

Palo Verde Community College District

Comprehensive Master Plan:

Educational Master Plan

Facilities Master Plan

Technology Master Plan



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Message from the Superintendent/President



The Comprehensive Master Plan (CMP) is the long term, ten-year planning document for our college district. This establishes the broad horizon for programs and direction for the district. Tied to the CMP, the district lays out its goals and initiatives for the college community within a three-year strategic planning horizon. It is intended to be a dynamic, living document in which we are constantly moving forward, revising the plan based on actual performance and matching to the needs of the community we serve. The master planning process ties together and gives direction to all related, long-term plans of the district: Strategic Plan, Facilities Master Plan, Enrollment Management, Information Technology, Finance and Budget, and

Human Resources. The governance structure and processes of the district encourage and support the ongoing, integrated method of planning and implementation, informed by assessment of outcomes achievement through robust program review, and budget allocation to support continuous improvement.

This is a vital process to the growth, adaptability, and sustainability of district programs in service to our community and students. It is a district-wide effort, informed by community needs, that demands active participation by every constituency to ensure success.

My sincerest appreciation and gratitude is extended to all who diligently participate in the planning and review process of our district. The active, peer-review, participatory governance structure of Palo Verde College is imperative to the integrity of our institution and in keeping our promise to the community.

Sincerely,

Donald G. Wallace, PhD
Superintendent/President

Executive Summary

During the academic year 2015-2016 the Cambridge West Partnership, LLC and the Hill Partnership Inc. were invited to assist the College in updating its combined Educational and Facilities Master Plans from a document completed in 2009. Cambridge West was also asked to develop a Technology Master Plan.

This Comprehensive Plan creates a framework for the College's future development of the instructional and student services programs. It estimates the amount and type of space that will be needed to accommodate future growth in academic programs of instruction and support services, and provides a framework for the evolution of technology at the College. The Educational Plan component is presented with the intent that it will serve as an educational programming blueprint for the College over the next ten years. The Technology Plan contemplates a shorter time horizon due to the rapid changes in information technology. The Facilities Master Plan portion will cast the projected space needed into a sequenced building and facility program that addresses the primary elements of site development/modification and facilities planning. The Facilities Plan component provides a blueprint out to the year 2030.

This 2016 Palo Verde Community College District Comprehensive Master Plan is the District's long-term plan. As a central component in the District's integrated planning process, this document serves many purposes but principally to:

1. Project the long-term development of programs and services;
2. Develop Institutional Strategic Goals;
3. Provide a common foundation for discussion about District programs and services;
4. Develop recommendations for site and facilities improvements;
5. Support accreditation and demonstrate compliance with accreditation standards; and
6. Inform the public of the District's intentions and garner support for the services provided in and to the communities served.

Activities

The process to develop the Comprehensive Master Plan included the following activities:

- Reference to and use of the College data files for student basic demographics and enrollment information.
- A review of the history and evolution of the College.
- An environmental assessment to consider the present and anticipated impacts both within and outside the College's service area.
- The development of a "vision for the future space needs" derived from qualitative and quantitative analyses.
- The development of growth and enrollment estimates extending to the year 2030.
- A review to assure that opportunities for access and overall success of underprepared and underrepresented groups within the community were considered in the planning process.

- An evaluation of current and projected facilities needed to support growth and innovation in instruction and support services.
- An evaluation of current and projected technology required to support the needs of the institution in future years.

The Educational Master Plan section begins with an external scan of the opportunities presented to the College from recent public policy and funding initiatives, characterizes the direction of the economy in the service area of Riverside and San Bernardino Counties, and concludes with a discussion and projection of the social-economic attributes of the residents and the immediate economy sub-region served by the College. Most employed adults work in public administration, retail trade, or services industries. The Great Recession hit the principal sites where the College has a presence, Blythe and Needles, hard. Slow population growth is projected for Blythe (.66% annual rate of increase) and the larger region of the Colorado Corridor that the Needles Center could potentially serve has only a slightly higher growth future (.72% annual rate of increase). The College has enjoyed a solid anchor of enrollments from individuals incarcerated in the two state prisons located just west of Blythe. Those institutions are projected to experience a stable population with continued enrollment potential. A second anchor group of enrollments comes from firefighting personnel throughout the state who are enrolled in in-service training classes through Instructional Service Agreements.

The internal scan portion of the Educational Master Plan traces enrollment and FTES trends to determine the growth the College has experienced after the disastrous experience from 2009 to 2012. This section also analyzes several different patterns of instructional delivery. The scan characterizes the students enrolled at the College and makes distinctions between the on-campus student community and the grouped enrollments of inmates and in-service firefighters. Setting aside the firefighting personnel and inmate student group, almost 50% of the students at the College fall into the traditional college-going age range of 18-24 years of age. The internal scan provides a profile of the support services provided to students through face-to-face and online self-service delivery modes. The narrative concludes with a sketch of the library, human, fiscal, technology, and space resources available to support the instructional program.

A series of key planning assumptions are outlined in the third chapter of the Educational Master Plan. These are based on a mix of trends in California and national community colleges and observations about the anticipated direction of the economy in Riverside and San Bernardino Counties. Roughly eight-six percent of all nonfarm job growth opportunities in the region will be concentrated in five industry sectors: (1) private educational services, health care, and social assistance; (2) professional and business services; (3) trade, transportation and utilities; (4) leisure and hospitality; and (5) construction.

As reflected in its strategic goals, the College is keenly interested in student achievement and completion, and sets a high priority on those indicators of its successful accomplishment of its mission.

The final segment of the Educational Master Plan reviews labor market data, documents what faculty members and staff envision for the future development of the instructional program and delivery of student support services, and outlines a series of recommendations for expansions to existing programs along with the introduction of possible new programs. However, the most common theme from the faculty and staff vision statements was to indicate the need for larger classrooms and more office space to accommodate services to students. The labor market discussion is supported by a detailed analysis found in the appendix material where projected occupational openings in the service area are matched with instructional programs offered by the community colleges in the region.

Among several suggestions for the College to consider is participating to a greater extent in some of the statewide initiatives. The College has not offered online or distance education courses. The California Online Education Initiative is an opportunity to secure some assistance to faculty and students to engage in that pedagogy. The state initiative for Adult Basic Education Planning and Block Grant funding has been an opportunity the College has seized upon to address critical community educational needs. The math faculty has successfully experimented with compressing basic skills course offerings, but there are other related opportunities for accelerated basic skills instructional strategies that College might want to consider. The College has an important dual enrollment program at the main campus in Blythe and is intent on introducing that idea at the Needles Center. Additional general suggestions for the College to consider include changing the academic calendar, implementing some community education (fee-based) offerings, and aligning career and technical education programs with industry-recognized certifications.

Several instructional programs were identified for potential expansion such as: Certified Nursing Assistant to include home health aide; education in early childhood and other disciplines to include a teacher assistant program; business administration focused on retail management/customer service/small business needs; computer office applications to promote a business information worker certification program; automotive technology to offer automotive service excellence exam preparation; welding to qualify as a testing site for the American Welding Society examination; agriculture crop science to introduce curriculum for the cultivation of marijuana for medical research at the Needles Center; and fire science to offer a career exploration curriculum.

A limited number of new career and technical education programs were identified as possible areas for the College to consider. These include culinary arts at the Needles Center, water/wastewater treatment at the prisons, pre-allied health program certification at the Needles Center, solar installer/technician training at the main campus, and a heating/ventilation/and air conditioning (residential) program at the main campus in Blythe.

The Facilities Master Plan (FMP) section provides a current perspective for future academic and support services space, buildings, and overall college/campus development at the principal location in Blythe as well as at the educational center in Needles. As a

companion to the EMP, the FMP supports the development of the institution through the year 2030. The recommendations developed in the FMP will depend upon, and may require, additional consideration in future planning, but the Plan is intended to serve as a framework for campus development.

The FMP provides a projection of future college attendance expressed as weekly student contact hours (WSCH). It also includes an analysis of the current conditions of buildings, instructional, and support spaces at the main campus and the educational center. Future development recommendations are outlined in two phases.

Phase One considers ways to reuse existing spaces with these goals in mind:

- increase the size of some classrooms,
- provide greater flexibility in the use of instructional spaces,
- create a skills laboratory area for the nursing program,
- provide additional space for student and administrative service office staff groups to alleviate overcrowding, provide property privacy, and accommodate additional storage needs, and
- provide a science laboratory and potential art instructional area at the Needles educational center.

Phase Two proposes the construction of a new building at the main campus with these goals in mind:

- provide new office spaces for district support units and personnel, and
- repurpose the areas those units are now using so that future growth of the instructional program can be accommodated.

The Technology Master Plan (TMP) section addresses three areas. The Plan

- identifies activities that could be done to enhance technology processes,
- provides suggestions for essential processes that will meet accreditation requirements, and
- identifies projects that the technology departments could accomplish with appropriate resources.

A technology governance structure is suggested in the TMP and the implementation of an integrated planning cycle to identify needs, request resources, and assess the effectiveness of technology resources is encouraged. Several key projects to meet the needs of students and staff are listed as a starting point for campus discussion. Two user support services for training and technology training for the staff were identified for the purpose of leveraging the available technology and systems at the College.

Overview of the College

The College is located in the agricultural Palo Verde Valley of southeastern California.

Palo Verde College opened as part of the Palo Verde Unified School District in 1947 to fewer than 20 students. At that time the District was using a former Army Air Corps training base, Morton Air Academy, located six miles from the center of Blythe. In 1950 the College enrollment had become 150 students and by the end of that decade the College moved to a Spanish-style building on East Hobsonway that had been a former high school. With almost 500 students the College relocated in 1967 to a new campus adjacent to the high school at the corner of Lovekin Blvd. and Chanslorway. The College District was created in 1973 with its own five-member Board of Trustees when it separated from the Palo Verde Unified School District as the curriculum expanded to include vocational-technical, continuing education, and developmental courses.

By 1999 the district expanded to include the eastern part of San Bernardino County and the City of Needles and added two additional trustees to represent the San Bernardino County territory. Instruction in Needles started at the high school campus but today the state-recognized Needles Educational Center that operates since June 2009 from the historic Claypool Building.

In 2001 the main campus moved to its new location, a 200-acre campus on the mesa overlooking the City of Blythe. That same year the College began a partnership with the Chuckawalla and Ironwood State Prisons to offer correspondence courses to the incarcerated students. The correspondence program has grown statewide to reach students at twenty-five other California Department of Corrections facilities. That growth is due to inmates being transferred from prisons in Blythe to other locations. In fall 2007 the College opened the Technology Building, in 2008 the Physical Education Complex, and in 2012 the Fine and Performing Arts complex was opened on the main campus.

The College is in the process of recovering from a major financial crisis that came to light in mid-2011. As a result, the College reduced staffing through voluntary separations, re-organized functions and responsibilities, cut expenses, and instituted more effective and transparent financial management practices.

Vision, Mission, Values, Philosophy of Education

Vision

Palo Verde College will be known for excellence—educationally, socially, economically and culturally.

Mission

Palo Verde College provides opportunities for personal and professional growth to a diverse community of learners in an academic environment committed to student success

and equity by supporting student achievement of basic skills, certificate, degree, university, and career goals.

Values

Excellence

Palo Verde College is committed to excellence. The College expects quality instruction and services, and applauds the achievement of its students, faculty and staff.

Learning

Palo Verde College facilitates lifelong learning and encourages scholastic achievement. The College believes that knowledge, understanding, and their application are keys to a better future.

Integrity and Ethics

Palo Verde College maintains the highest standards of ethics and integrity. The College consistently demands respect, honesty and fairness in its educational programs, professional interactions and community relations.

Diversity

Palo Verde College celebrates diversity in its students, in its faculty and staff, and in its community. Diversity enriches us all and strengthens our community.

Creativity

Palo Verde College supports and encourages creativity and innovation.

Civic Responsibility

Palo Verde College supports the continuous development of civic responsibility.

Philosophy of Education

The awarding of an Associate degree is intended to represent more than an accumulation of units. It is to symbolize a successful attempt on the part of the college to lead students through patterns of learning experiences designed to develop certain capabilities and insights. Among these are the ability to think and to communicate clearly and effectively both orally and in writing; to use mathematics, to understand the modes of inquiry of the major disciplines; to be aware of other cultures and times; to achieve insights gained through experience in thinking about ethical problems, and to develop the capacity for self-understanding.

Strategic Goals of the College

The College has crafted seven general strategic goals to guide their efforts over the next several years. These are intentionally broad enough to cover the ten-year term of this Comprehensive Master Plan. The next step in the District's integrated planning process is to build specific objectives and action steps to achieve these institutional strategic goals. These action steps commonly include timelines for task completion and the identification of those responsible for completing or ensuring the completion of the action steps. An integrated planning manual has been developed to describe the ongoing and systematic cycle of evaluation, integrated planning, resource allocation, implementation, and re-evaluation including methods for assessing progress on these action steps.

Goal 1: Prepare students for success through the development and support of exemplary programs and services.

Goal 2: Provide opportunities for increased diversity and equity for all across campus.

Goal 3: Improve alignment between instructional programs and the labor market.

Goal 4: Commit to continuous quality improvement through the use of quantitative and qualitative data in an on-going and systematic cycle of evaluation, integrated planning, and reevaluation of the college mission, programs, and services.

Goal 5: Maximize technology utilization across the institution.

Goal 6: Maximize existing resources and improve processes to maintain necessary programs and services.

Goal 7: Encourage and support participation in professional development to strengthen programs and services, and encourage innovative instruction.

Educational Master Plan Section

I. Educational Master Plan Introduction

The Educational Master Plan (EMP) has been developed as a resource to the College. It pursues two overarching questions:

1. *What might be the curriculum options to match labor market needs, transfer opportunities, and community interests?*
2. *How much additional instructional and student services space, if any, will the college need into the future?*

Deliverables of the Plan

The EMP will deliver the following:

- Characterize the nature of the public policy and funding opportunities available to the College.
- Sketch highlights of the service area economy and demographics of the residents.
- Review the characteristics of the students attending the College.
- Describe the ways in which the instructional program is delivered.
- Identify student support services, budget, technology, human resources, and space available to support the instructional program.
- List planning assumptions and College long-term goals.
- Identify occupations with projected openings into the future.
- Describe faculty visions for future curriculum and student services visions for anticipated future services.
- Identify general opportunities for instructional program development.
- Evaluate the mix of programs vs. labor market and transfer opportunities.

Framework for the Plan

The planning process principally relied on: (1) an analysis of the external and internal environment of the College including the demographic profile/characteristics; (2) the current and historical performance of the College relative to the areas of academic and support services; (3) the wisdom of those professional educators and administrators who are responsible for delivering the program of instruction and support services; and, (4) input from the consulting teams of Cambridge West Partnership, LLC and Hill Partnership Inc..

Underpinnings

The process for generating the EMP relied heavily on the analysis of the existing program of instruction, the current level of space demand and the existing degree of space utilization. It offers a discipline-specific set of recommendations and a broader assessment of the instructional mix of programs.

The 2014 fall semester was used as a "snapshot" in time from which a planning baseline was constructed. Although the College has experienced a downturn in enrollments from the high point of fall 2009, the 2014 fall term was selected as the benchmark because it

was the last complete term of data available to reflect the scope and breadth of the program of instruction and support services.

Analysis was also conducted relative to the demographic and income capacity of the "effective service area" of the College. This was defined as a geographic area with a sufficient and appropriate population base from which students of the future could be drawn. Additionally, a detailed look at the College was provided via an analysis of its external and internal conditions, its past characteristics and trends over a five-year period of fall terms from 2010 to 2014, its current productivity and efficiency, and its future needs for space.

At the present time the College offers a comprehensive curriculum at the 200-acre main campus site in Blythe (MCM) and an array of offerings at the smaller 1.3-acre Needles Center (NDL) site. Half of the buildings at the MCM site were constructed in 2000 for the campus opening. The others were erected between 2005 and 2012. The primary building at the NDL site, the Claypool Building, was constructed in the early 1930's. It was acquired by the College from the Claypool family in the early 2000's. A 2005 bond approved by the citizens of Needles and the surrounding area provided for the remodeling of the historic Art Deco building. State funds were provided for the furniture and equipment needed in the building.

II. Environmental Scan

A. Scan of Conditions External to Palo Verde College

The College in Context to its Environment

The Palo Verde Community College District consists of two campus locations. The main College campus is located on the west side of Blythe. A second site is located in the downtown area of Needles. The District is situated in the eastern portion of both Riverside and San Bernardino Counties next to the Arizona border. Distances from either campus location to communities in California, Arizona, and Nevada are found in Appendix A. The College offers distance education instruction and two-way interactive televised instruction between the two campus locations. The College also provides a range of correspondence courses at a variety of correctional institutions located throughout California. The official District boundaries cover some 6,500 square miles.

The southern portion of the District is located in the eastern economic development region of Riverside County. That planning region covers two-thirds of the County and is roughly divided between the Coachella and Palo Verde Valleys. The two-lane State Highways 95/78 run north and south along the Colorado River. Interstate 10 traverses the region to link Southern California with Arizona and the rest of the southwest. The Palo Verde Valley is a desired location for companies seeking access to the major markets in Phoenix and Los Angeles. But, the distance from the Palo Verde Valley to Los Angeles and the port areas limits traditional industries found in the Los Angeles basin and the industrial development of the region. The region does attract some tourism and does have

a growing number of businesses building “clean air” products.¹ The main District campus at Blythe is located in this southern portion of the District.

The northern portion of the District is located in the high desert in the eastern economic development region of San Bernardino County. Communities in this area lie along Interstate 40, paralleling or overlaying the historic Route 66. The Bureau of Land Management controls large portions of this area within the Mojave or Sonoran Desert. There are very few developable lands in this portion of the Palo Verde Community College District. The City of Needles is the largest community in the area. The town has its roots in railroading and remains the site of a major rail yard for the Burlington Northern Santa Fe (BNSF) and the Amtrak rail line. Economic Development projects that address highway improvements from the City to the Nevada State Line and within the City between Interstate 40 and the northern City limits will have major impacts on the area economy and substantially improve the safety of motorists traveling in the area. State Highway 95 splits north of Needles, with one route headed to Bullhead City, AZ via a crossing over the Colorado River and the other on to Henderson, Nevada, just south of Las Vegas. The Educational Center in Needles is located in this northern portion of the District.

Blythe and Needles are themselves roughly 96 miles apart over State Highway 95. That distance commonly takes one hour and 40 minutes to traverse.

Economy and Employment

The California economy is expected to continue its expansion and growth. State revenue is greater than projections in 2014 or 2015. The Legislative Analyst’s Office estimated that the State would likely receive another \$3.6 billion more revenue in 2015-16 than the Governor had predicted.² For K-14 public education the adverse economic circumstances of the Great Recession seem to have come to a conclusion.

The State’s economic upturn has been slow to reach Riverside and San Bernardino Counties, but between 2012 and 2022 the California Employment Development Department (EDD) projects a 19% increase in jobs in these counties. Twelve of the thirteen industrial sectors will contribute to that growth. The greatest growth is concentrated in six industrial sectors: (1) food preparation and serving related; (2) office and administrative support; (3) sales and retail; (4) transportation and material moving; (5) construction and extraction; and, (6) personal care and services.

Although the State economy appears to be on the mend and unemployment levels continue to diminish, a recent report from the Public Policy Institute of California (PPIC) observed that if recent trends in higher education and the economy were to continue, by 2025 the State is likely to face a greater shortage of workers who have some college education but less than a bachelor’s degree. Their projections, and those of the Centers of

¹ Riverside County Economic Development Agency. *Comprehensive Economic Development Strategy: 2014-15 Annual Update*.

² Jim Miller. “Legislative Analyst Predicts California Revenue Will Exceed Revised Budget Estimate by \$3 Billion,” *Sacramento Bee*. May 18, 2015

Excellence, are that the requisite number of workers with some college education may be as high as 1.4 million to replace workers who will retire. The expected growth of the state economy is projected to create one million new middle-skill jobs by 2025. Together, these needs are even larger than the projected one-million-worker shortage of college graduates with a bachelor’s degree.³ The analysis affirms that training beyond high school has become increasingly valuable in the labor market.

The College service area, in the eastern portions of Riverside and Bernardino counties, was impacted by a variety of factors coming from the national, regional, and local levels. The two primary cities in the District, Blythe and Needles, reflect the national demographic trends toward an older and a more diverse population. Evidence of the slow process towards economic recovery is also apparent through gradual increases in employment, retail sales, building permits, and home prices. Work destinations and commute times correlate with regional development patterns and the geographical location of local jurisdictions, particularly in relation to the regional transportation system.⁴

As part of the Palo Verde Adult Education Regional Consortium 2014-15 planning effort the BW Research Partnership conducted a survey of 150 businesses. As illustrated in the table below, most were small businesses.

EMP Table 1: Sizes of Business Surveyed, Eastern San Bernardino and Riverside Counties (2015)

Employer Size	# Employees	%
Small	1 to 10	72%
Medium	11 to 24	13%
Large	25 +	13%
No Report		2%

Source: Palo Verde Adult Education Regional Consortium. *Regional Comprehensive Plan*. March 2015

Twenty-four percent of the business reported they were more likely to identify with food and accommodation services, 11% indicated they were in the retail business, 10% were financial and insurance firms, and 7% were in the agriculture business. Fewer businesses identified with healthcare services, manufacturing, business support services or other industries.

Blythe

The City of Blythe is within the Riverside County Palo Verde Valley Area Plan. The Plan envisions the eastern portion of the Valley to be preserved as agriculture lands. Large lot

³ Sarah Bohn, “California’s Need for Skilled Workers,” Public Policy Institute of California, September 2014 and “California’s Future-Higher Education.” February 2015. Centers of Excellence. *Focus on 2025: A 10-year Middle-Skill Occupational Outlook for California*. Retrieved 4/17/16 from <http://doingwhatmatters.cccco.edu>

⁴ Southern California Association of Governments (SCAG). *Profile of the City of Blythe and Profile of the City of Needles*. May 2015

residential development has been designated in only a few places. A considerable amount of land in the Plan Area is designed as light industrial, but limited development of the recreational resorts along the Colorado River has been provided in response to the expanding tourism and recreational draw. Rural community land use designations are proposed near I-10 and along major north to south roads. The western half of the planning area is proposed to remain sparsely populated, rugged desert and mountain, which are characteristic of the Palo Verde Mesa. A business park and commercial retail land have been identified around the Blythe Airport. The table below provides a summary of the projected development capacity of the Plan *if all uses are built as proposed*.⁵



⁵ Riverside County. *Palo Verde Valley Area Plan GPA no 960 Volume 2*. February 2, 2014

EMP Table 2: Statistical Summary of Land Uses, Palo Verde Valley Area Plan of 2014

County Land Use Category	Area	Statistical Calculations		
	Acreage	Dwelling Units	Population	Employment
Agriculture Foundation Subtotal	113,352	5,668	16,153	5,668
Rural Foundation Subtotal	4,567	466	4,328	0
Rural Community Foundation Subtotal	2,195	1,449	4,129	0
Open Space Foundation Subtotal	155,439	3,855	10,986	20
Community Development Foundation Subtotal	5,848	3,478	9,912	21,366
<i>Foundational Components Total</i>	<i>281,401</i>	<i>14,916</i>	<i>45,508</i>	<i>27,054</i>
Non-County Land Use Category				
Cities	17,429			
Indian Lands	1,058			
Freeways	141			
<i>Non-County Components Total</i>	<i>18,628</i>			
<i>All Lands Total</i>	<i>300,029</i>			

Source: Riverside County. *Palo Verde Valley Area Plan 2014*

As an early California municipality, Blythe was named for its initial developer of the late 19th century, Thomas H. Blythe of San Francisco. He invested in land and commissioned a canal to the Colorado River in order to irrigate portions of the Palo Verde Valley. Through the investments, and work of others that is now known as the Palo Verde Irrigation District, the Valley has become a prime agriculture zone in California for alfalfa, wheat, miscellaneous field crops, and melons. The Valley soil is fertile due to past floods and river deposits from the Colorado River. However, agriculture accounts for a limited number of workers. Since 2004 the Metropolitan Water District (MWD) and the Palo Verde Irrigation District have created a legal framework in which farmers in the Palo Verde Valley can agree not to plant portions of the farmlands in exchange for a cash payment by the MWD. As the California draught worsens those agreements have become ever more important, but have translated into fewer farm jobs, fewer families, and fewer potential college students.

The Blythe Airport is a public facility, but is primarily used as a base for crop spraying operations, flight rental and instruction. Modest commercial development is projected for that area of the community.

Along the I-10 corridor more than 10 million visitors pass through the City of Blythe. Some of these visitors are sport and water recreation enthusiasts from Arizona and California. In 2007 the City adopted a Colorado River Corridor Plan to develop the riverfront within the City boundaries and its sphere-of-influence (12 miles and 6,000 acres) by extending adjacent residential and commercial areas eastward toward the Colorado River. Among other things, the Plan seeks to develop additional recreational

and resort land to bolster the local economy.⁶ It is an asset that attracts seasonal residents (“snow birds”) who contribute to the demand for retail products and services.

Two other components of Blythe’s economy are the state prisons, Ironwood and Chuckawalla Valley, located 15 miles west of Blythe. Chuckawalla Valley State Prison opened in 1988 as a level II facility for 1,700 convicted felons classified as medium to low-medium custody risk. In 2015 it had a staff of 750 and shared 1,720 acres of land with the second prison, Ironwood State Prison. Ironwood was established in 1994 as a level III medium to minimum-security facility for 2,200 convicted felons. In 2015 the Ironwood facility employed roughly 1,200 personnel. Many of those incarcerated at Ironwood were placed as a result of the original three-strikes law. These prisons are a major source of employment in the Palo Verde Valley and also a significant source of student enrollment through correspondence courses offered by the College.

During 2015 within the six census tracts that constitute the City, almost 5,600 people age 16 or older were employed. The majority was employed in services, public administration, or retail trade.

EMP Table 3: Blythe Residents, Distribution of Workforce by Industry, 2015

North American Industry Classification System (NAICS) Category	%*
Agriculture/Mining	9.4%
Construction	2.9%
Manufacturing	0.9%
Wholesale Trade	3.0%
Retail Trade	12.3%
Transportation/Utilities	5.2%
Information	0.2%
Finance/Insurance/Real Estate	3.5%
Services	40.2%
Public Administration	22.4%
*excludes incarcerated individuals	

Source: Environmental Systems Research Institute. Market Profile; analysis by Cambridge West Partnership, LLC

⁶ City of Blythe. *Colorado River Corridor Plan*. March 2007

Employment by occupational family is documented in the following table.

EMP Table 4: Blythe Residents, Distribution of Workforce by Occupations, 2015

Occupational Family	%	Category %
White Collar		41.1%
Management/Business/Financial	11.3%	
Professional	10.2%	
Sales	8.8%	
Administrative Support	10.8%	
Services		34.4%
Blue Collar		24.5%
Farming/Forestry/Fishing	7.6%	
Construction/Extraction	2.4%	
Installation/Maintenance/Repair	4.7%	
Production	3.4%	
Transportation/Material Moving	6.4%	
Total		100.0%

Source: Environmental Systems Research Institute. Market Profile; analysis by Cambridge West Partnership, LLC

A comparison of the number of people, by occupational family, employed in Blythe in 2001 vs. 2015 is found in Appendix G. The magnitude of change in some of the occupational families indicates the decline in farming employment and the rise in hospitality, sales, office support, and health occupations employment.

Needles

Like Blythe, Needles is a somewhat isolated community located on Interstate 40. The history of Needles is intertwined with railroading as the Santa Fe Railroad established an inspection station there in 1883. The city has also been influenced by its proximity to the Colorado River, the Mojave Indian Tribe and its lands, and the Old Trails Highway (aka Route 66). It is thought that the Fort Mojave Indian Tribe has continuously resided in the area for over 8,000 years. In the past, visitors traveled by railroad, Route 66, then I-40 to reach Needles. Other visitors traversed Highway 95 (the Trans-National Highway from Mexico to Canada) north or south to arrive at Needles. Bureau of Reclamation construction of dams along the Colorado River in the 1950s stopped the annual spring flooding problems. Dredging drained the valley lands, which were then suitable for agriculture, housing, and river recreation. Some 4.3 million cars pass along I-40 annually and contribute to the region's economy. Additionally, seasonal residents ("snow birds") add to the demand for retail products and services. Most land around Needles, but within California, is public land designated for conservation and managed by the federal Bureau of Land Management.

Today, the Burlington Northern Santa Fe (BNSF) Railroad continues to operate a massive rail yard hub in Needles to support numerous cargo trains moving cargo to Los

Angeles or from California to the middle or eastern states. Amtrak operates two trains a day from Needles to Los Angeles or Needles to Chicago. The BNSF railroad has been the major employer in Needles for decades, followed by the Needles Unified School district.

The City of Needles Economic Development plan, adopted for 2014-19, discusses several categories of economic activity: (1) local economic development initiatives; (2) external communications; (3) specific commercial development projects; (4) housing strategies and policies; (5) retail opportunities; and (6) exploitation of freeway corridors. Prominent among the recommendations is one for closer working relations with the Inland Empire Economic Partnership to promote more effective marketing of land development opportunities, increased tourism and movie filming activities. The City of Needles has hired the Development Management Group to provide economic development services.⁷

The Needles trade area covers a 72-mile strip along the Colorado River with a population in excess of 133,000. Cities at the extreme ends of the corridor included Laughlin, NV (25 minutes), Bullhead City, AZ (20 minutes), and Lake Havasu City, AZ (40 minutes). Within this trade area the larger employers are the casinos in Laughlin, the BNSF Railroad, hospitals in Bullhead City, Fort Mohave and the City of Needles, other municipalities within the area, school districts in those communities, Pacific Gas & Electric, Trans Western, Southern California Edison, and Wal-Mart. Most adults in this extended trade zone are employed in services or retail trade. Arts and entertainment accounts for 55% of those employed in the Laughlin-Bullhead City area. The 2011 average wage for this cluster was \$32,775. Healthcare services employment represents 8% of the workforce but the 2011 average cluster wage in that area was \$50,856.

In the Lake Havasu area the major employers include the Samaritan Regional Hospital, Mohave Community College, Sterlite Corporation and Wal-Mart. The 2011 average income in the arts and entertainment industry was \$26,989; in healthcare services the average income was \$49,184, comparable to the income in manufacturing and above the \$41,000 average found in the information technology and motorsports industry cluster occupation.⁸

At the north, Laughlin enjoys some 4 million annual visitors while at the southern end; Lake Havasu attracts 1.5 million visitors annually.⁹ For graduates of the College this trade area represents opportunities for employment.

During 2015, within the City of Needles most people age 16 or older were employed in services or transportation/utilities industries. Within the Colorado River Corridor area most were employed in services or retail trade.

⁷ Development Management Group, Inc. (DMG) *City of Needles Economic Development Strategic Plan 2014-2019*. Adopted April 22, 2014 and DMG. *Staff Report of Activities*. July 14, 2015.

⁸ ESI Corporation. *Mohave County Target Industry Analysis*. July 2011.

⁹ City of Needles. *Economic Development Strategic Plan*. 2014

EMP Table 5: Needles vs. Colorado River Corridor, Distribution of Workforce by Industry, 2015

North American Industry Classification System (NAICS) Category	Needles*	Corridor**
	%	%
Agriculture/Mining	0.8%	0.7%
Construction	8.9%	7.2%
Manufacturing	3.6%	4.6%
Wholesale Trade	1.2%	1.5%
Retail Trade	9.6%	14.7%
Transportation/Utilities	15.3%	4.8%
Information	2.0%	1.3%
Finance/Insurance/Real Estate	5.5%	5.0%
Services	48.7%	54.3%
Public Administration	4.4%	6.0%
*Employed population = 1,618		
**Employed population = 45,828		

Source: Environmental Systems Research Institute. Market Profile; analysis by Cambridge West Partnership, LLC



Employment by occupational family is documented in the following table that shows more adults employed in white-collar occupations. However, a larger portion of workers living in the Needles area are engaged in blue collar occupations with 20% concentrated in transportation/material moving occupations.

EMP Table 6: Needles vs. Colorado River Corridor, Distribution of Workforce by Occupations, 2015

Occupational Family	City of Needles*		Colorado River Corridor**	
	%	Category %	%	Category %
White Collar		44.4%		52.3%
Management/Business/Financial	6.5%		10.2%	
Professional	10.2%		14.1%	
Sales	10.7%		13.5%	
Administrative Support	17.0%		14.5%	
Services		23.5%		28.9%
Blue Collar		32.1%		18.8%
Farming/Forestry/Fishing	0.9%		0.2%	
Construction/Extraction	6.8%		5.5%	
Installation/Maintenance/Repair	1.3%		4.0%	
Production	3.1%		3.6%	
Transportation/Material Moving	20.0%		5.5%	
*Employed population = 1,618				
**Employed population = 45,828				

Source: Environmental Systems Research Institute. Market Profile; analysis by Cambridge West Partnership, LLC

Some of the employers in the two principal cities (Blythe and Needles) are listed in the Appendix B of this Plan.

Implications for the College

1. Future job opportunities, economic growth in manufacturing and logistics, and a much improved real estate market with affordable housing characterize the future of the *western* portions of both Riverside and San Bernardino Counties. But the *eastern* portions of both counties are projected to experience much slower growth and economic recovery. *The College can contribute to the economy of the counties by preparing younger students to transfer to four-year institutions and by equipping those who want to remain in the District service area with the job skills in demand by local employers.*
2. Reasonable employment opportunities in the two adjacent state prisons and the state Department of Corrections and Rehabilitation (public administration) will likely continue into the future as will opportunities for educational services to the inmates. However, state legislation, initiative measures that passed, and court orders are aimed at reducing the inmate population in the state prisons.

3. Services and retail trade industries of the economy will likely dominate the area around Blythe while services and transportation/utilities industries will likely dominate the area around Needles for the near future. *Although entry level preparation for service and retail trade industry jobs commonly do not require education beyond high school, there may be opportunities for the College to prepare individuals who seek advancement or wish to establish their own businesses in these industries.*

Higher Education Policy

Several key policy decisions will influence the California Community College system in the coming years. Although these public policies provide opportunities for the colleges, in some cases they may impose constraints.

The Completion Agenda

In July 2009, President Obama articulated that the American Graduation Initiative (AGI) has a goal of increasing the percentage of U.S. residents who earn high-quality degrees and credentials from the present rate of 39 percent to a rate of 60 percent by the year 2025. The goal is to make the U.S. competitive in the global marketplace. In the private sector employers have been increasingly screening applicants for employment by requiring college degrees for positions that previously did not require a degree.¹⁰

After President Obama pushed to increase college graduation rates across the nation, Complete College America, a non-profit organization, was formed to advance this mission. It has enlisted support from leaders in 34 states to ensure that a greater number of students acquire degrees.

The President's challenge to the nation has not been ignored in California. In response to the national graduation goal, the Community College League of California (CCLC) launched an "alternative futures" project, 2020 Vision for Student Success, to identify policy and practice changes that could be implemented to increase student achievement. To contribute its part toward achieving the national graduation goal, California needs to produce a total of 1,065,000 degrees or certificates per year to 2025. That translates to producing an *additional* 23,000 degrees and certificates per year, a 5.2% annual increase.¹¹ The California Public Policy Institute has repeatedly informed state policy makers that the State faces a skills gap.¹²

In August, 2014, the Board of Governors for the California community college system joined in the completion effort by announcing a goal to increase the numbers of students earning certificates, degrees, or transferring to four-year institutions by nearly a quarter of a million over the next ten years. For academic year 2013-14 the system awarded 190,314

¹⁰ Doug Lederman. "Credential Creep Confirmed" Inside Higher Education. September 9, 2014 and Karin Fischer. "A College Degree Sorts Job Applicants, but Employers Wish It Meant More," Chronicle of Higher Education. March 8, 2013 p. 26-29

¹¹ 2020 Vision: A Report of the Commission on the Future, (Sacramento, CA: Community College League of California, 2010)

¹² Public Policy Institute of California. *California's Future: Higher Education*. January 2016 and *Higher Education in California*. April 2016.

certificates and degrees, a 40 percent increase from 2009-10 and an all-time high for the system. The Gates, Ford, Lumina, and Kellogg Foundations, as well as the Carnegie Corporation of New York, fund work and to promote more college graduates. Collectively, there are more than two-dozen major entities that have sponsored initiatives to promote college completion.¹³

Federal Policy and Funding Initiatives

The Congress passed the Higher Education Opportunities Act in 2008. Subsequently, a series of new federal regulations have been issued to improve program integrity where Title IV financial aid funds are involved. Regional accrediting bodies are now expected to provide *closer* scrutiny of member institutions on a range of new topics. The Higher Education Act has been due for renewal and no one can predict its future direction.

The Obama administration and the U.S. Department of Education have announced a new emphasis for their involvement with career and technical education through a transformation of the Carl D. Perkins Career and Technical Education Act of 2006 as it comes due for renewal. Although the Act has not yet been renewed, the desired new directions will promote greater alignment between CTE programs and labor market needs as well as collaboration with K-12 and employers. Differences in the current provisions of the Perkins Act and the proposed changes were announced as long ago as April 2012.¹⁴

In July 2014 the Congress enacted the Workforce Innovation and Opportunity Act (WIOA) by a wide bipartisan majority as the first legislative reform in the past 15 years of the public workforce system. This legislation took effect on July 1, 2015 with regulatory rules written by the Departments of Labor (DOL), Education (DOE), and Health and Human Services (HHS). In general, the legislation eliminates 15 existing federal training programs and focuses on streamlining programs, reporting, and administration. WIOA keeps the basic structure of the prior legislation, with components covering occupational training, adult basic education, literacy and English language acquisition, vocational rehabilitation, and the national system of public employment offices and services. Key features and opportunities of the WIOA legislation include requirements for more unified planning between state and local authorities to address regional labor markets, a common set of performance measures, and promotion of best practices including contextualized adult basic education, ESL, and attainment of industry-recognized certificates.

The White House convened a series of higher education summits in order to promote change in higher education policy and practice. Attention was given to greater access, particularly for low-income students, the completion agenda, college outcome performance measures, constraints to the ever-rising costs of high education, and other topics of interest to the federal government. To encourage more participation in

¹³ Alene Russell. "A Guide to Major U.S. College Completion Initiatives," American Association of State Colleges and Universities, October 2011.

¹⁴ U.S. Department of Education, Office of Vocational and Adult Education. *Investing in America's Future: A Blueprint for Transforming Career and Technical Education*. April 2012.

postsecondary education the President used his 2015 state of the union address to offer a proposal, along the lines of the current policy in Tennessee, that the federal government help each state to make attendance at a community college free of tuition. By mid-spring 2016 there had been launched 27 new free community college programs.¹⁵

While it has been announced that some new federal resources will be allocated for use by community colleges, the Congress is currently also struggling to restrain spending and to reduce debt levels. The long-term impact remains to be seen, but federal aid now has a lifetime limit and is also limited to a maximum number of credit hours represented by 150% of the credits required for the program of study the student is pursuing. For a community college associate degree 150% would equate to 90-semester credit hours. Veterans on the G.I. Education Bill may be more limited in the credit hours funded by that program. In the FY2016 budget the President proposed that the maximum award under the Pell Grant program would increase and new rules would require students to make progress in their programs by passing an increasing percentage of their total course load. In a December 2015 budget deal the Congress unexpectedly agreed to increase the Pell grant maximums and provide additional funds to college access programs for needy students (TRIO and GEAR UP). President Obama has signed an executive order to align the monthly repayment rate of federal loans to the level of future wages earned by the student. That may ease the burden of debt for students and make the act of borrowing for a college education more feasible for prospective students. The President has also declared a policy to not enforce deportation on children of illegal immigrants meeting certain conditions and to provide work permits for those children.

Regional Accreditation Initiatives

In part, stimulated by prior federal governmental actions, all regional accrediting bodies are insisting that greater attention be given to student *learning* outcomes.

These new areas are in addition to the traditional goals of accreditation that are:

1. Assuring the public that the education provided by the institution meets acceptable levels of quality
2. Promoting continuous institutional improvement
3. Maintaining the quality of higher education institutions in the region

Implementation of the new ACCJC 2014 accreditation standards has introduced a number of changes, including the requirement to create a quality focus essay to guide future improvement efforts.¹⁶ The changes also echoed some of the national discussions about educational quality and accreditation.

California Community College Initiatives for Student Success

The following State initiatives are intended to increase student success rates:

¹⁵ White House Press Release. *White House Launches \$100 Million Competition to Expand Tuition-Free Community College Programs that Connect Americans to In-Demand Jobs*. April 25, 2016.

¹⁶ Accrediting Commission for Community and Junior Colleges. *Preparing for A Comprehensive Visit*. Workshop materials presented on October 15, 2014.

- The Board of Governors' basic skills initiative seeks to enable more students to overcome their academic deficiencies.
- Additional legislation, SB1440 Student Transfer Achievement Reform or STAR Act in 2010, simplified the process of transferring from a community college to a school in the California State University (CSU) system. This program provides a pathway for students to follow so that they can be admitted to a CSU with junior status. It has been complemented by SB440 in 2013, which further incentivizes transfer students to complete an associate degree.¹⁷

Perhaps the most potentially far-reaching set of recommendations for change in policy and practice were included in the report from the California Community College Chancellor's Office Student Success Task Force. The group proposed eight areas of focus with 22 recommendations. The Legislature passed the Student Success Act (SB 1456) in August 2012 and the governor signed it shortly thereafter. The measure did the following:

- Commissioned the development of a uniform placement exam for students;
- Directed colleges to provide students with orientation, assessment, placement and counseling services;
- Required students to identify an educational goal (such as degree or certificate for transfer to a four-year university) and complete an educational plan;
- Required colleges that receive student support service funds to complete and post a student success scorecard showing how well the campus is doing in improving completion rates, especially by race, ethnicity, gender, and income;
- Established minimum academic progress standards for students to receive Board of Governors fee waivers, but also developed an appeal process.

The Task Force recommendations came in the wake of a severe shortfall in resources for California's public higher education institutions. Therefore, implementation of these ideas was delayed.

Funds allocated for 2015-16 has enabled the Chancellor's Office to provide support to colleges that develop a student success and support plan (formerly matriculation) built around some of the recommendations arising from the Student Success Task Force. The provision of effective core services (orientation, assessment and placement, counseling, academic advising, and early intervention or follow-up for at-risk students) has enabled students to define promptly their educational and career goals, complete more of their courses, persist to the next term, and achieve their educational objectives in a timely manner.¹⁸ As new priority enrollment rules were made effective in fall 2014, one of the incentives for students to complete the core services was the potential loss of priority enrollment or withholding of an enrollment opportunity.

¹⁷ Campaign for College Opportunity. *Keeping the Promise: Going the Distance on Transfer Reform*. March 2016.

¹⁸ Eva Schiorring and Rogear Purnell. *Literature Review Brief: What We Know About Student Support 2nd Ed.* Research and Planning Group of the California Community Colleges. Fall 2012.

The Student Success Task Force recommended the development of a robust common assessment instrument. The assessment services will also include data collection and course placement guidance, but the placement cut scores will remain a local decision. Working groups of faculty from the disciplines of English, Math and ESL have been involved in drafting competencies that address the full range of prerequisite skills found in the curriculum. The common assessment initiative has a “go live” target of the 2016-17 academic year, pending a successful pilot experience.

The effort to exploit technology to support student success blossomed into the Educational Planning Initiative that was launched to help colleges meet the requirements for student success and to support program funding by providing every student an individual comprehensive educational plan. The initiative is also intended to enhance the counseling experience by inducing students to take more responsibility for their educational program plans and to have counseling expertise used only to *verify* the planning. A degree audit system to provide transcript, articulation and curriculum inventory elements is to be provided to help both students and counselors. As a by-product, it is hoped that the numbers of unnecessary units accumulated by students will be reduced. A single sign-on portal is intended to be the student’s point of access to this system that is a service-oriented experience in which some existing services will be complemented by new services yet to be produced. The project has a “go live” target of the 2016-17 academic year, pending a successful pilot experience.

The legislation implementing some of the recommendations of the Student Success Task Force, SB 1456, requires the coordination of student equity plans with student success and support programs. Student equity identifies groups of students needing more help and focuses on services and instruction for new and continuing students through to completion whereas student success and support programs focus on services for entering students and identifies individual students needing more help. Interest in student equity is not new as the Board of Governors adopted a student equity policy in 1992, but financial support for planning and interventions has not always been available or adequate. The traditional populations or variables researched for student equity planning are: age, disability status, gender and ethnicity. In 2014 the Legislature appropriated \$70 million for student equity purposes, and included foster youth, veterans, and low-income students in the targeted populations. It requires specific goals and activities to address disparities, and mandates coordination of them with other categorical programs. Unlike the student success and support program funding, dollars for student equity interventions do not require a match of funds or in-kind effort from the colleges. Funding for both efforts was increased for 2015-16 after the May 2015 budget revision. An additional increase is proposed for 2016-17.

Due to the governor’s interest in online education that in 2013 garnered an appropriation of \$56.9 million over 55 months to launch the Online Education Initiative for the community colleges, a common course management system was launched among the pilot colleges in fall 2015. The initiative is intended to increase access to more online courses offered by community college faculty members and to provide students well-designed resources that will improve their chances of a successful learning experience.

Within the initiative are efforts to assist faculty in several professional development ways such as creating online course content, teaching strategies for the online environment, developing course design standards, and training in course review. Also part of the work in this initiative is to improve student readiness to engage in the learning experience through online instruction and to provide tutoring support for those students. Those two components have had a successful pilot project “go live” in spring 2015.

Adult Education Initiative

The governor’s initial proposal that the adult education programs be absorbed into the community colleges met with stiff opposition in the legislature. A compromise was fashioned to improve and expand the provision of adult education through regional consortia in order to eliminate redundancy and to craft pathways into higher education for interested students. Instruction in parenting, home economics, and classes for older adults were explicitly excluded from this funding. The 2015 AB104 legislation provided a block grant of funds Adult Education Block Grant (AEBG) to support action to address adult learners in four areas: (1) elementary and secondary basic skills; (2) ESL and citizenship for immigrant populations; (3) adults with disabilities; and, (4) short-term career and technical education.

Career and Technical Education Initiatives

In 2012 the Legislature passed SB 1402 which the Governor signed to signal intent to recast and rewrite the economic and workforce education division programs and services. The new direction requires industry sector strategies that align collaboratively with labor markets on a *regional basis*. The Chancellor’s Office translated these policy directions into a four-part initiative called Doing What Matters (DWM) for Jobs and the Economy. Governor Brown has been generous in funding this work and his 2016-17 budget proposals offer \$200 million more to expand access to career and technical education as well as to implement new regional accountability structures.

The eleven colleges in the Inland Empire/Desert consortium selected the three priority sectors or clusters and two emerging sectors as described in the table below.

EMP Table 7: Inland Empire/Desert Consortium Priority Sector Choices

Priority Sectors/Clusters
Advanced Manufacturing
Global Trade & Logistics
Health
Emergent Sectors/Clusters
Advanced Transportation & Renewables
Information & Communication Technologies (ICT)/Digital Media

Source: Inland Empire/Desert California Community College Consortium

The initial phase of DWM was designed to dovetail with the State Workforce Plan created by the California Workforce Investment Board. Some funding from the DWM initiative was awarded to the regions to enhance existing CTE programs and to support regional collaborative work. The second phase of this initiative applies common accountability metrics to gauge the extent to which the efforts have “moved the needle.” A system of common metrics was developed that includes student momentum points and leading indicators of success. A third phase promotes bringing innovation and best practices to scale. The overriding message of the DWM initiative is to prompt *collaborative* action within regions to prepare students for work in critical industry sectors.

The 2014-15 State budget provided a one-time pool of \$50 million that helped the DWM initiative incentivize the colleges to develop, enhance, retool, and expand CTE offerings in response to regional labor market needs and to stimulate additional regional collaboration. The proposed budget for 2016-17 offers \$200 million to be allocated among the regions for the work of preparing students to enter the middle-skills workforce.

In 2013 SB 1070 (California Partnership Academies) was enacted to establish an economic and workforce development program for the community colleges. It requires the Board of Governors, the Chancellor’s Office staff, and the colleges to assist economic and workforce regional development centers and consortia to improve, among other things, career-technical education pathways between high schools and community colleges. Contracts and competitive grants funded by the program through 2015 were jointly administered to improve linkages and CTE pathways between high schools and community colleges. The governor’s 2016-17 budget proposals include funds to make this program permanent by also removing the sunset clause to the legislation and providing \$48 million additional dollars to support the work.

Additional efforts to promote career pathways from high schools to the community colleges were enshrined in the 2014-15 budget as it passed the California Career Pathways Trust Act. Some \$250 million was provided in the form of one-time competitive grants. These funds were made available to school districts, county superintendents of schools, directly funded charter schools, regional occupational centers or programs operated by a joint powers authority, and community college districts. The Legislature allocated a second round of funding for the Trust with applications for competitive grants implemented in academic years 2015-16 and 2016-17.

In November 2015 the Board of Governors culminated a yearlong effort to revisit the ways in which career and technical education is delivered as a means to prepare students for middle-skills jobs. The Task Force they commissioned provided 25 recommendations in seven broad areas. Full details are available at <http://bit.ly/1pCGOM>. The recommendations are expected to shape policies from the Board of Governors over the next few years.

Inmate Education Initiative

Senate Bill 1391, Hancock, which became law in September 2014 made a number of changes to rules that apply to inmate education. The Hancock bill permanently removed the open course provisions for inmates in state correctional facilities. Previously, districts offering inmate education had to accept funding at the noncredit rate, regardless of the nature of the course of instruction. SB1391 revised that method of compensation to allow an apportionment claim at the corresponding funding rate for credit and CDCP noncredit instruction, and relieved the districts from using only the positive attendance procedure to keep track of instructional time.

The legislation further required an interagency agreement between the Chancellor's Office and the Department of Corrections. Approved in January 2015, funds for pilot projects to expand access to courses that lead to degrees and certificates were created. That pilot project identified re-entry hub state correctional facilities near a community college. The colleges could seek one-time funding for program development and implementation of inmate education geared toward improving inmates' ability to find employment upon release and to reduce recidivism. The emphasis was upon face-to-face instruction, rigorous assessment, and student services. Four colleges (Lassen, Chaffey, Antelope Valley, and Folsom Lake) were granted a one-year award.

Although they are not higher education policy topics, the State of California has made a number of changes to its policies and practices pertaining to correctional institutions to reduce the numbers of those incarcerated. Because the College's correspondence course program has had a significant presence throughout the California correctional institutions, these changes directed toward reducing the State prison population may have implications for future enrollments from incarcerated individuals.

Dual Enrollment

The most recent legislation to promote collaboration, AB 288, signed into law on October 8, 2015 that took effect in January 2016, authorizes the governing board of a community college district to enter into a College and Career Access Pathways (CCAP) partnership with the governing board of a school district. The partnerships are to offer or expand dual enrollment opportunities for students who may not already be college bound or are from groups underrepresented in higher education. The goal is to develop a seamless pathway from high school to community college for career-technical education or preparation for transfer, improving high school graduation rates, or helping high school students achieve college and career readiness. The following are the highlights of the legislation:

- Community colleges can assign priority enrollment and registration to high school students in a CCAP with no fees to pay;
- Courses during the regular high school day can be restricted to high school students and do not have to meet the normal open enrollment standard;
- Courses with no open seats on campus cannot be offered at high schools through the CCAP;
- Basic skills math and English can be offered through CCAP but only for students who are not at grade level in that subject; and

- Community colleges can claim FTES if the high school student is qualified for full high school apportionment without using hours of the college course.

Many of the initiatives discussed above have benefited from generous funding associated with the continued recovery of the California economy. Apportionment base funding has been restored, categorical funding has been advanced, and one-time funds have been provided. That funding trend continued into the May 2016 revision of the Governor’s 2016-17 Budget. However, it is believed that the California economy is nearing the point when a normal economic expansion period should end and resources provided should be used to position each college for the future.¹⁹

New Growth Funding Formula

Apart from targeted funds described above, the SB 860 legislation from 2014 impacted the allocation of apportionment funds for growth to the districts by using the new formula in 2015-16. The legislation directed that growth would be based on each community’s need for access to their community college as determined by local demographics. Need within each district’s official boundaries is determined by two primary factors: number of people within each district who are without a college degree, and the number of individuals who are disadvantaged as evidenced by unemployment and measures of poverty.²⁰ The PVCCD is projected to have an apportionment growth rate of 3.69%

The General Neighborhood

The policies and priorities discussed above impact colleges differently. The Palo Verde CCD is the only immediate opportunity for a postsecondary education experience open to California residents of this region. The following table lists distances and driving times of the community colleges that are in “close proximity” to the PVCCD. Appendix A lists communities and commuting distances and times to U.S. Census Bureau places around the primary College locations in Blythe and Needles, California.



PALO VERDE COLLEGE
 WHERE KNOWLEDGE TAKES ROOT AND OPPORTUNITY GROWS

¹⁹ Mario Rodriguez, Acting Vice Chancellor for Finance. *2016-17 May Revise Letter to the System.*

²⁰ Day Toy, Vice Chancellor for Finance. “Growth Funding Allocation Formula,” *Consultation Digest.* November 20, 2014. “California Community Colleges Growth Funding Allocation Model” power point presentation to the Association of Chief Business Officers Conference. October 27, 2014.

EMP Table 8: Public Community Colleges Around the Palo Verde Community College District

College	City	State	Time*	Miles*
Palo Verde College	Blythe	CA		
Arizona Western College	Yuma	AZ	1h 33m	97
AWC- Quartzsite Center	Quartzsite	AZ	24m	22
AWC- Parker Center	Parker	AZ	53m	49
College of the Desert	Palm Desert	CA	1h 45m	109
Imperial Valley College	Imperial	CA	1h 42m	98
Palo Verde College	Needles	CA		
Mohave Community College				
Bullhead City Campus	Bullhead City	AZ	31m	23
Lake Havasu City Campus	Lake Havasu City	AZ	47m	43
Neal Campus	Kingman	AZ	58m	63
Barstow College	Barstow	CA	2h 13m	144
Victor Valley	Victorville	CA	2h 38m	174
*Google Maps distances and times				

Source: California Community College Chancellor’s Office; Arizona Colleges and Universities from Wikipedia.org

Implications for the Colleges:

1. A broad array of governmental and private organizations is promoting the urgency for postsecondary institutions to produce more graduates. It has been estimated that the State economy will be short in excess of two million graduates with a bachelor’s degree or postsecondary education short of the bachelor’s degree by 2025. *As a public agency the College should embrace that public agenda with vigor.*
2. As the federal government seeks to achieve a more balanced budget there is still financial support for students and incentives for institutions to increase student success and prepare more students to compete in a global economy. However, these incentives come with performance expectations. *The College may have opportunities to enhance resources and it should act upon those opportunities.*
3. After many years of debate, several federal workforce-training programs have been consolidated and a new direction emphasizing regional efforts and agency collaboration has emerged in the Workforce Innovation and Opportunity Act (WIOA) legislation. As of fall 2016 the Carl Perkins legislation has not yet been reauthorized nor has the Higher Education Act been reauthorized. *The College should monitor trends in federal to be in a position to take advantage of any new direction.*
4. The regional accrediting commission, ACCJC, is following federal direction with requirements it has imposed on member institutions. Recent state

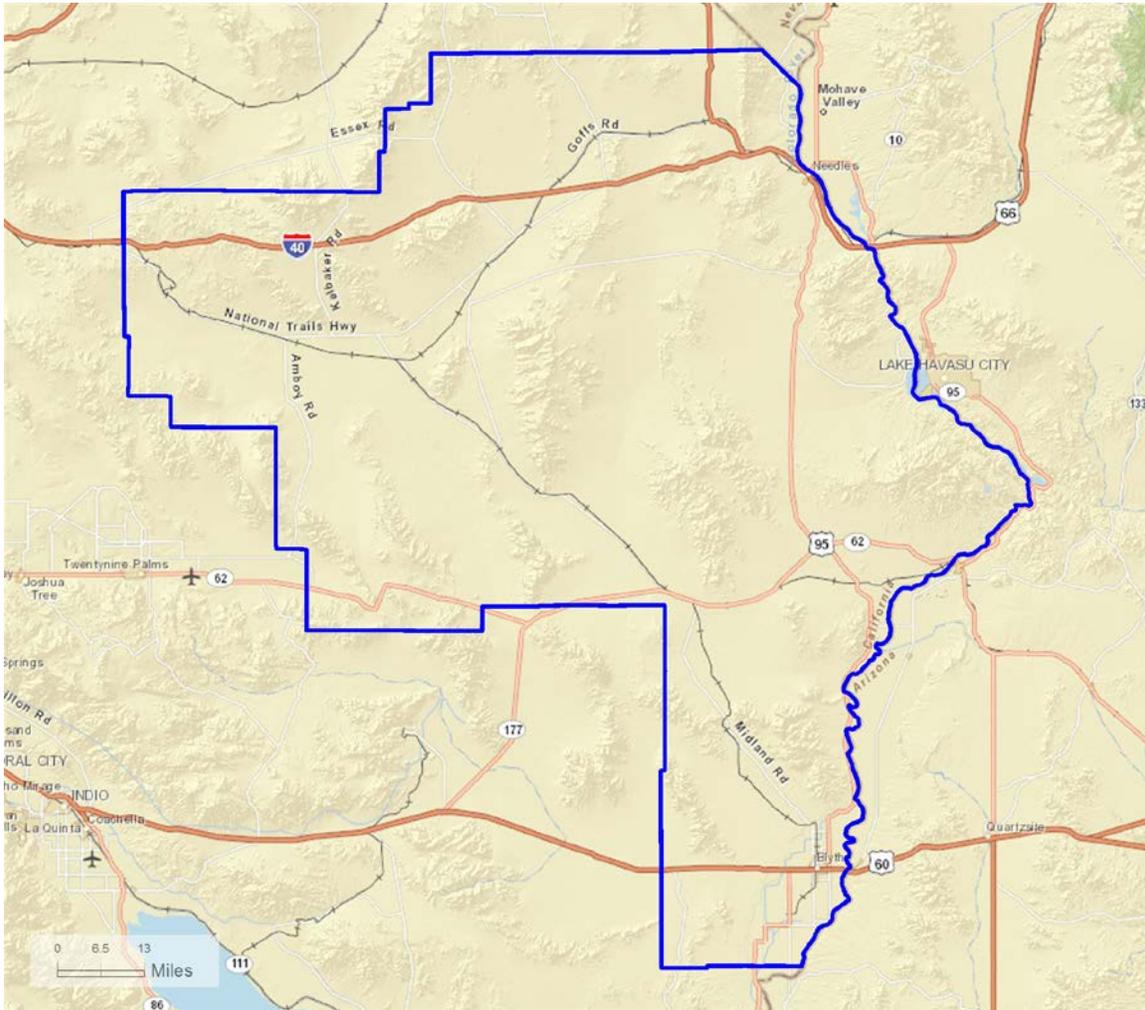
legislation intended to induce intentionality into institutional planning and to hold public colleges accountable for performance on state priorities are in a similar spirit to the accreditation expectations. *Attention should be given to tracking student achievement and learning performance, and acting upon areas where performance does not meet ACCJC expectations.*

5. Starting three years ago State legislation (SB 1440) created a remarkable framework to facilitate transfer to a campus within the California State University (CSU). Community college and CSU faculty throughout the state have risen to the occasion to forge transfer model curriculums (TMCs). *Palo Verde College achieved its expected target, but there may be more that could be done to facilitate transfer.*
6. Particular state attention has been given to re-crafting matriculation and other student services along the lines of recommendations from the Student Success Task Force. *Although matching funds are required, attention must be given to student success concerns. When it is implemented, participating institutions will be required to use a common placement assessment instrument if funds have been accepted. The College has a series of opportunities to improve services and student success by participating in these new state programs.*
7. A serious revisiting of online instruction as a delivery mode is being funded in the State. *While the College has not offered an extensive array of online classes, the online education initiative is a promising opportunity in which the College should consider full participation.*
8. Adult education has long been neglected as a public service in the state. The AEBG legislation provides fresh funding to promote regional cooperation and elimination of redundancy with incentives to focus the instruction on preparing vulnerable citizens for more effective participation in the workforce. This legislation, combined with the promise to raise the funding level for selective noncredit curriculum to equal the level of credit instruction starting in FY 2015-16, presents a unique opportunity to make a very substantial difference in the service area. *The College should grasp the opportunity to implement the planning work for adult education done by the regional consortium.*
9. Several opportunities are unfolding for career and technical education both within and outside of the Doing What Matters for Jobs and the Economy initiative from the Chancellor's Office. Several dedicated funding sources are promoting inter-segmental cooperation and regional approaches to this type of instruction. *The College should position itself to fully engage the various opportunities in this curriculum.*

Population Served: PVCCD Effective Service Area

Within Riverside and San Bernardino Counties, the official boundaries of the PVCCD include zip code areas comprised in this graphic.

Chart 1: Official PVCCD District Boundaries



Source: PVCCD Institutional Research

Geographically, the District covers 6,500 square miles. In 2015 the area population was estimated to be 20,461 with an additional 5,435 individuals incarcerated inside group quarters (the two state prisons west of Blythe). The District population, *excluding* those incarcerated, is projected to become only 21,002 by 2020. Of the fourteen zip codes, seven zip codes overlap into the services areas of adjacent community college districts (Imperial Valley, Copper Mountain, College of the Desert, and Barstow).

Some of the educational needs of residence in this area were documented through the Adult Education Consortium efforts. The 2010 socio-economic data provided for

planning is displayed below as a profile of the most vulnerable citizens in the PVCCD region.

EMP Table 9: Educational Needs of Adults in the PVCCD Service Area in 2010

Regional Consortia	Estimated Population*	Poverty	No High School Diploma	Unemployment	English Language Learners	Adults with Disabilities	No Citizenship	No Literacy
Palo Verde CCD	33,946	18,229	9,199	5,058	14,120	3,436	4,850	5,387
% of 2010 Population		53.7%	27.1%	14.9%	41.6%	10.1%	14.3%	15.9%

Sources: U.S. Census Bureau American Community Survey and U.S. Department of Education, National Center for Educational Statistics- National Assessment on Adult Literacy; analysis by the AB86 Work Group

Through the American Community Survey process the Census Bureau provides additional data about region’s residents. Just over 3,500 (18%) of the residents in Blythe reported being foreign-born, overwhelmingly from Latin American countries. Of those Blythe foreign-born residents, 65% indicated they were not U.S. Citizens and almost all of the 3,500 indicated they had entered the United States before 2010. In contrast, only 4% of the residents in Needles reported being foreign-born, again primarily from Latin American countries. Of those Needles foreign-born residents, 61% indicated they were not U.S. Citizens and all indicated they had entered the United States before 2010.

In 2010, across the PVCCD official service, area there were a limited number of languages other than English reported as being spoken at home. In Blythe those languages were Spanish, Indo-European, and Asian languages. The Census Bureau estimated that 2,600 people, 14% of the population in the Blythe, reported that they spoke English less than “very well” at home. In contrast, only 168 people in Needles reported that they spoke English less than “very well” at home.²¹

The initial work of the Adult Education Consortium has pointed to significant educational needs, primarily in Blythe, to which the College may want to respond.

Effective Service Area

Based upon an analysis of residential zip codes reported by enrolled students over the last five fall terms, the effective service area for Palo Verde College encompasses an unusual number of almost 300 zip codes. Individuals from these zip codes account for 85% of the students participating at the College. The bulk of the zip codes are outside the official District service area and represent students enrolled through in-service training agreements or through correspondence courses offered to incarcerated individuals throughout the California Department of Corrections system.

Within the official District area only seven zip codes were identified. Collectively, the student headcounts from these seven zip codes only accounted for 36% of the total headcounts. From fall 2010 to 2015 the portion of the students enrolled at the College

²¹ U.S. Census Bureau. *American Communities Survey 2009-2013*.

who live within the official District service area has *dropped* from 41% to 36% while the portion of those living outside of the official area has *increased* from 59% to 64%.

Comparing unduplicated student counts in fall 2010 with those in fall 2015 the College had 39 fewer students in fall 2015. But, the low point of 2013 represented a decline of 627 students from the high point in 2010. Within the official district service area the steepest decline, 213 students, was found in Blythe. The other major community served by the College, the City of Needles, noted 113 fewer students between 2010 and 2015.

Zip code 92226 is used for post office boxes that anyone can rent. However, it is also the official zip code used for mail directed to individuals incarcerated at Ironwood State Prison or Chuckawalla Valley State Prison.

EMP Table 10: Palo Verde College, Key Zip Codes for Student Participation

In Dist	Zip Code	City	Fall Term Unduplicated Headcounts						Total	% of Total	Cum %
			2010	2011	2012	2013	2014	2015			
Y	92225	Blythe	996	678	731	655	757	3,817	20.60%	20.60%	
Y	92226	Blythe	517	502	431	431	543	2,424	13.08%	33.69%	
Y	92239	Desert Center	3	2		3	2	10	0.05%	33.74%	
Y	92242	Earp	1					1	0.01%	33.75%	
Y	92280	Vidal	2	1	2		2	7	0.04%	33.78%	
Y	92332	Essex	2					2	0.01%	33.80%	
Y	92363	Needles	164	92	113	74	51	494	2.67%	36.46%	

Source: PVC Institutional Research; analysis by Cambridge West Partnership, LLC

More households (67%) in the PVC official District have lower incomes, below \$50,000, than most in Riverside or San Bernardino Counties. Both counties have more than twice the proportion of residents in the upper ranges of \$100,000 plus, compared to the PVC official District service area. As a whole, residents in the PVC service area have far less income to devote to educational expenses than do others living in the two adjacent California counties with the overwhelming discrepancy in the \$100,000 plus category.

EMP Table 11: 2015 Household Income Distributions

Household Income	PVCCD	Riverside	San Bernardino
<\$15,000	23.5%	10.8%	11.6%
\$15,000 to \$49,000	43.5%	34.6%	34.9%
\$50,000 to \$99,999	23.4%	29.3%	31.0%
100,000 to \$199,999	8.7%	20.7%	18.8%
\$200,000 +	1.1%	4.5%	3.6%

Source: Environmental Systems Research Institute. Market Profile; analysis by Cambridge West Partnership, LLC

Demographic attributes for the *official* District service area associated with the PVCCD are provided in the table that follows along with those of the two principle communities. Population growth between the year 2010 and 2020 for the PVC official District service area is estimated to be 3.9%, primarily from Blythe. The annual rate of change in median household income projected between the year 2015 and 2020 for the entire District is slightly behind that of the City of Blythe. In 2015, the median household income for the entire PVC *official* District service area was \$3,717 *less than* the City of Blythe’s median household income. Other comparisons between the District as a whole and the two principle cities are illustrated in the following table.

EMP Table 12: Palo Verde College District Official Service Area vs. Blythe and Needles

Needles					2015 to 2020		
Element	2000	2010	2015	2020	Annual Rate of Change	2000 to 2015 % Change	2010 to 2020 % Change
Population	4,912	4,844	4,820	4,844	0.10%	-1.9%	0.0%
Households	1,989	1,918	1,907	1,910	0.03%	-4.1%	-0.4%
Average Household Size	2.46	2.52	2.53	2.53		2.8%	0.4%
Median Age		39.2	39.7	40.5			
Median Household Income			\$27,815	\$29,093	0.90%		
Per Capita Income			\$15,753	\$17,409			

Blythe*					2015 to 2020		
Element	2000	2010	2015	2020	Annual Rate of Change	2000 to 2015 % Change	2010 to 2020 % Change
Population	14,619	15,045	15,293	15,807	0.66%	4.6%	5.1%
Households	4,916	5,123	5,214	5,373	0.60%	6.1%	4.9%
Average Household Size	2.93	2.90	2.89	2.90		-1.4%	0.0%
Median Age		32.0	31.9	32.5			
Median Household Income			\$37,939	\$42,483	2.59%		
Per Capita Income			\$17,615	\$19,765			

*excludes incarcerated, data is restricted to the six census tracts for the City

PVCCD					2015 to 2020		
Element	2000	2010	2015	2020	Annual Rate of Change	2000 to 2015 % Change	2010 to 2020 % Change
Population	21,318	20,218	20,461	21,002	0.49%	-4.0%	3.9%
Incarcerated Population	8,195	7,189	5,435				
Households	8,093	8,218	8,279	8,515	0.56%	2.3%	3.6%
Average Household Size	2.70	2.68	2.69	2.70		-0.4%	0.7%
Median Age		39.0	39.1	39.0			
Median Household Income			\$34,222	\$38,266	2.26%		
Per Capita Income			\$17,245	\$20,069			

Source: Environmental Systems Research Institute. Demographic and Income Profile and Market Profile; analysis by Cambridge West Partnership, LLC

An extended population projection for the primary cities, *excluding* incarcerated individuals, is illustrated in the following table.

EMP Table 13: Extended Population Projections, Primary Cities in the District

Area	Extended Population Projection			Annual Rate of Change
	2015	2020	2025	
Needles	4,820	4,844	4,868	0.10%
Blythe*	15,293	15,807	16,336	0.66%
Total	20,113	20,651	21,204	
*excludes incarcerated				

Source: Environmental Systems Research Institute. Market Profiles; analysis by Cambridge West Partnership, LLC

As noted earlier in this chapter, the City of Needles is part of a larger trade area commonly described as the Colorado River Corridor (CRC). The CRC extends into northwestern Arizona and therefore includes communities outside of the official District service area. This Arizona geography is, however, part of the effective service area for the Needles Center. In the table that follows an extended population projection for the City of Needles and the CRC has been provided. The projection for Blythe *excludes* the incarcerated individuals.

EMP Table 14: Extended Population Projections, Effective Service Area

Area	Extended Population Projection			Annual Rate of Change
	2015	2020	2025	
Needles+ CRC	133,876	138,748	143,815	0.72%
Blythe*	15,293	15,807	16,336	0.66%
Total	149,169	154,555	160,151	
*excludes incarcerated				

Source: Environmental Systems Research Institute. Market Profiles; analysis by Cambridge West Partnership, LLC

The two state prisons, Ironwood and Chuckawalla Valley, constitute their own census tract. A number of those incarcerated at these prisons are enrolled at the College through the correspondence course program. The combination of census data and California Department of Corrections and Rehabilitation data reveals the following profile of the male inmates at these facilities. The population of either prison is not projected to decrease substantially in the *near* future.²²

EMP Table 15: Male Prisoner Estimated Profile

	2015
Population	5,435
Population by Age	
15-24	6.7%
25-34	22.4%
35-44	30.1%
45-54	27.0%
55-64	8.5%
65-74	3.3%
75-84	2.0%
Median Age	42.0
Educational Attainment Age 25+	
Less Than High School	38.5%
High School Graduate	33.0%
Some College, No Degree	21.2%
Associate Degree	4.0%
Bachelor's Degree	2.9%
Graduate Degree	0.3%

Source: Environmental Systems Research Institute. Market Profile; California Department of Corrections and Rehabilitation Monthly Census Counts; analysis by Cambridge West Partnership, LLC

²² Tina Redway, Principal, Chuckawalla Valley State Prison. *Interview*. November 13, 2015

Within the District, Blythe (*excluding* the incarcerated population) has a larger proportion of residents with *less than* high school education compared to Needles. Conversely, Needles has a larger proportion of residents who have completed high school and a *larger* portion that had some college, but a lower percentage of Bachelor's and graduate degrees than in Blythe. Adult residents in Blythe have proportionally completed more various levels of college education than those in Needles.

EMP Table 16: Blythe vs. Needles, Educational Attainment, Age 25+ (2015)

	Blythe*	Needles
Less Than High School	27.8%	18.7%
High School Graduate	28.2%	35.4%
Some College, No Degree	25.4%	34.0%
Associate Degree	7.3%	5.3%
Bachelor's Degree	7.2%	4.3%
Graduate Degree	4.1%	2.4%
count of adults	9,034	3,187
*Excludes incarcerated individuals		

Source: Environmental Systems Research Institute. Market Profile; analysis by Cambridge West Partnership, LLC



From the 2010 census to 2020, the age group in both Blythe and Needles that will increase the most in proportion to the overall population is the 65+ seniors. Out to 2020, the groups of recent high school graduates, late teenagers, and traditional college-agers or early-20s (career choice) will continue to represent, on average, a substantial proportion of the overall population (15.2% in Blythe; 12.5% in Needles).

EMP Table 17: Blythe vs. Needles Age Range Projections

Blythe*					2010 to 2020
Age Category	2010	2015	2020	Average	Absolute Change
under 15	26.5%	24.7%	24.5%	25.2%	-2.0%
Career Choice (15-24)	14.7%	16.3%	14.7%	15.2%	0.0%
Career Start (25-34)	12.3%	13.0%	14.1%	13.1%	1.8%
Career Middle (35-44)	12.1%	11.0%	11.2%	11.4%	-0.9%
Career Finish (45-64)	23.7%	23.3%	22.0%	23.0%	-1.7%
Retirement (65+)	10.6%	11.8%	13.5%	12.0%	2.9%
Needles					2010 to 2020
Age Category	2010	2015	2020	Average	Absolute Change
under 15	21.7%	21.1%	21.1%	21.3%	-0.6%
Career Choice (15-24)	13.1%	12.8%	11.5%	12.5%	-1.6%
Career Start (25-34)	11.4%	11.1%	11.8%	11.4%	0.4%
Career Middle (35-44)	10.0%	9.9%	10.5%	10.1%	0.5%
Career Finish (45-64)	28.1%	27.1%	25.1%	26.8%	-3.0%
Retirement (65+)	15.8%	18.0%	20.1%	18.0%	4.3%

*Data for Blythe is restricted to the six census tracts for the city and excludes the incarcerated individuals.

Source: Environmental Systems Research Institute. Market Profile; analysis by Cambridge West Partnership, LLC

Across the State, participation rates in the community college system are traditionally the highest among younger adults, ages 18 to 24. The size of that group within the effective service area is critical to future enrollments. The following tables provide further details about the high school and college age populations in Blythe and Needles.

EMP Table 18: High School and College Age Populations, Blythe

Age	Blythe 6 Census Tracts*			Average	Blythe 6 Census Tracts*			Average
	2010	2015	2020	Age %	2010	2015	2020	Age Count
15	1.9%	1.7%	1.5%		279	266	237	
16	1.8%	1.8%	1.5%		270	274	238	
17	1.6%	1.6%	1.3%		237	245	209	
High School Subtotal	5.3%	5.1%	4.3%	4.9%	786	785	684	752
18	1.7%	1.7%	1.4%		249	264	228	
19	1.3%	1.5%	1.3%		195	234	212	
20-24	6.6%	7.9%	7.6%		987	1,209	1,194	
College Age Subtotal	9.6%	11.1%	10.3%	10.3%	1,431	1,707	1,634	1,591

*Data for Blythe is restricted to the six census tracts for the city and excludes the incarcerated individuals.

Source: Environmental Systems Research Institute. Market Profile; analysis by Cambridge West Partnership, LLC

EMP Table 19: High School and College Age Populations, Needles

Age	Needles			Average	Needles			Average
	2010	2015	2020	Age %	2010	2015	2020	Age Count
15	1.4%	1.1%	1.3%		70	55	62	
16	1.9%	1.2%	1.6%		90	59	69	
17	1.5%	1.1%	1.3%		72	54	61	
High School Subtotal	4.8%	3.4%	4.2%	4.1%	232	168	192	197
18	1.5%	1.1%	1.2%		71	55	59	
19	1.4%	1.2%	1.2%		70	60	59	
20-24	5.4%	6.9%	5.1%		260	331	248	
College Age Subtotal	8.3%	9.2%	7.5%	8.3%	401	446	366	404

Source: Environmental Systems Research Institute. Market Profile; analysis by Cambridge West Partnership, LLC

From 2010-11 to 2014-15 neither of the two small high schools in the College District service area sent many of their recent graduates to PVC. Palo Verde High School sends far more students on to the College than is the case at Needles High School. A relatively small portion of the graduates from both high schools completed curriculum to meet either University of California or California State University entrance requirements.

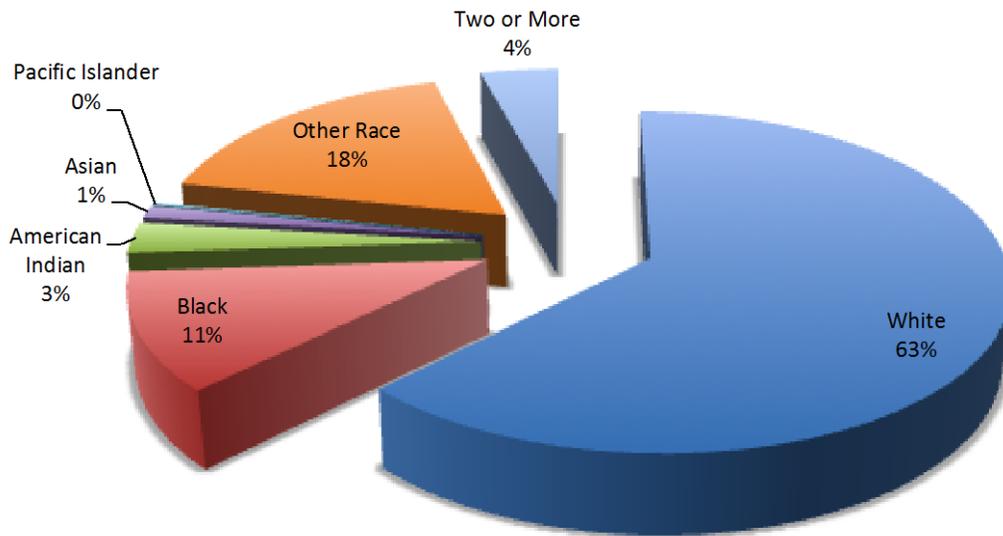
EMP Table 20: Palo Verde College Feeder High Schools

School	Code	Year	9	10	11	12	Total	Grads	Rate	Graduates with UC/CSU Required Courses	UC/CSU Prep Rate	Annual Average of HS Grads Attending PVC 1996-2010
Palo Verde High	3335759	2014-15	242	236	182	215	875					42.3%
		2013-14	251	234	245	203	933	175	86.2%	12	6.9%	
		2012-13	251	274	240	190	955	182	95.8%	33	18.1%	
		2011-12	286	281	208	180	955	156	86.7%	39	25.0%	
		2010-11	289	243	231	178	941	161	90.4%	34	21.1%	
		Totals	1,319	1,268	1,106	966	4,659	674	69.8%	118	17.5%	
Needles High	3634169	2014-15	57	52	59	49	217					3.7%
		2013-14	54	58	46	61	219	54	88.5%	7	13.0%	
		2012-13	60	49	61	71	241	59	83.1%	14	23.7%	
		2011-12	54	82	67	67	270	58	86.6%	17	29.3%	
		2010-11	77	75	64	63	279	57	90.5%	11	19.3%	
		Totals	302	316	297	311	1,226	228	73.3%	49	21.5%	

Source: California Department of Education, California Postsecondary Education Commission; analysis by Cambridge West, LLC

The largest racial group in the District *official* service areas has been White. But, the portion of the self-reported White group is expected to shrink 3% by 2020 while the portion of the self-reported Other Race group is anticipated to increase 2.7% by 2020.

Chart 2: 2015 Palo Verde College Official Service Area, Ethnic/Racial Composition



Source Environmental Systems Research Institute. Market Profile; analysis by Cambridge West Partnership, LLC

Residents who currently report Hispanic ethnicity constitute 45% of the population. That Hispanic ethnic group is estimated to continue expanding to become 52% by 2020. Across the State, participation in the community college system varies among ethnic and racial groups. However, young people from the Hispanic community have been traditionally underrepresented in higher education.

Implications for Palo Verde College:

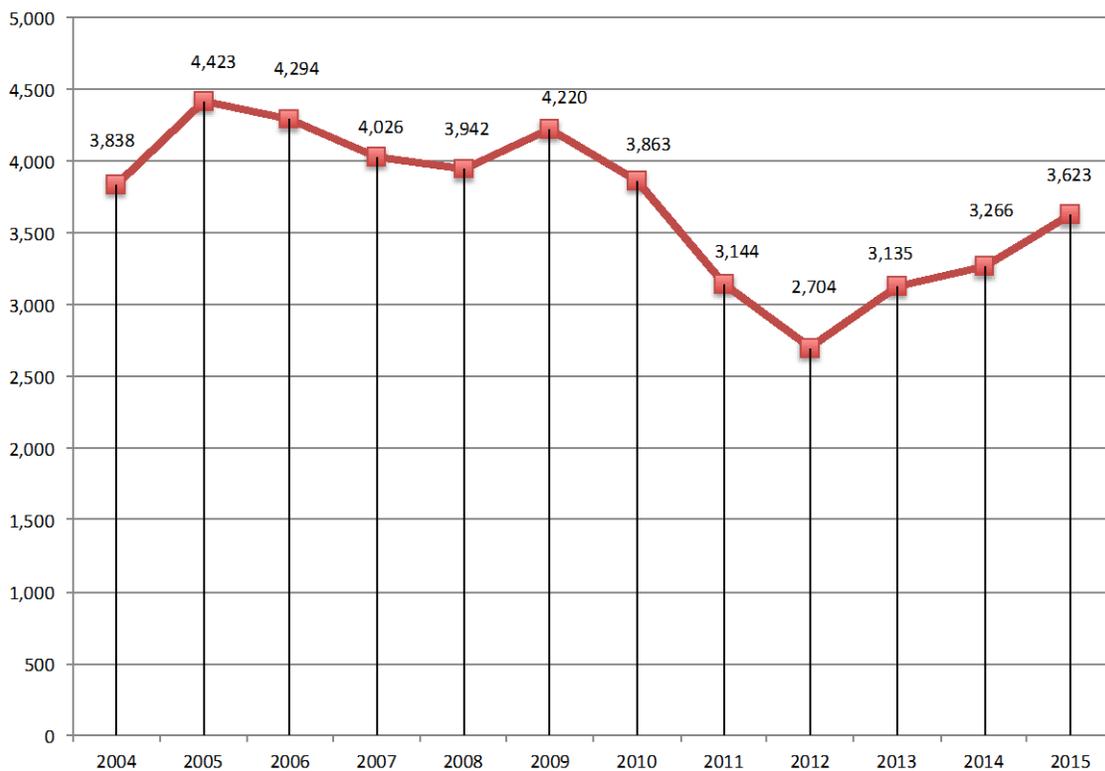
1. The population in the District is projected to continue growing *very slowly* with a 3.9% change between 2010 and 2020 or a .39% annual change rate.
2. Data assembled for the adult education consortium activities indicate that within the District service area there are a number of families living at or below the poverty level and a significant segment are English language learners. *These data present profound implications and opportunities for the College.*
3. Since 2010, enrollments have dropped twice (2011 and 2013). Enrollments in face-to-face instruction have dwindled the most. To some extent, the decline in enrollments is related to the significant shortfall in state resources related to the Great Recession. *Arresting and reversing the decline has been and should continue to be a priority for the College.*
4. Throughout the *official* District area, the portion of adult residents age 25 or older that have no high school diploma is 28%. *In the official District service area there are ample residents who could benefit by attending the institution and completing a certificate or degree.*
5. Over the next five years the portion of teenagers and very young adults in the effective service area who will make career choices will continue to represent a substantial segment of the population. Two public high schools have been the primary providers of students to the College. *These data underscore the importance of outreach efforts the College might wish to continue or initiate in order to recapture and build the enrollment volume.*
6. Both median household and per capita income in the *official* District service area fall below the overall corresponding Riverside and San Bernardino County figures. *The large portion of low income of households in the College's official service area provides an opportunity for the College to be a "merchant of hope" by recruiting students whose lives will be transformed by their success at the institution.*
7. Traditionally, the Hispanic ethnic group has had a lower participation rate in higher education. *The trend of growth in this ethnic group presents a particular challenge to the College, as the institution must compete for those students against four-year schools and other opportunities.*

B. Scan of Conditions Internal to Palo Verde College

The Institution from Within

From fall 2004 to fall 2009, the unduplicated student headcount at Palo Verde College saw an *increase* of 1.66% annually, peaking in fall 2009 with a total increase of 9.95% over fall 2004. From fall 2010 to fall 2015, the headcount *decreased* by 6.21% overall; a *decrease* of 1.04% annually. Because of budget cuts at the state level, enrollments across the state fell drastically during this same time period. Although workload reduction was not ultimately enforced at the small colleges, preparations for workload reduction and other factors resulted in declining enrollments at PVC between fall 2009 and fall 2012 when unduplicated headcount bottomed out at 2,704. Since fall 2012, unduplicated headcount has been gradually increasing, ending with an unduplicated headcount of 3,623 in fall 2015.

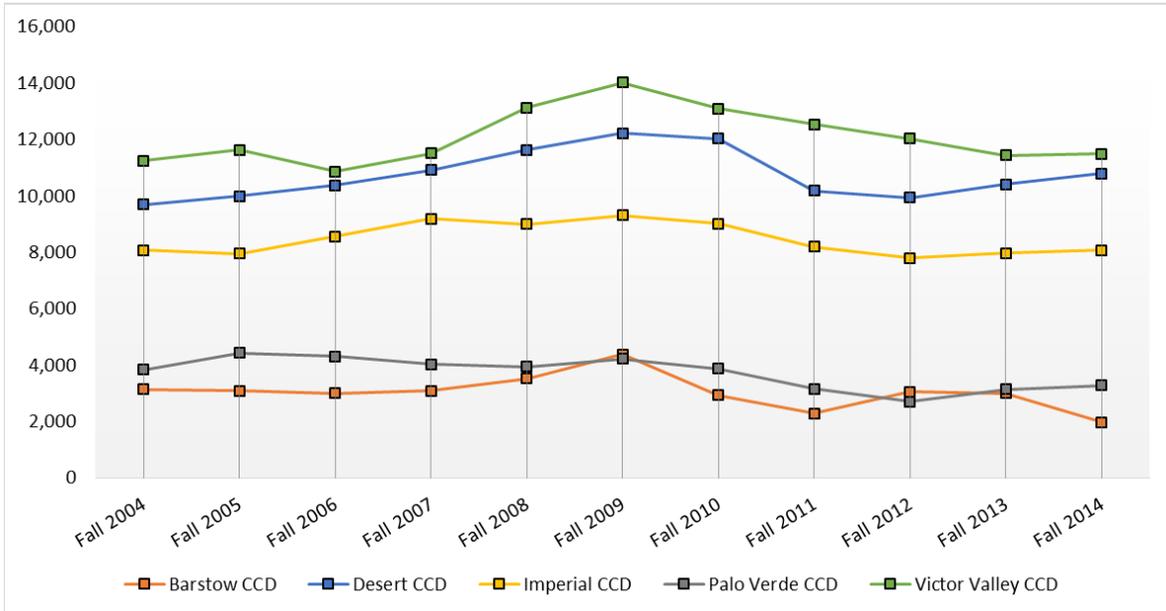
Chart 3: PVC Fall Terms, Unduplicated Student Headcount



Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

This same trend in declining headcount after fall 2009 was also experienced in neighboring California Community College Districts. Except for one, all of the districts, including Palo Verde College, were beginning to see modest increases in headcount.

Chart 4: PVCCD and Neighboring Districts Fall Term Unduplicated Student Headcount

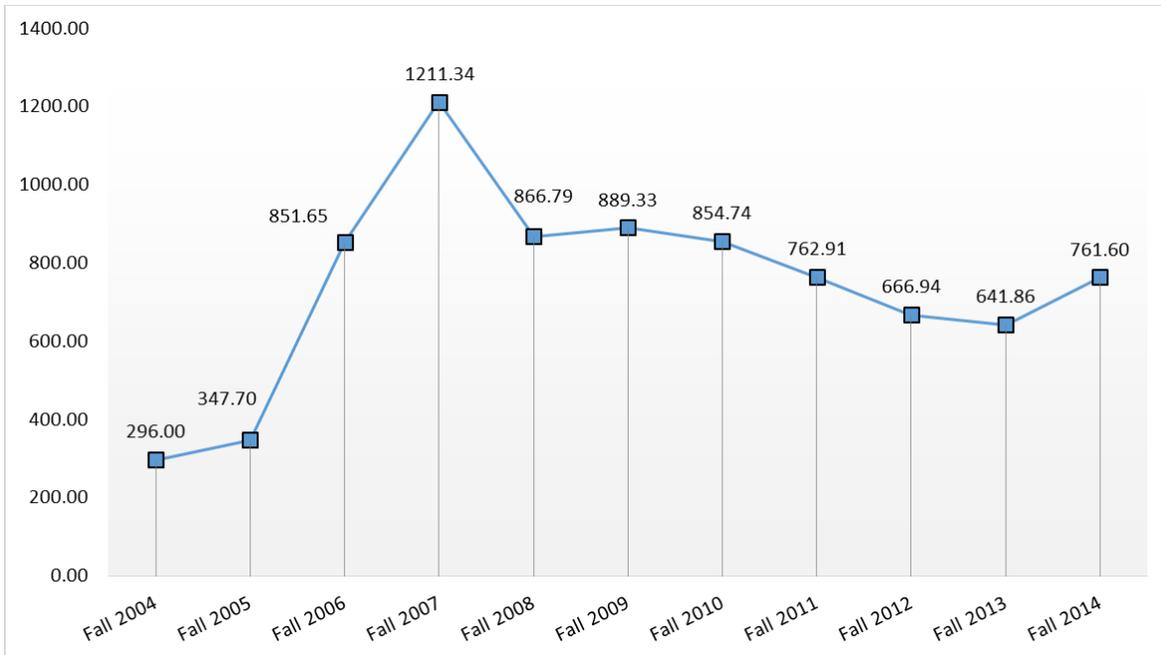


Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

From fall 2004 to fall 2014 the Full-time Equivalent Students (FTES) produced at PVC increased by 465.60 FTES, an increase of 157.30%, 14.30% annually. The FTES generation peaked in 2007 then declined to bottom out in fall 2013.

There are a few inconsistencies in the Chancellor’s Office data mart reports that raise data integrity questions. For example, the unduplicated headcount between fall 2006 and fall 2007 declined 6.24% while the FTES increased 42.23% between the same two terms. The data mart information about term-specific FTES values is developed from an algorithm that depends upon accurate underlying values in the student basic, student enrollment, and section basic end of term management information system files submitted by the College. The data mart FTES values are commonly slightly different from the actual FTES reported by the College through the apportionment claim process.

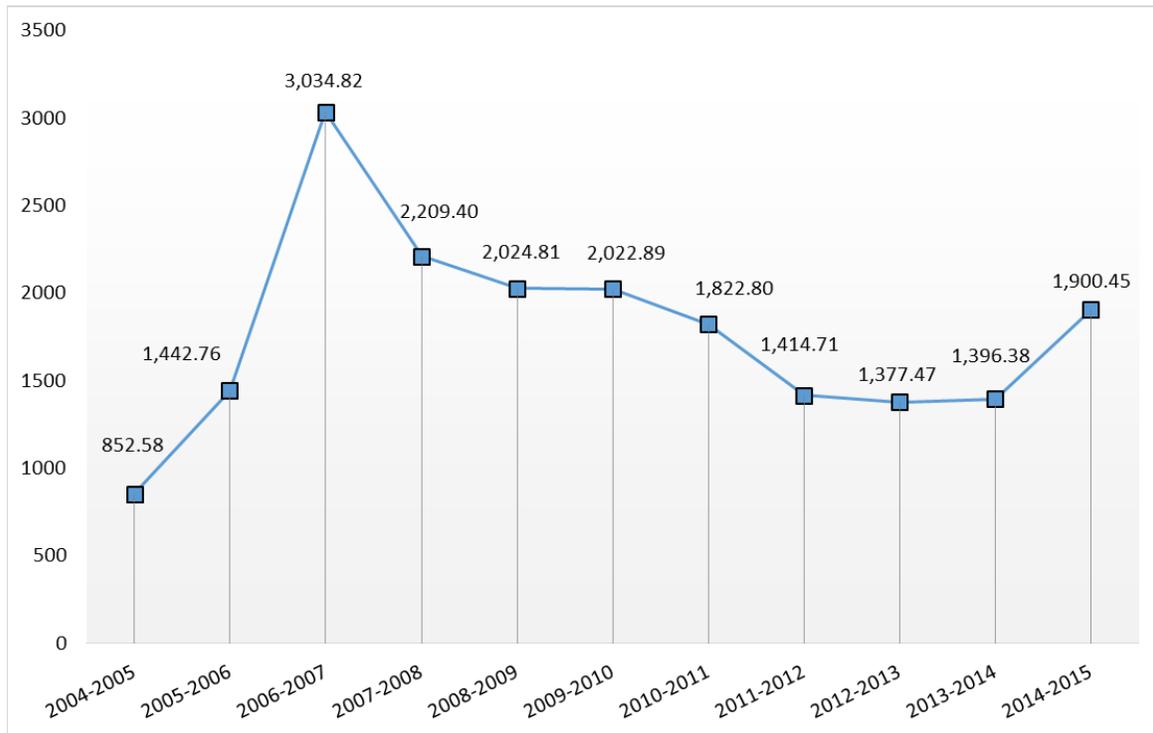
Chart 5: PVC Fall Term FTES Trends



Source: California Community Colleges Chancellor’s Office Data Mart; analysis by Cambridge West Partnership, LLC.

In terms of annual production, FTES increased 122.91% from 2004-2005 to 2014-2015. On average, this is an 11.17% increase in FTES each year. Following along the same trends as the fall terms, the annual FTES began a gradual decline, hitting bottom in 2012-2013. The highest FTES production was in 2006-2007 with 3,034.82 FTES, 1,314.16 of which were from summer 2006.

Chart 6: PVC Annual FTES Trends



Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

Current Program of Instruction

At the start of the 2014-15 academic year, the College was authorized to offer 25 instructional programs (degrees and certificates). Five of these approved programs are new transfer model curriculum degrees (AD-Ts). Three of the transfer degrees are in fields of study also approved as Associate Degrees. There are five degrees offered in disciplines that are considered within the liberal arts areas while the remaining 20 degrees and certificates are in disciplines that are considered career and technical education. Of these 20 programs, 12 culminate in the award of an Associate Degree while eight culminate in the award of a Certificate of Achievement. Six of the Associate Degrees offer Certificates of Achievement in the same field of study; the students may choose to earn both. Two of the Certificates of Achievement are approved by state agencies. The California Association of Alcohol and Drug Educators (C.A.A.D.E) approved the Certificate of Achievement in Alcohol and Drug Studies and the California Board of Vocational Nursing and Psychiatric Technicians accredited the Certificate of Achievement in Traditional Vocational Nursing. Additionally, the Board of Trustees has

authorized the College to award 20 Certificates of Career Preparation that require less than 18 units of credit. By state policy those awards are not entered on the students' transcripts upon completion. A comprehensive list of these instructional programs and an accounting of the awards granted for each is found in Appendix D.

The curriculum required for each authorized program of study is offered during a two-year cycle of scheduled classes. Among the five AD-T programs six courses are required in more than one of these programs. That fact will make them potentially popular and should cause them to be scheduled more frequently with a rotation between evening and day offerings. Another twenty-eight courses in these five transfer programs are required classes or restricted electives, but are only cited in one of the programs. An analysis of these requirements is found in Appendix C.

Other California community colleges approximately the same size as Palo Verde and also in more rural settings have approached enrollment management planning with a two-year scheduling cycle. The required courses in the programs of study are mapped out over that period of time so that students can plan future class lists and the college may attract larger numbers of students to those courses. Commonly, required introductory courses, which might also be part of a general education pattern, are offered more frequently than the more specialized courses required in the program of study. An example from Copper Mountain Community College's implementation of the two-year schedule cycle is found in Appendix I.

Every Associate Degree requires students to complete one of three general education patterns (UC and CSU Intersegmental General Education Transfer Curriculum or IGETC, CSU General Education Breadth, or the Palo Verde College general education pattern). Viewed from the perspective of discrete general education requirements, some have only one course that satisfies the requirement while in other general education areas as many as 40 courses may be used to meet the requirement. Collectively, the College has identified 135 courses that satisfy one or more requirements in at least one of the three general education patterns. Viewed from the perspective of a discrete course, some courses address multiple general education requirements. The following table documents the role of these courses in the various general education requirements.

EMP Table 21: Numbers of General Education Requirements Addressed by Individual Courses

Number of GE Requirements	Number of Approved Courses
One	24
Two	34
Three	48
Four	10
Five	16
Six	3

Source: Palo Verde College. *2014-15 Catalog*; analysis by Cambridge West Partnership, LLC

One approach to efficient scheduling is to concentrate the offerings on the courses that can be most flexibly used across the general education patterns. The detailed analysis of the general education patterns is located in Appendix H.

The fall 2014 program of instruction consisted of 492 sections, which generated 25,119.9 weekly student contact hours (WSCH), including all modes of instruction. Enrollments (seat tickets) per section averaged 16.7 and WSCH per section averaged 51.1. The key characteristics of the fall 2014 program of instruction are reflected in the following table. All of the sections retained and all of the WSCH have been included, regardless of the instructional mode, location of the section, or the residence status of the enrolled students.

EMP Table 22: Fall 2014 Key Measures for the Program of Instruction

Division	Net Sections	Seats	Seats/Sect.	WSCH	WSCH/Sect.	FTES
Allied Health	238	3272	13.7	7993.8	33.6	266.44
Business	28	568	20.3	1911.9	68.3	63.73
History, Social & Behavioral Sciences	57	1289	22.6	3905.4	68.5	130.18
Language Arts & Comm Studies	87	1340	15.4	4236.6	48.7	141.23
Math & Science	37	871	23.5	3974.7	107.4	132.49
Non-Credit	14	198	14.1	303.6	21.7	10.12
Vocational Education	31	683	22.0	2793.9	90.1	93.13
Grand Total	492	8221	16.7	25119.9	51.1	837.32

Source: Palo Verde College Office of Institutional Research, analysis by Cambridge West Partnership, LLC

It is important to note that Palo Verde College offers a large number of courses through in-service training. These courses, comprising fire science technology, emergency medical services, criminal justice, and non-credit English as a Second Language, are offered at various locations around the state of California. Of the 492 total sections offered in fall 2014, 235 of these sections, 48.8%, were in-service training. These in-

service classes account for 24.7% of both the total WSCH and total FTES for the college. Excluded from the following table that shows the same key characteristics for the fall 2014 as noted in the previous table are the in-service sections. By removing these sections, the average seats per section increases to 20.9 and the average WSCH per section increases to 73.6.

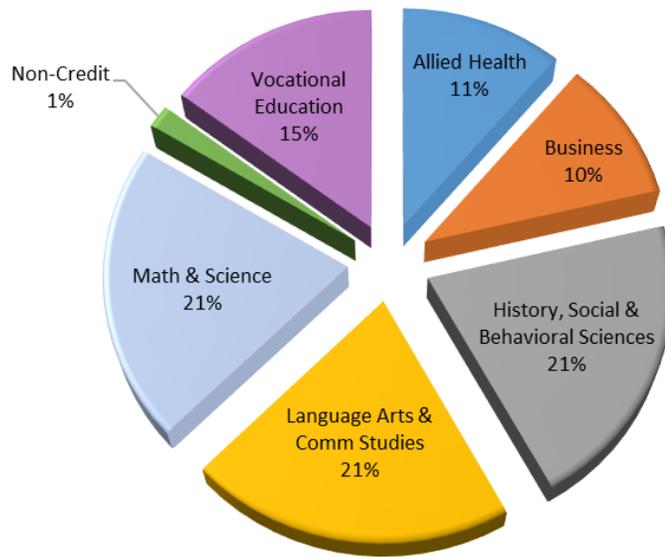
EMP Table 23: Fall 2014 Key Measures for the Program of Instruction, Excluding In-service

Division	Net Sections	Seats	Seats/Sect.	WSCH	WSCH/Sect.	FTES
Allied Health Division	30	583	19.4	2122.2	70.7	70.74
Business	28	568	20.3	1911.9	68.3	63.73
History, Social & Behavioral Sciences	57	1289	22.6	3905.4	68.5	130.18
Language Arts & Comm Studies	60	1192	19.9	3912.9	65.2	130.43
Math & Science	37	871	23.5	3974.7	107.4	132.49
Non-Credit	14	198	14.1	303.6	21.7	10.12
Vocational Education	31	683	22.0	2793.9	90.1	93.13
Grand Total	257	5384	20.9	18924.6	73.6	630.82

Source: Palo Verde College Office of Institutional Research, analysis by Cambridge West Partnership, LLC

The divisions of the College were used to determine percentage shares of the WSCH attendance. As the chart below illustrates, three divisions each account for 21% of the WSCH in fall 2014: Math & Science, Language Arts & Communication Studies, and History, Social & Behavioral Sciences. The departments that are part of the Vocational Education Division contribute 15% of the WSCH followed by the Allied Health Division (11%) and the Business Division (10%). These figures *do not* include the in-service training sections.

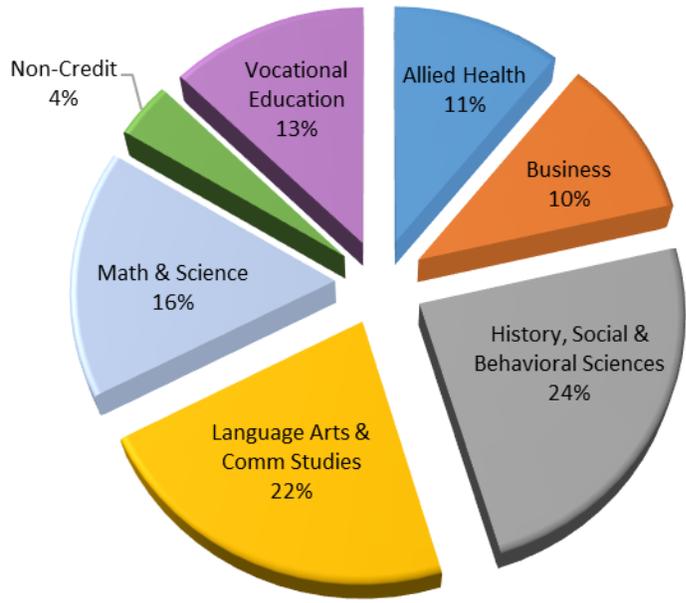
Chart 7: Fall 2014 Distribution of Attendance WSCH, Excluding In-service



Source: Palo Verde College Office of Institutional Research, analysis by Cambridge West Partnership, LLC

The divisions of the College were also used to determine percentage shares of the enrollments. As illustrated in the following pie chart, the History, Social & Behavioral Sciences division has the greatest portion of the enrollments at 24% followed closely by Language Arts & Communication Studies division with 22% of the enrollments. The Math & Science division has 16% of the enrollments followed by the Vocational Education (13%), Allied Health (11%), Business (10%) and non-credit (4%) divisions.

Chart 8: Fall 2014 Distribution of Enrollments, Excluding In-service



Source: Palo Verde College Office of Institutional Research, analysis by Cambridge West Partnership, LLC

During the fall 2014 baseline term, the College offered 178 different courses spread across the seven divisions as noted below. The Allied Health division offered the greatest number of courses at 48, which was 27% of the total. Of those 48 courses, 24 were offered through in-service training. History, Social & Behavioral Sciences and Language Arts & Communication Studies offered 35 and 31 courses, respectively.

EMP Table 24: Fall 2014 Distribution of Distinct Courses

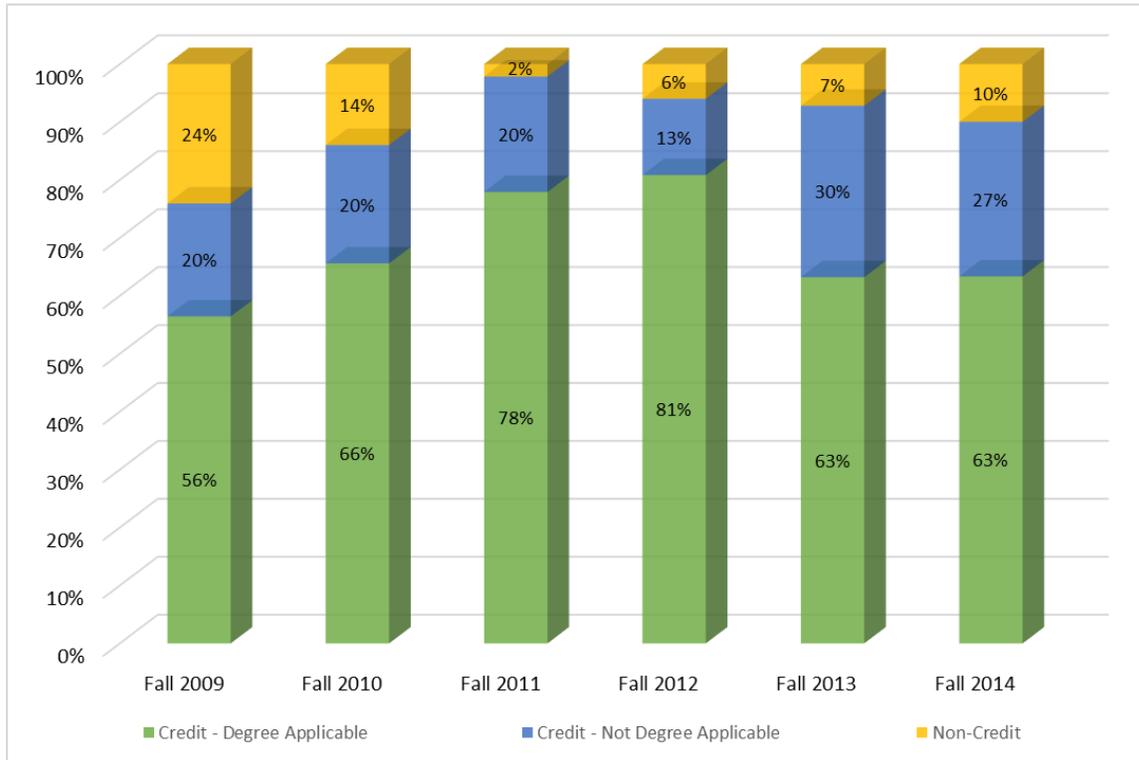
Divisions	Count of Courses	% of Courses
Allied Health	48	27.0%
Business	11	6.2%
History, Social & Behavioral Sciences	35	19.7%
Language Arts & Communication Studies	31	17.4%
Math & Science	19	10.7%
Non-Credit	8	4.5%
Vocational Education	26	14.6%
<i>Total Distinct Courses</i>	<i>178</i>	

Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

Of the 178 courses offered at all locations, 26 courses accounted for just over 50% of all fall term enrollments. Most of those enrollments were in the fire science technology and adult basic education disciplines.

The portion of the sections offered that are credit degree-applicable courses has increased by 6.91% over the past six fall terms while the portion of credit but not degree-applicable sections has increased by 7.18%. The portion of the sections offered that are noncredit has decreased by 14.09% during the same time period.

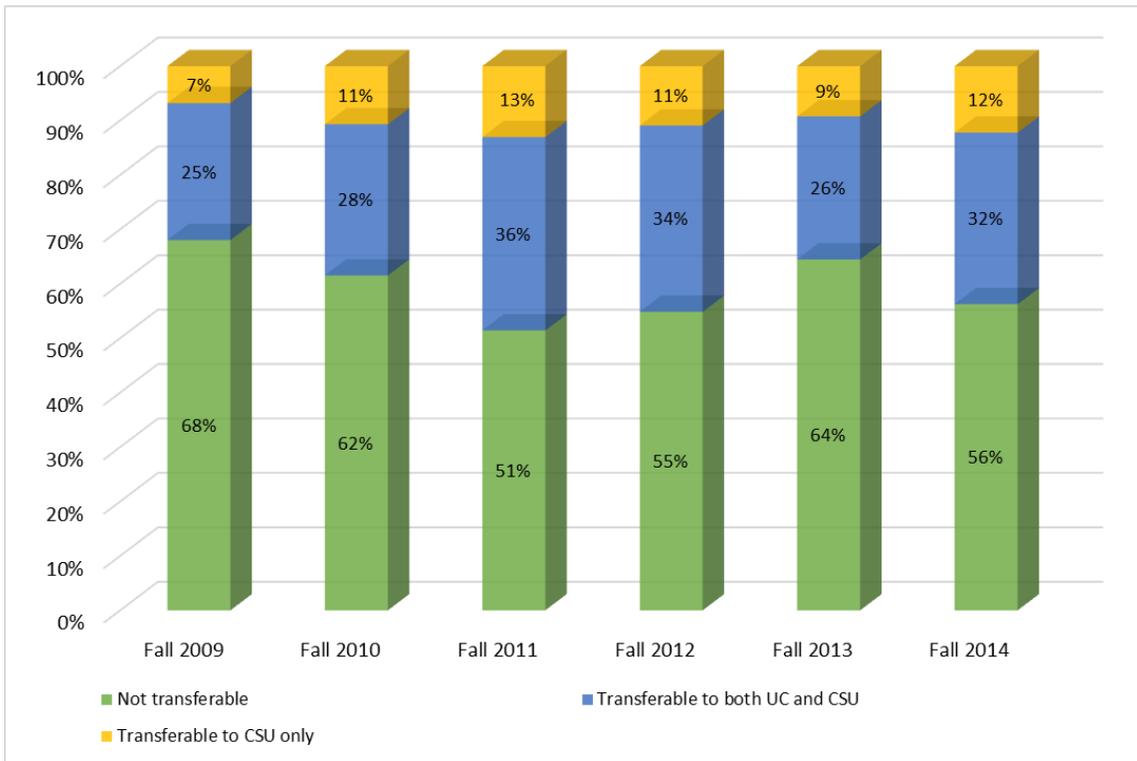
Chart 9: Fall Class Offering Trends by Credit Status



Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

With respect to transfer status, the trend in the portion of scheduled classes that are transferable to both the University of California (UC) and the California State University (CSU) has increased by 7% while the curriculum that transfers only to CSU has increased by 5% over the last six fall terms. Nontransferable course offerings have dropped by 12%.

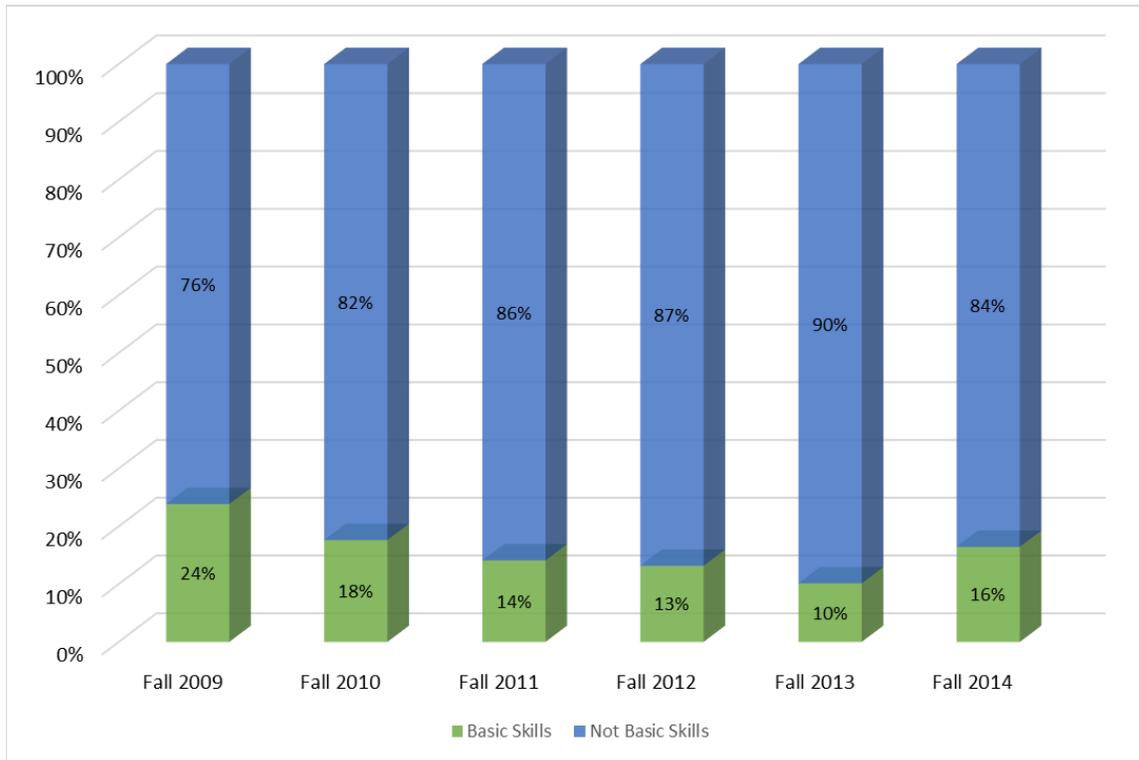
Chart 10: Fall Class Offering Trends by Transfer Status



Source: California Community College Chancellor’s Office Data Mart; analysis by Cambridge West Partnership, LLC

In fall 2009, 76.14% of the sections offered were not basic skills courses. In fall 2014 that number increased by 7.4% to 83.54%. This means that the number of basic skills sections offered decreased by 7.4% over the same time period.

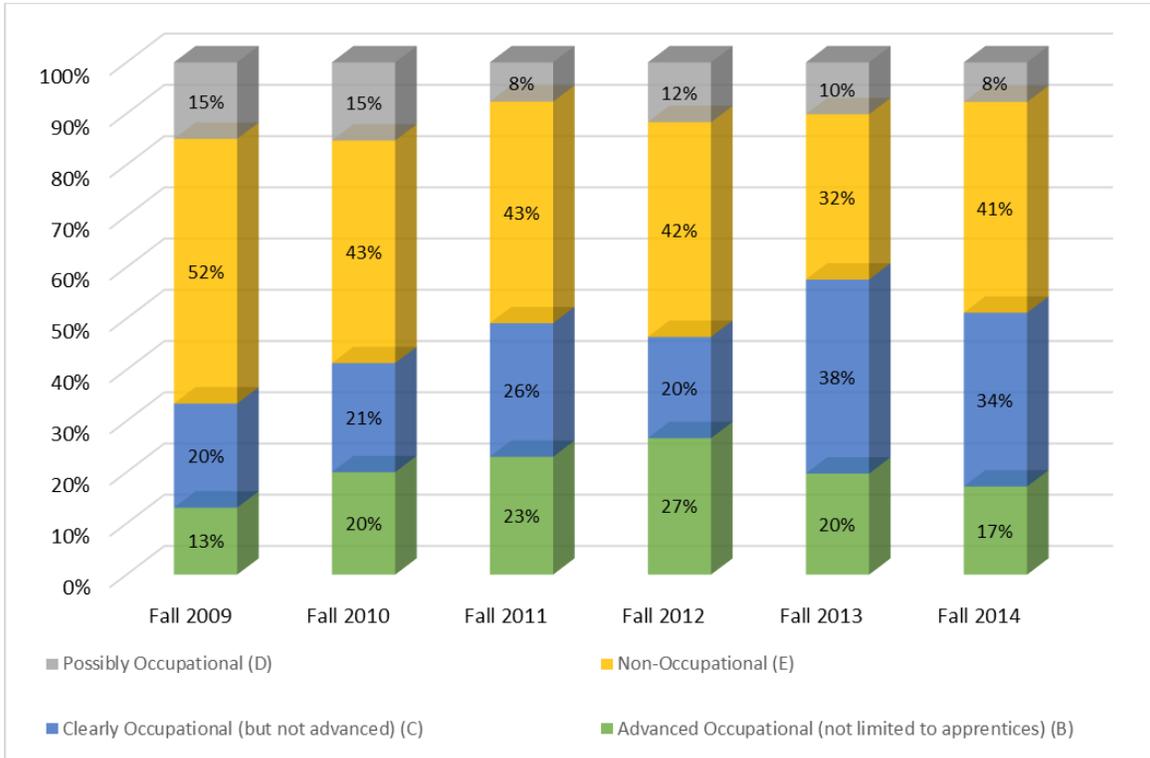
Chart 11: Fall Class Offering Trends by Basic Skills Status



Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

The Student Accountability Model (SAM) coding system can be used to categorize the College curriculum, separating courses into CTE and non-CTE categories. The SAM coding of courses also distinguishes among different kinds of career and technical education (CTE) courses. On average the CTE offerings represent 46% of the offerings while the non-CTE classes comprise 32% to 52% of the sections scheduled from fall 2009 to fall 2014. In fall 2014, CTE classes made up 51.13% of the section offerings while non-CTE classes made up 41.15%.

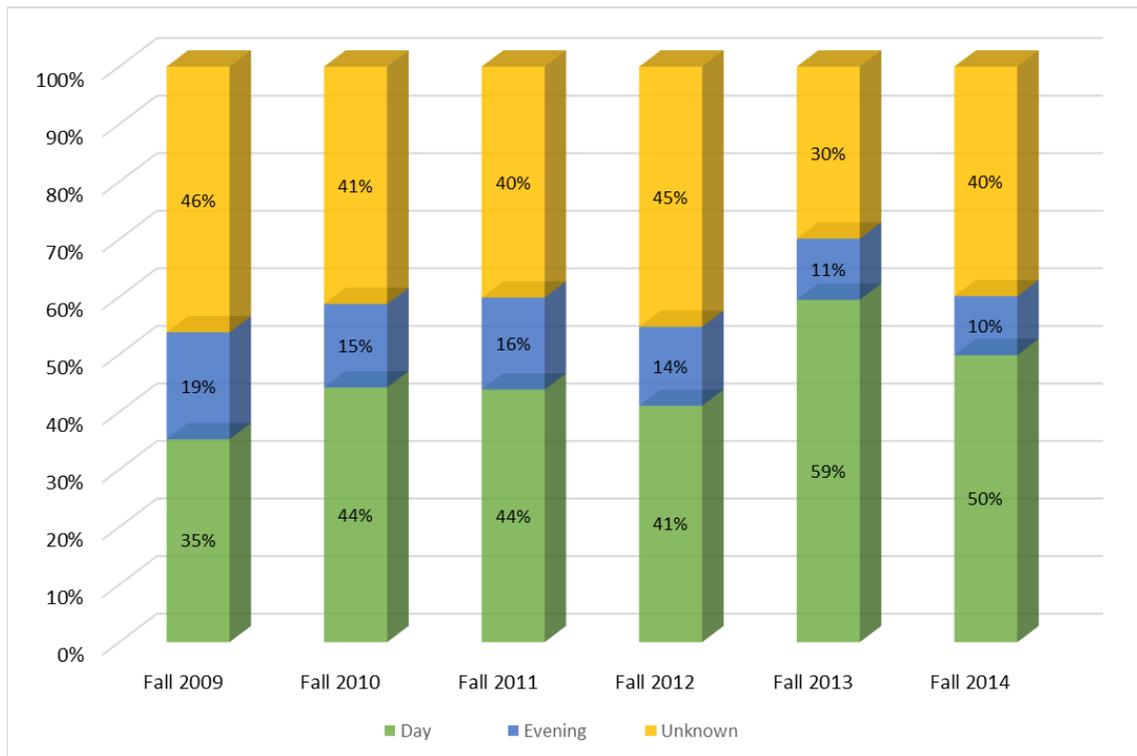
Chart 12: Fall Class Offering Trends by SAM Code Status



Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

On average, the number of daytime classes has exceeded the number of “to be arranged” (TBA) classes over the past six fall terms; daytime classes averaged 46% of the sections while TBA classes averaged 40% of the sections. The number of daytime classes, sections that began before 4:30 p.m., ranged from 35% to 59% and increased 15% from fall 2009 to fall 2014. TBA classes, the majority of which were distance education sections, made up 30% to 46% of the fall schedules but decreased 6% from fall 2009 to fall 2014. Evening classes, sections beginning after 4:30 p.m., made up the smallest portion of the fall schedules ranging from 10% to 19%, averaging 14% over the past six fall terms. Evening sections decreased 9% from fall 2009 to fall 2014.

Chart 13: Fall Class Offering Trends by Day vs. Evening Schedule



Source: California Community Colleges Chancellor’s Office Data Mart; analysis by Cambridge West Partnership, LLC.

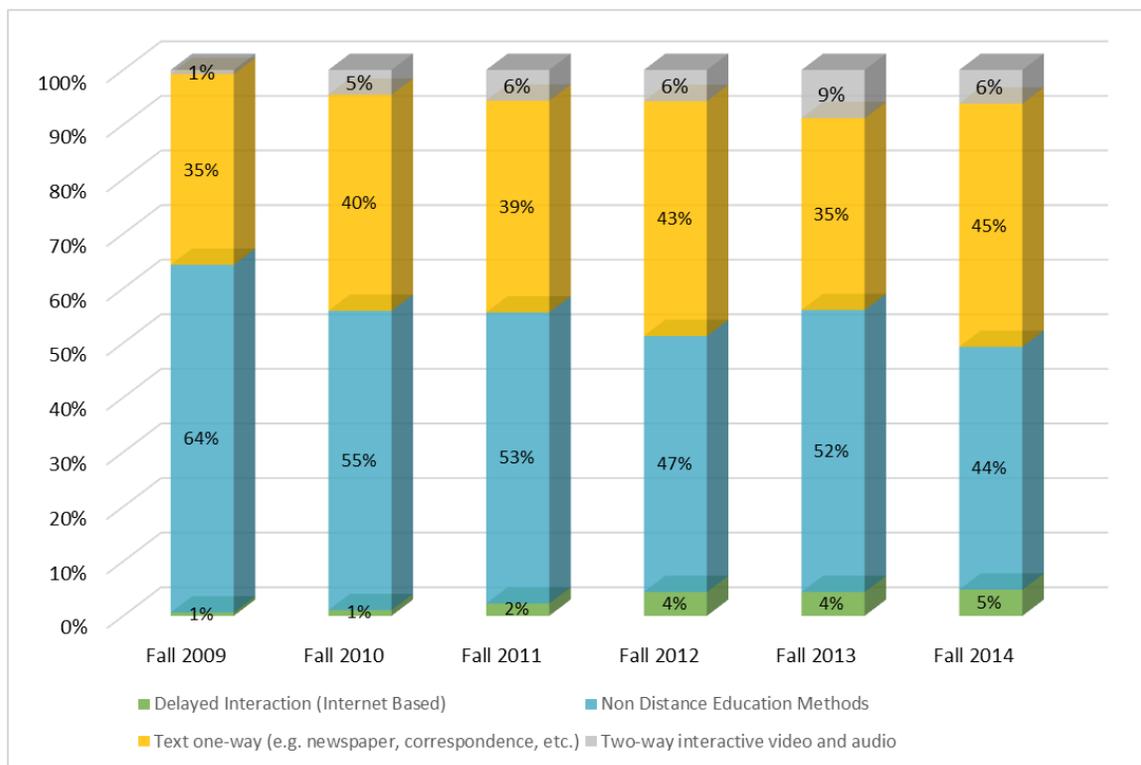
The college offers classes in multiple instructional formats in an effort to provide access to students who would not be able to attain a college education otherwise. In addition to traditional face-to-face classes, the college offers online, two-way interactive audio/video, and correspondence classes. Two-way video/audio classes are taught between the main campus and the Needles site. Classes that might typically be cancelled due to low enrollment when taught at only one campus are linked through video communication. Enrollments at both campuses are combined allowing the class to meet the minimum class size and avoid cancellation. In addition, disciplines for which it is difficult to find qualified instructors are taught through this method; only one qualified instructor is needed to teach students at both locations. FTES produced by two-way

audio/video and online sections are a small portion of the overall FTES and both instructional modes produce almost equal FTES. In fall 2014 two-way audio/video FTES exceeded online FTES by only 1%.

In 2001, PVC began offering correspondence courses to incarcerated students at the local state prisons. These courses are open to traditional students as well and are now offered at multiple correctional facilities throughout the state. Since the beginning of the program in 2001 to the current semester, the correspondence courses have become a major source of the college’s FTES. In fall 2014, 45% of the FTES were captured through correspondence education. In spring 2016, for the first time since the College started offering correspondence education, the FTES produced from this method surpasses the amount of FTES produced from traditional methods by 1%.

Over the past six fall terms, two-way video/audio and online FTES has increased by 5% and 4% respectively. Correspondence FTES has increased 10% while FTES produced through traditional methods has decreased by 20%.

Chart 14: FTES Trends by Method of Instruction



Source: California Community Colleges Chancellor’s Office Data Mart; analysis by Cambridge West Partnership, LLC.

Because of the multiple methods of instruction offered by the College, students who attend are not all from the District's service area. In terms of unduplicated headcount from fall 2010 through fall 2014, the majority of the students were only enrolled in in-service training. These students are typically firefighters enrolled in Fire Science courses and live all over the state of California. They made up 49% of the unduplicated headcount in the five-year span. 23% of the total unduplicated students from fall 2010 to fall 2014 were inmates, 27% were from the main campus in Blythe, the Needles Center and the Spring Street location and only .2% of the students were off-campus or only enrolled in online courses.



Day and Instructional Period Patterns

This Study explored the pattern of days of instruction in the fall 2014 term and the instructional periods in a day. Sections analyzed in this study included all credit sections that had a fixed meeting pattern and met on the PVC main campus and via ITV with the Needles Center. Correspondence, online, off-campus, ISA, non-credit and concurrent sections were excluded.

The table below shows the instructional periods utilized, by start time, during the fall 2014 term for all on-campus credit sections with a regular meeting pattern. There were 86 sections in this group that included weekly, daily, independent study and positive attendance census sections. Of the 86 sections, the most popular start time was 5:20 p.m. with 25 sections (29.07%) starting at this time. Other primary start times included 12:00 p.m. with 13 sections (15.12%) and 9:30 a.m. with eight sections (9.3%) starting at this time. Of the 86 sections in the group analyzed, over half (53.49%) were scheduled to start during these three primary start times. The primary start times discovered during this analysis are shown in the table below, and in all subsequent tables, in ***bold italics***.

EMP Table 25: Palo Verde College, Primary Start Times, fall 2014

Start Time	# Sect.	% Using Start Time
8:00 AM	5	
9:00 AM	1	
9:20 AM	1	
<i>9:30 AM</i>	<i>8</i>	<i>9.3%</i>
9:35 AM	1	
10:00 AM	3	
11:30 AM	2	
<i>12:00 PM</i>	<i>13</i>	<i>15.1%</i>
12:30 PM	2	
1:00 PM	4	
1:30 PM	5	
2:00 PM	4	
3:00 PM	2	
4:00 PM	1	
<i>5:20 PM</i>	<i>25</i>	<i>29.1%</i>
5:30 PM	2	
6:00 PM	5	
6:50 PM	2	
<i>Grand Totals</i>	<i>86</i>	<i>53.5%</i>

Source: Palo Verde College, Office of Institutional Research files; analysis by Cambridge West Partnership, LLC

Of the 86 sections analyzed, 39 (45%) were scheduled one day per week (M, T, W, Th, or F) and 45 (52%) were scheduled two days per week (MW or TR). Of the 39 sections offered one day per week, 24 (62%) were scheduled during two of the three determined primary start times; three (3) of these 24 sections started at 12:00 p.m. while 21 sections started at 5:20 p.m. Of the 39 sections offered one day per week, 54% began at 5:20 p.m., 8% began at 12:00 p.m. and no sections are scheduled at 9:30 a.m. Of the 39 one day per week sections, only six (6) sections were offered in the morning hours (start time before 12:00 p.m.); two (2) sections were offered on Wednesdays and four (4) sections on Thursdays. Two classes were offered on Friday for most of the day. These findings are demonstrated in the following four tables.

EMP Table 26: Palo Verde College, Primary Start Times by Meeting Days (One Day per Week), fall 2014

Monday Only Blocks			Tuesday Only Blocks		
Start Time	# Sect.	% Using Start Time	Start Time	# Sect.	% Using Start Time
<i>12:00 PM</i>	<i>1</i>	<i>9.1%</i>	<i>12:00 PM</i>	<i>1</i>	<i>16.7%</i>
1:00 PM	1		1:00 PM		
2:00 PM	1		2:00 PM		
3:00 PM	1		3:00 PM		
<i>5:20 PM</i>	<i>5</i>	<i>45.5%</i>	<i>5:20 PM</i>	<i>4</i>	<i>66.7%</i>
5:30 PM	1		5:30 PM		
6:50 PM	1		6:50 PM	1	
Grand Totals	11	54.5%	Grand Totals	6	83.3%

Wednesday Only Blocks			Thursday Only Blocks		
Start Time	# Sect.	% Using Start Time	Start Time	# Sect.	% Using Start Time
8:00 AM	1		8:00 AM	1	
9:00 AM			9:00 AM	1	
10:00 AM	1		10:00 AM	1	
11:30 AM			11:30 AM	1	
<i>12:00 PM</i>	<i>1</i>	<i>9.1%</i>	12:00 PM		
1:00 PM	1		1:00 PM	1	
2:00 PM	1		2:00 PM		
<i>5:20 PM</i>	<i>7</i>	<i>63.6%</i>	<i>5:20 PM</i>	<i>5</i>	<i>50.0%</i>
Grand Totals	12	72.7%	Grand Totals	10	50.0%

Source: Palo Verde College, Office of Institutional Research files; analysis by Cambridge West Partnership, LLC

Of the 45 sections offered two days per week, 23 (51%) were offered on Mondays and Wednesdays and 22 (49%) were offered on Tuesdays and Thursdays. Of the 23 Monday/Wednesday sections, 14 (61%) were scheduled during the three determined

primary start times; six (6) sections (26%) began at 12:00 p.m., five (5) sections (22%) began at 9:30 a.m. and three (3) sections (13%) began at 5:20 p.m. Of the 22 Tuesday/Thursday sections, eight (8) sections (36%) are scheduled during the three primary start times; four (4) sections (18%) began at 12:00 p.m., three (3) sections (14%) began at 9:30 a.m. and one (1) section (5%) began at 5:20 p.m. These findings are demonstrated in the following two tables.

EMP Table 27: Palo Verde College, Primary Start Times by Meeting Days (Two Days per Week), fall 2014

Mon/Wed Only Blocks			Tue/Thr Only Blocks		
Start Time	# Sect.	% Using Start Time	Start Time	# Sect.	% Using Start Time
8:00 AM	1		8:00 AM	1	
9:20 AM	1		9:30 AM	3	13.6%
9:30 AM	5	21.7%	9:35 AM	1	
11:30 AM			11:30 AM	1	
12:00 PM	6	26.1%	12:00 PM	4	18.2%
12:30 PM	1		12:30 PM	1	
1:00 PM			1:00 PM	1	
1:30 PM	3		1:30 PM	2	
2:00 PM	1		2:00 PM	1	
3:00 PM	1		3:00 PM		
4:00 PM			4:00 PM	1	
5:20 PM	3	13.0%	5:20 PM	1	4.5%
5:30 PM			5:30 PM	1	
6:00 PM	1		6:00 PM	4	
Grand Totals	23	60.9%	Grand Totals	22	36.4%

Source: Palo Verde College, Office of Institutional Research files; analysis by Cambridge West Partnership, LLC

This Study also explored the pattern of days of instruction and instructional periods of the irregularly scheduled sections. For this analysis the sections were broken down into segments. For example, a section that meets on a Monday beginning at 10:00 a.m. and on a Thursday beginning at 12:00 p.m. would have two segments due to the irregularity of the meeting pattern. A section may have multiple segments for various reasons other than the example provided, including multiple methods of instruction (lecture, laboratory, etc.) and multiple classrooms. For this analysis, there were 52 section segments, from 19 sections, analyzed for meeting days and start times.

The primary start times for these 52 segments were 7:19 a.m. and 9:35 a.m.; 37 of the segments (71%) began at these two times. These 37 segments accounted for portions of 14 of the 19 irregularly scheduled sections analyzed. These 14 sections are vocational classes that were scheduled during time blocks that aligned with the Palo Verde High

School bell schedule. The remaining five (5) sections included one (1) automotive technology class, one (1) biology class and three (3) nursing classes.

EMP Table 28: Palo Verde College, Primary Start Times (Irregular Meeting Patterns), fall 2014

Irregularly Scheduled- Primary Start Times		
Start Time	# Segments	% Using Start Time
6:00 AM	3	
7:19 AM	16	30.8%
8:00 AM	3	
8:19 AM	2	
9:00 AM	1	
9:35 AM	21	40.4%
10:35 AM	3	
12:00 PM	2	
4:00 PM	1	
Grand Total	52	71.2%

Source: Palo Verde College, Office of Institutional Research files; analysis by Cambridge West Partnership, LLC

EMP Table 29: Palo Verde College, Sections with Irregular Meeting Patterns, fall 2014

Section ID	Room	Days	Start Time	End Time
AUT-092-01	TB111	Sa	8:00 AM	9:00 AM
	TB111	Sa	9:00 AM	12:50 PM
AUT-100-01	TB111	F	7:19 AM	8:19 AM
	TB111	M	7:19 AM	9:19 AM
	TB111	W	7:19 AM	9:19 AM
AUT-101-01	TB111	F	9:35 AM	10:35 AM
	TB111	M	9:35 AM	11:25 AM
	TB111	W	9:35 AM	11:25 AM
AUT-110-01	TB111	Tu	7:19 AM	9:19 AM
	TB111	Th	7:19 AM	9:19 AM
	TB111	F	8:19 AM	9:19 AM
AUT-111-01	TB111	Tu	9:35 AM	11:25 AM
	TB111	Th	9:35 AM	11:25 AM
	TB111	F	10:35 AM	11:35 AM
BCT-101-01	TB117	F	7:19 AM	8:19 AM
	TB117	M	7:19 AM	9:19 AM
	TB117	W	7:19 AM	9:19 AM
BCT-110-01	TB117	Tu	7:19 AM	9:19 AM
	TB117	Th	7:19 AM	9:19 AM
	TB117	F	8:19 AM	9:19 AM
BCT-113-01	TB117	F	9:35 AM	10:35 AM
	TB117	M	9:35 AM	11:35 AM
	TB117	W	9:35 AM	11:35 AM
BCT-210-01	TB117	Tu	9:35 AM	11:25 AM
	TB117	Th	9:35 AM	11:25 AM
	TB117	F	10:35 AM	11:35 AM

Section ID	Room	Days	Start Time	End Time
BIO-101-01	CL216	Tu	12:00 PM	12:50 PM
	CL216	Th	12:00 PM	1:50 PM
CIS-130-01	CL130	F	9:35 AM	10:35 AM
	CL130	M	9:35 AM	11:35 AM
	CL130	W	9:35 AM	11:35 AM
CIS-131-01	CL130	Tu	9:35 AM	11:35 AM
	CL130	Th	9:35 AM	11:35 AM
	CL130	F	10:35 AM	11:35 AM
NUR-118-01	SITE	Tu	6:00 AM	2:00 PM
	CL224	Tu	8:00 AM	4:00 PM
NUR-118-02	SITE	F	6:00 AM	2:00 PM
	CL224	F	8:00 AM	4:00 PM
NUR-124-01	SITE	Tu	6:00 AM	1:15 PM
	SITE	W	4:00 PM	11:15 PM
WEL-100-01	TB110	F	7:19 AM	8:19 AM
	TB110	M	7:19 AM	9:19 AM
	TB110	W	7:19 AM	9:19 AM
WEL-101-01	TB110	F	7:19 AM	8:19 AM
	TB110	Tu	7:19 AM	9:19 AM
	TB110	Th	7:19 AM	9:19 AM
WEL-200-01	TB110	F	9:35 AM	10:35 AM
	TB110	M	9:35 AM	11:35 AM
	TB110	W	9:35 AM	11:35 AM
WEL-201-01	TB110	F	9:35 AM	10:35 AM
	TB110	Tu	9:35 AM	11:35 AM
	TB110	Th	9:35 AM	11:35 AM

Source: Palo Verde College, Office of Institutional Research files; analysis by Cambridge West Partnership, LLC

The findings of the Study indicate that just over half of the PVC course offerings (53%) were scheduled during three primary start times (9:30 a.m., 12:00 p.m. and 5:20 p.m.) leaving the early morning, mid-afternoon, and late evening blocks under-utilized. Of the 86 sections scheduled, only seven (7) sections (8%) began before 9:30 a.m. and only six (6) sections (7%) began after 9:30 a.m. but before 12:00 p.m. 18 sections (21%) began at various times after 12:00 p.m. but before 5:20 p.m.

Although this is a large percentage of the total sections, the irregularity of the start times caused overlaps with other sections, hindering student access. Only nine (9) sections (10%) began in the later evening hours, after 5:20 p.m. *These findings indicate that there may be a benefit to the College and its students to establish time blocks for scheduling, including blocks for early morning, mid-afternoon and late evening. These time blocks should then be consistently enforced to provide the best access for students.*

As discussed above, the College calendar is built on a nominal 18-week term. For attendance reporting to the State the official term length is 17.5 weeks. The common

three unit or three-lecture hour per week class is taught three days a week for a 50-minute period each day or two days a week for a 75-minute period each day. Both patterns produce three weekly contact hours (WCH) because the total weekly contact time is divided by a 50 minute “class hour” that *excludes* passing time. With a fall 2014 campus average of 18 students per class on census day, the typical class yielded 54 weekly student contact hours or WSCH (18 students * 3 WCH). When the WSCH is converted into full-time equivalent student (FTES) units used to claim apportionment, the following formula is used for most classes:

$$FTES = (WSCH * 17.5) / 525$$

The typical class generated 1.80 units of FTES $((54 * 17.5) / 525)$.

Most community colleges in the State have switched to a compressed term calendar, often with term lengths of 16 weeks that include the final exam period. That switch changes the instructional schedule patterns and the arithmetic of the WSCH and FTES calculations.

In a 16-week compressed calendar, a typical three-credit (unit) class, for example, might be scheduled twice a week to meet from 8:00 to 9:25 am for a period of 85 minutes each day or 170 minutes in the week. The result is a WCH of 3.4 (170 / 50) rather than 3.0 in the current semester schedule. With an average of 18 students per class, the resulting WSCH becomes 61.2 (18 students * 3.4 WCH). The typical three-unit class would then generate 1.87 units of FTES $((61.2 * 16) / 525)$. While a fraction of additional attendance in the typical class may not appear to be a substantial gain, across all of the campus classes scheduled for the entire term, it could add up to considerable amount of additional FTES and income to the College.

The following table illustrates the comparison between the current calendar the College is using vs. a 16-week compressed calendar. The illustration assumes an enrollment of 20 students in the typical three lecture contact hour a week class taught face-to-face on the campus.

EMP Table 30: Calendars, Instructional Periods, and College Income Illustration

Current Calendar		Weekly Contact			Weekly Student	Full-Time Equiva-	
Days	Start	End	Hours (WCH)	Enroll	Cont. Hrs. (WSCH)	lent Students (FTES)	Income
M & W	8:00	9:15	3.0	20	60	2.00	\$9,274
16-Week Compressed Calendar		Weekly Contact			Weekly Student	Full-Time Equiva-	
Days	Start	End	Hours (WCH)	Enroll	Cont. Hrs. (WSCH)	lent Students (FTES)	Income
M & W	8:00	9:25	3.4	20	67.5	2.25	\$10,433
Differences							
			Additional			Additional	
Days	Additional Time		WCH	Enroll	WSCH	FTES	Income
none	10 minutes/meeting		0.4	none	7.5	0.25	\$1,159

Source: Cambridge West Partnership, LLC

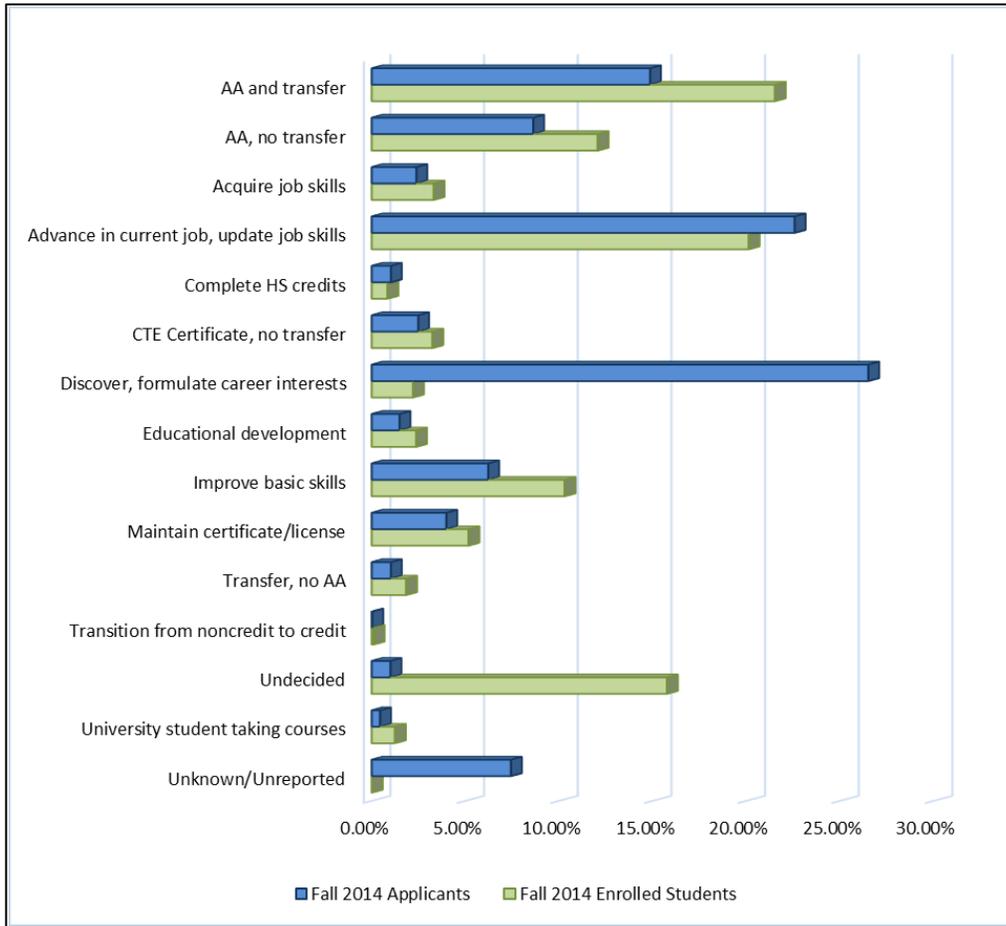
Students Who Attend the College

Students enroll in the College with hopes and dreams to pursue their goals in life. Sometimes those goals are not well formulated or adequately informed at the start of the college experience, but the matriculation process can assist students to navigate the curriculum as they traverse through higher education.

The chart below reflects the initial goals reported on the application for admission to Palo Verde College in the fall 2014 semester along with the goals of those students who actually enrolled. There were a total of 4,120 applicants and a total of 3,002 students who actually enrolled; 72.9% of the applicants enrolled in at least one class during the fall 2014 semester. The majority of the students who submitted an application intended on discovering/formulating career interests (26.5%). This category saw the biggest reduction when analyzing the smaller number of students who actually enrolled in the fall 2014 semester where only 2.2% reported their goal as discovering/formulating career interests. Applicants who wished to advance in their current job and/or update their job skills made up 22.6% of the total applicants while 14.9% intended on obtaining an Associate's degree and then transferring to a university. The majority of those students who actually enrolled intended on obtaining an Associate's degree and then transferring (21.5%). 20.1% intended on advancing in their current job and/or updating their job skills (down from 22.6% of those who applied), 15.8% were undecided (up from 1%), 12.1% intended on obtaining an Associate's degree without transferring (up from 8.62%) and 10.3% wished to improve their basic skills (up from 6.21%).

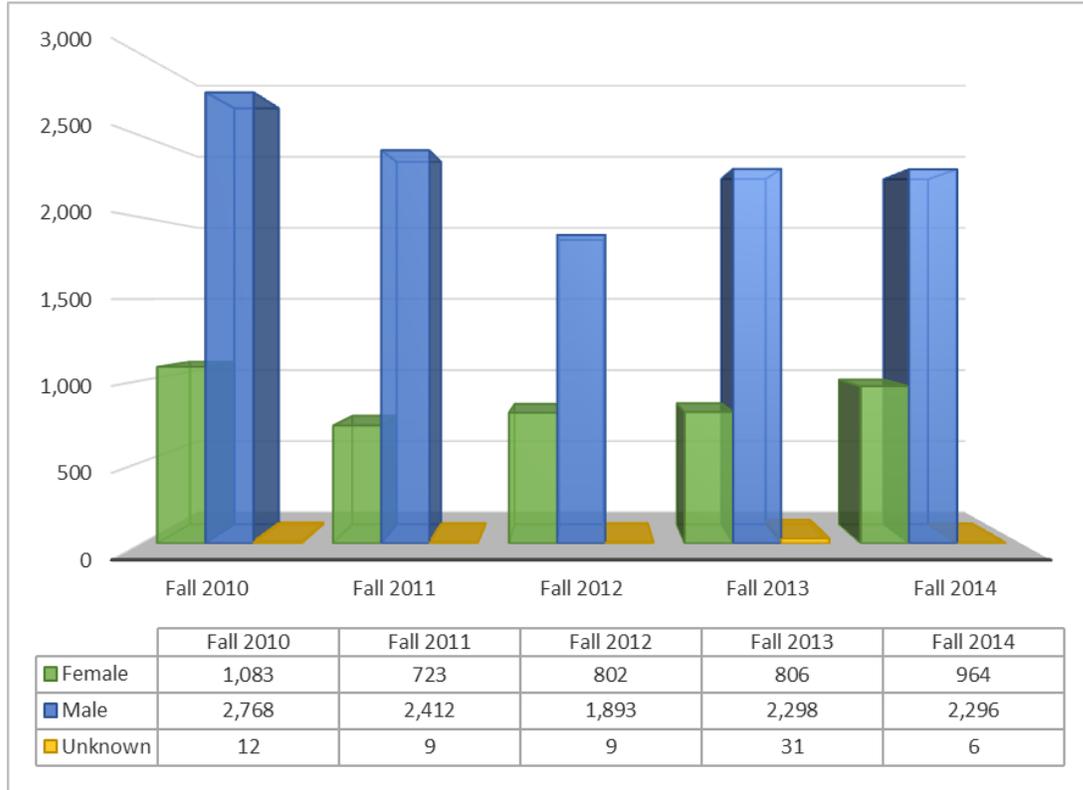


Chart 15: Fall 2014 Term Student Goal Trends



Source: California Community Colleges Chancellor’s Office Data Mart; analysis by Cambridge West Partnership, LLC.

Chart 16: Fall Term Distribution by Gender



Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

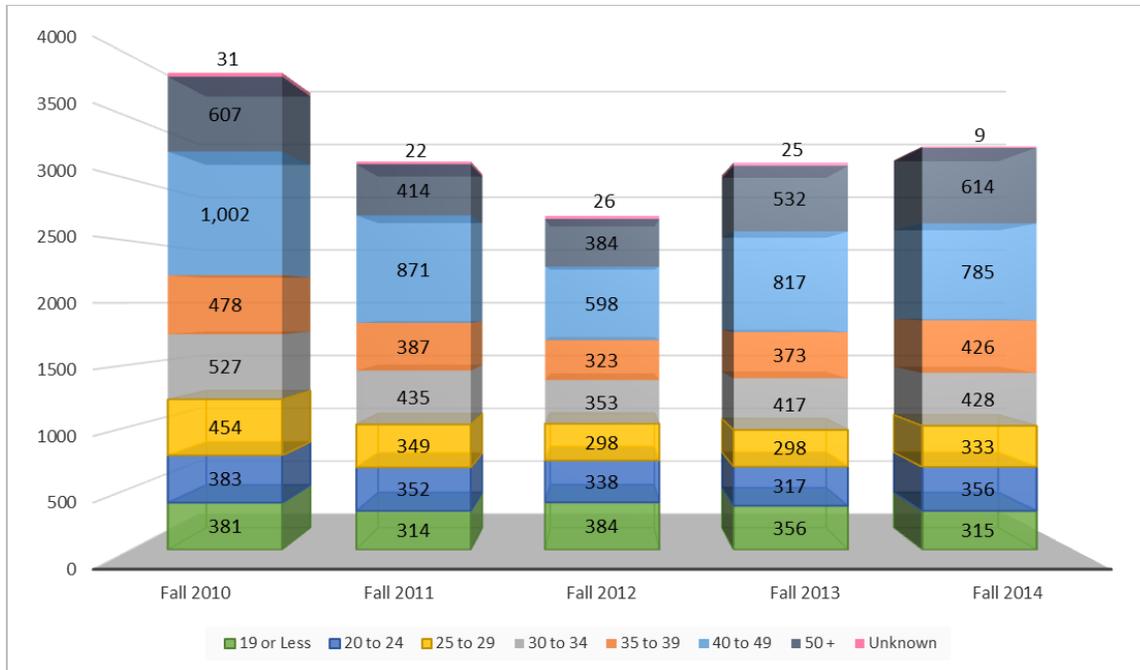
It is important to note that a large portion of the students at PVC are inmates or are enrolled in Fire Science courses through in-service training. Of the 3,266 fall 2014 students, 31.75% are inmates while 36.62% are students who were only enrolled in Fire Science courses.

Including all enrolled students, the number of male students at PVC greatly exceeds the number of female students. Over the past five fall terms, the male student population made up 70-77% of the total student population while the female students made up 23-30%. On average, males accounted for 72.41% of the student population, females accounted for 27.17% and .42% was unknown. Fall 2014 shows that 29.5% of the students were females, 70.3% were males and .2% was unknown/unreported.

However, of the 964 female students in fall 2014, 37.76% are inmates or Fire Science students, while 81.14% of the 2,296 males fall into these two categories. By removing the inmate students and the students who were only enrolled in Fire Science courses from the total, the distribution by gender changes drastically; making PVC's student population resemble other community colleges with more females than males. At PVC, with the exclusions 58.08% of the students are females and 41.92% are males.

Over the past five fall terms, the largest population of students at PVC, based on age, are the 40 to 49-year-old age group. The five-year average for this group is 25.28% of the student population, followed by the 50+-age group at 15.83%. The remaining age groups are fairly close in size with 30 to 34-year-olds making up 13.41% of the student population, followed by 35 to 39-year-olds with 12.33%. The 19 or less, 20 to 24, and 25 to 29-year-old age groups make up 10.86%, 10.84% and 10.75% of the population, respectively.

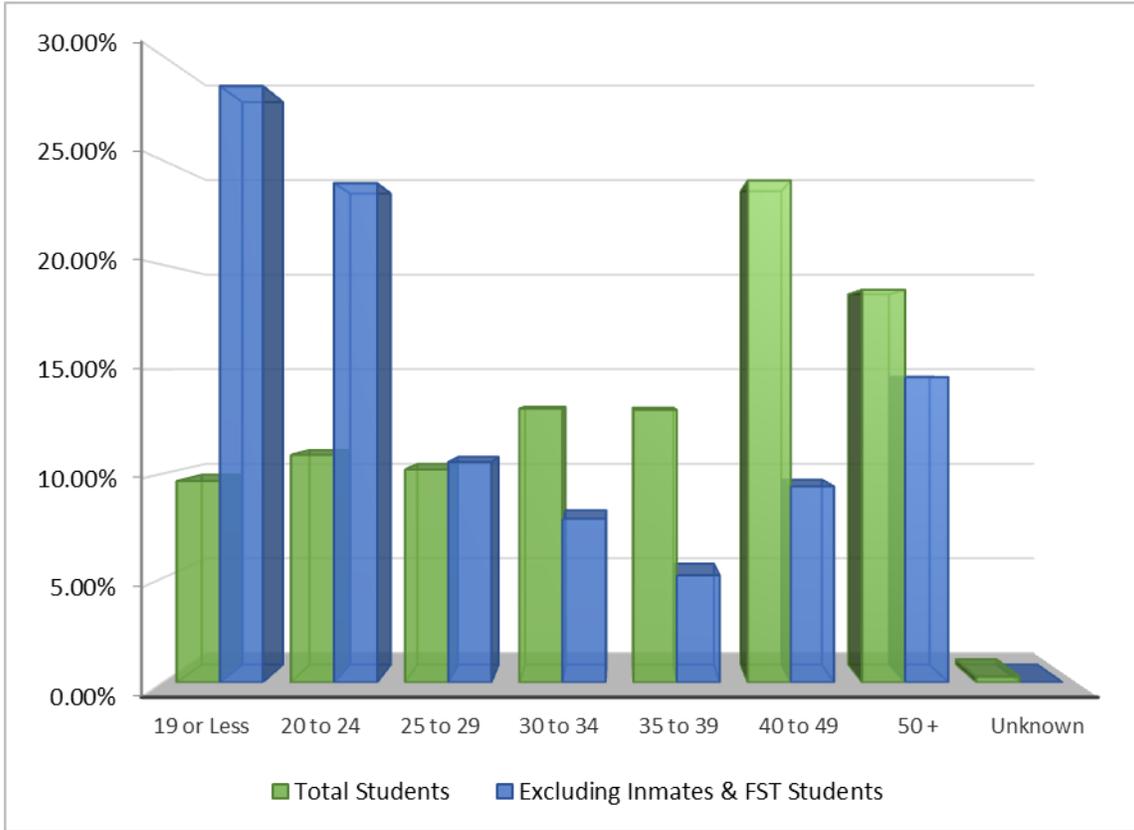
Chart 17: Fall Term Distribution by Age Group



Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

As with the gender distribution study, it is important to note how the large number of inmate students and students who only enrolled in Fire Science courses impact the age group distribution. By removing the inmate students (1,037) and the students enrolled only in Fire Science courses (1,196) from the fall 2014 unduplicated headcount (3,266), the age distribution for the remaining students changed drastically. The largest population is now the 19 or less age group with 28.56% followed by the 20 to 24-year-old age group with 23.91%. The 40 to 49-year-old age group dropped from 24.04% of the fall 2014 headcount to 9.39%. The following graph demonstrates the fall 2014 distribution by age group and compares the total unduplicated headcount for fall 2014 and the unduplicated headcount for fall 2014 excluding inmates and students who only enrolled in Fire Science courses.

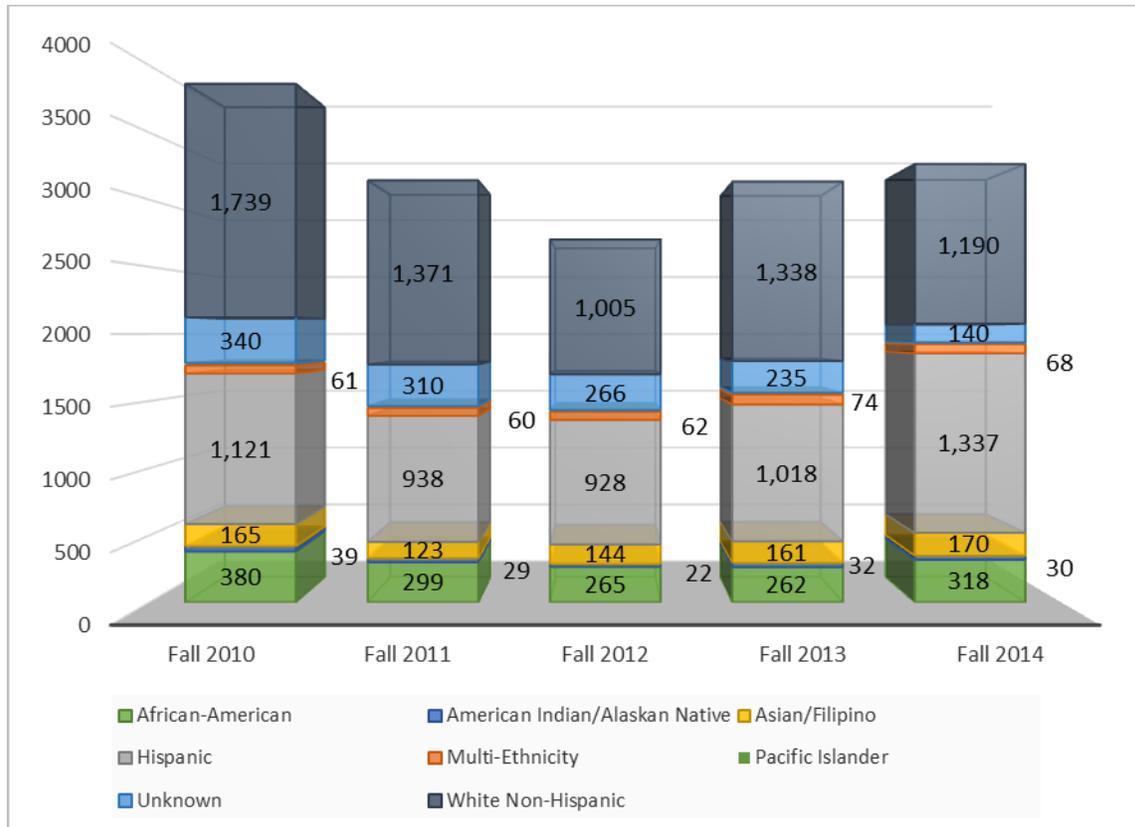
Chart 18: Fall Term Distribution by Age Group, Excluding Inmates and FST Students



Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

The largest group of students, based on ethnicity, was the White Non-Hispanic group. This group made up 41.23% of the student population based on an average of the 2010 to 2014 fall terms, with the Hispanic group following at 33.16%. The third largest group at 9.46% was African-Americans. 8.01% of the population had an unknown/unreported ethnicity. Asian/Filipino, Multi-Ethnic, American Indian/Alaskan Native and Pacific Islander groups followed with 4.74%, 2.02%, .94% and .45% of the population, respectively.

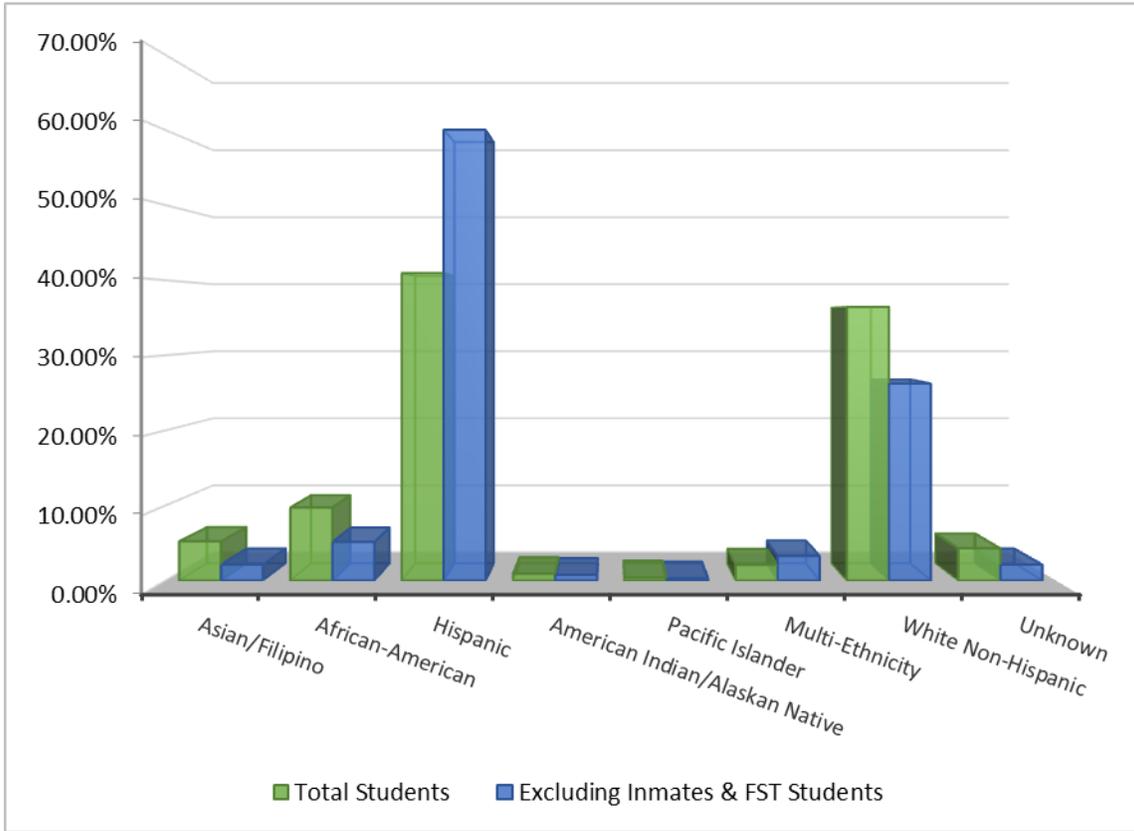
Chart 19: Fall Term Distribution by Race/Ethnicity



Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

Removing the inmate students and students who only enrolled in Fire Science courses impacts the distribution by race/ethnicity. In fall 2014, Hispanic students made up 40.94% of the total student population while White Non-Hispanic students made up 36.44%. By excluding inmates and Fire Science students, the percentage of Hispanic students increased to 60.02% of the population while the White Non-Hispanic percentage decreased to 26.23% of the population. The graph below shows the fall 2014 distribution by all race/ethnic groups. The graph compares the fall 2014 total unduplicated headcount and the fall 2014 total unduplicated headcount excluding inmate students and students who only enrolled in a Fire Science course.

Chart 20: Fall Term Distribution by Race/Ethnicity, Excluding Inmates and FST Students

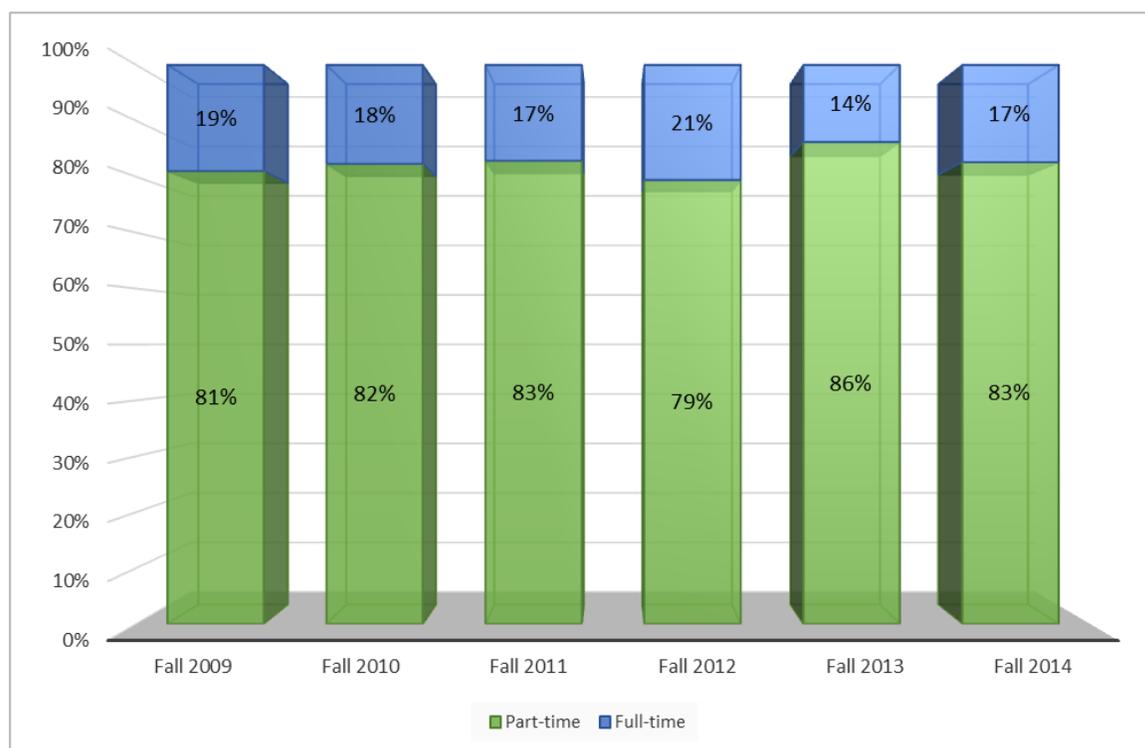


Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

The majority of the students at Palo Verde College enrolled in credit classes attend on a part-time basis, *completing* less than 12 credit hours per term. On average, during the 2009 to 2014 fall terms, 82% of the students completed a unit load of less than 12 units while 18% completed 12 or more units. Between fall 2009 and fall 2014, there was a 2% increase in the percentage of part-time students and a 2% decrease in the percentage of full-time students at PVC. Statewide averages show that 67% of the students were part-time while 33% were full-time.

On average over the 2009 to 2014 fall terms, 44% of the students at PVC completed fewer than 3 units. 15% of the students completed 3 to 5.9 units and 15% completed 6 to 8.9 units. On average 18% of the students *completed* a full-time load of 12 to 14.9 units. Across the state, the largest concentration of students falls into the 3-5.9-unit range at 25% followed closely by the 12-14.9-unit range at 23%.

Chart 21: Fall Term Full-time vs. Part-time Student Status Trends



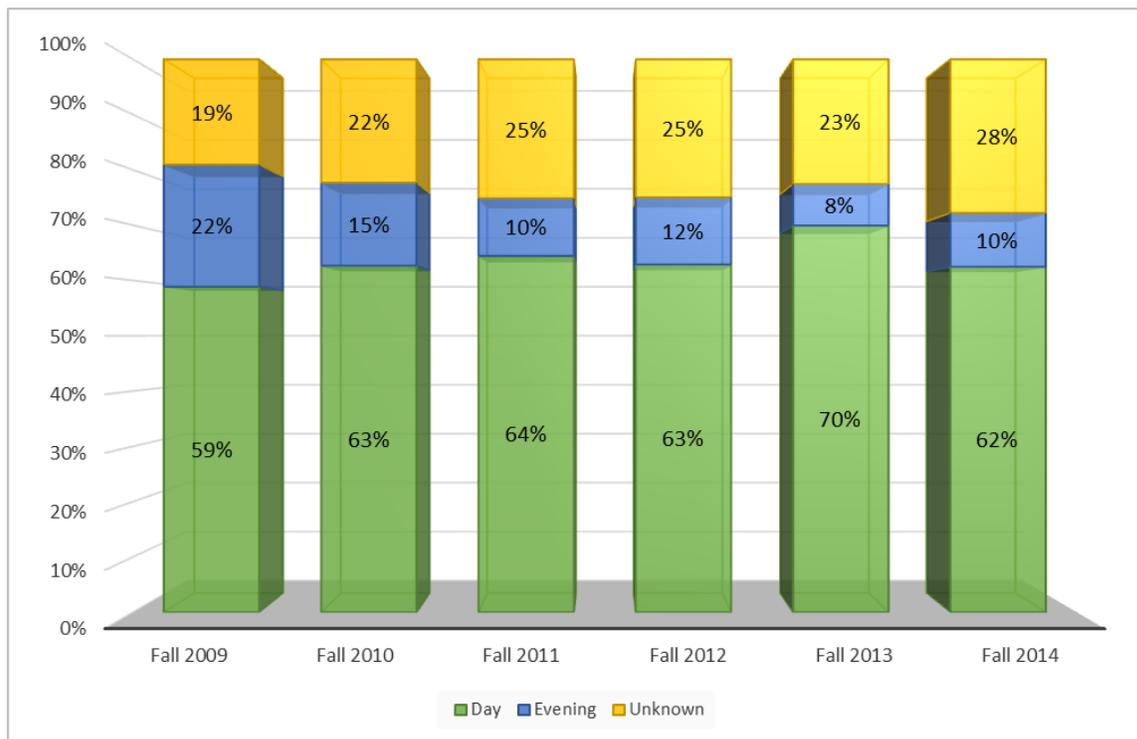
Source: California Community Colleges Chancellor’s Office Data Mart; analysis by Cambridge West Partnership, LLC.

In fall 2014, excluding inmate and fire technology students, 35.3% of the students attended full-time, 54.6% were attending part-time, and 10.15% were enrolled in non-credit classes.

On average, over the 2009 to 2014 fall terms, 64% of the students attended PVC during the day, 13% attended only in the evening and 24% were only enrolled in classes where the meeting times were TBA. Students that fall into the “Day” category may also have been enrolled in evening and TBA classes but are not counted in those categories. Evening classes were those that start at 4:30 pm or later.

The analysis of fall 2009 to fall 2014, shows the portion of the students attending only in the evening decreased by 12% while the day classes grew by 3%. The portion of students attending only TBA arranged classes increased by 9%. Statewide, the six-term average portion of students attending during the day and evening was 73% and 20% respectively; higher than the averages at PVC. The biggest difference between the statewide averages and PVC was in the TBA category. While the college saw an average of 25%, the average across the state in the same category was only 7%.

Chart 22: Fall Term Time of Attendance Trends

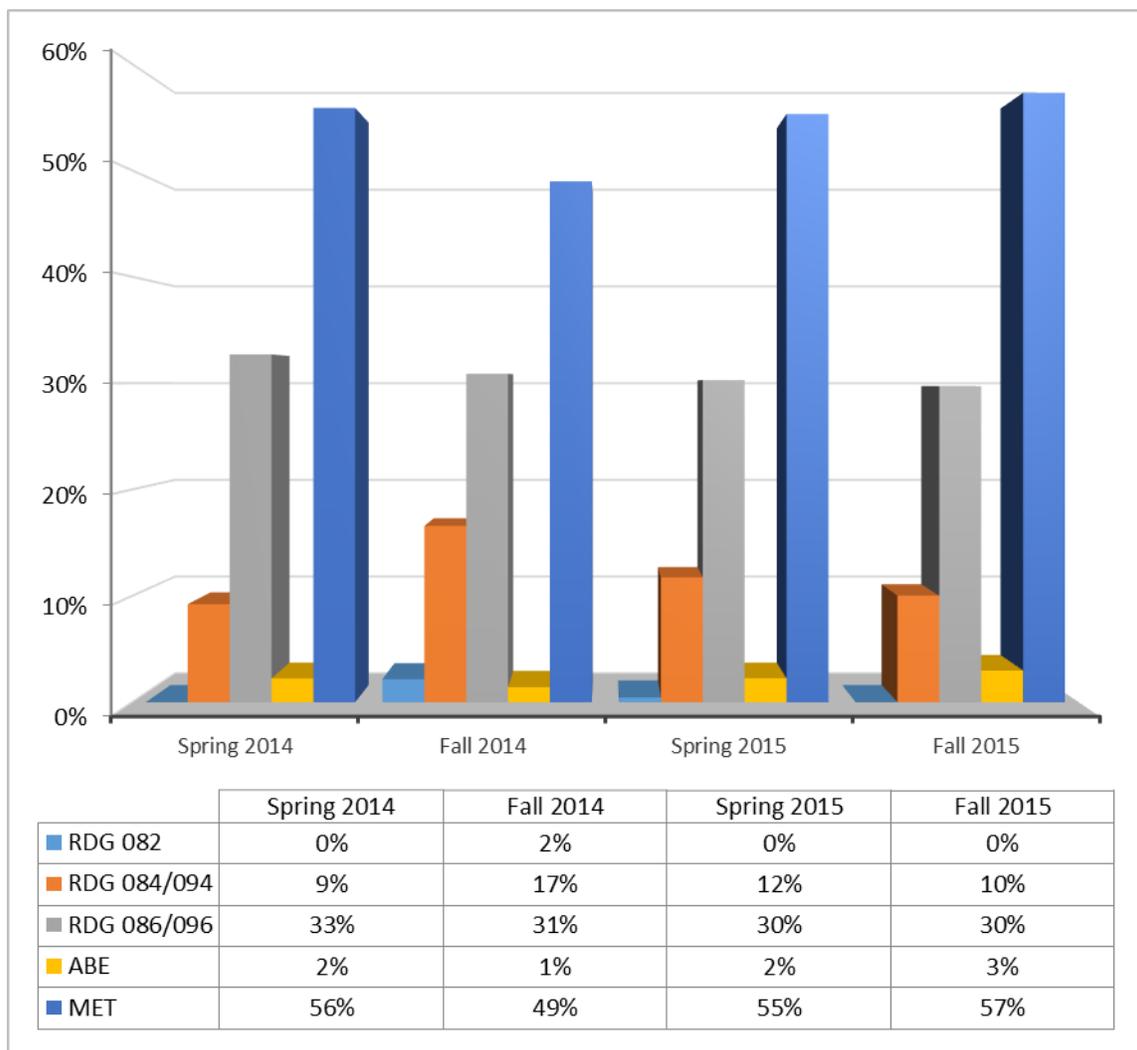


Source: California Community Colleges Chancellor’s Office Data Mart; analysis by Cambridge West Partnership, LLC.

The College provides placement assessment experiences for students in the disciplines of reading, English, and math. For those students participating in the placement experience from spring 2014 through fall 2015, the results draw a portrait of the extent to which the students were prepared for college-level curriculum.

Of the 3,072 reading placement exams, 54% of the students met the reading level required to place into transfer-level English. In the graph below, this group is represented by the term “MET.” In terms of those students placing below transfer level, 44% were placed into credit curriculum below the transfer level and 2% were placed into non-credit (ABE) curriculum to prepare them for the credit reading sequence.

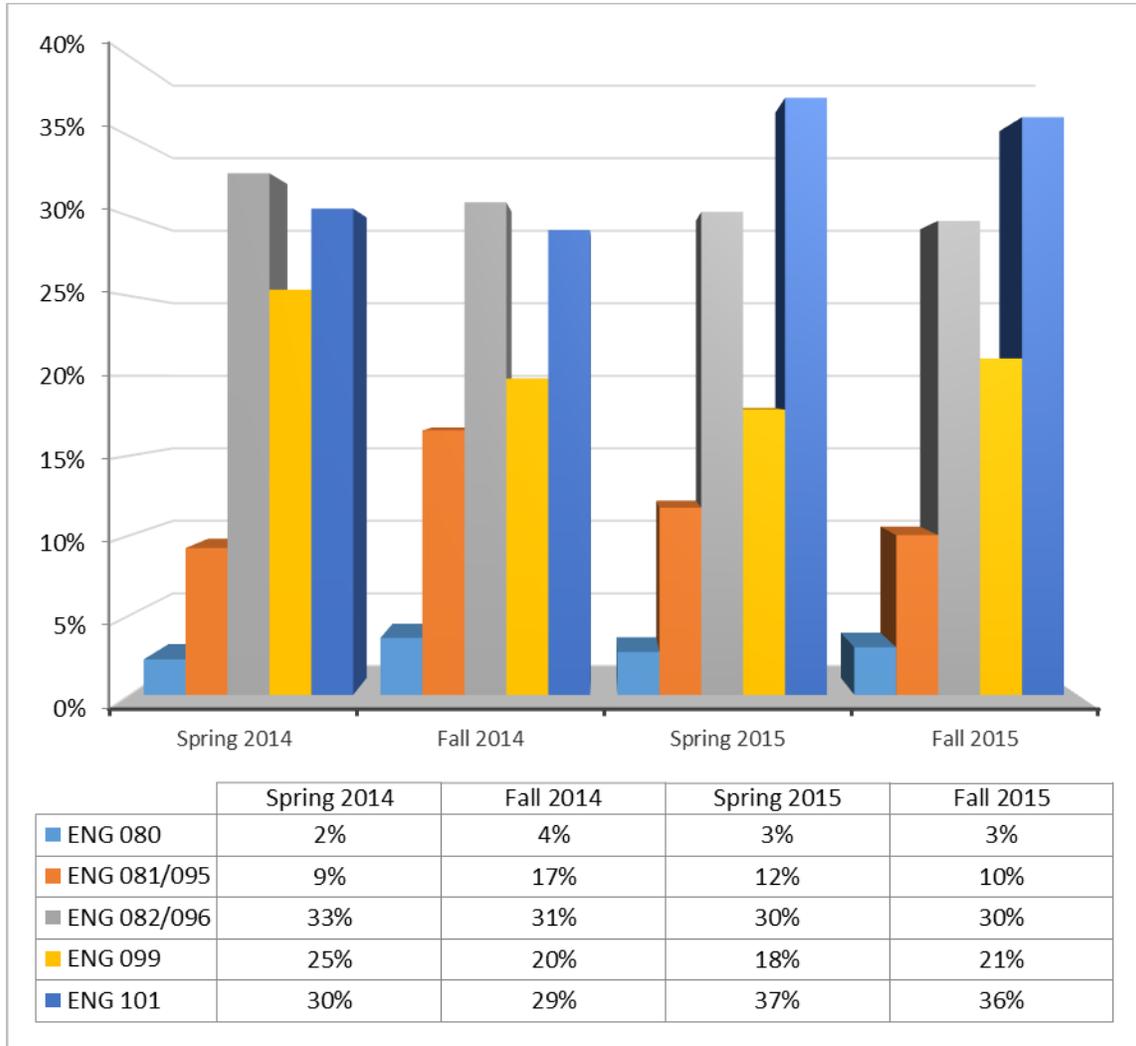
Chart 23: Reading Placement Results



Source: Palo Verde College Library and Office of Distance Learning; analysis by Cambridge West Partnership, LLC

Of the 3,072 placement exams in English, 66% of the students were placed into curriculum below the transfer level. In the graph below, ENG 101 is the transfer course.

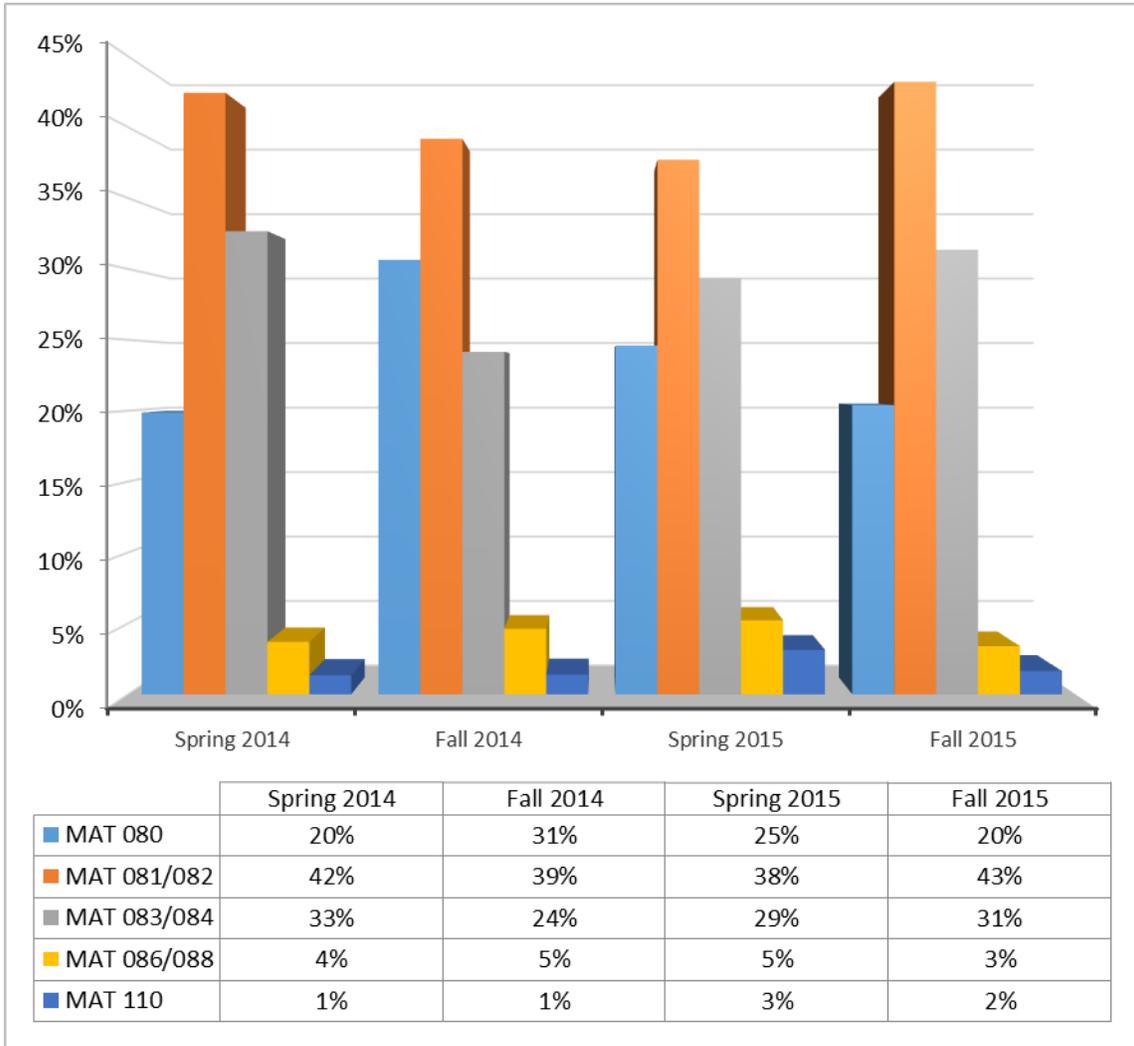
Chart 24: English Placement Results



Source: Palo Verde College Library and Office of Distance Learning; analysis by Cambridge West Partnership, LLC

Of the 2,936 math placement exams, 94% of the students were placed into curriculum below the transfer level. In the graph below, MAT 086/088 and MAT 110 are the transfer courses.

Chart 25: Math Placement Results



Source: Palo Verde College Library and Office of Distance Learning; analysis by Cambridge West Partnership, LLC

Non-Instructional College Resources to Support the Educational Mission Student Services

The College has established a number of student support offices that provide the services described in the following narrative.

Admissions and Records – The staff in Admissions and Records provide a variety of services to students. They offer assistance with application submissions, international student application submissions, registration, and high school concurrent enrollment processes. The staff in Admission and Records processes certificates and degrees awarded and provides transcripts, transcript evaluation, and enrollment verification.

Assessment – Assessment testing is available in the Library at any time during normal operating hours. Taking the assessment test ensures that students enroll in English, Reading, and Mathematics courses that best align with their current level of subject knowledge.

Associated Student Government – The Associated Student Government provides students an opportunity to engage in shared governance at the college. Membership also entitles students to discounts for admission to various events and for goods and services provided by local merchants.

California Work Opportunities and Responsibility to Kids (CalWORKs) – Students who are enrolled at the college, have young children, and are receiving cash aid qualify for support from the CalWORKs program. The program offers job development skills, workshops for employability, and work placement. The purpose of the program is to help students become independent and self-sufficient through education. The program also provides students with mentors and tutors, and may also assist with childcare, transportation and textbook expenses.

Counseling – Counseling assists students with education and career plans, enrollment, personal advising, graduation checks and transfer. All students are encouraged to see a counselor prior to enrolling for their first semester. Walk-in appointments are available but students are advised to call ahead and make an appointment to avoid waiting.

Disabilities Support Program and Services (DSP&S) – The DSP&S program is designed to assist students with physical, psychological or learning difficulties. Staff and counselors assist students by providing the individualized support necessary for them to achieve their goals.

Extended Opportunity Programs & Services (EOPS) /Cooperative Agencies Resources for Education (CARE)– The EOPS/CARE program offers assistance to students who are affected by language, social, and economic handicaps. Services include orientation, priority registration, peer counseling, transfer assistance and financial assistance for books, childcare and meals. The goal of the program is to provide qualified students with the resources necessary to be successful.

Financial Aid – The purpose of Financial Aid is to ensure that all students have access to a college education by assisting with the costs. Funds, available through federal, state and private programs, may be offered in the form of grants, loans and scholarships. The Financial Aid Office staff at the college is available to assist students with applying for, obtaining and understanding financial aid.

Tutoring – Tutoring services, available at the Student Learning Center, are offered to all students enrolled at the college. General tutoring is available in addition to specialized tutoring in math, ESL, American Sign Language and science courses. Students can also receive assistance with reading and writing assignments. The Student Learning Center is located in the Library on the second floor of the College Services Building.

Veteran’s Services – The College offers special assistance to veterans, dependents and reservists who are eligible for VA educational benefits. Office staff helps students in obtaining their benefits, provides information on benefits and services, assists with applications and forms, and refers students to other agencies and resources.

Virtual Bookstore – In 2011-2012, Palo Verde College closed its physical bookstore, previously located on the first floor of the College Services building. Students now have the ability to purchase their textbooks through Palo Verde’s Virtual Bookstore, offered through MBS Direct. Students can purchase new and used textbooks, purchase and download eBooks, and sell textbooks.

EMP Table 31: Palo Verde College Online Services

Service Area & Service	Online Interactivity	Notes
<i>Admissions & Records</i>		
Online application	X	
Registration services (enroll in classes, add/drop classes, view class schedule)	X	
Wait list access	X	
Contact information updates	X	
Make payments	X	
Student & faculty emails access	X	
International student application	X	
Printable forms	X	Students can print forms and submit in person, by mail or FAX
<i>Articulation</i>		
Articulation transfer agreements list/link	X	
Time availability	X	
<i>Assessment</i>		
Practice tests and test guides	X	
Testing schedule	X	

Service Area & Service	Online Interactivity	Notes
<i>Career Center</i> Virtual Career Planning CA Employment Development Dept. link Bureau of Labor Statistics Career Development Guide Career/Major exploration links Job Starter Career Guides O*NET Interview tips Salary potential/COLA calculator	X X X X X X X X X	Via act.org Palo Verde College publication Via external links
<i>Counseling</i> Online orientation/quiz Link to Student Ed Plan website	X X	Plan to incorporate by Fall 2016 Available in Spanish and for the hearing-impaired
<i>Disability Support Services</i> Basic information and agency links	X	
<i>Equal Opportunity Programs & Services (EOPS)/CARE</i> Basic information Orientation/quiz	X X	
<i>Veterans</i> Basic information and forms available	X	
<i>Financial Aid & Scholarships</i> Net calculator available; Apply for financial aid online Online scholarship application Forms	X X X X	Forms can be filled out online and printed for in person/mail submission
<i>Library</i> Online resources & catalog search	X	
<i>Online Instructional Supports</i> Online tutoring	X	
<i>Student Activities</i> Basic information College Facebook page	X X	External link/accessibility
<i>Student Accounts</i> Payment of fees	X	
<i>Student Bookstore</i> Order or rent texts online	X	
<i>Transfer Center</i> External transfer links available Transfer assistance links Four-year college/universities links IGETC/CSU Educational Plans	X X X X	Via ASSIST.org

Library

The Harry A. Faull Library and the Palo Verde College Student Learning Center are located on the second floor of the John O. Crain Student Services building and serve students, faculty and staff. The library is also open for use by community members. The library offers a variety of online subscription resources to students including digital versions of magazines, journals and newspapers, available 24/7 from any device with

Internet access. These subscription resources serve all students, including students from the Needles center. The library also offers books and audio-visual materials for borrowing by students and community members, and maintains a large percentage of textbooks for use in the library by students. The library lab houses twelve computers with Internet access and popular software programs. There are a student copier, printer and two study rooms available for student use.

The Student Learning Center, located inside the library since spring 2013, offers tutoring services in all subjects. The majority of tutoring sessions are for math, reading, English and the sciences. The Learning Center houses several computers for tutors and students to use. In fall 2015, all of the developmental reading courses and the majority of the developmental math courses had in-class tutors. In addition, one tutor began attending some of the remedial English courses during the fall 2015 semester. The goal of placing tutors in developmental courses is to provide a peer for students to consult with during lab and also outside of class. The librarian also places tutors in the classroom building when there is a tutoring lull in the learning center (no appointments or walk-ins for instance). Attendance software, Academia, is used to track attendance at the Center; tutees and tutors alike must sign in before the tutoring session ends. Appointments are also made through Academia, which alerts both tutor and tutee of appointments and also sends reminders of the appointment to both parties, hours in advance. Additionally, an online tutoring service (Brainfuse) is available for students to access 24/7.

Other services that are provided in the library include assessment and correspondence testing. For assessment testing, library employees check to make sure the student has a PVC student I.D., check for any prior assessment testing data, and follow the assessment testing rules set forth in the college catalog and student handbook. Correspondence test proctoring, a service provided for the correspondence students, came under the library department when the correspondence department was relocated last year. GED testing began during spring of 2015, but the testing was halted due to lack of staff in the fall 2015 semester. However, it is expected that when new staff is in place and trained the GED testing will continue.

Funding reductions over the last several years have posed significant challenges to the library and Learning Center services. The on-site book collection to become outdated because available funds are also used to purchase online subscriptions for the College's off-campus student population, including Needles and distance education students. Likewise, staffing reductions have created significant challenges. With the additional services now offered by the Library and Learning Center and the reduction in staffing, the ability to offer other services such as information literacy workshops and inmate student research requests has been severely hindered. In an effort to help stabilize the staffing and services, the college recently acquired two new part-time permanent library technicians to assist the Librarian who also functions as the Learning Center Coordinator.

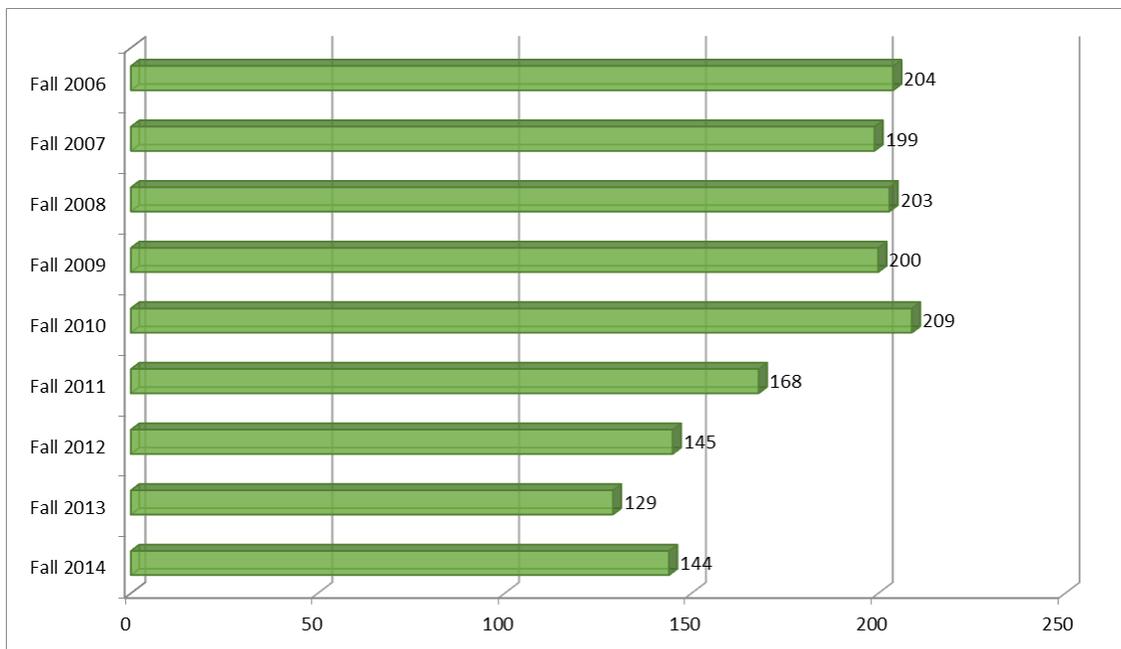
College-wide Staffing Patterns

The College has experienced a 29.41% *reduction* in the workforce headcount between fall 2006 and fall 2014. Fall 2010 saw the largest headcount at 209 employees. Between

fall 2010 and fall 2013 the College purposely reduced the number of employees with the headcount falling to 129 in fall 2013. As the financial situation of the College stabilized, there was an increase in employees. This was the case in fall 2014 when the headcount increased by 15 employees.

Between fall 2006 and fall 2014 there was a 33.3% *reduction* in educational administrators and a 24.2% *reduction* in classified staff. Full-time faculty saw a 15.4% *reduction*. Between the peak term of fall 2010 and fall 2014, the biggest *reduction* in employee headcount was from the classified staff at a decrease of 38.3%. All employee groups experienced an increase in headcount from fall 2013 to fall 2014 except for the classified staff, which lost another three employees.

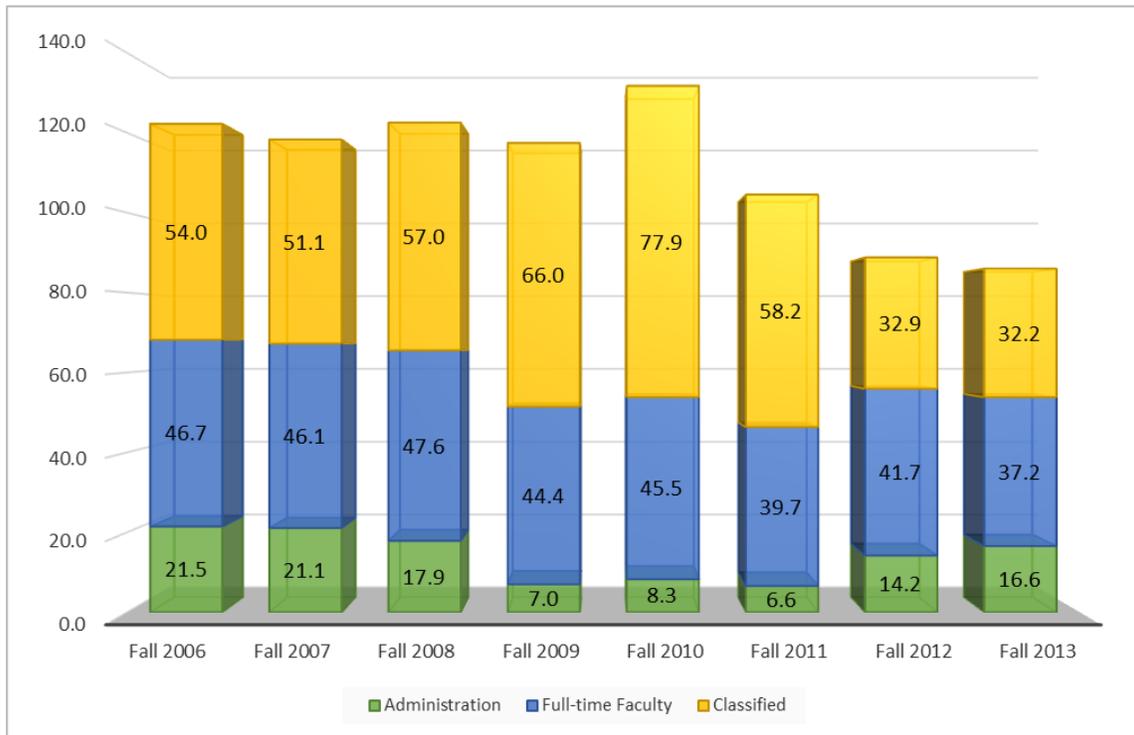
Chart 26: Employee Headcounts, Fall 2006 to Fall 2014



Source: California Community Colleges Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC.

From fall 2006 to fall 2013, the overall full-time workforce at PVC *declined*, expressed as units of full-time equivalency (FTE), an average of 33.1%. The FTE level of tenured faculty declined 20.3% while administration declined by 22.8% over the eight fall terms. However, the full-time equivalent (FTE) number of classified personnel decreased the most with a reduction of 40.4%.

Chart 27: Palo Verde College, Employee Groups by Full-time Equivalency



Source: Chancellor’s Office Data Mart, Annual Staff Data Report; analysis by Cambridge West Partnership, LLC

A second view of the employee headcounts, grouped by age ranges as of fall 2014, reveals that 33% of the educational administrators had reached the typical retirement age range, age 60 to 64. There are no educational administrators working beyond the typical retirement age range, age 65 to 69. In contrast, 18% of the tenured faculty members were within the typical retirement age range, and an additional 15% were working beyond the typical retirement age range. Over the next six years, an additional 9% of the full-time faculty (tenure track and tenured) will reach the typical retirement age.

The largest age group, at 30%, was the 18 to 34-age range of classified staff. Unlike administrators and full-time faculty, only 4% of the classified employees fell into the normal retirement age range, and another 4% were working beyond the normal age for retirement. From 2015-16 to 2020-21, only 6% of the classified staff will reach normal retirement age.

EMP Table 32: Employee Groups by Age Ranges, Fall 2014

Employee Category	Total Headcount	18 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70+
Academic, Temporary	55	18.18%		10.91%	12.73%	10.91%	16.36%	10.91%	9.09%	10.91%
Academic, Tenured/Tenure Track	33	3.03%	15.15%	9.09%	21.21%	9.09%	9.09%	18.18%	15.15%	
Classified	50	30.00%	8.00%	20.00%	14.00%	14.00%	6.00%	4.00%	4.00%	
Educational Administrator	6	16.67%	16.67%		16.67%	16.67%		33.33%		
Total Employee Headcount	144									

Source: Chancellor's Office Data Mart; analysis by Cambridge West Partnership, LLC

Given that 33% of the tenured faculty members (11 employees) were of retirement age or working beyond that normal time, it may be time for the College to consider priorities to guide the decisions about replacement personnel.

From 2006-07 to 2014-15, the college FTEF declined 36.25%, from 75.4 to 48.07. The following table demonstrates the change in FTEF over this time period for part-time and full-time faculty as well as each year's faculty obligation number.

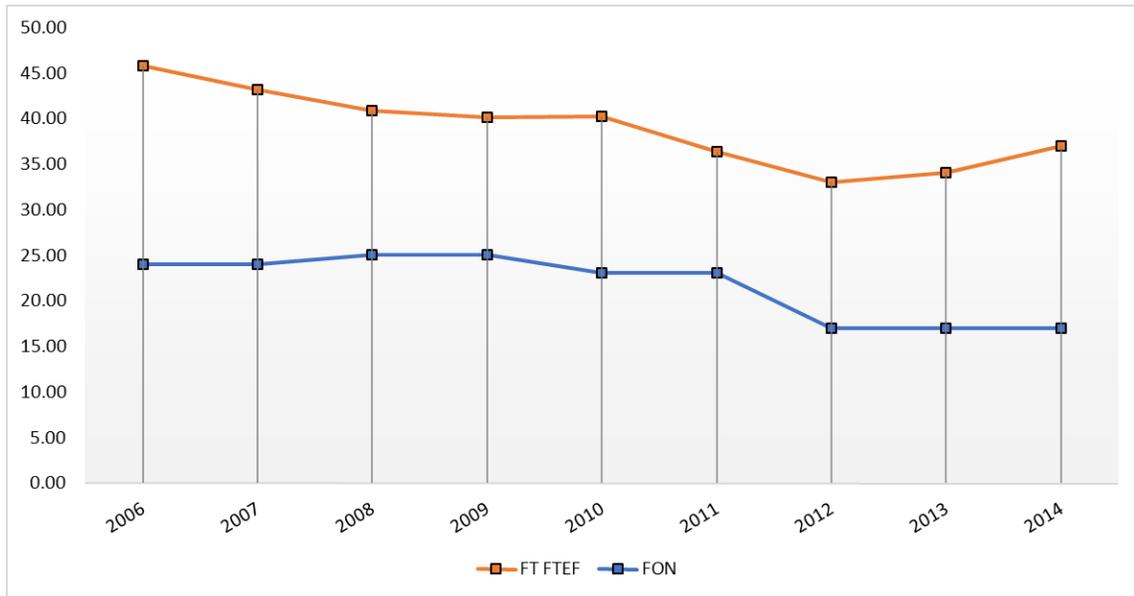
EMP Table 33: PVC, Fall Faculty Staffing 2006-2014

Full-time Equivalent Faculty (FTEF)								
Fall	FT Obligation	Difference (FT less PT)	Full-time (FT)	Part-time (PT)	Total	FT %	PT %	
2006	24.00	21.80	45.80	29.60	75.40	60.7%	39.3%	
2007	24.00	19.20	43.20	37.20	80.40	53.7%	46.3%	
2008	25.00	15.81	40.81	28.82	69.63	58.6%	41.4%	
2009	25.00	15.14	40.14	34.06	74.20	54.1%	45.9%	
2010	23.00	17.27	40.27	58.53	98.80	40.8%	59.2%	
2011	23.00	13.38	36.38	25.98	62.36	58.3%	41.7%	
2012	17.00	16.00	33.00	19.10	52.10	63.3%	36.7%	
2013	17.00	17.00	34.00	18.06	52.06	65.3%	34.7%	
2014	17.00	20.00	37.00	11.07	48.07	77.0%	23.0%	
<i>Average</i>	<i>21.67</i>	<i>17.29</i>	<i>38.96</i>	<i>29.16</i>	<i>68.11</i>	<i>59.1%</i>	<i>40.9%</i>	

Source: Chancellor's Office Fiscal Standards Unit, Faculty Obligation Number Reports; analysis by Cambridge West Partnership, LLC

Although there has been an overall decline in the number of full-time faculty during this time period, the following table demonstrates that the College consistently exceeded its annual faculty obligation (FON).

Chart 28: PVC Full-time Faculty Obligation

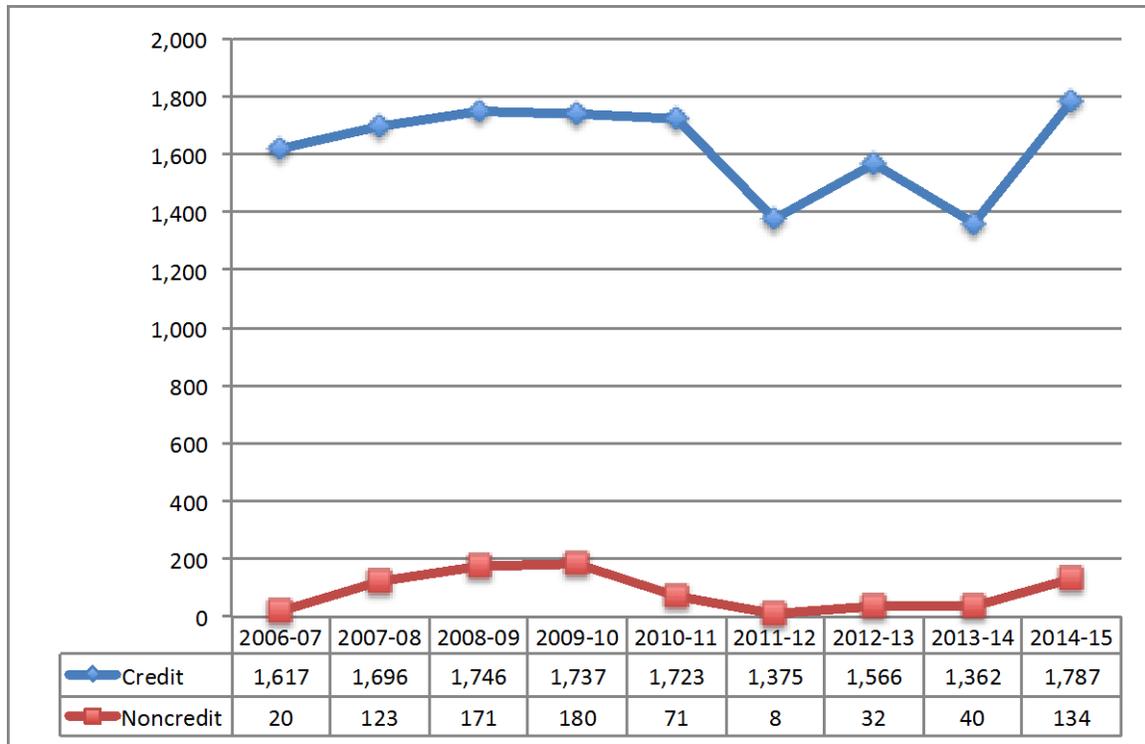


Source: Chancellor's Office Fiscal Standards Unit, Faculty Obligation Number Reports; analysis by Cambridge West Partnership, LLC

Budget

From 2006-07 to 2013-14 the annual FTES generated by the College *decreased* by 14.4%. Throughout this time, the College had no unfunded FTES. Starting in 2010-11 noncredit curriculum offerings were reduced for a period of four years and have yet to return to their high point in 2009-10. During 2014-15 the College actively and successfully pursued the goal of regaining lost FTES.

Chart 29: PVC Annual, Actual FTES Reported

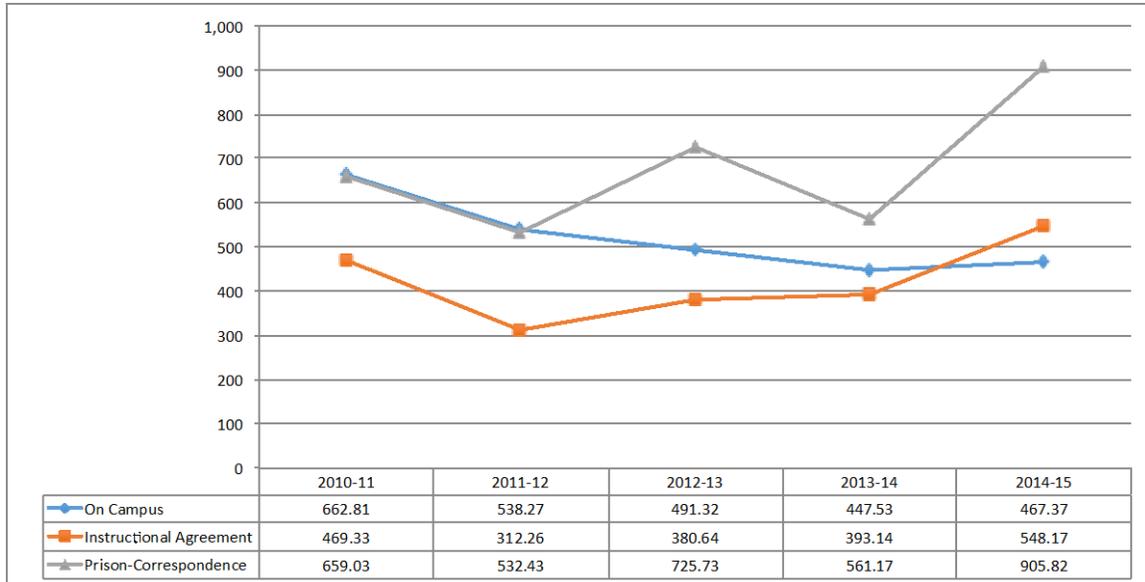


Source: California Community College Chancellor's Office, Fiscal Services Unit. *Reports of Recalculated Apportionment*; analysis by Cambridge West Partnership, LLC

The sources of FTES changed when the on campus offerings began accounting for less and the correspondence courses, that primarily serve incarcerated students, and in-service training, primarily to fire personnel, increased. Correspondence courses as a source of attendance and FTES have increased by 37% from 2010-11 to 2014-15. In-service classes as a source of attendance and FTES have increased by 17% over this period of time. The campus-based component has declined 30% from 2010-11 to 2014-15. Most (78%) of the on-campus classes are traditional face-to-face instruction with college-age students. A small portion, 11%, comes from two-way video and audio instructional television offerings between the main campus in Blythe and the Needles Center. Another small portion of the on-campus FTES, 10%, is generated by high school students who are dual enrolled at the College and at Palo Verde High School. These students are enrolled in the career and technical education programs of automotive technology and welding. The

College is in a long-run fiscally vulnerable position due to the decline in on-campus FTES.

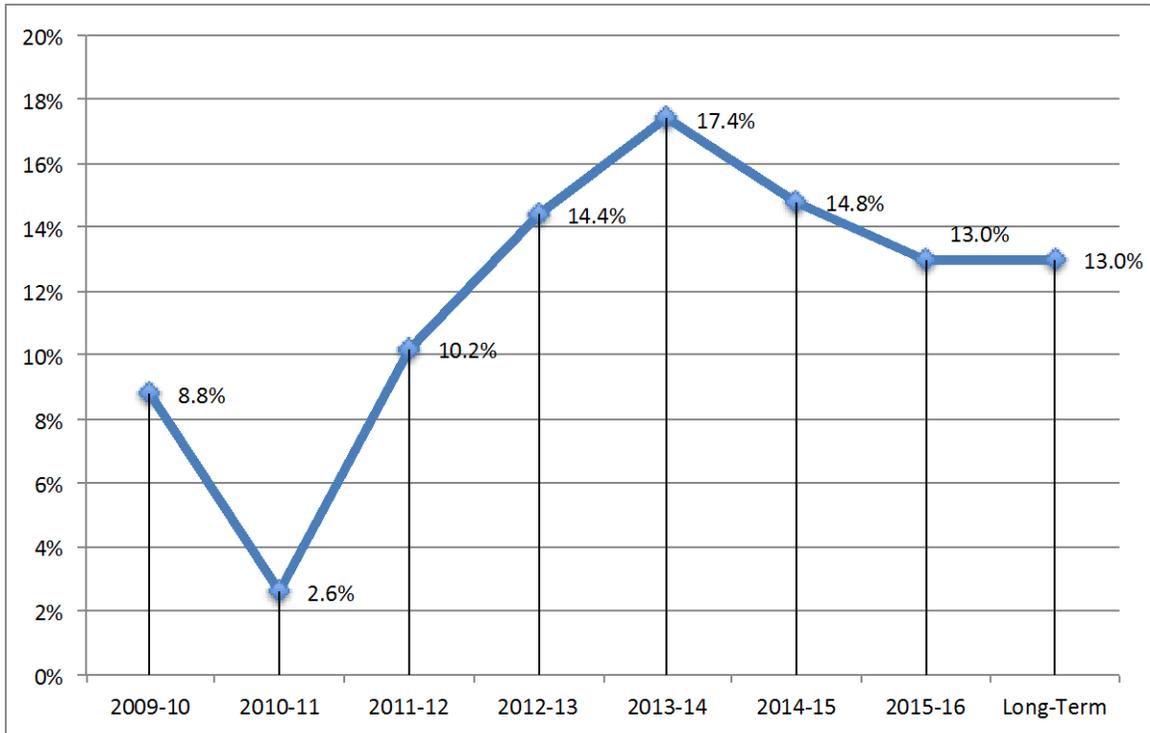
Chart 30: Sources of Annual FTES



Source: Palo Verde College Office of Admissions and Records; analysis by Cambridge West Partnership, LLC

The College was able to retain an 11.4% average ending balance from 2009-10 to 2014-15 as illustrated in the following chart. The ending balance has significantly improved since 2010-11. The 2015-16 and long-term percentages are estimates and goals.

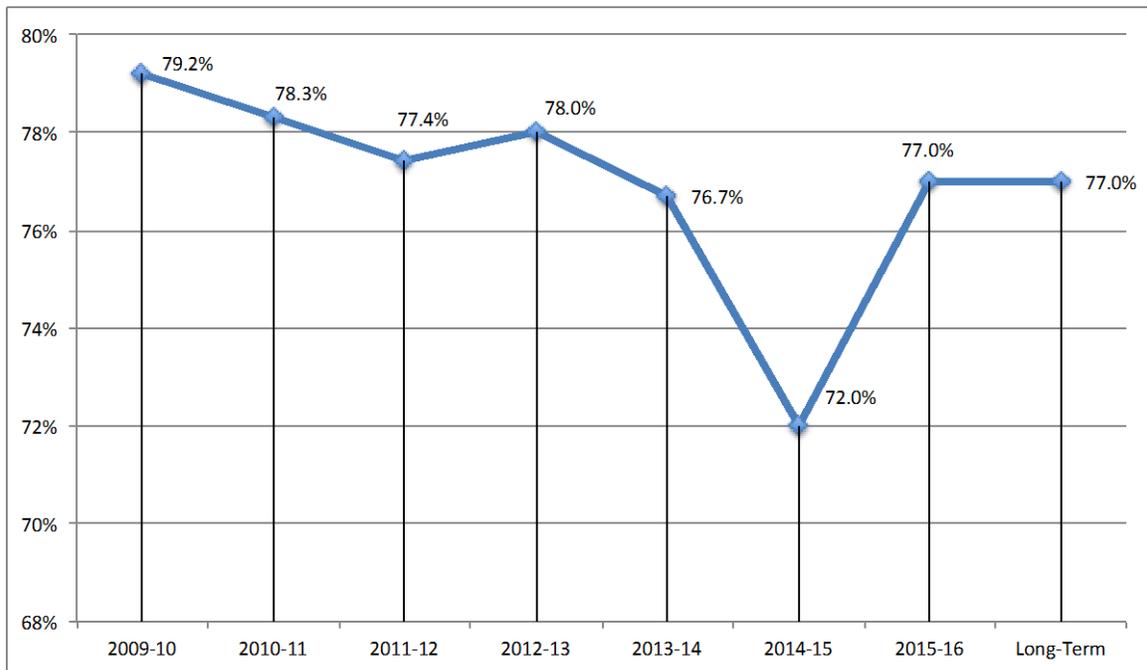
Chart 31: Ending Balance Amounts and As a Percentage of Total Expenditures



Source: California Community Colleges Chancellor's Office, Institutional Effectiveness web pages <https://misweb.cccco.edu/ie/DistrictRates.aspx>, retrieved on May 22, 2015. 2012-13 to 2014-15 data are from Palo Verde College, 2015-16 Adopted Budget page 5; analysis by Cambridge West Partnership, LLC

The College was able to maintain a 76.9% average of expenditures on salaries and benefits over the last six years as illustrated in the following chart. It remains to be seen if the College can continue to that average as the 2015-16 and long-term percentages are estimates and goals.

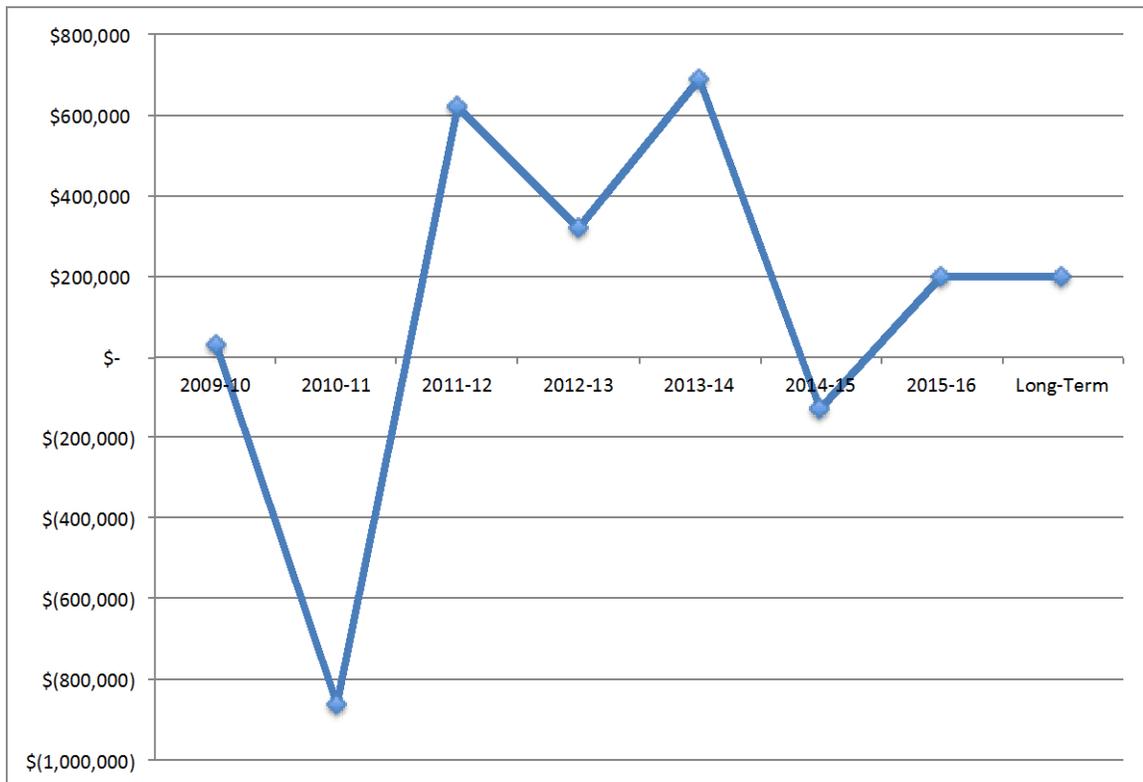
Chart 32: Salaries and Benefits As a Percentage of Unrestricted General Fund Expenditures



Source: California Community Colleges Chancellor's Office, Institutional Effectiveness web pages <https://misweb.cccco.edu/ie/DistrictRates.aspx>, retrieved on May 22, 2015. 2014-15 data are from Palo Verde College, 2015-16 Adopted Budget page 8; analysis by Cambridge West Partnership, LLC

The annual operating excess or deficiency reflects the net increase or decrease in general fund balances. The 2010-11 academic year was a particularly difficult and economically stressful year. The 2015-16 and long-term values are estimates and goals. The College was able to maintain a positive (excess) average of \$110,276 over the last six years as illustrated in the following chart.

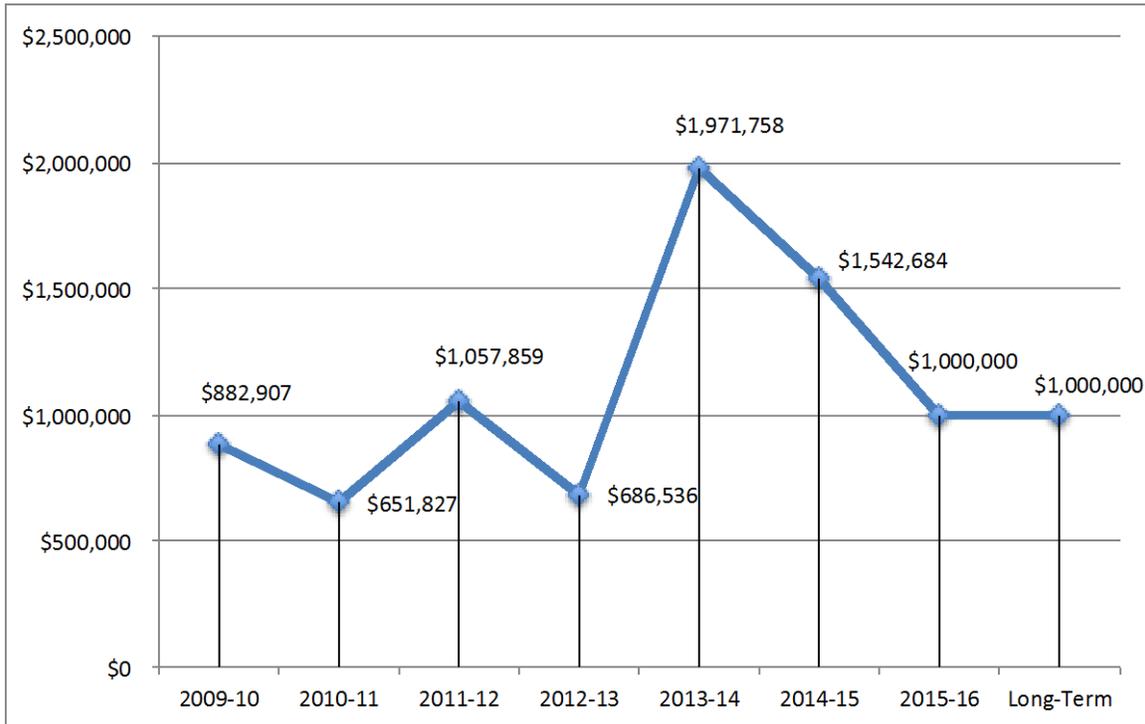
Chart 33: Annual Operating Excess (Deficiency)



Source: California Community Colleges Chancellor's Office, Institutional Effectiveness web pages <https://misweb.cccco.edu/ie/DistrictRates.aspx>, retrieved on May 22, 2015 and February 14, 2016; analysis by Cambridge West Partnership, LLC

The cash balance reflects the unrestricted and restricted general fund cash balance, excluding investments. The College was able to maintain a positive (excess) average of \$1,132,262 over the last six years as illustrated in the following chart. The 2015-16 and long-term values are estimates and goals.

Chart 34: Cash Balance of Unrestricted and Restricted General Funds



Source: California Community Colleges Chancellor's Office, Institutional Effectiveness web pages <https://misweb.cccco.edu/ie/DistrictRates.aspx>, retrieved on May 22, 2015 and February 14, 2016; analysis by Cambridge West Partnership, LLC

The Board of Trustees must address these fiscal facts in the coming years. Income from Proposition 30 will disappear at the end of calendar 2017, unless the underlying sales and income taxes are renewed by a popular vote. Starting in January 2018, the Affordable Care Act provides financial penalties for "Cadillac" medical benefit plans. Those penalties might one day impact the College. The State's allocations to the districts for FY2015-2016 were unusually generous and were based upon unexpected State revenue growth. The magnitude of growth in State revenue may not be repeated in future years and the unusual level of funding through "one time" money and categorical program dollars may not be repeated. Starting in July 2014 the District's contribution to CalSTRS for each covered employee started to increase from 8.25% to 8.88%. The contribution percentage is scheduled to increase to 19.1% by 2020 and remain at that level until 2046-

47.²³ The CalPERS retirement contributions for classified employees will increase from 12.46% in 2014 to 20.4% by 2020-21.²⁴

The resource allocation process links program reviews and College objectives to resources using four guiding principles:

1. Resources include all assets of the district including its fiscal resources, personnel, facilities, equipment, technology, and the time and talents of its faculty, staff, managers, and administrators.
2. The processes for allocating resources are transparent. All members of the district community are informed about the routines and components of planning that lead to resource allocations.
3. The resource allocation process begins with a review of the effectiveness of prior years' resource allocations and a forecast of potential funds for faculty, staff, and administrative positions and the program review fund.
4. Priority is given to resource requests that support:
 - a. Achievement of institutional goals and objectives
 - b. Health, safety, and accessibility²⁵

The budget development process at Palo Verde College historically has been completed as a "rollover" process. The managers of departments were provided with budget development sheets that displayed their discretionary accounts, and they were allowed to move their budget from one category to another to better serve their needs.

Any action plan has to include a request for funding in the program review for the unit or program. The Budget and Planning Committee assesses funding requests based on a rubric that evaluates the requests on the extent to which it addresses linkage to the following:

1. The district mission statement
2. Program review
3. Institutional objectives and action plans
4. Student learning outcomes, administrative unit outcomes, or service area outcomes
5. Assessment measures or evaluation plan²⁶

The College uses three timelines to process resource allocation requests: (1) non-personnel; (2) full-time faculty positions; and, (3) effectiveness review of the prior year's allocations.²⁷

²³ Provisions of AB 1469. Retrieved April 30, 2016 from www.calstrs.com/calstrs-2014-funding-plan

²⁴ Michael Youril. *Rate Hike Ahead: CalPERS Proposed Strategy Means Contribution Rates Will Continue to Rise for the Foreseeable Future.* Retrieved May 2, 2016 from www.calpublicagencylaboremploymentblog.com; Russi Eagan, Vice President Administrative Services. *Email Correspondence.* May 2, 2016.

²⁵ Palo Verde College. 2015 *Integrated Planning Manual*

²⁶ Ibid

²⁷ Ibid

Technology

The Information Technology department recently underwent reorganization that included splitting the duties of IT between two departments. The new Director of Institutional Research is now responsible for the Ellucian Colleague system and all products related to that system. The Director of Information Technology is responsible for all other college technologies including phone systems, network, email, security and classroom technology. The IT unit has been focusing their efforts on building redundancy into the college information systems and establishing better disaster recovery procedures. A new phone system, email system, and a new network were installed in 2014-15. Conferencing capability has been upgraded. In 2015-16 the College implemented the cloud-based Microsoft Office 365 product that provides office productivity software and related services.

Since the Great Recession the College experienced major budget cuts, which left much of the technology outdated; the college was unable to follow the technology maintenance and replacement strategy that was in place. Many systems are at the end of their expected life cycle or are already overdue for replacement. In addition, the College needs additional information storage and office space for staff. A Title III grant was used to purchase software for online instruction however, since that grant has ended, the annual maintenance cost of the software is now covered by the College's general fund.

The college has outlined the following technology goals and objectives as part of the Educational Master Plan:

1. Update and finalize the Technology Master Plan to assist with maintaining currency, updating necessary technologies and implementing new technologies in support of College operations and student success.
2. Participate in staff development training. It is the goal of the department to operate in such a way that the college technology and the IT staff are not in the forefront of everyday operations but run silently in the background.
3. Install the Lexmark imaging system upgrade, which is critical to the operations of several administrative offices. Repurpose room CL112 as a central document imaging room.
4. Create a student email system that links directly to the Ellucian Colleague product for better communications between college departments, faculty and students.
5. The IT Department has implemented the Canvas course management software promoted by the California Online Education Initiative (OEI) to replace the former system and to allow the college to expand its online course offerings.
6. Implement a replacement strategy for office and classroom computers. A proposal to replace all desktops at once followed by an annual 25% replacement strategy has been brought forth by the Director of Business Services.
7. Research the possibility of a thin client strategy, replacing the desktop-computing units with smaller, less expensive systems.
8. Move the College infrastructure to a cloud environment. Research and possibly utilize the Microsoft Azure product that offers integrated cloud services including analytics, computing, database, mobile, networking, storage and web services.

9. Upgrade the Business Objects reporting suite to 4.X as the initial step in improving reporting and analytical capabilities, and develop dashboards to improve access to data.

Space

The Chancellor’s Office monitors the use of five types of interior spaces at all community colleges. Any functionally usable interior space that could be assigned to an occupant is described as assignable square footage (ASF). Most interior space is considered assignable, but restrooms, mechanical equipment rooms, janitor’s closets, and corridors are not considered assignable. The annual Space Inventory Report is the means by which the College communicates space utilization changes to the Chancellor’s Office. Below is a summary of the most recent Space Inventory data.

EMP Table 34: Palo Verde College, 2015 Space Inventory Data

Main Campus - Blythe, CA

Title 5 Category	Use Monitored by Chancellor's Office	On Campus ASF per Inventory	Assigned Stations
Classroom	Yes	5,660	222
Laboratory	Yes	29,943	509
Office	Yes	14,131	104
Library	Yes	7,395	155
AV, TV, Radio	Yes	1,766	0
Physical Education	No	21,781	59
Assembly	No	16,586	514
All Other	No	29,180	374
Totals		126,442	1,937

Needles Center - Needles, CA

Title 5 Category	Use Monitored by Chancellor's Office	On Campus ASF per Inventory	Assigned Stations
Classroom	Yes	1,363	60
Laboratory	Yes	3,727	96
Office	Yes	1,396	12
Library	Yes	4,270	66
AV, TV, Radio	Yes	875	0
Assembly	No	1,110	65
Inactive	No	2,177	0
All Other	No	1,182	42
Totals		16,100	341

Source: California Community College Chancellor’s Office, FUSION Database.

III. Key Planning Assumptions

A. Planning Assumptions

The following are the key assumptions to guide future planning activities.

1. National and state goals and policy for postsecondary education will increasingly emphasize:
 - a. degree and certificate completion;
 - b. transfer to four-year universities;
 - c. reduction of achievement gaps among various subgroups of students; and,
 - d. containment of institutional costs.

To promote more effective community colleges some have argued that the institutions should be redesigned.²⁸ The College may want to explore those arguments and consider some of the policies and practices that the Aspen Institute has identified among the colleges to which it has awarded its \$1 million dollar prize for excellence.²⁹

2. Whether ACCJC remains or some other entity becomes the accrediting body for the College, an accreditor will likely continue to insist upon adequate capacity to provide educational services and demonstrable commitment to continuous quality improvement. In regard to effectiveness an accreditor will place emphasis on results of both student achievement and learning outcomes.
3. The funding needs for capital projects throughout the California community college system are greater than what the State presently provides. Currently, key public policy makers are reluctant to ask the public to consider additional general bond obligation debt for those purposes. However, were State capital construction bond funds made available, preference in allocation most likely would be given to colleges demonstrating good use of their facilities and growing in face-to-face instructional contact. Therefore, the College must strive for more efficient use of existing facilities.
4. A significant change in public policy regarding the CSU transfer process has been implemented with the SB 1440/440 legislation. The UC has started a similar transfer pathway framework. The College has responded to those public policy changes by adopting five Associate Degrees for Transfer (AD-Ts). The ongoing challenge will be to connect students to those pathways and perhaps cautiously expand the number of AD-Ts when they can be sustained and are a good fit for the local needs.

²⁸ Bailey, Thomas, et. al. *Redesigning America's Community Colleges: A Clearer Path to Student Success*. Harvard University Press, 2015. American Association of Community Colleges. *Reclaiming the American Dream: Community Colleges and the Nation's Future*. 2012. See also. Completion by Design at <http://www.completionbydesign.org/>

²⁹ Wyner, Joshua. *What Excellent Community Colleges Do: Preparing All Students for Success*. Harvard Education Press, 2014

5. The recommendations made by the Board of Governor’s Task Force on Workforce, Job Creation, and a Strong Economy may translate into a series of new policy, program, and funding initiatives for career and technical education.³⁰
6. The current and future planning environment is very fluid (e.g., resources and legislative mandates). The state of California, and by extension the community college system, has a set of revenue generation laws, policies, and practices that result in volatile levels of revenue. During the Great Recession the revenue reductions were unprecedented in both the steepness of the decline and in the number of consecutive years in which they were sustained. Elements of performance-based funding are working their way into categorical program and workforce development program funding. The College will need to be nimble and collaborative by engaging in interdepartmental dialogue on the campus. Additionally, the College will need to continue to be fiscally prudent and to use revenues efficiently.
7. Technology can be a disruptive factor both in the broader society and in higher education. It represents an evolving challenge to faculty members who need to teach some students how to use it while offering instruction in the same class to some students who may be very skilled in using the technology.³¹ A variety of technological applications for the classroom and instruction are promising, but faculty must learn to use them and the effectiveness of the technology needs to be empirically evaluated. The current State-sponsored Online Education Initiative holds great promise for the improvement of the online instruction experience for learners and faculty members. Technology is also a force with which to be reckoned in the delivery of administrative and instructional support services.³²
8. Transferable core abilities, commonly expressed in the learning outcomes associated with general education, will likely never go out of fashion and are highly valued by employers.³³ However, weaving a coherent curriculum that effectively fosters those talents is an ongoing challenge for any higher education institution.
9. Change in late adolescent and adult demographics (racial composition, ethnic identities, age cohorts) is the future of the effective service area. The primary college age cohort (18 to 24) will become proportionately a little larger in Blythe; but the group’s size will average only 1,600 potential students. Needles, in contrast, will see this age cohort decrease a little and will only average 400 potential students. The College will always have to “sell itself” to the community of prospective students.

³⁰ California Community College Chancellor’s Office. *Board of Governors Task Force on Workforce, Job Creation, and a Strong Economy: Report and Recommendations*. November 2015

³¹ Carl Straumsheim. “Digital Distractions,” *Inside Higher Education*. January 26, 2016

³² Ryland, Jane N. (President Emerita, CAUSE). *Technology and the Future of the Community College*. Retrieved from www.aacc.nche.edu/Resources/aaccprograms/past projects on January 15, 2016.

³³ Hart Research Associates. *Falling Short? College Learning and Career Success*. January 2015 (survey conducted on behalf of the Association of American Colleges and Universities)

10. Substantial numbers of residents are limited in their ability to participate in the local economy due to shortcomings in their academic capital (English language learners and low educational attainment) and poverty. The decision and resources required for outreach to recruit these adults and/or their college-age children will be an ongoing opportunity for the College as well as a challenge to “make room” for them and to help them succeed.
11. The implementation of the common core curriculum in K-12 districts may favorably impact the extent to which future students are “college-ready” upon graduation from high school. Currently, substantial portions of those high school graduates who complete the placement assessment exams are recommended to basic skills courses. What brings about these results? Is it the students, the assessment process, poor instruction, or a little of all?³⁴ The College may want to revisit the issue of “college ready,” consider strategies to improve the academic talent of prospective students, and explore additional approaches to the process of course placement assessment.
12. An important public service and an ongoing challenge for the College will be to align instructional programs to the occupations with the greatest job opportunities, some of which will require a Bachelor’s Degree while others will not. Considerable commitment and a willingness to change with the times will be required to design terminal Associate Degrees and Certificates of Achievement that culminate in an industry-recognized certification or adequate preparation of students for the examinations to earn those licenses and certifications.
 - a. Eighty-six percent of all projected nonfarm job growth opportunities (2012-2022) in Riverside and San Bernardino County is concentrated in five industry sectors:
 - i. The private educational services, health care and social assistance industry. This is the fastest growing sector (18% of all new jobs).
 - ii. The professional and business services sector. It represents 15% of all new jobs.
 - iii. Trade, Transportation, Utilities. As an industry it will provide 24% of all new jobs.
 - iv. Leisure and hospitality. This sector will contribute 14% of all new jobs.
 - v. Construction. This sector supplies 15% of the new jobs.
13. The ability to measure and track data is necessary to identify trends in student outcomes achievement. Robust data sets provide faculty, administrators, and staff with timely feedback and information about student outcomes. Exploration of robust data sets allows them to alter or enhance instructional programs and support services. Some have called this process a “culture of evidence.” It can be a challenge to know how to use this information well. That is to say, it is not enough to collect data, but the College must know how to analyze and use the data to make “informed decisions for the classroom, student services, and human resources.”³⁵

³⁴ Hanover Research. *Planning for the Future in Community Colleges*. December 2013

³⁵ Lorenzo, George (editor-in-chief of the SOURCE on Community College Issues, Trends, and Strategies). *Eight Important Questions for Eleven Community College Leaders: An Exploration of Community College Issues, Trends, and Strategies*. May 2011

IV. Opportunities for the Future

A. Future Labor Markets

Within Riverside and San Bernardino Counties roughly 55,000 annual job openings are projected between 2012-2022 due to retirements and new jobs created through growth in the economy. As is commonly the case, most of the openings require a high school diploma or less education for entry, but 14% of the anticipated occupational openings require a Bachelor's degree or higher for entry.

Occupations with the *most* job openings are forecasted to generate more than 33,000 jobs annually, roughly 60% of **all** job openings. The top three occupations with the most openings are: (1) retail salespersons; (2) laborers and freight, stock and material movers; and (3) combined food preparation and serving workers, including fast food. However the median wage for these jobs ranges from \$9 to \$12 per hour. These occupations are listed in Appendix J. The 50 *fastest-growing* occupations will provide a growth rate of 3.1% or higher. Forty-two percent of these are in construction and extraction related fields. These occupations are listed in Appendix K.

EMP Table 35: Riverside and San Bernardino County Projected Annual Job Openings 2012-2022

EDD Average Annual Occupational Openings Projections 2012-2022				
Entry Level Education	Average Annual Total	% of Total	% of Total	Median Annual Salary
Less Than High School	22,782	41.9%		\$22,331
High School Diploma or Equivalent	18,172	33.4%		\$35,105
		<i>Subtotal</i>	75.3%	
Some College, No Degree	610	1.1%		\$35,511
Postsecondary Certificate	3,370	6.2%		\$44,284
Associate's Degree	1,655	3.0%		\$58,414
		<i>Subtotal</i>	10.4%	
Bachelor's Degree	6,282	11.6%		\$70,335
Master's Degree	680	1.3%		\$75,332
Doctoral or Professional Degree	824	1.5%		\$90,483
		<i>Subtotal</i>	14.3%	
Total	54,375			

Source: California Employment Development Department, Labor Market Information; analysis by Cambridge West Partnership, LLC

Over the last six years the Inland Empire has added more blue-collar, middle-range paying jobs that has been the case throughout California.

EMP Table: 36 Where the Blue Collar Jobs Are

Location	Annual Salaries, New Jobs Added 2011-2016*			
	Low Pay	Blue Collar	Office Jobs	High Pay
	\$30,000 & Under	\$45,-\$55,000	\$45-55,000	Over \$55,000
Inland Empire	39%	41%	17%	3%
California	47%	20%	15%	18%
*Estimated for 2016				

Source: John Husing, Economics and Politics Inc. and California Economic Development Department

In an effort to identify new program areas that would meet labor market needs in either Riverside or San Bernardino County, an analysis was completed of the occupations expected to provide 50 or more job openings annually through 2022. The list was subdivided using the Bureau of Labor Statistics’ training-level definitions with a focus on those occupations requiring between a high school diploma and a bachelor’s degree. The most promising occupations are those with the highest number of projected annual average total jobs. The tables were sorted in descending order on that data column and are located in the Appendix F of this Plan.

The occupations that meet the criteria were mapped, through the Standard Occupational Classification (SOC) codes and Taxonomy of Programs (TOP) codes, to Associate Degree and Certificate of Achievement programs offered by the College. Each table also contains a column to indicate if the College has an established program of study that is aligned to the occupation.

Because some of the occupations mapped to more than one of the TOP codes used by the community college system, there can be multiple programs using different TOP codes offered for each occupation. For that reason, some of the occupations have more than one row in the tables. Details regarding the requisite knowledge, skills, and abilities for each occupation can be found at the U.S. Bureau of Labor Statistics website <https://www.onetonline.org>.

By way of summarizing the detailed tables included in Appendix F, the following tables provide a quick overview of the projected job openings grouped by expected educational preparation then by major occupational groups. Middle skills occupations are defined as those that require more than a high school diploma but less than a Bachelor’s Degree as preparation for entry-level positions. In the Riverside and San Bernardino County region,

EDD projects 5,600 new job openings as the average annual count of these middle skills occupations.³⁶

EMP Table 37: Projected Job Openings by Occupational Family

Major Occupational Group Description Bachelor's Degree Required (expected)	2012-2022 Annual Average Openings	2014 Typical Median Annual Salary	Expected Preparation
Management Occupations	1,803	\$91,466	BA
Business and Financial Operations Occupations	1,521	\$62,064	BA
Computer and Mathematical Occupations	248	\$81,619	BA
Architecture and Engineering Occupations	321	\$83,424	BA
Life, Physical, and Social Science Occupations	140	\$66,734	BA
Community and Social Service Occupations	140	\$53,043	BA
Education, Training, and Library Occupations	1,337	\$63,330	BA
Arts, Design, Entertainment, Sports, and Media Occupations	345	\$50,075	BA
Healthcare Practitioners and Technical Occupations	54	\$76,227	BA
Personal Care and Service Occupations	85	\$21,413	BA
Sales and Related Occupations	174	\$66,357	BA
Farming, Fishing, and Forestry Occupations	6	\$48,441	BA
Transportation and Material Moving Occupations	23	\$113,494	BA
<i>Annual Total</i>	<i>6,197</i>		

Major Occupational Group Description Associate Degree Required (expected)	2012-2022 Annual Average Openings	2014 Typical Median Annual Salary	Expected Preparation
Computer and Mathematical Occupations	47	\$58,447	AA
Architecture and Engineering Occupations	111	\$55,801	AA
Life, Physical, and Social Science Occupations	98	\$42,094	AA
Legal Occupations	56	\$51,142	AA
Education, Training, and Library Occupations	153	\$30,058	AA
Healthcare Practitioners and Technical Occupations	1,126	\$65,072	AA
Healthcare Support Occupations	32	\$65,487	AA
Personal Care and Service Occupations	3	\$73,478	AA
Installation, Maintenance, and Repair Occupations	23	\$59,012	AA
Transportation and Material Moving Occupations	6	N/A	AA
<i>Annual Total</i>	<i>1,655</i>		

³⁶ California Employment Development Department. *Labor Market Information, Occupational Projections for Riverside and San Bernardino Counties*. Retrieved July 14, 2015 from <http://www.labormarketinfo.edd.ca.gov>

Major Occupational Group Description Postsecondary Certificate Required (expected)	2012-2022 Annual Average Openings	2014 Typical Median Annual Salary	Expected Preparation
Business and Financial Operations Occupations	3	\$57,098	Certificate
Legal Occupations	7	\$85,530	Certificate
Education, Training, and Library Occupations	62	\$36,938	Certificate
Arts, Design, Entertainment, Sports, and Media Occupations	46	N/A	Certificate
Healthcare Practitioners and Technical Occupations	505	\$42,767	Certificate
Healthcare Support Occupations	901	\$34,344	Certificate
Protective Service Occupations	108	\$73,615	Certificate
Personal Care and Service Occupations	337	\$19,242	Certificate
Installation, Maintenance, and Repair Occupations	317	\$52,072	Certificate
Production Occupations	89	\$40,206	Certificate
Transportation and Material Moving Occupations	995	\$42,398	Certificate
<i>Annual Total</i>	<i>3,370</i>		

Source: California Employment Development Department, Labor Market Information; analysis by Cambridge West Partnership, LLC

The nature of the economy in Blythe has evolved over the last fifteen years as evidenced by the numbers of individuals employed in the occupational families shown at Appendix G. From 2001 to 2015 the only decline was the number of people employed in the farming, fishing, and forestry occupations. The greatest gain was in the food preparation and food serving related occupations followed by sales and sales related occupations, then office and administrative support occupations. Other areas of gain were found in healthcare practitioners and technical occupations, personal care and service occupations, and healthcare support occupations.

At the more local level, the 2015 survey of 150 businesses conducted by BW Research Partnership as part of the work effort for the AB86 Palo Verde Regional Consortium provides some insight to hiring practices and opportunities. Twenty-eight percent of businesses surveyed expected to hire more employees in 2015-16. Two-thirds of the businesses surveyed indicated that 75 to 100 percent of the personnel they hire typically require less than a four-year college degree to start work. This level of education at entry is predominantly associated with positions such as cleaners, helpers/laborers and clerical support workers. However, employers often indicated that they would prefer candidates with technical training and expertise specific to the vacant position and/or an associate's degree.

For firms that had great difficulty finding qualified applicants for positions requiring less than a four-year degree, these skills were identified as being extremely important:

1. Ability to speak and communicate with customers and colleagues
2. Ability to write and document complex information.
3. Ability to use technology and learn new technology tools and applications.
4. Ability to work with others and contribute as part of a team.

Among the positions requiring a four-year degree, 75% of those businesses in the survey indicated “some difficulty” or “great difficulty” in finding qualified applicants. In contrast, those positions requiring less than a four-year degree, 57% of the businesses in

the survey indicated that they had ‘some difficulty’ or ‘great difficulty’ finding qualified applicants- a 18% difference. To address deficiencies, more than 60% of the surveyed business expressed interest in potential training programs at community colleges in these two areas:

1. Development of digital literacy and the use of computer applications like Excel.
2. Certificate programs in specific occupational categories.

Half of the businesses surveyed expressed interest in these topics offered by a community college:

1. Training in management and supervision, including performance management and coaching.
2. Customized, “in-house” training for current employees at the business site.
3. Training in business communications, business writing and presentation skills.³⁷

The College currently offers an array of instructional programs, some of which may address these expressed interests. An inventory of the instructional programs offered by PVC is found in Appendix D of this Plan along with a count of awards granted to students over the last five academic years (2010-11 to 2014-15). The inventory has been annotated by placing a Taxonomy of Program (TOP) code in **bold** if the code associated with a PVC program of study matched to one or more of the Standard Occupational Code (SOC) values in the list of occupations projected to provide 50 or more annual job openings between 2012 and 2022.³⁸ PVC offers ten instructional programs that were a direct match. The most popular fields of study at PVC are Alcohol and Controlled Substances and Business Management.

Some of the programs of study offered by Palo Verde College are intended to facilitate transfer to a California State University (CSU) campus. The Legislature enacted and the Governor signed the Student Transfer Achievement Reform Act (SB 1440) in September 2010 in an effort to streamline transfer to the California public university system where most California community college students migrate. The act enables these two public systems to collaborate on the creation of Associate Degree transfer (AD-T) programs. Upon completion of the Associate Degree, the student is eligible for transfer with junior standing into the CSU system with guaranteed admission and priority consideration when applying to a particular program of study that is similar to the student’s community college major.

The Most Popular California State University (CSU) Majors

The following table lists a few of the most popular CSU majors. As of spring 2016 there were 36 transfer model curriculums (TMC) upon which the faculties of the community college and CSU systems had agreed as appropriate preparation to enter these major programs of study. Three of the thirty-six are uniquely appropriate for more rural

³⁷ Dr. Eva Margarita Munguia. *Palo Verde Regional Consortium Regional Comprehensive Plan*. March 1, 2015.

³⁸ California Community College Chancellor’s Office. *TOP to SOC to CIP Crosswalk*. Spring 2015.

community colleges with an agriculture curriculum. An updated, complete listing is available at this C-ID URL <https://c-id.net/degreereview.html>.

The extent of curriculum alignment between the programs of study at PVC and some of the most popular fields of study throughout the California State University (CSU) is noted in the following table.

EMP Table 38: Associate Degrees for Transfer Established at Palo Verde College

Associate Degree-Transfer	Established	Interest	Total
Administration of Justice	X		1
Business Administration	X		1
Early Childhood Education (ECE)	X		1
English		X	1
Music		X	1
Psychology	X		1
Sociology	X		1
Theater Arts		X	1
Total for College	5	3	8

Source: California Community College Chancellor's Office, Academic Affairs Division. *SB 1440 Legislation Update*. July 28, 2016; interviews and analysis by Cambridge West Partnership, LLC

The Most Popular University of California (UC) Majors

In summer 2015 the University of California announced a new academic roadmap for California community college students who planned to transfer to a UC campus. It is intended to simplify the admissions process and help students better prepare for transfer to the university and graduate within two years of admission. Although the pathways curricular directions are not a guarantee of admission, they are intended to help the university achieve its goal of a 2:1 ratio of freshmen to transfer students.

The extent of *potential* curriculum alignment between the AD-T programs of study at PVC and the most popular fields of study throughout the University of California (UC) is noted below.

EMP Table 39: Most Popular UC Majors and Associate Degrees for Transfer Established at Palo Verde College

TMC	UC	Palo Verde College		
	Transfer Pathway	AD-T Scorecard	Established	Interested
Administration of Justice		X		
Anthropology	X			
Biology	X			
	Biochemistry			
Business Administration	X	X		
	Cell Biology			
Chemistry	X			
Communication Studies	X			
Computer Science	X			
Early Childhood Education (ECE)		X		
Economics	X			
	Electrical Engineering			
English	X			yes
Film, Television, Electronic Media	X			
History	X			
Mathematics	X			
	Mechanical Engineering			
	Molecular Biology			
Philosophy	X			
Physics	X			
Political Science	X			
Psychology	X	X		
Sociology	X	X		
	Total	21	5	1

Source: Retrieved April 29, 2016 from Admission.universityofcalifornia.edu/transfer/preparation-paths/index.html; California Community College Chancellor's Office, Academic Affairs Division. *SB 1440 Legislation Update*. June 22, 2016; interviews and analysis by Cambridge West Partnership, LLC

B. Planning for Potential New Programs

The College has a well-established curriculum review and approval process. A shared-governance Curriculum Committee provides oversight to the process that includes both a technical and a substantive review of new curriculum ideas. Faculty members and division instructional deans propose new courses and programs, the Curriculum Committee and College administration critique, evaluate, set priorities and recommend proposals to the Board of Trustees. The criteria used to evaluate the visions for future curriculum within the College are similar to those adopted by the Chancellor's Office as discussed below.

Given the current California higher education public policy environment, priority should be given to *programs intended for transfer preparation* that have been developed around the Transfer Model Curricula (TMC). Priority should be given to *career and technical*

education programs that fall within the primary areas of emphasis agreed upon through regional discussions. The labor market data analysis provided in the initial segment of this chapter and the evolving list of TMCs developed around the most popular majors within the CSU system point to the primary areas for future program development that would serve students well.

The Chancellor's Office has a set of long-established criteria to use when evaluating new instructional program proposals. They encourage individual colleges and districts to use the same or similar criteria when evaluating a curriculum proposal. Those five criteria are as follows:

Appropriateness to the Mission

The proposed program and required courses must be aimed at the first two years of postsecondary instruction. The curriculum has to be congruent with the mission of the California community colleges as described in Education Code section 66010.4 and with the mission statement and master plan of the college and district. The proposal must clearly articulate the content or skills whose mastery forms the basis of the student learning outcomes. The proposed program must also address an occupational or transfer area that is valid for the region and institution. The courses and program must not be primarily avocational or recreational. Non-instructional activities and services are not considered to be courses and are not supported by apportionment.

Need

New curriculum must reflect the engagement of an educational planning process resulting from systematic program review that includes assessment of future needs and goals of the educational programs of the institution. The proposed program application must document the transfer applicability as meeting lower division requirements for a major program of study at a baccalaureate institution.

The need for noncredit college preparation or career development curriculum is presumed to exist if there is a student demand for the program and either their transitions to credit work or its fulfillment of labor market needs has been documented.

Career and technical education (CTE) program proposals intended to prepare students for entry level employment must provide labor market data or a recent employer survey that documents a need for the program and substantiates the opportunity for program graduates to secure future employment in the region. Statewide or national labor market evidence is considered as supplementary information. Industry or regional economic studies may be helpful validation. Letters from employers attesting to the need in the area and minutes of advisory committee meetings may be added for confirmation but only in conjunction with other collected evidence. Additional supporting documentation includes applicable studies or data from licensing agencies or professional associations and job advertisements for positions in the service area. The CTE program proposals must also secure the approval of the regional consortium of occupational deans so that duplication of programs is minimized. Additional suggested areas of discussion for labor market analysis are located in Appendix E of this Plan.

Curriculum Standards

The local curriculum committee, governing board, and program accreditor (when applicable) must apply the standards set forth in the Course and Program Approval Handbook and in the Title 5 Regulations. The college curriculum committee and the district governing board must approve all courses and new program proposals. The career and technical education regional consortia subsequently must review all CTE curriculum and new program proposals. The proposed program must also be consistent with requirements of any accrediting agencies where applicable.

The college must provide a description of the local approval process along with supporting documentation from advisory committees, local industry, and/or transfer institutions. The proposal process should ensure that the program is designed so that successful completion of the program requirements will enable students to meet the program goals and learning outcomes. Program-required courses should be integrated with courses selected to effectively meet the program goals and learning outcomes.

The Academic Senate for the California Community Colleges (ASCCC) provides useful additional information about best practices for curriculum development. Unless the web link has changed, curriculum resource materials are available as of fall 2015 at www.asccc.org/directory/curriculum-committee.

Adequacy of Resources

The institution must demonstrate that it has the resources to realistically maintain the contemplated program at the level of quality described in the proposal. That includes funding for qualified faculty to teach the curriculum of the proposed program, sufficient and adequate facilities and equipment, and essential library and learning resources to support the instruction. The institution must also commit to offering the required courses in the program at least once every two years and have faculty available to sustain the proposed required courses. It is incumbent upon the proposing college to carefully ascertain the space/facilities needs for a new program using the State facilities space standards.

Compliance

The design and proposed operation of the program may not be in any conflict with any licensing, state or federal law or regulation.

Although not required, the current thinking among occupational educators is that programs leading to industry-recognized certifications and programs designed with stackable certificates are highly desirable attributes of proposed CTE programs.

C. Faculty and Staff Visions for Curriculum and Services

A listing of future curriculum visions articulated by faculty members in each discipline was developed. Student services and administrative colleagues were also asked to identify their future visions for service delivery and student support. The future curriculum and service delivery visions were based upon responses to a questionnaire, interviews and listening sessions, open house events, and inspection of recent

comprehensive program review documents. The ideas were divided into two groups: (1) those for which some curriculum or administrative work had been started, recently approved, or lately modified and (2) those for which the idea was still percolating with an undetermined action/implementation date. These visions helped to spot interests in potential additional facilities and to recognize aspects of the current facilities that were not working well for the programs and services. Faculty members, student service professionals, administrative support specialists, and directors were also asked to identify their future interests in technology. The lists and discussions below summarize those visions of a potential future.

Academic Senate Visions

- Ideas Percolating, Undetermined Implementation Date
 - Create a teaching-learning center space where faculty can develop media, online educational materials, other instructional resources, and learn about best teaching practices. An example of such a center is operating at Cerritos College at this URL <http://cms.cerritos.edu/ic/>. Another example is at Chaffey College and may be viewed at this URL <http://www.chaffey.edu/profdev/fsc/welcome.html>

Business Division Visions

- Curriculum Started, Recently Approved or Modified
 - An accounting certificate was developed
- Ideas Percolating, Undetermined Implementation Date
 - Additional online courses in business

Perceptions About Facilities

The business faculty expressed the belief that a centralized location for specialized tutoring, peer counseling, and support services would help. Also, the faculty members indicated that College-provided day care service would be very helpful for single head-of-household students because babysitter or care services in the community are inadequate.

Perceptions About Technology

The business division faculty members indicated that the College course management system (bridge) might be problematic for students to use. They indicated that faculty members also needed training on this system to learn ways to use the online instructional modality effectively. Division faculty members reported that classroom technology (overhead projectors and computers) is not as reliable as desired (broken or often failing) and that computers are often down or not updated with the latest programs.

History, Social and Behavioral Science Division Visions

- Curriculum Started, Recently Approved or Modified
 - None at this time
- Ideas Percolating, Undetermined Implementation Date
 - Provide additional online courses

Perceptions About Technology

Faculty members identified several technology issues that are hampering program advancement. Faculty members need training in the effective use of the online and ITV instruction modalities. A dedicated staff member to support the ITV equipment at both Blythe and Needles is needed. Perhaps this person could also provide training in the use of online instruction technology. Currently there is no technical support for evening courses.

Language Arts and Communication Division Visions

- Curriculum Started, Recently Approved or Modified
 - The College submitted and the Chancellor's Office approved a career development/college preparation ESL noncredit certificate.
 - Concern about the length of time in basic skills prompted the faculty members to place the lowest level English composition class on inactive status in 2015-16.
 - A pilot test, outside of communications, is being conducted on the feasibility delivering of online courses to prisons.
 - A Speech class was taught in the prisons during fall 2015.

- Ideas Percolating, Undetermined Implementation Date
 - Associate Degree for Transfer in Theater, if there is interest
 - Associate Degree for Transfer in Music
 - Associate Degree for Transfer in English
 - The composition curriculum is being considered for a future change that would recombine the lecture and laboratory time. It would reduce the laboratory instruction from three hours per week to one hour per week but retain the three hours of lecture per week.

Perceptions About Facilities

Faculty members identified several facilities problem areas that hamper effective instruction. A dedicated writing lab (CL 128) equipped with updated computers and instructional technology would be helpful. The theater arts faculty member is now finding some design and equipment problems in the relatively new Fine and Performing Arts building. The details have been documented in the program review but are summarized as shortcomings in storage and dressing room capacity. No black box theater area was planned for the new building, but the green room converted for that purpose would be a very significant enhancement to the facility. Two additional features, not provided in the original construction, are desirable- a sink for paint clean up and a rigging system to manipulate backdrops and fly-in scenery. The "mall" area in building CL is a popular place for students to hang out, but they sometimes generate disruptive noise levels. The "mall" was supposed to be an area for quiet study and it would be helpful if there were a way to enforce the quiet principle so that adjacent classes are not disrupted.

Perceptions About Technology

Communications division faculty members identified several technology issues. Classroom technology (overhead projectors, printers, and computers) is not as reliable as

desired (broken or often failing). Repairs are needed for the electronic piano keyboards as well as the non-electronic pianos. Office computers and printers were reported as wearing out. The course management system (Sakai) needs to be improved or replaced. The system is currently used for all courses- online, correspondence, and face-to-face.

Math and Science Division Visions

- Curriculum Started, Recently Approved or Modified
 - Created an accelerated scheduling strategy for basic skills math courses (arithmetic through intermediate algebra).
 - Hired an “ombudsman” to immediately follow up with students who are absent from class.

- Ideas Percolating, Undetermined Implementation Date
 - Offer more higher-level math courses
 - Offer liberal arts math again
 - Offer geology again
 - Offer physics classes
 - Offer more biological science courses
 - Re-introduce additional chemistry courses to support STEM majors and nursing
 - Discuss the possibility of splitting the pre-calculus course into two courses.

Perceptions About Facilities

Faculty members expressed an interest in two facilities needs. First, additional laboratories for science would be helpful. Any future laboratory and lecture classrooms should accommodate at least 30 prospective students vs. 18 that are currently accommodated. Second, Physics and Astronomy have been primarily offered via the correspondence course modality in the past. The College will need a dedicated science laboratory for those disciplines if they were offered face-to-face at Blythe.

Perceptions About Technology

Math-Science division faculty members identified two technology issues. One, instructional computer equipment needs to be updated. Two, some basic instructional equipment is needed to support the Astronomy and Physics curriculum.

Nursing and Allied Health Division Visions

- Curriculum Started, Recently Approved or Modified
 - The College has received final approval from the State Board of Vocational Nursing and Psychiatric Technicians as well as the Chancellor’s Office to restart the LVN Program in spring 2016. Extensive program documentation was provided to the State Board and the Chancellor’s Office.

- Ideas Percolating, Undetermined Implementation Date

- Add online and correspondence courses for the non-laboratory dependent curriculum areas.
- Reinstate the Home Health program
- Reinstate the VN FastTrack program

Perceptions About Facilities

Faculty members identified several facilities shortcomings that hamper the instructional programs. The Nursing program needs a new skills laboratory. The current lab, CL 224, accommodates 16 students at small tables. A simulator laboratory is needed to provide a portion of the required clinical instruction. Currently students have to travel to the JFK Memorial Hospital in Indio to complete their required clinical hours of instruction. Three simulator beds are already in place. A dedicated 30-student lecture classroom space with video capability would be very helpful. The current room, CL 215, accommodates only 15 students at small tables.

Perceptions About Technology

The nursing and allied health division faculty members identified two technology issues to help advance the instructional programs. First, the purchase of one adult patient simulation mannequin is essential to provide some of the required clinical instruction. Second, the faculty members expressed some interest in the possibility of offering online courses in nutrition and medical terminology.

Professional Technologies (Vocation, CTE) Division Visions

- Curriculum Started, Recently Approved or Modified
 - Small certificate programs were added in
 - Automotive
 - Welding
 - Building Construction Trades
 - 3-D Printing for brick & mortar students (face-to-face instruction)
 - CIS revised the Associate Degree, the six certificate program requirements and course outlines.
 - CIS implemented new courses and a certificate for Computer Maintenance and Help Desk Support.
- Ideas Percolating, Undetermined Implementation Date
 - Increase marketing efforts (CIS).
 - Develop an instructional equipment replacement plan for the College (IT action item).
 - Establish authority to be an ASE certification center for automotive students.
 - Establish authority to be an AWS certification center for welding students.

Perceptions About Facilities

Faculty members identified several facilities needs that would help them advance their programs. The Automotive program faculty members would like an additional space provided as a “clean-room,” perhaps by repurposing another room. The “clean room”

would be used to teach engine reconstruction. The Welding program faculty members would like additional dedicated space as a welding certification test area, perhaps created by repurposing another room. Both the automotive and welding faculty members identified the shops need new for energy efficient swamp coolers to replace the very old portable swamp coolers.

Perceptions About Technology

Career and technical education faculty members identified outdated computer equipment as a limiting factor adversely impacting the CIS and other instructional programs.

Student Services Division Visions

- Initiatives Started, Recently Approved or Modified
 - Office functions have changed due to state mandates for document imaging, paperless transcript, new priority registrations, course repetition enforcement, and degree audit/educational planning software.
 - New matriculation components and 3SP regulations are streamlining counseling functions/services.
 - Financial aid operations have been adjusted to respond to the constant introduction of changes to the State and federal regulations.
 - The Child Development Center is pursuing new grants and fund-raising opportunities to help purchase new playground equipment and make repairs to the classrooms.
 - The Child Development Center director is seeking additional free training opportunities for the staff.
 - The Ellucian (Colleague) student degree audit software module has been implemented.
 - The Ellucian (Colleague) student educational planning module is being set up.
 - A professional expert for writing business reports has been retained to improve reporting, provide analytic advice, capabilities as well as to facilitate access, increase use, and help with interpretation of data.

- Ideas Percolating, Undetermined Implementation Date
 - How best to respond to state policy changes in BOGW eligibility, adult education, and dual enrollment rules.
 - Librarians and tutors are exploring ways to get into the online education loop.

Perceptions About Facilities

Various student services offices raised several facilities issues. The most common facility need (expressed by A&R, counseling, CalWORKS, correspondence unit, and financial aid) was for additional office space, particularly if the College enrollments increase and the programs grow in future years. A meeting room or office in the student services area is required to facilitate meetings with students where confidential information is being discussed.

- The A&R area must have a large counter to allow staff to assist students. The A&R also needs a fireproof storage area.
- A closed-door office for CalWORKS staff to use with students would be ideal for confidential discussions.
- Financial aid requests additional space for student files and a confidential information storage area.
- Library plans were drawn up a few years ago for the Library to be in a new location with a different internal layout. The plan was never implemented.
- The transfer staff expressed an interest in a designated transfer center space with computers where students could make inquiries and meet with university representatives.

Perceptions About Technology

Several units cited technology needs. A&R needs to purchase software (On Base-Hyland perhaps) that would expedite transcript evaluations for educational planning purposes. A&R also needs additional computer equipment to support students completing an application and the registration. Laptops, web-cam, Skype, and eBooks will be useful for EOP&S students in the future. Computers, printers, scanners will be needed for the financial aid office in the future. The Library would like to have software to help students with self-paced assessment tests and to practice other skills. The Child Development Center would like to purchase new tablets or updated computers to support lesson planning for preschool classroom teachers and staff.

Superintendent-President's Office Visions

The staff identified two facilities issues. One, additional storage space, was a common need expressed by several administrative offices. The second was for a larger conference room area.

General Administrative Offices Visions

- Initiatives Started, Recently Approved or Modified
 - The College has implemented a software package for degree audits.
 - The College has purchased a student educational planning software module as part of the Ellucian self-service portfolio, and a good portion of the set up has been completed. Meetings have been started to plan for the deployment to counselors and students.
 - The College has hired a consultant to improve reporting and increase institutional access, use, and interpretation of data.
 - There is a pilot effort with the local prisons to test out the delivery of online courses using the inmate educational network.
 - Information technology will install an upgrade to the Lexmark imaging system.

- Several proposals have been offered as strategies to replace all desktop computers, and to implement an annual replacement strategy.
 - The Business Objects reporting suite is being upgraded to improve reporting.
 - The College has adopted and implemented Canvas, the State-recommended learning management system.
- Ideas Percolating, Undetermined Implementation Date
 - Discussions are underway regarding a student email system.
 - Information technology is exploring the acquisition of “thin client” technology to replace desktop-computing units.
 - Consideration is being given to moving the College infrastructure to a cloud environment, perhaps by using Microsoft Azure products.

Perceptions About Facilities

The Business Services staff requires either additional physical storage space for all the files that are mandated to be maintain OR a system to store files electronically. The Business Services area lost an office in order to provide storage for critical documents. The Human Resources staff also indicated that additional storage space was needed as they now use file cases in the director’s office for storage. The Business Services staff repeated a perspective heard in the Instruction Office that it would be helpful to have a meeting room in each building. At this time there is no meeting room in the CS building. The facilities group indicated that there is a need for changes in irrigation (more water efficient control valves, sprinklers, etc.) and landscaping to respond to ongoing drought conditions and new state regulations. Information Technology has identified room CL112 as a potential site for central document imaging work. In the past, the Instruction Office has had a copy room and cabinets/counter area to support all of the work for the correspondence education area. It would be helpful to re-establish that resource. Several of the general administration offices indicated that they needed some additional office space in which to accomplish their work as currently some staff are working in areas removed from their colleagues simply because there is no room for them in the primary office area.

Perceptions About Technology

Formerly the College operated on a cash only basis but now uses a student receivables software package. This change illustrates the increasing level of technological complexity that staff must master. Unfortunately, computers now often crash and that has become a nuisance and a problem for staff and students. Also, Human Resources personnel indicated that the office computers needed to be replaced. The facilities staff group desired more energy efficient, computer controlled HVAC systems to save resources and provide a comfortable working environment. Some form of automated curriculum/enrollment management/scheduling software/program would be of assistance to the Instruction Office.

Needles Center Visions

- Initiatives Started, Recently Approved or Modified

- The Center is an approved testing site for the GED testing program. There are computers with the software for reading, math, and writing testing. Two staff members are qualified to administer the exam, one at each campus (funded by AEBG).
- Three GED coordinators were hired. One is located at Needles the other two are at the Blythe campus. One of the coordinators at Blythe is bilingual and will coordinate the Spanish GED program where the GED pre pilot program is implemented in English and Spanish. In October 2016 the program will be implemented in Needles. All of the coordinators do GED outreach (funded by AEBG).
- A full-time Adult Education Block Grant Coordinator was hired to report to the Needles Center Director. That coordinator will oversee the internal day-to-day operation of the grant and the GED program at both campus locations.
- Starting spring 2016, basic computer applications and digital literacy courses were started.
- Hired a part-time academic advisor using EOPS/BSI categorical funds.
- Palo Verde College currently does not offer some of the programs offered at the adjacent Mohave Community College (MCC) campus locations in Arizona. The Needles Center intends to offer in future schedules, at reduced rates, some MCC program prerequisite courses to students in Mohave County, Arizona so they can complete those prerequisite courses for transfer.
- Ideas Percolating, Undetermined Implementation Date
 - The Needles Center is exploring the possibility of utilizing the automotive, carpentry, welding, culinary/hospitality, and other vocational education facilities at Needles High School. The vocational curriculum would be open to both high school and Palo Verde Community College students. The Ft. Mojave Indian Tribe has expressed an interest in the College offering a culinary program to train prospective employees for their casinos. Locating qualified instructors will be challenging.
 - Utilize the above-listed facilities to offer dual-enrollment classes to their students during normal school hours.
 - Utilize the Basic Skills Initiative and the AEBG funds to provide remedial education and vocational training services to the community.
 - Expand online courses, and develop/offer complete online programs in order to enroll students who are not able to commute to the campus, but who wish to take advantage of the educational opportunities.
 - Offer adult education and workforce preparation curriculum through the Ed2Go and Pearson adult education company online offerings to complement face-to-face offerings.
 - Develop and offer training programs to local businesses via economic and workforce development efforts.

- Create additional partnerships and transfer agreements with other colleges, within and across state boundaries, and with Fort Mojave and the Chemehuevi tribal entities.
- Expand lifelong learning opportunities for the tri-state area.
- Considering a summer bridge curriculum to help students prepare for the college placement exam process with Acuplacer.

Perceptions About Facilities

The Center Director noted that as we move towards more ITV and online classes, the Center will need to develop additional smart classrooms, a computer center, a student success center, and a satellite library to serve the general student population and the community. A dedicated science laboratory is needed to meet the needs of pre-allied health students who wish to complete their prerequisites at a much more favorable tuition/fee schedule before transferring to programs.

Perceptions About Technology

The Center staff believes that currently, there is a greater need to deliver instruction through digital and more interactive means, including online classes and hybrid instruction. The demand for these types of services will increase in the next 5-10 years.

D. Opportunities for New Initiatives, Improvement or Expansion

1. General Areas of Opportunity

Several general areas of opportunity are available to the College at this point in time (academic year 2016-17). These are offered in support of the College goals previously cited in this Plan.

Senate Bills 1440/440

The 2010 enactment of the Student Transfer Achievement Reform (STAR) Act, aka SB 1440, provides the California community colleges with an opportunity to adjust some of the transfer-oriented programs that had been offered and to introduce new ones. The legislation requires a community college district to grant an Associate Degree for Transfer (AD-T) to a student in his/her field of study once the student has met degree and transfer requirements for a particular major. Once the transfer associate degree is earned (awarded), the student is eligible to transfer with junior standing into a local California State University (CSU) campus. Students will be given priority when applying to a particular program that is similar to his/her community college field of study. The bill prohibits a community college district or campus from adding local course requirements in addition to requirements of the STAR Act, and prohibits the CSU from requiring transferring students to repeat courses similar to those taken at the community college that counted toward their associate degree for transfer.

The statewide strategy to implement the STAR Act is to develop transfer-model curriculums (TMC) through inter-segmental faculty dialogue using the structure of the course identification numbering system (C-ID) as much as possible so that statewide

common course descriptions will be used as building blocks. The initial focus of the project is on the most popular transfer majors within the CSU. The goal is to reach agreements on a model curriculum that all community colleges will adopt for each particular major.

A subsequent amendment in 2013 (SB 440) required community colleges, by the start of the 2015-16 academic year, to create before the start of the 2013-14 academic year an associate degree for transfer in every major offered by the college that has an approved transfer model curriculum. Furthermore, the community colleges are required to create an associate degree for transfer in specified *areas of emphasis* before the start of the 2016-17 academic year. Two areas of emphasis, Global Studies and Social Justice Studies, TMCs were added in fall 2015.

Three additional model curricula have been created to promote a greater degree of standardization for community college associate degrees where the discipline does not fit the 60 lower-division units plus 60 upper-division units structure of the STAR Act. These *are not* TMCs within the SB1440/440 framework. They are in the fields of: (1) Engineering; (2) Information Technology; and, (3) Nursing.³⁹

As of spring 2016, thirty-six model curriculums had been approved that covered the CSU majors selected by roughly 80 percent of the community college transfer students, and individual colleges throughout the community college system response is from only 5 AD-Ts up to 28 AD-Ts. The results indicated that 20,600 community college students earned the new AD-T in 2014-15.⁴⁰ Some 7,000 students were accepted at a CSU, an encouraging acceptance count that was up from previously only 450 in 2011-12.⁴¹

The SB1440 legislation is a major policy shift for California higher education as it seeks to finally provide a cleaner and clearer path for easier transfer from the community colleges to the CSU where most students transfer. It eliminates the campus-by-campus and major-by-major transfer requirements and represents an unparalleled opportunity for the community colleges to facilitate the transfer process.

The University of California (UC) has also taken steps to simplify the process for transfer students, as it has articulated specific pathways for transfer into its 21 most popular majors. UC anticipates identifying pathways that are closely aligned with the AD-Ts established between the community colleges and the CSU system. In addition, the UC has pledged to meet the goal of a two-to-one ratio of incoming freshmen to transfer students by 2017-18.⁴²

³⁹ For additional information see <https://c-id.net/degreereview.html>

⁴⁰ California Community College Chancellor's Office. *Press Release*. December 10, 2015.

⁴¹ Carl Lariveral. "Easier Path From Community College to Cal State, Report Says," *Los Angeles Times*. February 2, 2015.

⁴² Nicole Freeling. "UC Offers Community College Students A Clear Path to Transfer," *Press Release*. July 8, 2015; Department of Finance. *Higher Education Highlights to the May 2015-16 Revise Budget Proposals*; University of California Transfer Information. Retrieved April 29, 2016 from <http://admission.universityofcalifornia.edu/transfer/preparation-paths/index.html>

The College may want to review how to increase the number of transfer degrees. For example, agriculture is clearly a major industry in the service area. The College has developed an agriculture career preparation certificate requiring four courses, two of which (Soil Science and Principles of Plant Science) are required in the Agriculture Plant Science AS-T. The College offers three other courses (Introduction to Chemistry, Principles of Microeconomics, and Introduction to Statistics) that are listed as choices in the core requirements for the AS-T in Agriculture Plant Science. To complete the transfer degree students are required to select one additional course from among five restricted electives, none of which the College offers at this time. The College may want to consider developing one of the five restricted elective courses for this transfer degree and subsequently providing this transfer degree.

A second possible new transfer degree discipline is based on the observation that public sector employment in education is a significant factor in the economy of the service area. There are substantial projected employment opportunities in the region for public school educators and there is a TMC for Elementary Teacher Education. The College has an early childhood education program, some curriculum for instructional aides, and regularly offers several courses listed in the TMC template. *While the core requirements for this program of study total to 48 units, it may be useful for the College to explore the possibility of offering the transfer degree.*

Assembly Bill 86- Assembly Bill 104 Block Grant

The Legislature provided the community college system with an opportunity to serve new students and advance the interests of the State. The May 2015 revision of the Governor's proposed 2015-16 budget included \$500 million to establish an Adult Education Block Grant program that provides funds to school districts and community colleges. Of that total \$350 million is earmarked for adult schools to maintain their level of effort in providing services while \$150 million is set aside for consortia work. The AB 86 program seeks to strengthen coordination of adult education services among adult schools, community colleges, local workforce investment boards, libraries, social service agencies, public safety agencies, etc. by reducing redundancy and providing the services to adult learners more effectively.

Regional consortia proposed transparent governance structures that were jointly approved by the Superintendent of Public Instruction and by the Chancellor of the Community College System. The language in the 2015-16 State Budget assures funding certainty and consortia are required to engage in robust planning at least once every three years. The Superintendent and Chancellor developed a plan using the consortia structure in future years to distribute Workforce Innovation and Opportunity Act (WIOA), federal Title II, and Perkins funding.

In broad terms the Palo Verde Adult Education Consortium set out four objectives: (1) provide certifications; (2) engage in data collection and sharing; (3) increase staffing; and, (4) increase marketing and outreach. The top priority for 2015-16 has been to address the gap in services for GED/High School Equivalency Preparation and Testing, Basic Literacy, and Numeracy instruction. The Consortium enhanced its academic and

career planning supports and worked on aligning career pathways from K-12 to the College. The Consortium also expanded its outreach to communities in the form of marketing and targeted research and analysis of community needs. Additional details are contained in the Annual Plan for 2015-16.⁴³

The College is continuing to explore stackable career and technical education credentials, starting with the career preparation certifications. In addition, the College has become a certified testing center for the general education development (GED) examination. *If noncredit curriculum to support preparation for the GED exam is developed, the College may want to consider also creating a career development/college preparation noncredit certificate to be awarded to the course completers.*

California Online Education Initiative (OEI)

The third general opportunity is the OEI project launched in 2013 that seeks to re-invigorate online instruction within the California community college system by addressing some of the known shortcomings in distance learning. The Initiative has the Governor's backing and a \$56.9 million budget over 55 months.

The 27-member steering committee includes representatives from a variety of constituencies that have been organized into workgroups to address: (1) professional development; (2) consortium operations; (3) student support services; (4) a common course management system; (5) basic skills; and, (6) academic affairs. Twenty-four pilot colleges have agreed to test solutions for student readiness; tutoring support strategies; and the use of the common course management system. With the grant funding, the OEI promises to provide colleges with incentives to participate. OEI has offered no-cost or low-cost tools such as a course management system, course design resources, a re-designed California Virtual Campus website and catalog, and professional development for faculty. Future students are promised online learning readiness materials, tutoring and basic skills support, counseling/advising, and streamlined access.

Participation in the OEI is voluntary on the part of the colleges, faculty, and students. One of the most promising aspects of the OEI is the Exchange. It is often challenging for colleges to ensure that all students have access to the courses they need at the times that best fit their busy schedules. The goal of the Exchange is to facilitate progress toward completion by providing access to courses across colleges. Students enrolled at colleges in the Exchange will be able to seamlessly register for Exchange courses, often those high-demand or difficult-to-fill courses. To ensure that course credits are recognized by a student's home college, all participating colleges will become members of the OEI Consortium. Membership will require the college to change business processes to make registration seamless, host technology-based mechanisms to carry out those processes, sponsor courses designed to a set of exemplary online education standards, recruit faculty who are committed to excellence in online learning and teaching strategies, and offer courses students need to complete their educational goals. The vision for the Exchange

⁴³ Palo Verde Adult Education Consortium. *Adult Education Block Grant Annual Plan 2015-16*. October 2015

has been dubbed the “Herculean” task of the OEI as it may be the most complex work undertaken in the overall effort, but it portends great dividends for the students.

As noted in the internal scan portion of this Plan, the College has not been an active participant in online instruction. Online instruction holds a promise to reach students outside the region as well as those who live in the service area but who cannot come to the campus. It also provides an option for students at the institution who were unable to enroll in a class they need in order to progress through their chosen program of study. It is clearly a means to reach a broader audience. The College recorded some online instruction in fall 2007 (4.27 FTES) but it represented only 0.4% of all FTES that year. Over the period of fall terms 2010 to 2014 the volume of FTES attributed to online instruction steadily grew from 8.78 FTES to 36.45 FTES representing on average 3.24% of FTES at the College. From the earliest year on record (fall 2000) the volume of FTES generated by online instruction compared to the total FTES *statewide* grew from .03% (130.76 FTES) to 9.5% (49,582.43 FTES) in fall 2015.

Over the years a great deal has been learned about the challenges to effective learning through an online environment. The OEI appears to be offering solutions to those known challenges.⁴⁴ *Therefore, the College may want to revisit this opportunity as a means to reach students who cannot attend classes at either physical site.*

The fire fighting personnel who have enrolled in technical courses offered by the College through an Instructional Service Agreement (ISA) are a second potential audience for online instruction courses. Having that initial relationship with the College may serve as a basis to continue in a program of study designed to culminate in an associate degree that is supported by online instruction. One of the goals of the OEI initiative is to facilitate a credit exchange and FTES sharing protocol. *The College may want to consider the feasibility of offering online instruction to these remotely located students and the possibility of using a currently established program of study as the framework for the general education curriculum required to complete the degree.*

The College has been very actively engaged in correspondence course instruction as on average from fall 2010 to fall 2014 it has represented 40% of FTES. Two-way interactive video and audio instruction has also been used to connect the campus in Blythe with the Center in Needles. On average, that mode of instruction has represented 6% of the FTES generated in the fall terms 2010 to 2014. Both of these modes of instruction may not be the “wave” of the future in higher education. The principal enrollments in the correspondence education offerings have been inmates in the state prisons. However, the Chancellor’s Office is promoting face-to-face instruction in career and technical fields as the preferred mode of instruction in the prisons.

Acceleration Instructional Design and Placement Policy

The instructional strategy known as acceleration has taken on multiple forms among community colleges throughout the nation. In part, acceleration arose because the well-

⁴⁴ Hans Johnson. et. al. *Successful Online Courses in California’s community Colleges*. Public Policy Institute of California. June 2015

intended established designs of basic skills curriculum sequences often create unintended consequences. Traditional multiple exit points lead many students to get discouraged and leave college.⁴⁵ Large-scale research studies outside and within California have demonstrated that when a student needs to complete more levels of developmental courses the student is less likely to ever complete college-level courses in English and math.⁴⁶

Other reasons for the increasing popularity of acceleration strategies emerged from national research that raised questions about the efficacy of making placement decisions based primarily upon the results from a single examination experience.⁴⁷ Still other national research has pointed to the ability of high school transcript data to predict success in college.⁴⁸ These research efforts opened a “new door” for acceleration initiatives.

The term “acceleration” has been given various definitions, or different labels, or descriptors. For purposes of this discussion four definitions/strategies have been identified as follows:

1. Compressing the pace of instruction by teaching the same course content over a shorter period of time.
2. Changing placement policies by adjusting placement exam cut scores and using more robust multiple measures data.
3. Implementing co-requisite models.
4. Redesigning remedial courses.

Compressing the pace of instruction as a strategy is perhaps inspired by the experience of faculty who teach a summer session of the same course they offer during the fall or spring term. Course retention and success are thought to be higher during the summer session experience. But, is that because students attending during the summer are better prepared and more motivated, or are the results due to the shorter period of time and the more intense instruction and contact with the subject matter? This scheduling strategy during a primary term arranges two levels of remedial curriculum in the discipline so that one course in the sequence follows the other, each using half of the weeks in the primary

⁴⁵ Juan Calcagno and Bridget Long. *The Impact of Postsecondary Remediation Using a Regression Discontinuity Approach*. National Center for Postsecondary Research, April 2008; Thomas Bailey, Dong Jeong, Sung-Woo Cho. *Referral, Enrollment, and Completion in Developmental Education Sequences in Community Colleges*. Community College Research Center, Teachers College, Columbia University. Working Paper # 15, 2009.

⁴⁶ Nikki Edgecombe. *Accelerating the Achievement of Developmental Education Students*. Community College Research Center, Teacher’s College Columbia University. Working Paper #30, 2011; Peter Bahr, et. al. *Course-Taking Patterns, Policies, and Practices in Developmental Education in the California Community Colleges*. Ed Source. June 2010.

⁴⁷ Judith Scott-Clayton. *Do High Stakes Placement Exams Predict College Success?* Community College Research Center, Teacher’s College Columbia University. Working Paper #41, 2012; Olga Rodriguez, et. al. *Remedial Placement Testing in Community Colleges*. Community College Research Center, Teachers College, Columbia University. Working Paper # 73, 2014.

⁴⁸ Clive Belfield and Peter Crosta. *Predicting Success in College: The Importance of Placement Tests and High School Transcripts*. Community College Research Center, Teachers College, Columbia University. Working Paper #42, 2012.

term. Typically the sequenced courses are taught on the same day and hour pattern with the same instructor. In some cases students are automatically enrolled in both courses to guarantee a place in the classes for the entire term of instruction.

Changing placement policies using robust multiple measures, such as the high school transcript data, broadens access to transfer-level courses and makes outcomes equitable for multiple subgroups of students. Nationally, while currently only 19% of students were eligible under existing practices, the national research estimates that 64% of entering students could succeed in college transfer-level English if allowed to enroll directly. Half of entering students could succeed in college math if allowed to enroll directly while only 25% are eligible under existing practices.⁴⁹ The California Multiple Measures Assessment Project found that 72% of community college students could be placed into college English using the overall high school GPA and English course GPA data.⁵⁰ At least two pioneering California community colleges (Butte and Long Beach) are testing this concept. Reports are favorable. Access to college English was doubled at Butte and quadrupled at Long Beach with success rates that remained steady and equity gaps narrowed.⁵¹ In the Virginia Community College system, completion of college-level math tripled after implementation of a pathways approach to placement.⁵²

The strategy of using co-requisites allows students who are characterized as being “below transfer level,” to enroll in a transfer-level course that is in a co-requisite relationship with a support class commonly taught by the same instructor. The positive outcomes in multiple states have been impressive.⁵³ Using a controlled experimental design the City University of New York found that the majority of students passed college statistics with supplemental instruction, and the pass rate was nearly 29% higher than in the control group of students who initially enrolled in elementary algebra.⁵⁴ Four North Carolina community colleges found that completion for college English was 1.6 to 2.3 times higher than in traditional remediation, and equity gaps narrowed or disappeared completely.⁵⁵

⁴⁹ Judith Scott-Clayton. *Do High Stakes Placement Exams Predict College Success?* Community College Research Center, Teachers College, Columbia University. Working Paper #41, 2012.

⁵⁰ Craig Hayward, John Hetts, Terrance Willett, et. al. *Using Decision Trees to Predict Course Success in the Multiple Measures Assessment Project*. Presentation at the Research and Planning Group Annual Conference, April 2015.

⁵¹ Leslie Henson and Kati Hern. *Let Them In*. Research and Planning Group Perspectives. November/December 2014; Long Beach City College. *Promising Pathways*. 2014. Retrieved from <http://www.lbcc.edu/promisepathways>

⁵² Olga Rodriguez and Nikki Edgecombe. *Early Findings From Statewide Developmental Education Reform in Virginia and Florida*. Presentation at the League for Innovation annual conference, March 9, 2015; Hoori Kalamakarian, Julia Raufman, and Nikki Edgecombe. *Statewide Developmental Education Reform: Early Implementation in Virginia and North Carolina*. Community College Research Center, Teachers College, Columbia University. May 2015.

⁵³ Complete College America. *Corequisite Remediation: Spanning the Completion Divide*. Spring 2016; Iris Palmer. *How to Fix Remediation at Scale- Colorado Example*. New America. March 2016; *Is Corequisite Remediation Cost Effective- Early Findings from Tennessee*. Community College Research Center, Teachers College, Columbia University. Research Brief #62, 2016.

⁵⁴ Alexandra Logue et. al. *Elementary Algebra or Statistics*. Paper delivered at the American Educational Research Association Conference. April 19, 2015.

⁵⁵ Dawn Coleman. *Replicating the Accelerated Learning Program*. Center for Applied Research. 2015.

Some institutions have successfully pursued a strategy of embedding basic skills instruction into discipline courses. The common approach is to use concrete applications in a specific context that is of interest to the students.⁵⁶ The teaching process is built on the recognition that some students learn more effectively when they are taught in a hands-on, real-world context rather than in an abstract manner. The currently popular reading apprenticeship initiative is perhaps another example of this embedded approach.

Redesigning remedial courses is a strategy of acceleration that seeks to better align English and math sequences with transfer-level curriculum. A 2014 evaluation of the California Assessment Project (CAP) initiative observed that throughout the California community college system only 7% of the students beginning at three levels below transfer-level successfully completed a transferable math course within three years. The comparable cohort of students in English composition is 19%. However, all of the first 16 California community colleges offering redesigned accelerated remediation reduced the students' time in remediation by at least one semester without making any changes to transferable courses. The study found that students' odds of completing a transferable math course were 4.5 times greater in an accelerated pathway than for students in traditional math remediation course, and completion rates for English composition courses were at least 1.5 times greater and 2.3 times greater in a high-acceleration implementation model than for students in traditional English composition remediation.

Acceleration was found to work for students of all backgrounds and at all placement levels, but implementation strategies did impact the final results.⁵⁷ The Carnegie Foundation for the Advancement of Teaching has sponsored a national program, Statway, to improve the completion of transfer-level math. Evaluation of that program concluded that, among the 26 pilot colleges, completion rates more than tripled in half the time (49% in one year vs. 15% in two years).⁵⁸

The California Acceleration Project (CAP) has been in place since 2010-11 as a response to the basic skills performance challenge and was a curricular design effort at some California community colleges years before the project formally began. The CAP seeks to promote curricular redesign to reduce the sequence length and eliminate “exit points” in the basic skills educational experience. It also promotes a reconsideration of curricular content to focus on what is taught and how it is taught with the guiding question of what students truly need to succeed in college English or math. As of June 2011, more than 80 colleges had participated in the CAP professional development activities.

⁵⁶ C. Mazzeo. *Supporting Student Success at California Community Colleges*. Career Ladders Project. 2008. Dolores Perin and Rachel Hare. *A Contextualized Reading-Writing Intervention for Community College Students*. Community College Research Center, Teachers College, Columbia University. May 2011. Elaine Baker, Laura Hope, Kelley Karandjeff. *Contextualized Teaching & Learning: A Faculty Primer*. Research and Planning Group. 2009.

⁵⁷ Craig Hayward and Terrence Willett. *Curricular Redesign and Gatekeeper Completion: A Multi-College Evaluation of the California Acceleration Project*. April 2014

⁵⁸ Nicole Sowers and Hiroyuki Yamada. *Pathways Impact Report*. Carnegie Foundation for the Advancement of Teaching. 2015.

As part of the Adult Education Regional Consortium initiative the College has compressed the two lowest levels in the basic skills math sequences into one course. The College is exploring the same strategy for the next two levels in the mathematics curriculum. College faculty members in reading and writing have developed an integrated curriculum to include instruction in both disciplines within the same course. Composition faculty members are experimenting with strategies to shorten the path of a student's basic skills writing instruction.

Statistics is the most common transferable mathematics course listed as required among the implemented AD-Ts at the College. *Therefore, the institution might want to explore and consider assisting transfer-oriented students with an accelerated path that requires less than a full-semester of instruction in Intermediate Algebra before entering Statistics. This acceleration strategy, sometimes described as Statway, is now fully accepted by the University of California and the California State University systems.*⁵⁹

The College might also want to consider the possibilities of developing a credit-by-examination experience for high school students who are completing the Intermediate Algebra course in high school. If successful, those students might be granted College credit for that high school course.

At least one college, Antelope Valley, has had significant success in administering a math diagnostic exam, modularizing the basic skills math sequence, and allowing students to move forward with self-paced instruction.⁶⁰ *The College might want to consider this option.*

The College mathematics faculty members are to be commended for efforts to offer compressed basic skills math course instruction during the primary terms.

Given the reported positive outcomes from the California and national research, some additional consideration to the potential changes in placement practices such as using the high school variables (GPA and grade in discipline-specific courses) may be a worthy effort for the College also to undertake.

Dual Enrollment- AB288

The most recent legislation to promote collaboration, AB 288 that took effect in January 2016, authorizes the governing board of a community college district to enter into a College and Career Access pathways (CCAP) partnership with the governing board of a school district. The partnerships offer or expand dual enrollment opportunities for

⁵⁹ UC/CSU Path Cleared for Statistics Pathways, October 20, 2015. Retrieved from <http://cap.3csn.org/2015/10/20/uccsu-path-cleared-for-statistics-pathways/>. See also Office of the Chancellor, California State University. *Statistics Pathways in CSU Quantitative Reasoning*. October 20, 2015 and University of California. *Special Regulations for Courses in Specific Subject Areas*. Retrieved October 20, 2015 from <http://ucop.edu/transfer-articulation/transferable-course-agreements/tca-policy/regulations-by-subject-area.html#s>.

⁶⁰ Bonnie Suderman, Vice President for Academic Affairs, Antelope Valley College. *Board Goals Progress Presentation*. May 10, 2016.

students who may not already be college bound or are from groups underrepresented in higher education. The goal is to develop a seamless pathway from high school to community college for career-technical education or preparation for transfer, by improving high school graduation rates or helping high school students achieve college and career readiness. The following are the highlights of the legislation:

- Community colleges can assign priority “no fee” enrollment and registration to high school students in a CCAP;
- Community college courses during the regular high school day can be restricted to high school students and do not have to meet the normal open enrollment standard;
- Courses with no available seats on campus cannot be offered at high schools through the CCAP because the public must have access to the course;
- Basic skills math and English can be offered through CCAP, but only for students who are not at grade level in that subject; and,
- Community colleges can claim FTES if the high school student is qualified for full high school apportionment without using hours of the college course.

The College engaged in a dual enrollment program with the Palo Verde Unified School District to offer courses five-days a week during the morning hours to vocational students enrolled in career and technical education. The College plans to pursue a similar engagement with the Needles Unified School District starting with automotive and construction programs. Additional programs in Culinary, Hospitality, and HVAC are scheduled to be investigated.

The College might want to explore ways to use the CCAP concept to develop curriculum for selected high school students. It might be possible to offer some of the College developmental curriculum at the high schools. The target audience would be students who have an interest in attending postsecondary education but whose placement exam scores or Early Assessment Program scores indicate they are not ready for college-level instruction. It would be ideal if this instruction could be delivered, using a CCAP framework, while the students are still enrolled in high school.

Improving High School Preparation- As long ago as 2003, a task force of high school teachers and CSU faculty members developed the Expository Reading and Writing Course (ERWC). It is a rigorous, rhetorically based, full-year college preparatory English course designed to support college-readiness in English for high school seniors. It has been adopted by upwards of 700 comprehensive high schools. The UC has approved the ERWC for area B credit of the A-G requirements and the course meets college preparatory requirements for CSU.⁶¹ The Needles Unified School District offers the ERWC course, the Palo Verde Unified School District is working on developing the ERWC for implementation in that District.⁶²

⁶¹ Expository Reading and Writing Course. Retrieved May 7, 2016 from www.calstate.edu/cap/englishcourse

⁶² Brandy Cox, Principal Palo Verde High School. *Personal Correspondence*. August 17, 2016. Lale Cilenti Arac, Needles Center Director. *Personal Correspondence*. August 18, 2016.

CSU San Bernardino (CSUSB) has started a math teacher education initiative and is seeking state grant funding to support the effort. Throughout the CSU system, and at CSUSB in particular, there is now a keen interest in developing in-service professional development materials for middle and high school math teachers. In addition, the CSU System Office and CSUSB leadership have an interest in developing a mathematics course for high school seniors that would be like the ERWC course for English.

The College may want to consider discussions to support the Palo Verde High School District to implement the ERWC curriculum. The College also may want to consider encouraging both public school districts in the College service area to monitor the CSUSB math initiative and seek opportunities to have their faculty participate.

Perhaps another way to be proactive in efforts to better prepare high school students for college curriculum would be to create a summer bridge program that might be open for incoming high school seniors as well as recent graduates.

Changing the Academic Calendar

The College is somewhat unique among California community colleges as it operates the primary terms of instruction from an academic calendar that requires 18-weeks of instruction. Most colleges have switched to an academic calendar that provides for some version of a 16-week instructional period. There is some evidence that the slightly shorter calendar improves student retention and success.⁶³ The faculty members teaching a compressed presentation of math basic skills curriculum at the College reported a higher success rate once that instructional strategy was implemented. However, the primary reason so many other colleges have made this switch is economic. The colleges gain some additional revenue from the full-term face-to-face classes. An illustration of this scenario can be found in the internal scan chapter of this Plan. The College would have to develop a proposal to the Chancellor's Office and obtain permission to make the change. In the process the College will need to revisit the way in which classes are scheduled using guidance from the addendum concerning academic calendars, course scheduling, and related topics (Sept. 2008) and other materials posted at the Chancellor's Office.

Community Education

The College is authorized to offer fee-based, not-for-credit instruction commonly called community services courses. These offerings do not require formal curriculum approval and faculty recruited to teach these classes do not have to meet the minimum qualifications required for apportionment generating curriculum. However, the College is required to operate this type of a program so that it generates at least as much income as is required to provide the instruction.

In the interviews there was some interest expressed in this possibility for both the Needles Center and the main campus in Blythe. Some community colleges have

⁶³ Susan Bangasser. *What Can We Say About the Impact of Compressed Calendars and Courses on Student Success?* Academic Senate of the California Community Colleges. Retrieved May 7, 2016 from www.asccc.org.

successfully offered these types of programs in cooperation with online providers such as Ed2Go or Pearson Inc. These providers supply continuing education, college readiness, and personal development curriculum.

Industry Recognized Certifications

The California Community College Association of Occupational Education (CCAOE) and the Chancellor's Office Doing What Matters initiative sponsored by the Workforce and Economic Development Division have developed a perspective on industry certifications. The perspective from these leadership groups is that career and technical education programs of study designed for immediate job entry should align with industry-recognized certifications that have labor market value. A review of the College 2015-2016 Catalog concluded that several of the career and technical education programs relate to industry certifications, but others do not. A survey of small business owners in the Inland Empire revealed that they valued vocational and industry certifications. The vocational certifications that at least five business owners cited included: (1) accounting/bookkeeping; (2) graphic design; (3) heating, ventilating, air conditioning repair (HVAC); (4) information technology; (5) medical assisting; (6) welding; (7) mechanical trades; and, (8) nursing- registered, licensed vocational, or assistant. The industry recognized certifications that small business owners cited included: (1) California Bureau of Real Estate; (2) CISCO; (3) certified public accountant (CPA); (4) electrical; (5) food handler; (6) insurance sales; (7) Microsoft; (8) paralegal; and, (9) water/wastewater.⁶⁴ *The College may want to consider revising public relations materials to highlight certifications, where they exist, and to strengthen those programs of study that do not currently align to an industry-recognized certificate. The relationships between career and technical programs and industry-recognized certifications should become a major marketing tool for the College.*

2. Possible Areas of Curriculum Expansion

Several curriculum areas in which the College may want to consider some adjustments. These suggestions are offered in support of the College goals previously cited in this Plan.

Home Health Aide- The College staff indicated in interviews that they had received a few calls from local health care providers asking if there were graduates of a program for this occupation who might be looking for employment. Some years ago the College operated a state-approved training program for this occupation. The curriculum for this occupation is commonly a subset of the instruction offered for Certified Nursing Assistants. The Inland Empire labor market analysis prepared in 2014 by the Center for Excellence indicates a number of job openings are expected in future years due to the life experiences of an aging population and the provisions of healthcare reform. Employment will be most likely found in ambulatory and long-term care facilities. Occupational projections throughout the State indicate there will be an average annual basis of 5,920 job openings. Openings in Riverside and San Bernardino County are projected to run an

⁶⁴ Lori Sanchez. Centers of Excellence for Labor Market Research- Desert/Inland Empire Region. *Small Business Survey*. November 2014.

average of 445 annually out to 2022. *The College may want to consider reopening its training program for Home Health Aides.*

Teacher Assistant and Teacher Assistant-Bilingual- The Taxonomy of Programs for the California community colleges provides a distinct entry for each of these occupational areas, but the EDD occupational projections does not. The College had some curriculum related to this occupation in its instructional aide or EDU courses and its child development curriculum. The College may want to revisit the occupation in light of labor market projections and as it is an initial step for someone who is interested in becoming a public school teacher. Projections for openings throughout the State indicate an average annual opportunity for 4,470 openings. For Riverside and San Bernardino Counties the projections average 442 annual job openings out to 2022. *The College may want to consider expanding its curriculum to create a specific program of study for this occupation.*

Retail Management- The College has a business curriculum available and provides an AD-T in Business Administration. In Blythe, the second greatest area of employment growth since 2001 is in the retail and sales family of occupations. The California community colleges have an established retail management curriculum with the Western Association of Food Chains (W AFC). But, many colleges have their own distinct retail management curriculum to assist those who enter the retail trade industry advance to supervisory positions. Occupational projections in Riverside and San Bernardino County for sales and related occupations are anticipated to provide almost 7,000 openings annually out to 2022. *The College may want to consider exploring this possibility with local businesses.*

Customer Service- The City of Needles is located along historic Route 66. Both Needles and Blythe experience a great deal of vehicular traffic and retail and hospitality (restaurants and hotel/motels) is a major segment of the local economies. People touring parts of the western states are a portion of the vehicular traffic. At a recent symposium on economic development of Route 66 participants identified short-term training in customer relations/customer service for employees interacting with visitors as a significant need to advance economic development.⁶⁵ For communities in which retail and hospitality were major parts of the economy the College might create a customer service academy and/or hotel management program. In light of the recently increased California minimum wage, employers may prefer to hire individuals whose educational background suggests that they can provide the most value to the prospective employer. *The College may want to consider exploring this possibility with local businesses.*

Small Business Needs- In 2014 the Inland Empire Center of Excellence sponsored a survey of small business owners. Unfortunately, business owners in neither Needles nor Blythe were included. The vast majority of the surveyed businesses were owner operated or employed no more than 10 people in retail or manufacturing industries. While the most important level of education required for entry-level employment was a high school diploma with on-the-job training, 44% of the respondents believed that some level of

⁶⁵ Lynne Miller, Symposium Organizer. *Personnel Correspondence*. June 17, 2016

post-secondary education was somewhat important. The skills that employers described as lacking in their employees were: (1) written communications (52% of employers indicated this skill); (2) leadership (49% of employers indicated this skill); (3) critical thinking (46% of employers indicated this skill); (4) computer applications (42% of employers indicated this skill); (5) problem solving and creativity/innovation (41% of employers indicated each of these skills); (6) oral communication and self-direction (40% of employers indicated each of these skills); and, (7) professionalism or work ethic (37% of employers indicated this skill).⁶⁶ These results echoed the survey work done for the AB86 Palo Verde Regional Adult Education Consortium in 2015. *The College may want to reflect on the current curriculum student learning outcomes to consider the extent to which the curriculum as a whole nurtures these skills.*

Business Information Worker- Office and administrative support occupations was one of the families of jobs that experienced the greatest growth in Blythe between 2001 and 2015. Much of the local economy is composed of small businesses. The results of the survey of establishments administered for the AB 86 Adult Education Regional Planning effort indicated that they needed employees who understood basic office productivity software applications. The Doing What Matters initiative has established a pattern for business information worker curriculum that consists of three levels of skills within the industry area of Information and Communications Technology and Digital Media. The three skills levels were developed with funding from the SynED, Chancellor's Office, and the Centers of Excellence. Each was related to one or more industry-valued certifications. The College offers a curriculum in computer applications and computer information science and is reported as a venue for the BIW level 1 courses. However, the program of study does not appear in the catalog and may not be widely advertised. *The College may want to consider aggressively marketing this program of study and expanding that curriculum to include some of the skills expected at the level 2 of this emerging occupation.*

Automotive Technology- The College offers a certificate and degree in this discipline. In the interviews it was determined that the lead instructor would like to provide an opportunity for program graduates to earn an Automotive Service Excellence (ASE) certification. That certification requires two years of work history, unless the candidate graduates from a National Automotive Technicians Education Foundation (NATEF) accredited program. In those cases the expected work history is cut in half. That accreditation may require educating more students, offering more curricula, and providing more instructional time than is currently the case. It is considered a difficult accreditation to accomplish. However, a graduate of the program could participate in the ASE examination process and if successful put the awarding of the certificate on hold until the requisite work history is developed. *The College may want to consider offering one or more courses in ASE text preparation with curriculum built around the studies guides.*

⁶⁶ Lori Sanchez. Centers of Excellence for Labor Market Research- Desert/Inland Empire Region. *Small Business Survey*. November 2014.

The future direction of automotive technology programs in the California community colleges is moving in the direction of training in alternative fuels. *The College may want to consider expanding the program to teach students the troubleshooting and repair of automobiles using the more popular alternative energy sources.*

Welding- The College offers a certificate and degree in welding. In the interviews it was determined that the lead instructor would like to create a testing center for American Welding Society (AWS) examinations. An instructor who teaches the examinee cannot administer the AWS certification test, as it must be a neutral third party who is trained and certified to administer the examinations. Much of the equipment required for the testing may be currently available at the welding program laboratory. The nearest AWS testing centers are located in Kingman, Arizona and Fontana, California. *While it was believed that additional space would be needed for a testing area, the College may want to revisit the space issue and consider becoming a testing site.*

Agriculture Crop Science Certificate of Career Preparation- During the summer of 2016 the City of Needles approached the College seeking participation in a Task Force to discuss workforce-training needs associated with developing medical marijuana cultivation facilities locating in the City.⁶⁷ The City of Hope cancer research organization has approached the City about increasing the numbers of facilities dedicated to cultivation of marijuana in support of the organization's research agenda. The City has accommodated with changes to local ordinances and issuing conditional use permits. *The curriculum in the current career preparation certificate may need to be augmented to address growing, cultivating, soil science, testing, etc. for this specific industry.*

Fire Science Career Exploration- The College has established curriculum for high school-age young adults who want to explore careers in fire science. The curriculum is delivered through instructional service agreements with the Industrial Emergency Council (IEC). City of Needles and Needles Unified School District leadership approached the College about helping to start an explorer program, similar to curriculum offered in Blythe and elsewhere, so that local youth could be trained and employed as firefighters.⁶⁸ *If the College could locate qualified instructors it might want to consider offering the courses or extending the agreements with IEC so that instruction is provided in Needles.*

3. New Career and Technical Education Possibilities

There is a limited number of career and technical education programs of study the College may want to evaluate as potential new programs of study. These suggestions are offered in support of the College goals previously cited in this Plan and are *in addition to* the two new associate degree for transfer programs of study previously discussed in this Plan.

Culinary Arts/Hospitality- The Fort Mojave Indian Tribe expressed an interest in entry-level training in the culinary arts/hospitality industry disciplines as a way to prepare

⁶⁷ LaLe Cilenti Arac, Director, Needles Center and AEBG Project Director. *Personal Correspondence.* August 24, 2016

⁶⁸ Ibid.

workers for employment in their casinos and related businesses. The Needles Unified School District has a teaching facility that might be made available to the College. At some time in the past, the College had a curriculum in this discipline that is not currently offered. One of the most common requirements in the culinary businesses is to educate employees about the principles and practices of sanitation, safety, and the use of food preparation equipment. This topic is commonly delivered in a lecture format and might be a viable option in some form at both the main campus in Blythe and at the Needles Center or as an online offering. Much of the employment in Blythe is associated with food preparation and serving, and the greatest employment growth in town is in this family of occupations.

Water/Wastewater Treatment- Educational leaders at the two state prisons (Ironwood and Chuckawalla) within the District service area have expressed an interest in a CTE program offered to the inmates in this discipline. Some inmates at the prisons are closer to being released than others, and the State is interested in providing better educational services to those individuals in the hope that they might find employment and not recidivate. Several community colleges in California have established programs in this field and the Centers of Excellence has prepared two studies on opportunities in this field in the San Francisco Bay Area and in Southern California. The Department of Public Health issues a variety of certifications for water distribution and treatment occupations. The California Water Environment Association issues certifications for wastewater collection while the State Water Resources Control Board governs certifications for wastewater treatment occupations. The greatest projected employment needs are for water treatment and distribution operators. Statewide occupational opening projections through 2022 indicate an annual average of 420 openings whereas in Riverside and San Bernardino Counties the annual average projection is for only 36 openings.

Pre-Allied Health Program Certificate- Several critical projected occupational employment opportunities in Riverside and San Bernardino County are in the allied health fields. The large area adjacent to Needles, described earlier in this Plan as the Colorado River Corridor, is likely the site of further employment opportunities. The adjacent community college system in Arizona has created several allied health programs in recognition of those opportunities, but most have waiting lists and an array of prerequisite courses to complete before a student can be considered for admission. At this time the College offers four allied health programs- Licensed Vocational Nursing, Certified Nursing Assistant, Emergency Medical Technician, and Phlebotomy Technician. Therefore, Palo Verde College already has an established curriculum that might be equivalent to the courses required as prerequisites to allied health programs offered at other colleges. *The College may want to consider developing the capacity to deliver these prerequisite courses online and/or at the Needles Center. The College may also want to consider creating a pre-allied health certificate, with flexible requirements, to meet the prerequisite expectations of the common allied health programs.*

Solar Installer/Technician-The California Solar Jobs Census 2015, sponsored by The Solar Foundation, projects 19% (14,318) jobs growth in 2016.⁶⁹ Over half of the workers

⁶⁹ The Solar Foundation. *California Solar Jobs Census 2015*.

are employed at installation firms, but the utility-scale market segment is driving the growth. The installed cost of utility-scale PV systems has been declining in recent years and national policy, found in state Renewable Portfolio Standards (RPS) requirements, have stimulated growth. The City of Blythe recently has authorized the construction of a large solar “farm” west of the city proper. The North American Board of Certified Energy Practitioners (NABCEP) administers an entry-level certification exam. Surveys and research by the Center of Excellence identified other existing opportunities for sales representatives, designers/engineers, and in manufacturing and distribution. *The College may want to explore this occupational area as a focus to the building construction technology program.*

Heating, Ventilation, Air Conditioning (residential)- There is a regional labor market demand for heating, ventilation, and air condition installers and repair technicians (an annual average of 184 job openings to 2022). From 2010-11 to 2014-15 four California community colleges in the Inland Empire region granted an average of 71 awards annually in this program of study. Imperial Valley Community College District annually graduated an average of another 11 students over this same period of time. Data for demand in Arizona and graduates from institutions in western Arizona is not completely available and reliable. The costs to start and support this type of career and technical education program may be steep but could build from the space, equipment, and curriculum now provided in the welding program. *The College may want to explore this occupational area as a focus to the building construction technology program.*



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Student Services/Instruction Team

- Staci Lee, Student Development and Civic Center Events Manager
- Diana Mendez, Director of Financial Aid and Scholarships
- Shelley Hamilton, Director of Admissions and Records
- Denise Taylor, Instructional Services Manager
- Esther McBroom, Instructional Services Secretary
- Lorenzo Lujano, Counseling
- David Silva, Counseling
- Hortensia Rivera, Director DSSS
- Maria Rivera, Director EOPS/CARE
- Irma Dagnino, Director Transfer Center, Articulation Officer
- Victor Hernandez, Counselor
- Jaelyn Randall, Student Success Manager

Budget and Planning Committee

- Adam Houston, Director of Institutional Research
- Shad Lee, Director of Facilities and Operations
- Biju Raman, Math/Chemistry and Academic Senate President
- Eric Eagan, Director of Information Technology
- Dana Maxfield, Fiscal Services Manager
- Lale Arac, Director of the Needles Center
- Michael Gaubeca, Business Instructor
- Julene Marquez, Business Services Technician I
- Rich Soto, Web Services/Network Specialist
- Denise Hunt, Executive Secretary to the Superintendent/President

Faculty and Staff Interviews/Questionnaire Respondents

- Brian Thieboux, Chair Language Arts and Communications Division
- Sioux Stoeckle, English and Theater Arts
- Karen Redwine, Co-chair History, Social and Behavioral Science Division

- Kevin Eoff, Co-chair History, Social and Behavioral Science Division
- Peter Martinez, Chair Business Division
- Sandra Sher, Chair Math/Science Division
- June Turner, Librarian
- Greg Ginder, Health/Physical Education
- Maria Kehl, Site Supervisor of the Child Development Center
- Henry Rinaldi, Auto Technology
- Joe Boire, Welding Technology
- Scott Peterson, Chair Vocational Education Division
- Alejandro Garcia, Physical Science/Math
- Derek Copple, Allied Health
- Virginia Armstrong, Nursing Program Director
- Willie Smith, Criminal Justice
- Dan Spechtenhauser, Network Technician
- Robert Van Dyne, Help Desk Technician- Needles Center
- Jeanie Johnson, Executive Secretary- Needles Center
- Carrie Mullion, Administrative Assistant to the Superintendent/President and Board of Trustees

All Staff meeting participants not identified above.

A special note of thanks is extended to Russi Eagan, Vice President for Administrative Services and Sean Hancock, Vice President for Instruction and Student Services for their assistance in arranging interviews, meetings, the open house session, and their primary campus leadership roles in this project.



Facilities Master Plan Section

I. Projections for Future Growth and Space Needs

Dynamics of Future Capacities

Linking the Educational Master Plan's internal and external analysis to Weekly Student Contact Hours (WSCH) and space quantification completes the process of planning for future instructional capacity. It balances the current curriculum, instructional delivery modes, learning environment, and necessary support structures with a comprehensive program of campus development. The extent and direction of future curriculum development is uncertain, but the visions of future curriculum in the Opportunities for the Future chapter will be balanced against the needs of the labor market, interests of prospective students, opportunities provided by the four-year transfer institutions, the College's mission, and priorities and financial resources of the College and District.

The current and immediate future economic indicators are improving, so it is anticipated that the College will return to positive growth in the foreseeable future. By the year 2020 the number of new student enrollments should begin to increase and the College will return to its previous growth pattern. Therefore, planning must involve developing a long-term vision as well as meeting short-term goals.

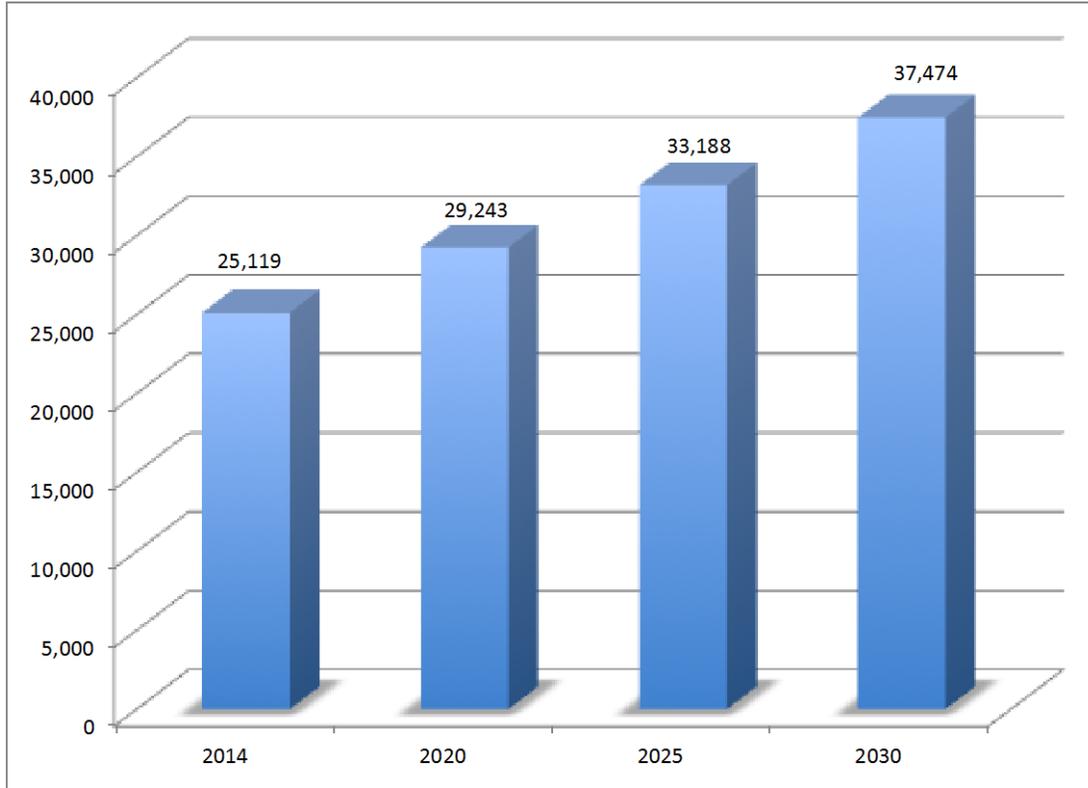
As a dynamic process, educational planning involves a mixture of methods and a variety of assessments. Looking to the future, a master plan must strive to:

- assure sufficient facilities to accommodate higher enrollment numbers;
- improve the teaching/learning environment;
- address new program development;
- integrate the latest technological innovations; and,
- provide adequate space configuration that permits flexible teaching methods.

By considering the expected economic and fiscal factors out to 2030, a growth projection for WSCH was established for the College. *The projections distinguish among sources, e.g. correspondence courses, in-service instruction primarily provided firefighter personnel, face-to-face classes taught on the main campus and at Needles.* While modest, this growth represents a reasonable forecast for this College at this time.

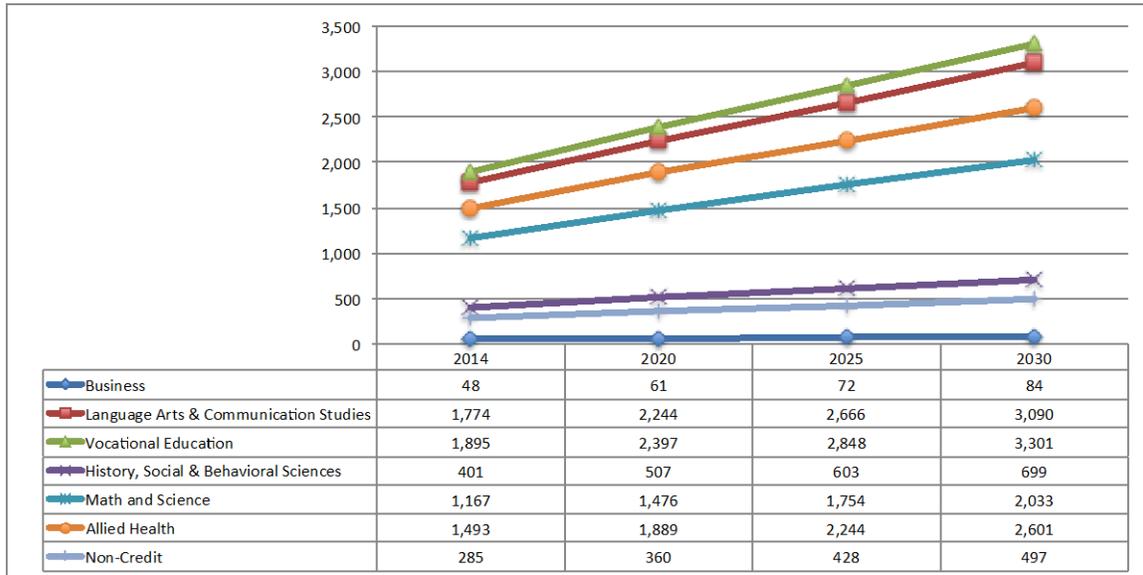
In any planning cycle, the projected WSCH is time specific and addresses future needs for increased capacity that may or may not materialize exactly at the times projected. The strategic goal is to plan for sufficient facilities that are flexible enough to accommodate additional enrollments when they do materialize.

FMP Chart 1: PVC Weekly Student Contact Hours (WSCH) From All Sources Forecast



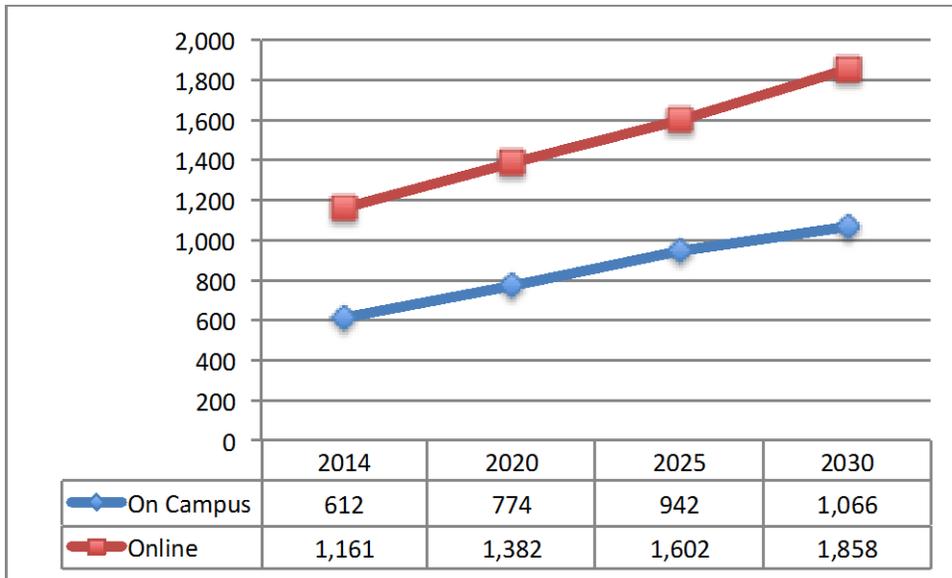
Source: Cambridge West Partnership, LLC

FMP Chart 2: PVC Weekly Student Contact Hours (WSCH), Blythe Campus by Division Forecast



Source: Cambridge West Partnership, LLC

FMP Chart 3: PVC Weekly Student Contact Hours (WSCH), Needles Center by Method of Instruction



Source: Cambridge West Partnership, LLC

The Baseline

The fall 2014 program of instruction provided a snapshot in time used as a baseline for this EMP. To address the capacities for the future, a planning model was created. This planning model, or baseline, provided the foundation from which a future program of instruction could be projected.

FMP Table 1: PVC Main Campus (Blythe) Baseline, Fall 2014

Division	# Sect.	Seats	Seats/Sept.	WSCH	FTEs
Business					
Accounting 0500	1	12	12.00	48.00	1.60
<i>subtotal</i>	1	12	12.00	48.00	1.60
Language Arts & Communication Studies					
American Sign Lang 0850	1	34	34.00	102.00	3.40
English 1500	18	296	16.44	888.00	29.60
English as Second Lang 4930	3	37	12.33	111.00	3.70
ESL Non-Credit 4930	2	43	21.50	99.00	3.30
French 1100	1	11	11.00	54.90	1.83
Music 1000	3	37	12.33	105.00	3.50
Reading 4930	5	75	15.00	300.00	10.00
Speech 1500	1	38	38.00	114.00	3.80
<i>subtotal</i>	34	571	16.79	1,773.90	59.13
Vocational Education					
Automotive Technology 0948	5	97	19.40	459.90	15.33
Building Construction Tech 0952	7	125	17.86	624.90	20.83
Computer Information Sys 0700	3	57	19.00	285.00	9.50
Welding Technology 0956	5	105	21.00	525.00	17.50
<i>subtotal</i>	20	384	19.20	1,894.80	63.16
History, Social & Behavioral Sciences					
Child Development 1300	4	68	17.00	200.10	6.67
Philosophy 2200	1	16	16.00	48.00	1.60
Psychology 2000	2	51	25.50	153.00	5.10
<i>subtotal</i>	7	135	19.29	401.10	13.37
Math & Science					
Astronomy 1900	1	15	15.00	45.00	1.50
Biology 0400	4	68	17.00	405.00	13.50
Math 1700	7	187	26.71	717.00	23.90
<i>subtotal</i>	12	270	22.50	1,167.00	38.90
Allied Health Division					
Criminal Justice 2100	3	44	14.67	132.00	4.40
Health Education 1200	1	30	30.00	90.00	3.00
Nursing Science Clinical 1200	3	54	18.00	186.60	6.22
Nursing 1200	10	162	16.20	874.50	29.15
Physical Education 0800	4	70	17.50	210.00	7.00
<i>subtotal</i>	21	360	17.14	1,493.10	49.77
Adult Basic Education Non-Credit					
Adult Basic Education Non-Credit	5	62	12.40	70.80	2.36
Non-Credit Basic Education	7	115	16.43	214.50	7.15
<i>subtotal</i>	12	177	14.75	285.30	9.51
Palo Verde Blythe Campus Subtotal	107	1,909	17.84	7,063.20	235.44

Source: Palo Verde College Office of Institutional Research, analysis by Cambridge West Partnership, LLC

FMP Table 2: PVC Correspondence Courses Baseline, Fall 2014

<i>Correspondence Courses</i>	# Sect.	Seats	Seats/Sept.	WSCH	FTES
<i>Accounting</i>	4	60	15.00	339.90	11.33
<i>Alcohol and Drug Studies</i>	16	373	23.31	1,152.00	38.40
<i>Astronomy</i>	3	87	29.00	522.00	17.40
<i>Auto Technology</i>	2	47	23.50	141.00	4.70
<i>Biology</i>	3	81	27.00	324.00	10.80
<i>Business</i>	15	331	22.07	993.00	33.10
<i>CIS</i>	7	205	29.29	615.00	20.50
<i>Economics</i>	2	27	13.50	117.00	3.90
<i>Edu-American Sign Lang</i>	5	166	33.20	498.00	16.60
<i>English</i>	8	194	24.25	582.00	19.40
<i>French</i>	1	17	17.00	84.90	2.83
<i>General Studies</i>	6	162	27.00	486.00	16.20
<i>Geography</i>	1	40	40.00	240.00	8.00
<i>Health Education</i>	5	125	25.00	375.00	12.50
<i>History</i>	6	141	23.50	423.00	14.10
<i>Management</i>	5	131	26.20	393.00	13.10
<i>Math</i>	11	259	23.55	1,005.90	33.53
<i>Music</i>	2	43	21.50	129.00	4.30
<i>Nursing Clinical</i>	2	52	26.00	156.00	5.20
<i>Physical Education</i>	1	20	20.00	20.10	0.67
<i>Philosophy</i>	2	54	27.00	162.00	5.40
<i>Physics</i>	1	13	13.00	78.00	2.60
<i>Political Science</i>	2	38	19.00	114.00	3.80
<i>Psychology</i>	4	71	17.75	213.00	7.10
<i>Reading</i>	1	25	25.00	75.00	2.50
<i>Sociology</i>	1	27	27.00	81.00	2.70
<i>Spanish</i>	5	95	19.00	475.20	15.84
<i>Speech</i>	2	50	25.00	150.00	5.00
<i>Welding</i>	2	47	23.50	143.10	4.77
<i>Correspondence Courses Subtotal</i>	125	2,981	23.85	10,088.10	336.3

Source: Palo Verde College Office of Institutional Research, analysis by Cambridge West Partnership, LLC



FMP Table 3: PVC Needles Center Baseline, Fall 2014

Needles Center Campus	# Sect.	Seats	Seats/Sect.	WSCH	FTES
Anthropology	1	10	10.00	30.00	1.00
Biology (Online)	1	31	31.00	123.90	4.13
Business	1	7	7.00	21.00	0.70
Child Development (Online)	4	82	20.50	255.30	8.51
Child Development	3	62	20.67	186.00	6.20
Chemistry (Online)	1	19	19.00	114.00	3.80
Criminal Justice (Online)	1	26	26.00	78.00	2.60
English (Online)	1	5	5.00	15.00	0.50
Geography (Online)	1	18	18.00	108.00	3.60
General Studies	1	18	18.00	54.00	1.80
General Studies Correspondence	3	101	33.67	303.00	10.10
History (Online)	1	15	15.00	45.00	1.50
Math (Online)	3	53	17.67	291.90	9.73
Spanish (Online)	1	26	26.00	129.90	4.33
Adult Basic Education Non-Credit	1	13	13.00	8.10	0.27
Non-Credit Basic Education	1	8	8.00	10.20	0.34
<i>Needles Center Campus Subtotal</i>	<i>25</i>	<i>494</i>	<i>19.76</i>	<i>1,773.30</i>	<i>59.11</i>

Source: Palo Verde College Office of Institutional Research, analysis by Cambridge West Partnership, LLC

FMP Table 4: In-Service Training Baseline, Fall 2014

In-Service	# Sect.	Seats	Seats/Sect.	WSCH	FTES
Fire Science Technology	202	2,615	12.95	5,760.30	192.0
Criminal Justice	1	23	23.00	87.90	2.9
Adult Basic Education - ESL	27	148	5.48	323.70	10.8
Emergency Medical Services	5	51	10.20	23.40	0.8
<i>In-Service Subtotal</i>	<i>235</i>	<i>2,837</i>	<i>12.07</i>	<i>6,195.30</i>	<i>206.5</i>

Source: Palo Verde College Office of Institutional Research, analysis by Cambridge West Partnership, LLC

FMP Table 5: Palo Verde College, Grand Total Baseline, Fall 2014

	# Sect.	Seats	Seats/Sect.	WSCH	FTES
<i>PALO VERDE COLLEGE GRAND TOTAL</i>	<i>492</i>	<i>8,221</i>	<i>16.71</i>	<i>25,119.90</i>	<i>837.3</i>

Source: Palo Verde College Office of Institutional Research, analysis by Cambridge West Partnership, LLC

WSCH Projections and the Future Program of Instruction

The following table projects future WSCH and FTES in the benchmark years of 2020, 2025, and 2030. The forecast is in summary form by location and divisions of the College.

FMP Table 6: Palo Verde College, WSCH Projections by Location and Division 2014-2030

	Actual										Projected													
	Profile - Fall Semester 2014					2020					2025					2030								
	# of Sec	WSCH	Sec	WSCH	Lab	Lec	Hrs	FTEs	Total	# of Sec	WSCH	Lab	Lec	Hrs	FTEs	Total	# of Sec	WSCH	Lab	Lec	Hrs	FTEs	Total	
Blythe Campus																								
Business	1	48.0	48.0	1.6	4	0		60.7	2.0	1	60.7	0.0	72.1	2.0	72.1	2.4	1	83.6	0.0	83.6	2.8	2.8	83.6	2.8
Language Arts & Communication Studies	34	1,773.9	52.2	59.1	103	7		2,244.0	74.8	49	2,252.2	118.8	2,244.0	74.8	2,666.0	88.9	56	2,925.9	163.6	3,089.5	103.0	103.0	3,089.5	103.0
Vocational Education	20	1,894.8	94.7	63.2	43	57		2,969.9	79.9	29	685.9	1,701.0	2,969.9	79.9	2,847.8	94.9	36	958.4	2,342.4	3,300.8	110.0	110.0	3,300.8	110.0
History, Social & Behavioral Sciences	7	401.1	57.3	13.4	21	3		507.3	16.9	8	456.7	50.6	507.3	16.9	602.9	20.1	10	629.0	66.7	696.7	23.3	23.3	696.7	23.3
Math & Science	12	1,167.0	97.3	38.9	32	31		1,476.3	49.2	17	754.4	721.9	1,476.3	49.2	1,754.2	58.5	20	1,038.8	894.0	2,032.8	67.8	67.8	2,032.8	67.8
Allied Health	21	1,493.1	71.1	49.8	45	53		1,889.0	63.0	28	1,160.6	728.4	1,889.0	63.0	2,244.3	75.0	34	1,597.8	1,003.0	2,600.8	86.7	86.7	2,600.8	86.7
Non Credit	12	285.3	23.8	9.5	20	6		360.9	12.0	13	360.9	0.0	360.9	12.0	428.8	14.3	17	497.0	0.0	497.0	16.6	16.6	497.0	16.6
Subtotal	107	7,063	66.0	235	268	157		8,935	298	126	5,614	3,321	8,935	298	10,616	354	174	7,731	4,573	12,303	410	410	12,303	410
Correspondence																								
Correspondence Courses	125	10,088.1	80.7	336.3	375	0		12,045.0	401.5	148	12,045.0	0.0	12,045.0	401.5	13,921.0	464.0	199	16,140.0	0.0	16,140.0	538.0	538.0	16,140.0	538.0
Needles Campus																								
On Campus	11	612.0	56.6	20.4	47	0		774.0	25.8	14	774.0	0.0	774.0	25.8	942.0	31.4	19	1,066.0	0.0	1,066.0	35.5	35.5	1,066.0	35.5
Online	14	1,161.0	82.9	38.7	49	6		1,382.0	46.1	17	1,382.0	0.0	1,382.0	46.1	1,602.0	53.4	22	1,858.0	0.0	1,858.0	61.9	61.9	1,858.0	61.9
Subtotal	25	1,773.0	70.9	59.1	96	6		2,156.0	71.9	31	2,156.0	0.0	2,156.0	71.9	2,544.0	84.8	41	2,924.0	0.0	2,924.0	97.5	97.5	2,924.0	97.5
ISA's																								
Fire Science Technology	202	5,760.3	28.5	192.0				5,760.3	192.0	202			5,760.3	192.0	5,760.3	192.0	202			5,760.3	192.0	192.0	5,760.3	192.0
Adult Basic Education	27	323.7	12.0	10.8				323.7	10.8	27			323.7	10.8	323.7	10.8	27			323.7	10.8	10.8	323.7	10.8
Criminal Justice	1	87.9	87.9	2.9																				
Emergency Medical Services	5	23.4	4.7	0.8				23.4	0.8	5			23.4	0.8	23.4	0.8	5			23.4	0.8	0.8	23.4	0.8
Subtotal	235	6,195.3	26.4	206.5	0	0		6,107.4	203.6	234	0.0	0.0	6,107.4	203.6	6,107.4	203.6	234	0.0	0.0	6,107.4	203.6	203.6	6,107.4	203.6
Grand Total	492	25,120	51.1	837.3	739	163		29,244	974.8	539	19,815	3,321	29,244	974.8	33,189	1,106.3	648	23,136	3,945	33,189	1,106.3	1,106.3	33,189	1,106.3

Source: Cambridge West Partnership, LLC

Space Projections

State standards for construction and renovation of facilities basically focus on capacity. Capacity, as discussed in the Facilities Planning Manual, is correlated with the production of WSCH. WSCH represents the average number of hours of student instruction in a week per class, i.e., 30 students enrolled in a class that meets 3 hours per week is 90 WSCH. This WSCH is then transformed into instructional space or assignable square feet (ASF). Each WSCH type, lecture vs. laboratory, generates an “appropriate” instructional facility addressed as ASF. While these calculations are established through State standards, other factors are considered in planning facilities. An additional factor in all facility planning is adequacy. Adequacy in this context considers both sufficient and suitable capacity to provide for an effective learning environment.

As assessment of the current facilities includes the capacity of the facilities to meet instructional programmatic needs, it reviews the condition of facilities and it addresses their adequacy to provide for an effective learning environment. The WSCH and space projections are not intended to dictate curricular content but rather to provide a perspective of what the current curriculum would look like if extended forward. The most important outcome of the forecasting process is to ensure that when a certain level of WSCH is achieved, the College will have in place designated and/or newly constructed facilities to meet demands in both academic and support services.

Two things result directly from this declaration. One is the need for a very detailed assessment of space needs for growth. Second is the opportunity to plan for facilities that may better serve the instructional and support services programs at the College. It is an opportunity for overall improvement of services at the College.

Analytical work associated with the previous 2009 combined Educational and Facilities Master Plan supported the capital construction of the Fine and Performing Arts building.

The current comprehensive analysis of projected space needs, by discipline, can be found in the appendix of this combined Educational and Facilities Master Plan. The following table provides a summary of projected space needs based upon the current projected WSCH growth developed for this combined Educational and Facilities Master Plan suggests that the Needles Center does not need *additional* space and that the main campus in Blythe needs additional administrative office and career technical education space. Both locations need *renovations and adjustments* to existing space to make areas more suitable for the delivery of services and instruction. The analysis takes into account the current and planned capital construction and applies the State’s space standards to the projected WSCH.

Educational Master Plan – Facilities Master Plan Linkages

The proposed capital construction is recommended in three phases as summarized in the following table and detailed in the Facilities Master Plan portion of this document.

The following table illustrates some of the linkages within this combined Educational and Facilities Master Plan.

FMP Table 7: Palo Verde College Projected Space Needs

Division/Area/Unit	From EMP Growth Projection & Space Analysis
<i>Phase One:</i>	
CS Bldg.- Alleviate overcrowding in administrative units.	Relocate Business Services & Human Resources to 2nd floor as a temporary move.
CL Bldg.- Create larger classrooms.	Modest modification of vacated 1st floor spaces for Student Services.
CL Bldg.- Provide dedicated laboratory and lecture space for nursing.	Convert five lecture rooms.
Needles Center-Provide science wet lab & student lounge, or GED testing area.	Modify rooms to create a dedicated simulator laboratory, lecture room, and skills laboratory.
	Renovate mezzanine area.
<i>Phase Two:</i>	
CS & CL Bldg.- Create more instructional spaces.	Construct new Administrative Services Bldg., move Information Technology, Business Services, Human Resources, Foundation, and Superintendent-President into this building. Assign former Information Technology spaces to general classrooms.
CS Bldg.- Comprehensive re-design of Student Services.	Remodel all of 1st floor to support Student Services.
Tech Bldg.- Provide additional instructional space.	Modify existing or construct new Technology Building.
<i>Phase Three:</i>	
CS Bldg.- Create more instructional spaces.	Remodel vacated temporary administrative space on 2nd floor to become 1-2 classrooms and an English Writing Center.

Source: Cambridge West Partnership, LLC and Hill Partnership Inc.



II. PALO VERDE COLLEGE TODAY



OVERVIEW

Palo Verde College (PVC) is located approximately 6 miles northwest of Blythe, on the banks of the Colorado River in the Palo Verde Valley, in southeastern California. The campus opened its doors in 1947, grew over the years and relocated to the current campus in 2001. The 200 acre campus is sited on a mesa, overlooking the city of Blythe and the surrounding agricultural community.

Palo Verde Community College District expanded in 1999 into eastern San Bernardino County, opening a “Center” in the City of Needles. Located approximately 95 Miles north of the main campus along Highway 95, the Needles Center occupies the recently renovated, historic Claypool Building.

BLYTHE CAMPUS

Located at the west end of 6th Avenue, Palo Verde College occupies approximately 200 acres. In addition to academic and support facilities (buildings) the campus site includes a Solar Field northwest of the campus core. Off-campus facilities include a Child Development Center (operated by the College) 5 miles southeast of the campus in the city of Blythe.

CAMPUS ZONING

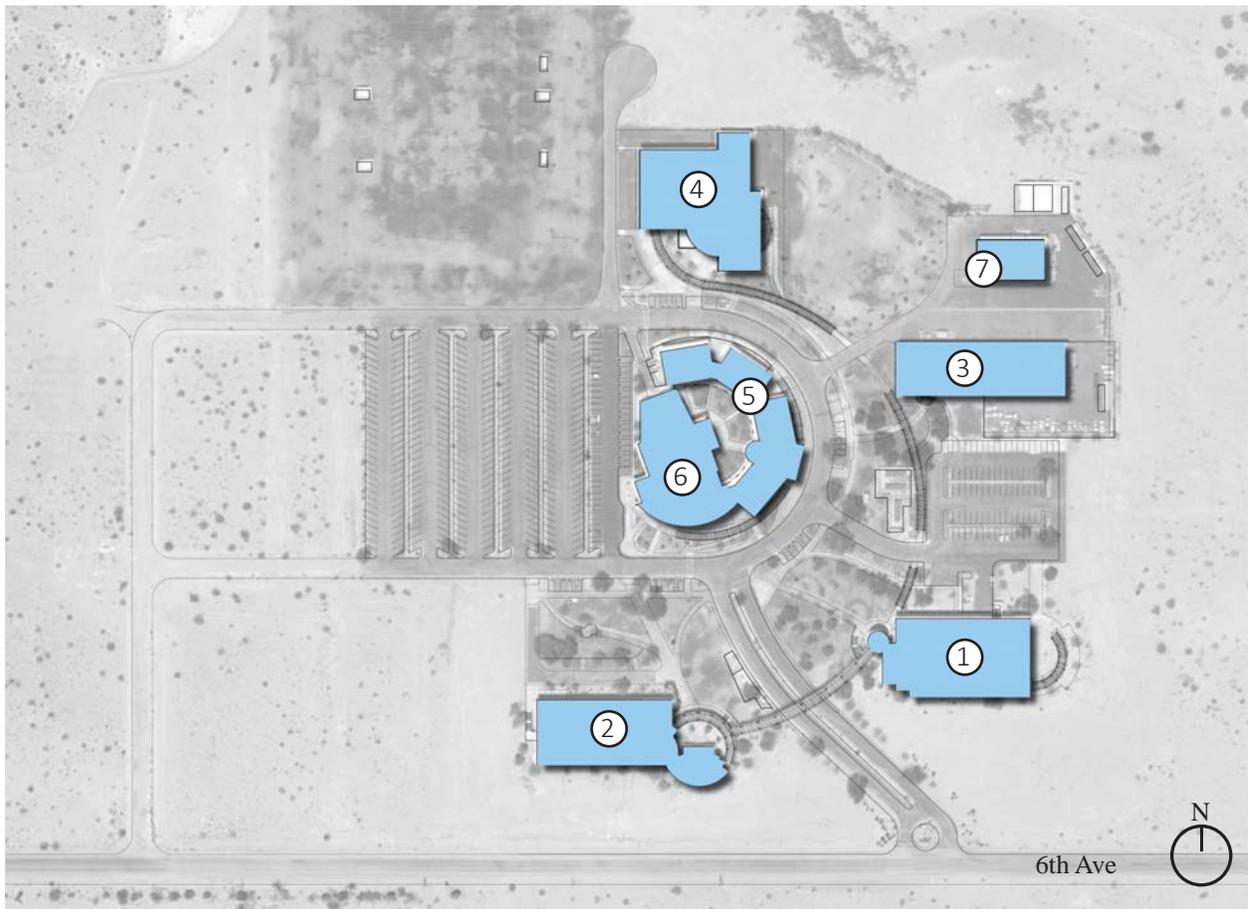
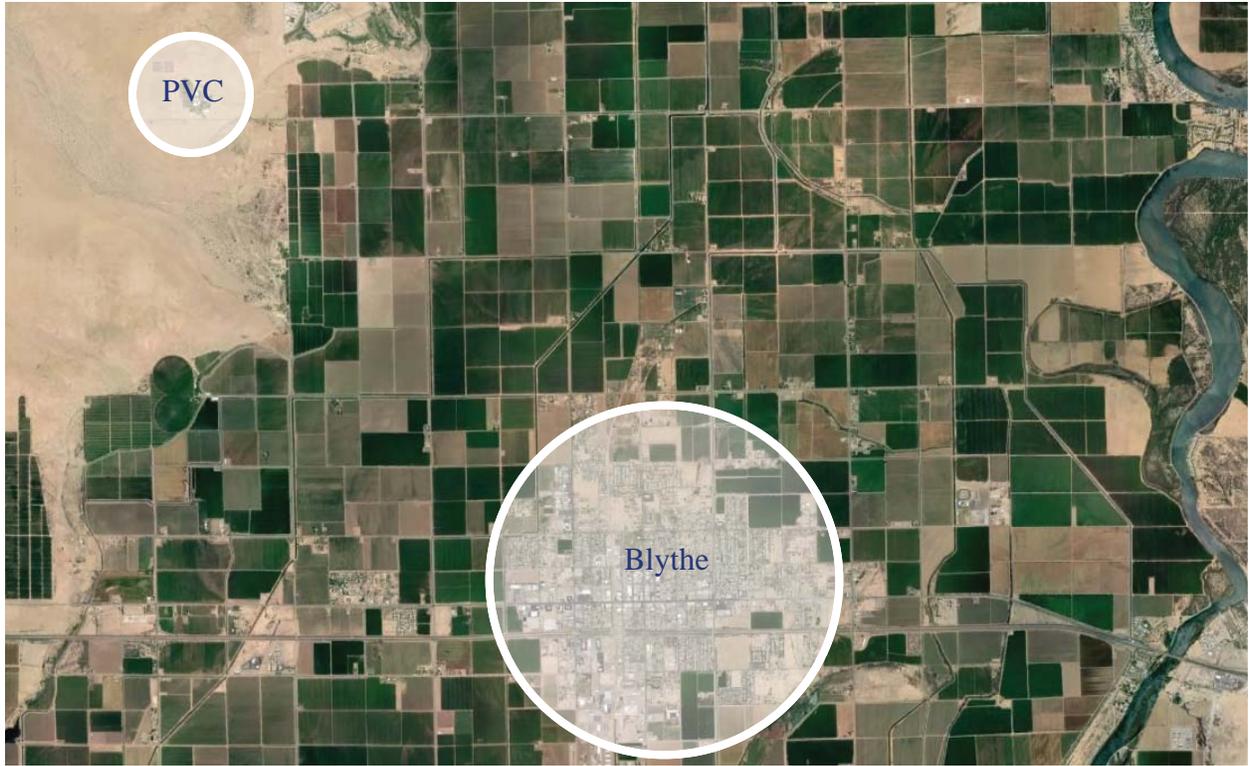
The campus is generally defined by a compact clustering of one and two story buildings, linked by a curvilinear pedestrian promenade, with the Performing Arts facilities at the center of the Campus. Current facilities include:

- A College Services Building housing Administration, Student Services, the Library, and General Classrooms is located east of the campus entry. This building also provides food service and supports student activities.
- A Class / Lab building sits to the west of the campus entry, housing multiple campus' classrooms, labs, a large lecture hall, and an open "computer mall".
- The Technology Building on the east edge of the core houses the Lucas Oil Auto Program, Welding, and Carpentry.
- The Maintenance and Operations facility is located north of the Technology Building. The two facilities share the same service road.
- The Gymnasium is located at the north edge of the campus core. Currently, under utilized by the campus, portions of the Gym are rented out to the Employment Development Department (EDD)
- The Fine Arts Building and Theater sit at the geographic center the Campus and are used for both academic purpose as well as leased facilities. For example, the Miss Blythe Pageant was held at the facility in the fall.
- The Campus Central Plant is located between the Technology Building and College Services. It is currently at capacity.

Surface parking occupies the central west edge of the campus. Additional surface parking internal to the academic core is located between the College Services and Technology Buildings. Athletic fields occupy the northwest edge of the central (improved) campus.



- ① Student Services / Food Service
- ② Classroom / Lab
- ③ Technology Building
- ④ Physical Education Center
- ⑤ Fine Arts
- ⑥ Theater
- ⑦ M/O



AGE & CONDITION OF BUILDINGS & INFRASTRUCTURE

EXISTING BUILDING STOCK

As indicated in the table below, the original campus facilities were completed in 2000 and are currently 16 years old. In 2000, the Blythe campus consisted of three buildings: Building 1, College Services (CS); Building 2, Class Lab (CL) and; Building 6, Maintenance and Operations. Standing alone until 2006, these facilities housed essential functions and provided the space necessary for the college to operate and grow over time.

The newest facility on campus, the Fine Arts and Theater Complex, was built in 2011.

While all buildings are in good physical condition, many academic and support needs have changed or outgrown their associate spaces. More specifically, as the Campus expanded its enrollment, there has been a corresponding increase in demand on Student Services and classroom space. Several areas of need are identified below:

- Five classrooms in the CL Building are considered small classrooms, as such they limit flexibility in scheduling.
- The CL Building houses an expanding Nursing program. As a result of growth in the Nursing program and changing industry needs, the lab, classroom and office space dedicated to this program have become impacted and do not support current instructional needs.
- In the CS Building, Student Services has outgrown their space. Conversely, while the Library and its associated study space is still frequently used, there is an excess of unused Library support space.

SITE INFRASTRUCTURE

The Central Plant is at capacity. The new Gymnasium and Fine Arts / Theater Complex are on their own package systems.

Building Number & Name	Year Built
① College Services / Food Service	2000
② Classroom / Lab	2000
③ Technology Building	2006
④ Physical Education Center	2007
⑤ Fine Arts	2011
⑥ Theater	2011
⑦ M/O	2000

College Services Building



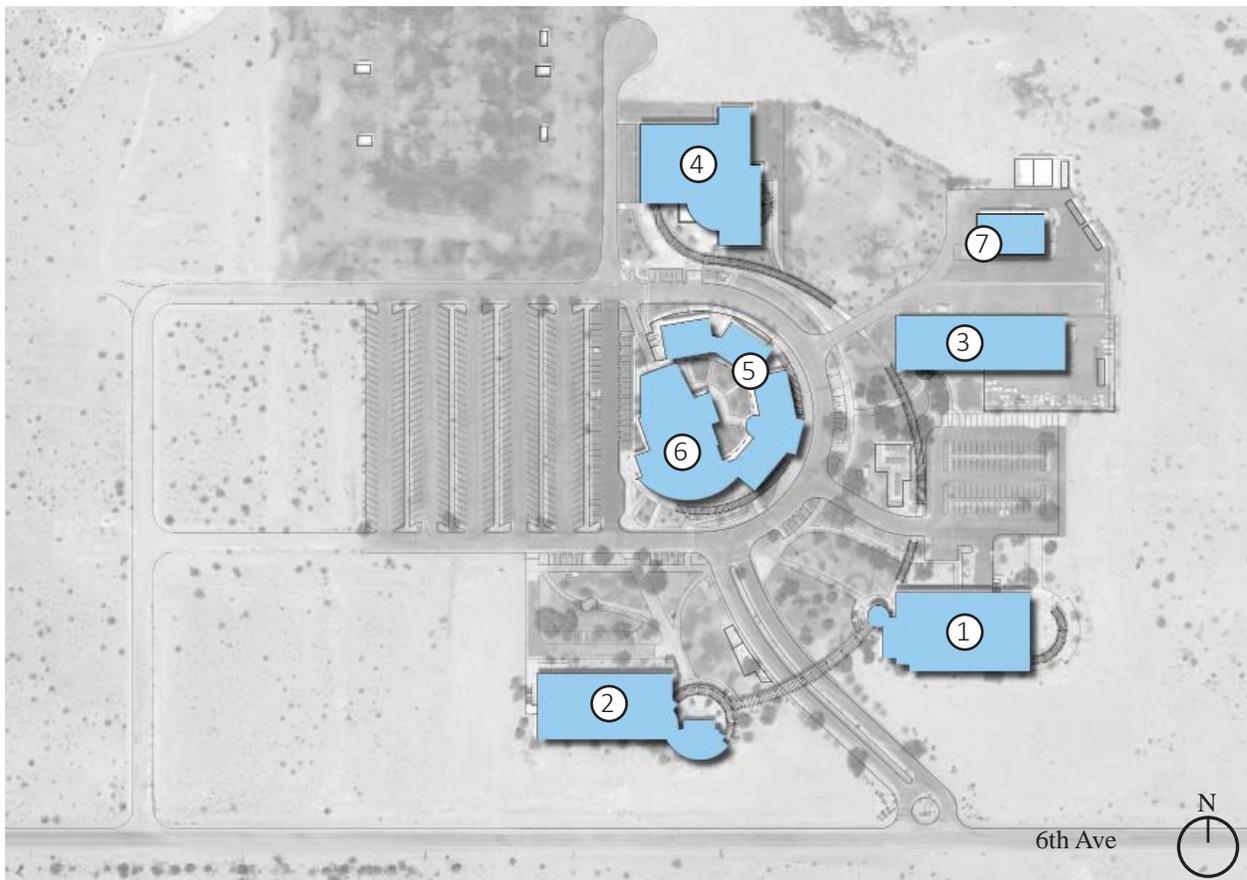
Theater



Classroom / Lab Building



College Services Building



VEHICULAR ACCESS, CIRCULATION & PARKING

VEHICULAR ACCESS & CIRCULATION

Vehicular access to the Campus consists of a single, centralized access from 6th Avenue. Entering the campus, one travels up a slight grade and under an elevated pedestrian walkway connecting the Class / Lab Building (to the West) and the College Services Building (to the East). This “gateway” provides a strong and clear sense of arrival.

On campus vehicular circulation consists of an internal loop road that provides convenient access to all parking, and provides service access to all areas of the campus. This internal road circles the Theatre and Fine Arts Complex with a shared service access to Technology and the Maintenance and Operations Facilities provided from the east edge of the loop. Service access to the Theater is located on the North, directly off the loop road.

While providing convenient vehicular circulation and service access, the internal road bifurcates the Theatre and Fine Arts Complex, from a pedestrian perspective, from the remainder of the Campus. While, based on current enrollments, this does not appear to be a safety concern, as enrollments grow it may become so in the future.

PUBLIC TRANSPORTATION & OTHER ACCESS

The Palo Verde Valley Transit Authority Gold Route ends at Palo Verde College. The route provides community member’s connection to the College, Kmart, the Hospital, Civic Center, and downtown Blythe, in addition to connecting to four additional routes. The Gold Line is active from 6:45am to 6:40pm Monday – Friday.

On Campus stops include 4 dedicated drop-off and pick-up locations around the loop.

There are limited off-campus sidewalks support pedestrian access and no dedicated bicycle paths to or within the campus.

PARKING

There are two improved on-campus parking lots:

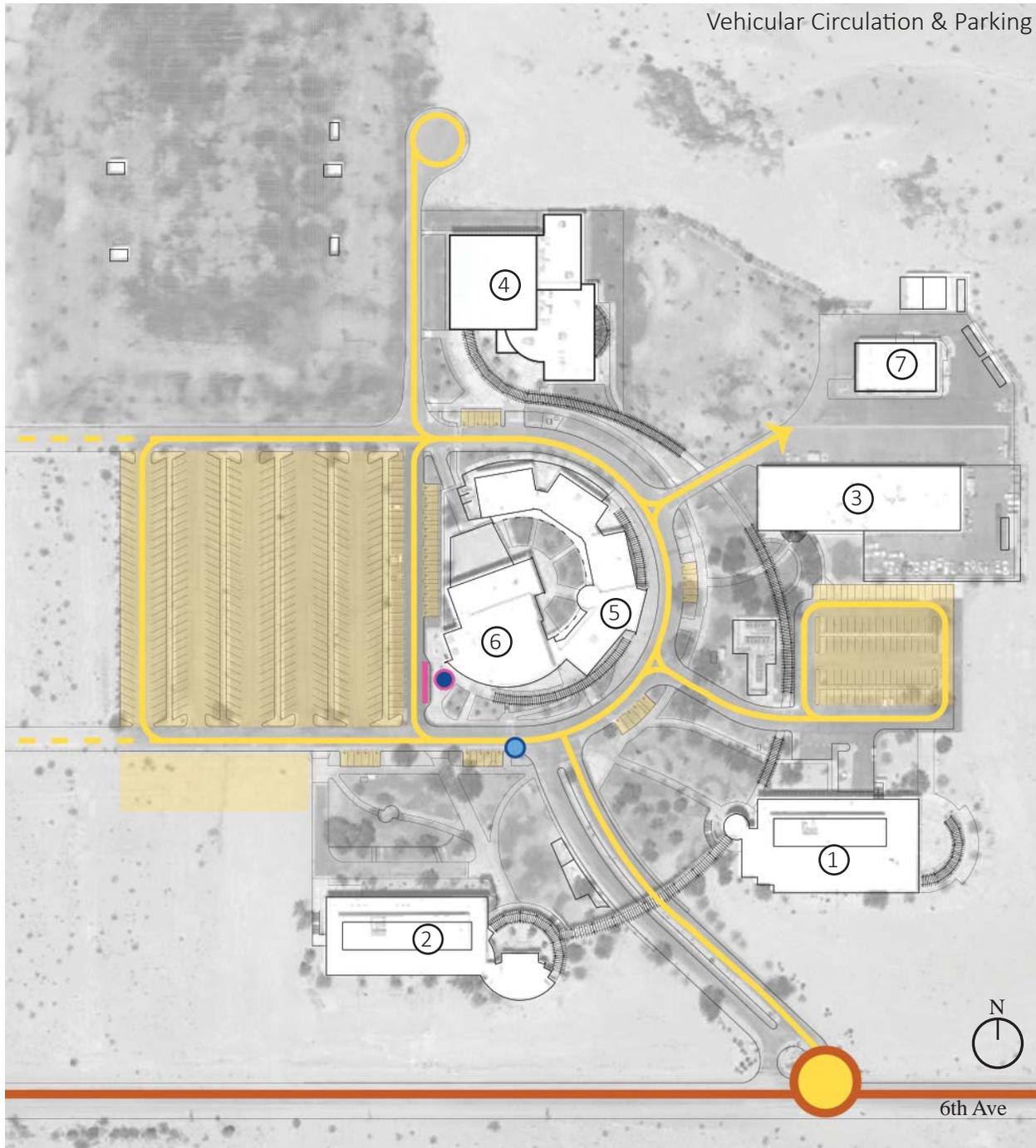
- The main lot east of the Theatre and Arts Complex consisting of 353 stalls for students, faculty, staff and public
- A smaller faculty, staff and visitor lot consisting of 84 stalls between the College Services and Technology Buildings.

Accessible parking stalls ring the campus loop road.

There are currently 457 parking stalls on campus. The 2015 Blythe Campus unduplicated enrollment is approximately 881 Students. This equates to a ration of 1.9 students / Stall, which is comfortable and sufficient to serve current and projected enrollments within the planning horizon. Access to buildings from parking is convenient.

SERVICE

As noted above, service vehicle access to facilities is generally good, with all significant service points located off of the campus loop road.



- Primary Entry
- Transit Drop Off
- Vehicular Drop Off
- Vehicular Circulation
- Primary Arterial Roads
- Parking

PEDESTRIAN ACCESS & OPEN SPACE

OPEN SPACE

The campus took form in 2000 with the completion of the first three buildings, College Services, the Class Lab building and M&O. As the campus grew, purposeful, weather protected outdoor open spaces were not created. As a result there is limited outdoor space that encourages or supports gathering and socialization. This is in part due to extreme weather conditions - average temperatures from 40 degrees (winter low) to 110 degrees (summer high) with limited rainfall and heavy wind gusts.

Primary open spaces include:

- The College Services Building patio directly east of the College Services building adjacent to the Building's food service and multipurpose areas. This is typically where outdoor events are held. The patio capitalizes on the mesa views, however provides limited shade or occupant protection from the prevailing winds.
- A second outdoor space located at the east entry of the Class Lab Building. This space is intended to provide the College with a flexible function/event plaza is used in conjunction with the tiered large lecture space (which also hosts district board meetings) located within the CL building. Again, this space provides limited shade or amenities.

Given the climate extremes, interior community space is critical for students to gather, study, and socialize. While limited, interior spaces currently include:

- The Student lounge is adjacent to food service facilities and housed on the ground floor of the Student Services Building. This space includes table games, a TV, and soft seating supporting socialization and study. The library is located on the second floor
- The "computer mall" on the ground floor of the Class / Lab. While students are discouraged from being loud, as noise interrupts the adjacent classrooms, students are encouraged to study and use the computers as they wish

PEDESTRIAN CIRCULATION AND WAY FINDING

Pedestrian Circulation consists primarily of a single, strongly articulated curvilinear spine that links campus facilities, one to another. This spine includes an on-grade, partially covered pedestrian walkway connecting the College Services, Technology and the Gymnasium; and a covered, elevated walkway connecting the College Services Building to the Class / Lab Building. The on-grade portion of the spine is bisected by a series of driveways and vehicular access points.

The elevated walkway is heavily used. Many people on campus move from building to building during a single visit. The elevated walkway is both a convenient and a direct way to access the facilities.

As noted above, from a pedestrian's perspective, the internal loop road bifurcates the Theatre and Fine Arts Complex from the remainder of the Campus. The loop road, coupled with the current distribution of parking and service access needs, results in multiple points of pedestrian and vehicular conflict when moving from building to building with the exception of the elevated walkway connecting CL and CS. While this could be considered a potential safety and traffic concern, the campus does not host enough guests for this to be an existing problem.

Pedestrian Circulation & Open Space



- Node
- Transit Drop Off
- Vehicular Drop Off
- Pedestrian Circulation
- - - Elevated Pedestrian Circulation
- Open Space
- Athletic Field





NEEDLES CENTER

The Needles Center is located in the historic Claypool Building in Needles, California. It is sited along Route 66 at the corner of Broadway and E Street.

The Needles Center contains a basement, main floor, and an unimproved mezzanine.

- Eight classrooms and computer labs are located in the basement. None of the classrooms are equipped with water or waste for multipurpose lab use.
- The Main floor hosts the Student Services and the Library / Learning Center.
- The mezzanine remains unfinished, and is currently acting as storage.

As noted in the Educational Master Plan, there is a desire to expand the list of classes and community resources at the Center. This includes Art and Basic Biology facilities and renovation / improvement of the mezzanine to provide for expansion of the Center's offerings.



Basement Room 3: Art/Craft & Sewing



Basement Classroom 5



Ground Floor



Ground Floor, Service Desk



View of Mezzanine



Mezzanine



III. PALO VERDE COLLEGE OPPORTUNITIES FOR THE FUTURE

TRANSLATING THE FINDINGS INTO PHYSICAL FORM

Translating the findings from the key considerations for the future into a college vision was facilitated via a program of work. Findings from the Educational Master Plan, growth projections for the future, our assessment of the current campus, key planning assumptions vetted with constituents and the integration of current planning efforts provided the shape and form that was to become the program of work.

Following data analysis and the projections for growth in the academic and support services venue, the facilities planning process began. The process involved the assemblage of space into larger building blocks and consideration of their appropriate locations on the campus. The information was based on campus tours, interviews with constituent groups, public presentations, questionnaires, discussions with administrative units, and presentations to appropriate committees.

FACILITIES MASTER PLAN PRINCIPLES

The discussion regarding FMP principles included review of the 2009 Facilities Master Plan. The planning team and members of the Steering Committee determined that the following principles would define the planning process:

- Maximize remaining resources
- Encourage creative solutions to increase space utilization
- Increase the community resources at the Needles Center
- Support programmatic needs and growth
- Create flexible classrooms
- Support students

CAMPUS SYSTEMS

In developing the Facilities Master Plan, the campus was viewed as an entity with strengths and weakness, with particular goals to be pursued, and with specific outcomes to be achieved. The needs of the “total campus” were considered, not simply buildings. The campus systems included such elements as pedestrian circulation, vehicular circulation and parking, open space, and campus amenities/improvements. Along with facilities (buildings), these components coalesce to make the campus a living and working community. Collectively, they support the overall goal of serving students by providing the physical resources that support learning and the overall academic experience.

Respected Landscape Architect, Kevin Lynch, developed a series of words like paths, edges, districts and landmarks to describe the organization of a city, how these elements enable its inhabitants to understand the city as a “place,” and how these elements facilitate their navigation of that “place” in a way that allows them to enjoy its various components and benefits. These words have become the concepts which planners use to organize small and large scale places, such as a

campus, in a way that allows the users and inhabitants of that place to find their way around and enjoy the experience.

For Palo Verde College, nomenclature and similar concepts have been used to define the campus (See FMP Chapter 2, Palo Verde College Today). We believe these planning concepts aid in creating a unique place for students. A place which supports access, learning, teaching, and socialization in a visually pleasant and socially stimulating environment which is welcoming and easily understood.

As previously noted, the campus is young and benefits from recent planning and construction. Throughout the planning horizon, if a project is implemented to address the campus systems, it is recommended that it focuses on access and gathering spaces. For instance, improving vehicular drop offs and enhancing the interior and exterior spaces which support community and student socialization, study and gathering. This opportunity is greatest in Phase Two.

The facilities master plan, as outlined in this chapter, addresses the campus vision in two phases. Phase One considers ways to reuse existing spaces. Phase Two proposed the construction of a new facility at the Blythe Campus to provide growth.

PHASE ONE

There are three projects outlined in Phase One:

1. Repurpose space in Class / Lab
2. Repurposed Space in College Services
3. Mezzanine Project at Needles

These projects in total are intended to be projects that can be implemented as the College wishes. The planning team acknowledges a \$2.5 Million dollar (in 2016 dollars) renovation budget that PVC outlined. Working with the driving factors of the EMP, phase one aims to achieve the following goals:

- increase the size of select classrooms,
- provide greater flexibility in instructional spaces,
- create a skills laboratory for the nursing program,
- provide additional space for student and administrative service office staff groups to alleviate overcrowding, provide property privacy, and accommodate additional storage needs, and
- provide a science laboratory and potential art instructional area at the Needles educational center.

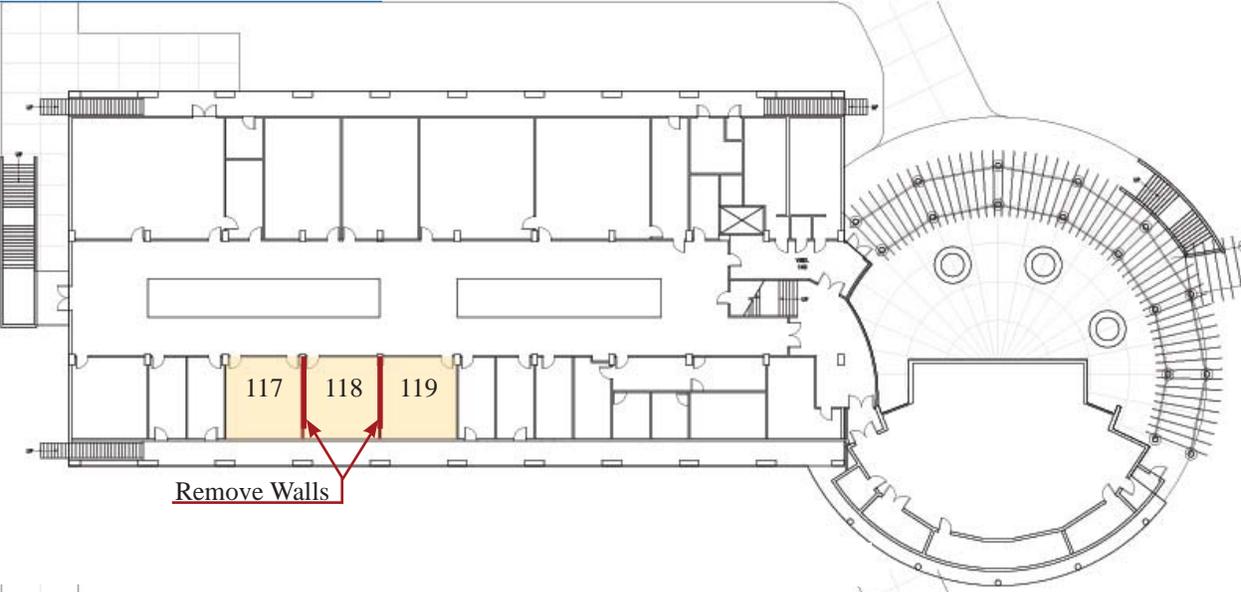
PHASE 1: PROJECT 1: CLASS / LAB RENOVATION

GROUND FLOOR

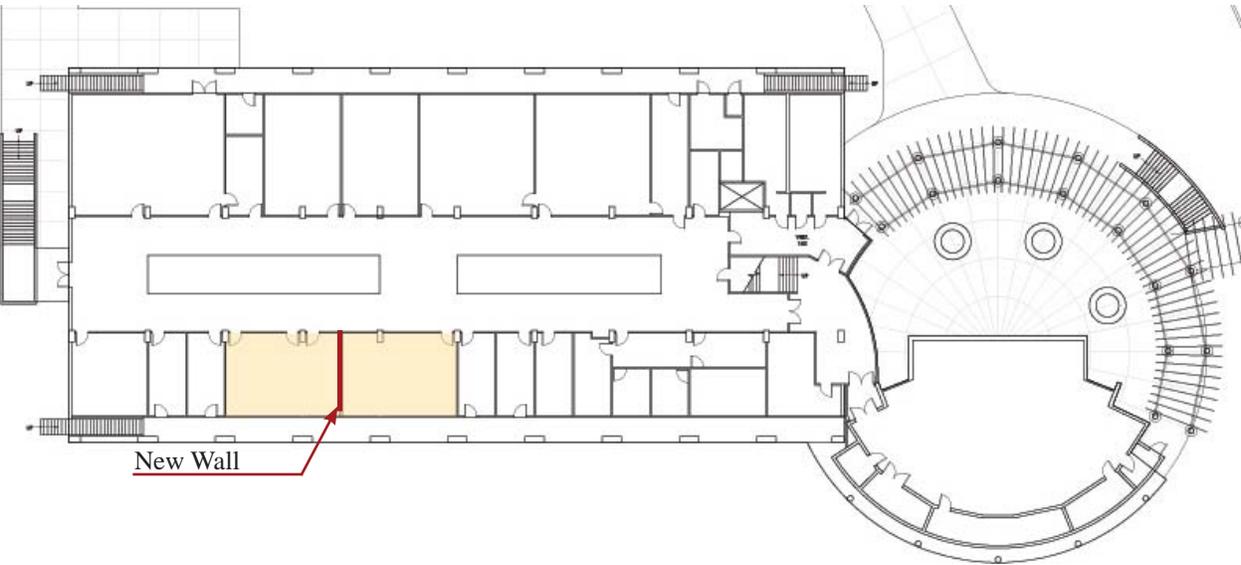
On the ground floor of the Class / Lab Building, it is recommended that the College turn three small classrooms (420 SF) into two medium ones (630 SF). To do this, the College will remove the two walls between rooms 117,118 and 119 and build one wall dividing room 118. The resulting classrooms will allow the college to have more flexibility in scheduling and class capacity.

The project goal is that this project remains within a \$100,000 construction budget. If so, this project will not need to be submitted to the Division of the State Architect (DSA). If the construction value exceeds \$100,000 but remains under \$250,000, it is recommended that the District and AOR work with DSA for an accessibility review only.

Class / Lab: Existing



Class / Lab: Future



PROJECT 1: CLASS / LAB RENOVATION

SECOND FLOOR

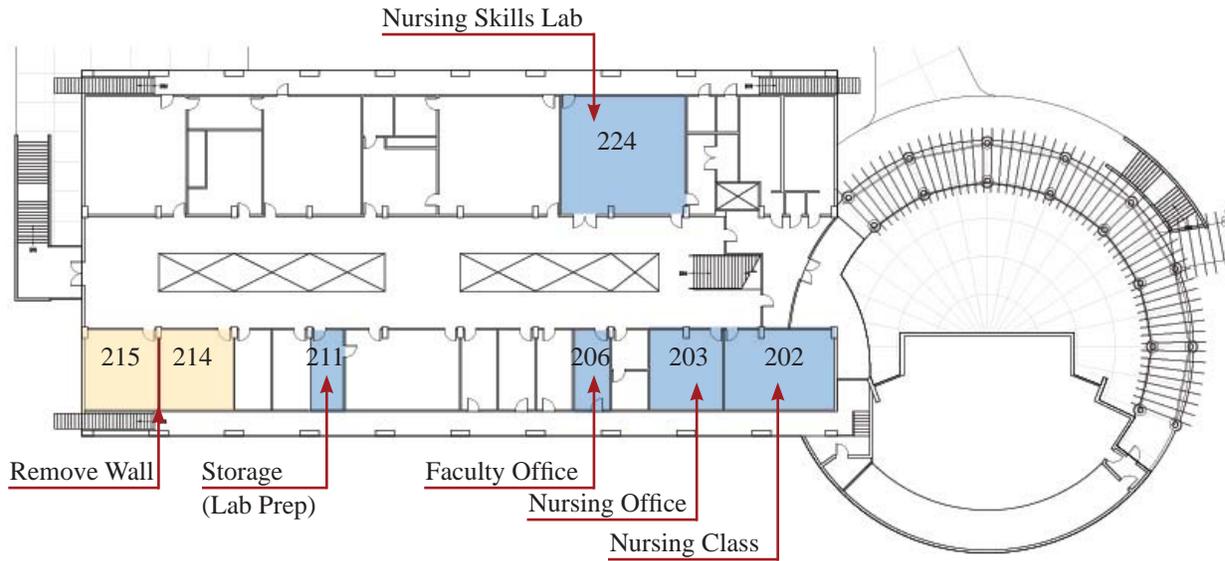
On the second floor of the Class / Lab Building, the plan recommends re-identifying spaces to allow the Nursing program to expand. The program currently uses room 224 as an Allied Health Demo & Bed Lab, Room 202 as the Nursing Classroom, and 203 as the Nursing Office (See Plan “existing). The project recommends that the Nursing Classroom relocates to the existing Nursing Office, room 203, resulting in the conversion of room 202 into a Nursing Sim Lab. This relocation will also turn room 224 (the existing Allied Health Demo & Bed Lab) into a dedicated Skills Lab.

To make the above changes, the project requires the re-organization of offices on the 2nd floor. PVC has identified an oversized Lab Prep (room 211) that can be converted into an office. The faculty in room 206 will transfer to the new office in 211, vacating 206 for the new nursing office. Once the nursing office moves to 206, 203 is available for the nursing classroom.

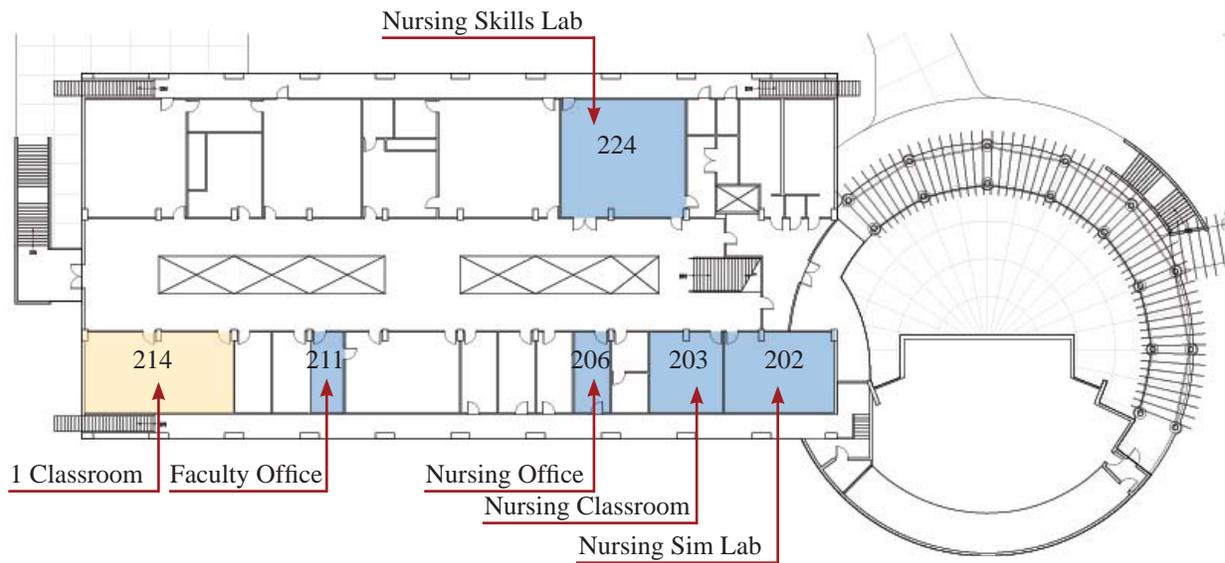
These changes to the second floor of Class / Lab do not involve re-construction. They do however involve the re-naming of rooms and potential equipment upgrades. The FMP recommends that this portion of Project One be completed by district maintenance staff. This portion of the project can be scheduled as the district sees fit.

In addition to the changes outlined above, Project 1 also recommends converting small classrooms 214 and 215 into one large classroom. Included in the project work done on the first floor, this space conversion will provide the College with increased classroom flexibility and utilization options.

Class / Lab: Existing



Class / Lab: Future



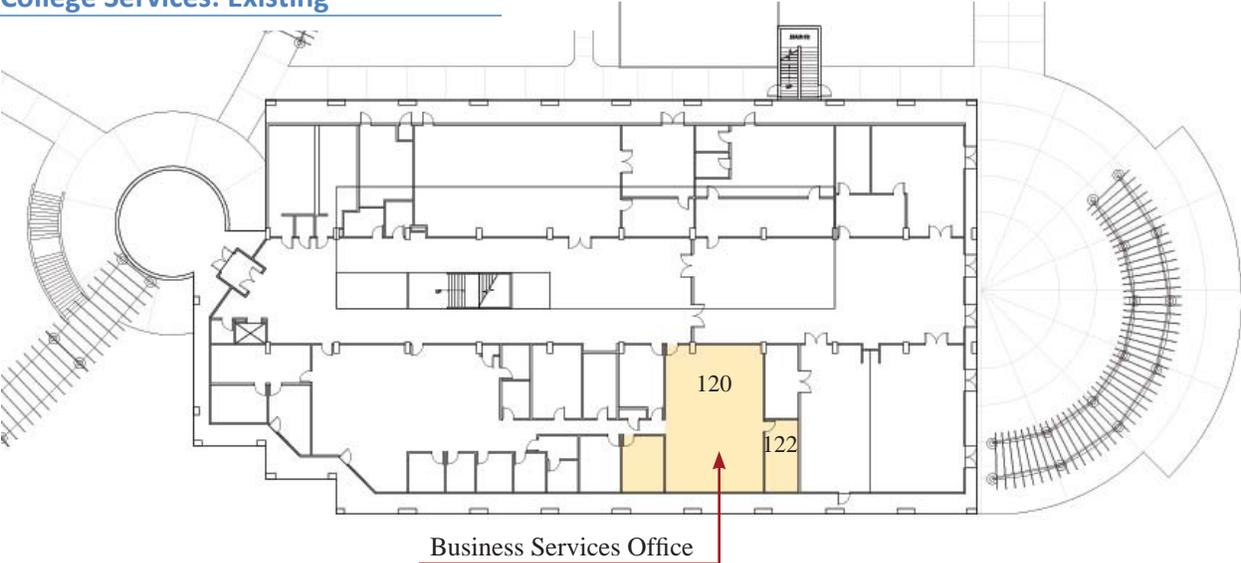
PROJECT 2: COLLEGE SERVICES RENOVATION

Throughout the EMP / FMP process, it was identified that the various departments within Student Services have outgrown the capacity of their existing spaces and are currently impacted. Project Two identifies underutilized space within the Library (second floor) to be converted into a new office suite for Business Services as well as a new conference room. This conversion will allow Student Services to expand adjacent to their existing footprint on the ground Floor.

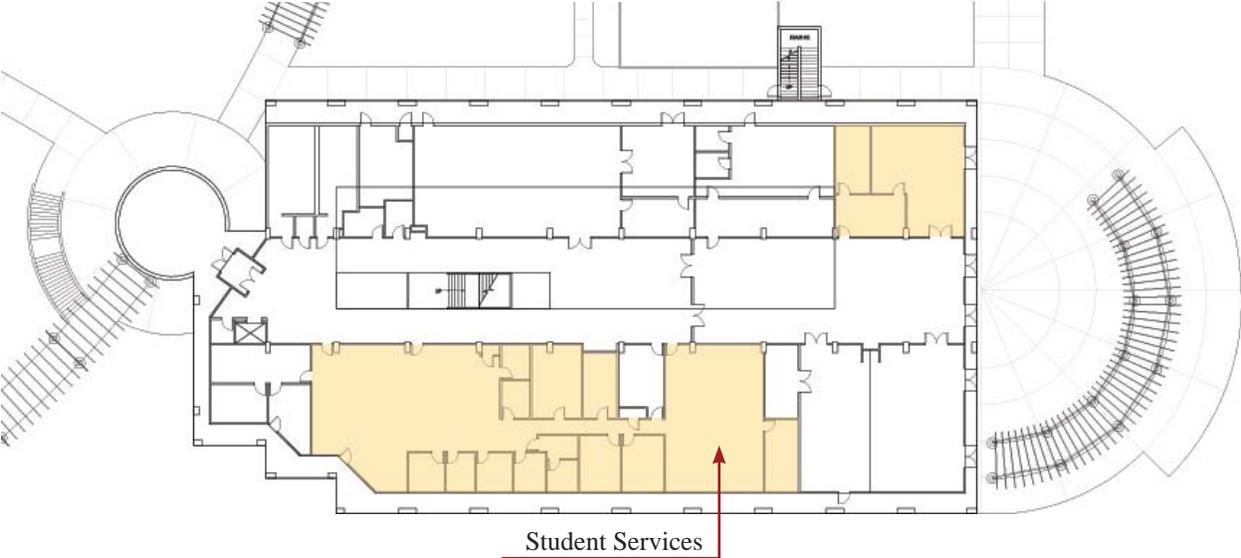
COLLEGE SERVICES: GROUND FLOOR

Business Services occupies rooms 120 and 122 on the ground floor. This project relocates this department to the second floor (see College Services: Second Floor). When vacated, these spaces provide approximately 1400 SF of additional space for Student Services to expand into. It is important to PVC that the delivery of Student Services remain consolidated and convenient for the students it serves.

College Services: Existing



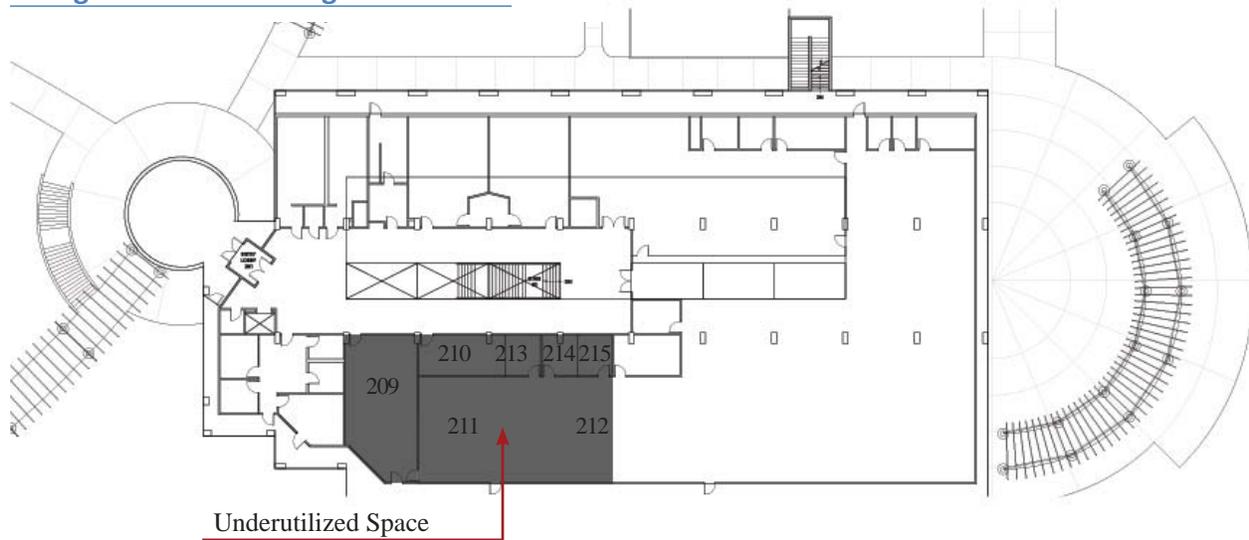
College Services: Future



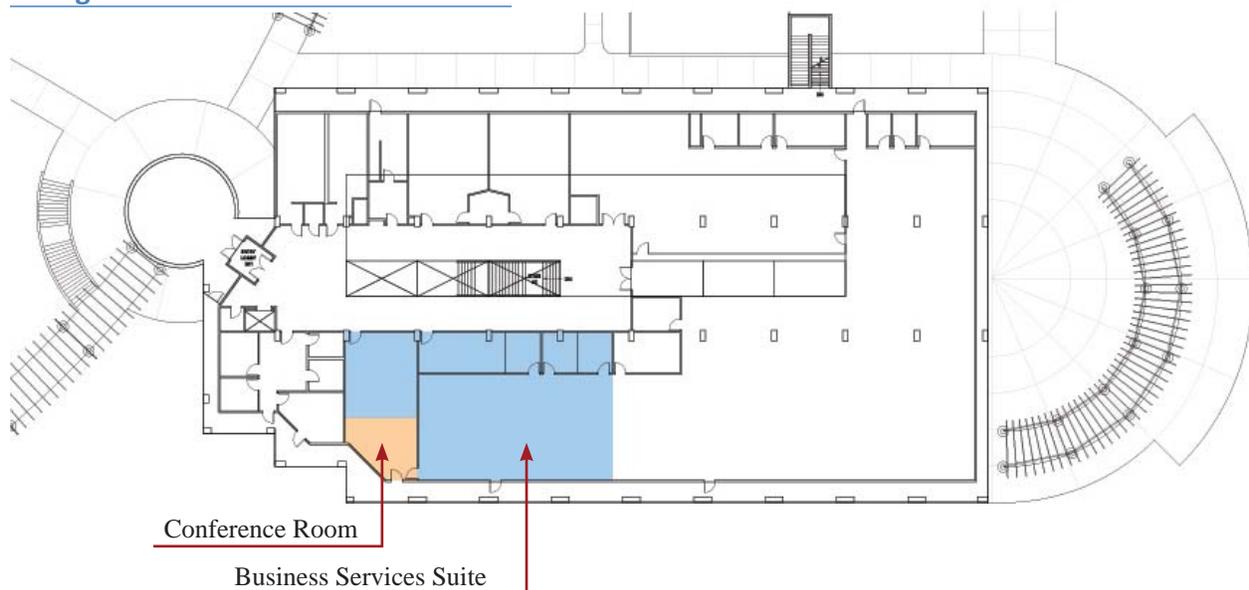
COLLEGE SERVICES: SECOND FLOOR

PVC has identified the following spaces on the second floor to be converted into Business Services: Rooms 209, 210, 211, 213, 214, 215, and a portion of 212. The areas listed will provide Business services with approximately 2500 SF for a new office suite. Existing room 209 will be split to provide a new conference room in addition to the Business Services suite. The new conference room will be used by both Business Services and the Office of the Superintendent / President.

College Services: Existing



College Services: Future



The project goal is to remain within a \$250,000 construction budget. While the planning team recognizes that this cost is within a threshold requiring processing and approval by DSA, it is recommended that the District and AOR work with DSA to limit the approvals to accessibility only. Should the scope of work remain under \$100,000 it will not need to be submitted to DSA. The sequencing of this project does not affect another; the project can commence design at the direction of PVC.



PHASE 2: PALO VERDE COLLEGE, NEW ADMINISTRATION BUILDING

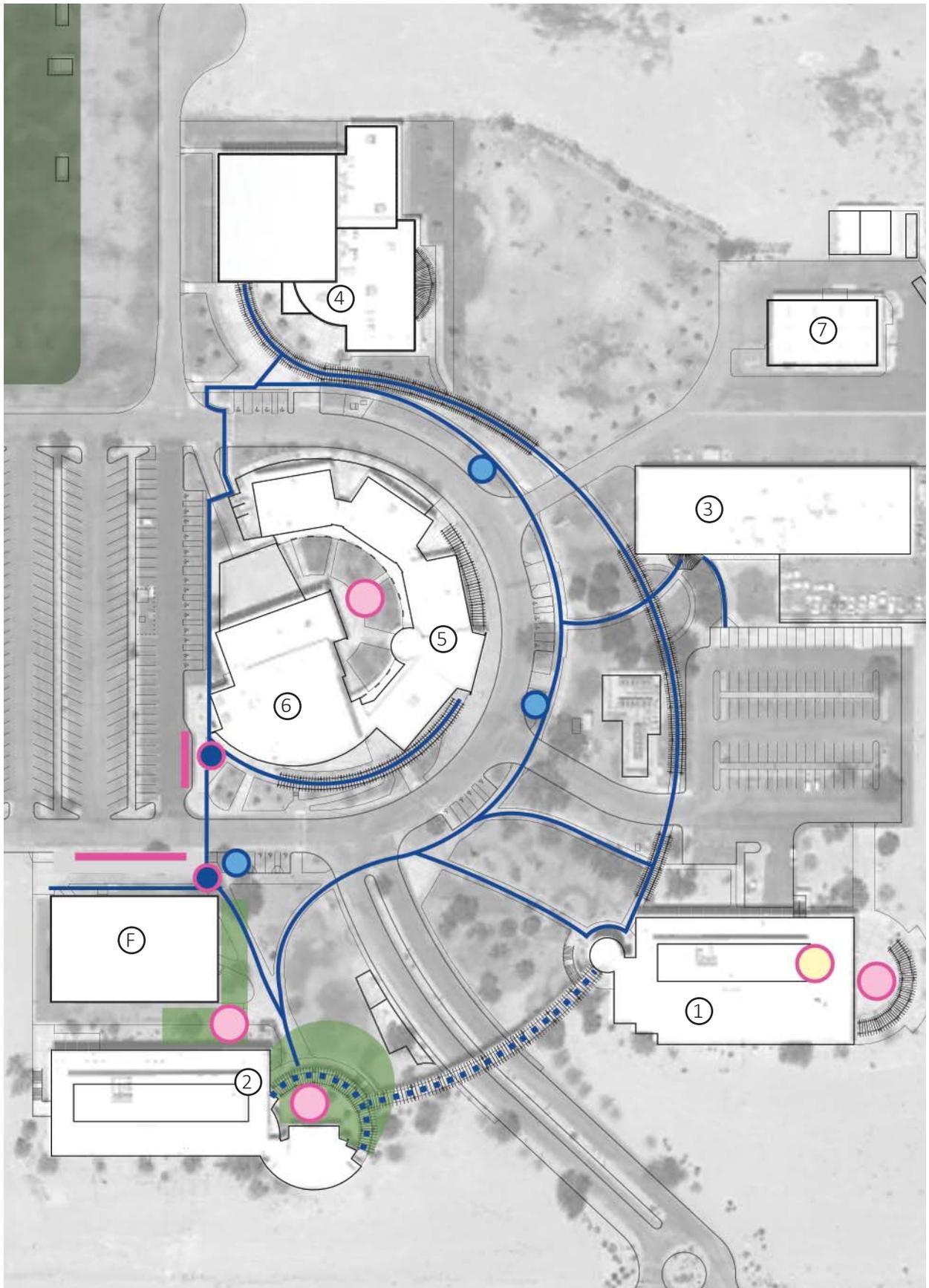
Phase two identifies a new Administration Building to be located north of the Class / Lab Building. This facility would house all of Administration and IT Services. The vacated areas in Class / Lab and College Services would be converted to additional Student gathering areas, Classrooms, Labs and offices.

SPACE	ASF	GSF
Superintendent/President’s Office	1,420	
Vice President Administrative Services	2,160	
Human Resources	1,460	
Mail Room/Communications Center	840	
Public Affairs	580	
Information Technology	1,970	
TOTAL SPACE	9,430	14,508

With Phase Two, there is an opportunity to provide additional spaces for the community to gather, both interior and exterior spaces as well as an improved drop off. The planning team recommends that the College encourage the development of gathering spaces with each new or renovated facility (in this planning horizon or in future plans). These spaces are important to the success of students and in improving the ‘sense of place’ and setting that defines Palo Verde College. The diagram adjacent identifies the placement of the future facility and how the campus systems may be improved with this project.

This project is viable when Palo Verde College is eligible for 100% project funding from the state.

- Node (Exterior)
- Node (Interior)
- Transit Drop Off
- Vehicular Drop Off
- Pedestrian Circulation
- ... Elevated Pedestrian Circulation
- Open Space
- Athletic Field
- ① College Services / Food Service
- ② Classroom / Lab
- ③ Technology Building
- ④ Physical Education Center
- ⑤ Fine Arts
- ⑥ Theater
- ⑦ M/O
- ⓕ Future Administration Building



Technology Master Plan Section

I. Introduction/Executive Summary

Palo Verde College is a small District with a main campus in Blythe, California and an educational center in Needles, California. Seventy-five percent (75%) of the college offerings are offsite and twenty five percent (25%) are on campus. This technology plan was developed in support of the recently developed Comprehensive Master Plan. Information used to formulate the plan was collected through interviews with staff, faculty and administration regarding the current technology environment and expected future needs.

One item that everyone interviewed agreed upon is that the Information Technology department, which handles infrastructure, classroom technology and staff desktops, and the Institutional Research department, which is responsible for the Enterprise Resource System and all mandated reporting, do a very good job at providing technology solutions with the resources with which they have to work. The technology plan is designed to address three areas:

1. Identify activities that can be done to enhance technology processes and implementation to improve campus support and usage across the District,
2. Provide the necessary technology processes to meet accreditation requirements, and,
3. Identify those projects that the technology departments can accomplish given appropriate resources.

Key items identified in the plan include:

- Implementation of a technology governance structure to develop policy, standards and guidelines in the use of technology and prioritize technology projects to meet the needs of students and staff,
- Implementation of an integrated planning cycle which will assist in identifying needs, requesting appropriate resources, implementing and assessing the effectiveness of technology resources,
- Identification of key projects to be undertaken to meet the needs of students and staff including the replacement cycles for technology equipment and systems, and
- Identification and implementation of appropriate user support services (including training) and technology staff training to most effectively leverage the technology and systems currently in place.

The college is starting with a good foundation including dedicated staff, supportive leadership and systems (hardware and software) to meet student and staff needs. This plan focuses on leveraging what is in place and enhancing the technology and processes to better support and prepare students.

II. Technology Governance Structure

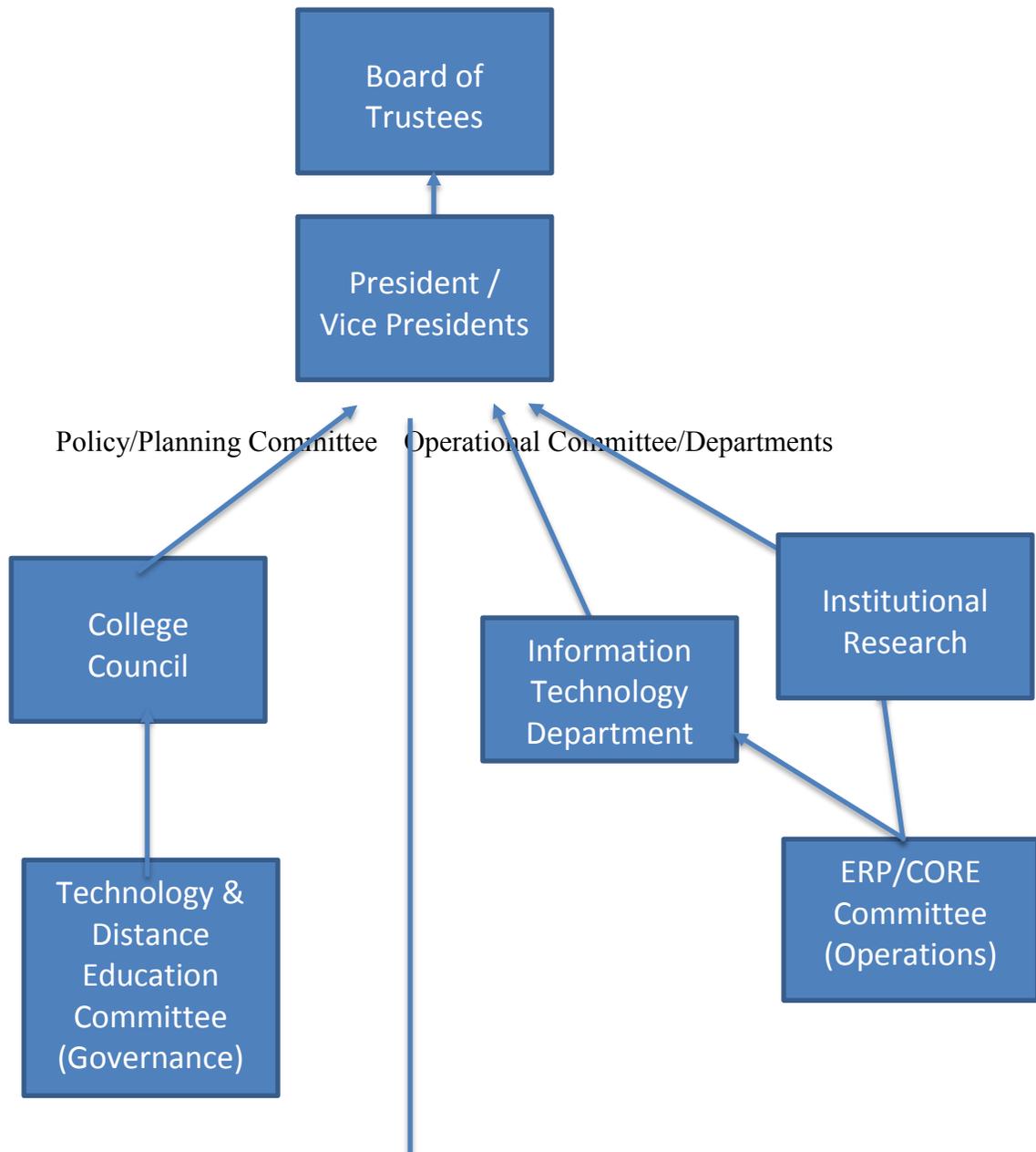
The current environment includes three committees. These include a Technology Committee that has not met regularly and was designed to set technology policy, an Enterprise Resource Planning/CORE committee that focuses on operations and MIS reporting, and a Distance Education Steering Committee.

In the absence of committee guidance, the Information Technology Department has used email campaigns and videos to get the word out about upcoming projects. The projects are currently self-initiated and prioritized by the Information Technology Department based on user reported needs and department observations.

The college should adopt a technology governance structure, building upon the existing committee structure. It should include committees to address policy and operational items for both instructional (including Distance Education) and administrative systems. The structure should result in fewer committees that are well documented and understood which will minimize the time needed for decision making in the fast changing world of technology. The committees can also assist with dissemination of information such as the status of ongoing projects. Fewer committees could assist the college with “committee fatigue” and focus efforts in the area of technology. This also helps the Information Technology department by having a representative group of users focused on prioritizing technology projects and resource allocations. Below is a governance structure that would provide both policy recommendations to the President and the Board and operational guidance to the Institutional Research and Information Technology departments that builds upon existing committee structures.



Graduation Ceremony 2016



Using the proposed Technology & Distance Education Committee to focus on planning and policy and the ERP/CORE Committee to focus on operations, the College should have in place the necessary structure to support technology across the campus. During implementation of the committee structure the college will need document this governance structure for technology. Each committee will need to develop a charter, which describes its function and operating procedures. In consultation with the Information Technology Department and Institutional Research the college should create a Map of Roles and Responsibilities that shows the clear delineation of responsibility to meet the requirements of accreditation as shown below:

TMP Table 1: Roles and Responsibilities

District Technology Map of Roles and Responsibilities				
	Committees		Departments	
	Technology & Distance Education Committee	ERP/CORE Committee	Information Technology	Institutional Research
P: Primary Responsibility E: Execution Responsibility				
Technology Planning				
Strategic	P		E	E
Budget/Spending	P		E	E
Infrastructure	P		E	
Staff Planning			P	P
Disaster Planning/Business Continuity	P		E	
Technology Evaluation (functional)		P		E
Technology Evaluation (technical)			P	P
Communication				
Advocacy/Value of IT	E	E	P	P
Data Driven Decision Making		P		P
Training			P	P
Policy/Standards				
Policy Recommendations	P		E	E
Infrastructure Standards	P		E	
Classroom Technology Minimum Standards	P		E	
Mobile Computing Standards	P		E	
Website Guidelines	P		E	
Computer Equipment Replacement Standards	P		E	
Software Development Standards		P		E
Applications				
Selection/Development Admin Systems		P		E
Selection/Development Academic Systems	P		E	
Backup		P	E	E
Testing		P		E
Distance Education	P		E	
Support/Maintenance				
Network/Infrastructure Management	P		E	
Audio Visual/Media	P		E	
Upgrades		P		E
E-mail	P		E	
Colleague and Related Systems		P		E
Lab/Classroom	P		E	
Telephony			PE	
Customer Support			PE	PE
Redeployment of Technology Equipment	P		E	
System Monitoring				P
Hardware/Software Installation			PE	PE
Security				
Information Security/Regulatory Compliance		P		E
Physical Security			PE	
Administration				
Vendor Management			PE	PE
Staffing/Hiring			PE	PE
Staff Evaluation			PE	PE
Purchasing/Acquisition			PE	PE

III. Technology Goals and Objectives

The college has outlined the following technology goals and objectives as part of the Comprehensive Master Plan:

10. Update and finalize the Technology Master Plan to assist with maintaining currency, updating necessary technologies and implementing new technologies in support of College operations and student success.
11. Participate in staff development training. It is the goal of the department to operate in such a way that the college technology and the IT staff are not in the forefront of everyday operations but run silently in the background.
12. Install the Lexmark imaging system upgrade, which is critical to the operations of several administrative offices. Repurpose room CL112 as a central document imaging room.
13. Create a student email system that links directly to the Ellucian Colleague product for better communications between college departments, faculty and students.
14. The IT Department has implemented the Canvas course management software promoted by the California Online Education Initiative (OEI) to replace the current system and allow the College to expand its online course offerings.
15. Implement a replacement strategy for office and classroom computers. A proposal to replace all desktops at once followed by an annual 25% replacement strategy has been brought forth by the Director of Business Services.
16. Research the possibility of a thin client strategy, replacing the desktop-computing units with smaller, less expensive systems.
17. Move the College infrastructure to a cloud environment. Research and possibly utilize the Microsoft Azure product that offers integrated cloud services including analytics, computing, database, mobile, networking, storage and web services.
18. Upgrade the Business Objects reporting suite to 4.X as the initial step in improving reporting and analytical capabilities, and develop dashboards to improve access to data.

The Technology Goals and Objectives are the result of informal input and brainstorming on the part of the Information Technology department staff. These goals and objectives should be reviewed, augmented and prioritized by the College community once the technology governance structure is in place and the committees are operational. This will help insure campus-wide buy-in and meet accreditation standards for technology. During interviews other items of interest to the campus community were identified and should be considered including:

- Provide a central repository (webpage) of training resources, including the operation and use of specialized equipment in the classrooms (i.e. DSPS equipment)
- Upgrade all classrooms to a consistent set of technology
- Change day of the week updates are performed to lessen impact on instruction
- Provide evening technology staff for classroom/lab support
- Provide an inventory of classroom equipment by room that staff can access so if additional equipment is needed they can easily identify it and make the request
- Implement a system to integrate student learning outcomes, assessment, and

program review to better inform planning and resource allocation.

IV. Technology Planning/Program Review

According to the Information Technology Department website the following is the Mission, Vision and Strategic Goals for the department:

Mission Statement

The IT Department's mission is to utilize technology to further the institutional goals of Palo Verde College and to support the faculty, staff and student body in the use of that technology.

Department Vision

To provide the best technology services to our user base through the effective utilization of existing and new technology. The IT Department will implement and support technologies and processes that will increase access to information, improve service to our user base and improve the quality of education at Palo Verde College.

Strategic Goals

- Implement enterprise initiatives to provide access to College and student information via campus website, inline admissions and registration and student portal functionality.
- Effectively manage and improve access to College data-systems to ensure information is readily available to be utilized in decision-making processes.
- Assist faculty with the integration of technology into curriculum.
- Provide technical support for College distance learning initiatives.
- Maintain a customer-driven culture within the department to ensure user' IT needs are well defined and consistently met.
- Establish an IT management and coordination structure to achieve an enterprise approach to managing IT resources in order to improve service to users and streamline department operations.

The department vision, mission and goals provide a basis for planning and decision-making and should be integrated with the Comprehensive Master Plan Goals and the Technology Goals and Objectives to form a single cohesive Technology Plan. (See Appendix A) All the necessary components are in place to meet accreditation standards for technology, although the first cycle of the Learning Support Full Review for Information Technology is scheduled for 2017 and has yet to be completed. The College has a program review guide for both academic and non-academic programs, which contains comprehensive review processes for all programs which is completed every four years. A separate Career Technical Education update is completed every two years. Resources are requested according to the Integrated Planning Manual and are based on the Learning Support Full Review projected needs.

V. Technology Policies, Procedures and Standards

Technology Use Policy

The College has adopted a Technology Use Policy and Administrative Procedures BP 3720 – Computer and Network Use, AP 3720-0 – Computer and Network Use and AP3720-1 – Student Email Correspondence Policy. These policies and procedures are comprehensive and complete. For accreditation purposes these should be reviewed and updated regularly through the technology governance process previously described in this document.

Standards

The College has not adopted technology infrastructure standards but the Information Technology Department does review blueprints for construction projects. This review depends on the ability of the reviewer to identify inconsistencies and problems. The College should adopt a set of infrastructure standards, particularly if the College is considering a Bond Measure. These standards would assure consistent technology across the campus. This consistency can reduce the long-term costs of maintenance and be developed to help insure the ability to upgrade and meet new technology demands over time.

Other standards or guidelines that could benefit the College are:

- Classroom Technology Minimum Standards
- Mobile Computing Standards
- Website Guidelines
- Computer Equipment Replacement Standards
- Software Development Standards

These standards and guidelines are best developed with campus-wide input using the technology governance process for discussion and approval. There are many examples of standards that other colleges have developed that can be used as a starting point for creation of standards for the College.

VI. Staffing

Information Technology

The Information Technology Department consists of six staff including one director. This group is responsible for technical services, thin client systems, servers, telephony, and instructional technology including smart classrooms, email systems, lab computers, desktops, and the maintenance of these technologies. Given the duties and the size of the College the staffing levels are appropriate.

Institutional Research

The Institutional Research staff of two is responsible for the MIS reporting, the Ellucian Colleague student, finance, financial aid and human resources systems and other related systems. The director is formerly the Director of the Information Technology Department. Duties were realigned during the last year to align the research function and administrative systems under one director. Consultants are often used to complete projects and necessary code to accomplish needed tasks is sometimes borrowed from other colleges. Given the responsibilities of this department and the reliance on outside services to complete work the department is understaffed.

End users indicate that there is not always clarity in the new division of responsibilities between the Information Technology and Institutional Research Departments. The College needs to clarify the delineation of responsibility between the two departments to assist users in contacting the appropriate support personnel when needed and in preparation for accreditation. The District Technology Map of Roles and Responsibilities presented previously in this document should be reviewed and agreed upon by the College to document the responsibilities of both departments and the associated committees.

VII. Computer Replacement, Upgrade and Maintenance

Administrative Systems

The College operates the Ellucian Colleague system to support finance, human resources, financial aid and student functions. In addition, the educational planning tool has also been deployed. The main servers and storage needed to run these systems were purchased in 2012. The College spends support dollars and staff time to continue operation of this system. When the current servers and storage are 5-7 years old it will be an appropriate time to consider other options such as hosting or cloud services. This might result in more efficiencies and dollar savings. The prerequisite to doing this is the improvement of the Internet connections as the demands will increase if a hosted or cloud option is selected.

Users indicate that the reporting from this system is not sufficient. The College should investigate the acquisition of a reporting tool that is easy to use. The College should provide training for end users on the selected reporting tool and encourage them to conduct simple reporting needs on their own or with minimal assistance.

Classroom Technology

Currently, lab and computer classrooms average five (5) years old. These systems have an average useful life of 5 years. The College is embarking on a project to “pilot” 100 virtual desktop systems in the classroom environment, which allows the College to use older equipment with newer centralized software management. Over time this option costs about the same as traditional desktop system replacement but may make the management of systems easier for staff. This type of system relies heavily on the network infrastructure because all work is done on

the server, not on the local desktop. This “pilot” system should be deployed and monitored to assess whether the benefits are realized in the current environment and whether the current network structure is capable of handling the increased volume with no adverse effects.

Staff Systems

Staff has desktop systems with an average age of just over six (6) years old. The useful life of these systems is 5 years. Because of the critical nature of many of these systems a replacement cycle should be developed and resources allocated to make sure that systems are operational and effective over time. The Information Technology staff recommends a 25% replacement cycle each year resulting in systems being replaced every 4 years. Virtual Desktop technology, should it prove to be effective and efficient in a classroom setting may be considered in the future. This should only be done if the Ellucian Colleague system will operate in such an environment effectively.

Once the Computer Equipment Replacement Standards are adopted through the governance process, a plan should be developed for replacement of all systems over time. Annually the resources should be requested to accomplish the replacement cycle over time. The Information Technology department should be involved in all hardware and software acquisitions to make sure that the department staff has the resources and training to maintain, upgrade and service the equipment and software. Identifying who is responsible for the maintenance of all systems and equipment should be clearly defined at the time of acquisition.

VIII. Administrative and Instructional Systems

Inventory of Software and Hardware

The current incomplete inventory of hardware is provided in Appendix N that is posted to the college web pages. This inventory should be completed and will provide the starting point for analysis of the necessary replacement cycle. The inventory should be updated to indicate the age of each system. From this list a plan should be developed to replace all tablets, laptops, desktops, servers, storage and network systems. The replacements should follow the Computer Equipment Replacement Standards that the College adopts. Older systems are much costlier.

Current and Future Project Prioritization

The current list of ongoing and suggested projects is presented in the Technology Goals and Objectives section of this plan. This initial list can serve as a guideline for future work once the list has been prioritized. The College should use the technology governance process to assist in the prioritization of the projects so that all constituents have clear expectations regarding project completion. This list can also help determine resource requests during budget development processes.

Distance Learning Systems

The College currently has an on call Distance Education Steering committee that has not been active. This committee would be incorporated into the Technology Governance Structure as previously described in this document. The Information Technology Department has replaced the former Distance Education system with the Canvas course management system provided through the California Online Education Initiative (OEI) to allow the College to expand online course offerings.

Website

The current website is a number of years old and is need of a revision. The current staff has skills in the support of the technology but need assistance with the design and content aspects. The use of an outside consultant in this endeavor would speed the project and free staff to focus on existing system support.

Technology Training

Currently the technology staff uses online resources such as CBT Nuggets, YouTube and Microsoft for training. Staff indicates that they have limited time for training because of the daily demands on their time. One idea would be to have specific time dedicated to training or regular group training so that staff is up to date on the latest technologies that they are required to support. Users indicate that they would like further training in the systems that they use. The College can use Lynda.com (Professional Learning Network) or @One (<http://www.onefortraining.org/>) training to meet these needs. Both are available to all community colleges free of charge.

Information Technology Infrastructure

Users complain regularly of slowness in the system, especially users who are trying to work on remote systems like the county payroll system. Staff reports that their backup plan is to go to their individual homes to do work when needed as it is sometimes faster. Users also report coming to work early during key times to make sure the work gets done before the campus gets busy. The College should work closely with CENIC the Internet provider to improve the performance of the connection. CENIC has been contacted and is currently evaluating alternatives to improve this service to the College.

Backup Procedures and Disaster Recovery

At this time, the College reports that they have no formal Business Continuity/Disaster Recovery plan. As this will be a requirement for accreditation, this plan needs to be developed. The Information Technology Department should draft this plan. The College might consider partnering with local K-12, providing remote backup at Needles (for Blythe) and vice versa, or partnering with another community college district to provide this capability. Longer term the College might want to consider offsite or cloud hosting services for systems.

Appendix Materials

EMP Appendix A: Neighboring Communities

Blythe, California- General Orientation to Arizona

Blythe to Ehrenberg, AZ – 5 miles, 9 min, via I-10
Blythe to Quartzsite, AZ- 22 miles, 24 min via I-10
Blythe to Brenda, AZ- 39 miles, 36 min via I-10 and US 60
Blythe to Hope, AZ- 54 miles, 50 min via I-10 and US 60
Blythe to Salome, AZ- 60 miles, 56 min via I-10 and US 60
Blythe to Wenden, AZ- 65 miles, 1 hr. via I-10 and US 60
Blythe to Parker, AZ- 51 miles, 55 min via US 95
Blythe to Cibola, AZ – 25 miles, 45 min, via State 78
Blythe to Yuma, AZ- 90 miles, 1 hr. 40 min via US 78
Blythe to Kingman, AZ- 148 miles, 2 hr. 24 min via AZ 95 and I-40
Blythe to Phoenix, AZ- 150 miles, 2 hr. 12 min via US 10

Arizona cities near Blythe, along I-10 and US 60

- Ehrenberg
- Quartzsite
- Brenda
- Hope
- Salome
- Wenden

Blythe, California- General Orientation to California

Blythe to Ripley, CA – 10 miles, 13 min, via State 78
Blythe to Palo Verde, CA- 21 miles, 28 min via State 78
Blythe to Needles, CA- 96 miles, 1 hr. 40 min, via US 95
Blythe to Palm Desert- 111 miles 1 hr. 50 min, via I-10
Blythe to Indio- 99 miles, 1 hr. 33 min, via I-10
Blythe to Palm Springs- 122 miles, 1 hr. 57 min, via I-10
Blythe to Twentynine Palms- 129 miles, 2 hrs., via I-10 and CA 62
Blythe to Yucca Valley- 146 miles 2 hr. 17 min, via I-10 and CA 62
Blythe to Los Angeles- 226 miles, 3 hr. 31 min, via I-10
Blythe to San Diego- 216 miles, 3 hr. 42 min, via I-10 and I-15

Needles, California- General Orientation to Arizona

Needles to Willow Valley- 5 miles, 10 min, via AZ 95
Needles to Mohave Valley- 7 miles, 11 min, via AZ 95
Needles to Mesquite Creek- 11 miles, 15 min, via AZ 95
Needles to Fort Mohave- 13 miles, 18 min, via AZ 95
Needles to Bullhead City- 23 miles, 32 min, via AZ 95
Needles to Lake Havasu City – 43 miles, 48 min, via I40
Needles to Kingman – 63 miles, 57 min, via I40

Needles, California- General Orientation to Nevada

Needles to Laughlin- 26 miles, 36 min, via AZ 95
Needles to Palm Gardens- 34 miles, 40 min via US 95

EMP Appendix B: Major Employers

Blythe Major Employers

Manufacturing		
Name of Company	Employees	Products
Morgan Corporation	231	Manufacturing
Hi-Value Processors	120	Vegetable packing
Hay Day Farms	65	Feed processor
Crawford & Associates	20	Ready-mix concrete
Modern Ginning Company	20	Cotton ginning
Non-Manufacturing		
Name of Company	Employees	Description
Ironwood State Prison	1,041	Level I & III prison
Chuckwalla Valley State Prison	794	Level II prison
Palo Verde Unified School District	300	Public school system
Palo Verde Community College	209	Community college district
Palo Verde Hospital	150	Hospital
City of Blythe	111	Municipality
Albertsons	100	Supermarket
County of Riverside	91	Public administration
K-Mart	88	Retail
Palo Verde Irrigation District	85	Public irrigation
Southern California Gas Company	43	Public utility

Source: City of Blythe and Blythe Chamber of Commerce

Needles Major Employers

Employer	Employees	Description
Burlington Northern/Santa Fe Railroad		Transportation
Needles Unified School District	70	Education
Colorado River Medical Center	100	Hospital
City of Needles	82	Municipality
San Bernardino County Sheriff's Dept.		Public Administration
Fort Mojave Indian Tribe		Hospitality
Southern California Gas Co.		Public utility
Pacific Gas and Electric		Public utility
Bureau of Land Management		Public Administration
California Highway Patrol		Public Administration

Source: City of Needles

EMP Appendix C: Associate Degrees for Transfer, Analysis of Specified Courses

	AD-T Duplicated Required/Options Courses					
	PSY	PSY	PSY	SOC	CHD	MAT
AD-T	101	155	150	101	101	106
Psychology	R	RC	R		OC	RC
Sociology	OC		OA	R		OA
Business Administration		RC				RC
Early Childhood Education					R	
Administration of Justice	OB	OB		OB		OB
TOTALS	3	3	2	3	2	4
	R	required				
	RC	required choice				
	O (with list letter)	options				

Source: Palo Verde College. 2014-15 Catalog; analysis by Cambridge West Partnership, LLC

EMP Appendix D: Program Inventory and Awards 2010-11 to 2014-15

Program Title	TOP Code	Program Award	Year Program Approved	Count of Annual Awards					Total Average
				2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	
Agricultural Crop Science	010100	Certificate of Career Preparation	2014						0
Hazardous Materials Specialist	030300	A.S. Degree	1993					1	1
Business Administration	050500	A.S.-T Degree	2013					1	1
Business Management	050600	A.S. Degree	1970	12	12	6	14	14	58
Business Management	050600	Certificate of Achievement	2008	7	6	12	4	5	34
Business Literacy	050600	Certificate of Career Prep	2009	26	30	38	39	48	181
Personal Finance	050600	Certificate of Career Prep	2015						0
Small Business & Entrepreneurship	050640	Certificate of Career Prep	2013						2
Unknown	059900	Certificate of Career Prep		25	29	13	2	1	70
Computer Information Systems	070200	A.S. Degree	2012		1	1	1	1	4
Information Technology Literacy or Computer Mgmt Information or Computer Maintenance & Help Desk Support	070200	Certificate of Career Preparation	2009, 2011, 2013	13	9	8	38	48	116
Computer Applications	070210	Certificate of Career Preparation	2012		1	4	1	2	8
Unknown	079900	Certificate of Career Preparation			2				2
Automotive Technology	094800	A.S. Degree	1983						2
Automotive Technology	094800	Certificate of Achievement	1970	6	6	10	12	7	41
Automotive Technology	094800	Certificate of Career Preparation	2013		2	1	1	1	5
Automotive Fabrication	094800	Certificate of Career Preparation	2015						0
Building Technology	095200	A.S. Degree	1993	1					1
Building Technology	095200	Certificate of Achievement	1983	10	4	2	5		21
Welding Technology	095650	Certificate of Achievement	1970	15	13	15	13	12	68
Welding Technology	095650	A.S. Degree	1970					1	2
Welding Technology	095650	Certificate of Career Preparation	2011		1	1			2

Source: California Community Colleges Chancellor's Office. Academic Affairs Program Inventory; MIS Referential Program Award Files; analysis by Cambridge West Partnership, LLC

Program Title	TOP Code	Program Award	Year Program Approved	Count of Annual Awards									
				2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015	Total	Average		
Licensed Vocational Nursing	123020	Certificate of Achievement	1993	14	14					3	9	40	10.0
Phlebotomy	120510	Certificate of Career Preparation	2009	8	1	2					1	12	3.0
Certified Nursing Assistant	123030	Certificate of Career Preparation	2009	26	9	21	14	55	125			125	25.0
Emergency Medical Technician	125000	Certificate of Career Preparation	2009	48								48	
Child Development	130500	A.S. Degree	1976	2	3	3	1	4	13			13	2.6
Child Development	130500	Certificate of Achievement	2004	1	1	1	1	2	6			6	1.2
Early Childhood Education	130500	A.S.-T Degree	2014									0	
Child Development-Associate Teacher or Child Development-Assistant	130500	Certificate of Career Preparation	2009	56	34	32	22	30	174			174	34.8
Psychology	200100	A.A.-T Degree	2011									0	
Alcohol and Drug Studies	210440	Certificate of Achievement	2004	1		5		7	13			13	4.3
ADS Specialist I or ADS Specialist II	210440	Certificate of Career Preparation	2009	67	68	49	67	65	316			316	63.2
Criminal Justice	210500	A.S. Degree	1970	2	1	2	2	2	7			7	1.8
Criminal Justice	210500	Certificate of Achievement	1976	4	2	2	1	5	14			14	2.8
Administration of Justice	210500	A.S.-T Degree	2013									0	
Firefighter I or Fire Instructor I or Fire Instructor II	213300	Certificate of Career Preparation	2009								2	2	
Sociology	220800	A.A.-T Degree	2011									0	
Liberal Arts: Mathematics and Science	490200	A.A. Degree	2008	7	13	22	20	39	101			101	20.2
Liberal Arts: Arts and Humanities	490300	A.A. Degree	2005	24	29	23	19	25	120			120	24.0
Liberal Arts: Social and Behavioral Sciences	490330	A.A. Degree	2008	27	33	32	24	30	146			146	29.2
Liberal Arts: Business and Technology	499900	A.A. Degree	2008	13	10	22	19	28	92			92	18.4
Catalog Rights	varies	varies	varies	25	6	4	1	1	9.0			9.0	
			Totals	440	333	332	330	450	1,850			1,850	377.0
These awards are distributed above based upon the TOP code.													
Local Approved	varies	Certificate of Career Prep	varies	284	198	180	187	268	1,117			1,117	223.4

Source: California Community Colleges Chancellor's Office. Academic Affairs Program Inventory; MIS Referential Program Award Files; analysis by Cambridge West Partnership, LLC

Locally Approved Only, Programs of Instruction

Title of Certificate	TOP Code	Program Goal	Type of Certificate	Year Approved	Units
Agricultural Crop Science	010100	Career Preparation	Certificate of Career Preparation	6/10/2014	11
Business Literacy	050600	Career Preparation	Certificate of Career Preparation	3/17/2009	13
Personal Finance	050600	Career Preparation	Certificate of Career Preparation	5/11/2015	9
Small Business Management	050640	Career Preparation	Certificate of Career Preparation	12/10/2013	16
3D Computer Animation	061440	Career Preparation	Certificate of Career Preparation	3/17/2009	12
Graphic Design and Web Content	061460	Career Preparation	Certificate of Career Preparation	8/16/2011	12
Information Technology Literacy	070200	Career Preparation	Certificate of Career Preparation	3/17/2009	9
Computer Mgmt Information Systems	070200	Career Preparation	Certificate of Career Preparation	8/16/2011	13
Computer Maintenance & Help Desk Support	070200	Career Preparation	Certificate of Career Preparation	7/1/2013	12
Computer Applications	070210	Career Preparation	Certificate of Career Preparation	8/13/2012	15
Automotive Fabrication	094800	Career Preparation	Certificate of Career Preparation	9/25/2013	16
Automotive Technology	094800	Career Preparation	Certificate of Career Preparation	7/1/2015	9
Welding Technology	095650	Career Preparation	Certificate of Career Preparation	5/11/2015	9
Phlebotomy	120510	Career Preparation	Certificate of Career Preparation	3/17/2009	4
Certified Nursing Assistant	123030	Career Preparation	Certificate of Career Preparation	3/17/2009	6
Emergency Medical Technician	125000	Career Preparation	Certificate of Career Preparation	3/17/2009	4-13
Child Development-Associate Teacher	130500	Career Preparation	Certificate of Career Preparation	3/17/2009	12
Child Development-Assistant	130500	Career Preparation	Certificate of Career Preparation	4/23/2009	6
ADS Specialist I	210400	Career Preparation	Certificate of Career Preparation	3/17/2009	15
ADS Specialist II	210400	Career Preparation	Certificate of Career Preparation	3/17/2009	15
Firefighter I	213300	Career Preparation	Certificate of Career Preparation	3/17/2009	12.25
Fire Instructor I	213300	Career Preparation	Certificate of Career Preparation	3/17/2009	4
Fire Instructor II	213300	Career Preparation	Certificate of Career Preparation	3/17/2009	6

Source: Palo Verde College, Office of Instruction

EMP Appendix E: Working With Labor Market Data: Discussion Points for Labor Market Analysis

Net Job Market

- Given the number of enrollments that are projected for the program and that are necessary to support the program, are there enough openings locally to permit placement of the expected number of graduates?
- Has the job market been declining slowly? Holding steady? Growing slowly? Growing rapidly? Recently emerging?

Earning Potential

- What is the average initial salary?
- What is the average percentage of salary increase in two years? Five years?

Program Credibility /Career Potential

- If advanced degrees are typically needed for career advancement, will the courses required for this program transfer toward completion of the requirements for those degrees?
- Will this preparation permit students to remain current in their field?
- Does the program teach basic principles and theory, as well as application? Is it current and of sufficient rigor? Does it allow for later shifts in career?
- Does this preparation meet the needs of those already employed for upward mobility, entrepreneurship, or a career upgrade?
- Does the program prepare students to work in an ethnically diverse workforce and in an ethnically diverse, global market?

Emerging Occupations

- When job market data are not available or are not appropriate for a new CTE program in an area of emerging social need or technology, it becomes important to provide a careful analysis and explication of the specific demands of this new occupation.
- A carefully designed employer survey (see instructions for Employer Survey/Other Evidence of Need in form instructions) can elicit documentation demonstrating that employers:
 - Share the college's assumption regarding future direction(s) of the field and the skills that this emerging industry will require of employees
 - Recognize the value of the proposed degree or certificate in the hiring or promoting of staff

Competitive Fields

Colleges are often called upon to provide training that students greatly desire, even where the job prospects are limited and the field is highly competitive. In such occupations—often in the arts and entertainment—it is talent rather than education that drives hiring. While no community college certificate can substitute for talent, a program that is exceptionally well designed to identify and develop talent can still be justified when few

programs of similar quality exist in the college service area.

Career Technical Education Skills

Many kinds of certificates are of occupational benefit to students already employed. In such circumstances, the program objectives and design, including the sequencing of courses, must fit the needs of students likely to be already employed. The course sequence must build on students' prior experience, and courses must be scheduled to accommodate working students. A program must not establish provisions that exclude students who are not already employed in a particular industry, unless the college makes available to such students a practicable entry-level pathway that would qualify them, upon completion, for the advanced training.

Small Businesses or Cottage Industries

Entrepreneurial opportunities and the market for cottage industries yield few statistics. Yet entrepreneurial opportunities are of value to an increasingly large proportion of the workforce, especially in rural areas. A proposal for approval of a program designed to meet the needs of students interested in pursuing entrepreneurial activities must include a careful analysis of needs and of the market within which they must compete.

Source: California Community College Chancellor's Office. Program and Course Approval Handbook 4th edition March 2012.

EMP Appendix F: Projected Job Openings by Educational Preparation

The first table identifies occupations commonly requiring a Bachelor's Degree. Thirty-two occupations in Riverside or San Bernardino Counties meet these criteria. A **bolded** TOP code indicates a Palo Verde College AD-T has been established for the occupation.

Occupations Commonly Requiring a Bachelor's Degree, 200 or More Projected Annual Openings 2012-2022

SOC	Occupational Title	TOP v 6	Average Annual Total Jobs	2014Q1 Median Hourly	2014 Q1 Median Annual	Ed Level	Work Experience	On-the-Job Training	PVC	
111021	General and Operations Managers	050500	767	\$43.75	\$90,991	Bachelor's	<5 years	None	Y	
111021	General and Operations Managers	050600		\$43.75	\$90,991	Bachelor's	<5 years	None	Y	
252021	Elementary School Teachers, Except Special Education		582	[6]	\$75,170	Bachelor's	None	I/R		
132011	Accountants and Auditors	050210	379	\$29.94	\$62,286	Bachelor's	None	None		
131111	Management Analysts	050500	255	\$36.54	\$76,009	Bachelor's	<5 years	None	Y	
131111	Management Analysts	050600		\$36.54	\$76,009	Bachelor's	<5 years	None	Y	
252031	Secondary School Teachers, Except Special and Career/Technical Education		204	[6]	\$70,830	Bachelor's	None	I/R		
252031	Secondary School Teachers, Except Special and Career/Technical Education	040100		[6]	\$70,830	Bachelor's	None	I/R		
252031	Secondary School Teachers, Except Special and Career/Technical Education	100200		[6]	\$70,830	Bachelor's	None	I/R		
252031	Secondary School Teachers, Except Special and Career/Technical Education	100400		[6]	\$70,830	Bachelor's	None	I/R		
252031	Secondary School Teachers, Except Special and Career/Technical Education	110500		[6]	\$70,830	Bachelor's	None	I/R		
252031	Secondary School Teachers, Except Special and Career/Technical Education	150100		[6]	\$70,830	Bachelor's	None	I/R		
252031	Secondary School Teachers, Except Special and Career/Technical Education	170100		[6]	\$70,830	Bachelor's	None	I/R		
252031	Secondary School Teachers, Except Special and Career/Technical Education	190200		[6]	\$70,830	Bachelor's	None	I/R		
252031	Secondary School Teachers, Except Special and Career/Technical Education	190500		[6]	\$70,830	Bachelor's	None	I/R		
252031	Secondary School Teachers, Except Special and Career/Technical Education	220500		[6]	\$70,830	Bachelor's	None	I/R		
[6] In occupations where workers do not work full-time all year-round, it is not possible to calculate an ho										
			I/R	Internship/Residency						

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

Occupations Commonly Requiring a Bachelor's Degree, 100 to 199 Projected Annual Openings 2012-2022

SOC	Occupational Title	TOP v 6	Average Annual Total Jobs	2014Q1 Median Hourly	2014 Q1 Median Annual	Ed Level	Work Experience	On-the-Job Training	PVC
119021	Construction Managers	050500	198	\$49.88	\$103,767	Bachelor's	None	MT OJT	Y
119021	Construction Managers	050600		\$49.88	\$103,767	Bachelor's	None	MT OJT	Y
131051	Cost Estimators	050500	192	\$29.95	\$62,296	Bachelor's	None	None	Y
131051	Cost Estimators	050600		\$29.95	\$62,296	Bachelor's	None	None	Y
252022	Middle School Teachers, Except Special and Career/Technical Education		175	[6]	\$76,445	Bachelor's	None	IR	
131161	Market Research Analysts and Marketing Specialists		148	\$26.77	\$55,687	Bachelor's	None	None	
112022	Sales Managers	050500	143	\$47.31	\$98,407	Bachelor's	<5 years	None	Y
112022	Sales Managers	050600		\$47.31	\$98,407	Bachelor's	<5 years	None	Y
113031	Financial Managers		142	\$50.92	\$105,903	Bachelor's	≥5 years	None	
172051	Civil Engineers		113	\$45.40	\$94,423	Bachelor's	None	None	
119111	Medical and Health Services Managers	120200	103	\$51.43	\$106,971	Bachelor's	None	None	
119111	Medical and Health Services Managers	126100		\$51.43	\$106,971	Bachelor's	None	None	
131071	Human Resources Specialists		100	\$26.95	\$56,070	Bachelor's	None	None	
	I/R- Internship/Residency								

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

Occupations Commonly Requiring a Bachelor's Degree, 50 to 99 Projected Annual Openings 2012-2022

SOC	Occupational Title	TOP v 6	Average Annual Total Jobs	2014Q1 Median Hourly	2014 Q1 Median Annual	Ed Level	Work Experience	On-the-Job Training	PVC
414011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products		99	\$32.77	\$68,161	Bachelor's	None	MT OJT	
271024	Graphic Designers	061430	92	\$18.45	\$38,384	Bachelor's	None	None	
252012	Kindergarten Teachers, Except Special Education		91	[6]	\$68,969	Bachelor's	None	I/R	
399032	Recreation Workers		85	\$10.30	\$21,413	Bachelor's	None	None	
113011	Administrative Services Managers	050500	77	\$36.41	\$75,747	Bachelor's	<5 years	None	Y
113011	Administrative Services Managers	050600		\$36.41	\$75,747	Bachelor's	<5 years	None	Y
113011	Administrative Services Managers	050920		\$36.41	\$75,747	Bachelor's	<5 years	None	
253099	Teachers and Instructors, All Other		77	[6]	\$64,284	Bachelor's	None	I/R	
111011	Chief Executives	050100	75	N/A	N/A	Bachelor's	≥5 years	None	
111011	Chief Executives	050500		N/A	N/A	Bachelor's	≥5 years	None	Y
111011	Chief Executives	050600		N/A	N/A	Bachelor's	≥5 years	None	Y
111011	Chief Executives	050800		N/A	N/A	Bachelor's	≥5 years	None	
111011	Chief Executives	210200		N/A	N/A	Bachelor's	≥5 years	None	
151121	Computer Systems Analysts		64	\$37.55	\$78,104	Bachelor's	None	None	
151121	Computer Systems Analysts	070200	64	\$37.55	\$78,104	Bachelor's	None	None	Y
151121	Computer Systems Analysts	070730	64	\$37.55	\$78,104	Bachelor's	None	None	
151121	Computer Systems Analysts	070810	64	\$37.55	\$78,104	Bachelor's	None	None	
413031	Securities, Commodities, and Financial Services Sales Agents		62	\$21.65	\$45,031	Bachelor's	None	MT OJT	
131041	Compliance Officers		60	\$33.36	\$69,379	Bachelor's	None	MT OJT	
272022	Coaches and Scouts		60	[6]	\$35,764	Bachelor's	None	None	
132072	Loan Officers		57	\$39.24	\$81,631	Bachelor's	None	MT OJT	
151142	Network and Computer Systems Administrators		57	\$36.64	\$76,213	Bachelor's	None	None	
131151	Training and Development Specialists		53	\$26.27	\$54,639	Bachelor's	<5 years	None	
172141	Mechanical Engineers		51	\$38.81	\$80,735	Bachelor's	None	None	
192041	Environmental Scientists and Specialists, Including Health	030100	50	\$36.10	\$75,090	Bachelor's	None	None	
192041	Environmental Scientists and Specialists, Including Health	030200		\$36.10	\$75,090	Bachelor's	None	None	
252052	Special Education Teachers, Kindergarten and Elementary School		50	[6]	\$74,533	Bachelor's	None	I/R	

[6] In occupations where workers do not work full-time all year-round, it is not possible to calculate an hourly wage. MT OJT - more than 1 month and up to 12 months OJT and informal training

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

The table below identifies four occupations in the Riverside or San Bernardino Counties with 50 or more projected annual openings through 2022 that commonly require an Associate Degree. The **bold** indicates that Palo Verde College has a program established that relates to the occupation. The second table provides additional information on the programs and graduates from neighboring colleges.

Occupations Commonly Requiring an Associate Degree, 50 or More Projected Annual Openings 2012-2022

		Inland Empire California Community Colleges Regional Data										
		Riverside and San Bernardino County 2012-2022 Occupational Employment Projections					Average Awards: 2010-11 to 2014-15					
SOC	Occupational Title	AV An Total Jobs	2014 Q1 Median Hourly	2014 Q1 Median Annual	2014 Q1 Entry Level Education	Work Exp	Regional TOP Codes	Number of Programs			Total	
								Certificate	Degree	Degree	Total	
291141	Registered Nurses	830	\$42.39	\$88,181	Associate	None	123010	1	7	73	532	604
	Preschool Teachers, Except Special Education	153	\$14.45	\$30,058	Associate	None	130500	27	20	447	174	621
252011	Preschool Teachers, Except Special Education						130540	1		2		2
232011	Paralegals and Legal Assistants	56	\$24.58	\$51,142	Associate	None	140200	3	3	39	21	60
292021	Dental Hygienists	75	\$44.02	\$91,550	Associate	None	124020	1	1		11	11
	<i>Total</i>	<i>1,114</i>										

		Inland Empire California Community Colleges Sub-Regional Data												
		Riverside and San Bernardino County 2012-2022 Occupational Employment Projections					Average Awards: 2010-11 to 2014-15							
SOC	Occupational Title	AV An Total Jobs	2014 Q1 Median Hourly	2014 Q1 Median Annual	2014 Q1 Entry Level Education	Work Exp	Regional TOP Codes	Award Degree	Palo Verde	Desert	Copper Mt.	Crafton Hills	San Bernardino Valley	Sub Total
291141	Registered Nurses	830	\$42.39	\$88,181	Associate	None	123010	Degree			1	1		3
	Preschool Teachers, Except Special Education	153	\$14.45	\$30,058	Associate	None	130500	Cert	1	2	2	3		11
	Preschool Teachers, Except Special Education						130540	Degree	2	2	1	2		9
232011	Paralegals and Legal Assistants	56	\$24.58	\$51,142	Associate	None	130540	Cert						1
292021	Dental Hygienists	75	\$44.02	\$91,550	Associate	None	140200	Degree						1
	<i>Total</i>	<i>1,114</i>												0

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

The table below identifies sixteen occupations in Riverside or San Bernardino Counties with 50 or more projected annual openings through 2022 that commonly require a Postsecondary Certificate. The **bold** indicates that Palo Verde College has a program established that relates to the occupation. The second table provides additional information on the programs and graduates from neighboring colleges.

Occupations Commonly Requiring a Certificate, 50 or More Projected Annual Openings 2012-2022

SOC	Occupational Title	Riverside and San Bernardino County 2012-2022 Occupational Employment Projections				Inland Empire California Community Colleges Regional Data								
		Av An Total Jobs	2014Q1 Median Hourly	2014 Q1 Median Annual	Entry Level Education	Work Exp	CO TOP Codes	Regional TOP Codes	Number of Programs			Average Awards 2010-11 to 2014-15		
									Certificate	Degree	Total	Certificate	Degree	Total
533032	Heavy and Tractor-Trailer Truck Drivers	995	\$20.59	\$42,298	Certificate	None	ST OJT	094750	4	1	5	134	3	137
311014	Nursing Assistants	328	\$12.66	\$26,330	Certificate	None	None	123030	6	4	10	150	62	212
	Licensed Practical and Licensed Vocational								1	1	2	2	2	2
292061	Nurses	299	\$22.17	\$46,104	Certificate	None	None	123020	5	5	10	37	29	65
319092	Medical Assistants	290	\$13.01	\$27,045	Certificate	None	None	120810	4	3	7	112	19	131
319092	Medical Assistants							120800						
395012	Hairdressers, Hairstylists, and Cosmetologists	251	\$9.47	\$19,690	Certificate	None	None	300700	3	3	6	62	10	72
499021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	184	\$24.73	\$51,459	Certificate	None	LT OJT	094600	4	3	7	59	9	68
319091	Dental Assistants	171	\$16.18	\$33,666	Certificate	None	None	124010	9	10	19	95	92	187
332011	Firefighters	98	\$26.69	\$55,522	Certificate	None	LT OJT	213300	6	2	8	82	9	91
332011	Firefighters							213350						
395092	Manicurists and Pedicurists	86	\$9.04	\$18,793	Certificate	None	None	300700	4	3	7	112	19	131
	First-Line Supervisors of Production and Operating Workers													
511011	Operating Workers	84	\$23.03	\$47,915	Certificate	<=5 years	None							0
	Emergency Medical Technicians and Paramedics								4	4	8	41	22	63
292041	Paramedics	83	\$11.46	\$23,846	Certificate	None	None	125100	4	4	8	371		371
292041	Paramedics							125000						
	Medical Records and Health Information Technicians													
292071	Technicians	76	\$19.00	\$39,507	Certificate	None	None	122310	1	1	2	6	4	10
254031	Library Technicians	62	\$17.77	\$36,938	Certificate	None	None	160200	2	2	4	5	5	10
319097	Phlebotomists	57	\$16.84	\$35,026	Certificate	None	None	120510	2	2	4	5	5	10
319011	Massage Therapists	51	\$17.97	\$37,364	Certificate	None	None	126200	3	1	4	3	1	4
492022	Telecommunications Equipment Installers and Repairers, Except Line Installers	51	\$30.76	\$63,989	Certificate	None	MT OJT	093430						
	Total	3,166												
	LT OJT ->12 mos or classroom and work, MT OJT -> 1 mo < 12 mos, ST OJT -< 1 mo													

Source: California Employment Development Department, Labor Market Information, California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

The table below identifies two occupations in Riverside or San Bernardino Counties with 50 or more projected annual openings through 2022 that commonly require some college. The **bold** indicates that Palo Verde College has a program established that relates to the occupation. The second table provides additional information on the programs and graduates from neighboring colleges.

Occupations Commonly Requiring Some College, 50 or More Projected Annual Openings 2012-2022

SOC	Occupational Title	Inland Empire California Community Colleges Regional Data												
		2014 Q1		2014 Q2		2014 Q3		2014 Q4		Average Awards 2010-11 to 2014-15				
		Total Jobs	Median Hourly	Median Annual	Entry Education	Work Exp	OJT	Regional TOP Codes	Certificate	Degree	Total	Certificate	Degree	Total
259041	Teacher Assistants	442	[6]	\$29,421	Some College	None	None	080200	4	3	7	11	12	23
151151	Computer User Support Specialists	103	\$24.63	\$51,213	Some College	None	MT OJT	070200	9	11	20	56	86	142
151151	Computer User Support Specialists							070820	1	1	1	1	1	1
	<i>Total</i>	545												

[6] In occupations where workers do not work full-time all year-round, it is not possible to calculate an hourly wage.
MT OJT -> 1 mo < 12 mos.

SOC	Occupational Title	Inland Empire California Community Colleges Sub-Regional Data														
		Riverside and San Bernardino County 2012-2022 Occupational Employment Projections		2014 Q1		2014 Q2		2014 Q3		2014 Q4		Average Awards 2010-11 to 2014-15				
		Total Jobs	Median Hourly	Median Annual	Entry Education	Work Exp	OJT	TOP Code	Award	Palo Verde	Deeert	Copper Mt.	Crafton Hills	San Bernardino Valley	Sub Total	
259041	Teacher Assistants	442	[6]	\$29,421	Some College	None	None	080200	Cert						0	
151151	Computer User Support Specialists	103	\$24.63	\$51,213	Some College	None	MT OJT	070200	Cert	1	1	2	23	4	10	3
	<i>Total</i>	545						070820	Cert	1	1	5	1	3	6	5

[6] In occupations where workers do not work full-time all year-round, it is not possible to calculate an hourly wage.
MT OJT -> 1 mo < 12 mos.

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

The table below identifies eight-nine occupations in Riverside or San Bernardino Counties with 50 or more projected annual openings through 2022 that commonly require a high school diploma. For some occupations below a college certificate or some college experience may give the job applicant a competitive advantage. In other occupations local hiring practices actually expect more than a high school diploma for entry-level education.

Occupations Commonly Requiring a High School Diploma, 50 or More Projected Annual Openings 2012-2022

SOC	Occupational Title	TOP v 6	Average Annual Total Jobs	2014Q1 Median Hourly	2014 Q1 Median Annual	Ed Level	Work Experience	On-the-Job Training	PVC
439061	Office Clerks, General		925	\$13.37	\$27,805	HS Diploma	None	ST OJT	
434051	Customer Service Representatives	051800	652	\$16.43	\$34,174	HS Diploma	None	ST OJT	
411011	First-Line Supervisors of Retail Sales Workers	010920	595	\$18.94	\$39,397	HS Diploma	<5 years	None	
411011	First-Line Supervisors of Retail Sales Workers	050940		\$18.94	\$39,397	HS Diploma	<5 years	None	
411011	First-Line Supervisors of Retail Sales Workers	050970		\$18.94	\$39,397	HS Diploma	<5 years	None	
411011	First-Line Supervisors of Retail Sales Workers	070910		\$18.94	\$39,397	HS Diploma	<5 years	None	
431011	First-Line Supervisors of Office and Administrative Support Workers	050630	570	\$23.49	\$48,857	HS Diploma	<5 years	None	
431011	First-Line Supervisors of Office and Administrative Support Workers	051440		\$23.49	\$48,857	HS Diploma	<5 years	None	
472031	Carpenters		560	\$25.24	\$52,489	HS Diploma	None	APP	
436014	Secretaries and Administrative Assistants, Except Legal, Medical, and	051400	543	\$17.13	\$35,643	HS Diploma	None	ST OJT	
351012	First-Line Supervisors of Food Preparation and Serving Workers		504	\$13.16	\$27,378	HS Diploma	<5 years	None	
	Sales Representatives, Wholesale and Manufacturing, Except Technical and								
414012	Scientific Products	050900	469	\$25.65	\$53,346	HS Diploma	None	MT OJT	
339032	Security Guards		412	\$10.62	\$22,098	HS Diploma	None	ST OJT	
399011	Childcare Workers	130500	366	\$10.52	\$21,886	HS Diploma	None	ST OJT	Y
399011	Childcare Workers	130540		\$10.52	\$21,886	HS Diploma	None	ST OJT	
399011	Childcare Workers	130550		\$10.52	\$21,886	HS Diploma	None	ST OJT	
399011	Childcare Workers	130590		\$10.52	\$21,886	HS Diploma	None	ST OJT	
433031	Bookkeeping, Accounting, and Auditing Clerks	050200	364	\$18.06	\$37,566	HS Diploma	None	MT OJT	
493023	Automotive Service Technicians and Mechanics	094800	357	\$17.21	\$35,806	HS Diploma	None	LT OJT	Y
493023	Automotive Service Technicians and Mechanics	094840		\$17.21	\$35,806	HS Diploma	None	LT OJT	
499071	Maintenance and Repair Workers, General		357	\$18.24	\$37,933	HS Diploma	None	LT OJT	
435071	Shipping, Receiving, and Traffic Clerks		354	\$14.06	\$29,243	HS Diploma	None	ST OJT	
434171	Receptionists and Information Clerks		339	\$12.80	\$26,621	HS Diploma	None	ST OJT	
413099	Sales Representatives, Services, All Other		311	\$21.79	\$45,313	HS Diploma	None	ST OJT	
533033	Light Truck or Delivery Services Drivers		296	\$15.74	\$32,733	HS Diploma	None	ST OJT	
MT OJT-	more than 1 month and up to 12 months OJT and informal training							ST OJT-1 month or less OJT	

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

Occupations Commonly Requiring a High School Diploma, 50 or More Projected Annual Openings 2012-2022

SOC	Occupational Title	TOP v 6	Average Annual Total Jobs	2014Q1 Median Hourly	2014 Q1 Median Annual	Ed Level	Work Experience	On-the-Job Training	PVC
471011	First-Line Supervisors of Construction Trades and Extraction Workers	095210	253	\$33.06	\$68,771	HS Diploma	≥5 years	None	
471011	First-Line Supervisors of Construction Trades and Extraction Workers	095220		\$33.06	\$68,771	HS Diploma	≥5 years	None	
471011	First-Line Supervisors of Construction Trades and Extraction Workers	095230		\$33.06	\$68,771	HS Diploma	≥5 years	None	
471011	First-Line Supervisors of Construction Trades and Extraction Workers	095240		\$33.06	\$68,771	HS Diploma	≥5 years	None	
471011	First-Line Supervisors of Construction Trades and Extraction Workers	095260		\$33.06	\$68,771	HS Diploma	≥5 years	None	
471011	First-Line Supervisors of Construction Trades and Extraction Workers	095270		\$33.06	\$68,771	HS Diploma	≥5 years	None	
471011	First-Line Supervisors of Construction Trades and Extraction Workers	095280		\$33.06	\$68,771	HS Diploma	≥5 years	None	
471011	First-Line Supervisors of Construction Trades and Extraction Workers	095290		\$33.06	\$68,771	HS Diploma	≥5 years	None	
471011	First-Line Supervisors of Construction Trades and Extraction Workers	095700		\$33.06	\$68,771	HS Diploma	≥5 years	None	
471011	First-Line Supervisors of Construction Trades and Extraction Workers	095720		\$33.06	\$68,771	HS Diploma	≥5 years	None	
472111	Electricians		241	\$27.61	\$57,407	HS Diploma	None	Apprentice	
436013	Medical Secretaries	051420	224	\$15.30	\$31,825	HS Diploma	None	MT OJT	
512092	Team Assemblers		220	\$11.58	\$24,090	HS Diploma	None	MT OJT	
131199	Business Operations Specialists, All Other		195	\$31.50	\$65,500	HS Diploma	None	None	
333051	Police and Sheriff's Patrol Officers		190	\$40.82	\$84,895	HS Diploma	None	MT OJT	
439199	Police and Sheriff's Patrol Officers	210500	190	\$40.82	\$84,895	HS Diploma	None	MT OJT	Y
439199	Office and Administrative Support Workers, All Other		189	\$12.64	\$26,276	HS Diploma	None	ST OJT	
433071	Tellers		173	\$13.58	\$28,241	HS Diploma	None	ST OJT	
472073	Operating Engineers and Other Construction Equipment Operators		159	\$32.19	\$66,960	HS Diploma	None	MT OJT	
434151	Order Clerks		155	\$14.73	\$30,640	HS Diploma	None	ST OJT	
119051	Food Service Managers	130620	152	\$22.64	\$47,093	HS Diploma	<5 years	None	
119051	Food Service Managers	130700	152	\$22.64	\$47,093	HS Diploma	<5 years	None	
119051	Food Service Managers	130710	152	\$22.64	\$47,093	HS Diploma	<5 years	None	
119051	Food Service Managers	130720	152	\$22.64	\$47,093	HS Diploma	<5 years	None	
433021	Billing and Posting Clerks		151	\$16.13	\$33,547	HS Diploma	None	ST OJT	
491011	First-Line Supervisors of Mechanics, Installers, and Repairers	093440	151	\$33.78	\$70,269	HS Diploma	<5 years	None	
333012	Correctional Officers and Jailers		150	\$35.17	\$73,156	HS Diploma	None	MT OJT	
	MT OJT- more than 1 month and up to 12 months OJT and informal training							ST OJT- 1 month or less OJT	

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

Occupations Commonly Requiring a High School Diploma, 50 or More Projected Annual Openings 2012-2022

SOC	Occupational Title	TOP v 6	Average Annual Total Jobs	2014Q1 Median Hourly	2014 Q1 Median Annual	Ed Level	Work Experience	On-the-Job Training	PVC
119199	Managers, All Other	050500	143	\$51.95	\$108,049	HS Diploma	<5 years	None	Y
119199	Managers, All Other	050600		\$51.95	\$108,049	HS Diploma	<5 years	None	Y
119199	Managers, All Other	050640		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	160100		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	200100		\$51.95	\$108,049	HS Diploma	<5 years	None	Y
119199	Managers, All Other	200300		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	209900		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	220100		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	220200		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	220220		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	220400		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	220500		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	220600		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	220610		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	220700		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	220710		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	220800		\$51.95	\$108,049	HS Diploma	<5 years	None	Y
119199	Managers, All Other	221000		\$51.95	\$108,049	HS Diploma	<5 years	None	
119199	Managers, All Other	229900		\$51.95	\$108,049	HS Diploma	<5 years	None	
493031	Bus and Truck Mechanics and Diesel Engine Specialists	094700	142	\$21.12	\$43,918	HS Diploma	None	LT OJT	
472152	Plumbers, Pipefitters, and Steamfitters		141	\$22.30	\$46,397	HS Diploma	None	APP	
433011	Bill and Account Collectors		138	\$15.97	\$33,223	HS Diploma	None	MT OJT	
531021	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand		135	\$23.88	\$49,674	HS Diploma	<5 years	None	
533022	Bus Drivers, School or Special Client		127	\$17.11	\$35,599	HS Diploma	None	ST OJT	
211093	Social and Human Service Assistants		126	\$15.12	\$31,444	HS Diploma	None	ST OJT	
434081	Hotel, Motel, and Resort Desk Clerks		126	\$10.80	\$22,479	HS Diploma	None	ST OJT	
LT OJT- more than 12 months OJT and formal classroom instruction		MT OJT- more than 1 month and up to 12 months OJT and informal training							

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

Occupations Commonly Requiring a High School Diploma, 50 or More Projected Annual Openings 2012-2022

SOC	Occupational Title	TOP v 6	Average Annual Total Jobs	2014Q1 Median Hourly	2014 Q1 Median Annual	Ed Level	Work Experience	On-the-Job Training	PVC
514041	Machinists	095630	125	\$15.22	\$31,642	HS Diploma	None	LT OJT	
39099	Protective Service Workers, All Other		124	\$14.77	\$30,723	HS Diploma	None	ST OJT	
519061	Inspectors, Testers, Sorters, Samplers, and Weighers		120	\$16.25	\$33,797	HS Diploma	None	MT OJT	
435032	Dispatchers, Except Police, Fire, and Ambulance		119	\$18.67	\$38,832	HS Diploma	None	MT OJT	
499041	Industrial Machinery Mechanics		111	\$25.00	\$51,999	HS Diploma	None	LT OJT	
	First-Line Supervisors of Transportation and Material-Moving Machine and								
531031	Vehicle Operators		110	\$24.79	\$51,554	HS Diploma	<5 years	None	
292052	Pharmacy Technicians		105	\$16.27	\$33,842	HS Diploma	None	MT OJT	
435061	Production, Planning, and Expediting Clerks		105	\$18.66	\$38,812	HS Diploma	None	MT OJT	
493093	Tire Repairers and Changers		103	\$12.70	\$26,412	HS Diploma	None	ST OJT	
519111	Packaging and Filling Machine Operators and Tenders		102	\$11.48	\$23,866	HS Diploma	None	MT OJT	
499052	Telecommunications Line Installers and Repairers		101	\$26.75	\$55,633	HS Diploma	None	LT OJT	
514121	Welders, Cutters, Solderers, and Brazers	095650	101	\$17.30	\$35,982	HS Diploma	None	MT OJT	Y
393011	Gaming Dealers		100	\$9.60	\$19,972	HS Diploma	None	ST OJT	
435052	Postal Service Mail Carriers		99	\$27.50	\$57,210	HS Diploma	None	ST OJT	
436011	Executive Secretaries and Executive Administrative Assistants	051400	98	\$24.90	\$51,793	HS Diploma	<5 years	None	
119141	Property, Real Estate, and Community Association Managers	051100		\$31.49	\$65,490	HS Diploma	<5 years	None	
119141	Property, Real Estate, and Community Association Managers	051110		\$31.49	\$65,490	HS Diploma	<5 years	None	
434061	Eligibility Interviewers, Government Programs		90	\$20.13	\$41,880	HS Diploma	None	MT OJT	
533031	Driver/Sales Workers		88	\$11.54	\$24,014	HS Diploma	None	ST OJT	
433051	Payroll and Timekeeping Clerks	050200	86	\$19.27	\$40,078	HS Diploma	None	MT OJT	
499099	Installation, Maintenance, and Repair Workers, All Other		86	\$16.86	\$35,073	HS Diploma	None	MT OJT	
131031	Claims Adjusters, Examiners, and Investigators	051200	84	\$30.55	\$63,536	HS Diploma	None	LT OJT	
	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping								
371012	Workers		82	\$18.92	\$39,359	HS Diploma	<5 years	None	
413021	Insurance Sales Agents		82	\$18.77	\$39,034	HS Diploma	None	MT OJT	
519199	Production Workers, All Other		81	\$11.49	\$23,876	HS Diploma	None	MT OJT	
339092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers		79	\$10.98	\$22,843	HS Diploma	None	ST OJT	
472021	Brickmasons and Blockmasons		79	\$41.63	\$86,601	HS Diploma	None	Apprentice	
	LT OJT - more than 12 months OJT and formal classroom instruction								
	MT OJT - mor than 1 month and up to 12 months OJT and informal training								ST OJT - 1 month or less OJT

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

Occupations Commonly Requiring a High School Diploma, 50 or More Projected Annual Openings 2012-2022

SOC	Occupational Title	TOP v 6	Average Annual Total Jobs	2014Q1 Median Hourly	2014 Q1 Annual	Ed Level	Work Experience	On-the-Job Training	PVC
419022	Real Estate Sales Agents	051100	77	\$24.95	\$51,904	HS Diploma	None	LT OJT	
371011	First-Line Supervisors of Housekeeping and Janitorial Workers		73	\$16.53	\$34,381	HS Diploma	<5 years	None	
253021	Self-Enrichment Education Teachers		69	\$13.05	\$27,134	HS Diploma	<5 years	None	
411012	First-Line Supervisors of Non-Retail Sales Workers		66	\$26.27	\$54,646	HS Diploma	<5 years	None	
419011	Demonstrators and Product Promoters		66	\$11.21	\$23,312	HS Diploma	None	ST OJT	
434121	Library Assistants, Clerical		65	\$12.92	\$26,884	HS Diploma	None	ST OJT	
493042	Mobile Heavy Equipment Mechanics, Except Engines	094720	64	\$27.31	\$56,803	HS Diploma	None	LT OJT	
533099	Motor Vehicle Operators, All Other		64	\$10.61	\$22,063	HS Diploma	None	ST OJT	
351011	Chefs and Head Cooks	130630	62	\$12.82	\$26,662	HS Diploma	≥5 years	None	
391021	First-Line Supervisors of Personal Service Workers		62	\$17.95	\$37,323	HS Diploma	<5 years	None	
472211	Sheet Metal Workers	095640	61	\$22.70	\$47,217	HS Diploma	None	APP	
372021	Pest Control Workers		59	\$13.72	\$28,537	HS Diploma	None	MT OJT	
113071	Transportation, Storage, and Distribution Managers	050500	58	\$39.11	\$81,359	HS Diploma	≥5 years	None	Y
113071	Transportation, Storage, and Distribution Managers	050600		\$39.11	\$81,359	HS Diploma	≥5 years	None	Y
113071	Transportation, Storage, and Distribution Managers	302000		\$39.11	\$81,359	HS Diploma	≥5 years	None	
113071	Transportation, Storage, and Distribution Managers	302010		\$39.11	\$81,359	HS Diploma	≥5 years	None	
439041	Insurance Claims and Policy Processing Clerks		58	\$17.71	\$36,837	HS Diploma	None	MT OJT	
499051	Electrical Power-Line Installers and Repairers		58	\$49.52	\$102,991	HS Diploma	None	LT OJT	
131023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	050900	57	\$25.50	\$53,037	HS Diploma	None	LT OJT	
119013	Farmers, Ranchers, and Other Agricultural Managers	010200	56	\$51.45	\$107,001	HS Diploma	≥5 years	None	
119013	Farmers, Ranchers, and Other Agricultural Managers	010220		\$51.45	\$107,001	HS Diploma	≥5 years	None	
119013	Farmers, Ranchers, and Other Agricultural Managers	010230		\$51.45	\$107,001	HS Diploma	≥5 years	None	
119013	Farmers, Ranchers, and Other Agricultural Managers	010240		\$51.45	\$107,001	HS Diploma	≥5 years	None	
119013	Farmers, Ranchers, and Other Agricultural Managers	010300		\$51.45	\$107,001	HS Diploma	≥5 years	None	
119013	Farmers, Ranchers, and Other Agricultural Managers	010310		\$51.45	\$107,001	HS Diploma	≥5 years	None	
119013	Farmers, Ranchers, and Other Agricultural Managers	010900		\$51.45	\$107,001	HS Diploma	≥5 years	None	
119013	Farmers, Ranchers, and Other Agricultural Managers	010930		\$51.45	\$107,001	HS Diploma	≥5 years	None	
119013	Farmers, Ranchers, and Other Agricultural Managers	011200		\$51.45	\$107,001	HS Diploma	≥5 years	None	
		MT OJT- more than 12 months OJT and formal classroom instruction							
		MT OJT- more than 1 month and up to 12 months OJT and informal training							
								ST OJT- 1 month or less OJT	

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

Occupations Commonly Requiring a High School Diploma, 50 or More Projected Annual Openings 2012-2022

SOC	Occupational Title	TOP v 6	Average Annual Total Jobs	2014Q1 Median Hourly	2014 Q1 Median Annual	Ed Level	Work Experience
435111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping		55	\$12.69	\$26,398	HS Diploma	None
131022	Wholesale and Retail Buyers, Except Farm Products	050900	53	\$24.03	\$49,994	HS Diploma	None
131022	Wholesale and Retail Buyers, Except Farm Products	050960		\$24.03	\$49,994	HS Diploma	None
419021	Real Estate Brokers	051100	53			HS Diploma	<5 years
493021	Automotive Body and Related Repairers		53	\$15.88	\$33,028	HS Diploma	None
499098	Helpers--Installation, Maintenance, and Repair Workers		53	\$13.42	\$27,928	HS Diploma	None
292099	Health Technologists and Technicians, All Other		51	\$19.13	\$39,781	HS Diploma	None
271026	Merchandise Displayers and Window Trimmers		50	\$14.06	\$29,249	HS Diploma	None
LT OJT- more than 12 months OJT and formal classroom instruction		MT OJT- mor than 1 month and up to 12 months OJT and informal training					ST O

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

EMP Appendix G: Summary Comparison of Employment in Blythe 2001 vs. 2015

SOC	Occupational Family	Number of Jobs		Average Annual Change	% Change	Average Annual Change	% Change
		2001	2015				
11-0000	Management Occupations	185	198	13	0.9	7.03%	0.5%
13-0000	Business and Financial Operations Occupations	88	124	36	2.4	40.91%	2.7%
15-0000	Computer and Mathematical Occupations	21	29	8	0.5	38.10%	2.5%
17-0000	Architecture and Engineering Occupations	16	28	12	0.8	75.00%	5.0%
19-0000	Life, Physical, and Social Science Occupations	21	33	12	0.8	57.14%	3.8%
21-0000	Community and Social Service Occupations	27	58	31	2.1	114.81%	7.7%
23-0000	Legal Occupations	11	16	5	0.3	45.45%	3.0%
25-0000	Education, Training, and Library Occupations	125	142	17	1.1	13.60%	0.9%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	13	33	20	1.3	153.85%	10.3%
29-0000	Healthcare Practitioners and Technical Occupations	135	230	95	6.3	70.37%	4.7%
31-0000	Healthcare Support Occupations	51	96	45	3.0	88.24%	5.9%
33-0000	Protective Service Occupations	95	126	31	2.1	32.63%	2.2%
35-0000	Food Preparation and Serving Related Occupations	353	564	211	14.1	59.77%	4.0%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	129	131	2	0.1	1.55%	0.1%
39-0000	Personal Care and Service Occupations	59	129	70	4.7	118.64%	7.9%
41-0000	Sales and Related Occupations	380	538	158	10.5	41.58%	2.8%
43-0000	Office and Administrative Support Occupations	504	641	137	9.1	27.18%	1.8%
45-0000	Farming, Fishing, and Forestry Occupations	902	637	-265	-17.7	-29.38%	-2.0%
47-0000	Construction and Extraction Occupations	52	59	7	0.5	13.46%	0.9%
49-0000	Installation, Maintenance, and Repair Occupations	174	189	15	1.0	8.62%	0.6%
51-0000	Production Occupations	90	102	12	0.8	13.33%	0.9%
53-0000	Transportation and Material Moving Occupations	405	440	35	2.3	8.64%	0.6%
	Total	3,836	4,543	707	47.1	18.43%	1.2%

Source: Economic Modeling Specialists International. Occupational Overview Quarter Three Data Set, January 2016 (courtesy of the Riverside County Economic Development Agency and Supervisor John Benoit's Office); analysis by Cambridge West Partnership, LLC

EMP Appendix I: Example Two-Year Course Cycle

Program/Course	Term Scheduled				Program/Course	Term Scheduled				Note
	Fa 15	Sp 16	Fa 16	Sp 17		Fa 15	Sp 16	Fa 16	Sp 17	
Child Development					Psychology					
CD010	X	X	X	X	PSY001	X	X	X	X	
CD012	X		X		PSY003	X	X	X	X	
CD014	X		X		PSY012	X		X		
CD075	X		X		PSY020	X		X		
CD076	X		X		PSY023	X		X		
CD030		X		X	PSY005		X		X	
CD044		X		X	PSY010/SOC010		X		X	
CD074		X		X	PSY033		X		X	
CD015		X		X						
Sociology					Criminal Justice					
SOC001	X	X	X	X	CJ001	X	X	X	X	
SOC002	X		X		CJ002	X		X		
SOC003	X		X		CJ005A	X		X		
SOC004	X		X		CJ006	X		X		
SOC014	X		X		CJ030	X		X		
PSY005		X		X	CJ003		X		X	
PSY010/SOC010		X		X	CJ007		X		X	
					CJ010		X		X	
					CJ032		X		X	
Business , Accounting & Economics					Business , Accounting & Economics (continued)					
BUAC066	X	X	X	X	BUMA027	X		X		
BUAC010					BUMA010	X	X	X	X	
ACCT001	X	X	X	X	BUMA20A	X	X	X	X	
ACCT002	X	X	X	X	BURE081		X			
ACCT003		X	X		BURE83A			X		
ACCT004	X		X		BURE084	X				
ACCT005		X		X	BURE85				X	
BAAA001	X		X		ECON001	X	X	X	X	
BUMA001	X	X	X	X	ECON002	X	X	X	X	

Source: <http://www.emccd.edu/Two-Year-Course-Cycle>; analysis by Cambridge West Partnership, LLC

EMP Appendix J- Occupations Projected to have the Most Job Openings

Riverside and San Bernardino Counties 2012-2022						
Occupational Title	Total Job Openings 2012-2022	2014 Q1 Median Hourly	2014 Q1 Median Annual	Entry Level Education	Work Exp.	OJT
Retail Salespersons	24,590	\$10.24	\$21,286	< High School	None	ST OJT
Laborers and Freight, Stock, and Material Movers, Hand	21,060	\$11.89	\$24,735	< High School	None	ST OJT
Combined Food Preparation and Serving Workers, Including Fast Food	20,750	\$9.10	\$18,924	< High School	None	ST OJT
Cashiers	20,200	\$9.47	\$19,704	< High School	None	ST OJT
Personal Care Aides	17,980	\$9.41	\$19,569	< High School	None	ST OJT
Waiters and Waitresses	13,700	\$8.97	\$18,652	< High School	None	ST OJT
Heavy and Tractor-Trailer Truck Drivers	9,950	\$20.39	\$42,398	Certificate	None	ST OJT
Office Clerks, General	9,250	\$13.37	\$27,805	High School	None	ST OJT
Stock Clerks and Order Fillers	8,830	\$11.05	\$22,975	< High School	None	ST OJT
Construction Laborers	8,510	\$18.70	\$38,899	< High School	None	ST OJT
Registered Nurses	8,300	\$42.39	\$88,181	Associate	None	None
General and Operations Managers	7,670	\$43.75	\$90,991	Bachelor's	<5 years	None
Landscaping and Groundskeeping Workers	7,280	\$10.81	\$22,491	< High School	None	ST OJT
Customer Service Representatives	6,520	\$16.43	\$34,174	High School	None	ST OJT
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	6,400	\$12.21	\$25,403	< High School	None	ST OJT

ST OJT- 1 month or less OJT; MT OJT- mor than 1 month and up to 12 months OJT and informal training; APP- Apprenticeship
 LT OJT- more than 12 months OJT and formal classroom instruction; IR- Internship/Residency

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

Riverside and San Bernardino Counties 2012-2022									
Occupational Title	Total Job Openings		2014 Q1 Median		2014 Q1 Annual		2014 Q1 Entry Level		OJT
	2012-2022	2014 Q1	Hourly	Annual	Education	Work Exp.			
First-Line Supervisors of Retail Sales Workers	5,950		\$18.94	\$39,397	High School	<5 years	None		
Elementary School Teachers, Except Special Education	5,820	[3]	[3]	\$75,170	Bachelor's	None	I/R		
First-Line Supervisors of Office and Administrative Support Workers	5,700		\$23.49	\$48,857	High School	<5 years	None		
Carpenters	5,600		\$25.24	\$52,489	High School	None	APP		
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	5,560		\$9.51	\$19,780	< High School	None	ST OJT		
Cooks, Restaurant	5,540		\$10.70	\$22,259	< High School	<5 years	MT OJT		
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	5,430		\$17.13	\$35,643	High School	None	ST OJT		
First-Line Supervisors of Food Preparation and Serving Workers	5,040		\$13.16	\$27,378	High School	<5 years	None		
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	4,690		\$25.65	\$53,346	High School	None	MT OJT		
Maids and Housekeeping Cleaners	4,460		\$10.26	\$21,342	< High School	None	ST OJT		
Teacher Assistants	4,420	[3]	[3]	\$29,421	Some College	None	None		
Food Preparation Workers	4,390		\$9.19	\$19,125	< High School	None	ST OJT		
Packers and Packers, Hand	4,190		\$9.90	\$20,589	< High School	None	ST OJT		
Cooks, Fast Food	4,180		\$9.05	\$18,823	< High School	None	ST OJT		
Security Guards	4,120		\$10.62	\$22,098	High School	None	ST OJT		
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	3,980		\$9.03	\$18,783	< High School	None	None		
Accountants and Auditors	3,790		\$29.94	\$62,286	Bachelor's	None	None		
Childcare Workers	3,660		\$10.52	\$21,886	High School	None	ST OJT		
Bookkeeping, Accounting, and Auditing Clerks	3,640		\$18.06	\$37,566	High School	None	MT OJT		

ST OJT- 1 month or less OJT; MT OJT- more than 1 month and up to 12 months OJT and informal training; APP- Apprenticeship

LT OJT- more than 12 months OJT and formal classroom instruction; I/R- Internship/Residency

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

Riverside and San Bernardino Counties 2012-2022						
Occupational Title	Total Job	2014 Q1	2014 Q1	2014 Q1	2014 Q1	2014 Q1
	Openings	Median	Hourly	Median	Annual	Entry Level
	2012-2022	Hourly	Annual	Education	Work Exp.	OJT
Dishwashers	3,600	\$9.03	\$18,783	< High School	None	ST OJT
Maintenance and Repair Workers, General	3,570	\$18.24	\$37,933	High School	None	LT OJT
Automotive Service Technicians and Mechanics	3,570	\$17.21	\$35,806	High School	None	LT OJT
Shipping, Receiving, and Traffic Clerks	3,540	\$14.06	\$29,243	High School	None	ST OJT
Receptionists and Information Clerks	3,390	\$12.80	\$26,621	High School	None	ST OJT
Dining Room and Cafeteria Attendants and Bartender Helpers	3,360	\$8.98	\$18,662	< High School	None	ST OJT
Nursing Assistants	3,280	\$12.66	\$26,330	Certificate	None	None
Industrial Truck and Tractor Operators	3,010	\$15.22	\$31,656	< High School	None	ST OJT
Licensed Practical and Licensed Vocational Nurses	2,990	\$22.17	\$46,104	Certificate	None	None
Light Truck or Delivery Services Drivers	2,960	\$15.74	\$32,733	High School	None	ST OJT
Medical Assistants	2,900	\$13.01	\$27,045	Certificate	None	None
Counter and Rental Clerks	2,780	\$11.77	\$24,491	< High School	None	ST OJT
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	2,720	\$9.12	\$18,954	< High School	None	ST OJT
Substitute Teachers	2,650	\$18.71	\$38,900	Bachelor's	N/A	N/A
Management Analysts	2,550	\$36.54	\$76,009	Bachelor's	<5 years	None
First-Line Supervisors of Construction Trades and Extraction Workers	2,530	\$33.06	\$68,771	High School	≥5 years	None

ST OJT- 1 month or less OJT; MT OJT- mor than 1 month and up to 12 months OJT and informal training; APP- Apprenticeship
 LT OJT- more than 12 months OJT and formal classroom instruction; I/R- Internship/Residency

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

EMP Appendix K- Occupations Projected to be the Fastest Growing

Riverside and San Bernardino Counties 2012-2022											
Occupational Title	Est. Jobs Projected		% Change	Average % Change	2014 Q1 Median Hourly	2014 Q1 Annual Median Annual	Entry Level Education	Work Exp.	OJT	Annual	
	2012	2022								2012	2014 Q1
Brickmasons and Blockmasons	710	1,420	100.0%	10.0%	\$41.63	\$86,601	HS Diploma	None	APP		
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	460	890	93.5%	9.3%	\$14.49	\$30,135	<HS Diploma	None	ST OJT		
Reinforcing Iron and Rebar Workers	480	800	66.7%	6.7%	\$34.25	\$71,250	HS Diploma	None	APP		
Cement Masons and Concrete Finishers	1,960	3,220	64.3%	6.4%	\$24.74	\$51,457	<HS Diploma	None	MT OJT		
Fence Erectors	570	930	63.2%	6.3%	\$18.27	\$37,998	HS Diploma	None	MT OJT		
Tile and Marble Setters	1,140	1,840	61.4%	6.1%	\$19.21	\$39,951	<HS Diploma	None	LT OJT		
Cost Estimators	2,100	3,350	59.5%	6.0%	\$29.95	\$62,296	Bachelor's	None	None		
Painters, Construction and Maintenance	3,440	5,450	58.4%	5.8%	\$21.54	\$44,798	<HS Diploma	None	MT OJT		
Personal Care Aides	27,620	43,630	58.0%	5.8%	\$9.41	\$19,569	<HS Diploma	None	ST OJT		
Roofers	1,280	2,020	57.8%	5.8%	\$23.64	\$49,170	<HS Diploma	None	MT OJT		
Audio and Video Equipment Technicians	630	990	57.1%	5.7%	N/A	N/A	Certificate	None	ST OJT		
Glaziers	510	800	56.9%	5.7%	N/A	N/A	HS Diploma	None	APP		
Drywall and Ceiling Tile Installers	2,320	3,630	56.5%	5.6%	\$21.95	\$45,648	<HS Diploma	None	MT OJT		
Carpet Installers	780	1,220	56.4%	5.6%	\$13.21	\$27,464	<HS Diploma	None	ST OJT		
Tapers	750	1,130	50.7%	5.1%	\$19.40	\$40,336	<HS Diploma	None	MT OJT		

ST OJT- 1 month or less OJT; MT OJT- more than 1 month and up to 12 months OJT and informal training; APP- Apprenticeship
 LT OJT- more than 12 months OJT and formal classroom instruction; I/R- Internship/Residency

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

Riverside and San Bernardino Counties 2012-2022									
Occupational Title	2012 Est. Jobs	2022 Projected Jobs	% Change	Average % Change	2014 Q1 Median Hourly	2014 Q1 Median Annual	Entry Level Education	Work Exp.	OJT
Logisticians	780	1,170	50.0%	5.0%	\$34.31	\$71,354	Bachelor's	None	None
First-Line Supervisors of Construction Trades and Extraction Workers	4,280	6,350	48.4%	4.8%	\$33.06	\$68,771	HS Diploma	≥5 years	None
Construction Laborers	12,310	18,180	47.7%	4.8%	\$18.70	\$38,899	<HS Diploma	None	ST OJT
Plasterers and Stucco Masons	1,070	1,570	46.7%	4.7%	\$17.32	\$36,045	<HS Diploma	None	LT OJT
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	2,580	3,770	46.1%	4.6%	\$24.73	\$51,439	Certificate	None	LT OJT
Carpenters	9,610	14,030	46.0%	4.6%	\$25.24	\$52,489	HS Diploma	None	APP
Market Research Analysts and Marketing Specialists	2,460	3,590	45.9%	4.6%	\$26.77	\$55,687	Bachelor's	None	None
Diagnostic Medical Sonographers	440	640	45.5%	4.5%	\$33.50	\$69,677	Associate	None	None
Plumbers, Pipefitters, and Steamfitters	2,520	3,620	43.7%	4.4%	\$22.30	\$46,397	HS Diploma	None	APP
Demonstrators and Product Promoters	940	1,350	43.6%	4.4%	\$11.21	\$23,312	HS Diploma	None	ST OJT
Electricians	3,920	5,590	42.6%	4.3%	\$27.61	\$57,407	HS Diploma	None	APP
Telecommunications Line Installers and Repairers	1,510	2,150	42.4%	4.2%	\$26.75	\$55,633	HS Diploma	None	LT OJT
Structural Iron and Steel Workers	630	880	39.7%	4.0%	\$38.98	\$81,086	HS Diploma	None	APP
Management Analysts	4,690	6,520	39.0%	3.9%	\$36.54	\$76,009	Bachelor's	<5 years	None
Physician Assistants	690	950	37.7%	3.8%	\$44.29	\$92,127	Master's	None	None
Meeting, Convention, and Event Planners	640	880	37.5%	3.8%	\$20.62	\$42,901	Bachelor's	None	None
Real Estate Brokers	1,130	1,550	37.2%	3.7%	N/A	N/A	HS Diploma	<5 years	None
Home Appliance Repairers	650	890	36.9%	3.7%	\$23.89	\$49,679	HS Diploma	None	MT OJT
Health Specialties Teachers, Postsecondary	1,880	2,570	36.7%	3.7%	[2]	\$84,225	Doctorate	<5 years	None

ST OJT- 1 month or less OJT; MT OJT- more than 1 month and up to 12 months OJT and informal training; APP- Apprenticeship
LT OJT- more than 12 months OJT and formal classroom instruction; IR- Internship/Residency

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

Riverside and San Bernardino Counties 2012-2022												
Occupational Title	2012		2014 Q1		2014 Q1		2014 Q1		2014 Q1		OJT	
	Est. Jobs	Projected	%	Average %	Change	Hourly	Median	Annual	Median	Annual		Entry Level
	2012	Jobs 2022	Change	Change	Change	Hourly	Annual	Annual	Annual	Education	Exp.	OJT
Real Estate Sales Agents	1,670	2,280	36.5%	3.7%		\$24.95	\$51,904	\$51,904	\$51,904	HS Diploma	None	LT OJT
Manicurists and Pedicurists	1,930	2,630	36.3%	3.6%		\$9.04	\$18,793	\$18,793	\$18,793	Certificate	None	None
Cooks, Restaurant	10,130	13,670	34.9%	3.5%		\$10.70	\$22,259	\$22,259	\$22,259	<HS Diploma	<5 years	MT OJT
Actors	520	700	34.6%	3.5%		N/A	N/A	N/A	N/A	Some College	None	LT OJT
Financial Analysts	610	820	34.4%	3.4%		\$38.14	\$79,324	\$79,324	\$79,324	Bachelor's	None	None
Industrial Machinery Mechanics	1,780	2,380	33.7%	3.4%		\$25.00	\$51,999	\$51,999	\$51,999	HS Diploma	None	LT OJT
Construction Managers	4,040	5,380	33.2%	3.3%		\$49.88	\$103,767	\$103,767	\$103,767	3	None	MT OJT
Combined Food Preparation and Serving Workers, Including Fast Food	29,130	38,760	33.1%	3.3%		\$9.10	\$18,924	\$18,924	\$18,924	<HS Diploma	None	ST OJT
Interpreters and Translators	610	810	32.8%	3.3%		\$18.69	\$38,860	\$38,860	\$38,860	Bachelor's	None	ST OJT
Sheet Metal Workers	1,160	1,540	32.8%	3.3%		\$22.70	\$47,217	\$47,217	\$47,217	HS Diploma	None	APP
Automotive and Watercraft Service Attendants	1,690	2,240	32.5%	3.3%		\$11.27	\$23,445	\$23,445	\$23,445	<HS Diploma	None	ST OJT
Cargo and Freight Agents	400	530	32.5%	3.3%		\$18.19	\$37,830	\$37,830	\$37,830	HS Diploma	None	ST OJT
Nonfarm Animal Caretakers	1,550	2,050	32.3%	3.2%		\$10.08	\$20,959	\$20,959	\$20,959	<HS Diploma	None	ST OJT
Electrical Power-Line Installers and Repairers	870	1,150	32.2%	3.2%		\$49.52	\$102,991	\$102,991	\$102,991	HS Diploma	None	LT OJT
Home Health Aides	4,140	5,470	32.1%	3.2%		\$10.72	\$22,299	\$22,299	\$22,299	<HS Diploma	None	ST OJT
Operating Engineers and Other Construction Equipment Operators	2,990	3,920	31.1%	3.1%		\$32.19	\$66,960	\$66,960	\$66,960	HS Diploma	None	MT OJT

ST OJT- 1 month or less OJT; MT OJT- mor than 1 month and up to 12 months OJT and informal training; APP- Apprenticeship

LT OJT- more than 12 months OJT and formal classroom instruction; I/R- Internship/Residency

Source: California Employment Development Department, Labor Market Information. California Community College Chancellor's Office; analysis by Cambridge West Partnership, LLC

FMP Appendix L- Palo Verde College, WSCH Projections by Division and Discipline 2014-2030

	Actual										Projected												
	Profile - Fall Semester 2014					2020					2025					2030							
	# of Sec	WSCH	Sec	FTEs	Lec Hrs	Lec Hrs	Lab Hrs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs	
Business	1	48.0	48.0	1.6	4	0	0	1	60.7	0.0	60.7	2.0	1	72.1	0.0	72.1	2.4	1	83.6	0.0	83.6	2.8	2.8
Accounting	1	48.0	48.0	1.6	4	0	0	1	60.7	0.0	60.7	2.0	1	72.1	0.0	72.1	2.4	1	83.6	0.0	83.6	2.8	2.8
Language Arts & Communication Studies	1	102.0	102.0	3.4	3	0	0	1	129.0	0.0	129.0	4.3	2	153.3	0.0	153.3	5.1	2	177.7	0.0	177.7	5.9	5.9
American Sign Language	18	888.0	49.3	29.6	54	0	0	22	1,123.3	0.0	1,123.3	37.4	26	1,334.6	0.0	1,334.6	44.5	30	1,546.8	0.0	1,546.8	51.6	51.6
English	3	111.0	37.0	3.7	9	0	0	3	140.4	0.0	140.4	4.7	4	166.8	0.0	166.8	5.6	4	193.4	0.0	193.4	6.4	6.4
English as a Second Language	2	99.0	49.5	3.3	6	0	0	3	125.3	0.0	125.3	4.2	3	146.8	0.0	146.8	5.0	4	172.4	0.0	172.4	5.7	5.7
ESL-Non Credit	1	54.9	54.9	1.8	4	0	0	1	69.5	0.0	69.5	2.3	1	82.5	0.0	82.5	2.8	1	95.0	0.0	95.0	3.2	3.2
French	3	105.0	35.0	3.5	9	2	2	3	108.9	23.9	132.8	4.4	4	120.4	26.4	146.8	5.3	4	150.0	32.9	182.9	6.1	6.1
Music	5	300.0	60.0	10.0	15	5	5	6	284.6	94.9	379.5	12.7	7	338.2	112.7	450.9	15.0	9	392.0	130.7	522.7	17.4	17.4
Reading	1	114.0	114.0	3.8	3	0	0	1	144.2	0.0	144.2	4.8	2	171.3	0.0	171.3	5.7	2	198.6	0.0	198.6	6.6	6.6
Speech	34	1,773.9	52.2	59.1	103	7	7	40	2,125.2	118.8	2,244.0	74.8	49	2,824.9	141.1	2,666.0	88.9	56	2,925.9	163.6	3,089.5	103.0	103.0
Vocational Education	5	459.9	92.0	15.3	9	16	16	6	192	389.8	581.8	19.4	7	228.1	463.1	691.2	23.0	9	264.4	536.8	801.2	26.7	26.7
Automotive Technology	7	624.9	89.3	20.8	18	17	17	9	166.0	624.5	790.5	26.4	10	197.2	742.0	939.2	31.3	12	278.6	839.9	1,068.5	36.3	36.3
Building Construction Technology	3	285.0	95.0	9.5	6	9	9	4	284.8	75.7	360.5	12.0	4	338.4	90.0	428.4	14.3	5	392.2	104.3	496.5	16.6	16.6
Computer Information Systems	5	525.0	165.0	17.5	10	15	15	6	53.1	611.0	664.1	22.1	8	63.1	725.9	789.0	26.3	9	73.2	811.4	914.6	30.5	30.5
Welding Technology	20	1,894.8	94.7	63.2	43	57	57	25	695.9	1,701.0	2,396.9	79.9	29	828.8	2,021.0	2,847.8	94.9	36	958.4	2,342.4	3,300.8	110.0	110.0
History, Social & Behavioral Sciences	4	200.1	50.0	6.7	12	3	3	5	202.5	50.6	253.1	8.4	6	240.6	60.2	300.8	10.0	6	278.9	69.7	348.6	11.6	11.6
Child Development	1	48.0	48.0	1.6	3	0	0	1	60.7	0.0	60.7	2.0	1	72.1	0.0	72.1	2.4	1	83.6	0.0	83.6	2.8	2.8
Philosophy	2	153.0	76.5	5.1	6	0	0	2	183.5	0.0	183.5	6.5	3	220.0	0.0	220.0	7.7	3	266.5	0.0	266.5	8.9	8.9
Psychology	7	491.1	57.3	13.4	21	3	3	8	466.7	50.6	507.3	16.9	10	542.7	60.2	602.9	20.1	10	628.0	69.7	698.7	23.3	23.3
Math & Science	1	45.0	45.0	1.5	3	0	0	1	56.9	0.0	56.9	1.9	1	67.8	0.0	67.8	2.3	2	78.4	0.0	78.4	2.6	2.6
Astronomy	4	405.0	101.3	13.5	9	15	15	5	189.6	322.8	512.4	17.1	5	225.2	383.5	608.7	20.3	6	261.0	444.5	705.5	23.5	23.5
Biology	7	717.0	102.4	23.9	20	16	16	9	507.9	369.1	907.0	30.2	11	603.5	474.2	1,077.7	35.9	12	699.4	549.5	1,248.9	41.6	41.6
Mathematics	12	1,167.0	97.3	38.9	32	31	31	15	754.4	721.9	1,476.3	49.2	17	896.5	857.7	1,754.2	58.5	20	1,038.8	994.0	2,032.8	67.8	67.8
Allied Health	3	132.0	44.0	4.4	9	0	0	4	167.0	0.0	167.0	5.6	4	198.4	0.0	198.4	6.6	5	230.0	0.0	230.0	7.7	7.7
Criminal Justice	1	90.0	90.0	3.0	3	0	0	1	113.9	0.0	113.9	3.8	1	135.3	0.0	135.3	4.5	2	156.6	0.0	156.6	5.2	5.2
Health Education	3	186.6	62.2	6.2	9	2	2	4	193.6	47.5	236.1	7.9	4	230.0	50.5	280.5	9.35	5	266.5	58.5	325.0	10.8	10.8
Nursing Science Clinical	10	874.5	87.5	29.2	24	39	39	11	420.4	685.9	1,106.3	36.9	13	499.5	814.9	1,314.4	43.81	15	578.9	944.5	1,523.4	50.8	50.8
Nursing	4	210.0	52.5	7.0	0	12	12	5	265.7	0.0	265.7	8.9	6	315.7	0.0	315.7	10.70	7	365.8	0.0	365.8	12.2	12.2
Physical Education	21	1,493.1	71.1	49.8	45	53	53	25	1,160.6	728.4	1,889.0	63.0	28	1,378.9	868.4	2,244.3	75.0	34	1,597.8	1,003.0	2,600.8	86.7	86.7

Source: Cambridge West Partnership, LLC

	Actual												Projected													
	Profile - Fall Semester 2014						2020						2025						2030							
	# of Sec	WSCH	Sec	WSCH	FTEs	Lec Hrs	Lab Hrs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs				
Palo Verde College	5	70.8	14.2	2.4	5	0	5	89.6	0.0	89.6	3.0	5	106.4	0.0	106.4	3.5	7	123.3	0.0	123.3	4.1	10	373.7	0.0	373.7	12.5
Adult Basic Education Non-Cr Non Credit Basic Education	7	214.5	30.6	7.2	15	6	7	271.3	0.0	271.3	9.0	8	322.4	0.0	322.4	10.7	12	360.9	0.0	360.9	12.0	13	428.8	0.0	428.8	14.3
Total	12	285.3	23.8	9.5	20	6	12	360.9	0.0	360.9	12.0	13	428.8	0.0	428.8	14.3	126	5,614	3,321	8,935	298	147	6,671	3,945	10,616	354
Total	107	7,063	66.0	2.35	268	157	126	5,614	3,321	8,935	298	147	6,671	3,945	10,616	354	174	7,731	4,573	12,303	410	174	7,731	4,573	12,303	410

	Actual												Projected													
	Profile - Fall Semester 2014						2020						2025						2030							
	# of Sec	WSCH	Sec	WSCH	FTEs	Lec Hrs	Lab Hrs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs				
Palo Verde College	125	10,088.1	80.7	336.3	375	0	148	12,045.0	0.0	12,045.0	401.5	171	13,921.0	0.0	13,921.0	464.0	199	16,140.0	0.0	16,140.0	538.0	199	16,140.0	0.0	16,140.0	538.0
Total	125	10,088.1	80.7	336.3	375	0	148	12,045.0	0.0	12,045.0	401.5	171	13,921.0	0.0	13,921.0	464.0	199	16,140.0	0.0	16,140.0	538.0	199	16,140.0	0.0	16,140.0	538.0

	Actual												Projected													
	Profile - Fall Semester 2014						2020						2025						2030							
	# of Sec	WSCH	Sec	WSCH	FTEs	Lec Hrs	Lab Hrs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs				
Needles Campus	11	612.0	35.6	20.4	47	0	14	774.0	0.0	774.0	25.8	17	942.0	0.0	942.0	31.4	19	1,066.0	0.0	1,066.0	35.5	22	1,838.0	0.0	1,838.0	61.9
On Campus	14	1,181.0	82.9	38.7	49	6	17	1,382.0	0.0	1,382.0	46.1	19	1,602.0	0.0	1,602.0	53.4	22	1,838.0	0.0	1,838.0	61.9	27	2,544.0	0.0	2,544.0	84.8
Total	25	1,773.0	70.9	59.1	96	6	31	2,156.0	0.0	2,156.0	71.9	36	2,544.0	0.0	2,544.0	84.8	41	2,924.0	0.0	2,924.0	97.5	41	2,924.0	0.0	2,924.0	97.5

	Actual												Projected													
	Profile - Fall Semester 2014						2020						2025						2030							
	# of Sec	WSCH	Sec	WSCH	FTEs	Lec Hrs	Lab Hrs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs	# of Sec	Lec WSCH	Lab WSCH	Total WSCH	FTEs				
ISA's	202	5,760.3	28.5	192.0	0	0	202	5,760.3	0.0	5,760.3	192.0	202	5,760.3	0.0	5,760.3	192.0	202	5,760.3	0.0	5,760.3	192.0	202	5,760.3	0.0	5,760.3	192.0
Fire Science Technology	27	323.7	12.0	10.8	2.9	0	27	323.7	0.0	323.7	10.8	27	323.7	0.0	323.7	10.8	27	323.7	0.0	323.7	10.8	27	323.7	0.0	323.7	10.8
Adult Basic Education Criminal Justice	1	87.9	87.9	2.9	0.8	0	5	23.4	0.0	23.4	0.8	5	23.4	0.0	23.4	0.8	5	23.4	0.0	23.4	0.8	5	23.4	0.0	23.4	0.8
Emergency Medical Services	5	23.4	4.7	0.8	0	0	234	0.0	0.0	6,107.4	203.6	234	0.0	0.0	6,107.4	203.6	234	0.0	0.0	6,107.4	203.6	234	0.0	0.0	6,107.4	203.6
Total	235	6,195.3	26.4	206.5	0	0	234	0.0	0.0	6,107.4	203.6	234	0.0	0.0	6,107.4	203.6	234	0.0	0.0	6,107.4	203.6	234	0.0	0.0	6,107.4	203.6

No growth added

Grand Total	492	25,120	51.1	837.3	739	163	539	19,815	3,321	29,244	974.8	568	23,136	3,945	33,189	1,106.3	648	26,795	4,573	37,475	1,249.2
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Source: Cambridge West Partnership, LLC

TMP Appendix M- Technology Plan 2017-2019

College Goal 4: Commit to continuous quality improvement through the use of quantitative and qualitative data in an on-going and systematic cycle of evaluation, integrated planning, and reevaluation of the College mission, programs, and services.			
Information Technology Goals	Responsible Party	Expected Completion	Annual Status
			Implications for Next Year
4.1 Refine and adopt the proposed technology committee structure to address policy and operational items for both instructional (including Distance Education) and administrative systems.	College President in consultation with College constituent groups		
4.2 Develop the charter and operating procedures for each committee.	Chairs of the Technology & Distance Education and ERP/CORE committees		
4.3 Document the technology prioritization process and prioritize the projects under College Goal 5 in this plan.	Chairs of the Technology & Distance Education and ERP/CORE committees in consultation with the Directors of Information Technology and Institutional Research		
4.4 Review and refine the Map of Roles and Responsibilities to delineate the responsibilities of each committee and department.	Chairs of the Technology & Distance Education and ERP/CORE committees in consultation with the Directors of Information Technology and Institutional Research		

Palo Verde Technology Plan 2017-2019

College Goal 4: Commit to continuous quality improvement through the use of quantitative and qualitative data in an on-going and systematic cycle of evaluation, integrated planning, and reevaluation of the College mission, programs, and services.				
Information Technology Goals	Responsible Party	Expected Completion	Annual Status	Implications for Next Year
4.5 Complete the first Learning Support Full Review for the Information Technology and Institutional Research departments as defined in the Program Review Guide	Director of Information Technology department and Director of Institutional Research department			
4.6 Update the Palo Verde Technology Plan 2017-2019 by determining the Expected Completion section for each Goal and annually report on the Status and Implications for Next Year sections of the plan to the College community	Director of Information Technology department and Director of Institutional Research department			
4.7 Regularly review the Technology Use Policy & Administrative Procedures BP 3720 – Computer and Network Use, AP 3720-0 – Computer & Network Use and AP3720-1 – Student Email Correspondence	Chair of the Technology & Distance Education Committee			

Palo Verde Technology Plan 2017-2019

College Goal 5: Maximize technology utilization across the institution.			
Information Technology Goals	Responsible Party	Expected Completion	Annual Status
			Implications for Next Year
5.1 Install the Lexmark imaging system upgrade for key offices. Repurpose room CL112 as a central document imaging room.	Director, Information Technology Department		
5.2 - Create a student email system that links directly to the Ellucian Colleague product for better communications between College departments, faculty and students.	Director, Institutional Research Department		

Palo Verde Technology Plan 2017-2019

College Goal 5: Maximize technology utilization across the institution.				
Information Technology Goals	Responsible Party	Expected Completion	Annual Status	Implications for Next Year
5.3 Implement a replacement strategy for office and classroom computers.	Director, Information Technology Department			
5.4 Investigate the move of the College systems to a hosted or cloud environment as equipment needs replacement.	Director, Information Technology Department			
5.5 Complete the pilot thin client project, evaluate the results. If results indicate continue deployment.	Director, Information Technology Department			
5.6 Upgrade the Business Objects reporting suite to 4.X as the initial step in improving reporting and analytical capabilities, and develop dashboards to improve access to data. Consider other reporting tools.	Director, Institutional Research Department			

Palo Verde Technology Plan 2017-2019

College Goal 5: Maximize technology utilization across the institution.				
Information Technology Goals	Responsible Party	Expected Completion	Annual Status	Implications for Next Year
5.7 Upgrade all classrooms to a consistent set of technology based on standards created in 6.1	Director, Information Technology Department			
5.8 Consider changing the day of the week updates are performed to lessen impact on instruction	Director, Information Technology Department			
5.9 Consider providing evening technology staff for classroom/lab support	Director, Information Technology Department			
5.10 Provide an inventory of classroom equipment by room that staff can access for classroom preparation	Director, Information Technology Department			

Palo Verde Technology Plan 2017-2019

College Goal 5: Maximize technology utilization across the institution.				
Information Technology Goals	Responsible Party	Expected Completion	Annual Status	Implications for Next Year
5.11 Revitalize the College Website	Director, Information Technology Department			
5.12 Implement a system to integrate student learning outcomes, assessment, and program review to better inform planning and resource allocation	Director, Information Technology Department			
5.13 Identify new projects and add to plan as appropriate	Director, Information Technology Department and Director, Institutional Research Department			

Palo Verde Technology Plan 2017-2019

College Goal 5: Maximize technology utilization across the institution.				
Information Technology Goals	Responsible Party	Expected Completion	Annual Status	Implications for Next Year
5.11 Revitalize the College Website	Director, Information Technology Department			
5.12 Implement a system to integrate student learning outcomes, assessment, and program review to better inform planning and resource allocation	Director, Information Technology Department			
5.13 Identify new projects and add to plan as appropriate	Director, Information Technology Department and Director, Institutional Research Department			

Palo Verde Technology Plan 2017-2019

College Goal 7: Encourage and support participation in professional development to strengthen programs and services, and encourage innovative instruction.				
Information Technology Goals	Responsible Party	Expected Completion	Annual Status	Implications for Next Year
7.1 Advertise and offer training opportunities for staff using Lynda.com, @One and other training resources	Director, Information Technology Department			
7.2 Provide a central repository (webpage) of training resources, including the operation and use of specialized equipment in the classrooms (i.e. DSPS equipment)	Director, Information Technology Department			

TMP Appendix N- Palo Verde List of Hardware Inventory (available on the College web pages)

This appendix material provides a catalog/inventory of all servers and end-user computer units in the District. The operating system, model, operating system architecture, and purchase date are documented. It serves as the baseline to develop a plan for the systematic replacement of the technology and physical equipment.