Fighting and Prevention Workers	17	265	309	44	17%	\$49.62
FIRE	Fire Inspectors and Investigators	2	45	53	8	18%	\$34.51
GEOG	Forest and Conservation Technicians	27	676	634	(42)	(6%)	\$20.42
GEOG	Cartographers and Photogrammetrists	7	179	205	26	15%	\$26.98
GEOG	Foresters	2	41	47	6	15%	\$32.74
GEOG	Soil and Plant Scientists	3	54	65	11	20%	\$31.92
GEOG	Surveying and Mapping Technicians	8	227	263	36	16%	\$27.63
GEOL	Environmental Engineering Technicians	6	158	186	28	18%	\$24.64
GEOL	Environmental Science and Protection Technicians, Including Health	14	186	239	53	28%	\$24.43
GEOL	Geological and Petroleum Technicians	2	40	47	7	18%	\$25.15
GEOL	Conservation Scientists	3	80	83	3	4%	\$38.06
GEOL	Environmental Engineers	13	307	354	47	15%	\$43.20

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
GEOL	Environmental Scientists and Specialists, Including Health	59	1,334	1,499	165	12%	\$38.28
GEOL	Geoscientists, Except Hydrologists and Geographers	9	190	217	27	14%	\$37.51
GEOL	Mining and Geological Engineers, Including Mining Safety Engineers	2	45	53	8	18%	\$49.68
GEOL	Natural Sciences Managers	6	256	263	7	3%	\$52.77
GEOL	Forest and Conservation Workers	4	149	151	2	1%	\$12.03
HIST	Curators	2	30	39	9	30%	\$24.77
HIST	Librarians	20	501	580	79	16%	\$28.58
HIST	Library Technicians	66	1,010	1,098	88	9%	\$18.37
HIST	Audio-Visual and Multimedia Collections Specialists	1	134	134	0	0%	\$18.64
HIST	Museum Technicians and Conservators	2	60	68	8	13%	\$19.52
HIST	Library Assistants, Clerical	61	968	1,121	153	16%	\$13.43
KIN	Massage Therapists	32	923	1,134	211	23%	\$20.61
KIN	Physical Therapist Assistants	29	487	645	158	32%	\$29.92
KIN	Athletic Trainers	5	88	111	23	26%	\$21.14
KIN	Coaches and Scouts	69	1,528	1,731	203	13%	\$17.64
KIN	Exercise Physiologists	1	31	39	8	26%	\$25.35
KIN	Physical Therapists	73	1,254	1,619	365	29%	\$41.69
KIN	Fitness Trainers and Aerobics Instructors	50	1,962	2,211	249	13%	\$19.34
KIN	Physical Therapist Aides	18	327	417	90	28%	\$13.68
MATH	Mathematicians	Insf. Data	19	22	3	16%	\$37.90
MATH	Statisticians	4	57	78	21	37%	\$32.10
MATH	Logisticians	37	929	1,172	243	26%	\$37.27
MATH	Statistical Assistants	2	45	54	9	20%	\$21.00
MODLANG	Interpreters and Translators	27	533	716	183	34%	\$20.28
MUSIC	Music Directors and Composers	6	190	200	10	5%	\$25.32
MUSIC	Musical Instrument Repairers and Tuners	3	50	62	12	24%	\$19.15
MUSIC	Musicians and Singers	7	216	224	8	4%	\$33.49
PHIL	Judges, Magistrate Judges, and Magistrates	4	163	176	13	8%	\$99.89
PHIL	Judicial Law Clerks	1	38	44	6	16%	\$42.19
PHIL	Lawyers	87	2,597	3,008	411	16%	\$56.90

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
PHYSICS	Aerospace Engineers	6	176	187	11	6%	\$46.42
PHYSICS	Atmospheric and Space Scientists	Insf. Data	20	24	4	20%	\$40.35
PHYSICS	Materials Scientists	Insf. Data	22	22	0	0%	\$40.79
PHYSICS	Physical Scientists, All Other	2	97	96	(1)	(1%)	\$49.15
PHYSICS	Physicists	1	27	33	6	22%	\$58.60
POLIT	Political Scientists	Insf. Data	15	19	4	27%	\$36.67
POLIT	Broadcast News Analysts	Insf. Data	12	11	(1)	(8%)	\$27.50
PSYCH	Community and Social Service Specialists, All Other	44	895	1,071	176	20%	\$19.78
PSYCH	Counselors, All Other	8	203	232	29	14%	\$14.50
PSYCH	Educational, Guidance, School, and Vocational Counselors	72	2,281	2,488	207	9%	\$30.89
PSYCH	Healthcare Social Workers	88	1,458	1,957	499	34%	\$31.49
PSYCH	Marriage and Family Therapists	11	314	351	37	12%	\$24.36
PSYCH	Mental Health Counselors	44	1,151	1,324	173	15%	\$20.57
PSYCH	Occupational Therapists	29	684	867	183	27%	\$43.48
PSYCH	Psychologists, All Other	3	79	86	7	9%	\$40.64
PSYCH	Rehabilitation Counselors	62	1,318	1,615	297	23%	\$16.79
PSYCH	Occupational Therapy Assistants	13	205	274	69	34%	\$31.02
PSYCH	Arbitrators, Mediators, and Conciliators	2	79	87	8	10%	\$35.67
PSYCH	Child, Family, and School Social Workers	54	1,436	1,641	205	14%	\$24.18
PSYCH	Mental Health and Substance Abuse Social Workers	31	732	866	134	18%	\$23.19
PSYCH	Recreational Therapists	7	174	204	30	17%	\$34.31
PSYCH	Social and Community Service Managers	47	855	1,111	256	30%	\$38.66
PSYCH	Social Workers, All Other	38	1,278	1,369	91	7%	\$29.13
PSYCH	Therapists, All Other	3	92	113	21	23%	\$36.26
PSYCH	Clinical, Counseling, and School Psychologists	55	1,371	1,522	151	11%	\$41.33
PSYCH	Psychiatrists	11	259	297	38	15%	\$111.56
PSYCH	Community Health Workers	24	389	509	120	31%	\$21.44
PSYCH	Occupational Therapy Aides	2	25	37	12	48%	\$17.40
PSYCH	Social and Human Service Assistants	172	2,942	3,749	807	27%	\$15.89
PSYCH	Substance Abuse and Behavioral Disorder Counselors	38	1,003	1,149	146	15%	\$19.41

Related	Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
Program		Openings	Jobs	Jobs	Change	% Change	Earnings
RADIOL	Radiologic Technologists	59	1,345	1,715	370	28%	\$30.39
RELIG	Clergy	20	418	519	101	24%	\$28.04
RELIG	Directors, Religious Activities and Education	16	286	336	50	17%	\$21.39
RELIG	Religious Workers, All Other	3	60	77	17	28%	\$22.90
RESP	Respiratory Therapists	43	1,247	1,478	231	19%	\$32.18
RESP	Respiratory Therapy Technicians	2	62	77	15	24%	\$29.12
SOC	Survey Researchers	2	28	43	15	54%	\$24.15
SOC	Social Science Research Assistants	4	45	62	17	38%	\$22.21
SOC	Social Scientists and Related Workers, All Other	3	172	175	3	2%	\$37.08
THART	Makeup Artists, Theatrical and Performance	Insf. Data	10	11	1	10%	\$31.42
THART	Actors	23	614	609	(5)	(1%)	\$35.70
THART	Producers and Directors	9	204	212	8	4%	\$33.09
THART	Set and Exhibit Designers	2	46	51	5	11%	\$22.92
THART	Costume Attendants	4	66	64	(2)	(3%)	\$22.63
THART	Entertainers and Performers, Sports and Related Workers, All Other	1	43	50	7	16%	\$19.71

EXHIBIT A.176 SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - UNRELATED TO EXISTING PROGRAMS

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Adhesive Bonding Machine Operators and Tenders	1	28	30	2	7%	\$17.16
Administrative Law Judges, Adjudicators, and Hearing Officers	Insf. Data	12	12	0	0%	\$59.61
Adult Basic and Secondary Education and Literacy Teachers and Instructors	3	119	130	11	9%	\$39.57
Agricultural Equipment Operators	1	50	36	(14)	(28%)	\$12.07
Agricultural Inspectors	Insf. Data	20	19	(1)	(5%)	\$24.61
Agricultural Workers, All Other	Insf. Data	12	<10	Insf. Data	Insf. Data	\$14.37
Aircraft Mechanics and Service Technicians	3	71	79	8	11%	\$27.29
Airline Pilots, Copilots, and Flight Engineers	1	36	36	0	0%	\$54.30
Animal Control Workers	Insf. Data	12	13	1	8%	\$22.15
Appraisers and Assessors of Real Estate	Insf. Data	27	32	5	19%	\$34.10
Architects, Except Landscape and Naval	3	38	55	17	45%	\$44.68
Architectural and Civil Drafters	2	92	94	2	2%	\$28.33
Architectural and Engineering Managers	5	152	163	11	7%	\$63.69
Assemblers and Fabricators, All Other	9	245	273	28	11%	\$13.42
Audio and Video Equipment Technicians	3	105	118	13	12%	\$17.54
Automotive and Watercraft Service Attendants	12	215	267	52	24%	\$12.84
Automotive Body and Related Repairers	4	196	170	(26)	(13%)	\$21.19
Automotive Glass Installers and Repairers	Insf. Data	22	14	(8)	(36%)	\$14.46
Automotive Service Technicians and Mechanics	75	1,672	1,957	285	17%	\$19.81
Bakers	19	406	481	75	18%	\$12.43
Barbers	Insf. Data	15	18	3	20%	\$12.85
Boilermakers	Insf. Data	11	11	0	0%	\$36.36
Brickmasons and Blockmasons	Insf. Data	115	31	(84)	(73%)	\$25.60
Building Cleaning Workers, All Other	Insf. Data	31	33	2	6%	\$12.76
Bus and Truck Mechanics and Diesel Engine Specialists	27	764	855	91	12%	\$21.84
Bus Drivers, School or Special Client	35	1,045	1,178	133	13%	\$16.39
Bus Drivers, Transit and Intercity	2	73	78	5	7%	\$18.94
Butchers and Meat Cutters	15	344	399	55	16%	\$14.68
Cabinetmakers and Bench Carpenters	14	337	409	72	21%	\$14.39
Cardiovascular Technologists and Technicians	6	140	181	41	29%	\$25.17

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Cargo and Freight Agents	6	84	117	33	39%	\$18.67
Carpenters	31	1,371	1,335	(36)	(3%)	\$23.12
Carpet Installers	1	41	46	5	12%	\$20.52
Cement Masons and Concrete Finishers	6	317	296	(21)	(7%)	\$22.73
Chefs and Head Cooks	7	240	270	30	13%	\$17.36
Chemical Plant and System Operators	Insf. Data	13	<10	Insf. Data	Insf. Data	\$28.11
Civil Engineering Technicians	Insf. Data	31	31	0	0%	\$30.31
Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	Insf. Data	17	17	0	0%	\$12.36
Coaches and Scouts	16	328	384	56	17%	\$17.45
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	4	153	149	(4)	(3%)	\$16.79
Coin, Vending, and Amusement Machine Servicers and Repairers	2	54	63	9	17%	\$17.41
Commercial and Industrial Designers	1	32	36	4	13%	\$30.01
Commercial Pilots	2	29	40	11	38%	\$36.71
Community Health Workers	6	94	127	33	35%	\$21.18
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	2	26	34	8	31%	\$24.66
Computer, Automated Teller, and Office Machine Repairers	3	73	89	16	22%	\$17.69
Computer-Controlled Machine Tool Operators, Metal and Plastic	5	102	121	19	19%	\$17.40
Concierges	2	29	39	10	34%	\$13.54
Construction and Building Inspectors	3	81	90	9	11%	\$38.25
Construction and Related Workers, All Other	2	65	65	0	0%	\$21.39
Construction Laborers	44	1,409	1,401	(8)	(1%)	\$20.11
Construction Managers	9	272	304	32	12%	\$52.92
Continuous Mining Machine Operators	Insf. Data	16	18	2	13%	\$21.32
Control and Valve Installers and Repairers, Except Mechanical Door	6	154	149	(5)	(3%)	\$31.43
Conveyor Operators and Tenders	4	67	81	14	21%	\$17.39
Cooks, All Other	1	24	32	8	33%	\$12.85
Cooks, Institution and Cafeteria	28	573	718	145	25%	\$13.91
Cooks, Private Household	Insf. Data	12	13	1	8%	\$21.09
Correctional Officers and Jailers	9	284	297	13	5%	\$34.54
Counter and Rental Clerks	36	1,074	1,135	61	6%	\$14.77

EXHIBIT A.176 SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - UNRELATED TO EXISTING PROGRAMS (cont.)

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Couriers and Messengers	3	148	154	6	4%	\$12.75
Crane and Tower Operators	2	31	38	7	23%	\$26.34
Credit Authorizers, Checkers, and Clerks	Insf. Data	32	36	4	13%	\$15.76
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	Insf. Data	31	24	(7)	(23%)	\$17.90
Customer Service Representatives	139	2,683	3,256	573	21%	\$17.63
Cutting and Slicing Machine Setters, Operators, and Tenders	Insf. Data	30	21	(9)	(30%)	\$17.40
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	3	243	227	(16)	(7%)	\$16.50
Data Entry Keyers	3	295	257	(38)	(13%)	\$13.89
Demonstrators and Product Promoters	12	255	289	34	13%	\$13.23
Dental Assistants	38	985	1,143	158	16%	\$15.04
Dental Hygienists	17	291	371	80	27%	\$41.96
Dental Laboratory Technicians	Insf. Data	24	23	(1)	(4%)	\$14.95
Dentists, General	11	240	283	43	18%	\$54.14
Detectives and Criminal Investigators	3	132	130	(2)	(2%)	\$44.92
Diagnostic Medical Sonographers	8	120	175	55	46%	\$34.01
Dietetic Technicians	3	109	131	22	20%	\$14.50
Dietitians and Nutritionists	5	129	163	34	26%	\$33.01
Dispatchers, Except Police, Fire, and Ambulance	27	539	632	93	17%	\$19.33
Drafters, All Other	Insf. Data	12	14	2	17%	\$25.11
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	Insf. Data	27	23	(4)	(15%)	\$13.70
Driver/Sales Workers	21	406	535	129	32%	\$16.08
Drywall and Ceiling Tile Installers	2	183	106	(77)	(42%)	\$27.15
Earth Drillers, Except Oil and Gas	Insf. Data	26	27	1	4%	\$35.36
Education, Training, and Library Workers, All Other	5	424	435	11	3%	\$18.70
Electrical and Electronic Equipment Assemblers	4	97	114	17	18%	\$15.43
Electrical and Electronics Drafters	Insf. Data	35	37	2	6%	\$29.01
Electrical and Electronics Engineering Technicians	4	137	144	7	5%	\$29.08
Electrical and Electronics Repairers, Commercial and Industrial Equipment	2	76	81	5	7%	\$28.12
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	1	23	27	4	17%	\$38.71
Electrical Power-Line Installers and Repairers	16	266	308	42	16%	\$44.53

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Electricians	20	582	660	78	13%	\$30.26
Electromechanical Equipment Assemblers	Insf. Data	16	19	3	19%	\$14.13
Electronic Equipment Installers and Repairers, Motor Vehicles	Insf. Data	33	31	(2)	(6%)	\$16.40
Electronic Home Entertainment Equipment Installers and Repairers	2	40	42	2	5%	\$22.27
Eligibility Interviewers, Government Programs	8	312	324	12	4%	\$20.10
Embalmers	Insf. Data	13	<10	Insf. Data	Insf. Data	\$24.06
Engine and Other Machine Assemblers	Insf. Data	20	22	2	10%	\$20.27
Engineering Technicians, Except Drafters, All Other	3	114	114	0	0%	\$31.20
Excavating and Loading Machine and Dragline Operators	Insf. Data	32	35	3	9%	\$26.95
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	1	46	49	3	7%	\$14.04
Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	Insf. Data	16	15	(1)	(6%)	\$14.71
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	2	55	52	(3)	(5%)	\$13.04
Farmers, Ranchers, and Other Agricultural Managers	Insf. Data	86	48	(38)	(44%)	\$35.12
Farmworkers, Farm, Ranch, and Aquacultural Animals	2	81	55	(26)	(32%)	\$13.14
Fence Erectors	2	72	74	2	3%	\$18.86
Fiberglass Laminators and Fabricators	Insf. Data	36	33	(3)	(8%)	\$15.73
First-Line Supervisors of Construction Trades and Extraction Workers	13	587	612	25	4%	\$34.51
First-Line Supervisors of Correctional Officers	1	36	37	1	3%	\$45.64
First-Line Supervisors of Farming, Fishing, and Forestry Workers	Insf. Data	40	29	(11)	(28%)	\$19.18
First-Line Supervisors of Fire Fighting and Prevention Workers	Insf. Data	14	16	2	14%	\$49.71
First-Line Supervisors of Food Preparation and Serving Workers	99	1,786	2,200	414	23%	\$14.84
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	36	593	762	169	28%	\$24.57
First-Line Supervisors of Housekeeping and Janitorial Workers	11	263	302	39	15%	\$17.96
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	5	186	209	23	12%	\$20.25
First-Line Supervisors of Mechanics, Installers, and Repairers	26	648	726	78	12%	\$34.59
First-Line Supervisors of Non-Retail Sales Workers	8	283	326	43	15%	\$29.98
First-Line Supervisors of Personal Service Workers	19	342	458	116	34%	\$19.10
First-Line Supervisors of Police and Detectives	Insf. Data	19	22	3	16%	\$59.82
First-Line Supervisors of Production and Operating Workers	17	747	782	35	5%	\$25.92
First-Line Supervisors of Protective Service Workers, All Other	4	98	112	14	14%	\$25.80

EXHIBIT A.176 SERVICE AREA JOB OPENINGS BY OCCUPATION (2015-2025) - UNRELATED TO EXISTING PROGRAMS (cont.)

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
First-Line Supervisors of Retail Sales Workers	107	2,354	2,849	495	21%	\$20.84
First-Line Supervisors of Transportation and Material-Moving Machine/Vehicle Operators	25	450	553	103	23%	\$27.41
Floor Layers, Except Carpet, Wood, and Hard Tiles	Insf. Data	23	26	3	13%	\$16.20
Floral Designers	2	59	43	(16)	(27%)	\$15.75
Food Batchmakers	5	123	128	5	4%	\$13.49
Food Cooking Machine Operators and Tenders	1	27	29	2	7%	\$14.23
Food Processing Workers, All Other	2	44	52	8	18%	\$14.19
Food Service Managers	17	571	636	65	11%	\$23.72
Forging Machine Setters, Operators, and Tenders, Metal and Plastic	1	51	48	(3)	(6%)	\$16.93
Foundry Mold and Coremakers	Insf. Data	12	10	(2)	(17%)	\$13.12
Funeral Attendants	2	70	62	(8)	(11%)	\$14.34
Funeral Service Managers	Insf. Data	17	16	(1)	(6%)	\$30.57
Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	Insf. Data	17	16	(1)	(6%)	\$15.07
Furniture Finishers	3	39	56	17	44%	\$12.40
Gaming Cage Workers	Insf. Data	32	32	0	0%	\$12.58
Gaming Change Persons and Booth Cashiers	3	52	54	2	4%	\$12.18
Gaming Dealers	4	178	185	7	4%	\$12.23
Gaming Service Workers, All Other	2	67	71	4	6%	\$13.93
Gaming Supervisors	Insf. Data	18	19	1	6%	\$23.74
Gaming Surveillance Officers and Gaming Investigators	Insf. Data	17	18	1	6%	\$16.56
Gas Plant Operators	2	48	43	(5)	(10%)	\$35.53
Glaziers	2	41	39	(2)	(5%)	\$29.99
Grinding and Polishing Workers, Hand	2	59	52	(7)	(12%)	\$13.82
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders,	2	88	76	(12)	(14%)	\$14.32
Metal and Plastic	-		10	(12)	(1170)	φ11.02
Grounds Maintenance Workers, All Other	Insf. Data	11	15	4	36%	\$18.90
Hairdressers, Hairstylists, and Cosmetologists	14	292	349	57	20%	\$12.07
Hazardous Materials Removal Workers	1	26	30	4	15%	\$18.39
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	Insf. Data	14	15	1	7%	\$40.79
Health Educators	5	98	119	21	21%	\$24.92
Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
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	Openings	Jobs	Jobs	Change	% Change	Earnings
Health Technologists and Technicians, All Other	14	451	538	87	19%	\$21.03
Healthcare Practitioners and Technical Workers, All Other	10	259	286	27	10%	\$29.39
Healthcare Support Workers, All Other	10	282	321	39	14%	\$16.80
Hearing Aid Specialists	Insf. Data	14	17	3	21%	\$21.13
Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	Insf. Data	17	18	1	6%	\$17.04
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	17	409	467	58	14%	\$24.61
Heavy and Tractor-Trailer Truck Drivers	219	5,899	7,026	1,127	19%	\$23.17
Helpers, Construction Trades, All Other	Insf. Data	36	32	(4)	(11%)	\$17.48
HelpersBrickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	Insf. Data	71	20	(51)	(72%)	\$17.46
HelpersCarpenters	1	34	39	5	15%	\$13.39
HelpersElectricians	2	46	59	13	28%	\$14.23
HelpersInstallation, Maintenance, and Repair Workers	9	203	225	22	11%	\$14.90
HelpersPipelayers, Plumbers, Pipefitters, and Steamfitters	3	92	103	11	12%	\$15.30
HelpersRoofers	1	26	32	6	23%	\$12.70
Highway Maintenance Workers	Insf. Data	23	27	4	17%	\$23.63
Home Appliance Repairers	8	157	180	23	15%	\$23.35
Home Health Aides	125	1,131	2,047	916	81%	\$13.19
Industrial Engineering Technicians	1	37	39	2	5%	\$24.32
Industrial Engineers	5	103	117	14	14%	\$37.12
Industrial Machinery Mechanics	18	360	427	67	19%	\$26.04
Industrial Truck and Tractor Operators	85	1,888	2,234	346	18%	\$15.94
Inspectors, Testers, Sorters, Samplers, and Weighers	22	545	624	79	14%	\$17.46
Installation, Maintenance, and Repair Workers, All Other	6	246	261	15	6%	\$18.22
Instructional Coordinators	7	370	409	39	11%	\$36.52
Insulation Workers, Floor, Ceiling, and Wall	Insf. Data	21	14	(7)	(33%)	\$30.86
Insurance Appraisers, Auto Damage	Insf. Data	17	13	(4)	(24%)	\$25.02
Insurance Sales Agents	21	580	647	67	12%	\$24.81
Interior Designers	2	43	54	11	26%	\$24.95
Interviewers, Except Eligibility and Loan	11	315	360	45	14%	\$18.78
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	117	3,598	4,040	442	12%	\$13.57

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Jewelers and Precious Stone and Metal Workers	Insf. Data	22	23	1	5%	\$16.82
Laborers and Freight, Stock, and Material Movers, Hand	469	7,866	9,675	1,809	23%	\$13.46
Landscape Architects	1	22	27	5	23%	\$37.61
Landscaping and Groundskeeping Workers	72	1,885	2,099	214	11%	\$12.36
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	2	63	62	(1)	(2%)	\$16.95
Laundry and Dry-Cleaning Workers	12	246	281	35	14%	\$12.18
Legislators	Insf. Data	18	20	2	11%	\$25.02
Library Assistants, Clerical	6	96	108	12	13%	\$13.45
Light Truck or Delivery Services Drivers	53	1,564	1,820	256	16%	\$19.24
Locksmiths and Safe Repairers	Insf. Data	15	17	2	13%	\$25.13
Lodging Managers	2	33	40	7	21%	\$23.45
Machine Feeders and Offbearers	22	350	476	126	36%	\$14.96
Machinists	18	437	499	62	14%	\$17.21
Magnetic Resonance Imaging Technologists	2	39	52	13	33%	\$36.78
Mail Clerks and Mail Machine Operators, Except Postal Service	1	52	49	(3)	(6%)	\$13.68
Maintenance and Repair Workers, General	71	1,921	2,225	304	16%	\$18.74
Maintenance Workers, Machinery	4	151	168	17	11%	\$21.64
Material Moving Workers, All Other	6	137	156	19	14%	\$19.19
Mechanical Door Repairers	1	18	22	4	22%	\$21.77
Mechanical Drafters	1	60	58	(2)	(3%)	\$25.72
Media and Communication Workers, All Other	Insf. Data	37	40	3	8%	\$18.77
Medical and Clinical Laboratory Technicians	16	249	334	85	34%	\$19.56
Medical and Clinical Laboratory Technologists	9	129	175	46	36%	\$33.06
Medical and Health Services Managers	33	605	765	160	26%	\$57.93
Medical Appliance Technicians	Insf. Data	11	13	2	18%	\$20.99
Medical Assistants	92	1,956	2,446	490	25%	\$14.11
Medical Equipment Preparers	7	179	210	31	17%	\$19.97
Medical Equipment Repairers	4	45	66	21	47%	\$26.80
Medical Records and Health Information Technicians	23	417	519	102	24%	\$21.76
Medical Secretaries	66	1,492	1,941	449	30%	\$15.73

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Medical Transcriptionists	2	50	62	12	24%	\$23.08
Meeting, Convention, and Event Planners	5	109	141	32	29%	\$19.94
Merchandise Displayers and Window Trimmers	6	83	112	29	35%	\$16.56
Metal Workers and Plastic Workers, All Other	Insf. Data	41	43	2	5%	\$13.25
Metal-Refining Furnace Operators and Tenders	Insf. Data	21	24	3	14%	\$17.71
Meter Readers, Utilities	2	87	73	(14)	(16%)	\$22.69
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	2	67	63	(4)	(6%)	\$16.54
Millwrights	Insf. Data	19	21	2	11%	\$21.87
Mixing and Blending Machine Setters, Operators, and Tenders	5	128	131	3	2%	\$15.14
Mobile Heavy Equipment Mechanics, Except Engines	6	162	169	7	4%	\$26.22
Molders, Shapers, and Casters, Except Metal and Plastic	5	109	106	(3)	(3%)	\$16.15
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	3	165	164	(1)	(1%)	\$14.90
Morticians, Undertakers, and Funeral Directors	Insf. Data	25	23	(2)	(8%)	\$38.06
Motor Vehicle Operators, All Other	12	275	312	37	13%	\$15.35
Motorboat Mechanics and Service Technicians	2	30	38	8	27%	\$18.13
Motorcycle Mechanics	2	43	49	6	14%	\$24.26
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1	43	45	2	5%	\$15.70
Nuclear Medicine Technologists	2	47	58	11	23%	\$46.27
Occupational Health and Safety Specialists	3	68	77	9	13%	\$34.87
Office Machine Operators, Except Computer	3	110	103	(7)	(6%)	\$17.06
Operating Engineers and Other Construction Equipment Operators	11	329	341	12	4%	\$31.28
Ophthalmic Laboratory Technicians	1	13	19	6	46%	\$13.53
Ophthalmic Medical Technicians	3	60	82	22	37%	\$18.84
Opticians, Dispensing	8	143	176	33	23%	\$16.95
Optometrists	3	50	62	12	24%	\$52.35
Orderlies	5	96	120	24	25%	\$17.25
Outdoor Power Equipment and Other Small Engine Mechanics	1	27	30	3	11%	\$16.11
Packaging and Filling Machine Operators and Tenders	23	593	654	61	10%	\$13.62
Packers and Packagers, Hand	102	2,003	2,406	403	20%	\$12.08

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Painters, Construction and Maintenance	7	310	288	(22)	(7%)	\$21.46
Painters, Transportation Equipment	2	86	65	(21)	(24%)	\$18.85
Painting, Coating, and Decorating Workers	2	61	60	(1)	(2%)	\$13.43
Paper Goods Machine Setters, Operators, and Tenders	Insf. Data	50	43	(7)	(14%)	\$18.64
Parts Salespersons	24	607	684	77	13%	\$18.16
Paving, Surfacing, and Tamping Equipment Operators	1	69	61	(8)	(12%)	\$30.67
Pest Control Workers	6	193	199	6	3%	\$14.00
Petroleum Pump System Operators, Refinery Operators, and Gaugers	1	23	22	(1)	(4%)	\$33.78
Pharmacy Aides	6	181	206	25	14%	\$14.74
Pharmacy Technicians	28	707	900	193	27%	\$17.98
Pipelayers	Insf. Data	28	31	3	11%	\$25.70
Plant and System Operators, All Other	Insf. Data	12	12	0	0%	\$25.20
Plasterers and Stucco Masons	Insf. Data	94	41	(53)	(56%)	\$19.03
Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	Insf. Data	30	28	(2)	(7%)	\$15.36
Plumbers, Pipefitters, and Steamfitters	12	460	520	60	13%	\$23.72
Podiatrists	Insf. Data	12	13	1	8%	\$71.57
Police and Sheriff's Patrol Officers	14	321	351	30	9%	\$42.28
Postal Service Clerks	2	152	115	(37)	(24%)	\$25.38
Postal Service Mail Carriers	21	678	538	(140)	(21%)	\$25.62
Postal Service Mail Sorters, Processors, and Processing Machine Operators	1	186	147	(39)	(21%)	\$23.00
Postmasters and Mail Superintendents	Insf. Data	17	15	(2)	(12%)	\$37.62
Postsecondary Teachers	108	2,874	3,461	587	20%	\$41.67
Pourers and Casters, Metal	Insf. Data	47	41	(6)	(13%)	\$14.60
Power Distributors and Dispatchers	1	28	32	4	14%	\$41.38
Power Plant Operators	7	166	172	6	4%	\$31.37
Precision Instrument and Equipment Repairers, All Other	Insf. Data	16	17	1	6%	\$25.75
Prepress Technicians and Workers	Insf. Data	24	18	(6)	(25%)	\$17.42
Print Binding and Finishing Workers	Insf. Data	21	17	(4)	(19%)	\$16.53
Printing Press Operators	2	89	76	(13)	(15%)	\$17.04
Private Detectives and Investigators	Insf. Data	12	17	5	42%	\$28.40

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Probation Officers and Correctional Treatment Specialists	2	59	60	1	2%	\$40.10
Production Workers, All Other	10	227	254	27	12%	\$13.88
Property, Real Estate, and Community Association Managers	12	252	303	51	20%	\$29.81
Protective Service Workers, All Other	38	443	497	54	12%	\$15.40
Psychiatric Aides	2	77	84	7	9%	\$13.30
Psychiatric Technicians	3	185	194	9	5%	\$27.32
Radiation Therapists	2	54	64	10	19%	\$49.25
Radio, Cellular, and Tower Equipment Installers and Repairs	Insf. Data	16	18	2	13%	\$23.59
Rail Car Repairers	Insf. Data	15	18	3	20%	\$16.96
Real Estate Brokers	2	63	67	4	6%	\$30.84
Real Estate Sales Agents	4	125	150	25	20%	\$25.57
Recreation Workers	30	747	943	196	26%	\$12.18
Recreational Vehicle Service Technicians	2	49	53	4	8%	\$20.24
Refuse and Recyclable Material Collectors	7	142	171	29	20%	\$18.88
Reinforcing Iron and Rebar Workers	2	117	80	(37)	(32%)	\$28.47
Reservation and Transportation Ticket Agents and Travel Clerks	Insf. Data	32	34	2	6%	\$15.40
Residential Advisors	7	61	96	35	57%	\$16.72
Retail Salespersons	502	7,916	9,852	1,936	24%	\$12.49
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	3	142	137	(5)	(4%)	\$16.62
Roofers	9	223	257	34	15%	\$20.56
Roustabouts, Oil and Gas	Insf. Data	15	16	1	7%	\$20.44
Sales Engineers	2	47	58	11	23%	\$46.20
Sales Managers	27	708	813	105	15%	\$54.19
Sawing Machine Setters, Operators, and Tenders, Wood	7	141	156	15	11%	\$14.02
Security and Fire Alarm Systems Installers	1	39	44	5	13%	\$24.38
Security Guards	52	1,848	2,058	210	11%	\$12.66
Semiconductor Processors	Insf. Data	<10	<10	Insf. Data	Insf. Data	\$16.68
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	5	63	82	19	30%	\$15.44
Septic Tank Servicers and Sewer Pipe Cleaners	1	31	37	6	19%	\$24.10

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Sheet Metal Workers	5	178	175	(3)	(2%)	\$23.19
Skincare Specialists	3	67	93	26	39%	\$14.42
Slot Supervisors	Insf. Data	12	12	0	0%	\$22.00
Solar Photovoltaic Installers	Insf. Data	25	27	2	8%	\$24.15
Speech-Language Pathologists	6	163	196	33	20%	\$38.58
Stationary Engineers and Boiler Operators	3	74	76	2	3%	\$29.89
Stock Clerks and Order Fillers	245	5,050	5,828	778	15%	\$12.84
Stonemasons	Insf. Data	49	19	(30)	(61%)	\$18.43
Structural Iron and Steel Workers	3	92	72	(20)	(22%)	\$33.40
Structural Metal Fabricators and Fitters	5	112	95	(17)	(15%)	\$16.22
Surgical Technologists	9	213	279	66	31%	\$23.48
Surveyors	2	47	53	6	13%	\$34.73
Switchboard Operators, Including Answering Service	4	236	228	(8)	(3%)	\$13.54
Tailors, Dressmakers, and Custom Sewers	1	38	46	8	21%	\$14.57
Tapers	Insf. Data	45	24	(21)	(47%)	\$24.19
Taxi Drivers and Chauffeurs	11	178	265	87	49%	\$12.28
Team Assemblers	37	1,296	1,341	45	3%	\$12.90
Telecommunications Equipment Installers and Repairers, Except Line Installers	6	185	217	32	17%	\$29.25
Telecommunications Line Installers and Repairers	4	108	122	14	13%	\$26.51
Telemarketers	4	86	108	22	26%	\$12.05
Telephone Operators	Insf. Data	14	15	1	7%	\$20.09
Terrazzo Workers and Finishers	Insf. Data	12	13	1	8%	\$22.62
Tile and Marble Setters	3	126	115	(11)	(9%)	\$21.59
Tire Repairers and Changers	19	429	466	37	9%	\$12.98
Title Examiners, Abstractors, and Searchers	2	88	90	2	2%	\$27.39
Tool and Die Makers	Insf. Data	42	46	4	10%	\$23.68
Tour Guides and Escorts	1	22	24	2	9%	\$12.63
Transportation Inspectors	2	36	41	5	14%	\$23.59
Transportation Security Screeners	2	72	74	2	3%	\$19.36
Transportation Workers, All Other	3	54	61	7	13%	\$14.75

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Travel Agents	Insf. Data	33	26	(7)	(21%)	\$14.77
Tree Trimmers and Pruners	4	77	93	16	21%	\$14.85
Umpires, Referees, and Other Sports Officials	Insf. Data	17	19	2	12%	\$13.80
Upholsterers	10	115	170	55	48%	\$15.64
Urban and Regional Planners	2	27	30	3	11%	\$38.29
Veterinary Technologists and Technicians	4	96	120	24	25%	\$15.61
Water and Wastewater Treatment Plant and System Operators	4	78	86	8	10%	\$31.21
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	11	236	281	45	19%	\$13.57
Welders, Cutters, Solderers, and Brazers	13	486	426	(60)	(12%)	\$17.54
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	2	34	38	4	12%	\$15.38
Wind Turbine Service Technicians	Insf. Data	16	21	5	31%	\$25.22
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	6	186	217	31	17%	\$12.88
Word Processors and Typists	Insf. Data	148	118	(30)	(20%)	\$18.88

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Adhesive Bonding Machine Operators and Tenders	8	289	279	(10)	(3%)	\$16.68
Administrative Law Judges, Adjudicators, and Hearing Officers	2	109	111	2	2%	\$59.02
Adult Basic and Secondary Education and Literacy Teachers and Instructors	15	552	604	52	9%	\$39.62
Aerospace Engineering and Operations Technicians	Insf. Data	25	27	2	8%	\$32.45
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
Air Traffic Controllers	3	43	49	6	14%	\$51.39
Aircraft Cargo Handling Supervisors	3	52	61	9	17%	\$18.22
Aircraft Mechanics and Service Technicians	43	862	1,032	170	20%	\$28.49
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	5	168	186	18	11%	\$23.86
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
Appraisers and Assessors of Real Estate	9	314	369	55	18%	\$33.99
Architects, Except Landscape and Naval	17	284	376	92	32%	\$41.65
Architectural and Civil Drafters	12	680	667	(13)	(2%)	\$27.24
Architectural and Engineering Managers	34	1,114	1,173	59	5%	\$64.21
Assemblers and Fabricators, All Other	61	1,803	2,101	298	17%	\$13.37
Athletes and Sports Competitors	1	36	37	1	3%	\$40.93
Audio and Video Equipment Technicians	17	583	642	59	10%	\$18.05
Audiologists	4	44	68	24	55%	\$38.21
Automotive and Watercraft Service Attendants	76	1,253	1,594	341	27%	\$12.63
Automotive Body and Related Repairers	31	1,050	1,058	8	1%	\$21.96
Automotive Glass Installers and Repairers	4	125	112	(13)	(10%)	\$15.02
Automotive Service Technicians and Mechanics	326	7,882	9,010	1,128	14%	\$19.46
Avionics Technicians	3	56	72	16	29%	\$31.90
Bailiffs	1	14	23	9	64%	\$24.91

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Bakers	112	2,640	3,059	419	16%	\$12.47
Barbers	5	104	127	23	22%	\$13.40
Bicycle Repairers	5	54	79	25	46%	\$12.09
Boilermakers	5	85	89	4	5%	\$36.04
Brickmasons and Blockmasons	13	612	524	(88)	(14%)	\$26.56
Broadcast Technicians	1	55	54	(1)	(2%)	\$24.77
Brokerage Clerks	5	160	158	(2)	(1%)	\$24.00
Building Cleaning Workers, All Other	5	180	197	17	9%	\$12.41
Bus and Truck Mechanics and Diesel Engine Specialists	144	3,917	4,458	541	14%	\$21.40
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
Butchers and Meat Cutters	75	1,631	1,931	300	18%	\$14.92
Cabinetmakers and Bench Carpenters	18	1,528	1,179	(349)	(23%)	\$14.46
Camera Operators, Television, Video, and Motion Picture	Insf. Data	41	44	3	7%	\$33.13
Captains, Mates, and Pilots of Water Vessels	1	19	22	3	16%	\$31.64
Cardiovascular Technologists and Technicians	24	522	677	155	30%	\$25.28
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
Chefs and Head Cooks	47	1,645	1,832	187	11%	\$17.77
Chemical Equipment Operators and Tenders	5	131	133	2	2%	\$18.47
Chemical Plant and System Operators	8	204	179	(25)	(12%)	\$28.50
Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	4	130	132	2	2%	\$12.40
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
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

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	13	211	271	60	28%	\$24.91
Computer, Automated Teller, and Office Machine Repairers	31	535	710	175	33%	\$17.04
Computer-Controlled Machine Tool Operators, Metal and Plastic	45	890	1,065	175	20%	\$17.47
Concierges	12	200	258	58	29%	\$14.09
Construction and Building Inspectors	32	918	1,010	92	10%	\$37.83
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
Control and Valve Installers and Repairers, Except Mechanical Door	27	646	692	46	7%	\$31.19
Conveyor Operators and Tenders	24	481	569	88	18%	\$17.22
Cooks, All Other	6	117	149	32	27%	\$12.90
Cooks, Institution and Cafeteria	108	2,382	2,926	544	23%	\$14.02
Cooks, Private Household	1	39	42	3	8%	\$20.33
Cooling and Freezing Equipment Operators and Tenders	2	40	48	8	20%	\$15.06
Correctional Officers and Jailers	178	4,801	5,237	436	9%	\$33.49
Correspondence Clerks	3	58	71	13	22%	\$12.52
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
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	7	228	219	(9)	(4%)	\$17.83
Customer Service Representatives	833	16,189	19,613	3,424	21%	\$17.62
Cutting and Slicing Machine Setters, Operators, and Tenders	5	263	241	(22)	(8%)	\$17.15
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	22	1,759	1,713	(46)	(3%)	\$16.43
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

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Dentists, General	53	1,149	1,364	215	19%	\$55.86
Derrick Operators, Oil and Gas	Insf. Data	15	15	0	0%	\$23.28
Detectives and Criminal Investigators	30	1,127	1,173	46	4%	\$45.64
Diagnostic Medical Sonographers	30	468	684	216	46%	\$34.06
Dietetic Technicians	12	414	491	77	19%	\$14.55
Dietitians and Nutritionists	20	552	680	128	23%	\$32.95
Dispatchers, Except Police, Fire, and Ambulance	132	2,766	3,217	451	16%	\$19.06
Drafters, All Other	2	84	94	10	12%	\$24.89
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	4	215	191	(24)	(11%)	\$13.87
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
Electric Motor, Power Tool, and Related Repairers	3	82	92	10	12%	\$23.82
Electrical and Electronic Equipment Assemblers	27	1,285	1,392	107	8%	\$15.83
Electrical and Electronics Drafters	5	254	263	9	4%	\$28.95
Electrical and Electronics Engineering Technicians	25	967	1,003	36	4%	\$29.61
Electrical and Electronics Installers and Repairers, Transportation Equipment	2	62	70	8	13%	\$25.59
Electrical and Electronics Repairers, Commercial and Industrial Equipment	19	581	649	68	12%	\$28.21
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	3	75	87	12	16%	\$39.30
Electrical Power-Line Installers and Repairers	65	1,184	1,386	202	17%	\$43.38
Electricians	169	5,155	5,717	562	11%	\$28.91
Electromechanical Equipment Assemblers	5	214	233	19	9%	\$14.60
Electro-Mechanical Technicians	2	50	56	6	12%	\$27.71
Electronic Equipment Installers and Repairers, Motor Vehicles	2	178	180	2	1%	\$16.08
Electronic Home Entertainment Equipment Installers and Repairers	18	384	417	33	9%	\$21.69
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
Engine and Other Machine Assemblers	5	209	219	10	5%	\$20.25

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Entertainment Attendants and Related Workers, All Other	6	55	79	24	44%	\$12.97
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
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	8	315	316	1	0%	\$13.95
Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	5	191	210	19	10%	\$14.72
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	15	533	488	(45)	(8%)	\$12.83
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
Farm Equipment Mechanics and Service Technicians	3	116	105	(11)	(9%)	\$20.60
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
First-Line Supervisors of Construction Trades and Extraction Workers	128	4,868	5,470	602	12%	\$34.10
First-Line Supervisors of Correctional Officers	26	588	633	45	8%	\$43.87
First-Line Supervisors of Farming, Fishing, and Forestry Workers	8	413	348	(65)	(16%)	\$19.78
First-Line Supervisors of Food Preparation and Serving Workers	528	9,361	11,627	2,266	24%	\$15.07
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 Mechanics, Installers, and Repairers	158	3,831	4,311	480	13%	\$34.30
First-Line Supervisors of Non-Retail Sales Workers	60	1,982	2,306	324	16%	\$29.84
First-Line Supervisors of Personal Service Workers	72	1,397	1,804	407	29%	\$19.77
First-Line Supervisors of Police and Detectives	17	314	377	63	20%	\$59.61
First-Line Supervisors of Production and Operating Workers	104	5,164	5,314	150	3%	\$25.90
First-Line Supervisors of Protective Service Workers, All Other	36	745	913	168	23%	\$24.05
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/Vehicle Operators	129	2,423	2,964	541	22%	\$27.23
Fish and Game Wardens	Insf. Data	27	29	2	7%	\$26.94

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
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
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
Food Batchmakers	49	1,126	1,222	96	9%	\$13.49
Food Cooking Machine Operators and Tenders	9	225	251	26	12%	\$14.23
Food Processing Workers, All Other	13	269	322	53	20%	\$14.16
Food Service Managers	97	3,140	3,507	367	12%	\$24.23
Forging Machine Setters, Operators, and Tenders, Metal and Plastic	7	332	321	(11)	(3%)	\$16.80
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
Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	3	111	105	(6)	(5%)	\$15.07
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
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders,	1./	696	612	(72)	(110/)	¢14.26
Metal and Plastic	14	000	015	(73)	(1170)	φ14.00
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

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
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
Health Educators	21	454	532	78	17%	\$24.94
Health Technologists and Technicians, All Other	53	1,753	2,090	337	19%	\$20.70
Healthcare Practitioners and Technical Workers, All Other	41	1,006	1,119	113	11%	\$29.54
Healthcare Support Workers, All Other	39	1,125	1,280	155	14%	\$17.02
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
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	115	2,929	3,299	370	13%	\$24.11
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
HelpersBrickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	11	404	354	(50)	(12%)	\$17.87
HelpersCarpenters	11	262	303	41	16%	\$13.46
HelpersElectricians	19	467	570	103	22%	\$13.81
HelpersExtraction Workers	3	59	70	11	19%	\$16.72
HelpersInstallation, Maintenance, and Repair Workers	57	1,304	1,465	161	12%	\$14.79
HelpersPainters, Paperhangers, Plasterers, and Stucco Masons	3	132	127	(5)	(4%)	\$13.42
HelpersPipelayers, Plumbers, Pipefitters, and Steamfitters	20	718	797	79	11%	\$15.05
HelpersRoofers	5	130	161	31	24%	\$12.74
Highway Maintenance Workers	15	428	506	78	18%	\$23.29
Home Appliance Repairers	40	776	912	136	18%	\$21.84
Home Health Aides	437	4,029	7,240	3,211	80%	\$13.32
Hydrologists	2	40	44	4	10%	\$45.24
Industrial Engineering Technicians	8	335	337	2	1%	\$24.88
Industrial Engineers	36	862	950	88	10%	\$37.65
Industrial Machinery Mechanics	116	2,163	2,627	464	21%	\$26.08
Industrial Truck and Tractor Operators	398	9,849	11,357	1,508	15%	\$15.89
Inspectors, Testers, Sorters, Samplers, and Weighers	143	4,095	4,583	488	12%	\$17.44
Installation, Maintenance, and Repair Workers, All Other	49	1,659	1,856	197	12%	\$18.14
Instructional Coordinators	33	1,694	1,872	178	11%	\$36.28

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Insulation Workers, Floor, Ceiling, and Wall	23	311	462	151	49%	\$28.20
Insulation Workers, Mechanical	10	104	182	78	75%	\$27.02
Insurance Appraisers, Auto Damage	4	112	116	4	4%	\$25.60
Interior Designers	18	372	439	67	18%	\$25.20
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
Landscape Architects	7	163	191	28	17%	\$35.64
Landscaping and Groundskeeping Workers	576	14,111	16,053	1,942	14%	\$12.33
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	9	450	441	(9)	(2%)	\$17.23
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
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
Machinists	138	3,564	4,068	504	14%	\$17.34
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
Maintenance and Repair Workers, General	413	12,074	13,722	1,648	14%	\$18.77
Maintenance Workers, Machinery	25	1,023	1,136	113	11%	\$21.54
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
Mechanical Drafters	8	453	441	(12)	(3%)	\$25.77
Media and Communication Equipment Workers, All Other	1	114	104	(10)	(9%)	\$32.42

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Medical and Clinical Laboratory Technicians	67	1,013	1,362	349	34%	\$19.63
Medical and Clinical Laboratory Technologists	36	531	724	193	36%	\$33.37
Medical and Health Services Managers	126	2,385	2,979	594	25%	\$58.00
Medical Appliance Technicians	4	132	107	(25)	(19%)	\$23.42
Medical Assistants	331	7,415	9,118	1,703	23%	\$13.80
Medical Equipment Preparers	28	700	828	128	18%	\$20.03
Medical Equipment Repairers	27	295	457	162	55%	\$26.40
Medical Records and Health Information Technicians	85	1,612	1,977	365	23%	\$21.70
Medical Secretaries	256	5,911	7,631	1,720	29%	\$15.64
Medical Transcriptionists	10	223	276	53	24%	\$23.09
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 Workers and Plastic Workers, All Other	6	296	324	28	9%	\$13.27
Metal-Refining Furnace Operators and Tenders	2	53	63	10	19%	\$17.57
Meter Readers, Utilities	11	488	438	(50)	(10%)	\$22.30
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	8	423	399	(24)	(6%)	\$16.47
Millwrights	5	143	172	29	20%	\$21.80
Mine Cutting and Channeling Machine Operators	1	25	30	5	20%	\$22.68
Mixing and Blending Machine Setters, Operators, and Tenders	38	1,158	1,174	16	1%	\$15.14
Mobile Heavy Equipment Mechanics, Except Engines	45	1,157	1,262	105	9%	\$26.09
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
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and	10	1 /10	1 320	(00)	(7%)	¢14.56
Plastic	19	1,413	1,020	(99)	(770)	φ14.00
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 Mechanics and Service Technicians	6	130	156	26	20%	\$17.43
Motorboat Operators	Insf. Data	13	16	3	23%	\$23.69

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Motorcycle Mechanics	5	145	155	10	7%	\$22.82
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	10	366	371	5	1%	\$15.65
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
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
Outdoor Power Equipment and Other Small Engine Mechanics	6	173	196	23	13%	\$16.01
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
Paper Goods Machine Setters, Operators, and Tenders	8	736	708	(28)	(4%)	\$17.87
Paperhangers	1	56	49	(7)	(13%)	\$17.18
Parking Enforcement Workers	4	115	116	1	1%	\$19.86
Parts Salespersons	111	2,784	3,148	364	13%	\$17.86
Patternmakers, Metal and Plastic	2	80	76	(4)	(5%)	\$15.16
Paving, Surfacing, and Tamping Equipment Operators	17	692	728	36	5%	\$30.48

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
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
Pharmacy Aides	31	834	966	132	16%	\$14.71
Pharmacy Technicians	131	3,256	4,185	929	29%	\$17.97
Pile-Driver Operators	2	56	63	7	13%	\$27.30
Pipelayers	9	293	339	46	16%	\$26.56
Plant and System Operators, All Other	3	64	69	5	8%	\$25.38
Plasterers and Stucco Masons	20	974	992	18	2%	\$17.70
Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	5	267	231	(36)	(13%)	\$15.14
Plumbers, Pipefitters, and Steamfitters	90	3,440	3,881	441	13%	\$23.29
Podiatrists	2	52	57	5	10%	\$67.98
Police and Sheriff's Patrol Officers	253	5,832	6,428	596	10%	\$42.09
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
Pourers and Casters, Metal	2	132	115	(17)	(13%)	\$14.46
Power Distributors and Dispatchers	4	86	92	6	7%	\$42.07
Power Plant Operators	16	473	478	5	1%	\$31.90
Precision Instrument and Equipment Repairers, All Other	6	107	130	23	21%	\$25.62
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
Private Detectives and Investigators	9	104	158	54	52%	\$26.20
Probation Officers and Correctional Treatment Specialists	29	995	1,021	26	3%	\$38.62
Production Workers, All Other	72	1,663	1,923	260	16%	\$13.92
Property, Real Estate, and Community Association Managers	65	1,713	1,948	235	14%	\$29.71

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Protective Service Workers, All Other	202	2,457	2,692	235	10%	\$15.37
Psychiatric Aides	10	451	448	(3)	(1%)	\$13.46
Psychiatric Technicians	12	1,221	1,185	(36)	(3%)	\$27.61
Pump Operators, Except Wellhead Pumpers	1	17	23	6	35%	\$17.94
Radiation Therapists	9	201	242	41	20%	\$49.06
Radio, Cellular, and Tower Equipment Installers and Repairs	4	155	164	9	6%	\$22.95
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
Real Estate Brokers	14	612	667	55	9%	\$31.22
Real Estate Sales Agents	26	1,025	1,177	152	15%	\$25.99
Recreation Workers	127	3,957	4,701	744	19%	\$12.24
Recreational Vehicle Service Technicians	7	177	179	2	1%	\$19.21
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
Retail Salespersons	3,052	49,183	60,673	11,490	23%	\$12.46
Riggers	3	69	80	11	16%	\$26.56
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	9	382	385	3	1%	\$16.22
Roofers	47	1,123	1,331	208	19%	\$20.74
Rotary Drill Operators, Oil and Gas	1	22	23	1	5%	\$32.50
Roustabouts, Oil and Gas	4	115	126	11	10%	\$21.20
Sailors and Marine Oilers	1	16	19	3	19%	\$16.72
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
Security Guards	650	15,768	19,495	3,727	24%	\$12.10
Semiconductor Processors	3	160	123	(37)	(23%)	\$18.13

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and	17	298	356	58	19%	\$15.15
Tenders		200	000		10,0	\$10110
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
Sheet Metal Workers	35	1,168	1,223	55	5%	\$22.91
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
Signal and Track Switch Repairers	Insf. Data	16	18	2	13%	\$32.16
Skincare Specialists	20	422	579	157	37%	\$14.63
Slot Supervisors	6	207	220	13	6%	\$22.07
Solar Photovoltaic Installers	6	226	249	23	10%	\$23.09
Sound Engineering Technicians	1	55	57	2	4%	\$20.99
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
Structural Iron and Steel Workers	18	579	475	(104)	(18%)	\$32.71
Structural Metal Fabricators and Fitters	33	715	699	(16)	(2%)	\$16.28
Surgical Technologists	35	804	1,055	251	31%	\$23.45
Surveyors	11	368	393	25	7%	\$33.44
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
Telecommunications Equipment Installers and Repairers, Except Line Installers	63	2,146	2,459	313	15%	\$28.59
Telecommunications Line Installers and Repairers	68	1,519	1,788	269	18%	\$25.21
Telemarketers	36	820	996	176	21%	\$12.14
Telephone Operators	3	109	105	(4)	(4%)	\$20.50

Description	Annual	2015	2025	2015 - 2025	2015 - 2025	Avg. Hourly
	Openings	Jobs	Jobs	Change	% Change	Earnings
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
Tire Repairers and Changers	90	1,984	2,157	173	9%	\$12.99
Title Examiners, Abstractors, and Searchers	18	586	659	73	12%	\$27.56
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
Transit and Railroad Police	Insf. Data	10	12	2	20%	\$22.57
Transportation Attendants, Except Flight Attendants	2	53	65	12	23%	\$16.47
Transportation Inspectors	13	242	283	41	17%	\$23.85
Transportation Security Screeners	8	281	290	9	3%	\$20.11
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
Upholsterers	17	426	455	29	7%	\$15.61
Urban and Regional Planners	24	414	456	42	10%	\$38.04
Watch Repairers	2	23	34	11	48%	\$22.07
Water and Wastewater Treatment Plant and System Operators	49	1,017	1,127	110	11%	\$30.57
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	58	1,432	1,669	237	17%	\$13.45
Welders, Cutters, Solderers, and Brazers	98	3,159	3,149	(10)	(0%)	\$17.50
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	11	246	290	44	18%	\$15.46
Wind Turbine Service Technicians	4	100	126	26	26%	\$24.76
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	12	789	717	(72)	(9%)	\$12.95
Word Processors and Typists	4	1,260	1,032	(228)	(18%)	\$18.71





