

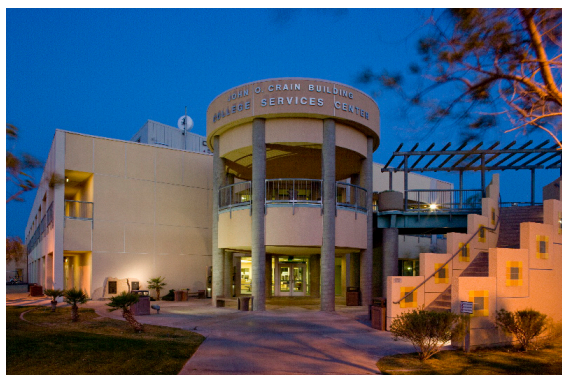
2009 PALO VERDE COLLEGE & NEEDLES CENTER EDUCATIONAL & FACILITIES MASTER PLAN SEPTEMBER, 2009

PALO VERDE COMMUNITY COLLEGE DISTRICT

PALO VERDE COLLEGE

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INTRODUCTION*

This past fall, 2008, the Campus Planning Group was retained for the purpose of updating the 1996 Palo Verde College Educational and Facilities Master Plan. The 1996 Plan had served to guide facility planning for the District to this date. The 1996 Plan had provided excellent direction for the District for 12 years. During these 12 years the District gained state funding for:

- a) College Services Building
- b) Classroom/Laboratory Building
- c) Technology Building
- d) Gymnasium and Fields
- e) Fine and Performing Arts Center
- f) Furniture/equipment for the Claypool Building

During these 12 years, Palo Verde College annexed the greater Needles area to the District. Needles was not included in the 1996 Plan.

The recent visit by the Western Association of Schools and Colleges Accrediting team recommended that the 1996 Master Plan be updated.

It was probably envisioned that this would be a quick process, but there are few quick fixes in planning. Gathering and analyzing economic and population data and information and applying these for the purpose of forecasting service and program changes is a complicated process. This is complicated by applying state facility standards and rules for translating these changes into facilities. It is further complicated by being a political process with the greater faculty, staff and students involved.

Principals of the Campus Planning Group include:

JAMES SPENCER, AIA – Jim was a principal with Spencer/Hoskins Associates, the architectural and facility planners for Palo Verde College for more than a dozen years. He brings to the task extensive experience with Educational/Facility Master Planning for California Community Colleges, this being his 24th Plan. He has had rewarding planning and designing experience with more than a dozen California colleges, including but not limited to: Glendale, Cuesta, Grossmont, Antelope Valley, Sequoias, Victor Valley, College of the Canyon, Cuyamaca, Moorpark, Palo Verde, and Indian Valley Colleges.

JIM R. PELL, PH.D. – Jim brought to the planning process 40 years experience in education as a teacher, counselor, coach, director, dean, provost and vice president. His experience includes leadership roles in instruction, student services and administrative services. He was the “architect” of the Victor Valley College (VVC) “shared governance” process, and was the District’s facilities planning team leader. Jim’s experience was gained at 5 colleges in 3 states. He was directly involved in redesigning the matriculation process at Yuba College in the late 1960’s and subsequently was the chief architect for the matriculation process at 4 colleges. He was part of the state consultation process that reinstated matriculation in the early 90’s. On the instructional side, he provided the leadership for developing degree/certificate programs at College of the Desert (COD) for the Coachella Valley’s hospitality industry, including gaining private resources to support culinary arts, hotel management, golf pro management, and a turf grass programs. He was also the driving force behind gaining political and financial support for a Child Development Center at COD. Jim’s crowning achievements, though, were the Student Activity Center and the Advanced Technology Center at VVC.

MARILYN KEITHLEY – Marilyn is the Principal for the Campus Planning Group. She is the technical member of the team with exceptional talents for organizing materials on the printed page, and she understands the Chancellor’s Office Facilities FUSION program. For the past 12 years she has been involved in preparing the Palo Verde College Five-Year Construction Plan and Space Inventory.

Special assistance was brought in to provide guidance for Allied Health fields of study:

LEANN WAGNER, MSN, RN – LeAnn is the Dean of Allied Health and Public Service for Victoria College, Victoria, Texas. LeAnn has more than 30 years experience as an RN, nursing faculty member and Dean.

The Three Amigos at one time or another visited and measured every Palo Verde College and Needles Center facility, including classrooms, labs, and offices. As a result, they brought to the process knowledge of the history of the District, its facilities, services, and program offerings. They also brought knowledge of the population served by Palo Verde College and the Needles Center, and the economies of these including forecasts for both.

* Refer to the Facilities Master Plan (page 95) for additional information

PROCESS

The process included updating economic and population data and forecasts for the District, gaining enrollment data for the years 2003/04 and 2007/08, and gathering documents such as:

- District's Catalog
- Catalog for other colleges and universities
- Class Schedules
- District's Organizational Plan
- The 1996 Palo Verde College Educational and Facilities Master Plan
- The District's 2008 Five-Year Construction Plan
- The District's 2008 Space Inventory
- Population forecast data from the Southern California Association of Governments (SCAG), 2008
- Population/Economic Data by the Center for Excellence, 2008
- SANBAG Quarterly Economic Reports
- Earlier Research by J. Pell for the Needles Center
- California Community College Taxonomy of Programs Manual
- California Community College Facilities Manual
- U.S. Census
- U.S. Labor Department
- Websites for: Blythe, Needles, Lake Havasu, Bullhead City, Laughlin, Yuma Parker, PVUSD, NUSD, Mohave College

During the month of December 2008, the two principals, Jim Spencer and Jim Pell, interviewed some 30 groups/individuals over a four day period. Some 85 faculty and staff participated. The interviews involved a series of questions for those interviewed – these questions were ones refined over numerous master planning processes. Those participating were not given the questions in advance of the meetings – spontaneity was sought, not prepared answers. Every group/individual was given the opportunity to provide thinking or ideas not brought up in the interview, and they were encouraged to contact either or both Jim's if they had further information or questions. There were surprisingly only a limited number of follow-ups which included the district librarian and the Needles Center administrator, both of whom provided valuable additional information. Most faculty and staff members participated enthusiastically and provided complete enough information so as to obviate the need for additional follow-up. Additional information and data was requested by the Jim's to clarify and/or expand information/data/impressions gathered from the interviews. During the month of February, the Principals met with Needles area community members to gain further information.

These data and information have been organized into systematic planning tools:

- Educational Master Plan. This plan describes the instructional disciplines and the services for Palo Verde College and the Needles Center and projects growth of these based upon growth projections for the population and economies for the Palo Verde College and Needles Center. The Plan also assesses facility needs for each instructional discipline and each service.
- Facility Master Plan. The Facility Master Plan projects and defines facilities needed for the coming 12 to 15 year period – to the year 2019/20 based upon the Educational Master Plan. This Plan will guide the annual updating of the District's Five-Year Construction Plan.

NEED FOR THE STUDY

The purpose of this study was to analyze population and economic data and information germane to the Palo Verde College Community College District and forecast their impacts on the instructional programs and the college services up to the year 2019/20, and translate these impacts into a plan for facilities.

An Educational Master Plan and a Facilities Master Plan are required by the Western College and Universities Accrediting Body and the California Community College Chancellor's Office. To be eligible for state facility project funding, the District must have on file in the Chancellor's Office Master Plans for Educational programs and services, and Facilities.

The District's annual Five-Year Construction Plan will be based upon the Facilities Master Plan.

As conditions and forecasts can change, the District leaders must be alert to the possible need to review forecasts for educational programs and services and how these affect facility needs. This should be an annual process, part of the Five-Year Construction Plan preparation process.

Sub Needs:

1. Forecast enrollment/WSCH based on 5 year increments for the District
2. Forecast enrollment/WSCH change for 5 year increments for Palo Verde College, the Needles Center, Spring Street Site and Instruction Agreements
3. Define each instructional discipline using TOP Code definitions, project enrollment/WSCH changes for 2010, 2015 and 2020 years.

4. Define each district service, and where possible, identify the number of students served, services provided, and staffing, and project changes for the future.
5. Identify facility needs for each discipline and service
6. Recommend facilities for each discipline and service for five-year construction planning
7. Produce a Facility Summary for future facility planning for Palo Verde College and the Needles Center
8. Identify any new instructional discipline and/or services that the population and economy projections demonstrate a need for.

Center for Excellence Study
Riverside County
San Bernardino County.

5. The California Community College Chancellor's Office TOP Code manual was referenced for instructional discipline definitions and codes.
6. The California Community College Chancellor's Office Facilities Manual was used.
7. The study was limited to economic and population projections up to the year 2020.
8. The study did not attempt to project facility and staff positions that will be needed in the next 12 to 15 years. Numbers of staffing varies greatly from college to college.
9. California Community College facility capacity/load ratios as derived from the 2009 Five Year Plan were used for projecting needed facilities.
10. Student demographic data was obtained from the California Community College Student Data Mart – unduplicated headcount numbers differed from those available through the District.
11. Percentages were typically rounded to the nearest one-tenth employing statistical rounding methodology.
12. No attempt was made to forecast any changes in class size when projecting number of class sections needed for future years.
13. No judgments were made regarding quality of teaching/learning, services provided or leadership.

DELIMITATIONS OF THE STUDY

1. The budget for the master plan was intended to support an update of the 1996 Master Plan. But the magnitude of the changes over the 13 years since 1996 necessitated an entirely new plan. These constraints therefore made it difficult to support multiple meetings, particularly of a follow-up nature. But with the resources available, a great deal of valuable information was revealed and is presented in this Plan.
2. Population data were secured from a variety of reliable sources:
 - U.S. Census
 - Southern California Association of Governments (SCAG)
 - Center for Excellence Study (did not extend to 2019/20)
 - Assorted state/county/city web sites.
3. Student population data were from the Palo Verde CCD Office of Admissions and Records. Further calculations were typically needed to get usable data for the study.
4. Economic data/information was obtained from a variety of reliable sources:
 - Blythe Chamber of Commerce
 - Needles Chamber of Commerce
 - Bullhead City Chamber of Commerce
 - Lake Havasu Chamber of Commerce
 - Laughlin Chamber of Commerce
 - U.S. Labor Department

HISTORY OF THE DISTRICT

The Palo Verde Community College District was founded in 1947 to serve the greater Blythe area when community leaders had the foresight to recognize the need for a college to educate their youth and to contribute to the area's economic development. Otherwise, young persons were forced to leave the area to pursue

their higher educational goals. At the time, it was more than 175 miles to the nearest California college or university, by a two-lane highway. The college enrolled 17 students that first year. The original college was part of the K-14 Unified Palo Verde School District sharing a campus site with Palo Verde High School at the Morton Air Academy site. By 1950, the college enrollment had increased to 250.

In 1958 the college moved to East Hobson Way and located in a building that had been constructed for the high school in 1918. By 1966, the college enrollment had increased to 472. Next, the college moved to the Chanslorway campus in 1967 where it shared a site with the high school. In 1973, Palo Verde College separated from the Unified School District.



The Palo Verde Community College District was located on the southeast boundary of California where the Colorado River forms the state line with Arizona. The overall district encompassed some 1,160 square miles. It was mostly uninhabited except for the fertile valley along the river.

In 1999, the District annexed the greater Needles area into the District from the San Bernardino Community College District. Needles is also located on the Colorado River separating California and Arizona. To the immediate north of Needles is the Nevada boundary – some 25 miles. Blythe and Needles are separated by more than 90 miles, connected by Highway 95, a two-lane state highway.

The San Bernardino Community College District had supported a Needles operation for many years, going back to the 1960's. There is documented evidence of programs and classes being offered as early as 1975 and anecdotal evidence going back to 1969. According to a 1984 system-wide request of all the districts to declare their center and outreach operations, San Bernardino CCD apparently did not respond. If it had, a Needles Center would have been grandfathered many years sooner.

Evidence gleaned from past San Bernardino Valley College class schedules for programs offered in Needles was sufficient to warrant grandfathering the Needles operation. It became an official Educational Center approved by the California Post-secondary Education Commission (CPEC) and the California Community Colleges Board of Governors (BOG) in February 2006. This makes the site eligible for state capital outlay funding and enables it to earn extra FTES funding.

In 2004, the Claypool family donated to the District its hardware store property in downtown Needles to be used as a permanent location for the Needles Center. In 2005, the citizens of Needles approved a two-thirds majority bond to fund the reconstruction of the Claypool Building to create a permanent Needles Center. Reconstruction was completed in early 2009, with classes expected to begin later in the year.

The expanded Palo Verde Community College District is one of the largest in the state. It is a huge thinly populated service area of 6,519 square miles, with two population centers: Blythe and Needles, both alongside the Colorado River. Both are located on a major east/west interstate highway, I-40 at Needles and I-10 at Blythe. Needles is also a major railroad route with more than 50 trains passing through each day. The I-10 is a major trucking highway to and from the Los Angeles harbors via the distribution ware houses to the east of Los Angeles. It is the main avenue of commerce between LA and Phoenix.

Fall 2001 Palo Verde College moved to a 200 acre site located on the mesa overlooking the Palo Verde Valley. The initial campus (Phase One) provided two major buildings: the College Service building and a Classroom/Laboratory building, along with the necessary college infrastructure of roads, utilities, and a Maintenance Building. Phase Two, comprising a Technology Building, was opened in 2005. Phase Three comprising a gymnasium and shower-lockers and an outdoor play field, opened in 2007. Phase Four, the Fine and Performing Arts Complex, is under construction and expected to be completed in Fall 2011. Other construction projects are in the planning state:

- Child Development Center -- This project provides for a permanent facility at the Palo Verde College campus. It will provide much needed child development services for Palo Verde College students. The present Child Development facilities are in modular units located at and on Palo Verde Unified School District property. The District wants the land for their uses.
- Public Safety/Health Services Building -- This project will provide much needed classrooms and laboratories for the Public Safety and Health Services programs. These are particularly important educational facilities for the greater Blythe area with the two major correctional facilities. The Health Services programs are of immense importance for isolated communities -- in this situation, for a good portion of the year, a population of 200,000 plus older tourists are in the immediate area.
- New Library/Instructional Media Center -- This project addresses an extremely undersized library (40% Cap/Load Ratio) and an even more deficient AV/TV facility (27% Cap/Load Ratio) by constructing a new free-standing library building. Its vacated space will provide much-needed office space as well. The project addresses the unusual role of a library serving an isolated community as well as the prison programs. It also addresses the need to develop and distribute instructional media to support distance learning for this isolated region.



PALO VERDE COLLEGE
CAMPUS
TODAY

COLLEGE MISSION/STRATEGIC PLAN

VISION

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

MISSION

Palo Verde College provides an exemplary learning environment that promotes student success, lifelong learning and community development.

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

ADJOINING COMMUNITY COLLEGE DISTRICTS

As illustrated on a regional map, the District adjoins four California community college districts:

- Barstow CCD to the west
- Copper Mountain CCD to the west
- College of the Desert CCD to the west
- Imperial Valley CCD to the south

The Palo Verde CCD also adjoins two Arizona and one Nevada Community college districts:

- Clark County CCD to the north
- Mohave CCD to the east and northeast
- Arizona Western CCD to the east and south

California Community College Districts

In looking at the adjacent California districts, College of the Desert, located in Palm Desert, is probably closest in terms of driving time for Blythe area residents. Interstate 10 directly links the two areas, College of the Desert lies about 112 miles from Blythe or about two hours campus to campus. Conversely, Barstow College is the closest for the Needles Center. Interstate 40 directly links the two areas, Barstow College lies about 144 miles from Needles or about 2.5 hours campus to campus.

ARIZONA COMMUNITY COLLEGE DISTRICTS

For Blythe residents the nearest sizable campus is Arizona Western College located just east of Yuma on the mesa overlooking the Gila Valley, Arizona Western also has a Center located in Parker.

For the Needles residents the Mohave CCD has three campuses: Lake Havasu City, Kingman and Bullhead City. The Bullhead City campus is about a 30 to 40 minute drive from the Needles Center.

Two communities in Arizona, Ehrenberg and Quartzite, lie directly to the east of Blythe across the river along Interstate 10. They are both much closer to Blythe than any Arizona campus, and are capable of being served by Palo Verde College. And, for a sizable Arizona population, the Needles Center is closer than Bullhead College, and easier to access.

CPEC (California Post Secondary Education Commission) guidelines suggest a reasonable commute time of 30-40 minutes automobile drive including time to locate parking. Palo Verde College and the Needles Center essentially have no competition for serving students in the greater Blythe and Needles service areas on a daily commute basis.

TRANSPORTATION ROUTES

Blythe is at the junction of Interstate 10 and State Highway 95/78. Highway 95/78 run north-south along the Colorado River, these are two-lane highways. Interstate 10 links the two largest metropolitan areas in California (Los Angeles) and Arizona (Phoenix). As Los Angeles is a major center for imported and exported goods, Interstate 10 handles a tremendous volume of commercial traffic as well as thousands of cars per day. Blythe is roughly at the halfway point between these two destinations.

Needles is at the junction of Interstate 10 and State Highway 95. Highway 95 splits with one route crossing the Colorado River on its way to Bullhead City (this highway has multiple traffic signals). The other Highway 95 continues on to Henderson, Nevada, just outside of Los Vegas, Interstate 40 joins Interstate 15 at Barstow to the west and continues east across the U.S. In earlier days, Needles was a railroad inspection point—all trains stopped and were inspected for mechanical problems. Today, more than 50 trains pass through Needles on the way to the Los Angeles basin and eastward across the country.

DRIVING TIMES

The following are current approximate driving times from Blythe to an assortment of cities and the prison complex:

City	Miles	Minutes	City	Miles	Minutes
Indio	101	90	Ironwood/Chuckawalla	22	20
Palm Desert	112	100	Phoenix, Az	182	150
Palm Springs	126	110	Parker, Az	56	60
El Centro	110	110	Quartzite, Az	22	25
Riverside	165	150	Ehrenberg, Az	5	5
Needles	100	95	Yuma, Az	115	110

These are the current approximate driving times from Needles to an assortment of cities:

City	Miles	Minutes	City	Miles	Minutes
Blythe	100	95	Lake Havasu City, Az	42	45
Barstow	144	125	Laughlin, Nv	25	35
Bullhead City, Az	25	40	Las Vegas, Nv	107	110
Kingman, Az	60	50			

Please note these driving times do not include time getting to and from the interstate and/or highway.

The 95 plus minutes driving time between Needles and Blythe on a two-lane highway with multiple dips (subject to flash flooding) makes it unreasonable to expect students to commute between Palo Verde College and the Needles Center. It is more reasonable to employ computer/TV interactive teaching/learning opportunities for students at the two locations.

It is reasonable to expect residents of Quartzite and Ehrenberg (and north of Ehrenberg along the river) to take advantage of the educational opportunity Palo Verde College offers.

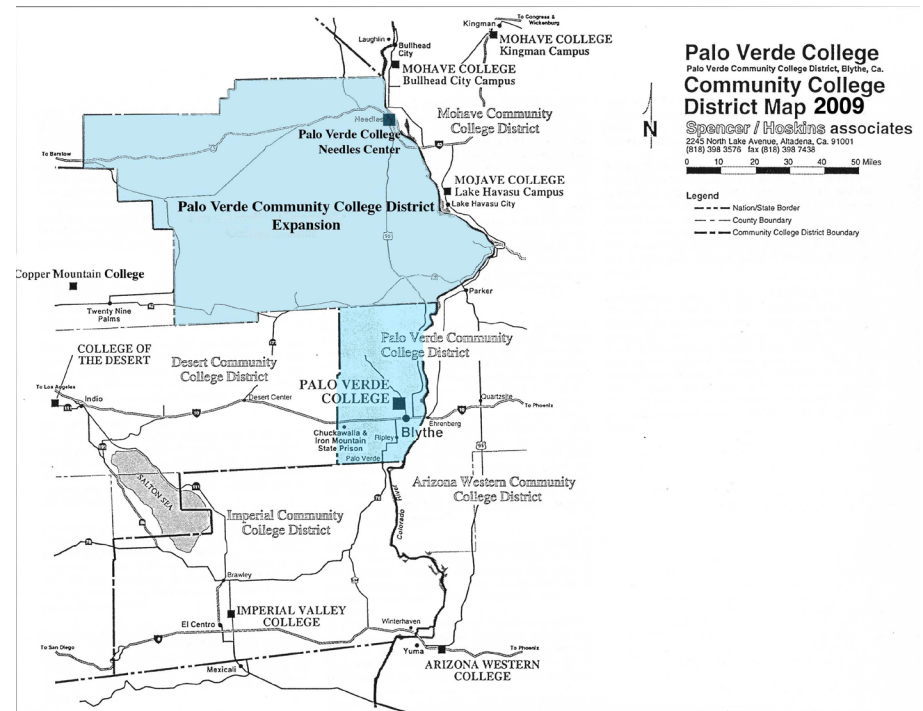
It is also reasonable to expect residents of Arizona located across the river from Needles to take advantage of the short driving time to the Needles Center. It is also reasonable to expect that some Needles residents will commute to Bullhead City and the Kingman Mohave CCD campuses for programs Needles is not able to provide. The Needles Center should work with Mohave CCD to provide these students with their General Education course work (Cooperation for Admissions and Records, Financial Aid services, and Counseling services is necessary.).

The reality is Palo Verde College and the Needles Center can meet most student course work needs via Interactive computer TV teaching/learning.

REGIONAL GROWTH

The following map shows the District's expansion in 1999 northward into eastern San Bernardino County; the district area more than quintupled to its current size of 6,519 square miles. This map also illustrates the various population centers and District boundaries on both sides of the Colorado River.

THE COLORADO RIVER "CORRIDOR": Shown on a map at the beginning of the Facilities Master Plan Section (page 95) is a zone of development or potential development along the Colorado River. A number of rapidly growing communities have sprung-up along the river. Attracted by a moderate winter climate, abundant water and water-related recreation, population growth has been fueled by retirement seekers, others have been attracted by recreation and gambling. Still others are influenced by proximity with the American/Mexican border transportation routes. The attraction of "lower-level" employment opportunities in agriculture, gambling and the hospitality industries has helped fuel the growth. Another industry has also contributed to growth along the river – prisons.



LAUGHLIN/BULLHEAD CITY: Laughlin, Nevada to the far north did not appear on the 1980 Census because it was far below the minimum 1,000 population level required for recording in the census communities. By 1990 Laughlin and its companion, Bullhead City, across the river in Arizona had grown by 143 percent to a total population of 28,742. By the 2000 census Laughlin had a population of 7,076 and Bullhead City 33,769, or a total of 40,845 for an increase of 52.73 percent in 10 years. By 2006 Bullhead City had increased to 40,225, an increase of 19.11 percent in just 6 years. It is forecast that the Arizona side will continue to grow at a rapid rate. The reasons are an abundance of water and favorable business investment opportunities. Bullhead City has become in part the bedroom community for

Laughlin hotel/casino employees. Regardless, this is the second largest population center along the north half of the Colorado River Corridor.

LAKE HAVASU CITY: Lake Havasu City was developed along a large Colorado River reservoir by the McCulloch Chainsaw Company with the "London Bridge" as an attraction. From 1980 to 1990 the city grew 53 percent to a population of 24,363. By 2000, the population had increased to 41,938, a 72.13 percent increase. This rapid growth has continued, by 2006 the population was 56,355, a 34.4 percent increase in 6 years. There is no reason to believe Lake Havasu City will not continue to grow. This makes it the largest population center along the North Colorado River Corridor.

Parker/Parker Strip: Unlike the communities to its north along the Arizona side of the Colorado River, Parker has experienced modest growth. For the 2000, Parker had a population of 3,140 and the Parker Strip 3,302. (The California side of Rio Mesa and Big River do not have recorded census data.)

ECONOMY

Economy and population are the two most important factors in the size of a college and drive its degree/certificate programs. Palo Verde College and the Needles Center are integral partners in the economies of the greater Blythe and Needles communities, and are major contributors to its development.

BLYTHE

Entering the Palo Verde Valley from any direction, visitors discover a green valley – this after traveling through stark, barren desert. The reason is simple, the Colorado River flows through the Valley north to south, and there is a small diversion dam about 15 miles upriver from Blythe. The Palo Verde Irrigation District's Diversion Dam draws water from the Colorado River for the Valley's massive canal system. This water creates the green fields – agricultural fields. The dam also supplies water to the city of Blythe and enables life to exist in the valley.



**THE COLORADO RIVER
AT BLYTHE**

Agriculture is, by far, the largest industry in the Palo Verde Valley with more than 100,000 acres of land under cultivation. These produce products, worth in excess of \$100 million annually. Principal crops (from 2004 Agriculture Data) include:

CROPS	ACRES
Alfalfa	64,588
Cotton	11,865
Wheat & Barley	6,448
Citrus	2,811
Cantaloupe	2,571
Sudan	2,535
Bermuda	2,375

In terms of employment, farming is a relatively small industry with only 436 jobs. The largest two employers, the state prisons are far above all others. Ironwood and Chuckawalla Valley Prisons employ some 1,350 correction officers and 550 support staff. The largest employers in 2004 were:

EMPLOYER	NUMBER OF EMPLOYEES
Ironwood State Prison	1,120
Chuckawalla Valley State Prison	794
Palo Verde Unified School District	411
Morgan Corporation (located in Arizona)	231
Palo Verde Hospital	137
Riverside County	120
Hi-Value Processors	120
K-Mart	120
City of Blythe	126
Palo Verde CCD	232
Albertsons	90
Palo Verde Irrigation District	411
Southern California Gas Company	43

Employment by industry (excluding law enforcement, the largest employer) for 2004 was:

NUMBER OF EMPLOYEES	INDUSTRY PERCENTAGE	
Agriculture	221	4.9
Construction	161	3.5
Manufacturing	146	3.1
Transportation & Public Utilities	242	5.3
Wholesale & Retail Trade	740	16.3
Finance, Industrial, Real Estate	389	8.6
Education	724	15.9
Services	730	16.1
Government	1,187	26.1

plers. This results in vocational/technical programs with small enrollments and even fewer job opportunities. California Community College funding processes do not encourage the development of more expensive vocational/technical programs by districts. Further, there are few programs that attract students from outside the area, the health industry is one of these. While the 1,350 correction officers at the two prisons appear impressive, the reality is that the system provides its own training centers for new recruits and for in-service training. The District leadership is seeking ways to address this need in offering an Academy that would attract public safety officers for training from across the state, as well as serve the training needs for Ironwood and Chuckawalla Valley Prisons.

The Palo Verde College leadership has partially overcome these problems with a unique relationship with Palo Verde High School, and its relationship with the state prison system – educating inmate populations.

The Colorado River and the Interstate 10 Highway influence the economy of the Palo Verde Valley. More than 9 million vehicles pass through Blythe each year, and the River attracts boating, water sports and fishing recreation enthusiasts. In 2004 there were 14 gasoline stations, 11 of them with convenience stores. There were 16 hotels with more than 1,000 rooms. There were also 33 food service outlets, and 2 RV parks and recreation camps, a \$50 million industry.

Health care is an important local industry with one major hospital, 15 nursing and residential care facilities, 13 physician offices and 3 dental offices.

For 2004 the median household income was \$41,000. This compares with \$46,885 average household income for Riverside County and \$59,948 for the state of California. Combine this with an 8,000 low-income inmate population bespeaks the imperative need for a strong Financial Aid, EOPS/CARE, and Counseling programs at Palo Verde College.

According to an Industry Analysis done earlier in 2008 for Palo Verde CCD by the Center for Excellence, there were 1,331 business outlets within 50 miles of Palo Verde College. This pales in comparison to the 3,066 for the Needles Center. This presents a significant challenge for the leadership of Palo Verde College. Colleges that serve relatively small economies experience difficulty with having both a supply of students and a job market in the service area for placement of student com-

NEEDLES

Needles, much like Blythe, is a geographically isolated community located on the western side of the Colorado River. Like Blythe, Needles is located on a major interstate highway, the I-40. Unlike Blythe, Needles came into being largely as a result of the Santa Fe Railroad establishing it as an inspection (terminal) stop in the late 1890's. The railroad lines through Needles remain the major east/west, west/east railroad, the BNSF Railway, transportation route with an average of 50 or more trains per day passing through Needles on the way to the Los Angeles port distribution centers, and the commodities from California headed for the middle and eastern states. The railroad has been the city's major employer for over a century. The second largest employer is the Needles Unified School District. It is reported that half or more of the railroad and educational employees who work in Needles, live across the river in Arizona taking their spending with them.



THE OLD SANTA FE WESTBOUND THROUGH NEEDLES, CALIFORNIA

According to the MCDC Demographic Profile from the 2000 Census, the Needles "Work Force by Industry" includes:

INDUSTRY	NUMBER OF	
	EMPLOYEES	PERCENTAGE
Agriculture, Fishing & Mining	8	.05
Construction	79	4.6
Manufacturing	32	1.9
Wholesale Trade	13	0.8
Retail Trade	160	9.3
Transportation & Warehousing	270	15.0
Information	7	0.4
Finance, Insurance, Real Estate	65	3.8
Professional, Scientific, Management and Waste Management	70	4.1
Education, Health, & Public Service	472	27.3
Arts, Entertainment, Recreation, Accommodation & Food Service	375	21.7
Other Services	76	4.4
Public Administration	101	5.8
TOTAL	1,728	100.0

"Work Force by Occupation" included:

OCCUPATION	NUMBER OF	
	EMPLOYEES	PERCENTAGE
Management & Professional	416	21.1
Service, Sales & Office	636	33.1
Farming, Fishing & Forestry	10	0.5
Construction & Maintenance	244	12.7
Production, Transportation & Material Moving	334	17.4
TOTAL	1,923	100.0

The Colorado River and the I-40 Interstate Highway influence the economy of Needles. More than a million vehicles pass through Needles each year, and the River attracts water sports and fishing enthusiasts. This is reflected by 10 gasoline service stations, 7 hotels, 2 RV parks and recreation camps, 13 food outlets, and 10 automotive repair shops.

The Needles hospitality industry is forecast to increase during the upcoming couple of years with the construction of:

- Fort Mohave Indian Tribe Casino/Hotel west of Needles on I-40. The property is to include a 100 plus room hotel, a gaming casino, multiple restaurants (much like the recently opened Q Hotel on the I-8 west of Yuma)
- Holiday Inn Express Hotel. The hotel will feature 50 plus rooms and a restaurant.

Equally important is the reported plan for completion of the reconstruction of the Harvey House, El Garces, at the train station in downtown Needles. The hotel will feature 50 plus rooms and an upscale restaurant. A similar project, the La Posada, in Winslow, Arizona, is highly successful. Both of these are a result of developer Allan Affeldt.

Unlike Blythe, agriculture in the greater Needles area economy is of minimal economic importance.

The 2004 economic data for Needles showed 14 health care and social assistance locations, including 4 offices of physicians. This clearly shows that health care and education are the largest employers for the area.

Another positive note of recovery for Needles during 2006; 26 buildings were constructed with an average cost of \$270,100 and for 2007 another 5 buildings were constructed with an average cost of \$299,200.

The median household income for Needles for 2007 was \$35,022, significantly below the state average of \$59,948.

The Center for Excellence found that while the economy of Needles is relatively limited in terms of career opportunities for Needles Center completers, the area offers within a 50 mile radius opportunities significantly greater than Palo Verde

College. The Center found 3,066 business enterprises, this compares with 1,331 for Palo Verde College. Within a 50 mile radius are Bullhead City, Lake Havasu City and Laughlin, Nevada. The economics of these three cities can only be described as prospering. Bullhead City, a city of 40,225 people in 2006, is the bedroom community for Laughlin hotel/casino employees. Lake Havasu City, a city of 56,355 in 2006, is a recreation/retirement community. Laughlin is a city of 7,000; its economy is based on the gaming industry with 10 large hotel/casino operations.

The down side is, as was pointed out to us by Needles community members, a majority of Needles residents do not have the necessary reliable transportation to work in any of these cities and continue to reside in Needles.

The Needles Center will have a similar conundrum to overcome as Palo Verde College has, placement opportunities in the market area for completers. There is a definite need for lower division course work to prepare students to transfer to universities so that they are ready for upper division work. The health industry is



EL GARCES SANTE FE TRAIN STATION
AND HARVEY HOUSE

probably the best opportunity. For example, the Registered Nursing degree program at Mohave Community College is located at the Lake Havasu Campus. This means Bullhead City students must commute to Lake Havasu to participate in the District's RN program. This commute, combined with the \$900 per semester fee, and the \$2,400 additional fee for the RN program would make an RN program at the Needles Center attractive.

The Center needs to support the beginnings of a tourist/hospitality industry in Needles through degree and certificate programs. The Center could offer specially designed short-term training programs, e.g., customer service, housekeeping training, language programs for specific services. These could be fee-based offerings.

It needs to be added that students who complete degree/certificate programs or learn marketable skills at either Palo Verde College or the Needles Center have huge employment centers in which to gain employment. For example, the Phoenix area to the east, Las Vegas to the north, to the west the greater Palm Springs area, in the Inland Empire, the Los Angeles Basin, among others, are readily accessible. Students are highly mobile.

ATTENDANCE LOCATIONS

Palo Verde Community College District has four major attendance locations:

- Palo Verde College *
- Instructional Service Agreement
- Needles Center
- Spring Street **

During the 2007 Fall Semester Palo Verde College had 61.8 percent of Weekly Student Contact Hours (WSCH) earned by the District. The next largest was Instructional Service Agreements with 26.8 percent (actually 4 locations). These were followed by the Spring Street site and the Needles Center which were 5.7 percent each (see the table below). The majority of WSCH for the District is earned through the Instructional Service Agreements and Distance Education (inmates).

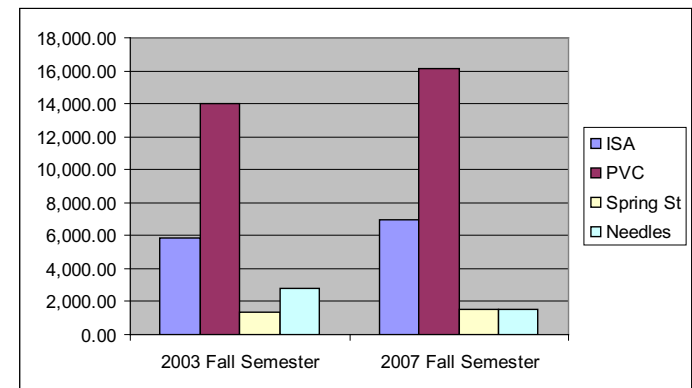
Notes:

* As 31.4 percent of District WSCH was earned via Distance Education, approximately 50 percent of Palo Verde College WSCH is comprised of inmates.

** Spring Street site is actually counted as Palo Verde College; it is not an approved facility.

Breakdown of Weekly Student Contact Hours (WSCH) by Location, Fall Semesters 2003 and 2007

Location	2003 Fall Semester		2007 Fall Semester		Percent Change
	WSCH	Percentage	WSCH	Percentage	
Instructional Service Agreement	5,858.17	24.3	7,000.47	26.8	+19.5
Palo Verde College	14,008.94	58.2	16,166.76	61.8	+15.0
Spring Street	1,358.43	5.6	1,488.26	5.7	+ 9.5
Needles Center	2,842.79	11.8	1,485.94	5.7	-47.0
Total	24,068.33	99.9	26,141.43	100	+ 8.6



A breakdown by location based on unduplicated head count for the 2007 Fall Semester included:

LOCATION	NUMBER	PERCENTAGE
Palo Verde College	907	19.2
Spring Street	556	11.8
Inmates (multiple prison sites)	930	19.7
Needles Center	272	5.8
Instruction Service Agreements	2,052	43.5
TOTAL	4,717	100.0

The significance of these demonstrates that 50.7 of students enrolled in course offerings for the District are at Palo Verde College (Palo Verde College, Spring Street and Inmates). Only 5.8 percent were enrolled at the Needles Center, whereas 43.5 percent were enrolled through the District's Instructional Service Agreements. However, in WSCH the Instructional Service Agreements generate 26.8 percent for the 2007 Fall Semester – the reason being all of these enrollments were part-time. This compares with 67.5 percent of WSCH earned at Palo Verde College. Needles Center earned almost the same WSCH as head count, 5.7 and 5.8 percent respectively.

It is anticipated that the Instructional Service Agreements will slowly produce fewer WSCH and head count over the coming 12 to 15 years as the population of Blythe and Needles grow and the District's relationship with the Prison System becomes more refined and programs needed by the inmate population are identified and refined.

The Instructional Service Agreements and inmate WSCH, and therefore FTES (WSCH x 17.5 weeks/525), and the revenues these generate present an interesting conundrum. Both are beyond the immediate control and direct influence of District officials, and could change significantly quickly with little warning. Conversely, the training of public safety personnel is not going to disappear, but rather continues to develop as the need for replacements for retiring members continues to increase. Certainly, prison populations are here to stay, and made up of persons in need of learning to read, write and computation as well as learning marketable knowledge and skills.

Removing "Instructional Service Agreements" and inmate enrollment from the equation, the tables below show enrollment head counts for the Needles Center and Palo Verde College based exclusively on service area population projections at incremental percentages of adult population.

Projections for Needles Center Attendance Based on Percentage of Adult Population, 18 Years of Age or Older
5.0, 5.6, 6.0, 6.5 and 7.0 Percent

Year	Population (18 Years +)	Percentage				
		5.00%	5.50%	6.00%	6.50%	7.00%
2005	5,650*	283	331	339	367	396
2010	5,604	280	331	336	365	392
2015	5,560	278	306	334	361	389
2020	5,538	277	305	332	306	388

PROJECTIONS FOR PALO VERDE COLLEGE ATTENDANCE BASED ON PERCENTAGE OF ADULT POPULATION, 18 YEARS OF AGE OR OLDER
5.0, 5.6, 6.0, 6.5 AND 7.0 PERCENT

Year	Population (18 Years +)	Percentage				
		5.00%	5.50%	6.00%	6.50%	7.00%
2005	20,497	1,025	1,127	1,230	1,332	1,435
2010	22,915	1,146	1,260	1,375	1,490	1,604
2015	25,774	1,289	1,418	1,546	1,675	1,804
2020	30,156	1,508	1,659	1,809	1,960	2,111

- Notes:
1. Used 72.5 percentage for 18 years of age or older
 2. Does not include prison population
 3. 18 years of age or older percentages: California = 73.90, San Bernardino + 70.30, Riverside County = 72.50

STUDENT DEMOGRAPHICS

GENDER

Student demographics for persons who enrolled for course offerings at the Palo Verde Community College District for the 2007 Fall Semester: 70.1 percent were males and 29.9 females.* At most community colleges females comprise 60 or greater percent of the student population. Palo Verde College's gender distribution is obviously impacted by the inmate population and the public safety employees the college serves (Instructional Service Agreements).

GENDER	HEADCOUNT	PERCENTAGE
Female	1,202	29.9
Male	2,823	70.1
Total	4,026	100.0

Data Source: Chancellor's Office Data Mart

AGE

The majority of Palo Verde students for 2007 Fall Semester were 20 years or older, but under 50: 75.1 percent. Only 9.4 percent of the student population was 19 years of age or younger, and 15.2 percent was 50 years of age or older. Again, these results were probably affected by the inmate population and Service Agreements students.

AGE	HEADCOUNT	PERCENTAGE
19 or less	377	9.4
20 to 29	984	24.5
30 to 39	1,097	27.2
40 to 49	944	23.4
50 & up	611	15.2
Unknown	13	0.3
TOTAL	4.026	99.9

Data Source: Chancellor's Office Data Mart

ETHNICITY

For the 2007 Fall Semester 49.3 percent of the student population classified themselves as white non-Hispanic and 26.5 percent Hispanic, 75.8 percent of the

District's student population. The 26.5 Hispanic percentage when compared with 58 percent of the Blythe population appears low. This should be studied further to determine if the service area Hispanic population is being underserved. If it is, an assertive recruitment plan needs to be formulated and implemented.

ETHNICITY	HEADCOUNT	PERCENTAGE
African-American	395	9.8
American Indian	58	1.4
Asian	146	3.6
Filipino	65	1.6
Hispanic	1,64	26.5
Pacific Islander	29	0.7
White-non-Hispanic	1,983	49.3
Unknown	286	7.0
TOTAL	4,026	100.0

Data Source: Chancellor's Office Data Mart

UNIT LOADS

Of the 4,026 Palo Verde students listed in the Chancellor's Office Data Mart for 2007 Fall Semester, 1,154 or 28.7 percent are enrolled in 12 or more units (full-time students). In fact, 725 or 18 percent are enrolled in 15 or more units. Conversely, 969 students were enrolled in 1 or 2 units, 24.1 percent of students. There were 503 non-credit students, 12.5 percent of students.

UNIT LOAD	HEADCOUNT	PERCENTAGE
Non-credit	50.3	12.5
0.1 – 2.9	969	24.1
3.0 – 5.9	508	12.6
6.0 – 8.9	695	17.3
9.0 – 11.9	97	4.9
12.0 – 14.9	429	10.7
15.0 & up	725	18.0
TOTAL	4,026	100.1

Data Source: Chancellor's Office Data Mart

For the 2007 Fall Semester 61.8 percent of enrolled students were either continuing

or returning students. Of the remainder, 23.7 percent were “first-time students” and 10.1 percent were students who had attended college elsewhere and transferred in, “first-time transfer students”. It is imperative that the first-time and transfer students complete the Matriculation process on a timely basis.

The District should refine the Matriculation process so that students who need the process are required to complete it and for those students who do not need the process, it is voluntary. For example, this writer asked if he would be required to meet with a counselor to enroll in weight training. The answer was yes. It was pointed out that the writer had an earned Ph.D., had advised hundreds of college students, and was proficient in fitness training. This is a waste of precious counselor time and may cause persons such as me to not enroll.

Other student demographics not listed in the Chancellor’s Office Data Mart that are vital for planning – for the 2007 Fall Semester of the students participating in the District’s assessment process, 60 percent scored at the basic skills level for English, and 21 percent at the remediation level. Only 18 percent scored at a level that demonstrated readiness for college level English. For mathematics, 69 percent scored at a basic arithmetic level. Only 6 percent were determined ready for college algebra – the required course for UC/CSU General Education mathematic requirement.

These, along with a sizeable Hispanic population in need of English education, present a serious challenge to the faculty and leadership of the District. Reading, writing and mathematics deficiencies, severely limit program planning for needed progress such as the Health and Public Safety programs offer.

POPULATION

Blythe and Needles are located in Riverside and San Bernardino counties respectively. These are among the fastest growing counties in California, indeed in the nation. For example, while the state of California grew by 52 percent from 1980 to 2000, San Bernardino County grew 128 percent and Riverside County 162 percent (source: California Dept. of Finance). From 2000 to 2006 it is estimated that the state of California increased by 7.6 percent, from 33,871,648 to 36,457,549. San Bernardino County grew from 1,709,434 to an estimated 1,999,331, 17.0 percent and Riverside County continued to rapidly grow from 1,545,387 to 2,026,803, a 31.2 percent increase.

According to the Southern California Association of Governments (SCAG) the

Palo Verde College service area population in 2005 was 36,855 including inmates, 28,272 excluding inmates. As Palo Verde College provides education services to the inmate population of the Ironwood and Chuckawalla Valley State prisons, the population used for planning purposes includes inmates. The population was forecast by SCAG to increase 12.24 percent by 2010, 25.61 percent by 2015 and 44.91 percent by the year 2020. For projecting enrollment change and class offering changes from 2007 to 2020, a 37.59 percent growth factor was employed (see the tables below for population forecasts including prison population and excluding prison population).

Palo Verde Community College District							
Population Change Forecast 2005 - 2020							
Including Prison Population							
Area	2005	2010	% Change	2015	% Change	2020	% Change
Palo Verde College	36,855	41,366	12.24	46,297	26	53,407	44.91
Needles Center	7,793	7,728	-0.83	7,718	-0.96	7,638	-1.98
Total	44,648	49,098	11.41	54,015	24.65	61,045	41.93

Palo Verde Community College District							
Population Change Forecast 2005 - 2020							
Excluding Prison Population							
Area	2005	2010	% Change	2015	% Change	2020	% Change
Palo Verde College	28,272	31,607	11.79	35,550	25.74	41,595	47.12
Needles Center	7,793	7,782	-0.83	7,718	-0.96	7,638	-1.98
Total	36,065	39,335	10.96	43,268	24.78	49,233	45.14

Note: Population data provided by SCAG, November, 2008

For the Needles Center service area, SCAG estimated the population for 2005 at 7,793 and forecast a 1.98 percent decrease between 2005 and 2015. As a result, the enrollment and class offering projections for the Needles Center service area were more complicated than those for Palo Verde. One population source estimated an increase in the Needles population from 2000 to 2006. Factors that could positively influence a resurgence for Needles include:

- The opening of the Needles Center Claypool Building
- The Fort Mohave Indian Tribe Hotel/Casino on I-40
- The reconstruction of the Harvey House
- New hotels, such as the Holiday Inn Express
- Recent building construction

The Needles Center enrollment should be impacted by attracting back to Needles the 100 or so Needles students who have been attending the Bullhead City campus, and attract students from the immediate area across the river from Needles. For this study, we conservatively estimated a doubling of the student enrollment. This is largely predicated on district leaders being able to offer General Education course offerings needed for students to transfer, implementing one or more occupational/technical degree/certificate programs that will attract students and which fulfill economic development in the 50 mile radius of Needles. The district must also provide services such as Financial Aid, EOPS/CARE, Disabled Student Programs and Academic Advising.

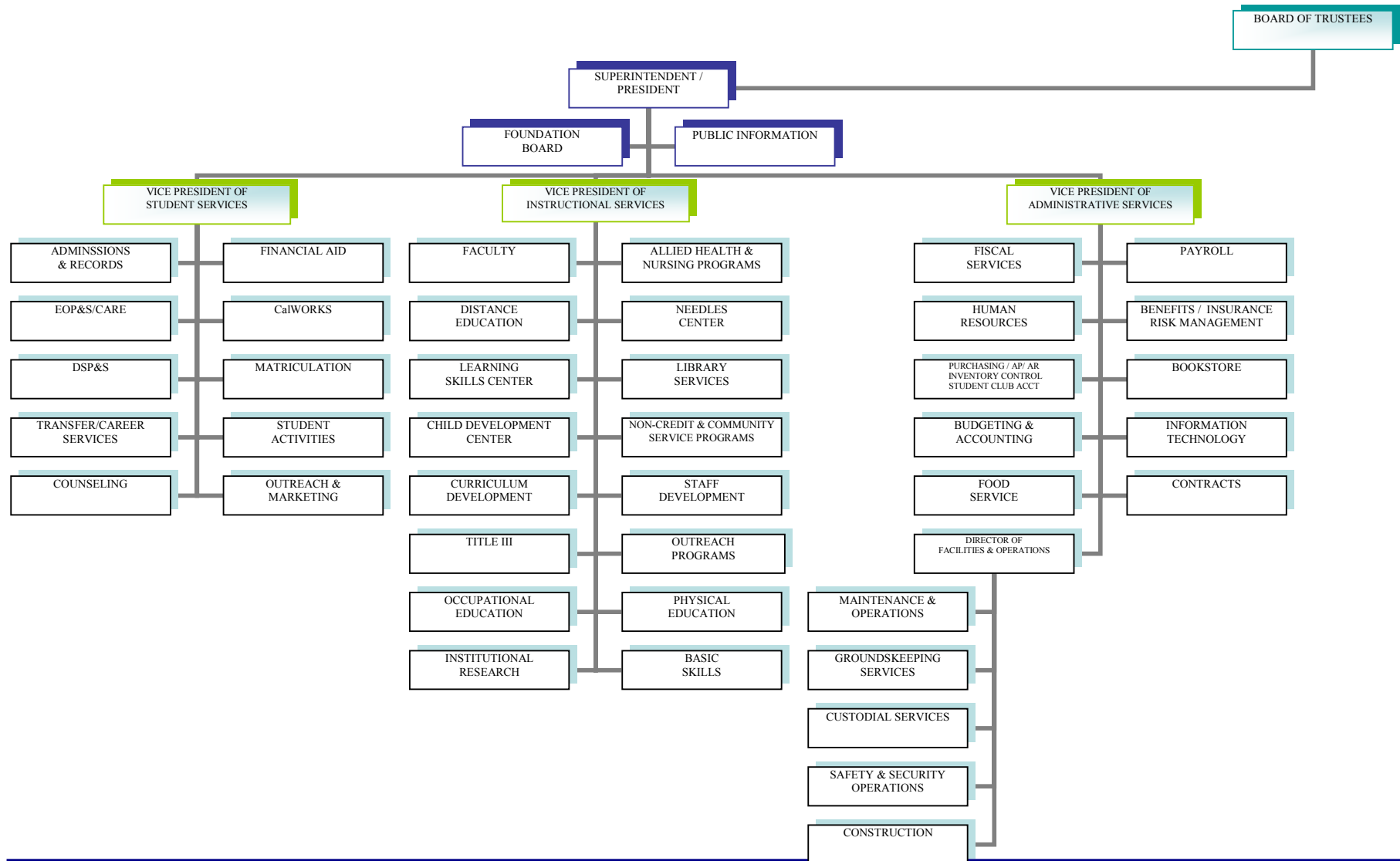
Another population factor that needs to be included in district planning is both Blythe and Needles areas have younger populations (under 18 years of age): 34 percent for Blythe and 27.2 percent for Needles. These compare with 25 percent for the nation and 26.1 percent for California. This means a larger public school population than would normally be expected. The combination of high population growth rate and increasing high school graduation rates will continue to result in high enrollment growth rates for Palo Verde College, and to a lesser extent, for the Needles Center.

The educational attainment levels of a high school diploma or higher for the adult population for Blythe and Needles are 72.6 percent of the Needles adult population has a high school diploma or higher while 62.1 percent for Blythe. The English language spoken in the home is 90.2 percent for Needles and 60.7 percent for Blythe. For Blythe, 16.4 percent of the population reported speaking English less than very well, and 2.5 percent no English. For the non-inmate population, this means some 3,500 residents in Blythe speak English less than very well or not at all.

For the population of Needles, 49.2 percent of households had an annual income of under \$25,000. This was 39.6 percent of the households of Blythe.

These factors demonstrate a need for strong Basic Skills and Remediation programs. They also demonstrate a strong need for quality Financial Aid, EOPS/CARE and Advising programs at both Palo Verde College and the Needles Center. The mathematics and English faculties must play a prominent role in enabling students to overcome the lack of readiness for the rigors of college level learning. The Learning Center should also play a big role in reading, writing and mathematics remediation.

PALO VERDE COMMUNITY COLLEGE DISTRICT
ORGANIZATIONAL CHART
2008/2009



VICE PRESIDENT OF INSTRUCTION

The Vice President of Instruction is responsible for district-wide teaching/learning activities including supervising the permanent and adjunct faculty members. The assorted programs and departments the Vice President provides leadership and management include:

- Distance Education
- Learning Skills Center
- Child Development Center
- Curriculum
- Title III
- Occupational Education
- Institutional Research
- Allied Health & Nursing
- Needles Center
- Library
- Non-Credit and Community Service
- Staff Development
- Outreach
- Physical Education
- Basic Skills
- Business Education
- Language Arts and Communication Studies
- History, Social & Behavior Services
- Math & Science

In addition to these responsibilities the Vice President’s office prepares class schedules, the college catalog and program reviews. The office must ensure that the District reaches, but does not significantly exceed, the District’s attendance target each year so that the District operates prudently. Preparing the class schedules means responsibility for use of classrooms and laboratories, and scheduling faculty loads.

The certificated permanent faculty currently totals in excess of 30 faculty and upwards of 100 adjunct faculty members:*

Palo Verde College	36
Spring Street	31
Needles Center	30

The work of the Vice President of Instruction also includes managing Instructional Service Agreements for 4 instructional programs at different locations. And, as the District offers extensive teaching/learning offerings in a variety of incarceration facilities, the vice president manages these relationships.

For small colleges managing course offerings and enrollments is a complex task. Class sizes at the Palo Verde College campus, Spring Street and the Needles Center tend to be under 20 students – fortunately the Instructional Service Agreement and the Distance Education offerings have higher enrollments thereby offsetting the limited enrollments per class for offerings for District residents. This should enable the District to offer necessary degree/certificate/general education course offerings where necessary for lower class enrollments. It is also fortunate that small college districts are funded at a higher FTES amount than larger districts. The state also provides extra funding for Educational Centers. This is a complicated and complex responsibility. It is further complicated for the future by the need to proportionately blend the campus/center, inmate and Instructional Service Agreement enrollments for the financial welfare of the District.

(continued)

WILLIAM SMITH

**VICE PRESIDENT
INSTRUCTIONAL SERVICE**



VICE PRESIDENT OF INSTRUCTION (CONT)

LONG RANGE GROWTH: The Office of Vice President of Instruction is expected to grow consistent with the enrollment growth rate of the District.

FACILITY ASSESSMENT: The 490 ASF office facility, divided into two rooms, was originally a single larger room intended for the student lounge and an integral part of a student center to be located at the east end of the CS Building and fronting the large patio. This space assignment was changed during construction to address insufficient office space. However, the location for the Vice President of Instruction is awkward due to its proximity to remaining student activities. Moreover, it is isolated from college operations with which it most closely relates such as senior administration, distance education, and the faculty. The current space allocation is probably insufficient to accommodate the operation as it has grown and would also benefit from availability of a nearby meeting room.

FACILITY NEEDS: The Office of the Vice President of Instruction should be located in the Classroom Building for access ease for the faculty members or in close proximity to the office of the Superintendent/President. It is best if both of these criteria can be fulfilled. The facility should have convenient meeting space, and should be designed for the difficult and detailed work necessary to prepare class schedules and catalogs. It may be necessary for the Vice President to have an office at the Needles Center, at least initially, to ensure development of the Center's instructional programs.



DIANE RODRIGUEZ
VP STUDENT SERVICES

WILLIAM SMITH
VP INSTRUCTIONAL SERVICES

* As reported in the 2007/08 Palo Verde College catalog.

VP INSTRUCTION STAFFING:

Vice President	1
Executive Secretary	1
Secretary	1



CHILD DEVELOPMENT CENTER

The Don Kuykendall Child Development Center at Palo Verde College is located at 811 W. Chanslorway. This facility is licensed for 41 children ages 2 years 9 months to 5 years. Most of the children served by the Center are from parents who live in the community served by the College with a limited number of children whose parents attend Palo Verde College. Fees are based on a sliding scale provided by the state of California based on gross monthly income of parents.

The Center is in operation all year, Monday – Friday, 7:30 am – 5:30 pm. The Center typically has a waiting list for children. The staff is comprised of:

- 1 Site Supervisor
- 2 CDC Teachers
- 2 Instructional Aides
- 2 Part-time Instructional Aides
- 1 Part-time Cook

The Center also has 2 temporary aides who are used on an as needed basis.



LONG RANGE GROWTH: Long range planning is based upon a permanent Center located at the Palo Verde College campus. A Center on campus would increase the number of children whose parents attend the College, e.g., CARE and CalWORKS children. Currently, most of these children attend other child care centers in the community. The Campus Center could include care for infants and offer an after school “latch-key” children program.. The Center should increase its services greater than the rate of growth for the enrollment rate for the District then level off. The Needles Center will need to address this need for students with children.

FACILITY NEEDS: The current Center facility is made up of older modular units located at the earlier Palo Verde College campus site. The site and facilities have been sold to the Palo Verde Unified School District. A Child Development Center project has been presented to the state for funding in the District’s Five-Year Construction Plan. If funded, some \$10 million, it would open for the 2012/12 year. The Center would include a laboratory for child development teaching/ learning and serve as a preschool teacher training site and serve as a model for the industry for the greater community.

DISTANCE EDUCATION

The Palo Verde College Distance Education Program is administered by an Associate Dean of Instruction at the Blythe campus. The program provides teaching/learning opportunities mainly for incarcerated inmates at some 20 prisons. The program's methodology is the long employed "correspondence course" methodology using written communications between the instructor of record and the student. The District has submitted a Title III Grant application, which if successful, will enable the District to move toward computerized self-paced teaching/learning for the Distance Education program. It is also imperative that the Distance Education program be accessible for disabled students.

For the 2007 Fall Semester some 144 class sections were offered at the Palo Verde College campus and 3 at the Needles Center. All classes were for credit courses. An array of courses was offered including a majority of the assorted disciplines that make up the District's curriculum. A majority of the District's permanent faculty taught 1 or more Distance Education classes and an additional 30 to 35 adjunct faculty taught in the program for a total of some 30 full-time equivalent faculty.

The Distance Education program started in 2001 with just 52 students; it now has an unduplicated headcount of upwards of a 1,000 students. If an Alcohol and Drug Certificate program is certified to educate Addiction Counselors for incarcerated inmates, the program would grow substantially with upwards of 33 prisons participating.

LONG RANGE GROWTH: The Distance Education program classes and enrollment are expected to grow consistent with the enrollment growth rate of the District. The exception would be if the Alcohol and Drug program is certified. Unless this is contracted on a for-fee basis, classes and enrollment would have to be reduced elsewhere by the District.

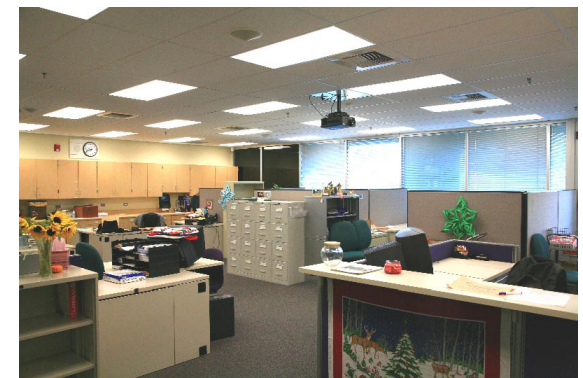
FACILITY NEEDS: The Distance Education program is currently administered from a former large instructional lab in the Class/Lab Building. It was moved there as a matter of expediency in response to need for additional office space. While the space works well by unifying the program, it displaces an instruction use while being inappropriately located in the main instructional building. Because programs served by the Distance Education Program are actually off campus and many of their faculty are adjunct, it might be possible to temporarily locate the administrative unit off campus as well, such as at the Spring site. Longer term

however, this program should be located close to the Vice President of Instruction with proximity to Admissions and Records, Financial Aid, EOPS and DSPS. There is also a need for on-campus work space for adjunct faculty, especially those who teach on-campus classes in addition to distance education classes.



DISTANCE EDUCATION
OFFICE ENTRANCE

DISTANCE EDUCATION
OFFICE CONVERTED
FROM BUSINESS LAB
CL123



INSTRUCTIONAL SERVICE AGREEMENTS

Instructional Service Agreements provide for sharing enrollment/attendance for programs offered at locations outside the boundaries of the Palo Verde Community College District. For 2007 Fall Semester the agreements included 4 programs of study:

- Administration of Justice
- Criminal Justice
- Fire Service Technology
- Emergency Medical Technician

at 4 locations:

- Ben Clark Center
- IEC
- RCFD
- RDING

These agreements among multiple colleges and agencies facility necessitate in-service training for public agency safety employees across the state. This represents an important benefit for the entire state and for individual college districts.



TRAINING AT THE BEN CLARK CENTER



LEARNING SKILLS CENTER

The Palo Verde College Learning Skills Center (LSC) provides instructional services:

- Supports classroom instruction
- Offers basic skills in ESL, reading, writing and mathematics
- Assessment Center
- Tutoring Center
- Computer assisted instruction
- Independent learning
- ESL lab at Spring Street
- Coordinates with Needles Center

These fulfill vital needs of the college and the greater community. The College and the Center have relatively high percentages of their student population needing basic skills learning assistance in ESL, reading, writing and mathematics.

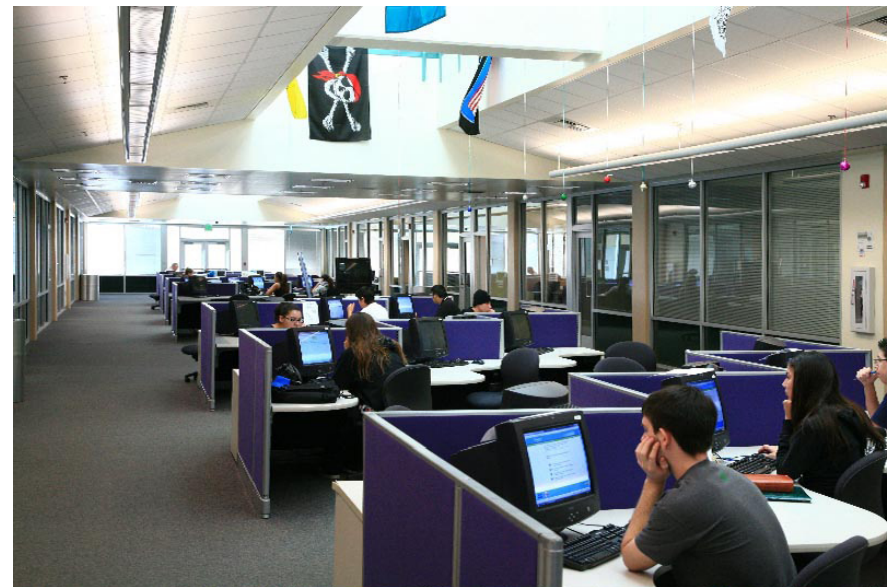
For the 2007/08 academic year the LSC provided 11,373 clock hours of assistance to some 1,224 students or 325 WSCH. Of these, 1,039 clock hours were for ESL instruction and 8,122 clock hours for LSC assistance. The Needles Center provided 52 clock hours LSC assistance for 7 students. The Palo Verde College LSC functions as a laboratory employing computer teaching/learning technology. It has the capacity for computerized self-paced learning, but this teaching/learning methodology has yet to be developed at PV.

LONG RANGE GROWTH: It is expected that the LSC will grow at a rate consistence with the growth of the District. It has the capacity for much more rapid growth should it be needed. The Needles Center needs to develop LSC services in its new facility, the Claypool Building.

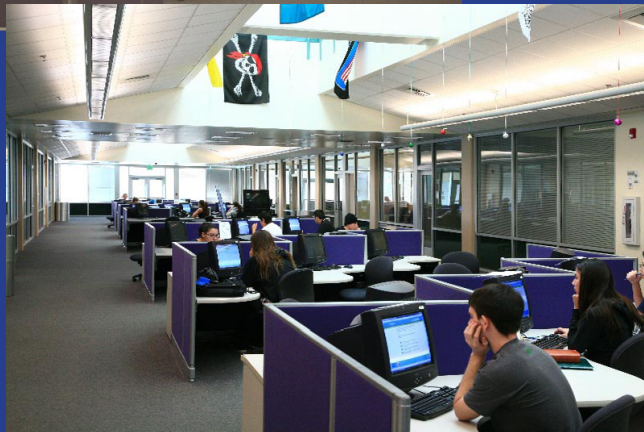
FACILITY NEEDS: The Learning Skills Center is currently in the central mall of the Class/Lab Building. It was originally designed to be next to the library in the College Services Building where the two were believed closely related in terms of function and operation. That location provided Learning Skills with a number of support spaces, including tutoring/group study rooms and offices.

But there developed an operational affinity between Learning Skills and the Independent Learning Lab in the Class/Lab Building -- hence the program was

moved there, but without the support spaces. If the Learning Skills Center is to remain in the Class/Lab Building, it will require a reassessment of its need for the support spaces. Finding additional space for these in the Class/Lab Building will be a challenge because they will compete with the growing need for faculty offices and other instructional support uses.



LEARNING SKILLS CENTER



LEARNING CENTER CL141

LIBRARY (LEARNING RESOURCE CENTER)

The Palo Verde College library provides these instruction services for faculty and students:

- Holdings
- Reference Library
- Videos/DVDs
- Computer Laboratory
- Internet Access for Books/Periodicals
- Magazines/Newspapers
- Orientation to Library Resources
- Research for Inmates
- Study Rooms

The holdings remain undersized for a college the size of Palo Verde; at least 30,000 volumes are recommended by Title V. Since the 1996 Master Plan, holdings have increased by only 1,000 volumes. Due to the isolated nature of the college, this is a serious handicap for PV instructors and students. The need is to update holdings to support class instruction is paramount.

Student study rooms and overall library space have been reduced. This is a result of lack of space for growing student services and the unplanned need for space for Information Technology. The library now has only one student study room, and that room lacks computer capacity.

The library is staffed by 1.5 librarians and 2 support staff.

Hours of operation for library services are 8 a.m. to 8 p.m., Monday through Thursday and 8 a.m. to 4:30 p.m., Friday. The location of the library makes it difficult to provide services on weekends due to access and building security problems.

LONG RANGE GROWTH: Library services are expected to grow at the enrollment growth rate for the District. The Library must serve the Needles Center as well as the PV campus.

FACILITY NEEDS: The PV Library needs to reclaim space lost to Information Technology, EOPS/CARE, and DSP&S or it should be relocated into a new free-standing building closer to the instructional core of the campus. The facility needs to be brought up-to-date with student computer technology access in study rooms and individual stations. Library space needs to be provided at the Needles Center that transports PV library to Needles faculty and students.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007, 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
PVC Campus	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	5	4	5	6
Enrollment	69	123	148	169
WSCH	276	492	593	677
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	1	1
Enrollment	0	0	8	8
WSCH	0	0	32	32

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

ACC 100	Basic Accounting
ACC 101	Principles of Accounting I
ACC 102	Principles of Accounting III

ACCOUNTING, TOP CODE 0502.00

Accounting focuses on the measurement and reporting in monetary terms of the flows of resources into and out of an organization. Accounting collects, processes, evaluates and reports certain information. The primary role of accounting is to aid decision making.

Accounting can be called the language of business. Today accountants use sophisticated computers and communication equipment for their work. The study of accounting provides students with traditional accounting skills, as well as expanded skills in analytical reasoning, problem solving, computers, and oral and written communication. Accounting programs prepare students for careers in public, private and non-profit organizations. Accounting 101 and 102, Principles of Accounting, are required for majors in Business Administration and should be completed prior to transferring to a university.

For the 2007 Fall Semester 4 Accounting classes were offered, all via Distance Learning – for 123 students, an average of 31 students per class. No accounting classes were offered at the Palo Verde College campus or the Needles Center.

LONG RANGE PROGRAM GROWTH: Accounting courses offerings are expected to be consistent with the overall enrollment change. Students need to learn the use of computers and communication equipment in accounting and business.

For accounting courses to be offered at the Needles Center, Interactive technology needs to be employed from the Palo Verde College campus – this will enhance campus enrollment in accounting.

FACILITY NEEDS: Although accounting courses are defined as lecture courses, classes need to be taught in classrooms with computer teaching/learning capacity.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	9*	11	12
Enrollment	0	197	238	271
WSCH	0	584	704	804
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2015*
Classes	0	0	0	0
Enrollment	0	0	0	0
WSCH	0	0	0	0

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

- ADS 101 Intro to Addiction Studies
- ADS 102 Pharmacology & Physiological Effects of Addiction
- ADS 103 Case Management & Documentation
- ADS 107 Group & Family Processes
- ADS 109 Substance Abuse in Special Populations

*Note: All classes Dist. Edu.

ALCOHOL/DRUG STUDIES, TOP CODE 2104.40

The study of Alcohol/Drug Studies prepares students with an integrated theoretical and practical experience to develop skills necessary to work in the field of alcohol/drug abuse, as well as with families or employers of chemically dependent persons.

The Alcohol/Drug Studies program fulfills an important need for the greater community the District serves. The District offers 3 Certificate programs in Alcohol/Drug Studies, and 2 of its courses fulfill General Education requirements for graduation and transfer: Area E, ADS 101 and 102. District officials are working with prison officials to certify the PV Alcohol/Drug Studies program to educate inmates to be able to counsel other inmates with chemical addictions. The program could serve up to 33 prison populations.

Teaching methodology is currently distance learning employing correspondence teaching/learning methodology. A Title III Grant may enable the District to employ more computer teaching/learning technology.

For the 2007 Fall Semester, the Palo Verde College campus offered 9 Alcohol/Drug Studies classes with 197 students enrolled, an average of 22 students per class. The enrollment range was 9 to 29 students. All classes were offered through Distance Learning. No classes were offered at the Needles Center.

LONG RANGE GROWTH: Alcohol/Drug Studies offerings and enrollment are expected to grow consistent with the overall enrollment growth of the District. The exception would be if the Certificate program is certified and selected to prepare inmates to counsel inmates with addictions; the program will increase in offerings and enrollment at a significant level.

FACILITY NEEDS: A laboratory with computer teaching/learning capacity is needed for the faculty to work from for this and other Distant Learning programs.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
PVC Campus	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	1	5	6	7
Enrollment	31	82	99	113
WSCH	93	247	298	340
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	0	0
Enrollment	0	0	0	0
WSCH	0	0	0	0

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

ANT 101	Cultural Anthropology
ANT 102	Aztecs, Maya, and their Predecessors
ANT 201	Introduction to Archaeology

ANTHROPOLOGY, TOP CODE 2202.00

Anthropology is the study of the origins, physical and cultural development, technologies, social customs and beliefs of mankind.

Anthropology and archaeology fulfill a need with the college and the greater community. Anthropology fulfills General Education requirements for graduation and transfer: Area D, D1 and D3. It is also a component of a Liberal Arts major.

Teaching methodology is predominantly lecture/discussion. Smart classrooms/labs are becoming increasingly prominent. For Archaeology sites outside the laboratory are often used.

For the 2007 Fall Semester 5 classes were offered at the Palo Verde College campus for 82 students, and no classes were offered at the Needles Center. All of the Palo Verde campus classes were taught via Distance Learning.

LONG RANGE GROWTH: Anthropology course offerings are expected to grow consistent with the overall enrollment growth of the District. To enable Needles Center students to complete graduation and transfer requirements the District needs to offer one or more Anthropology classes –web casting would help facilitate to do this.

FACILITY NEEDS: Anthropology needs a smart classroom/laboratory with maximum flexibility at both the College and the Center.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	7	17*	19
Enrollment	41	93	224	256
WSCH	156	369	890	1016
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	5	4	6	6
Enrollment	52	28	60	60
WSCH	196	131	220	220

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

ART 105	Digital Photography
ART 106	Advanced Digital Photography
ART 110	Art History & Appreciation I
ART 120	Basic Painting Design & Color
ART 125	Basic Drawing & Composition
ART 135	Oil Painting

ART, TOP CODE 1002.00

Art is the study of two and three dimensional techniques in the areas of painting, drawing and sculpture. It is the product of creative human activity in which materials are shaped or selected to convey an idea, emotion, or visually interesting form. The visual arts include painting, sculpture, architecture, photography, decorative arts, crafts and other visual arts that combine materials or forms.

Art fulfills an imperative need in the college and the greater community. Art courses fulfill the General Education C1 Arts (Art, Dance, Music, Theatre) requirements and is a component of a Liberal Arts degree. With the completion of the Fine and Performing Arts Complex, classrooms and laboratories will be dedicated to Art. The Complex includes an Art Gallery for displaying student and community art.



Palo Verde College's Harry A. Faull Library featured an exhibit of artwork by inmates participating in the Arts in Corrections program at Chuckawalla Valley State Prison.

The exhibit was coordinated by Jose Gaxiola, Institution Artist Facilitator at CVSP. The exhibit included landscapes and portraits done in oil pastels and pencil. The Arts in Corrections program is conducted in many of California's correctional institutions. Gaxiola became involved in the program 15 years ago. He started as a contract artist and has

**JOSE GAXIOLA, INSTITUTION ARTIST FACILITATOR
AT CHUCKAWALLA VALLEY STATE PRISON**

(continued)

ART (CONT)

Teaching methodology for Art laboratories remains fairly historically consistent. The exceptions are photography and the teaching of Art History – these employ digital and computer teaching/learning technology.

For the 2007 Fall Semester 7 Art classes were offered through the Palo Verde College campus for 93 students. Five of these were offered through Distance Learning, and the other 2, of necessity, were offered at the Palo Verde High School site. At the Needles Center 4 classes were offered, including 2 in digital photography, 28 students participated with a class size range of 3 to 7.

LONG RANGE GROWTH: Art offerings are expected to significantly exceed the overall growth of the District at both the Palo Verde College campus – when the Fine and Performing Arts Complex is completed – and at the Needles Center – when the Claypool Building reconstruction is completed. The teaching of Art History and Appreciation classes should be web cast between the College and the Center to enable students to qualify for graduation and transfer.

FACILITY NEEDS: Laboratories are needed for Painting and Photograph and smart classroom/laboratories with computer technology capacity for teaching Art History.



LOCAL ARTIST,
KATHLEEN JORGENSON
ART EXHIBIT
JANUARY 2009

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	2	2	3
Enrollment	38	38	46	52
WSCH	228	152	183	209
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	0	0
Enrollment	0	0	0	0
WSCH	0	0	0	0

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

AST 110	Astronomy: Beyond the Solar System
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ASTRONOMY, TOP CODE 1911.00

Astronomy is the study of matter and energy in the universe: the solar system, stars, galaxies and nebula. This includes the study of their history and dynamics and related theories and cases.

Astronomy fulfills a need in the college and the greater community by offering courses that fulfill for the General Education B1 Physical Sciences requirement.

Teaching methodology is increasingly employing computer teaching/learning technology in a laboratory environment. There is a special need for a Planetarium/Observatory – the Blythe area would be excellent for these. The capacity to teach GIS is also needed: plotters, digitizer, large format printers, etc.

For the 2007 Fall Semester 2 Astronomy classes were offered at the Palo Verde College campus, both via Distance Learning with 12 and 26 students. No classes were offered at the Needles Center.

LONG RANGE GROWTH: Astronomy offerings are expected to grow consistent with the overall enrollment growth of the District. A planetarium/observatory facility at the Palo Verde College campus would increase this growth projection. The Needles Center should offer Astronomy courses via web casting from the PV campus to enable its students to participate in the study of this science and for graduation requirements.

FACILITY NEEDS: A laboratory is necessary for astronomy including a planetarium/observatory at the PV Campus.



ALEJANDRO GARCIA AND
PHILIP CLINTON

DISCUSS THE
ASTRONOMY PROGRAM
WITH DR. JIM PELL

Palo Verde Community College District Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	8	6	7	8
Enrollment	112	93	112	128
WSCH	599	595	718	819
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	0	0
Enrollment	0	0	0	0
WSCH	0	0	0	0

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

AUT 90	Automotive Fabrication & Set-Ups
AUT 100	Intro to Automotive Technology
AUT 101	Basic Technician Skills
AUT 103	Suspension, Steering and Alignment
AUT 110	Brake Systems
AUT 111	Automotive Electrical Systems

AUTOMOTIVE TECHNOLOGY, TOP CODE 0948.00

Automotive Technology consists of the servicing, maintenance, and diagnosis of malfunctions, and repair and overhaul of components and systems in automotive vehicles.

Automotive Technology fulfills a defined need in the college and the greater community. The college offers an Associate Degree and 2 certificates in Automotive Technology. In addition to the vehicles from the community, thousands of vehicles pass through the greater Blythe area on the I-10 every day of the year.

Automotive Technology teaching/learning is increasingly employing computer technology – vehicles are increasingly driven by complex computer technology.

For the 2007 Fall Semester 6 Automotive classes were offered at the Palo Verde College campus Technology Building with 93 students enrolled, an average of 16 students per class. Class size range was 14 to 25. One class was an auto fabrication course. No Auto Technology classes were offered at the Needles Center.

LONG RANGE GROWTH: Automotive Technology offerings are expected to grow consistent with the overall enrollment growth of the District. Fabrication is expected to grow more rapidly. The location of the College, away from population centers, hinders becoming aligned with major automotive training programs.

FACILITY NEEDS: The College has new facilities with up-to-date equipment. A classroom/lab with computer teaching/learning capacity would complement the excellent laboratory facilities. It is not anticipated that Auto Technology classes will be offered at the Needles Center.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	5	7	8	10
Enrollment	88	130	157	179
WSCH	399	542	654	746
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	1	1	1
Enrollment	16	13	14	14
WSCH	111	278	56	56

Note: Projections based on population forecast by SCAG, Dec 2008

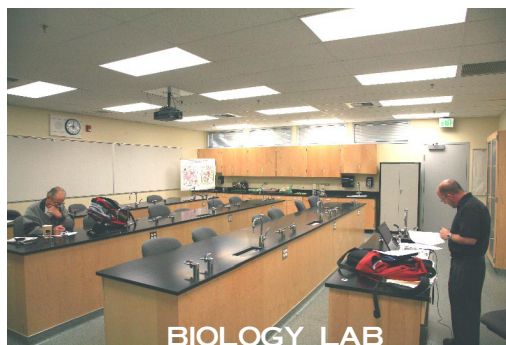
COURSES

BIO 100	Intro to Biology
BIO 101	Intro to Biology - Lab
BIO 110	Basics of Biology
BIO 111	Basic Microbiology
BIO 210	Human Anatomy

BIOLOGY, TOP CODE 1401.00

Biology is a generalized scientific study of life. It includes the structure, function, reproduction, growth, heredity, evolution, behavior, and distribution of living organisms. The term Biology was introduced in Germany in 1800 and popularized by the French naturalist Jean-Baptiste de Lamack as a means of encompassing the growing number of disciplines involved with the study of living forms.

Biology fulfills a need in the college and in the greater community by fulfilling the B2 Life Science General Education requirement for graduation and transfer. It is also a component of a General Studies degree program. Biology courses are also required for admission to the Licensed Vocational Nursing Certificate program. Conversely, it is not a requirement for the Fast Track Licensed Vocational Nursing Certificate – this may help explain its popularity.



Teaching methodology for Life Science courses is increasingly employing computer teaching/learning technology. The lecture portion of Life Science courses is typically offered in a laboratory setting rather than relocating to a classroom.

For the 2007 Fall Semester 7 Biology classes were offered at the Palo Verde College campus, 4 via Distance Learning (all BIO 100). Only one BIO 101 (lab) section was offered, to 8 students. Average class size was 19 with an 8 to 25 range. One class was offered at the Needles Center, BIO 210, Human Anatomy, for 13 students.

LONG RANGE GROWTH: Biology offerings are expected to grow consistent with the overall enrollment growth of the District. This will change when the District offers a Registered Nursing degree program. Faculty members are interested in offering courses that would be of interest to the greater community, for example: Desert, River and Marine Biology.

Of necessity, the Needles Center will need to increase its Biology course offerings to enable its students to complete general education and degree/certificate requirements. This could be accomplished via web casting from the Palo Verde College campus.

FACILITY NEEDS: Smart laboratories with sufficient flexibility to offer the full range of Life Sciences. A Life Science laboratory must be made available at the Needles Center.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	3	0	7	8
Enrollment	28	0	111	124
WSCH	144	0	728	743
Needles Center				
Classes	0	0	0	0
Enrollment	0	0	0	0
WSCH	0	0	0	0

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

BCT 100	Intro to Building Trades
BCT 101	Rough Coarpentry
BCT 102	Advanced Framing Techniques
BCT 130	Principles of Drafting
BCT 215	Intro to Computer Aided Drafting (CAD)

BUILDING CONSTRUCTION TECHNOLOGY, TOP CODE 0952.00

The study of Building Construction Technology consists of layout, fabrication, erection, installation, and repair of buildings, highways, airports, and other structures and fixtures, including framing, construction materials, estimating, blueprint reading and use of tools.

Building Construction Technology fulfills a need in the college and the greater communities the Palo Verde College and Needles Center serve by enabling students to learn the building construction trades, e.g.: cabinetry, framing, plumbing, electrical, heating/air conditioning, rough carpentry. The District offers both an Associate degree and a Certificate program. It is estimated that some 70 percent of the houses in the greater Blythe and Needles areas are in need of rehabilitation. Currently, the curriculum is being revised to include solar energy and "green" construction. The program is kept current by an active Advisory Committee from the industry.



Teaching methodology for Building Technology is increasingly employing computer teaching/ learning technology in smart classrooms/laboratories.

No Building Construction Technology classes were offered for 2007 Fall Semester at either the Palo Verde College campus or the Needles Center, however, it was reported that 6 classes were offered for the 2008 Fall Semester with some 30 hours of instruction. The classes represented a cooperative relationship with Palo Verde High School. Classes typically had 12 to 15 students.

LONG RANGE GROWTH: Building Construction Technology offerings and enrollments are expected to grow more rapidly than the overall enrollment growth of the District. The need for rehabbing houses and business complexes will drive this growth. When another prison is constructed, certainly the program would grow.

FACILITY NEEDS: The Building Construction Technology program is located in the new Technology Building, therefore it has needed laboratory and classrooms. Equipment is needed such as dust collection and computer technology.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	4	18	22	25
Enrollment	97	329	397	453
WSCH	291	979	1178	1344
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2002
Classes	2	0	3	3
Enrollment	16	0	21	24
WSCH	48	0	64	73

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

BUS 101	Introduction to Business
BUS 105	Business Math
BUS 115	Small Business Finance
BUS 135	Business Law
BUS 201	Principles of Organizational Leadership
BUS 202	Business Communication
BUS 206	Marketing

BUSINESS, TOP CODE 0501.00

The study of Business is of processes, principles, and procedures of purchasing, selling, producing, and interchanging goods, commodities, and services to prepare students for positions of responsibility, management and/or ownership.

Business fulfills a need at Palo Verde College and the Needles Center and the greater communities they serve. The District offers a Certificate in Business Studies. The discipline and the certificate appear to be a catch all for business courses, e.g.:

- Intro to Business
- Business Math
- Small Business Math
- Business Law
- Business Communication
- Marketing

Three of these courses are lower division components of a Business Administration degree program. Teaching methodology for these courses should include the use of a smart laboratory with computer teaching/learning technology.

For the 2007 Fall Semester, 18 Business classes were offered at Palo Verde College for 329 students, an average of 18 per class, none of the classes was held at the campus, all were offered via Distance Education, and none was offered at the Needles Center. This means that none of the core courses for a Business Administration major was offered for residents of Blythe or Needles.

LONG RANGE GROWTH: Business offerings and enrollment are expected to grow at the overall enrollment growth of the District. As this projection depends largely on future inmate enrollments, the projection can change rapidly. The District needs to develop Business Administration degree/certificate curricula, and then market this within the College and Center communities. If this is accomplished with a reasonable degree of knowledge and talent, enrollments and offerings could increase at a substantially rate at both the College and the Center.

FACILITY NEEDS: Business offerings require smart laboratory facilities – for both the College and the Center.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	10	12	14
Enrollment	58	155	187	213
WSCH	174	463	558	637
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	1	1	1
Enrollment	0	8	8	8
WSCH	0	24	24	24

Note: Projections based on population forecast by SCAG, Dec 2008

BUSINESS MANAGEMENT, TOP CODE 0506.00

Business Management is the planning, organizing, directing, and controlling of business operations. The study includes learning various theories, tools, and practical applications used to maintain business sustainability through the management of capital, financial, and human resources.

The Business Management program fulfills a vital need in the college and the greater communities served by Palo Verde College and the Needles Center by preparing students to become leaders in the business community, both private and public. The District offers both an Associate Degree and a Certificate in Business Management. The program is kept current by an active Advisory Committee from the industry.

Teaching methodology for Business Management is increasingly in employing computer technology in smart classroom environments. Management teaching/learning is also team driven.

For the 2007 Fall Semester, 10 management classes were offered at Palo Verde College for a total of 155 students, 15.5 per class. All of these were taught via Distance Education. One class, MAN 107 Small Business Management, was offered at the Needles Center for 8 students.

continued



EARL TURNER, CIS & MATH INSTRUCTOR
ALEJANDRO GARCIA, MATH & PHYSICAL SCIENCE INSTRUCTOR
SANDRA SHER, MATH INSTRUCTOR

DISCUSSING THE BUSINESS MANAGEMENT PROGRAM
WITH DR. JIM PELL

COURSES

MAN 105	Principles of Management
MAN 106	Personnel Management
MAN 107	Small Business Management
MAN 145	Organizational Behavior

BUSINESS MANAGEMENT (CONT)

LONG RANGE GROWTH: Business Management offerings and enrollments are expected to grow commensurate with the overall enrollment growth of the District. This is expected for both Palo Verde College and Needles Center.

However, the District needs to develop and implement an Associate Degree for Business Administration. This is the umbrella business degree program for a BA or BS in Business. Lower division core requirements include:

- | | |
|-------------------------|---------------------|
| Accounting | Economic |
| Information Systems | Business Law |
| Business Communications | Business Statistics |

From this lower division base students can emphasize at the upper division level such concentrations as:

- | | |
|------------------------|-----------------------|
| Accounting | Management |
| Banking | Marketing |
| Economics | Finance |
| Information Systems | Public Administration |
| International Commerce | |

The District could also spin off a degree/certificate program in Supervision and Management. This program is highly applicable to small business enterprises as well as agriculture, warehousing, and hospitality industries.

FACILITY NEEDS: The Business Management/Business Administration program requires smart classrooms/laboratories and at least one classroom designed so that students can study/work in a team format. These apply both to Palo Verde College and the Needles Center.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007, 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	1	1		
Enrollment	10	12		
WSCH	90	48		
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0		
Enrollment	0	0		
WSCH	0	0		

Note: Projections based on population forecast by SCAG, Dec 2008

CHEMISTRY, TOP CODE 1905.00

Chemistry is the study of subatomic particle elements, compounds, and other forms of matter. This includes their detection, occurrence composition, structure, prospective, determination, interactions, transformations, changes of state, energy relationships, and the governing laws. Chemistry arose from attempts by people to transform metals into gold beginning about 100 A.D., an effort that became known as alchemy. Modern Chemistry was established in the late 18th century, as scientists began identifying and verifying through scientific experimentation the elemental processes and interactions that create gases, liquids, and solids that compose our physical world.

Chemistry fulfills a need for the college and the greater community. It fulfills the B1 Physical Science General Education requirement for graduation and transfer. It is also a component of the General Studies degree program. Chemistry is a vital component of an assortment of programs: Medical, Agriculture, Hazardous Materials, Criminal Investigation, Food, Engineering, to name a few. Part of the enrollment shortage can be attributed as U.S. novelist Anita Loos wrote, "there's nothing colder than chemistry". There are specialized Chemistry offerings taught in other departments, e.g., FST 153.

Teaching methodology for Chemistry courses is increasingly employing computer teaching/learning technology. The lecture portion of Chemistry courses is typically taught in a laboratory setting. The District could buy into a web site for a licensed chemistry lab that enables chemistry to be taught via a dry lab – one major result is improved safety for students.

For the 2007 Fall Semester at the Palo Verde College campus only 1 chemistry class was offered for 12 students, plus 2 Independent Study students (organic chemistry). No Chemistry classes were offered at the Needles Center.

LONG RANGE GROWTH: Chemistry offerings are expected to grow consistent with the overall enrollment growth of the District. This will change when a Registered Nursing degree program and other health programs are added to the curriculum. Of necessity, the Needles Center will need to offer Chemistry to its students for general education and degree requirements. This could be accomplished via web casting from the Palo Verde College campus.

FACILITY NEEDS: Chemistry needs a smart laboratory with computer teaching/learning technology.

COURSES

CHE 101	Intro to General Chemistry
CHE 109	Chemistry for Health Sciences & Nursing Disciplines
CHE 210	General Chemistry I

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	6	6	7	8
Enrollment	88	106	128	145
WSCH	289	360	434	495
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	4	4	4
Enrollment	24	31	32	32
WSCH	72	102	105	105

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

CHD 115	Introduction to Early Childhood Education
CHD 125	Child, Family and the Community
CHD 130	Art for Early Childhood
CHD 201	Growth & Development for Early Childhood
CHD 215	Supervision & Administration of Childhood Development Programs
CHD 227	Parenting Principles and Communication

CHILD DEVELOPMENT, TOP CODE 1305.00

Early Child Development is a study of the intellectual, psychosocial, and physical development of children. It includes the principles and practices in the care and education of children. In the late 19th century, interest in the characteristics and needs of children produced more systematic efforts to study their development. In the early 1900s, for the first time children received scientific attention resulting in increasing interest in their development and well-being. It is commonly believed that the family environment is an important influence on a child's personality development – the Child Development worker contributes to the Family Environment. The education of child development is vital to the well-being of children.

Child Development fulfills a need in the college and the greater community by preparing teachers and workers for essential child care/development centers. The greater Blythe area is a young community with upwards of 33 percent of its population under 18 years of age; this compares with a national average of 25 percent. The District offers an Associate degree in Child Development and 2 Certificate programs: Child Development Teacher and Associate Teacher. Child Development 201, Growth and Development for Early Childhood fulfills 2 General Education requirements: Area D, D9 and Area E.

Teaching methodology for Child Development is mainly lecture – there should be smart classrooms with computer teaching/learning capacity. Laboratories can use simulation teaching/learning as well as supervision in a Child Development environment.

For the 2007 Fall Semester 6 classes were offered at the Palo Verde College campus for 106 students, class size range = 10 to 24. The average class size was 18. At the Needles Center 4 classes were offered for 31 students with a class range of 5 to 9 and an average of 8 students per class.

LONG RANGE GROWTH: Child Development class offerings and enrollments are expected to grow consistent with the overall enrollment growth of the District.

FACILITY NEEDS: The Palo Verde College campus needs a permanent Child Development Center that would provide quality care and education for children of Palo Verde College students. This would greatly facilitate enabling student parents to be able to gain a college education. The Center should also provide for a smart classroom/lab with computer teaching/learning capacity, including simulators.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	10	12	15	17
Enrollment	169	186	224	256
WSCH	428	578	697	795
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	5	0	7	8
Enrollment	53	0	70	81
WSCH	157	0	211	243

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

CIS 101	Intro to Computers & Information Systems
CIS 102	Personal Computer Applications
CIS 106	Intro to Computer Literacy
CIS 120	Spreadsheets
CIS 124	Web Page Design
CIS 131	Animation Principles and Applications

COMPUTER INFORMATION SYSTEMS, TOP CODE 0702.00

Computer Information Systems programs involve teaching/learning of information technology concepts, theories, principles, methods and related computer capabilities and applications related to business, technical, and scientific problems. They include general programs in data and information storage and processing, including hardware, software, basic design principles, and user requirements.

Computer Information Systems fulfills a vital need at Palo Verde College and the Needles Center and the greater communities that Palo Verde College and Needles Center serve. Computer Information Systems are vital to virtually all segments of society as we know it, especially for communications and business operations. The District offers an Associates Degree in Computer Information Systems and a certificate by the same name. The District also offers a Certificate (12



BILL PONDER, CIS AND BUSINESS INSTRUCTOR

(continued)

COMPUTER INFORMATION SYSTEMS (CONT)

units) in 3D Computer Animation. The catalog lists a degree program in Computer Repair, however there was no evidence of it being active.

For the 2007 Fall Semester, 12 Computer Information Systems classes were offered at Palo Verde College for 186 students, an average of 16 students per class. Two classes had enrollments of 29 students – these were offered at the campus (CIS 102 Personal Computer Applications). Six of the 12 classes were offered via Distance Education and one was offered at Palo Verde High School (11 students). No classes were offered at the Needles Center, however, in 2003 Fall Semester 5 classes were offered with 53 students enrolled.

LONG RANGE GROWTH: Computer Information Systems is a growth industry in this nation as well as world-wide. The program offerings and enrollments are expected to grow more rapidly than the overall growth of the District. This is especially true if the program's curriculum can address information technology teaching/learning needs for business, science, technology, art, music and other industries

FACILITY NEEDS: The program will need more than one laboratory in the next 5 to 10 years, including one in the new Fine and Performing Arts Complex. If the Computer Repair program is developed, a laboratory will be needed. A dedicated laboratory will be needed at the Needles Center.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	1	1	1
Enrollment	40	19	23	26
WSCH	97	23	28	32
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	1	1	1
Enrollment	0	7	8	10
WSCH	0	12	14	17

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

CWE 140	Occupational Work Experience
CWE 145	General Work Experience
CWE 150	Career Success Seminar
CWE 155	Career Awareness Seminar

COOPERATIVE WORK EXPERIENCE, TOP CODE 4932.00*

Cooperative Work Experience consists of supervised employment intended to assist students in acquiring desirable work habits, attitudes, and career awareness.

Cooperative Work Experience fulfills a need in the college and the greater community by teaching students desirable work habits, attitudes and about career opportunities. An important benefit is enabling students to prepare for opportunities within an organization.

Teaching methodology at the job site is interaction between workers and supervisors, and setting and achieving goals. The classroom portion, CWE 150 and 155, teaching/learning should take place in a smart classroom with computer technology capacity for students.

For the 2007 Fall Semester 19 students were enrolled in Cooperative Work Experience at the Palo Verde College Campus and 7 students at the Needles Center.

At the PV campus 7 students were actually enrolled in vocational/technical work experience and 2 in general work experience. Ten students were enrolled in the Career Awareness Seminar. At the Needles Center 3 students were enrolled in general work experience and 4 in the Career Success Seminar. This means only 12 students were actually enrolled in Work Experience.

Vocational work experience is not reported in the TOP Code for the assorted vocational/technical disciplines as specified in the Code, Title 5, Section 55256. Work experience is not listed as either a requirement or elective in any of the District's degree or certificate programs. Colleges with a commitment to Cooperative Work Experience (CWExp) list courses in vocational/technical disciplines and certificate/degree programs, and are committed to establishing quality work sites. For highly successful programs the College Works Study program is an active partner for both on-campus and off-campus job sites.

LONG RANGE GROWTH: Cooperative Work Experience offerings and enrollments are not expected to grow consistent with the overall enrollment growth of the District. It is not structured for growth. If the structure should change, it could grow rapidly.

FACILITY NEEDS: Smart classrooms with computer technology capacity for teaching/learning.

* Occupational Work Experience is reported in the TOP Code for the occupation in which experience takes place.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	7	7*	11	12
Enrollment	100	129	195	222
WSCH	328	414	624	712
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	0	1	1
Enrollment	39	0	10	10
WSCH	156	0	40	40

Note: Projections based on population forecast by SCAG, Dec 2008

CRIMINAL JUSTICE, TOP CODE 2105.00

Criminal Justice is the study of theories, principles and techniques of law enforcement agencies, juvenile justice and corrections. Corrections (TOP Code 2105.10) is the second arm of law enforcement education at Palo Verde College: the study of theories, principles and techniques of providing services for the incarcerated.

Criminal Justice is an imperative need in the college and the greater community. Two state prisons just west of Blythe employ more than 1,350 correction officers and more than 550 support staff. Ironwood and Chuckawalla Valley State prisons are the largest employers in the Palo Verde Valley, employing more than 1,900. This compares with next largest – Palo Verde Unified School District with fewer than 400 employees. Further, depending upon need and state resources, the prison site is designed for up to 7 state prisons. In 2004 the median annual household income in the greater Blythe area was \$41,000 – a corrections officer without any experience can earn close to that amount; with experience close to double that amount. The prisons infuse the local economy with more than \$200 million annually. Using an impact factor of 4, these prisons impact the local economy approaching \$1 billion annually.

The District offers an Associate Degree and Certification program in Criminal Justice. Criminal Justice courses also fulfill a General Education requirement: Area D, D-8.

Teaching methodology for Criminal Justice is evolving with the development of smart classrooms/ labs and computer teaching/learning technology, e.g., use of simulators in the laboratory/classroom. The program requires an activity room for physical training/conditioning. This need is often on an irregular schedule basis, making it difficult to use gym space. Access to a firing range is also necessary.

For the 2007 Fall Semester 7 classes were offered at the Palo Verde College campus for 129 students. Class size range was 11 to 49 students with an average of 18 students per class. No classes were offered at the Needles Center. Through an active Advisory Committee, the program is current with the profession.

(continued)

COURSES

CRJ 85	Police Explorer Academy II
CRJ 103	Criminal Law
CRJ 115	Intro to Law Enforcement
CRJ 125	Report Writing
CRJ 132	Family Intervention
CRJ 135	Spanish for Emergency Service Personnel
CRJ 165	Arrest & Firearms
CRJ 200	Correctional Supervision I

CRIMINAL JUSTICE (CONT)

LONG RANGE GROWTH: Criminal Justice class offerings and enrollment are expected to grow consistent with the overall enrollment growth of the District. This could change significantly if and/or when another prison is constructed, or if the District were to achieve Academy status. Then development and implementation of in-service training classes for correction officers, Border Patrol, Highway Patrol, etc. could also affect the forecast. Classes should be offered at the Needles Center and could be web cast from the PV campus.

FACILITY NEEDS: Criminal Justice needs smart classrooms/labs with computer teaching/learning capacities unique to law enforcement, and needs a unique activity laboratory for physical conditioning/training. A firing range is also needed. This facility could be part of a facility for Public Safety programs; Criminal Justice, Fire Technology, EMT, Hazardous Materials, Alcohol and Controlled Substances.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0		
Enrollment	0	0		
WSCH	0	0		
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	0	0	0
Enrollment	20	0	0	0
WSCH	60	0	0	0

Note: Projections based on population forecast by SCAG, Dec 2008

CULINARY ARTS, TOP CODE 1306.30

The study of Culinary Arts consists of the selection, storage, preparation, and service of food in quantity, including the culinary techniques used by chefs, institutional cooks, bakers, and catering services.

Culinary Arts would fulfill a need in the college and the greater community for preparing cooks. The District has a list of courses for a Culinary Arts program, but no degree or certificate programs.

Teaching methodology for Culinary Arts is increasingly employing computer teaching/learning technology in the classroom phase but not the laboratory portion – which is the major portion.

No Culinary Arts classes were offered at either the Palo Verde College campus or the Needles Center for 2007 Fall Semester. A couple of cake baking classes were offered through the non-credit program.

LONG RANGE GROWTH: Culinary Arts offerings and enrollment are not expected to grow consistent with the enrollment growth of the District. The District lacks a “teaching kitchen” as well as a “production kitchen” where food preparation of the type professional cooks (chefs) need to learn. These are expensive to install and operate. There is no local market for professionally prepared cooks/chefs. However, there is a market within reasonable distances: the Palm Springs, Phoenix, Lake Havasu, and Laughlin areas are examples. Such a program could be fee-based financed – this would also involve a need for housing for students from outside the area.

FACILITY NEEDS: A teaching kitchen with at least 6 full kitchen set ups, an adjacent classroom, and a production kitchen.

COURSES

CUA 110	Introduction to Culinary Arts
CUA 115	Creative Cooking & Menu Preparation

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	3	4	4
Enrollment	48	68	82	94
WSCH	144	204	246	281
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	1	1
Enrollment	0	0	4	6
WSCH	0	0	12	18

Note: Projections based on population forecast by SCAG, Dec 2008

ECONOMICS, TOP CODE 2204.00

Economics is the study of limited resources, their use in producing goods and services, and their allocation and consumption. The study includes related theories, principles and techniques. For the Fall 2007 Semester, 3 economic classes were offered at the Palo Verde College campus and none at the Needles Center. The 3 classes at the Palo Verde College campus had an average of 23 students per class and a range of 20 to 28 students. All 3 classes were taught through Distance Learning.

Economics fulfills a need for the college and the community by helping students understand the principles of the American economy. It fulfills the D2 General Education requirement for the CSU and UC system. Principles of Macro- and Micro-economics are required by all student Business majors.

Teaching methodology for Economics is increasingly employing computer teaching/learning technology. Computer driven smart labs will be increasingly prominent.

LONG RANGE GROWTH: Economics is expected to grow consistent with the overall enrollment growth of the District. The District must recognize the need to offer Economics for Business majors employing web casting between the College and the Center.

FACILITY NEEDS: Labs either equipped with computers or wired/wireless for student to bring their own computers are needed

COURSES

ECO 105	Principles of Macroeconomics
ECO 106	Principles of Microeconomics

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	5	2	2	3
Enrollment	121	40	48	55
WSCH	261	121	146	166
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	4	4	4
Enrollment	0	21	24	24
WSCH	0	40	48	48

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

EDU 80	Supplemental Skills Lab
EDU 81	Supplemental Skills Lab
EDU 83	Supplemental Skills Lab
EDU 84	Supplemental Skills Lab
EDU 131	American Sign Language 1
EDU 132	American Sign Language 2

EDUCATION, TOP CODE 0801.00

Education is the study of theory and method related to elementary, secondary and postsecondary education at the lower-division level. At Palo Verde College Education consists of teaching/learning for tutoring, supplemental instruction, sign language (TOP Code 0850.00) and instructional aide. It does not include an Introduction to Education course for students interested in teaching as a career.

Education fulfills a need in the college and the greater community by offering supplemental instruction in reading, writing and mathematics. It also provides teaching/learning in sign language. The American Sign Language courses do fulfill the General Education C2 Humanities requirement for graduation and transfer: EDU 131, 132 and 134.

Teaching methodology varies depending upon the course emphasis, e.g., supplemental instruction is laboratory based and employs computer teaching/learning technology. Sign Language is lecture based.

For the 2007 Fall Semester 2 classes were offered at the Palo Verde College campus, both via Distance Learning for a total of 40 students. Four classes were offered at the Needles Center for 21 students – a range of 3 to 8 students per class. Three of the classes were supplemental math-ematic courses and 1 was for American Sign Language.

LONG RANGE GROWTH: Education offerings are expected to grow consistent with the overall enrollment growth of the District. This is especially true for American Sign Language. If the District should discontinue its practice of non-prescriptive reading, writing and mathematics the supplemental classes would increase exponential.

FACILITY NEEDS: Supplemental teaching/learning can be accomplished through the Learning Skills Center at both the College and the Center. Sign Language should be taught in a smart laboratory with computer training/learning technology employed.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	22	31	37	43
Enrollment	478	423	510	582
WSCH	1722	1269	1530	1746
Needles Center	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Classes	5	4	5	5
Enrollment	39	28	30	40
WSCH	136	84		

Note: Projections based on population forecast by SCAG, Dec 2008

ENGLISH, TOP CODE 1501.00

English consists of written expression, reading, literature and literary criticism. Reading, writing and critical thinking are essential for student learning at the college level. Most students entering Palo Verde College, Needles Center, and the Distance Learning program, fall below this necessary level for the rigors of college learning. For example, for the 2007/08 year, 340 students taking the English assessment instrument at the PV campus, 178 (60%) scored at the Basic Skills level and 74 (21%) at the Remediation level. Only 60 (18%) scored at the readiness level of English 101, College Composition. The incarcerated population did slightly better: 29 (6%) at the Basic Skills level, 290 (65%) at the Remediation level, and 129 (29%) at the readiness level for college English.

English fulfills an imperative need in the college and the greater community by teaching students to do research, write, read and think critically. All of these are essential in a democratic society. English courses also fulfill vital General Education requirements for graduation and for the CSU and UC systems: A2 Written Communication, and A3 Critical Thinking. English courses also fulfill the C1 and C2 Humanities General Education requirements. As a result, English will continue to be vital for student learning.

Teaching methodology is increasingly employing computer technology in the teaching/learning process. Computer labs will become increasingly prominent – there is a special need for a designated “writing lab”.

Class size averaged some 14 students per class, with a range of 2 – 22 at Palo Verde College. Needles classes averaged 7 students with a range of 4 – 15. Distance Learning classes tended to be larger, ranging from a low of 6 students to a high of 28. For the 2007 Fall Semester 191 students enrolled in English classes at the PV campus, 105 students in English 80’s classes, 35 in English 90’s classes and 51 in college level English classes. In the incarcerated student population, no students enrolled in English 80’s classes, 136 in English 90’s classes and 96 in college level classes.

LONG RANGE GROWTH: As long as the District maintains a non-prescriptive position regarding students entering with developmental skills and remediation reading and writing skill levels, the percentage enrolling in English classes will remain relatively low. English offerings are expected to grow consistent with the overall enrollment growth of the district. Of necessity, the Needles Center must increase its English offerings to enable students to complete degree/transfer requirements – probably through web casting from the Palo Verde campus.

(continued)

COURSES

ENG 80	Intro to Writing
ENG 81	Basic Writing I
ENG 82	Basic Writing II
ENG 87	Supplemental Instruction for Basic Writing I
ENG 88	Supplemental Instruction for Basic Writing II
ENG 89	Supplemental Instruction for Intro to Writing
ENG 95	Writing Improvement I
ENG 96	Writing Improvement II
ENG 99	Basic Composition
ENG 101	Reading and Composition
ENG 102	Composition and Intro to Literature
ENG 103	Critical Thinking and Composition

ENGLISH (CONT)

FACILITY NEEDS: English classrooms/labs need to be designed to accommodate computer teaching/learning technology.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde Campus	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	15	20	24	28
Enrollment	56	37	45	51
WSCH	123	67	81	92
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	0	0
Enrollment	0	0	0	0
WSCH	0	0	0	0

Note: All but 2 class sections were offered at Spring Street -- 2 offered at Palo Verde College were though LSC. ESL is also offered the non-credit program.

ENGLISH AS A SECOND LANGUAGE, TOP CODE 4930.80

Palo Verde Community College District offers English as a Second Language (ESL) in both credit and non-credit courses that prepare students for entry to academic degree and certificate programs as well as being a vital component of a work-force based curriculum.

Both credit and non-credit offers multi-level courses in writing, reading and speaking to prepare students for the demands of higher education or a vocational certificate.

English as a Second Language fulfills a college and community need, especially the greater Blythe community, by teaching students who are not fluent in English to read, write and communicate orally in English. Persons of Hispanic origin in 2008 made up 58 percent of the greater Blythe population. The percentage is expected to increase to 61 percent by the year 2013. For 2008, 25 percent of the greater Needles area population was of Hispanic origin. This is forecast to increase to 29 percent by the year 2013. It is believed once the immigration political issue is resolved; there will be a flood of non-English speaking students into the California community college system – including Palo Verde College and the Needles Center.

With the exception of Learning Skill Center students, 82 students for 1,039 contact hours for 2007/08, all Palo Verde College ESL classes were offered at the Spring Street Location. For the 2007 Fall Semester, 37 students were enrolled in credit ESL classes – out of a student population of 4,717 – and created 67 WSCH. Eight non-credit class sections were offered at the Spring Street location. No ESL credit or non-credit classes were offered at the Needles Center.

Teaching methodology is increasingly employing computer technology in the ESL teaching/learning process. Computer labs will become increasingly prominent with a self-paced learning format.

ESL classes averaged 2 students per class – overlays no doubt increase this number of students per class. Class size range was 1 to 6. No Distance Learning classes were offered.

LONG RANGE GROWTH: The Hispanic population found in both Blythe and Needles, and the growth of these populations, project that ESL offerings should increase more rapidly than the overall growth of the district. This will be affected by political resolution of the immigration situation and beginning an ESL Vocation program.

FACILITY NEEDS: ESL classrooms/labs need to be designed to accommodate computer teaching/learning technology.

(continued)

ENGLISH AS A SECOND LANGUAGE (CONT)

COURSES

ESL 50	Beginning English as a Second Language
ESL 51	Beginning English as a Second Language 2
ESL 54	Intermediate English as a Second Language 1
ESL 55	Intermediate English as a Second Language 2
ESL 56	Intermediate English as a Second Language 3
ESL 58	Advanced English as a Second Language 1
ESL 59	Advanced English as a Second Language 2
ESL 60	Advanced English as a Second Language 3
ESL 61	Advanced English as a Second Language 4

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	1	1	1	1
Enrollment	39	13	16	18
WSCH	30	16	19	22
Needles Center	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Classes	0	0	0	0
Enrollment	0	0	0	0
WSCH	0	0	0	0

Note: Projections based on population forecast by SCAG, Dec 2008

FIRE SCIENCE TECHNOLOGY, TOP CODE 2133.00

The study of Fire Science Technology consists of the study of the principles and techniques of preventing, controlling and extinguishing fires. This includes firefighter operations, maintenance of fire fighting equipment, fire rescue procedures, and applicable laws and regulations.

Fire Science Technology is a needed program in the college and the greater community. The District offers a Certificate program titled Fire Science Technician.

Teaching methodology for Fire Technology increasingly is employing computer teaching/learning technology, including simulators (safer).

For the 2007 Fall Semester 1 Fire Science Technology class was offered for 12 students – FST 229 – Certification: Community Emergency Response Team. One Independent Study class was offered for 1 student. No classes were offered at the Needles Center.

LONG RANGE GROWTH: Fire Science Technology offerings and enrollments are expected to grow consistent with the overall enrollment growth of the District. Laboratories and equipment for Fire Technology teaching/learning would increase this growth. Classes need to be offered at the Needles Center via web casting to meet training needs in the greater Needles area.

FACILITY NEEDS: The Palo Verde College campus needs classrooms and laboratories designed for Fire Technology teaching/learning.

COURSES

FST 150	Haz Mat - First Responder Operations
FST 178	Instructor IA, Instructional Techniques
FST 229	CERT - Community Emergency Response Team

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	10	10	12	14
Enrollment	241	218	263	518
WSCH	662	702	847	966
Needles Center	Fall 2003	Fall 2007	Fall 2025	Fall 2020
Classes	1	1	2	2
Enrollment	17	34	40	40
WSCH	17	102	120	120

Note: Projections based on population forecast by SCAG, Dec 2008

GENERAL STUDIES, TOP CODE 4901.00

General Studies at the Palo Verde College includes teaching/learning for student leadership, college life, and the matriculation process for new and re-entry students. The courses do not fulfill any General Education or major requirements. The discipline is intended to assist students in their quest for success in college.

General Studies fulfills a vital student need by helping them to understand the matriculation process, college resources, programs and services. The discipline also assists students with setting educational/career goals, and improving time management and study skills.

Teaching methodology is largely face-to-face classroom teaching/learning. For Fall 2007 Semester, Palo Verde College offered 10 classes for 218 students, an average of 22 per class. Of the 10 classes, 2 were at the Palo Verde College campus and 8 Distance Learning. The Needles Center offered 1 class for 34 students.

LONG RANGE GROWTH: General Studies offerings are expected to grow consistent with the overall enrollment growth of the District. This could change if the District were to make General Studies prescriptive for students entering without collegiate level reading, writing and math skills.

FACILITY NEEDS: A smart classroom/lab should be wired/wireless for students to bring their own computers with them to class.

COURSES

GES 100	Student Leadership
GES 101	Introduction to Student Life
GES 115	The Master Student

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	5	6	7
Enrollment	25	91	110	125
WSCH	210	407	491	560
Needles Center				
Classes	2	0	1	1
Enrollment	8	0	8	8
WSCH	47	0	48	48

Note: Projections based on population forecast by SCAG, Dec 2008

GEOGRAPHY, TOP CODE 2206.00

Geography is the study of the Earth and its life in land, sea, and air. It includes the distribution of plant and animal life, human beings and their settlements and industries, and the interaction of these factors.

Geography fulfills a need in the college and greater community. As Ulysses S. Grant and Napoleon Bonaparte understood, leaders must understand geography. Geography courses fulfill vital General Education requirements for graduation and transfer: Area B: B1 Physical Science, Area D: D5 and Area E. It also is a component of a Liberal Arts degree.

Teaching methodology increasingly is employing computer teacher/learning technology in classrooms and laboratories.

For the 2007 Fall Semester 5 Geography classes with 91 students were offered at the Palo Verde College campus of which 3 were taught at the Palo Verde College campus with an average class size of 14 and a range of 12 to 15 students. The remaining 2 classes were offered via Distance Learning. No Geography courses were offered at the Needles Center.

LONG RANGE GROWTH: Geography offerings are expected to grow consistent with the overall enrollment growth of the District. To enable Needles Center students to complete graduation and transfer requirements, the District needs to offer one or more Geography classes – web casting would help facilitate this.

FACILITY NEEDS: Geography classrooms/labs need to be designed as smart and the capacity for students to use electronic devices – either wired or wireless.

COURSES

GEO 101	Physical Geography
GEO 103	World Geography
GEO 104	Cultural Geography

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	3	0	2	3
Enrollment	46	0	28	42
WSCH	158	0	112	168
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	1	0	1	1
Enrollment	1	0	4	4
WSCH	2	0	16	16

Note: Projections based on population forecast by SCAG, Dec 2008

GEOLOGY, TOP CODE 1914.00

Geology is the study of the structure, composition, origin, history, distribution and modification of materials upon and within the earth and other celestial bodies.

Geology fulfills a need in the college and the greater community. It fulfills the General Education B1 Physical Science requirement for graduation and transfer. The curriculum has several courses that fulfill requirements and also should be of interest to members of the community – need good marketing. For example, the Blythe area is unique in the state of California as it has not experienced an earth quake in more than 500,000 years.

Teaching methodology is increasingly employing computer teaching/learning technology. Classrooms need to be smart and laboratories have computer technology capacity for students.

For 2007 Fall Semester no Geology classes were offered at either the Palo Verde College campus or the Needles Center.

LONG RANGE GROWTH: Geology offerings and enrollment are expected to grow more rapidly than the overall enrollment growth of the District. Geology needs to be offered at the Needles Center students for graduation and transfer purposes – via web casting from the PV campus.

FACILITY NEEDS: Geology needs a laboratory on the ground floor of the Classroom Building with set-up for hands on learning employing tables. The ground floor is essential so that a rock garden can be accessed from the laboratory.

COURSES

GEL 101	Physical Geology
GEL 203	Geology of the Mojave Desert
GEL 280	Selected Topics in Geology

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	6	9	11	
Enrollment	131	201		
WSCH	438	665		
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	5	2		
Enrollment	49	29		
WSCH	201	176		

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

HEA 128	Medical Terminology
HEA 129	
HEA 140	Health Education
HEA 160	Emergency Medical Technician

HEALTH SCIENCE, TOP CODE 1201.00

The study of Health is the general and introductory occupational progress in the health occupation. At Palo Verde College Health includes Emergency Medical Technician (TOP Code 1250.00), Home Health Aide (TOP Code 1230.80), Nurse Assistant (TOP Code 1230.30), Phlebotomy (TOP Code 1205.10) – the other health program, LVR, is listed elsewhere.

Health programs fulfill an imperative need in the college and the greater community. Health is a growth industry, including the ones listed above. Most, 7 of 11, classes offered in the District for the 2007 Fall Semester were Health 140 – Health Education, a General Education course for the study of healthful living. The course fulfills the General Education Area E requirement and is a component of several associate degree programs. This course and the certification program are vital to the well being of the greater communities served.

Teaching methodology increasingly is employing computer teaching/learning technology in the classroom/laboratories. Use of simulation apparatus is becoming prevalent in EMT laboratories. The health certification programs are kept current through Advisory Committees from the industry.

For the 2007 Fall Semester, 9 health classes were offered at the Palo Verde College campus and 2 at the Needles Center. Of these 7 were Health 140 Health Education classes with a student enrollment range of 23 to 28 students at the PV campus and 6 at the Needles Center. For the EMT class at each location, 12 enrolled at the PV campus and 23 at the Needles Center. Eight students were enrolled in the Medical Technology class and 17 in the Phlebotomy class. Of the Health Education classes, 4 were offered through Distance Learning.

LONG RANGE GROWTH: Health offerings and enrollments are expected to grow consistent with the overall enrollment growth of the District. This could change with new health programs and/or construction of a new prison and/or certification of a Public Safety Academy.

FACILITY NEEDS: The Health Education course needs a smart classroom with computer teaching/learning capacity at both the College and the Center. Laboratories for teaching/learning EMT, Home Health Aide, Phlebotomy, and nursing programs are needed at the PV campus. These need to be smart laboratories with computer teaching/learning capacities.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	5	8	10	11
Enrollment	124	177	214	244
WSCH	372	528	637	727
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	1	0	2	2
Enrollment	11	0	20	20
WSCH	33	0	60	60

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

HIS 110	World Civilization
HIS 115	Current Events
HIS 130	American History I
HIS 140	American History II

HISTORY, TOP CODE 2205.00

History is the study of the past, including the recording, gathering, criticizing, synthesizing and interpreting information and data about past events.

History fulfills an imperative need in the college and the greater community. As the U.S. philosopher wrote, "Those who cannot remember the past are condemned to repeat it". History courses satisfy multiple General Education requirements: C2, D4, D6 and the state requirement for U.S. History. As a result, History will continue to be a vital component of student degree/transfer programs.

Teaching methodology for History includes lecture, discussion, research, small group study among others. Computer teaching/learning technology is becoming more prominent.

For the Fall 2007 Semester, 8 History classes were offered at the Palo Verde College campus, 1 at the campus and 7 via Distance Learning. The 1 class at the Palo Verde campus had 21 students; the Distance Learning classes had a range of 11 to 28 students. No History classes were offered at the Needles Center.

LONG RANGE GROWTH: History offerings are expected to grow consistent with the overall enrollment growth of the District. To enable students to complete degree/transfer requirements the Needles Center must offer history course offerings, probably through web casting with the Palo Verde College campus.



INSTRUCTORS GREG NALL, BRUCE WALLACE,
KEVEN EOFF AND SOLMON OSAYANDE

FACILITY NEEDS:

Classrooms for teaching history need to be "smart" and minimally include the capacity for students to bring electronic devices with them – wired or wireless classrooms/labs.

INTERCOLLEGIATE ATHLETICS, TOP CODE 0835.50

Currently, Palo Verde College does not offer an Intercollegiate Athletic program. In its earlier history it did. With completion of the PV Gymnasium and fields, Palo Verde College now has the facilities for several sports, e.g.:

- Basketball
- Volleyball
- Soccer

With an added investment other spots such as baseball and softball are possible. If an agreement could be struck with the Palo Verde Unified School District for use of its football field for games, football could be added to the list.

The major obstacles to overcome for the District to offer a sports program include:

- The state does not fund facilities for Intercollegiate Athletics
- Recruiting athletes who could be competitive with colleges such as College of the Desert, Mt. San Jacinto, Arizona Western, Imperial Valley, etc.
- Housing for athletes
- Financial aid to finance tuition, fees, books and supplies, room and board
- Title IX requirements for equality in programs for men and women

As virtually all California Community Colleges have sports programs, areas for recruiting athletes would be from other states. This results in the need for a financial aid program that can package all of the expenses directly related to attending Palo Verde for these student/athletes. The PV Financial Aid work study program is inadequate to meet this need. This is compounded by not participating in federally sponsored loan programs. It is best to house student/athletes where the college has a modicum of control over their daily activities. Residence Halls could be financed through revenue bonds, or perhaps a private contractor. With residence halls comes the need for food service, an activities program and conduct matters.

Only 2 sports typically generate revenues, football and basketball. Of these, basketball produces greater revenue per participant due to limited participants

and more games. For example, Imperial Valley College was able to field a high quality basketball program in the 1960s for a number of years with athletes from outside the District.

Sports can be highly rewarding for communities, especially isolated ones. The negative is cost and bringing young persons into the community who have little commitment to it – a number of presidents and board members have paid a harsh cost for this experience.

Perhaps, the District should look at colleges that have had experience with this: West Kern, Columbia College, and Arizona Western College.

FACILITY NEEDS: Palo Verde College has excellent facilities for basketball and volleyball. For football, baseball, softball, and swimming, the District lacks the fields and facilities. A pool would provide a valuable community asset in a region with an extremely hot climate.



CLANCY OSBORNE PHYSICAL EDUCATION CENTER RIBBON CUTTING MARCH 5, 2008

PALO VERDE SOCCER CLUB



Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	21	23	28	32
Enrollment	462	535	645	736
WSCH	1782	2,043	2464	2811
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	5	1	4	4
Enrollment	31	5	28	28

Note: Projections based on population forecast by SCAG Dec 2008

COURSES

MAT 80	Basic Arithmetic
MAT 81	Arithmetic Fundamentals
MAT 82	Arithmetic Fundamentals w/Lab
MAT 83	Elementary Algebra
MAT 84	Elementary Algebra w/Lab
MAT 85	Supplemental Instruction for Elementary Algebra
MAT 86	Intermediate Algebra
MAT 88	Intermediate Algebra w/Lab
MAT 106	Introduction to Statistics w/Lab
MAT 110	College Algebra

MATHEMATICS, TOP CODE 1701.00

Mathematics is a science of numbers and space configurations and their operations, measurements, relationships, and abstractions. Theoretical topics in computer science, statistics, astronomy, or other sciences may be included when treated as mathematical constructs or used as examples for the applications of mathematical concepts and operations.

Mathematics fulfills an imperative need in the college and the greater community by providing students with a foundation in mathematics. Mathematics fulfills the area B Physical Universe, B4 Mathematics/Quantitative Reasoning, and is a component of a Liberal Arts degree. Mathematics permeates virtually every facet of life and academic study. For example, mathematics are vital to all sciences, medical, technical, information systems, business, building trades are but some examples. As Roger Bacon stated, "All science requires mathematics".

Teaching methodology is increasingly employing electronic teaching/learning technology in smart classrooms, and increasingly using computerized self-paced learning, especially for "home study".

For the 2007 Fall Semester 23 mathematics classes with 535 enrolled. In addition to the 23 classes another 11 math classes were offered through the Learning Skills Center for 1 to 8 students each. The 23 classes had an enrollment range of 5 to 34 students, averaging 22 students. Ten of the classes were offered at the Palo Verde College campus, 13 via Distance Learning. The courses ranged from Basic Arithmetic to College Algebra with a majority of students enrolled in pre-college courses. The Needles Center offered 1 math class for 5 students, an Intermediate Algebra class.

LONG RANGE GROWTH: Mathematical offerings are expected to grow consistent with the overall enrollment growth of the District. This assumes a continuation of the District's practice of non-prescriptive approach to Reading, Writing and Mathematics. The importance of this is reflected in assessment results. For example, for 2007/08 for the PV campus, of the 494 taking the math assessment, 340 (69 %) scored at the Basic Arithmetic Skills Level, conversely only 6 (1%) scored at a level that demonstrated readiness for College Algebra. For the incarcerated population, 510 took the math assessment, of these 331 (59%) scored at the Basic Arithmetic Skills level, none demonstrated a readiness for College Algebra. Of necessity, the Needles Center will have to offer a full range of mathematic courses to enable its students to complete graduation and transfer requirements. This can be accomplished via web casting with the Palo Verde College campus.

FACILITY NEEDS: Mathematics is increasingly being offered in smart laboratories with computer teaching/learning technology. Faculty members expressed a need to teach "face-to-face" with their students.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	6	3*	6	7
Enrollment	49	58	105	125
WSCH	142	175	320	365
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	3	3	4	4
Enrollment	25	13	36	36
WSCH	66	23	80	80

Note: Projections based on population forecast by SCAG, Dec 2008

*Change = Projected growth x 1.5 (Performing Arts Center)

COURSES

MUS 121	Music History & Appreciation
MUS 131	Classroom, Piano I
MUS 132	Classroom, Piano II
MUS 135	Basics of Reading Music
MUS 137	History of Rock
MUS 234	Classroom Piano
MUS 280	Selected Topics in Music

MUSIC, TOP CODE 1004.00

Music consists of the art and technique of combining sounds of various timbres in harmonic, rhythmic and/or melodic forms which are artistically expressed. The creation, performance, significance, and the definition of music vary according to culture and social context. To people in many cultures, music is intrinsically intertwined into their way of life.

Music fulfills an imperative need in the college and the greater community. Music courses fulfill the General Education C1 Arts (Art, Dance, Music, and Theatre) requirement and is a component of a Liberal Arts degree. With the completion of the Fine and Performing

Arts Complex, classrooms and 2 laboratories will be dedicated to Music. The complex includes a 400 seat theatre where music performances can be offered for the college and the community. The complex also includes scenery construction, costume construction and makeup/dressing spaces.



Teaching methodology for Music laboratories remains fairly historically consistent. The exception is commercial music teaching/learning.

For the 2007 Fall Semester 3 Music History and Appreciation classes were offered at the Palo Verde College campus for 58 students, all via Distance Learning. However, 3 non-credit music classes (vocal ensemble) were offered at the Palo Verde College campus for 54 students. At the Needles Center 3 classes were offered for 13 students. In addition 2 non-credit music classes (vocal ensemble) were offered for 5 students.

LONG RANGE GROWTH: Music offerings are expected to significantly exceed the overall growth of the District at both the Palo Verde College campus with the completion of the Fine and Performing Arts complex and the Needles Center – when the Claypool Building reconstruction is completed. Music History and Appreciation classes should be web cast between the College and the Center to enable students to complete degree and transfer requirements.

FACILITY NEEDS: The Phase IV Fine and Performing Arts complex will soon be available at the Palo Verde College campus and laboratories available at the Needles Center. This new facility will include a smart classroom with computer/learning capacity for the offering of Music History and Appreciation.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007, 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	12	7	8	10
Enrollment	283	110	133	151
WSCH	119	79	95	109
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	16	25	25	25
Enrollment	207	261	261	261
WSCH	153	250	250	250
Spring Street	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	63	79	95	109
Enrollment	1138	1052	1269	1448
WSCH	1202	1317	1576	1812

Note: Projections based on population forecast by SCAG, Dec 2008

NON-CREDIT, TOP CODE 4930.00

Non-Credit courses are classified in accordance with their primary objective within the 9 state-supported non-credit categories. These include:

- English as a Second Language (ESL)
- Citizenship for Immigrants
- Elementary and Secondary Basic Skills
- Health and Safety Education
- Substantial Disabled
- Parenting
- Home Economics
- Older Adults
- Short-Term Vocational
- Workforce Preparation

Non-credit courses fulfill a need in the college and the greater community enabling students to gain valuable language, citizenship, basic skills, parenting, workforce preparation, among others vital to enabling them to succeed in the college and/or the community. This is especially true for the population of the greater Blythe and Needles areas as persons are able to attend without having to pay fees or tuition.

Teaching methodology is predominantly open-entry, open exit employing self-paced learning materials. Increasingly, this teaching/learning methodology, employs computer technology. Much teaching is still face-to-face and small groups.

For the Fall 2007 Semester 7 non-credit classes were offered at the Palo Verde College campus for 110 students – the student attendance average was less than 1 WSCH each (.72 hours per week). At the Needles Center 25 non-credit classes were offered for 261 students – the students averaged less than 1 WSCH each (.96 hours per week). At the Spring Street location 79 classes were offered—the students averaged 1.25 WSCH each. Courses offered ranged from Workforce classes, to Music, to ESL, to Physical Conditioning, Parenting, Sewing, Color Decorating, and Cooking.

(continued)

NON-CREDIT (CONT)

LONG RANGE GROWTH: Non-credit offerings and enrollment are expected to grow consistent with the overall enrollment growth of the District at both the Palo Verde College campus (including the Spring Street location) and the Needles Center. The exception may occur when the immigration problem is resolved. If it includes amnesty, non-credit ESL and Citizenship classes will grow substantially for 2 to 3 years.

FACILITY NEEDS: Non-credit courses need the same kind of classrooms, laboratories and teaching/learning technology as credit courses. Increasingly this means smart classrooms/laboratories with computer teaching/learning capability.

COURSES

Palo Verde College (Fall 2007)	
ABE 12	Team Building (1 section)
ABE 15	Conflict Management (1 section)
NBE 13	Crafts & Decorations (1 section)
NBE 68	Supervised Tutoring (1 section)
NBE 76	Vocal Ensemble (3 sections)
Needles Center (Fall 2007)	
ABE 19	Values & Ethics (1 section)
ABE 40	Computers Made Simple (3 sections)
ABE 50	Ensemble of the Big Band Era (1 section)
ABE 72	Vocational Landscaping & Gardening (3 sections)
ABE 88	Aerobics (6 sections)
NBE 41	Cooking Made Simple (3 sections)
NBE 69	CPR & First Aid (1 section)
NBE 76	Vocal Ensemble (2 sections)
NBE 80	Reading & Writing Improvement (1 section)
NBE 97	Life Skills Reading (1 section)
NBE 99	Life Skills Math (2 sections)

Spring Street (Fall 2007)	
ABE 24	CDL Bus Operator License (1 section)
ABE 40	Computers Made Simple (7 sections)
ABE 59	Creative Stitchery (2 sections)
ABE 68	Parenting (2 sections)
ABE 76	Physical Conditioning (3 sections)
ABE 81	ESL Entry Level II (2 sections)
ABE 83	Word Processing (6 sections)
ABE 88	Aerobics (3 sections)
ABE 90	ESL Entry Level I (2 sections)
ABE 99	Accessing the Internet (1 section)
NBE 13	Quick & Easy Crafts & Decorations (3 sections)
NBE 15	Leadership/Supervisory Skill Enhancement (1 section)
NBE 16	Supplemental Skills for N/C ESL (4 sections)
NBE 35	CPR for Healthcare Workers (1 section)
NBE 39	Sewing Made Simple (1 section)
NBE 45	ESL Beginning Level (4 sections)



NURSING, TOP CODE 1230.00

The study of Nursing consists of the principles and techniques for assisting the individual, sick or well, in the performance of those activities contributing to health or to recovery. Nursing is a profession concerned with the total health care of the individual and the family. Nurses practice in homes, schools, clinics, hospitals and other setting where people are in need of health care services.

Nursing fulfills a vital need in the college and the greater community. The District offers a “traditional” Licensed Vocational Nurse Certificate program and a “Fast Track” Licensed Vocational Nurse Certificate program. Both prepare students to become Licensed Vocational Nurses (LVNs).

Teaching methodology is increasingly employing computer teaching/learning technology in the classroom and laboratories for educating nurses and others in the health professions.

For the 2007 Fall Semester 11 nursing classes were offered at the Palo Verde College campus for 151 students, an average of 14 students per class. Class size range was 6 to 18 students. All classes were offered at the campus, other than clinical. No nursing classes were offered at the Needles Center.

LONG RANGE GROWTH: Nursing offerings and enrollments are expected to grow more rapidly than the overall enrollment growth of the District. For example, nursing more than doubled in size from 2003/04 to 2007/08. The Health industry is a growth industry in the United States. There is great demand throughout the country for nurses, especially bilingual and/or bicultural. The major obstacle to growth is clinical slots within reasonable distances – LVN clinicals are already conducted in Indio, Parker and Lake Havasu. A Registered Nursing (RN) degree program would be a major accomplishment for the District. The District needs to include Needles Center students in the program to facilitate service to the Needles community health services.

FACILITY NEEDS: The nursing program needs unique laboratories that fit teaching/learning needs of its courses. The College and the Center should be able to work cooperatively to enable Needles students to complete nursing degree/certificate requirements in the near future.

NURSING LABS



continued

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	5	11		
Enrollment	61	151		
WSCH	388	1,139		
Needles	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	0	0
Enrollment	0	0	0	0
WSCH	0	0	0	0

Note: Projections based on population forecast by SCAG, Dec 2008

NURSING (CONT)

The District needs to include Needles Center students in the program to facilitate service to the Needles community health services. Currently, the nursing program has a dedicated laboratory with 1,030 assignable square feet (asf), and 32 student stations and 197 asf of prep space. The faculty would like for a classroom to be dedicated to the program.

COURSES

NUR 100	Certified Nursing Assistant - Lecture
NUR I01	Certified Home Health Aid
NUR 102	Intro to Anatomy & Physiology for Allied Health
NUR 103	Intro to Pharmacology I
NUR 112	Medical-Surgical Nursing II - Lecture
NUR 114	Understanding Human Growth & Behavior for Licensed Vocational Nursing
NUR 115	Pharmacology for Fast Track LVNs
NUR 116	Fast Track LVN Fundamentals - Lecture
NUR 118	Certified Assistant - Clinical
NUR 127	Medical-Surgical Nursing II - Clinical
NUR 141	Fast Track LVN Fundamentals - Clinical
NUR 250	IV Therapy Techniques for Nurses

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	9	11	13	15
Enrollment	69	94	113	129
WSCH	172	185	223	255
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	2	2
Enrollment	0	0	10	10
WSCH	0	0	18	20

Note: Projections based on population forecast by SCAG, Dec 2008

LONG RANGE GROWTH: In its present format, Office Administration offerings and enrollments will either grow slower than or commensurate with the overall enrollment growth of Palo Verde College and the Needles Center. If the program is brought up to date, it could grow more rapidly than the projected growth of the District. The District could also consider program emphasis in Office Technology, Legal Office Technology, and Medical Office Technology. Offerings in customer service would also serve the communities well – this need was emphasized by Needles community representatives.

FACILITY NEEDS: The program needs a dedicated smart computer driven teaching/learning environment at both Palo Verde College and the Needles Center.

OFFICE ADMINISTRATION, TOP CODE 0514.00

An Office Administration program involves recording and disseminating of information, by manual and/or electronic means, including administrative office practices (keyboarding, computer literacy/ applications, internet usage, e-mailing, scheduling, etc.), global concepts, and office management skills (problem solving, critical thinking, and interpersonal relations).

The Office Administration program fulfills a need at Palo Verde College and the Needles Center and the greater communities they serve by preparing students to assist business leaders and managers for office environments. The program includes Associate Degrees, Administrative Office Assistant and General Office Assistant, and Certificates by the same names. The program needs to be brought up to date to prepare persons for the office environments of the 21st Century (with emphasis on electronic communications and providing assistance via management organization.

Teaching methodology for Office Administration must employ computer teaching/learning technology in a smart laboratory, and teach customer service and team work.

For the 2007 Fall Semester 11 classes were offered at Palo Verde College for 94 students. All were offered at the campus – none via Distance Education. No classes were offered at the Needles Center. The courses offered centered around keyboarding and shorthand.

COURSES

OFA 123	Basic Keyboarding, Part 1
OFA 124	Basic Keyboarding, Part 2
OFA 125	Basic Keyboarding, Part 3
OFA 136	Shorthand, Part 1
OFA 137	Shorthand, Part 2
OFA 138	Shorthand, Part 3
OFA 139	Shorthand, Part 4
OFA 220	General Office Procedures
OFA 223	Keyboarding Processing, Part 1
OFA 224	Keyboarding Processing, Part 2
OFA 225	Keyboarding Processing, Part 3

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	5	4		
Enrollment	66	50		
WSCH	158	108		
Needles Center				
Classes	1	0		
Enrollment	17	0		
WSCH	51	0		

Note: Projections are based on use of new gym and fields (normal change x 2). Non-credit classes at Spring Street include aerobics.

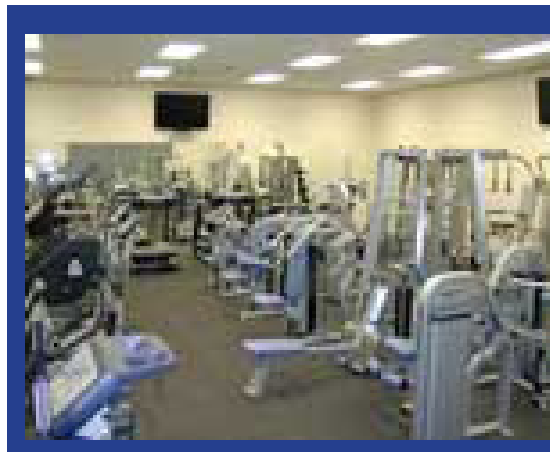
Note: Projections based on population forecast by SCAG, Dec 2008

PHYSICAL EDUCATION, TOP CODE 0835.00

Physical education consists of preparatory skills in fitness, physical activity, and intercollegiate athletics. The discipline includes courses designed to meet the general education requirements for learning lifelong healthful living through appropriate physical activity and theory courses, as well as transfer and physical education teacher and fitness specialist preparation. Physical Education is the only discipline that is directly concerned with motor behavior improving strength, agility, flexibility, and endurance. Sports and recreational programs are only incidental to physical education offerings.

For the Fall 2007 Semester, 4 physical education classes were offered at the Palo Verde College campus with 50 students enrolled, an average of 12 students per class. No classes were offered at the Needles Center. However, at the Spring Street location, non-credit aerobics classes were offered with 76 students enrolled. Also, a weight training class was offered for 15 students, and an Advanced Adaptive Activity class was offered for 20 students. At the Needles Center, 6 non-credit aerobic classes were offered for 55 students.

Physical education fulfills a college and community need for teaching/learning lifelong fitness and recreation activities and health education. For some transfer programs, physical education fulfills a general education requirement. An adaptive program would also increase student enrollment in P.E. classes. The Claypool Building should result in a growth of P.E. classes at the Needles Center. The District needs to develop an Adaptive Physical Education program for its Disabled Student population.



**FITNESS CENTER
OPEN TO PUBLIC IN
NOVEMBER 2008**

COURSES

PHE 101/102/103	Bowling
PHE 117/118/119/120	Aerobics
PHE 131/132/133/134	Weightlifting
PHE 140	Adaptive Water Activity
PHE 174/177/179	Golf
PHE 180	Sport Psychology

PHYSICAL EDUCATION (CONT)

LONG RANGE GROWTH: With the use of the new gym and fields at Palo Verde College, physical education will grow much more rapidly than the overall enrollment of the District. If the District elects to require one or more physical education classes for graduation, the discipline will grow even more rapidly.

FACILITY NEEDS: At the Palo Verde College campus a classroom/lab is needed for the teaching of First Aid and Health courses. A lab activity room is needed at the Needles Center to offer a variety of activity classes.



Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	4	5	6
Enrollment	42	91	110	125
WSCH	126	274	330	377
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2022
Classes	1	0	1	1
Enrollment	6	0	8	8
WSCH	18	0	24	24

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

PHI 100	Intro to Philosophy
PHI 105	Comparative World Religions

PHILOSOPHY, TOP CODE 1509.00

Philosophy is the critical examination of categories of human thought for describing reality, the nature and context of human experience, the methodology of rational inquiry and criteria of practice, including ethics, esthetics, logic, and the history of ideas.

Philosophy fulfills a need in the college and the greater community by teaching students the love and search for truth and the pursuit and the attainment of wisdom – the heart of the college/ learning experience. Philosophy courses fulfill General Education requirements for graduation and transfer – A3 Critical Thinking and C2 Humanities. Courses also qualify as components of a Liberal Arts major.

Teaching methodology continues to be largely lecture/discussion with Socratic methodology still prevalent.

For the 2007 Fall Semester, 4 classes were offered at the Palo Verde College campus, none at the Needles Center. The 4 classes were all offered through Distance Learning, class size range of 13 to 29 students.

LONG RANGE GROWTH: Philosophy offerings are expected to grow consistent with the overall growth of the District. The District needs to generate one or more course offerings at the Palo Verde College campus and the Needles Center, probably employing web casting.

FACILITY NEEDS: Philosophy classrooms should be designed with seating arrangement flexibility for small group discussions. Classrooms should be “smart” and enable students to use electronic devices – either wire or wireless.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	2	2	3
Enrollment	42	37	45	51
WSCH	156	111	134	153
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	1	1
Enrollment	0	0	6	6
WSCH	0	0	18	18

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

POS 145	American Political Institutions
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POLITICAL SCIENCE, TOP CODE 2207.00

Political Science is the study of the description and analysis of political institutions and processes. This includes the origin, development, geographic units, forms, sources of authority, powers, purposes, functions and operations of government and related theories of social benefit.

Political Science fulfills a need in the college and the greater community by helping students to understand the purposes and government processes. As James Madison wrote, "What is government itself, but the greatest of all reflections by human nature? If men were angels, no government would be necessary". Obviously, government is still needed, and it is best for citizens to understand it. There is a lot of truth in Joseph DeMaistre's statement, "Every country has the government it deserves". Political Science is important because politics is important – people's lives are affected by what governments do or choose not to do, and by the power structure that exists in society. Political Science courses fulfill the State requirements – U.S. Constitution and Local Government for graduation and transfer. It is also a component of a Liberal Arts major.

Teaching methodology for political science is best served by "smart" classrooms, with capacity for a student to employ electronic devices either wired or wireless.

For the 2007 Fall Semester 2 classes were offered at the Palo Verde College campus, none at the Needles Center. Of the 2 classes, 1 was taught at the PV campus and 1 via Distance Education. The class at the PV campus had 12 students, the DE 25.

LONG RANGE GROWTH: Political Science course offerings are expected to grow consistent with the overall enrollment growth of the District. It is imperative that one or more Political Science classes be offered at the Needles Center for graduation/transfer purposes – probably via web casting technology.

FACILITY NEEDS: Smart classrooms with a capacity for students to employ electronic devices are needed.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	9	8	10	11
Enrollment	187	162	195	223
WSCH	561	480	579	660
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	2	1	2	2
Enrollment	22	12	24	24
WSCH	66	36	72	72

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

PSY 101	General Psychology
PSY 110	Personal & Social Adjustment
PSY 115	Human Sexuality
PSY 145	Human Relations
PSY 155	Intro to Statistical Analysis
PSY 210	Abnormal Psychology
PSY 220	Counseling and Interviewing

PSYCHOLOGY, TOP CODE 2201.00

Psychology is the study of objective behavior and subjective experience of human beings.

Psychology fulfills a need in the college and the greater community by teaching students to begin to understand human behavior. Psychology courses fulfill General Education requirements for graduation and transfer: Area D, D9 and Area E. It is also a component of a Liberal Arts degree.

Teaching methodology is predominately lecture/discussion. Smart classrooms/labs are becoming increasingly prominent.

For the 2007 Fall Semester 8 classes were offered at the Palo Verde College campus and 1 class at the Needles Center. The 8 classes included 162 students. Of the 8 classes, 2 were at the Palo Verde campus and 6 via Distance Learning. The 2 classes had 12 and 26 students. The Needles Center class had 12 students enrolled.

LONG RANGE GROWTH: Psychology offerings are expected to grow consistent with the overall enrollment growth of the District. Offerings for the Needles Center need to increase to enable students to complete General Education requirements for graduation/transfer – web casting would help enable this to happen.

FACILITY NEEDS: Psychology classrooms/labs need to be designed for maximum flexibility, smart and the capacity for students to use electronic devices – either wired or wireless.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	4	5	6
Enrollment	0	61	74	84
WSCH	0	209	252	288
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	1	1
Enrollment	0	0	6	6
WSCH	0	0	24	32

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

RDG 84	Beginning Reading with Lab
RDG 86	Intermediate Reading with Lab
RDG 94	Beginning Reading
RDG 96	Intermediate Reading

READING, TOP CODE 4930.70

Reading consists of assisting students to improve their basic reading skills in order to comprehend college level materials, e.g.: to grasp main ideas, supporting details, and draw inferences from written materials. Reading also improves student understanding of words as well as study and critical thinking skills. These are vital to success as a college student.

Assessment results showed most students entering Palo Verde College, Needles Center and the Distance Learning program were at the pre-collegiate reading level, however for the Fall 2007 Semester only 61 students enrolled in 4 reading classes, 2 classes at Palo Verde College and 2 in the Distance Learning program. No reading classes were offered at the Needles Center.

Reading fulfills an imperative need in the college and the greater community by enabling students to be able to comprehend more difficult reading materials (college level). This is essential to the success of a democratic society where literacy is paramount.

Teaching methodology is increasingly employing computer teaching/learning technology. Computer driven labs will become increasingly more prominent in the teaching of reading. The Learning Skill Center is a prominent component of improving student reading skills.

Class size for the 4 reading classes ranged from 10 to 18 students; the average size being 15.

LONG RANGE GROWTH: As long as the District maintains a non-prescriptive position regarding students entering without college level reading skills, Reading offerings are expected to grow consistent with the overall enrollment growth of the District. The need for increased reading instruction is reflected in assessment results. For example, for 2007/08, of the 333 students who took the reading assessment instrument, 205 (62%) scored at the Basic Reading Skills level. The Needles Center must address this need by commencing to offer Reading classes.

FACILITY NEEDS: Reading labs need to be designed to accommodate computer teaching/learning technology. Reading by its nature can be conducted in an independent learning environment. It also is a component of learning skills.

REGISTERED NURSING, TOP CODE 1230.10

Registered Nursing degree programs (ADN) lead to licensing by the Board of Registered Nursing. It includes nursing care in specialty areas.

Registered Nursing (ADN) would fulfill a need at both Palo Verde College and the Needles Center and their greater communities by preparing RNs for the local health industry. As the ADN program is a degree offering, it would contribute to increasing student enrollment in General Education courses, especially the sciences at both locations

Teaching methodologies for RN programs have to prepare students for increasing use of computer/electronic technology in health care.

Health care is a growth industry in the United States. In fact; it is a world wide growth industry. In this nation it is driven by both supply and demand. The shortage of RNs is forecast to reach 500,000 by 2025. It is estimated that there is a need for an additional 30,000 graduates each year to meet the nation's health care needs, an expansion of 30 percent. The nursing population is an aging one, e.g., the ratio of RNS in their 40's to RNs in their 20's is 4 to 1. Within 10 years, 40 percent of working RNs will be 50 years of age or older.

Needles community leaders cited Registered Nursing as a critical need. Currently, Needles residents must commute to either the Bullhead City or the Lake Havasu Campus of the Mohave College District to study nursing. This is an impossible commute for students with limited financial means. It currently costs Mohave College residents \$900 per semester for fees (for 15 units), and an additional \$865 per semester special fee for the ARN program. Other "nearby" community college districts that offer ARN degree programs include Imperial College, College of the Desert and Victor Valley. None of these colleges is able to admit all of the eligible students wanting to become RNs.

One of the arguments frequently heard against RN programs is its cost for faculty, staff, specialized facilities, and expensive equipment. These assertions are true; however, if the cost analysis is based upon student completers, nursing is an average cost program. The reason is simple, the high completion rate for ADN programs as compared with other programs. Furthermore, they go to work in the field for which they prepared, jobs are waiting. Also, the health care industry tends to financially support ADN programs.

To validate the need for RNs in the Palo Verde and Needles areas, a short Needs Assessment Survey could be conducted. The results of this survey could be the foundation of the development of an Associated Degree Nursing (ADN) Program. Two options should be considered when developing this program. Option one would be to develop a Multiple-Entry-Exit Program (MEEP) and Option 2 would be to develop an LVN to ADN Transition Program that is separate from the current VN Program. Implementing either of these options would necessitate limiting the VN Program to one initiative and ultimately compromising the quality of the graduates. It is important that Palo Verde CCD begin taking the appropriate steps to meet current and future community needs for highly qualified nurses.

OPTION 1 -MULTIPLE-ENTRY-EXIT PROGRAM

Developing a Multiple-Entry-Exit Program (MEEP) would provide the most flexibility for students while providing the greatest efficiency for the College. All students would meet the same admission requirements and be admitted to the Nursing Program with defined criteria for continuing progression to each successive program level defined within the program itself. The curriculum could be designed to be completed in four long semesters and one 12 week summer session. Students who successfully completed the first semester could be credentialed as Certified Nurses' Aides (Fall Semester).

Students who met established criteria and progressed to the next two semesters would be eligible to become Licensed Vocational Nurses {Spring Semester and 12 week Summer Semester). Students who met additional criteria and wished to pursue licensure as a Registered Nurse would complete the fourth and fifth semesters (Fall and Spring). Obviously this would eliminate the two track VN Program and fuse it into one system. Thirty students would continue to be admitted to the Nursing Program with the hope that at least twenty of the original thirty would complete all five semesters and go on to be licensed as Registered Nurses. In addition to the thirty students admitted directly into the first semester of the MEEP, LVNs from the community who had been practicing for many years would also be interested in coming back to school and attaining licensure as a Registered Nurse. This cohort could begin the program in the summer with a special Transition course and then continue with the generic students in the Fall and Spring, finishing the program in just one year. Both the total number of students and the total number of courses, both nursing and general education courses, would be increased. Methods of curriculum delivery could be a combination of face- to-face, on-line, and selected use of web casting.

(continued)

REGISTERED NURSING (CONT)

The biggest disadvantage of this approach is that none of the current faculty is prepared at even the Bachelor's degree level and the Master's degree is required for all ADN faculty. This program would still provide the students with the most flexibility and the College with the most efficiency but It may not be feasible in the short-term. However, as new nursing faculty members are hired strong preference should be given to those applicants with at least Bachelor's degrees and current faculty should be encouraged by financial assistance from the College to begin working on advanced degrees.

OPTION 2 LVN TO ADN TRANSITION PROGRAM

An LVN-ADN Transition Program could be implemented with separate admission criteria but with a curriculum built on what the LVN's have already mastered both in theory and clinical. In general, admission criteria for this type of program include some requirement for work experience is usually a minimum of one year) in a direct patient care setting. These students could begin their curriculum in the summer with a short 8 week LVN to ADN Transition course and then continue in the fall and spring graduating one year after program enrollment. This program could be implemented with an initial enrollment of ten students with expansion to fifteen or twenty if there was a demand and available faculty and clinical facilities.

The advantage of this approach is that current faculty could be used to continue the VN Program and additional Master's prepared faculty could be hired to teach the Transition Program. However there would need to be separate administrative oversight of this program as well as separate budgetary management.

PROGRAM IMPLEMENTATION

The two most common factors constraining growth in ADN Programs are difficulty in recruiting and retaining faculty and lack of clinical space. Faculty recruitment poses many challenges, especially in a rural area, but the key to success is to take the individuals that are in the area and provide assistance and support for them to gain the educational credentials and clinical expertise that is needed for quality nursing programs. Clinical space can now be supplemented by the use of high tech manikins for simulated clinical experiences. Palo Verde College could partner with Palo Verde Hospital and submit a grant proposal to purchase some of these expensive pieces of equipment to establish a regional simulation center. Many federal grants from the DOE, the DOL, and Rural Affairs are available to assist remote areas such as Blythe and Needles. Palo Verde Hospital in Blythe with 55 beds and

Colorado River Medical Center in Needles with 25 critical access beds would not be adequate clinical facilities to support an RN Program. Alternative clinical sites would have to be located and students would have to travel for a significant number of experiences. Yuma would undoubtedly provide access to appropriate learning experiences for the Palo Verde cohort. Bullhead City with Valley View Medical Center 154 beds) and West Arizona Regional Medical Center (139 beds) should have adequate experiences available for the Needles students. It is common practice for nursing schools located close to state lines to use facilities on either side of the border. Of course clinical contracts would have to be negotiated but this should not be a problem for such a small number of students. Using clinical facilities in larger cities might also allow the College to employ more qualified hospital staff members as clinical faculty which would be very helpful to the program.

No matter which program design is chosen all courses should be made available through the on-line or ITV delivery modes to both campuses. The BRN may want to have the program established on the Blythe campus and then expand the courses to the Needles Center.

The steps in receiving approval from the California Board of Nursing for a new ADN Program are outlined in detail in the document "Guidelines for Proposed New Programs to Prepare Students for Registered Nursing Licensure" found on the BRN website. Step 1 is to submit a Letter of Intent to the BRN. Step 2 is to submit a detailed feasibility study which is a report on the assessment of need for the proposed program. This is an opportunity to promote community involvement by establishing an Advisory Committee for the Program. All current and potential stakeholders, particularly health care agencies, should be invited to be members of the committee. They can assist with the feasibility study, curriculum development, faculty recruitment, and program support. This support can be everything from donating equipment and supplies to providing student scholarships, to providing actual faculty or salary for a faculty member. Once the feasibility study has been reviewed and approved, a Program Director can be employed; the current Associate Dean of Nursing has the required degree and experience for the ADN Program Director position and could do all the preliminary work and then assume this role permanently or until a qualified director could be employed. The BRN will appoint a Nursing Education Consultant to begin working closely with the College to complete the approval process.

(continued)

REGISTERED NURSING (CONT)

LONG RANGE GROWTH: A Registered Nursing program would experience rapid growth initially and consistently grow as the enrollment of the District increases.. It would keep Blythe and Needles residents from having to leave the area to become RNs, and attract students from nearby areas where programs cannot take all eligible students and from where there is no ADN program, e.g., Barstow, Laughlin, Yucca Valley and Twenty-Nine Palms.

The major problem to overcome is clinical sites – however, this can be accomplished and should not prevent a decision to move forward.

FACILITY NEEDS: The Palo Verde College nursing laboratory would need to be upgraded with the latest computer technology, especially the various simulators available for health programs. As community college ADN programs prepare nurses for the hospital patient room, this is vital. A nursing laboratory would also need to be established at the Needles Center. There are quality ADN program models available at nearby colleges, e.g., College of the Desert.

This is a needed program that the District should implement within the next 5 years, no later than 2014/15.

FUNDING: The Assembly passed “Economic Stimulus Bill” provides federal funding for nurse training and education. The Act includes some \$500 million for education and training for health professionals. Nursing associations are asking for at least \$100 million – these funds are for loan repayments and for nurses who work in underserved areas or teach in nursing schools. Stimulus funds include an additional \$171 million to support nursing programs to address the critical shortage of nurses.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	7	4	5	6
Enrollment	124	83	100	114
WSCH	342	240	289	330
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	1	1	2	2
Enrollment	10	10	2020	60
WSCH	30	30	60	60

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

SOC 101	Intro to Sociology
SOC 111	Marriage and The Family

SOCIOLOGY, TOP CODE 2208.00

The study of Sociology consists of the study of human society, social institutions, and social relationships. This includes such things as the development, purposes, structures, functions, and interactions of human groups.

Sociology fulfills an important need in the college and the greater community by assisting students to understand social institutions and human relationships. Sociology courses fulfill General Education requirements for graduation and transfer: Area D, D7 and D10 and Area E. Sociology courses are also a component of a Liberal Arts Degree.

Teaching methodology increasingly employs computer teaching/learning technology in the classroom/lab.

For the 2007 Fall Semester 4 Sociology classes were offered at the Palo Verde College campus, all taught via Distance Learning. Class size ranged from 12 to 27 students for a total of 83 students. One class was offered at the Needles Center, 10 students.

LONG RANGE GROWTH: Sociology course offerings are expected to grow consistent with the overall enrollment growth of the District. Class offerings at both the Palo Verde campus and the Needles Center could be enhanced by web casting classes.

FACILITY NEEDS: Sociology needs "smart" classrooms/labs with capacity for students to employ electronic devices.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	7	3	4	4
Enrollment	92	61	74	84
WSCH	442	305	368	420
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	1	0	1	1
Enrollment	8	0	8	8
WSCH	24	0	24	24

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

SPA 101	Elementary Spanish I
SPA 102	Elementary Spanish II
SPA 115	Spanish for Spanish Speakers
SPA 130	Conversational Spanish I

SPANISH, TOP CODE 1105.00

Spanish consists of the study of the language, literature, and culture of Spanish-speaking people.

Spanish fulfills a need in the college and the greater community by helping students to communicate orally and read Spanish, and have a grasp of the Spanish culture. As the population of the greater Blythe area is made up with a majority having Spanish ancestry, its study is vital. Spanish courses fulfill the General Education C2 Humanities requirements as well as being a component of Liberal Arts and General Studies degrees. As America is part of the Global economy, languages are vital to international trade and commerce.

Teaching methodology for language is increasingly employing computer teaching/learning technology in smart classroom/labs.

For the 2007 Fall Semester 3 Spanish classes were offered at the Palo Verde College campus, 1 at the campus and 2 via Distance Learning. Sixty-one students were enrolled, an average of 20 students per class, and with a range of 13 to 28. No classes were offered at the Needles Center.

LONG RANGE GROWTH: Spanish offerings and enrollment are expected to grow consistent with the overall enrollment growth of the District. Spanish courses need to be offered at the Needles Center to enable students to complete language requirements for transfer purposes – via web casting from the PV campus.

FACILITY NEEDS: Smart classrooms/laboratories with computer teaching/learning capability. Computerized self-paced learning is needed.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	4	6	7	8
Enrollment	94	129	156	178
WSCH	282	387	467	533
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	1	1
Enrollment	0	0	6	6
WSCH	0	0	18	18

Note: Projections based on population forecast by SCAG, Dec 2008

SPEECH, TOP CODE 1506.00

Speech consists of theory and methods of group communication and public address, including the development and use of language and the analysis of speech and other communication behaviors and actions.

Speech fulfills an important need in the college and the greater community by teaching students to research topics and then organize and deliver oral presentation on findings. Speech also fulfills a General Education requirement for graduation and CSU and UC systems: Area A1, Oral Communication and A3 Critical Thinking. As a result, Speech will continue to be vital for student learning.

Teaching methodology is increasingly employing electronic technology in the teaching/learning process. Smart classrooms/labs will be used increasingly in the future for the teaching/learning of speech.

Class size at Palo Verde College averaged 32 students for the Fall 2007 Semester. Of the 6 classes offered, 2 were at the Palo Verde campus and 4 via Distance Learning. No classes were taught at the Needles Center.

LONG RANGE GROWTH: Speech class offerings are expected to grow consistent with the overall enrollment growth of the District. Of necessity, the Needles Center must offer one or more Speech classes each semester to enable students to complete degree/transfer requirements – probably through web casting from the Palo Verde campus.

FACILITY NEEDS: At least one classroom/lab at the Palo Verde campus needs to be equipped with appropriate electronic technology for teaching/learning speech.

COURSES

SPE 101	Introduction to Speech
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Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	3	3*	7	8
Enrollment	26	18	44	50
WSCH	111	81	196	225
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	1	1
Enrollment	0	0	6	6
WSCH	0	0	18	18

Note: Based on completing Performing Arts Center - change = (projected population change x 2)

Note: Projections based on population forecast by SCAG, Dec 2008

COURSES

THA 110	Intro to Theatre
THA 120	Acting Theory for Theatre Performance
THA 280	Selected Topics in Theatre Arts

THEATRE ARTS, TOP CODE 1007.00

The study of Theatre Arts (Dramatic Arts) consists of dance, theatre and interpretation. Theatre is a diverse and complex act. It requires collaboration among many artists, crafts people, and managers. Production elements include costumes, scenery, properties, music, and choreography. Lighting and sound are more recent additions.

Theatre Arts fulfills an imperative need in the college and the greater community. Theatre Arts 110 fulfills the General Education C1 Arts requirement and is a component of Liberal Arts and General Studies degrees. With the completion of the Fine and Performing Arts Complex, classrooms will be available as well as a dedicated laboratory. The Complex includes a 400 seat theatre where dramatic arts performances can be offered.

Teaching methodology for dramatic arts remains historically consistent. The teaching/learning process for Intro to Theatre increasingly employs smart classroom/labs and computer teaching/learning technology.

For the 2007 Fall Semester 3 Theatre Arts classes were offered at the Palo Verde College campus, none at the Needles Center. The classes ranged in enrollment from 1 – 9 students, an average of 6 per class. All were offered at the PV campus.

LONG RANGE GROWTH: Theatre Arts offerings and enrollments are expected to significantly exceed the overall growth of the District at the Palo Verde College campus when the Fine and Performing Arts Complex is completed. Theatre Arts general education courses should be web casted to the Needles Center to enable Needles students to complete degree and transfer requirements.

FACILITY NEEDS: The necessary laboratory and classroom(s) will soon be available at the Palo Verde College campus and a laboratory available at the Needles Center.

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	2	2	3
Enrollment	0	26	31	36
WSCH	0	78	94	107
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	0	0
Enrollment	0	0	0	0
WSCH	0	0	0	0

Note: Projections based on population forecast by SCAG, Dec 2008

WATER TECHNOLOGY, TOP CODE 0958.00

The study of Water Technology consists of the principles, technical skills and equipment used to process, purify, store and distribute potable water, and dispose of waste water. It includes the design, construction, operation, and maintenance of equipment for water and waste water treatment systems.

Water Treatment fulfills a need in the college and the greater communities by preparing students for the imperative tasks of processing potable water and disposing of waste water in an environmentally safe process. Water is rapidly becoming an urgent utility commerce.

Teaching methodology for Water Treatment at Palo Verde College has yet to evolve – no classes were taught at the PV campus or the Needles Center.

For the 2007 Fall Semester 2 Water Treatment classes/courses were offered by the Palo Verde College campus via Distance Education. The 2 classes had a total of 26 students, 14 enrolled in WTE Fundamentals of Drinking Water Treatment and 12 in WTE Principles of Waste Water Treatment.

LONG RANGE GROWTH: Water Treatment offerings are expected to grow consistent with the overall enrollment of the District. This could change in future years with the development of degree/certificate programs and a laboratory for the discipline.

FACILITY NEEDS: Water Treatment needs a laboratory uniquely designed for teaching/learning this discipline.

COURSES

WTE 105	Fundamental Drink Water Treatment
WTE 110	Principles of Wastewater Treatment

Palo Verde Community College District				
Enrollment and WSCH for 2003, 2007 2015 and 2020 Fall Semester				
Students	Fall 2003	Fall 2007	Fall 2015*	Fall 2020*
Enrollment	4,547	4,717	5,688	6,490
WSCH	21,226	24,655	29,734	33,925
Palo Verde College	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	11	5	6	7
Enrollment	114	73	88	100
WSCH	585	365	440	502
Needles Center	Fall 2003	Fall 2007	Fall 2015	Fall 2020
Classes	0	0	0	0
Enrollment	0	0	0	0
WSCH	0	0	0	0

Note: Projections based on population forecast by SCAG, Dec 2008

WELDING TECHNOLOGY, TOP CODE 0956.50

Welding Technology consists of the study of welding techniques, processes, and equipment applied in accordance with diagrams, blueprints, or other specifications.

Welding fulfills a need in the college and the greater community by offering a Certificate program that prepares students to gain certification. The program and facility have been certified by the American Welding Association.

Teaching methodology incorporates both classroom and laboratory. Welding technology is increasingly impacted by computer technology. What and how welding teaching/learning are kept current by an active Advisory Committee from the industry.

For the 2007 Fall Semester 5 Welding classes were offered at the Palo Verde College campus with 73 students enrolled, a range of 9 – 21 students with average class size of 15. No Welding classes were offered at the Needles Center.

LONG RANGE GROWTH: Welding Technology offerings and enrollments are expected to grow consistent with the overall enrollment growth of the District and the PV campus. No classes are expected at the Needles Center.

FACILITY NEEDS: As the Technology Building at the Palo Verde College campus is relatively new, it has excellent laboratory and classroom environments and equipment.

COURSES

WEL 100	Oxyacetylene Gas Welding
WEL 101	Shielded Metal ARC Welding
WEL 102	Basic Gas Metal ARC Welding (MIG)
WEL 200	Advanced Shielding & Gas Metal ARC (MIG) Welding
WEL 201	Advanced Tungsten ARC Welding (TIG)

VICE PRESIDENT OF STUDENT SERVICES

The Vice President of Student Services is responsible for district-wide services to assist students. These services include:

- Admissions & Records
- Counseling/Academic Advisement
- EOPS/CARE
- DSP&S
- Student Activities
- Financial Aid
- CalWORKS
- Transfer/Career Centers
- Assessment
- Orientation
- Outreach
- Student Conduct
- Student Grievances

At other colleges, services such as Food, Bookstore, Sports and management of Student Center type facilities are often found in Student Services. Where there are residence halls, their management tends to be that of Student Services.

Student Services experiences an exceptional busy time at the beginning of each instructional semester and intersessions. This occurs mainly with the matriculation process: admissions, orientation, assessment, advisement, and registration. These are complicated at Palo Verde College resulting from the Spring Street site, the Needles Center, the Instructional Services Agreements and prisons. The Vice President must ensure that these services work harmoniously so that there is an efficient flow of students through the process. This necessitates the Vice President being located within the facility where these services are housed. It is typically a hands-on position.

Actually, there is never a down-time for student services. There are only times when it is busier than others.

Typically, community colleges such as Palo Verde have few student behavior problems, but they do occur. Therefore, student conduct is typically handled through this office. It is the responsibility of the Vice President to publish a student handbook detailing student conduct, student grievance, privacy rights processes and then manage the process to ensure fair and equal treatment.



DIANA RODRIGUEZ

**VICE PRESIDENT
STUDENT SERVICE**

STUDENT SERVICES STAFF:

VICE PRESIDENT	1
EXECUTIVE SECRETARY	1
MATRICULATION SECRETARY	1

LONG RANGE GROWTH: The Office of Vice President of Student Services is expected to grow consistent with the enrollment and growth rate of the District.

FACILITY NEEDS: The Office of the Vice President of Student Services is located where it should be, on the lower floor of the Palo Verde College Service Building within the Student Services area. The problem is this location is insufficient to house all of the matriculation services and certainly not in a logical organization. The Vice President and Student Service facility needs to be addressed for the Needles Center.

ADMISSIONS AND RECORDS

The Palo Verde College Admissions and Records Service provides these services for students:

- Admissions of entry and re-entry students
- Registers students into classes
- Adds/drops classes for students
- Collects and enters student attendance
- Submits various state reports, e.g., 320 Attendance Report
- Collects and enters student grades
- Maintains/ensures integrity of student transcripts
- Admissions of international students
- Evaluates student transcripts from other colleges/universities
- Performs graduation audits
- Issues diplomas/certificates
- Mails transcripts upon request
- Maintains record storage of student records, including rosters and attendance
- Processes student probation/dismissal
- Mails grades to students
- Issues refunds

These services are for the total district student population. Admissions and Records personnel are typically the first college representatives new and re-entry students encounter through the admissions process. All of the above listed services fulfill a vital need in the college and the greater community. It is especially vital that the first encounter for students is a satisfying one. Whether or not a student proceeds to registration and continues his/her college studies is directly affected by this first encounter, and whether or not there is someone the student can turn to when in need.

Admissions and Records is a crucial first component of the matriculation flow for students:

1. Admissions and Records
2. Orientation
3. Assessment
4. Advisement
5. Financial Aid/EOPS/CARE/DSP&S
6. Follow-Up



It is imperative that these services be located so that a logical flow is created for the student. This is often referred to as a “one-stop shop”. What this means is a student can get these services in one location.

Admissions and Records also works closely with Distance Education and off-campus sites, including Centers to ensure accountability and records integrity.

Methodology for Admissions and Records is to employ computer data entry, storage and retrieval wherever possible. Working with students and faculty is still an important customer service interaction.

Long Range Growth: Admissions and Records are expected to grow consistent with the enrollment growth rate for the District. With 5 FTE employees the service is probably understaffed, but economics drives these decisions. The growth of the Needles Center will necessitate services at that location.

Facility Needs: The space in the Palo Verde College Service Building does not meet the space or the matriculation process needs for these services. For example, orientation and assessment are located in the Classroom Building and EOSP/CARE and DSP&S are located on the second floor of the College Service Building in library space. There is no room for expected growth.



MALINDA WALNOHA (REGISTRAR), SELLY HAMILTON (ASSISTANT TO THE REGISTRAR), AND SUZIE WOODS (ADMISSIONS AND RECORDS SPECIALIST)

COUNSELING

The Palo Verde College Counseling program consists of 3 counselors and 1 support staff member, plus an adjunct counselor at the Spring Street site. One of the counselor positions is a bilingual counselor and another serves as the articulation officer (.20) for the District. The counseling program provides an array of services for students. These include:



DAVID SILVA, BILINGUAL COUNSELOR
 HORTENSIA RIVERA, DIRECTOR/COUNSELOR
 IRMA DAGNINO, COUNSELOR
 INTERVIEWED BY DR. JIM PELL

- Academic Advising
- Student Education Plans (SEP)
- Orientation
- Probationary Students Counseling
- Transfer/career Center
- Articulation
- Crisis Intervention
- Admissions Applications
- Referral to off-campus services
- Follow-up for academic progress
- Personal/Career Counseling

The matriculation flow at Palo Verde College begins with completing and submitting the application for admission through the counseling service. Every student meets with a counselor (could be an EOPS/CARE or DSPS counselor) before registering for classes. The completion of the Student Education Plan is a vital component of the process – it is essential for financial aid and veteran's benefits that these are completed on a timely basis. This requires close working relationships between Admissions and Records, Financial Aid and Counseling (including EOPS/CARE & DSPS).

LONG RANGE GROWTH: It is expected that the Counseling service will grow at a rate consistent with the enrollment growth rate of the District. The Needles Center will of necessity need to staff the assorted student services to facilitate the matriculation process for its students.

FACILITY NEEDS: The Student Services space in the College Services Building at the Palo Verde College campus is already over-extended. Normal growth, or new programs such as the Title III Grant, will not find available space. It is necessary that this be addressed, and yet maintain the integrity of the matriculation process for students. Computer technology is of paramount importance for counseling services.



**HAPPY PAIR
PALO VERDE COLLEGE STUDENT
AND DAUGHTER
PARTICIPANTS IN THE CALWORKS
PROGRAM**

CALWORKS

California Work Opportunities and Responsibilities to Kids (CalWORKS). CalWORKS provides temporary financial assistance and employment for parents who meet certain requirements. Included among these are:

- Reside in California and intend to stay
- Have children, under 13 years of age, with one or both parents absent from the home, deceased or disabled
- Have a net monthly income less than the maximum aid payment for families
- Provide proof of regular school attendance for all school age children
- Participate with welfare-to-work activities

Recipients who are enrolled in a degree or certificate program at Palo Verde College may be eligible for job assistance and child care benefits. The program assists with child care for children less than 13 years of age, books and supplies and assistance with resume preparation and job placement. CalWORKS students are encouraged to participate in the matriculation process at Palo Verde College: orientation, assessment, advisement, financial aid.

The CalWORKS program at Palo Verde College has a half-time coordinator for 37 students, 33 at PV and 4 at the Needles Center.

LONG RANGE GROWTH: CalWORKS is a county program that depends upon state funding sources. It is expected that the program will grow consistent with the enrollment growth rate of the District.

FACILITY NEEDS: The program requires an office located in the matriculation process close to the EOPS/CARE program. It requires office space located where clerical support is accessible.

DSP&S

The DSP&S program was established at Palo Verde College to accommodate the learning and support needs of students with disabilities, as mandated by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. The Palo Verde College Disabled Students Program and Services (DSP&S) is designed to provide assistance for students with physical psychological, or learning disabilities. A wide range of services are provided to qualified students. These include:

- Peer Counseling
- Priority Registration
- Test-taking Accommodations
- Sign Language Interpreters
- Campus-community liaison
- Note Taking Assistance
- Tutors
- Academic Advisement
- Specialized Counseling
- Assistive Technology Center
- Mobility Assistance on Campus
- Adaptive Equipment
- Tape Recorder Loan Programs
- Adaptive Physical Education
- Learning Disability Assessment

For the Fall 2008 Semester 197 students participated in the Palo Verde College DSP&S program:

Blythe Campus	133
Needles Center	13
Inmates	51

The program has a director, secretary and 2 adjunct counselors (19 hours per week each) and an array of note takers, interpreters, and tutors as needed. The program is located on the second floor of the Palo Verde College Services Building behind the EOPS/CARE program in library space.

LONG RANGE GROWTH: The DSPS program is expected to grow more rapidly than the enrollment and growth rate for the District, e.g., over Fall 2007. An adaptive P.E. program at the Palo Verde College campus and the accessible

Claypool Building at the Needles Center will increase disability student participation. The potential inmate disabled student population is huge.

FACILITY NEEDS: The Palo Verde College DSP&S location on the second floor of the Services Building reflects the insufficiency for space of the Student Service program. The DSP&S program needs to be located in the matriculation process, preferably in close proximity to, and on the same floor level with, EOPS/CARE – these programs share students and services. The program at both the Palo Verde campus and the Needles Center needs assistance technology space and test-taking accommodations. Security and accessible storage space is necessary for assorted learning devices, equipment and mobility equipment.



**DSP&S COORDINATOR, COUNSELOR
STEVE LAVIGNE AND IDA NARANJO-HAMBLEN,
SECRETARY**

EOPS/CARE

The Extended Opportunities Program and Services (EOPS) program came into being in 1969 to provide access and educational equity for economically and educationally disadvantaged students. The program has been highly successful in improving graduation rates – it was later joined by the Cooperative Agencies Resources for Education (CARE) program to provide assistance for single head of households.

The EOPS program at Palo Verde College functions as an integral component of the matriculation process for economically and educationally disadvantaged students: for 2008 Fall Semester 325 students at the Palo Verde College campus, 32 at the Needles Center and 653 inmates, more than a thousand students (participated in the program). The program provides these services for students:

- Academic/Counseling/Advising
- Student Education Plan
- Career Planning
- Transfer Assistance
- Peer Counseling
- Book Grants
- Priority Registration
- Crisis Intervention
- Progress meetings 3 times per semester
- Referral to off-campus services
- Follow-up

The EOPS program has a staff of:

Director	0.50
Counselors	2.50 (0.5 of the Director)
Part-Time Advisors	2.00
Secretary	0.75

The CARE program functions as a component of the EOPS program and provides these services:

- Financial assistance for child care and transportation
- Academic and Personal Counseling
- Book services
- Parenting Skills

To participation in the CARE program a student must qualify for the EOPS program and be a single parent receiving assistance from CalWORKS. The children must be under 14 years of age.

For Fall 2008, the CARE program provided assistance to 41 students with a total of 94 children: 38 students at the PV campus and 3 at the Needles Center. CARE staffing includes a Coordinator and secretary (0.25).

LONG RANGE GROWTH: It is expected that the EOPS/CARE programs will grow at a rate consistent with the enrollment growth rate of the District. Of necessity, the Needles Center will grow more rapidly once the Claypool Building reconstruction is complete.

FACILITY NEEDS: The Student Services program outgrew the space allocated to it in the College Services Building at the PV campus. This has resulted in the EOPS/CARE services being relocated to upstairs of the building taking space from the Library. This location takes these vital services out of the intended flow of the matriculation services. It is necessary this be addressed in facility planning – that is, maintaining the integrity of the matriculation student process and library services.



PETER MARTINEZ (DIRECTOR/COUNSELOR), VICTOR HERNANDEZ (COUNSELOR), CARMEN HERNANDEZ (PROGRAM ASSISTANT), MARIA RIVERA (COUNSELOR) AND STACI LEE (CALWORKS COORDINATOR)

FINANCIAL AID

Palo Verde College provides financial assistance in the form of grants, scholarships and part-time employment for students who meet specific financial aid program requirements. To be considered for financial aid, students must complete the Free Application for Federal Student Aid (FAFSA). The FAFSA must be submitted and processed before a student considered for financial aid. California residents may also apply for the Board of Governors (BOG) waiver. The several forms of student financial aid are to assist students with their college related expenses. Eligibility for financial assistance is based on the difference between what the student/family can afford and the cost of education. Programs administered by the Financial Aid program at Palo Verde include:

Program	Approximate Numbers, 2008
BOG Waivers	1,6
Pell Grants	255
FSEOG	40
Work Study	15
CAL Grants	0
Chafee Grants	4
Scholarships	22

Palo Verde College does not participate in the Federal Stafford Loan program. The Financial Aid program has a Director, 4 full-time employees and 2 part-time peer workers. The program is located within the student service areas on the ground floor of the College Services Building. This is well located for the matriculation process for entering and re-entry students. The staff is responsible for packaging awards, making certain every student has and follows an education plan, and makes satisfactory progress toward certificate or degree requirements. This results in considerable face-to-face interaction with students. As about two-thirds of the BOG waivers are awarded to inmates, it is necessary for staff to travel to prisons. The work study program is small, only 15 students, with 2 students working off-campus.

The staff must ensure that federal and state aid regulations are adhered to; otherwise the District could become liable for mismanagement of the programs. This is the tight-rope financial aid people must walk: helping students, yet maintaining the integrity of the programs.

LONG RANGE GROWTH: Financial Aid is expected to grow consistent with the enrollment growth rate for the District. The exception would be if the District were

to become assertive about gaining additional work study funding, and perhaps taking the program off the campus. This could be accomplished working cooperatively with the CWExp program. Other colleges have found this an excellent way for students to gain valuable work experience and pay the District's matching fund requirements. The District could also at some point welcome the Stafford Loan program. More students at the Needles Center will be eligible for Pell Grants and work study program as the student population grows with the opening of the Claypool Building.

FACILITY NEEDS: The Student Service space in the Service Building is already over extended. Facility planning is needed that addresses this need for expansion of services and maintain the integrity of the matriculation process. Computer technology is of paramount importance for financial aid programs.



RORIE CHAMBER (FINANCIAL AID TECHNICIAN I), LINDA PRATT (FINANCIAL AID OFFICER), DIANE MENDEZ (ASSISTANT TO FINANCIAL AID OFFICER/OUTREACH COORDINATOR)

STUDENT ACTIVITIES

The Student Activities program consists of a half-time advisor (the other half is CalWORKS coordinator) and an Associated Student Body Council (ASB). This program consists of limited activities for students in large part because the ASB has, according to the president and vice president, a limited budget for this purpose. ASB membership is voluntary with the major benefit being discounts in the bookstore and food service. The ASB Council is located on the second floor of the College Laboratory Building, rooms 203 and 204. "Activity space" is located on the east end of the ground floor of the College Services Building.

A Student Activities program is dedicated to improving student life and opportunity in a college, and giving the students a voice in the political processes of the college. It is also intended to provide students with a real life experience with the democratic form of government. Activities can take a variety of forms:

- Social activities
- Clubs/organizations
- Competitions
- Special days
- Intramurals/extramurals
- ASB ID cards
- Service activities
- Encourage students to be active members of the college

LONG RANGE GROWTH: The Student Activities currently is minuscule and for good reason: no budget and no facilities. It is expected that Student Activities will grow more rapidly than the enrollment growth for the District. As the Needles Center has no Student Activities program, it is expected to also grow more rapidly.

FACILITY NEEDS: The ASB Council needs facilities that are designed for an activities program with offices and meeting and work space where the day-to-day activities will not interrupt teaching/learning. This space should be in proximity to food services, bookstore and have space for special activities. What is most needed for today's commuter student is a place to go between classes to study while enjoying a beverage, meal and/or snacks. This area should have computer technology capacity for student learning. Space for games is not necessary – this invites/attracts non-students. As Palo Verde College does not have a police department, attracting undesirables should be avoided where possible.

Space for ASB Council, food services needs to be addressed for the Needles Center.



(FROM LEFT) CLAUDIA SANDOVAL, SECRETARY; NEREIDA MEDINA, HISTORIAN; DAVID KRAWCHECK, COMMISSIONER OF PUBLICITY; RAMIRO MENDEZ, PRESIDENT; TAWNI GUTHRIE, VICE PRESIDENT; GARRETT BRUNET, BUSINESS MANAGER; AND MARCUS RODRIGUEZ, STUDENT TRUSTEE. JOINING THE NEW OFFICERS IN THE PICTURE IS THE PALO VERDE COLLEGE PIRATE.

VICE PRESIDENT OF ADMINISTRATIVE SERVICES

The Vice President of Administrative Services is responsible for district-wide management/leadership for a wide variety of services the District depends heavily on to ensure the college/center operates – doors are unlocked, utilities are operating, bills are paid, rooms are clean/sanitary, payroll is met, necessary items are bid and purchased. This wide variety of services includes:

- Fiscal Services
 - Budget Preparation
 - Budget Management
 - Finances
 - Accounting
 - Accounts Payable
 - Accounts Receivable
 - Audit
 - Inventory Control and Inventory Accounting
 - Benefit packages
 - Payroll
- Human Resources
- Purchasing
- Facilities and grounds
- Security/Safety
- Mail processing
- Contracts
- Risk Management
- Information Technology
- Auxiliary Operations
 - Bookstore
 - Food Service
 - Community use of facilities
- Parking
- Storage
 - Receiving
 - Distribution
- Locksmith
- Transportation

The Vice President must accurately project federal, state and local revenues for the budgeting process. This can be extremely complex during down fiscal



GERI BUTLER

**VICE PRESIDENT
ADMINISTRATIVE SERVICES**

cycles. Budget expenditures and reserves must fit within the state regulations and district policies for the fiscally prudent operation of the District. This is further complicated by the need to ensure that faculty and staff members at the College and Center perceive fair and equal treatment in the budgeting process.

VP ADMINISTRATIVE SERVICES STAFFING:

Vice President of Administrative Services	1
Executive Secretary	1
Fiscal Services Manager	1
Categorical Program Manager	1
Human Resource Manager	1
Payroll Technician	1
Administrative Services Technician	1
Bookstore Manager	1
Director of Information Technology	1
Director of Facilities & Operations	1
Total	10

(continued)

ADMINISTRATIVE SERVICES:

- **FISCAL SERVICES:** These services are responsible for the integrity of the budget, the accounting process, short- and long-term financing, benefit packages, payroll inventory accounting and audits. It is vital to the District that these are managed with the highest level of competence and integrity to ensure the financial well-being of the District.
- **HUMAN RESOURCES:** This service is responsible for defining all positions within the District, the advertisement of employment opportunities, the screening/processing of applicants and the hiring of employees. These all must be done in compliance with state and federal regulations and guidelines to ensure that the hiring processes are fair and equal.
- **PURCHASING:** Purchasing must be processed within state regulations and guidelines with proper bidding and purchasing processes that will ensure that the items sought meet the standards the District sets. This is a complicated process – the more complicated the item, the more complicated it is to develop bid specificities. Purchasing can range from hard items to services (services are typically bid through Requests for Proposals). It is often possible to “piggyback” existing bids by other districts, the state or the federal government. A quality purchasing service results in buying quality hard items and services while saving district resources.
- **FACILITY AND GROUNDS:** Facilities and Grounds at Palo Verde College involves a wide-range of responsibilities requiring extensive knowledge of craft skills and state/federal regulations. These include:

- | | |
|--------------------------|---------------------|
| Electrical | Energy conservation |
| Air Conditioning/Heating | Waste Management |
| Carpentry | Recycling |
| Plumbing | Transportation |
| Landscaping | Set ups |
| Rock masonry | Receiving |
| Emergency alarm system | Storage |
| Security | Elevators |
| Cleaning/sanitizing | Locksmit |
| Facility planning | Hazardous Materials |
| Construction | |

It is necessary to contract for specialists, e.g. security, electrical, elevator services/repair, and street/parking lot repair/stripping. The department has 9 full-time employees:

Director	1
Assistant Director	1
Grounds	3
Custodial	3
Secretary	1

The District also has 1 part-time facilities employee at the Needles Center, and uses 1 part-time employee at the Spring Street site. When the Clay-pool Building is fully operational, the facilities staffing will have to increase to provide quality maintenance and cleaning.

- **RISK MANAGEMENT:** Administrative Services is responsible for Risk Management for the District:
 - Liability coverage
 - Damage to facilities
 - Workers Compensation
 - Student insurance
 - Sports insurance

These are complicated insurance matters typically through JPA's/Consortiums with other colleges to get the best coverage at reasonable cost.

- **AUXILIARY SERVICES:** The District operates its own bookstore operation and food service. It is imperative that these are well managed to ensure efficient, yet provide quality services.
- **INFORMATION TECHNOLOGY:** Information Technology includes all electronic communications hardware and software for the District. The District is currently installing a new software system, DataTel. This is a complicated and time consuming ordeal for employees who already have full-time work. In the end, the system will be only as good as the knowledge, skill

and dedication put into its installation. With the Claypool Building becoming operational, it will be essential to establish quality web casting from the outset to enable the Needles Center to offer courses necessary for graduation, including fulfill general education requirements. This will be necessary to attract back Needles residents from attending college across the River, and perhaps, attract some Arizona residents.

The District needs to move more assertively with computerized self-paced learning. It already has the computer hardware/software and student stations for this purpose. The Learning Skills Center is grossly under used.

Director of Information Technology	1.0
Assistant Director	1.0
Web Service/Network Specialist	1.0
Network Technician	1.0
Help Desk Technician	1.0
Part-Time Micro-Computer Repair	0.5

LONG RANGE GROWTH: The assorted Administrative Services are expected to grow consistently with the enrollment and growth of the District. The exception to this will be for the Claypool Building/Needles Center operation. Probably it will impact Facilities and Grounds the most – it currently has only 1 part-time employee at the site. The other is Facilities and Grounds, its growth relates close to growth of facilities, e.g., the Claypool Building, the PV Gym and fields, and the Fine and Performing Arts complex. The service that is most likely to grow faster than enrollment is Information Technology as the District implements DataTel and increases computer self-paced learning and computerized distance learning, this service must grow.

FACILITY NEEDS: Administrative Services does not have room for further growth at the Palo Verde campus, and the space needs improved sound proofing in the walls and ceiling if student activities should become prominent in the east end of the College Services building.

There are not any planned facilities for Information Technology, as a result, much of the service is housed in library space. Space needs to be planned for this vital service including offices, receiving/warehousing, space for hardware, work space for setting up and repairing equipment and meeting rooms for planning activities.

The Bookstore needs improved space for receiving, boxing and disbursing books for off-campus sites.

The current food preparation facility fulfills the need for breakfast, lunch and early evening, but is inadequate for culinary arts program teaching/learning.

The District maintenance building lacks sufficient receiving/warehousing space for a growing college.

Administrative Services needs to be addressed for the Claypool Building.

The District needs to carefully plan sufficient student/guest parking slots to accommodate students attending classes, guests attending activities/events at the Gym and/or Fine and Performing Arts Complex

The District needs to move more assertively with computerized self-paced learning. It already has the computer hardware/software and student stations for this purpose. The Learning Skills Center is underused.



ADMINISTRATIVE SERVICES STAFF

BOOKSTORE

The Palo Verde College Bookstore is located on the ground floor of the College Service Building at the Blythe campus. It is in close proximity to the student matriculation process for student convenience. The Bookstore offers these services:

- Textbooks
- Reference books/materials
- Supplies
- Limited clothing supplies
- Coffee
- Book returns

The Bookstore serves the Palo Verde College campus, the Needles Center and the Distance Education programs. It does not provide books and services for the Instructional Agreement program. It processes books/supplies for the Distance Education programs including boxing and mailing these to 20 plus prisons.

The Bookstore is District operated with 2 employees and 1 student worker. It is open for business 8:00 am to 5:30 pm, Monday through Thursday and 8:00 am to 3:30 pm, Friday. The bookstore needs to be open evening hours, especially at the beginning of each semester and summer intersession.

LONG RANGE GROWTH: The Bookstore is expected to grow consistent with the enrollment growth rate for the district. Eventually, a bookstore location at the Needles Center will be needed.

FACILITY NEEDS: The space in the Palo Verde College campus is sufficient for the projected growth of the District. The receiving/processing space is not sufficient for the processing of books/supplies for the Distance Education program and Needles Center. These were not anticipated at the time the College Service Building was planned, designed and constructed and by its nature need not take place in the present bookstore.



POLICE/SECURITY

Palo Verde College does not have a police/security department. Yet as the college grows and develops more programs, services and facilities, this may become a necessity. Most community colleges financially support police/security departments through parking fees, and if necessary the General Operating budget. Palo Verde College and the Needles Center have millions of dollars in taxpayers money invested in facilities, furnishings and equipment/furniture. It is imperative that the integrity of teaching/learning is protected. Currently, the District contracts security coverage for its facilities for non-use hours.

FACILITY NEEDS: This needs to be kept in mind for future years in planning facilities. Usually police/security are located close to where students may congregate e.g., food service and student activity spaces.

DISTRICT SUPERINTENDENT/PRESIDENT

The Superintendent/President serves the dual role of providing an interface between the District and its communities through its elected 7 member Board of Trustees and providing overall leadership and management for the District. At Palo Verde College the superintendent/president must perform a more diverse range of responsibilities than is typical at larger districts.

At Palo Verde College the superintendent/president has 3 vice presidents – Instruction, Administrative and Student Services, to perform the day-to-day operations of the district. These are also the policy formulators and policy overseers. The PV superintendent/president directly oversees the district’s Foundation and a Public Information office. The superintendent/president functions as the District’s planner, including facilities planning and legal issues facing the District. The person holding this position is also the District’s chief politician interacting with city, county, and state and federal governmental bodies. Due to the remoteness of Blythe and Needles from the centers of county and state governments, the superintendent/president must be prepared to travel a great deal in order to accomplish District goals and keep governmental officials aware of Palo Verde College and its needs/interests. As Harry Truman so aptly put it years earlier, the “buck stops” with the Palo Verde Community College District Superintendent/President.

As with any CEO, it is imperative that the superintendent/president have a close working and trust relationship with the 7 members of the Board of Trustees. This requires a special effort as 2 of the members are located in the greater Needles community. Ensuring fair and reasonable distribution of resources and attention between 2 sites is a difficult balancing act where often perception rather than reality rules.

The superintendent/president’s office is located on the second floor of the College Services Building with sufficient space for 2 support staff and a small conference room – seating 6 reasonably. The office is reasonably accessible yet out of the main flow of traffic.

LONG RANGE GROWTH: It is expected that the office of Superintendent/President will not grow consistent with the expected enrollment growth rate of the District.

FACILITY NEEDS: None at Palo Verde College. The superintendent/president will need an office presence at the Needles Center in the Claypool Building.



JAMES W. HOTTOIS
SUPERINTENDENT/PRESIDENT

SUPERINTENDENT/PRESIDENT STAFFING:	
SUPERINTENDENT/PRESIDENT	1
ADMINISTRATIVE ASSISTANT	1
EXECUTIVE SECRETARY	1

COLLEGE-WIDE SERVICES

These are services that serve the college as a whole. Included are:

District Foundation: The purpose of the Foundation is to garner support for all aspects of the District. This includes financial resources, influence with community and business leaders, and to identify possible partnerships within the communities that would be mutually beneficial. It is imperative that the superintendent/president identify concrete needs of the District to guide Foundation efforts.

PUBLIC INFORMATION: This service is vital to communications between the College and the Center and their communities. Preparation of news releases, a district newsletter, promotional materials, scheduling events, and coordinating college and center activities are responsibilities of this office. This office is often of assistance in making documents such as class schedules and catalogs more customer driven. A plan to market the District should be a prime responsibility of this office.

LEGAL SERVICES: Under the direct supervision of the superintendent/president, this mandatory service is vital to the well being of the District.

PLANNING: The superintendent/president is responsible for keeping the District's Instructional and Facility Master Plans current and implementing the provisions of them. These are mandated by the state and the accrediting bodies. Each year the District is required to submit and update:

- Five-Year Construction Plan
- Five-Year Scheduled Maintenance Plan
- Space Inventory

These are predicated on an understanding of the local, regional and state economy and population forecasts to predict instruction/service needs which translate into facility needs.

FACILITIES SECTION

INTRODUCTION*

This chapter reviews the following subjects in the order listed:

1. District Growth through Annexation
2. Palo Verde College, Blythe Facilities Master Plan
3. Needles Educational Center, Facilities Master Plan.

Two of the above, #1 and #3, are new developments since the 1996 Palo Verde College Educational and Facilities Master Plan was completed. This chapter explores each from a facilities viewpoint. It also updates the facilities planning recommendations for #2, covering the final development of the new Mesa Campus at Blythe. The 1996 Plan was limited to the existing Palo Verde College campus in downtown Blythe and its soon-to-be-built replacement on the mesa overlooking the Palo Verde Valley. The new Mesa Campus has since been built and occupied. Finally, given the fact that relatively few copies of the 1996 Plan were made (perhaps 25 or so), certain important information is reproduced in this plan where it might affect future decisions.

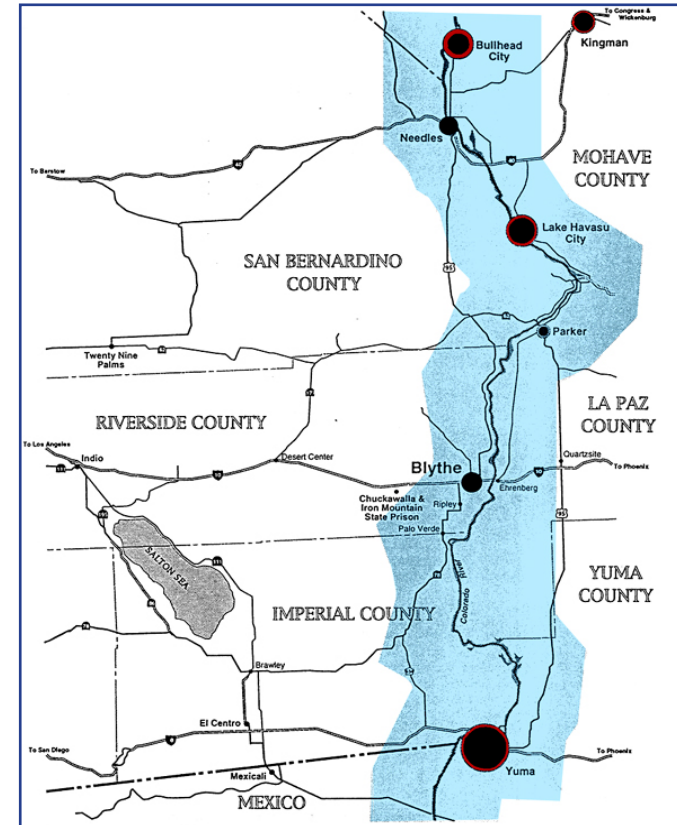
1. DISTRICT GROWTH THROUGH ANNEXATION

One of the important changes to the college district master plan over that of 1996 was the annexation in 1999 of an isolated portion of the San Bernardino Community College District into Palo Verde Community College District. The 1996 Plan did not specifically address the concept of Palo Verde College expanding to the north to serve this area that included Needles. However, it did suggest that Palo Verde College was the best located of all the current California community college campuses to serve Needles, which at that time was not formally being served by its host district. That area, part of the San Bernardino Community College District, was separated by two intervening college districts and by hundreds of miles from the main district facilities in the Inland Empire/City of San Bernardino.

Accompanying that recommendation was the introduction of a concept of the "Colorado River Corridor". This is illustrated in the drawing on the right excerpted from the 1996 Plan. It shows the potential of near continuous development along the

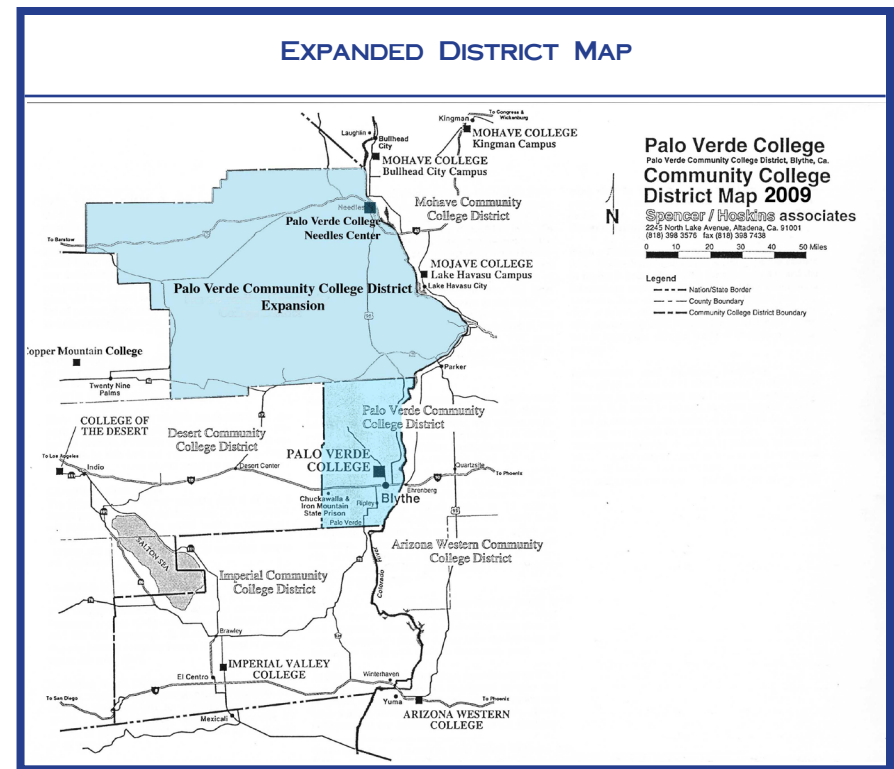
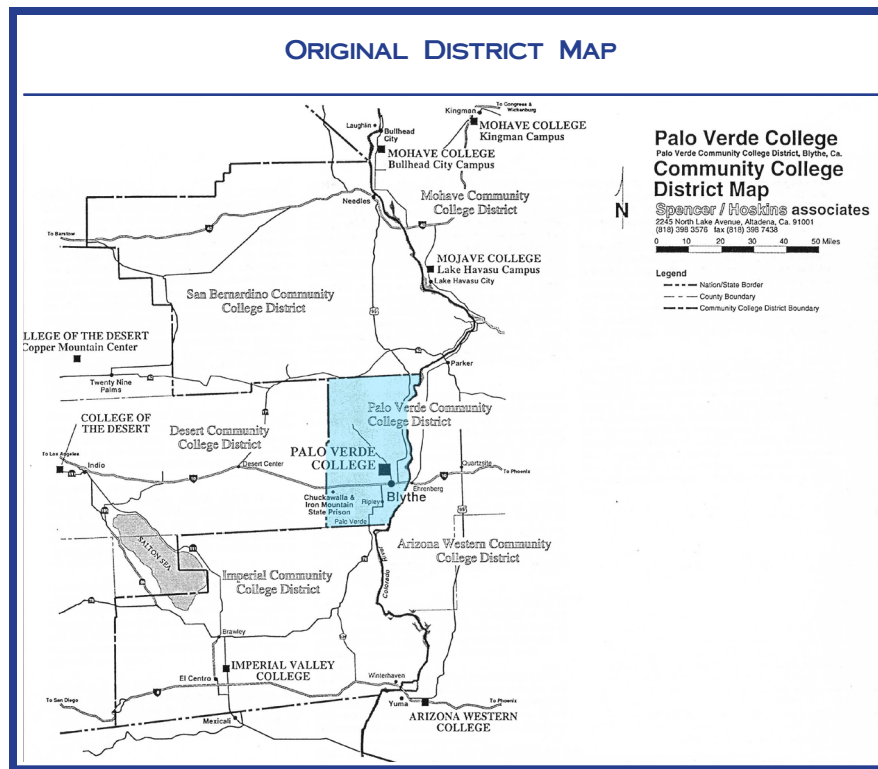
river stretching from Laughlin/Bullhead City on the north all the way south to Yuma. This corridor was seen as likely to grow rapidly, yet underserved by postsecondary education. Palo Verde College would again be the likely candidate to serve the California side of this corridor.

* Refer to the Introduction Section (page 1) for additional information



It was only a short time later when in 1999 Palo Verde Community College District annexed the greater Needles area from San Bernardino Community College District. The district now straddles two counties, Riverside and San Bernardino, both of which abut the Colorado River along much of its course along the California state line.

The increase in district size and configuration is illustrated on the two maps below. The first map depicts the district as it was before the 1999 annexation -- located solely in Riverside County. The second map illustrates its expansion northward into eastern San Bernardino County. It can be seen that the district area more than quintupled to its current size of 6,519 square miles. In its greatest diagonal dimension it is about 136 miles across. Needles and Blythe, the two main district population centers are 97 miles apart by driving distance – too far to expect students to commute.



In comparing the two, it can be seen that Blythe is generally closer to other California population centers and community colleges. Needles, by contrast, is closer to Arizona and Nevada population centers and their community colleges.

Driving distances/times from Blythe (updated from the 1996 Master Plan):

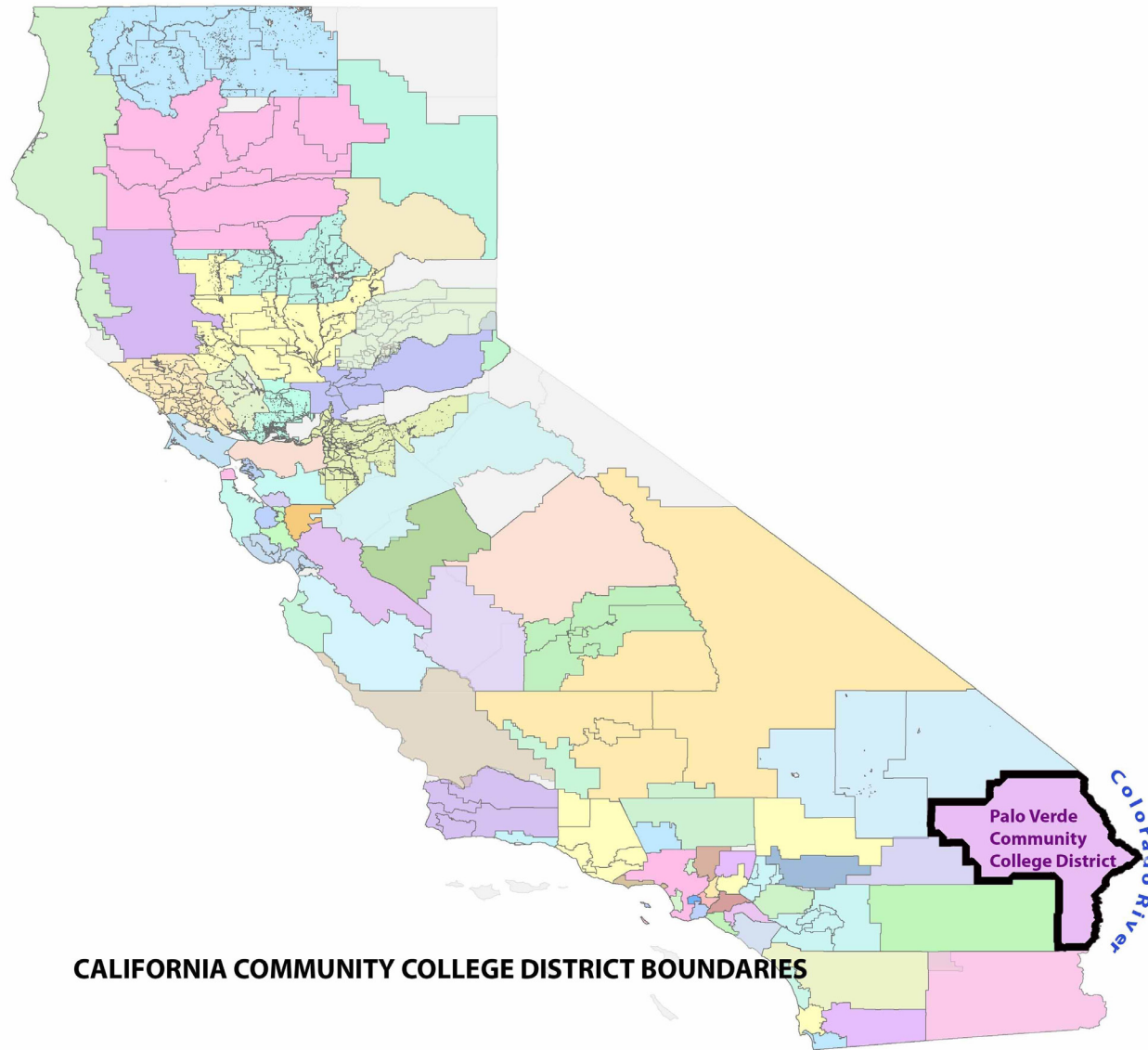
To	Miles	Minutes
Needles	97	97.00
Indio	98	89.00
College of the Desert	107	103.00
Palm Springs	119	111.00
El Centro (Imperial Valley College)	104	112.00
Riverside	172	2.60
Ironwood/Chuckawalla State Prisons	22	20.00
Phoenix, Arizona	151	2.25
Parker, Arizona (Yuma/La Paz Counties CCD Center)	49	63.00
Quartzite, Arizona	22	20.00
Ehrenberg, Arizona	5	5.00
Yuma Campus	101	105.00

Driving distances/times from Needles:

To	Miles	Minutes
Blythe (Palo Verde College)	97	97.00
Barstow (Barstow College)	144	2.15
Victorville	174	2.50
Victor Valley College	182	2.75
San Bernardino	212	3.20
San Bernardino Valley College	214	3.20
Antelope Valley College	240	3.65
Laughlin, Nevada	25	36.00
Los Vegas, Nevada	111	105.00
Bullhead City, Arizona	22	32.00
Mohave College, Bullhead City Campus	15	21.00
Mohave College, Lake Havasue City Campus	44	48.00
Mohave College, Kingman Campus	63	57.00
Phoenix, Arizona	244	3.75

On the following page is a California map showing all the community college districts and their boundaries. At present, Palo Verde CCD abuts four other California community college districts: Imperial CCD to the south, Desert CCD and Copper Mountain CCD to the west, and Barstow CCD to the north. It also abuts two Arizona community college districts: Yuma/La Paz Counties CCD (Arizona Western College) on the south and Mohave Community College District on the north.

Palo Verde CCD (6,519 sq. miles) is fourth largest in the state by land area. It follows Kern CCD (21,290 miles), Shasta CCD (10,132 sq. miles), and Barstow CCD (9,157 sq. miles). It shares in common with these large districts a low population density. Palo Verde may in fact be the least populated of all. The combination of large area with long distances to reach a tiny population is especially challenging in an economic and practical sense. Palo Verde College, through its annexation of the region to the north, especially Needles where it established its second campus, has made this a reality.



2. PALO VERDE COLLEGE, BLYTHE FACILITIES MASTER PLAN

This section covers the facility master planning at the main Blythe (or new Mesa) campus, including pertinent portions related to the site selection process. This information is repeated from the 1996 Plan where there are legal or safety considerations. Otherwise, it only summarizes the otherwise detailed information provided in the earlier plan.

Facilities master planning at the main Blythe campus has continually evolved since the completion of the 1996 Plan. Funding limitations from the state required a phased approach to the relocation of the college to the Mesa site, wherein before it had been believed possible to build all at once. This in turn required certain design changes. Other changes came from the vicissitudes of the bidding climate and construction processes. Many desired features had to be deferred or eliminated because of the unprecedented run-up in construction costs during the mid-2000s. New educational goals, information technology, and the continually evolving technology of education have driven further changes.

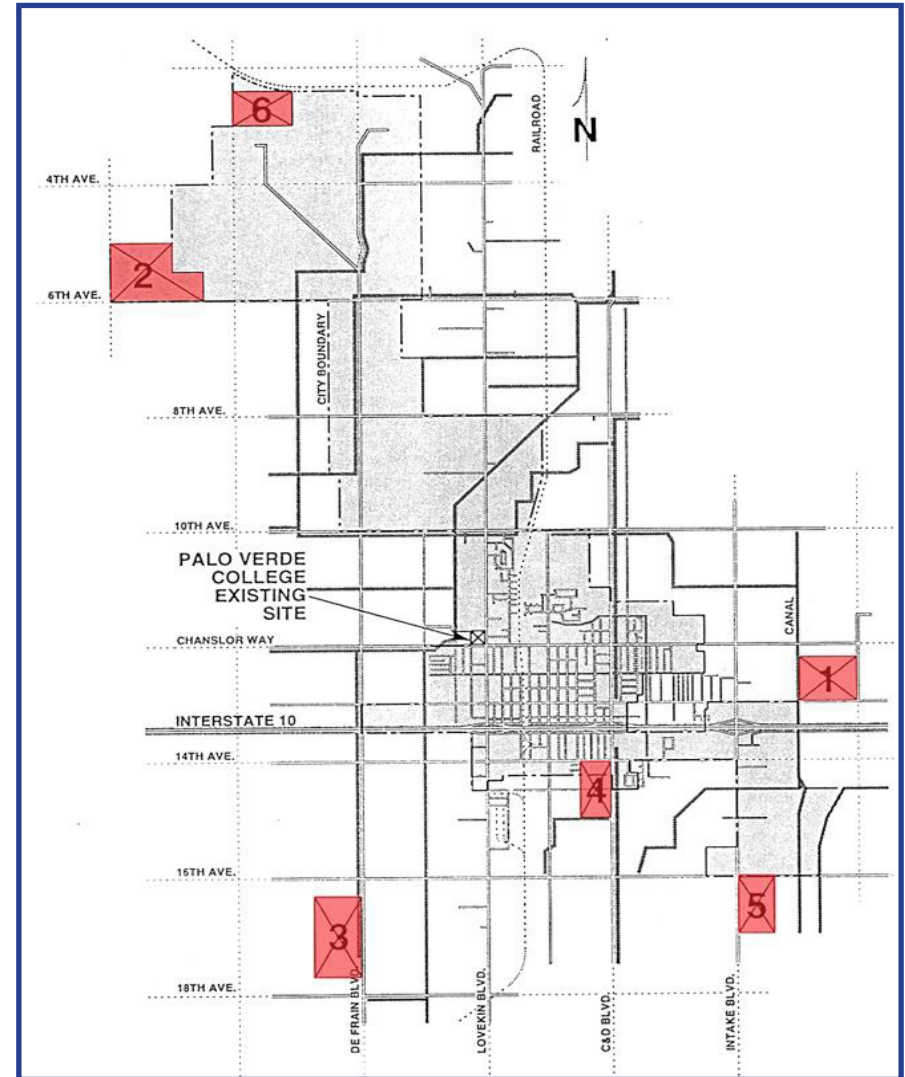
The result is a facilities master plan best illustrated by a four iterations of the campus development plan (or map). These represent possibilities rather than fixed plans. They reflect the thinking at various points in time as the college has evolved. Yet over-arching is a planning structure that has remained consistent with the 1996 Plan. The four plans can therefore be taken collectively rather than individually in describing the facilities master plan -- with the idea that future possibilities be added over time. This provides a flexible and adaptable planning structure that more closely reflects the effects of change.

Each plan is described in the order of its development:

PLAN #1 - ORIGINAL 1996 FACILITIES MASTER PLAN

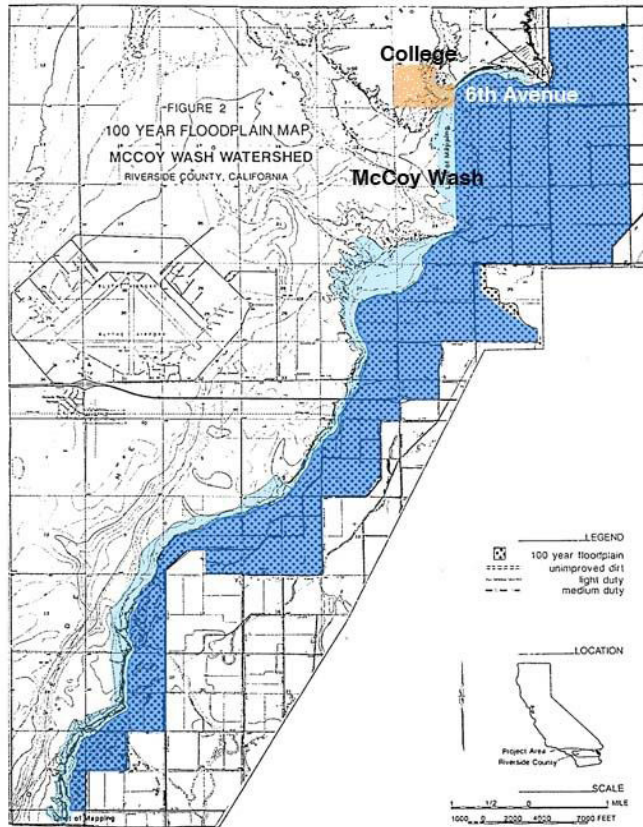
- Location of the College within City Limits*

The 1996 Plan set a goal to locate the college within the city limits of Blythe. Of the six sites originally under consideration (illustrated on the drawing to the right), only three ended up actually within the city limits at the time of final selection (1995). The site ultimately selected (2) lay atop the mesa overlooking the town, was in the city limits and was the largest in area, largely level, and outside flood hazard areas. It was also not considered desirable bottom farmland and wasn't currently being farmed.



- *Location Relative to the McCoy Wash*

While the bulk of the site had no flood hazards to contend with, its main access route, 6th Avenue, does have a remote possibility of flooding that could block vehicular access. This is illustrated on the drawing below that shows the potential floodplain from a 100 year flood. 6th Avenue crosses the northern tip of that area. At the time of the 1996 Plan, it was believed that this problem would be addressed in FY 1997 via the McCoy Wash Watershed Project that included construction of a flood control dam. That work was never completed. The college and district should encourage either its completion or the improvement and paving of an alternate access road via a routing not subject to flooding.



*First Site Tour, 1995
by members of the faculty and community – hosted by Dr.
Wilford Beumel, then Superintendent-President*



*1995 Presentation of First Iteration of Master Plan
James Spencer, Architect*

The initial development of the campus occurred at the east and south edges of the main 160 acre square site that comprises the bulk of the college property. This portion lies atop the mesa and overlooks the Palo Verde Valley. A 40 acre “salient” abuts the 160 acres at its southeast corner, raising the total to 200 acres. The 40 acres lies below the mesa and due to its steep topography and proneness to erosion has not been specifically earmarked for development. The easternmost flat portion of the 40 acres might be leased out where it adjoins existing farm land.

The three major college land uses, buildings, parking, and physical education, were situated at the south half of the main 160 acre site. North of it was an area roughly 50-60 acres set aside for a college farm, should there be interest in developing agriculture programs. Growth at the three land uses was to be accommodated by leaving each open-ended for expansion -- mainly toward the west. All three were situated to expand parallel to one another, creating a balanced growth with minimum travel distance in between.

The two largest multi-story buildings were situated along the edge of the south-facing natural bluff alongside 6th Street, the main route to town. Occupants can enjoy views of the green agriculture basin below and the mountains and Colorado River in the distance. The other buildings were generally arrayed along the same bluff as it turns northward. An added benefit to this arrangement was that it improved the visibility of the campus that otherwise would have been set back from the bluff behind a “sea of parking”. Today, one can see the campus buildings from Interstate 10, six or seven miles distant.

An important unifying feature of the 1996 Plan is the entrance to the college. This is denoted by the “great circle” pedestrian bridge and covered walkway that links all the major buildings. This feature, both visual and functional, serves to orient one to the organization of the campus and provides shade along the path of travel from building to building. The cost of the bridge was borne out of cost savings to the two story buildings by eliminating the second elevator in each, as well a third elevator to the mezzanine in the main Assembly Room or Lecture Hall. The bridge provides an alternate means to reach the ground level, should one of the elevators be out of service. But it mainly serves as the campus’ main architectural feature, allowing buildings to be simplified and made more “background” and desert-like in nature.

The 1996 Plan implemented the primary roadway circulation network for the campus, and its utility backbone. Much of that has been built following the plan. It also included detailed programming and plans for what eventually transpired as the first three phases of construction:

- Phase One, Classroom/Lab Building and College Services Building.
- Phase Two Technology Building, and
- Phase Three Physical Education Complex.

All three phases have been built and occupied. In addition, a fourth phase was identified to construct a theater. Other additions originally included an expansion to the Classroom/Lab Building to accommodate the addition of art and music lab facilities and other growth as required.

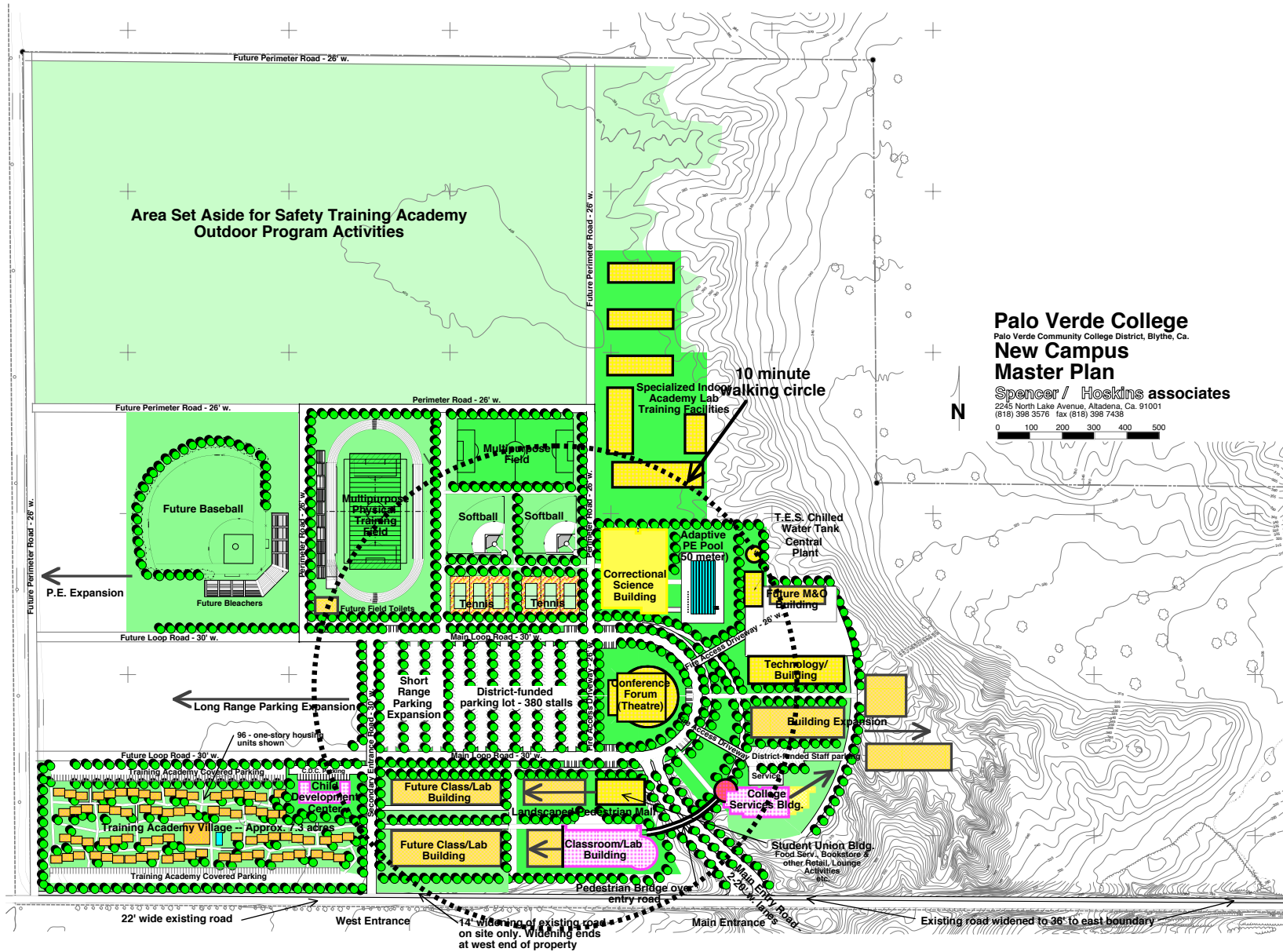
The 1996 Plan was based on the creation of a central chiller plant located next to the Maintenance & Operations Building for ease of maintenance. During the Phase One project, budget limitations led to temporarily locating the chiller plant closer to the Phase One buildings, with a long-term plan to relocate it to the maintenance complex as a part of the later Phase Three project.

The 1996 Plan also illustrated the development of a swimming pool. This was to be a joint swimming and diving pool with approximate dimensions of 25 yards by 25 meters. It was a response to the hot climate and the fact that the local high school pool was closed for reconstruction. With no active public pool for the Blythe region, the college pool was seen as serving not only its physical education program, but also providing a vital public service in one of the hottest regions of the US.

PLAN #2 - 1999 UPDATED FACILITIES MASTER PLAN

As this campus map on the following page illustrates, more detailed planning led to some evolutionary changes to the 1996 Plan. They were as follows:

- *Public Service Training Academy*
The completion of the two large state prisons 20 miles west of town, Chuckawalla and Ironwood, presented an immediate need for in-service training of the correctional staff. But coupled with that, Palo Verde College was also seen as ideally situated to accommodate a full-service training academy for public safety programs. These might include in addition to correctional science, law enforcement, fire science, hazardous materials, health occupations, emergency medical technician, and the like. The large available land area coupled with the relative isolation from heavily populated areas and its location in one of the few areas of California outside an environmentally sensitive air basin, particularly the South Coast Air Basin, make it desirable for these programs. This coupled with the then availability of a nearby railroad spur and excellent air quality with constant air movement makes this location well suited for hazardous training.



The 1999 Plan responded by creating a plan for a joint Physical Education – Correctional Science training building and outdoor swimming pool. It identified a northward expansion to that complex, comprising various other more specialized public service training buildings. Finally, the main northwest area of the site, originally set aside for the college farm, was instead to be set aside for a defensive driving course in support of the various law enforcement programs.

- ***Student Housing***

The southwest corner of the site, instead of being designated more vaguely as building and parking expansion in the 1996 Plan, was to be set aside and designated for student housing. Housing was deemed an essential component of full academy-type programs by accommodating cadets and trainees from outside the area (even out of state) to utilize these programs.

- ***Child Development Center***

Adjoining the housing was to be a Child Development Center initially intended to accommodate trainee parents with small children. However, Palo Verde College by 1989 was concurrently working to establish a child development center at its old campus. Now firmly established and in operation for many years, the child development center's role has been expanded to support an early childhood education program that provides career education for college students, as well as child care for college students and staff. The existing Child Development Center is licensed for 41 children; the new on-campus facility is planned for 60.

- ***Student Union Building***

A future Student Union Building with food service and student activities was to be located north of the Classroom/Lab Building. This was in response to a state prohibition of funding student facilities – hence the need for the district to build its own free-standing building. However it was ultimately incorporated into the College Services Building.

PLAN #3 - 2003 UPDATED FACILITIES MASTER PLAN

By 2003, further refinement and development of the 1996 Plan had taken place, as illustrated by the 2003 Plan on the following page. The new Mesa campus was in operation and there was detailed planning under way for the Phases Two, Three, and Four (the Fine and Performing Arts Complex) projects. The following were additions and changes to the 1999 Plan:

- ***Unified Fine and Performing Arts Complex***

At the prominent circular site opposite the main entrance originally earmarked for only the Theater, it was decided to accompany the theater with all the art-

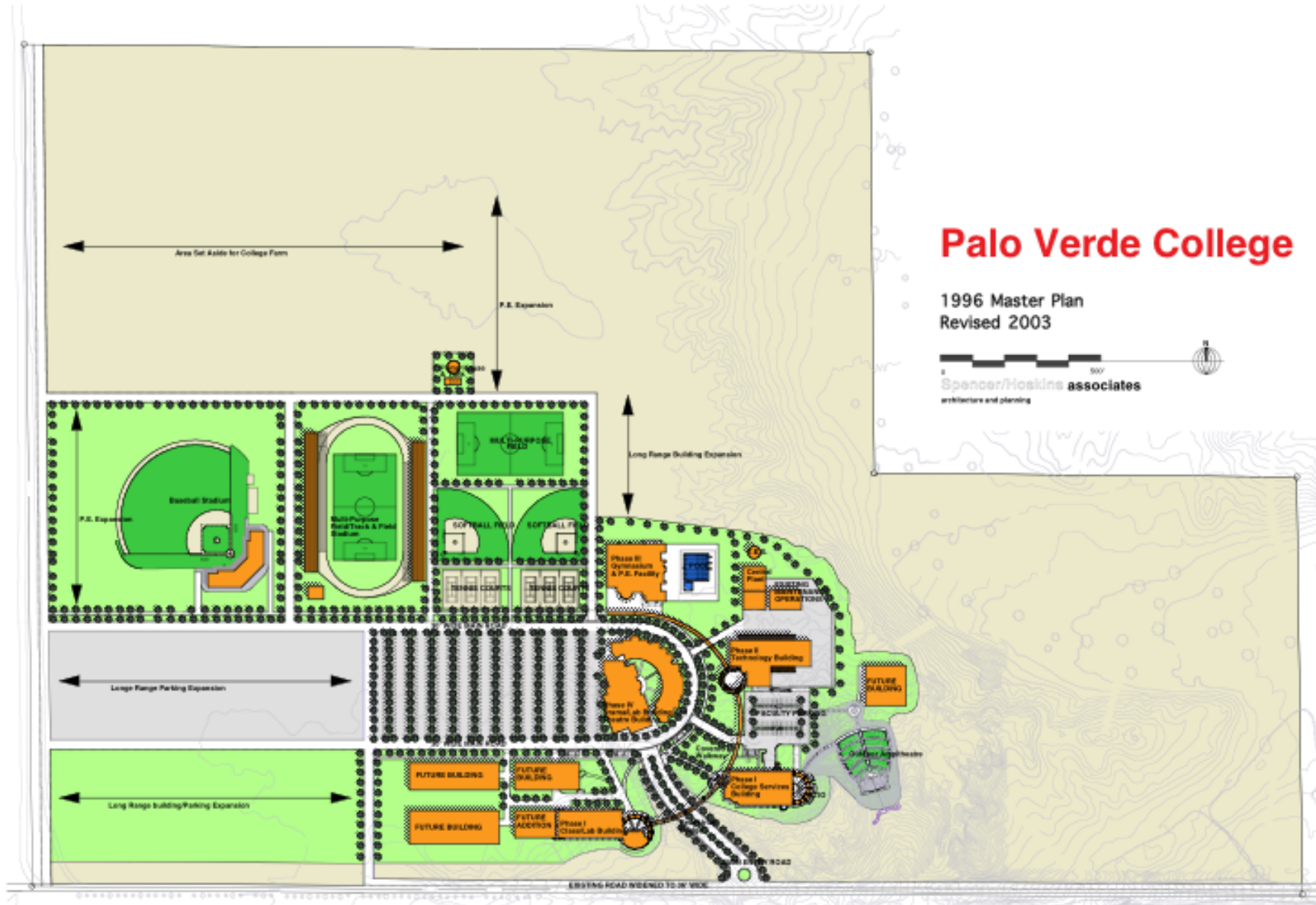
related instructional programs. The original plan was to locate these instructional programs in a westward expansion to the Classroom/Lab Building. That was viewed as unnecessarily splitting the instructional from the performance facilities. A unified approach would be more efficient and foster a more unified approach for the arts. This revised plan has resulted in creation of the Phase Four Fine and Performing Arts project which is under construction.

- ***Outdoor Amphitheater***

Utilizing a natural drainage swale alongside the patio at the east end of the College Services Building, an amphitheater for outdoor performances and assemblies was approved by the state to be added to the scope of the nearby Phase Two Technology Building. This project also would address an ongoing problem of erosion in the swale by utilizing the concrete risers of the amphitheater and its stage platform as part of the erosion control mitigation. Between the risers, horizontal seating surfaces were to be primarily grass and the perimeter was to be surrounded by trees for shade. Provisions for night-



EXISTING SWALE IN THE FOREGROUND
SUITED FOR THE PROPOSED
AMPHITHEATER AT THE
NORTH END OF THE CS BUILDING



time performance lighting and sound systems were to be provided, along with wheelchair access pathways and path lighting.

Though completely developed into working drawings, the amphitheater had to be eliminated for two reasons: 1) budget constraints, and 2) determination by DSA (Division of the State Architect) during plan check that disabled parking for approximately 2% of the roughly 1,000 seat capacity (20 stalls) needed to be added to the nearby staff parking lot. That would have required a substantial addition to the parking lot for an extremely infrequent use, or conversion of existing staff parking to restricted handicap stalls. DSA at the time would not accept the explanation that the staff parking lot was restricted to staff usage and that the general parking, student, public, and handicap, was already accommodated at the center of campus.

- **TV Studio**

Also part of the approved Phase Two Technology Building scope was a south wing accommodating the college media instructional support facility, principally a TV studio and its support spaces. Like the Amphitheater, this wing was completed through working drawings and eliminated because of budget constraints. However part of its function has potentially been replicated in the Phase Four project via the two story high Green Room behind the stage. The Green Room can be configured to accommodate these functions if needed.

The 2003 Plan left out the specific designations for a Public Service Training Academy and student housing. It simply reverted to the more generalized descriptions for these areas in the 1996 Plan.

PLAN #4 - 2007 UPDATED FACILITIES MASTER PLAN

As the site on page 108 illustrates, the 2007 Plan was updated to reflect the most current planning underway as of this master plan. It is superimposed over a satellite photo of the campus and shows existing completed projects and new projects listed on the following page.

- **Public Safety/Health Services Building**

This project rekindles and refines the public safety academy concept with a specific design submitted to the state as an FPP (Final Project Proposal). The facility would be constructed under Department of Homeland Security guidelines that encourage the unification of public safety and health training programs. It would incorporate labs for combat training, forensics, independent learning, nursing and a firing range. It is designed around a central courtyard wherein the public safety programs would be on the north and west

and the nursing on the east. It would tie into the north side of the Physical Education Building (Gymnasium) and share certain facilities already available there, such as the shower-lockers and the various PE/activity spaces. It would vacate nursing labs in the main Classroom/Lab Building for expansion of other science programs and would bring on campus certain public safety programs presently offered off-site. The building would be approximately 27,500 GSF (18,303 ASF) and would comprise the first phase of what would become a fully integrated public service academy (see floor plan on page 109).

- **Child Development Center (see page 110)**

This project develops a detailed plan (FPP) to relocate the child development operation on the old campus to the Mesa Campus. It is approximately 13,500 GSF (9,259 ASF) and includes an outdoor play yard in a courtyard south of the building. Because of its relatively long walking distance from existing parking, a new parking lot is also included. The facility is sized for 60 full time children and provides a child development instructional lab for college students. Though not specifically indicated, the facility leaves space to the west for the planned future student housing. This project awaits state funding

- **50 Meter Pool**

Better illustrated on the attached Physical Education Center landscape site plan (page 111) is an alternate pool design for an all-shallow configuration (no diving well) and a movable bulkhead to divide the pool into various activities or to allow swimming competition at various lengths (25 yards or 50 meters). The original 25 yard x 25 meter pool and an electrical upgrade were eliminated from the Phase Three project scope. The pool's dimensions are now to be 20 yards x roughly 60 meters. The extra length would provide a storage pocket for the bulkhead and reserve an area that is very shallow for small children and recreational use. The depth of the main portion of the pool would be approximately 5' at the ends (one being at the bulkhead when deployed for swimming) and 7' for water polo at the center. The pool was ultimately left out of the scope of the PE Complex because of budget limitations. However, room for it still remains at the site. Power for the pool equipment will need to come from a new service routed north from the Phase Four Visual and Performing Arts Complex.

- **Relocated General Use PE Field**

Budget constraints with the Phase Three PE Complex also caused most of the outdoor field development to be eliminated from the scope. The sole remaining outdoor feature is the large General Use Field which in previous iterations of the master plan was to be located further west and away from the building.

It was decided to reverse the field layout and locate the General Use Field next to the building. This is illustrated in the attached revised field layout drawing (page 112). The General Use Field was originally to include a running track and outdoor lighting. Both were designed through working drawings but subsequently eliminated for budget reasons. However if the field was built in strict accordance with the grading plan and irrigation plan, which both provided for the track, it should be possible to add it in the future without re-grading and removing the main turf area. Field lighting will now need to be fed from a new electrical service planned for the Phase Four project wherein provision has been made to serve future loads on the north.

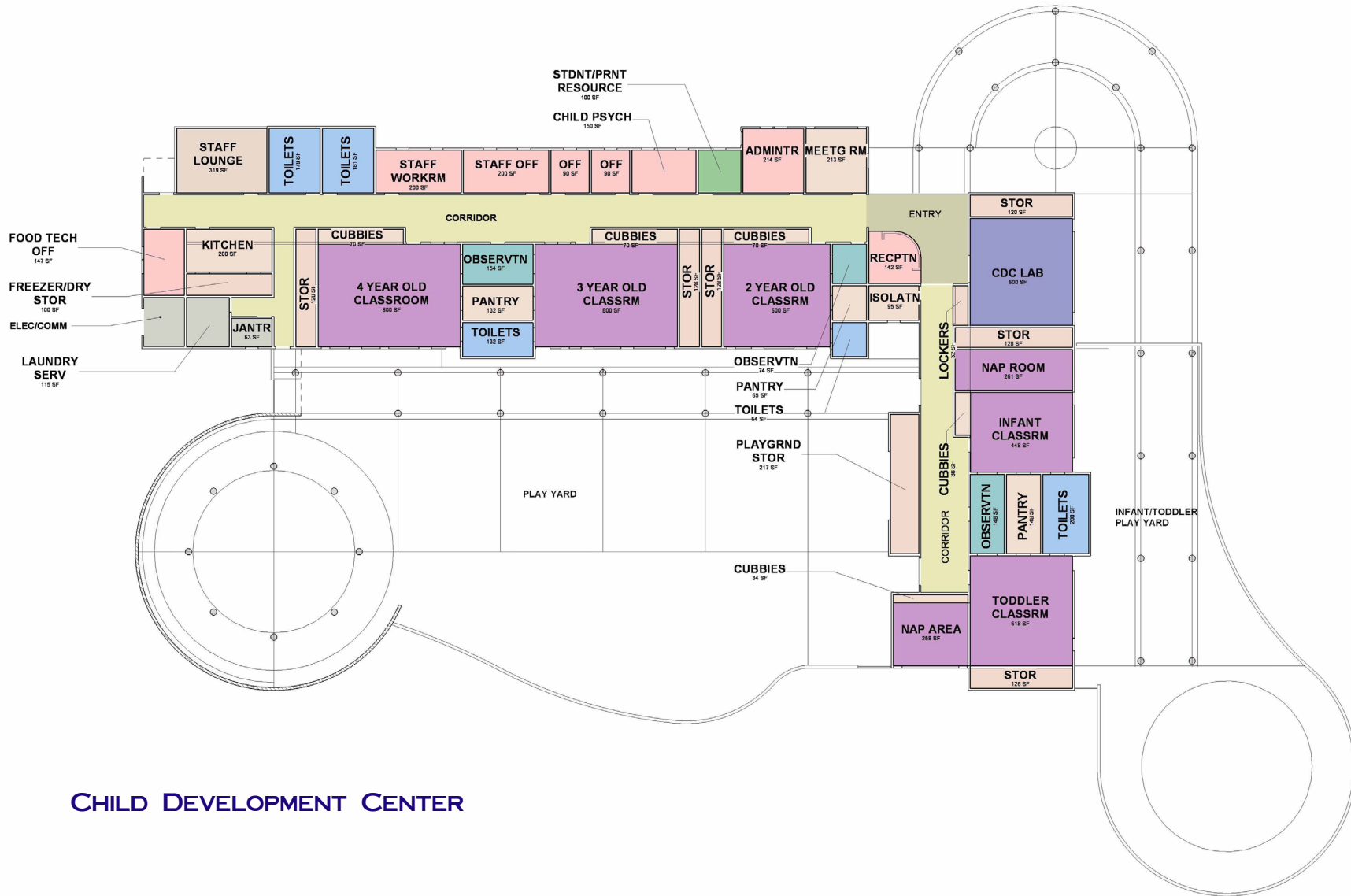
- *Photovoltaic Array*

This is illustrated on the civil drawing (see page 113) of the actual project working drawings. It is under construction by BP Solar and scheduled for completion in September, 2009. The project utilizes sunlight as a source of electrical power to feed the college during daylight hours. It is expected to generate approximately one megawatt of power and was sized to meet the year-round power requirements of the college. In that sense, Palo Verde College will become “grid-free”. That means that the power generated by the array will be sufficient to cover not only peak college demand during daylight hours, but also sufficient to cover purchases of power from Southern California Edison (SCE) during darkness and periods of low sunlight.

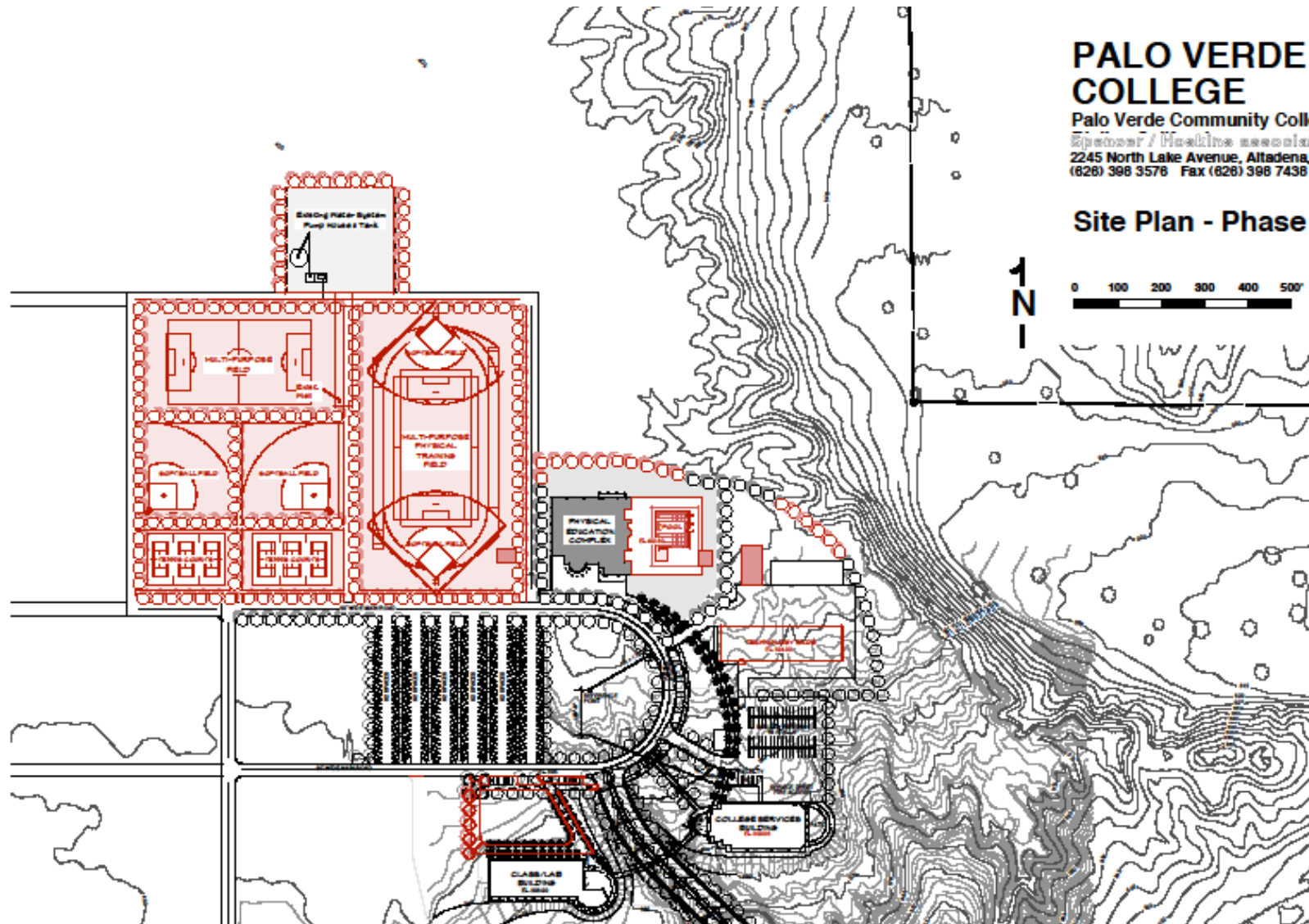
The array occupies a portion of the northwest site (north of the future PE Fields) whose 855' x 455' property line dimensions add up to about 8.93 acres. The space it takes may affect the viability of the defensive driving course informally earmarked in the 1999 Updated Facilities Master Plan. It is financed under a “lease-to-own” approach wherein BP Solar financed the construction under a 20 year ground lease of the property with payments covered by the cost of power otherwise purchased by the college and through direct sale of surplus power to SCE. This is an extremely positive development toward encouraging a sustainable future for Palo Verde College.

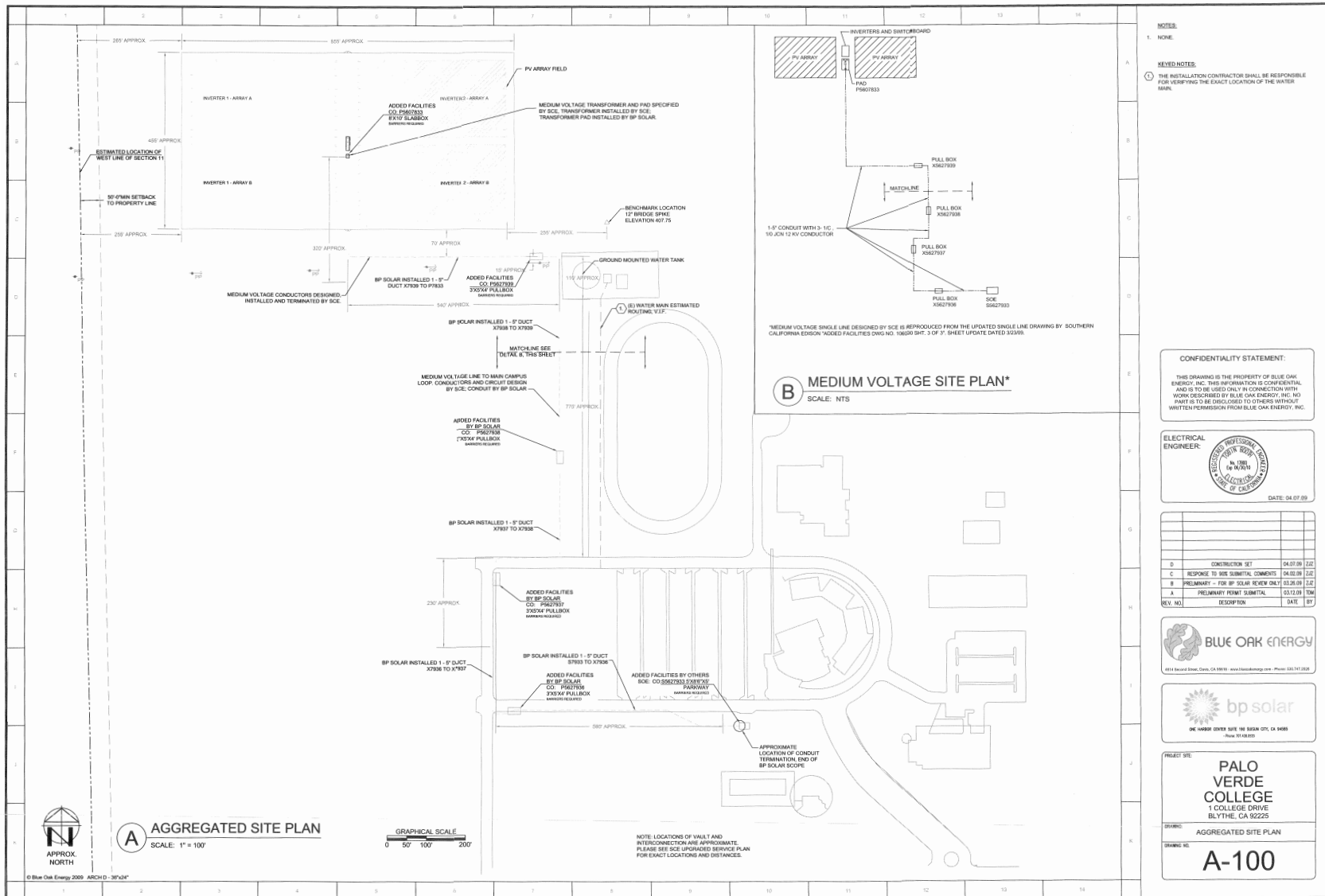


2007 UPDATED FACILITIES MASTER PLAN



CHILD DEVELOPMENT CENTER





o **Effects of Public Transit**

The ratio can vary by the availability and use of public transit as well as pedestrian and bicycle use. Palo Verde College, roughly 6 1/2 miles from downtown, is not expected to have measurable use of bicycle or pedestrian access because of the sheer distance and elevation gain atop the mesa. However, it does have convenient hourly public transit service via the "Road Runner" bus service to downtown Blythe. In addition is an hourly school bus shuttle service bringing high school students on campus for various programs, currently mainly in the Technology Building. This shuttle service is expected to increase upon completion of the Phase IV Fine & Performing Arts project currently under construction whose excellent facilities will attract high school students seeking college credits in the arts.



o **Effects of Student Contact Hours on parking**

The parking ratio also varies by the average number of contact hours a typical student takes: the higher the weekly hours, the lower the numeric parking ratio. This is because a student taking more hours will tend to spend more time on campus. Therefore that parking stall won't turn over as often as a stall used by a student with fewer hours.

Palo Verde College has relatively low average hours per student – recorded at 6.12 Weekly Student Contact Hours (WSCH) per student

in the 2008 Five Year Plan (the statewide average believed to be about 9 hours). But countering that is an unusually high number of staff on campus to support the large off-campus and distance learning programs – at times potentially exceeding the number of students on campus.

Overall, given the long distances and low population density in the Palo Verde Valley, yet availability of convenient public transportation, it suggests a medium level usage of private vehicles. That would be a parking ratio of about 5:1. This means that the 482 existing stalls will support about five times that enrollment, about 2,400 students. But with the reduction in parking to 439 stalls after completion of Phase Four, the enrollment supported will be about 2,200 students.

That number appears to be well beyond current actual on-campus enrollment demand, suggesting there is no near-term need to expand on campus student parking.

2. On and Off Campus Roads and Vehicular Circulation

Palo Verde College is about 5 1/2 miles from the center of downtown Blythe and 6 miles from the I-10 Freeway. There is some housing clustered relatively near the campus atop the same mesa where it lies and some scattered farm residences nearby. However the nearest concentration of housing where students and faculty live is about 4 miles distant, with other housing concentrations up to 10 miles away. This means that distance could be an important determinant of attendance. It is exacerbated by the low average income of many residents who can't afford to own a vehicle.

• **Future Urbanization Around the College**

Over time Palo Verde College may not find itself as isolated from town as it is today. College campuses by their nature tend to draw cities and urbanization toward them by filling in open space. This is because of the traffic a college generates – that over time draws housing and needed services around the campus. There is much history to this with other campuses throughout California. Many originally started on inexpensive farm land or open space well removed from town, but are now enveloped by urbanization and traffic. Some colleges even sold off what they believed to be excess land – only to later discover that they are short of land because of unanticipated growth.

Though hard to imagine today, it is possible that Palo Verde College will likely some day be surrounded by housing and other development. It will have to deal with the traffic and other problems that come with it. Planning should always be mindful of that potential.

o **6th Avenue**

Palo Verde College is directly served by 6th Avenue that extends east toward the center of Blythe. It is the only paved street serving the college and dead-ends at its west boundary. 6th Avenue was widened and improved by the city when the college first moved there in 2001. 6th Avenue is therefore capable of handling considerable traffic – well beyond that anticipated for the college. It may have been in anticipation of other development in the area. This is evidenced by the fact that much of the land around the college was purportedly purchased by speculators with a long-term goal of housing development.

Given the limitations of a single college access road, it is anticipated that someday an alternate access road will be needed to serve Palo Verde College

o **Neighbours Boulevard Extension**

There is a long term possibility of a north-south paved street along the college west boundary. This is currently a gravel road that aligns with Neighbours Boulevard to the south and which is served by a freeway on-ramp. This road extends south of the I-10 Freeway to become State Hwy 78 that links the Palo Verde Valley with the Imperial Valley, and further west, Oceanside, and still further west, San Diego. Consideration for an alternate college access with direct connection to the freeway was a part of the original 1996 master plan and continues to the present. The McCoy Wash that lies in between could make a direct connection cost prohibitive, though this may have been addressed via the long-planned flood control dam. Long term, it is expected the college site will eventually be served via a paved road along its west boundary.

o **College Drive**

The current paved access into the campus is via College Drive, a divided street that passes underneath the pedestrian bridge and serves as the main entrance. College Drive provides the college its

address. A second unnamed paved entrance is planned further to the west. This is currently a gravel road – but with concrete curbs and gutters already in place. It is anticipated that this entrance will be paved as a part of the Child Development Center project, as it provides the only direct paved access to that facility.

o **Interior Campus Loop Road**

Providing internal circulation is an unnamed loop road with planned westward extensions of both its north and south legs -- all the way to the west property line, and presumably tying into the future Neighbours Boulevard extension. Both legs are intended to accommodate future expansion of buildings on the south, the main parking lot in the center, and the PE fields on the north.

Currently, the roads are unpaved west of the existing main parking lot, but curbs and gutters are in place up to the location of the future west entrance. With rapid erosion of the soft sand soil, these curbs are being undermined and will eventually crack and fail when driven over by heavy vehicles. It would therefore be highly desirable that permanent paving be installed before it is too late.

o **Service Driveways**

These provide vehicle access to various areas of the campus and its buildings and are shown on the various site master plans. Most are mandated by the requirements of fire and emergency vehicle access. They are typically required to be 20' minimum wide for one-way traffic and 24' wide for two way traffic. Turn arounds must be provided if a fire vehicle is required to back up more than 50'. All buildings require unimpeded all-weather fire vehicle access to within 150' of their perimeters. That is currently provided at all existing buildings.

Future buildings such as the planned *Public Safety/Health Services Building* north of the gymnasium and the *Child Development Center* to the west will require extensions of these access driveways or other paved access. The Photovoltaic Array and the existing well and water tank owned by the local water agency may also require improved all weather access driveways in order to service those facilities. They are presently served by gravel roads that have been recommended for eventual paving in the various iterations of the college master plan.

PEDESTRIAN CIRCULATION & DISABLED ACCESS

It is an important design consideration for a campus to lie reasonably within the walking distance of a pedestrian. This is tied to the passing time between classes, which is typically 5-10 minutes. A pedestrian in good health can walk approximately 750' within 5 minutes, or 1,500' in 10 minutes. All building functions should ideally be located within a 1,500' circle.

To date this has been accomplished in the Palo Verde College master plan as illustrated by the 1999 version of the master plan (see page 9). Also important is the walking distance/time between parking stalls and building destinations as well as from the bus stop to building destination. All of these have been addressed and lie within the 10 minute circle.

Care has been given to separate pedestrian routes from traffic congestion points, especially intersections. The most obvious of these is the main entrance pedestrian bridge that entirely separates the pedestrian traffic between the two largest buildings from entering traffic below. But also significant is the location of pedestrian cross walks as far as possible from the intersection of the loop road and College Drive, especially where it intersects College Drive. Vehicle drop-off points, many coinciding with disabled parking and drop-off are similarly located. Finally bus stops have been located for convenient access into the major buildings. The "great circle" walk and trellis, when used for travel between buildings provides a direct route between many and is removed as much as possible from points of vehicular interaction.

Shaded access is provided via the "great circle" walk and also at strategic gathering and access points at major entrances and around the Phase IV perimeter. Parking stalls were oriented to coincide with the likely path of travel for the greatest number of students – either south toward the CL Building or north toward the PE Complex. Protection of pedestrians remains an important consideration as expansion occurs.

- **Disabled Access**

One of the most important shaping aspects of a campus is Universal Access for individuals with varying levels of disability. At the main campus, as mentioned before, disabled parking is distributed around the interior perimeter so as to be close to all the major buildings. Van parking is included and a protected path of travel (not requiring the crossing of vehicle lanes) is provided to each building. Outdoor pathways have provisions for the blind with raised tactile (detectable) warning strips at vehicular crossing locations. Wheelchair ramps are provided at street crossings and other

locations where curbs or steps would block the path of travel. The flat terrain allows that most areas of campus are within a 5% slope, the maximum allowed without formal ramps.

Building interiors are similarly accessible with wheelchair complying doorways and clearances, many of which are motorized at heavily used points such as main entrances and restrooms. Motorized doors are also located where wind is a problem.

Restrooms and elevators have been located near one another and close to staffed locations for assistance when needed. Only one elevator was provided in each of the two main buildings. This was in order to fund the cost of the pedestrian bridge that provides a safe path of travel for all pedestrians. In the event that one of the elevators is out of order, the bridge provides access to an accessible path of travel to grade by using the elevator in the other building.

The overall campus constructed relatively recently and having been approved by DSA (Division of the State Architect) is in compliance with most all current ADA (Americans with Disabilities Act) and California Building Code (Title 24) requirements. Where there is non-compliance, the issues typically center on code changes after the earlier phases of construction were built. These have in some instances been addressed with later construction.

CAMPUS ARCHITECTURE

The buildings already constructed or currently under construction reflect various design approaches to meeting their external environmental and internal functional requirements. The most immediate consideration is that Blythe lies in one of the hottest regions of the US. The mesa location of the campus, removed from the cooling effect of the Colorado River and the irrigated valley, accentuates the high temperatures in the region. But nevertheless various solutions for construction were applied to the four phases of buildings done so far. These were primarily driven by their internal functional requirements.

- **Climatically Appropriate Architecture**

Central to the campus architecture of Palo Verde College is that it be appropriate to the challenging desert climate. It is characterized by extremely high summertime temperatures, sometimes exceeding 115°F and on rare occasions reaching 125°F. Opposite are wintertime temperatures that can reach freezing during the cool months. Generally speaking, half

of the year is quite hot while the other half is cool and pleasant. Outdoor spaces, while desirable during the cool months, can become unusable during the hot months. The hot season therefore encourages an “indoor campus” design approach whereas the cool season might encourage more of an “indoor-outdoor” approach. This was a significant challenge and led to the “interior mall” strategy of the two main buildings described later in this chapter.

The climate is also characterized by *high diurnal* temperature swings. This is a characteristic of inland climates in regions with low humidity where the peak daytime temperatures can exceed their nighttime counterparts by 35° and 40°F during most seasons. During the summer daytime hours, temperatures will consistently reach a blistering 115°F, while at night it may be, with low humidity, a very comfortable 85°F. The exception is during the late summer Monsoon season when moisture from the south increases the humidity. While peak daytime temperatures are somewhat less at that time, the effect of the humidity can make it swelteringly hot. That period is also characterized by some of the heaviest rains that come via thundershowers and flash floods. The resultant run-off can seriously erode the soft sandy soil on the college property.

Palo Verde College’s buildings are generally constructed of high mass materials. These consist of concrete and concrete masonry wherein their inherent heat storage characteristics have been used to take advantage of the high temperature swings (This is opposed to low mass materials such as wood and steel that do not store a great deal of heat). Thermal mass can moderate a building’s internal temperature to the median between the high daytime and low nighttime temperatures. The effect can be accentuated by using nighttime ventilation (cooling off the internal thermal mass) as well as shading and external insulation. Thermal mass if properly deployed effectively becomes a “thermal flywheel” to moderate and stabilize interior temperatures. This increases comfort and substantially reduces peak and year round energy use for cooling or heating.

High mass has been taken advantage of in various ways on the buildings already constructed or planned on campus. Some (Phase One Buildings) rely on excellent shading by the mass itself to moderate the interior temperatures; others (especially Phases Three and Four) rely on external insulation to stabilize the temperature of the mass.

Building orientation is another consideration. Most buildings on campus are carefully oriented with their long dimensions east-west and present only a minimum exposure to the hottest east and west sun during the summer months. Their broad south and north exposures are generally well shaded to minimize heat gain, except during winter when the sun is lower on the horizon and the heat is beneficial. Exceptions to this are the gymnasium and theater whose layout and lack of windows encourage a squarer shape.

High temperatures and excessive temperature swings also stress many construction materials – hastening their deterioration. But concrete and masonry are generally immune to that.

- **Architectural Style**

The style adopted for the buildings constructed and planned to date is contemporary, but with a Native American flair derived from the southwest. It revived and reinterpreted the Pueblo Deco style that was an outgrowth of the Art Deco period of the 1930’s as it was adapted to the climate and history of the desert southwest. Buildings with similar polychrome concrete and masonry construction with Native American themes can be seen in Phoenix, Albuquerque, and El Paso. Selection of this style was viewed as indigenous to the region and appropriate to its history and early inhabitants.

- **Building Construction**

- o **Phase One**

The Phase One *Classroom/Laboratory Building and College Services Building* were completed in 2001 as a part of the initial facilities for the relocated college. Accompanying them were the main roadway, parking, central chiller plant, and utility and drainage infrastructure for the campus. These are described elsewhere.

Also constructed concurrently, but under a separate contract, was the *Maintenance and Operations Building* that was paid for out of district funds. This building, a pre-engineered steel structure, is intended solely for maintenance and operations personnel and as such was not submitted to DSA for plan check. It is therefore a non-certified building and should not be used for teaching purposes.

Both main buildings are two story and rely on precast concrete (tilt-up) moment frames to provide the primary supporting structure. These are illustrated in construction photos on page 24. The concrete frames, along the north and south perimeter walls and transversely down the centers of the buildings, support both vertical and lateral loads. On the interior, steel beams tie the concrete frames together and support steel decking with concrete infill slabs. The exterior concrete frames create a shaded balcony that shields the perimeter windows and walls from direct sunlight. The interior concrete frames coupled with the extensive concrete slabs provide thermal mass to stabilize the interior temperatures. No appreciable wood construction was used in either of the two buildings; they are almost exclusively constructed of inorganic materials (concrete, steel, metal studs, and gypsum board).

There are no load-bearing walls within the two main buildings except at the circular Assembly Room at the east end of the Classroom/Lab Building. This provides maximum flexibility for future building alterations. Additional concrete moment frames may be added without seismic separations or extra bracing. This is because each frame uniquely contributes to supporting its share of the building loads. However for this to work, the additions will need to be composed of two story frames identical to those already in place. That in turn means that additions will need to be substantial enough in area to justify the construction of at least a full two story 20' wide bay (about 3,200 sf. per bay).

Both buildings were planned for expansion at the far opposite ends, the Classroom/Lab Building toward the west and the College Services Building toward the east (if sufficient space is available). Other directions of expansion may include north (south is down slope), though specific provisions structurally and circulation-wise were not made.

Both Phase One buildings are designed to comply with "Mall" section of the building code. This is illustrated by the floor plans on the following pages. The central linear two story malls substitute for ordinary enclosed corridors on each floor and offer space for other activities such as study, independent learning, and even dining in addition to circulation. The main requirement is that a 10' wide unimpeded circulation aisle be maintained along both sides of the mall. With an

overall mall width of 30', this means the center 10' may be used for functions and activities other than circulation.

Other benefits of the mall, especially with the two story high open mezzanine made possible, include daylighting of the mall interiors and the use of full height glass between it and the classrooms and offices. The mall code doesn't require fire labeled doors with steel frames or similarly rated glass and wall construction. The same applies to ductwork and fire dampers that are not required where ducts cross a mall. This non fire-rated construction, including doors and windows in aluminum frames, contribute to a cost savings that may help compensate for the added space required by the second circulation aisle. Regardless of its cost, the most significant advantage of the mall is its creation of an "indoor campus". The resultant airy, naturally lighted spaces provide a substitute "indoor landscape" for outdoor landscaping when it is too hot.

The *Classroom/Lab Building* was formally renamed in honor of *Anthony Reale*, a well-respected former board member who passed away while in office. See floor plans on page 121 (1st floor) and 122 (2nd floor); and entry courtyard and interior on page 123. It accommodates the majority of the academic programs including classrooms, labs, and faculty offices. Also accommodated is a small student activity space in a vacated classroom -- whose location next to other classrooms is somewhat inappropriate. The mall itself accommodates the highly successful Learning Center with its support facility. The mall was originally intended to accommodate only an independent computer study center in support of the classrooms. The Learning Center was instead intended for space next to the Library in the College Services Building. However combining the two functions made operational sense. But with a growing information technology support (IT) operation, it has resulted in a shortage of space.

The circular Assembly Room is mainly a tiered lecture hall with projection and other support space provided at the rear of the room. Above them is an open mezzanine that may be used for technical support purposes such as lighting, or even overflow audience seating. This room was also provided a lighting catwalk above the main seating area in order to support limiting theatrical lighting and other performance uses (see picture of interior on page 123).

Analysis of these usages and other facility needs for the various disciplines and services housed in the building are described in detail in each pertinent section of the Educational Master Plan chapter.

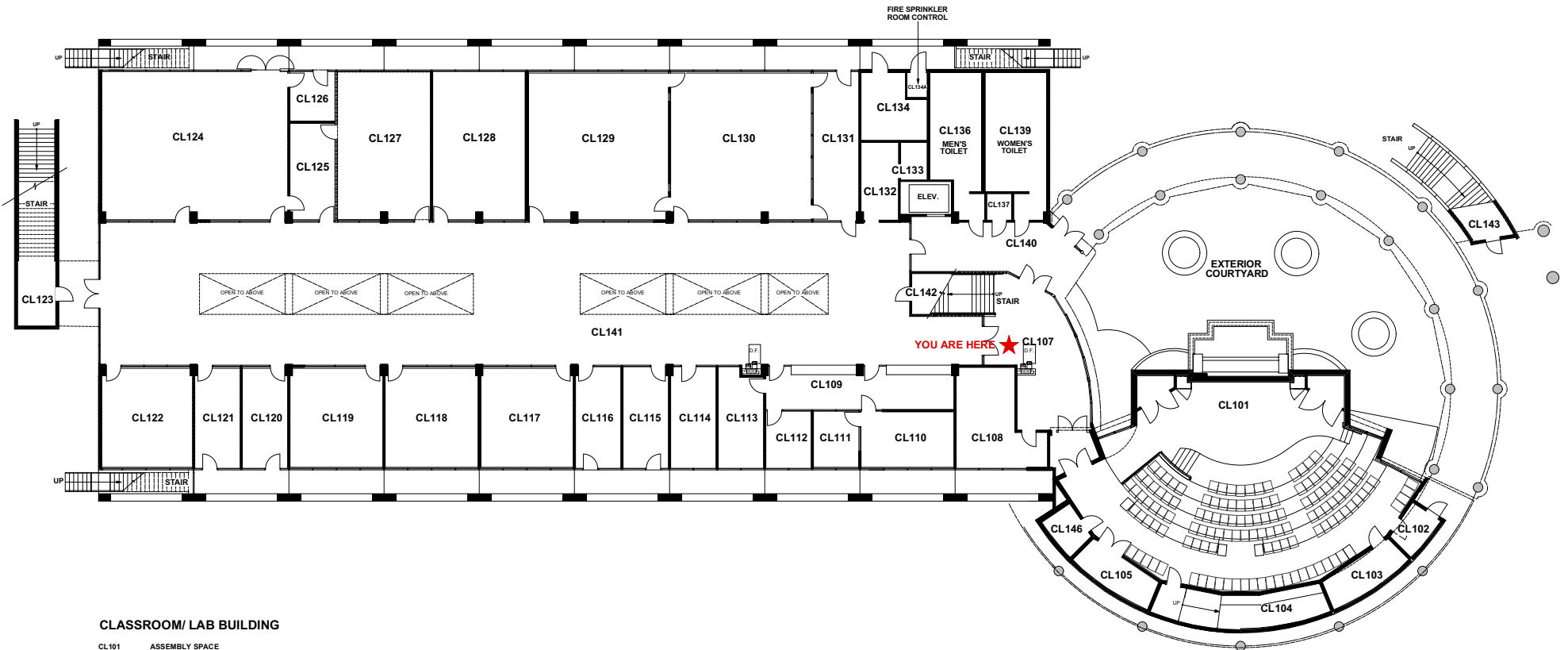
The main entrance to the Classroom/Lab Building is via a shaded circular courtyard next to the Assembly Room. This north-facing court provides shaded outdoor space during the hot seasons. The elevated bridge provides the shade and a level connection to the Assembly Room mezzanine, as well as to the main entry bridge described later.

The *College Services Building* has also been formally renamed in honor of a former board member, John Crain, who also passed away while on the board. Mr. Crain was influential in supporting the construction of the new Mesa Campus. See floor plans on page 124 (1st floor) and page 125 (2nd floor).

The building accommodates most of the services that support the academic programs. It includes the college library, media services, distant learning labs, all student services, instruction office, business office, and the superintendent-president's office. In addition are food services, dining and assembly spaces and the college bookstore. The main campus telecommunications-network hub is on the ground floor. Its main entrance (also the main entrance to the college) is denoted by a circular entry tower with curved stair (see picture on page 126).

Both Phase One buildings are linked on their respective second floors by a sloping steel bridge (handicap ramp) that serves to denote the vehicular entry to the college (see picture on page 126). The bridge provides grade separated pedestrian access between the buildings while allowing all vehicular traffic to pass safely below. The bridge also accommodates the main chilled water lines and other utilities serving the two buildings. Both buildings are tied into the central chiller plant.

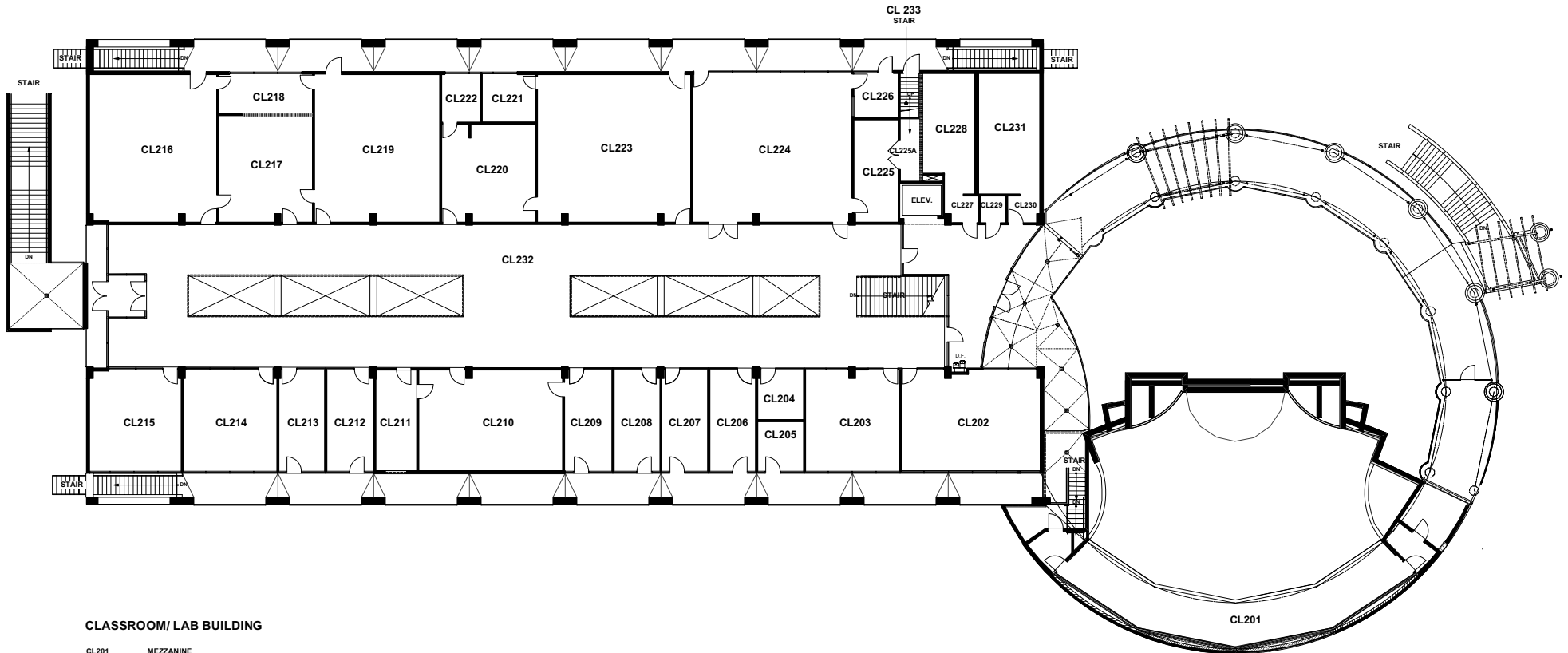




CLASSROOM/ LAB BUILDING

- CL101 ASSEMBLY SPACE
- CL103 STORAGE
- CL104 CONTROL ROOM
- CL105 STORAGE
- CL106 CONFERENCE ROOM
- CL108 COMPUTER REPAIR
- CL110 OFFICE
- CL111 TELECOM
- CL112 TELECOM SERVER
- CL113 WORK ROOM
- CL114 MEETING ROOM
- CL115 FACULTY OFFICE A
- CL116 CLASSROOM A
- CL117 CLASSROOM B
- CL118 CLASSROOM C
- CL119 FACULTY OFFICE B
- CL120 FACULTY OFFICE C
- CL121 CLASSROOM D
- CL122 UTILITY STORAGE
- CL123 MULTI-PURPOSE LABORATORY
- CL124 OFFICE D
- CL125 PREP
- CL126 CLASSROOM E
- CL127 CLASSROOM F
- CL128 C.I.S. LAB A
- CL129 C.I.S. LAB B
- CL130 FACULTY OFFICE E
- CL131 CUSTOMAL STORAGE
- CL132 ELEVATOR EQUIPMENT
- CL133 ELECTRICAL ROOM
- CL134 FIRE SPRINKLER CONTROL ROOM
- CL136 MEN'S TOILET
- CL137 JANITOR
- CL138 WOMEN'S TOILET
- CL139 UTILITY STORAGE
- CL142 UTILITY STORAGE
- CL143 UTILITY STORAGE
- CL144 STORAGE
- CL146 STORAGE

FIRST FLOOR PLAN

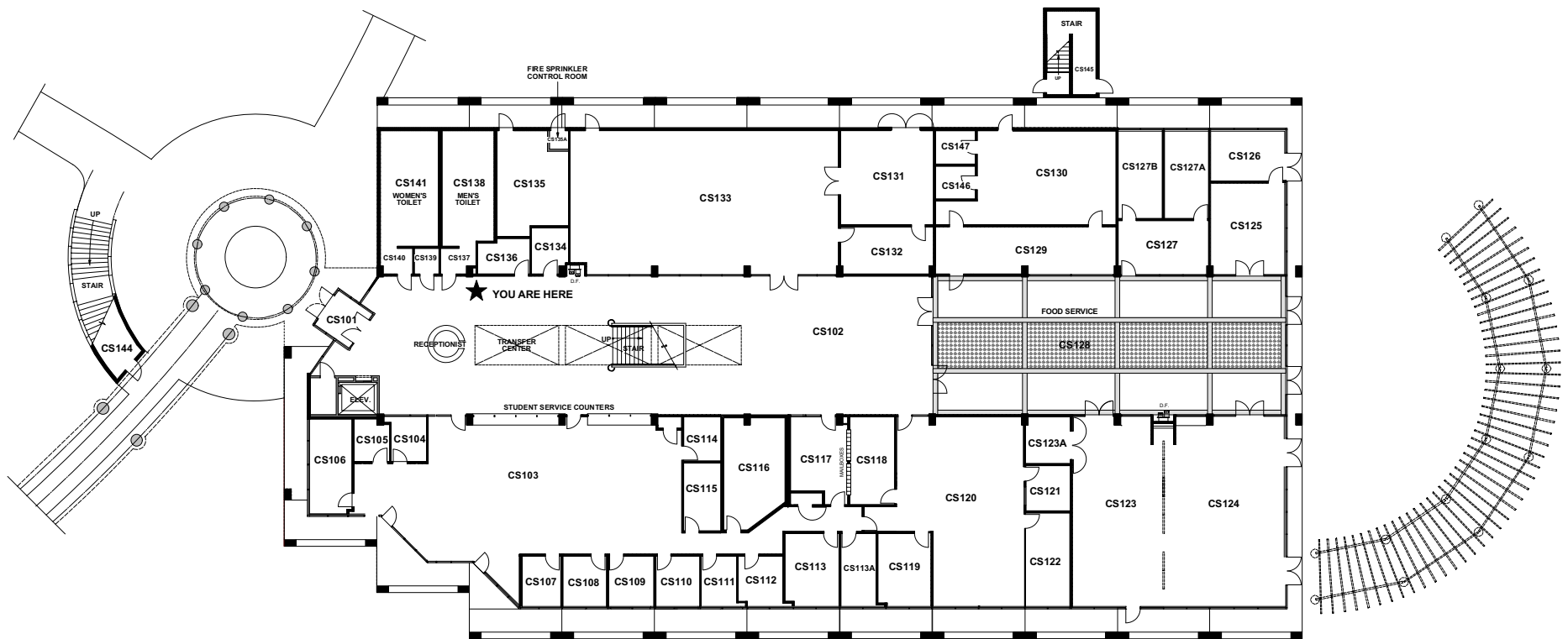


CLASSROOM/ LAB BUILDING

- | | |
|--------|--|
| CL201 | MEZZANINE |
| CL202 | CLASSROOM G |
| CL203 | SEMINAR A |
| CL204 | OFFICE A |
| CL205 | TELE/ COMM |
| CL206 | FACULTY OFFICE B |
| CL207 | FACULTY OFFICE C |
| CL208 | FACULTY OFFICE D |
| CL209 | FACULTY OFFICE E |
| CL210 | MULT-PURPOSE LAB |
| CL211 | LAB. PREP. |
| CL212 | FACULTY OFFICE F |
| CL213 | FACULTY OFFICE G |
| CL214 | SEMINAR B |
| CL215 | SEMINAR C |
| CL216 | SCIENCE LAB. (MICROBIOLOGY/ BOTANY LAB. |
| CL217 | BOTANY/ BIOLOGY PREP. |
| CL218 | FACULTY OFFICE H |
| CL219 | SCIENCE LAB. (ANATOMY/ PHYSIOLOGY) |
| CL220 | CHEMISTRY/ PHYSICS PREP. |
| CL221 | INSTRUM. BALANCE |
| CL222 | FACULTY OFFICE J |
| CL223 | CHEMISTRY LAB. |
| CL224 | ALLIED HEALTH DEMO & BED LAB. |
| CL225 | A.H. PREP. STORAGE |
| CL225A | ELEC. CLOSET |
| CL226 | NURSING DIR. |
| CL228 | MENS TOILET |
| CL229 | JANITOR |
| CL231 | WOMENS TOILET |
| CL233 | STAIR TO ROOF |

SECOND FLOOR PLAN

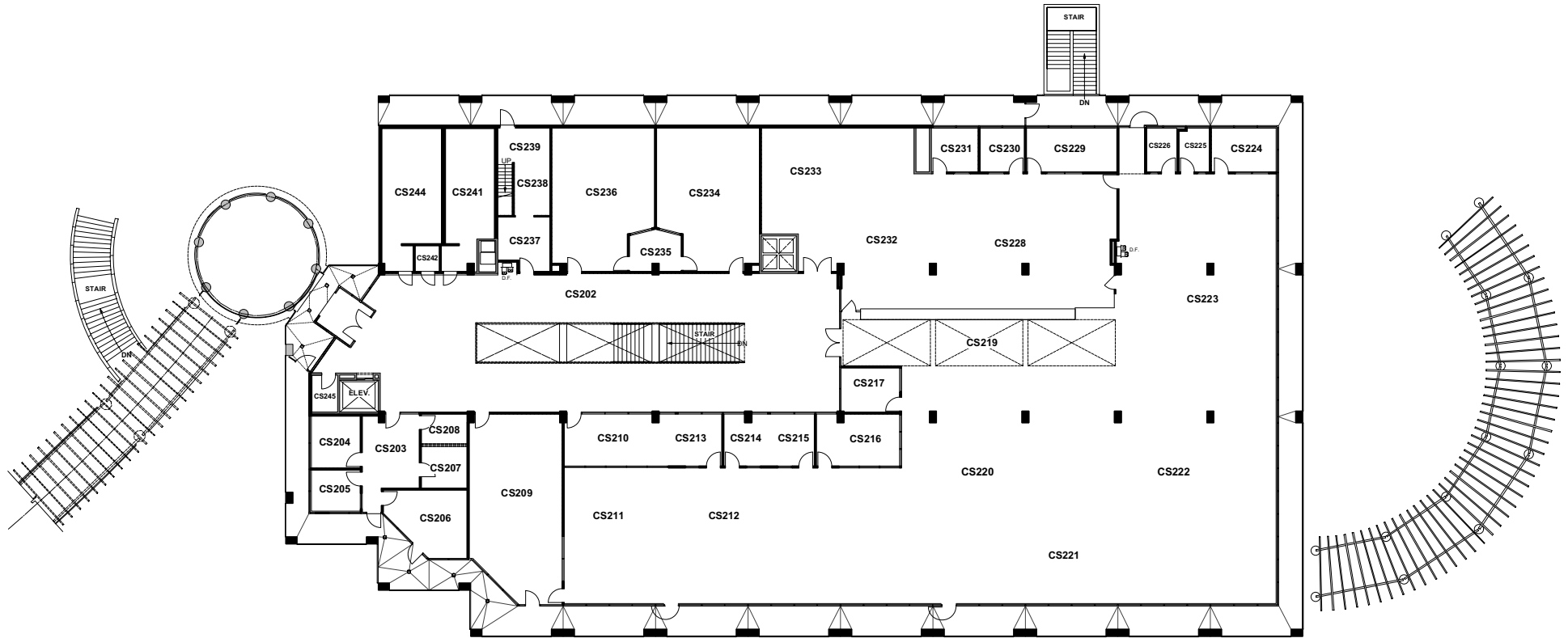




COLLEGE SERVICES BUILDING

- | | | | |
|--------|-----------------------------------|--------|-----------------------------|
| CS103 | STUDENT SERVICES OPEN OFFICE AREA | CS125 | DEAN OF INSTRUCTION |
| CS104 | COUNSELOR | CS127A | A.S.B. MEETING |
| CS105 | COUNSELOR | CS127B | A.S.B. MEETING |
| CS106 | DEAN OF STUDENT SERVICES | CS128 | A.S.B. WORK ROOM |
| CS107 | EDPS CARE | CS129 | SERVERY |
| CS108 | EDPS DIR. | CS130 | KITCHEN |
| CS109 | EDPS DIR. | CS131 | STOCK ROOM |
| CS110 | FIN AID | CS132 | ACCOUNTING OFFICE |
| CS111 | FIN AID TECH | CS133 | BOOKSTORE |
| CS112 | PUBLIC INFORMATION SERVICES | CS134 | ELECTRICAL ROOM |
| CS113 | REGISTRAR OFFICE | CS135 | TELECOM ROOM |
| CS113A | REGISTRAR | CS135A | FIRE SPRINKLER CONTROL ROOM |
| CS114 | MEETING ROOM | CS136 | SUPPLY STORE |
| CS115 | WORK ROOM | CS138 | MEN'S TOILET |
| CS116 | VAULT | CS139 | JANITOR |
| CS117 | FACULTY WORK ROOM | CS141 | WOMEN'S TOILET |
| CS118 | CASHIER | CS142 | ELEVATOR EQUIPMENT |
| CS119 | MEETING ROOM | CS143 | UTILITY |
| CS120 | BUSINESS SERVICES OPEN AREA | CS144 | EQUIPMENT STORAGE |
| CS121 | CONTROLLER | CS146 | DRY STORAGE |
| CS122 | DEAN OF BUSINESS | CS147 | DRY STORAGE |
| CS123 | FACULTY/STAFF DINING | | |
| CS124 | DINING & STUDENT | | |
| CS125 | INSTRUCTION OFFICE OPEN AREA | | |

FIRST FLOOR PLAN



COLLEGE SERVICES BUILDING

- CS203 RECEPTION
- CS204 MEETING ROOM
- CS205 ADMIN ASSIST.
- CS206 PRESIDENT
- CS207 WORK ROOM
- CS208 TOILET
- CS209 MULTIPURPOSE LAB. (LANGUAGE LAB)
- CS210 DSP'S HIGH TECH CENTER
- CS211 ASSESSMENT
- CS213 TUTOR C
- CS214 TUTOR B
- CS215 TUTOR A
- CS217 GROUP STUDY A
- CS219 LIBRARY LOBBY
- CS220 REFERENCE/ PERIODICALS
- CS221 READING AREA
- CS222 COMPUTER STUDY AREA
- CS223 LIBRARY STACKS
- CS224 GROUP STUDY C
- CS225 STUDY B
- CS226 STUDY A
- CS228 TECHNICAL PROCESSIN
- CS229 OFFICE A
- CS230 OFFICE B
- CS231 A.V./TV. EQUIPMENT
- CS233 INTERACTIVE DISTANCE LEARNING LAB A
- CS234 CONTROL BOOTH
- CS235 INTERACTIVE DISTANCE LEARNING LAB B
- CS236 TELECOM
- CS237 ELECTRICAL AND FIRE SPRINKLER CONTROL ROOM
- CS238 STAIR TO ROOF
- CS239 MEN'S TOILET
- CS241 JANITOR
- CS242 WOMEN'S TOILET
- CS244 EQUIPMENT STORAGE
- CS245

SECOND FLOOR PLAN



o Phase Two

The Phase Two Technology Building completed in 2007 also relies upon tilt-up concrete construction and steel framing to support its roof and mezzanine levels. But it differs from the Phase One buildings in that the tilt-up panels are designed as shear walls instead of moment frames. This building, illustrated on the floor plan, is an industrial environment intended to support programs of that nature (see floor plan on following page). Only a portion (classrooms, offices, and the carpentry lab) is finished air-conditioned space. The rest is heated and ventilated-only because it is composed largely of rooms with large roll-up doors that are frequently left open to the weather. Provision however was made in the mezzanine air handling equipment room to accommodate the addition of cooling equipment at those rooms. Insulation that was provided was used mainly on the interior sides of the exterior concrete walls and over the entire roof. Skylights for natural lighting were originally designed, but eliminated for cost savings.

The Technology Building accommodates a large automotive lab (sized for diesel and marine programs), a welding lab, and a large construction technology lab. The construction technology lab is intended to be partitioned into sections for cabinetry, heating ventilating and air conditioning (HVAC), and plumbing. But because of a shortage of faculty, these additional programs were delayed until future enrollment growth will support them. In the meantime, there is a large outdoor work yard around the perimeter of the building, part of which is dedicated to actual building construction. Supporting the three major labs are two “demonstration labs” that can double for classrooms. Also included are a tool crib and faculty offices. Future expansion can occur toward the east into level space atop the mesa. As was mentioned earlier, a south wing housing a TV studio and support spaces was designed through working drawings and approved by the state. This had to be removed for budget reasons, but could be reinstated if the need for those specialized facilities were to develop.



o **Phase Three**

The Phase Three Physical Education Building was completed in 2008 and is the first deviation from the poured concrete wall construction of its predecessors. Continuing problems with the timely delivery of concrete from the local mixing/batch plant in Blythe resulted in a change in the wall construction from tilt-up concrete to concrete masonry units. But it benefited the college by allowing a change of insulation strategies from conventional interior insulation to exterior EIFS (Exterior Insulation and Finish Systems) that would allow taking advantage of the thermal mass of the wall construction to save on heating and cooling loads.

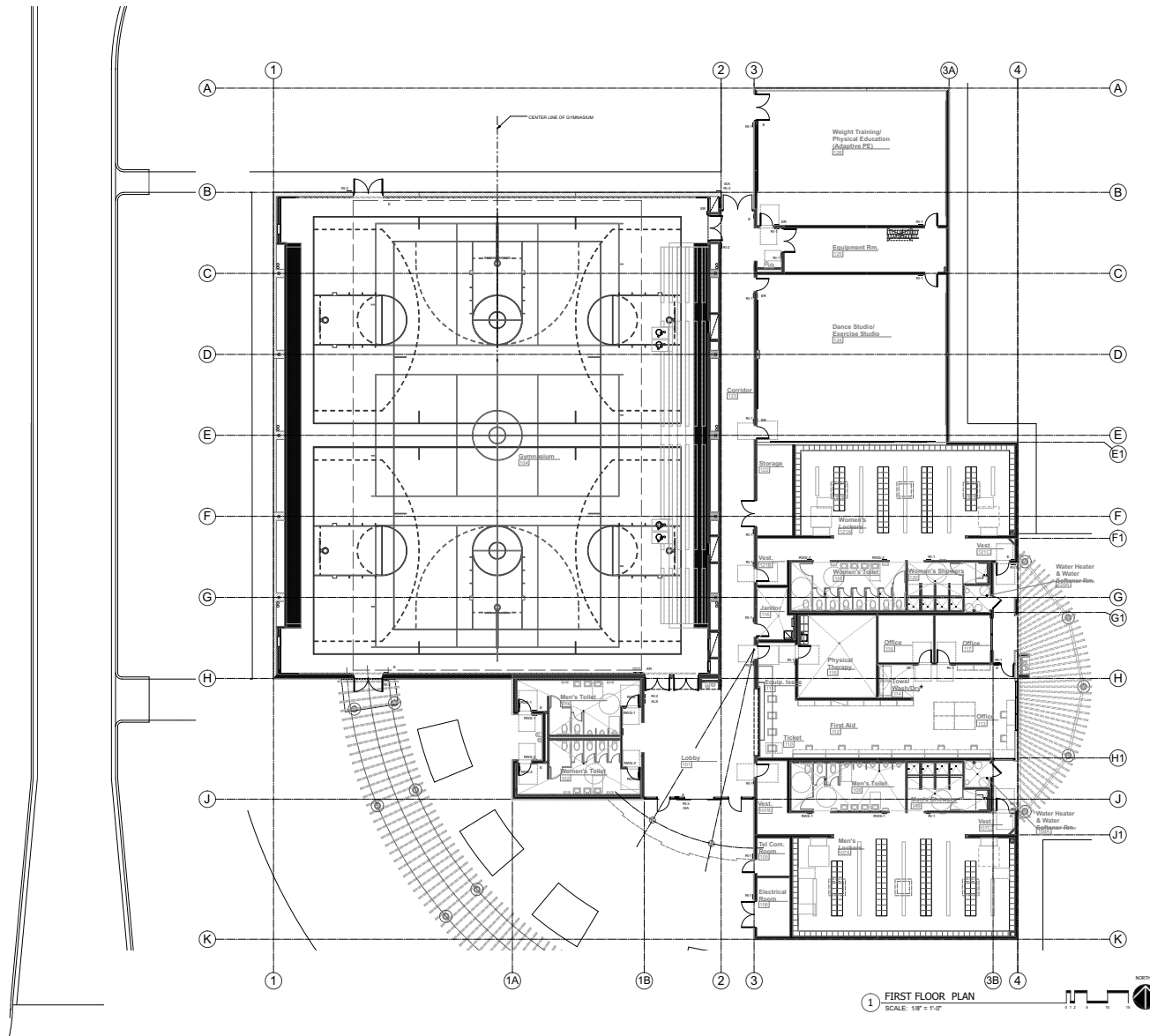
This building, illustrated on the floor plan, (page 130) is composed of a concrete block high bay full regulation gymnasium using long span steel girders and a concrete block lower wing housing the shower-lockers, storage, a physical training room, faculty offices, and two major activity rooms. With the exception of the main lobby and windows in the offices, the majority of the building is without windows -- reflecting the owner's desire to control the interior lighting. This coupled with construction inflation resulted also in the elimination of the originally planned skylights -- except those in the locker rooms. The offices are oriented toward the future swimming pool yard and the locker rooms are designed to provide a direct access to the pool when it is built.

This building relies on foam insulation applied to the exterior of the concrete masonry walls. Without the numerous windows that required balconies and overhangs for shading with Phase One, it became the first building to directly apply the principles of thermal mass with external insulation. It is also the first building not to be tied into the central chiller plant, instead having its own "package" cooling units. The main entrance is on the south side that provides an air lock into the main conditioned area of the building. It fronts a small wind protected plaza that supports outdoor ceremonies and intermissions during major sports and assembly events. Access to Phase Three is

via the "great circle" shade trellis walkway that originates at the Classroom/Lab Building and terminates at the gymnasium. Public toilets (in addition to those inside the locker rooms) are accessible from both the plaza and athletic field on the west and from inside the gymnasium lobby. A northward expansion has been accommodated via the future planned *Public Safety/Health Services Building* by utilizing the existing north exit corridor.



DR. HOTTOIS CELEBRATING THE GRAND OPENING FOR THE CLANCY OSBORNE PHYSICAL EDUCATION CENTER (BOARD MEMBERS ON THE RIGHT AND MR. OSBORNE AT THE LEFT BEHIND DR. HOTTOIS).





o **Phase Four**

The Phase Four Fine and Performing Arts Complex is starting construction in Summer 2009 and expected to be completed within two years. Its construction matches that of the Phase Three building using concrete masonry units and EIFS. The circular form of the site made the repetitive kind of construction best suited for tilt-up concrete walls impractical. Concrete block provided more versatility in accommodating the resulting irregular building shapes, as well as the high and low bay construction. The project, illustrated on the floor plan on the following page, is composed of two buildings, a theater with support spaces and a laboratory wing arrayed around a circular inner courtyard. This is the first building complex to be planned around a traditional courtyard that would provide protection from the wind while creating a cool microclimate through lush landscaping.

The theater, like the gymnasium, is composed of high bay concrete masonry construction with long span steel girders. Yet it is without a traditional fly loft. This allowed the main roof to be all one level and less costly. Substituting for the fly loft and rigging, performances will be flexibly accommodated using tension grids (suspended steel frameworks supporting walk-able open woven cable mesh infill panels) and catwalks over the stage and audience seating. The open mesh allow light and sound to pass through, and even allows limited use of rigging and movable scenic effects. This solution utilizes the latest theatrical technology and requires only limited use of traditional rigging and drapery, mainly at the main proscenium opening for curtains and at the upstage (rear) for a cyclorama and rear lighting effects.

The scenery shop and adjacent green room are similarly high bay construction, well suited to accommodate a variety of future styles of theatrical and performing arts productions. As mentioned earlier, the green room has been designed to allow for conversion to a small "black box" theater and/or the TV studio to replace the south wing omitted from the Phase Two project.

The circular lab wing (actually composed of four square buildings and one wedge shape one) is lower in overall height than the theater, but still nearly two stories high. Each of the four houses a pair of labs (music practice rooms in one case) and are provided with high,

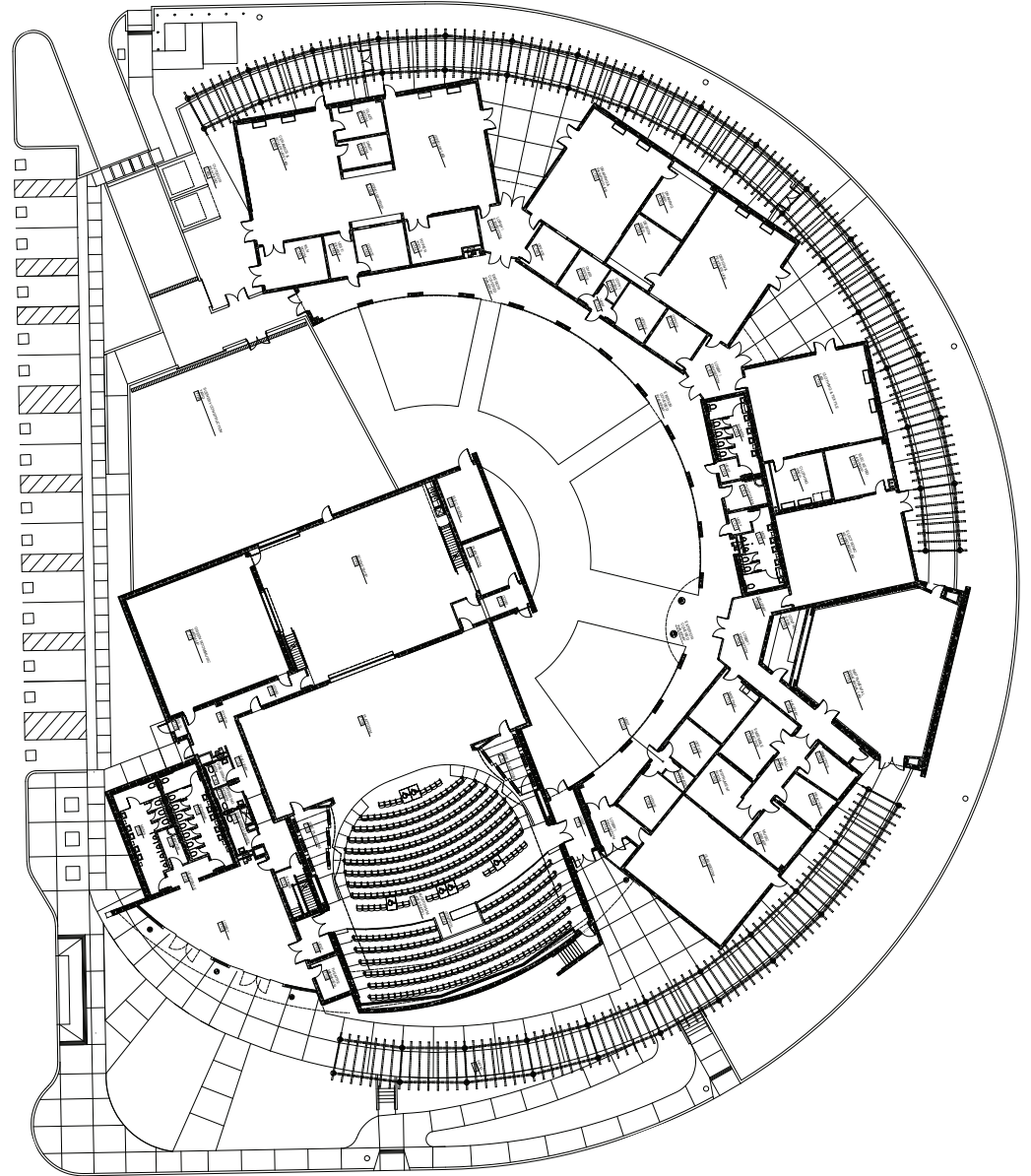
well-shaded clerestory windows for natural lighting. These are mainly for the art labs, one electronic music lab, and one classroom. The wedge shape building is the music recital hall and is also high, but for purposes of acoustics rather than lighting. In front of each pair of labs is a pair of faculty offices and in front of that, fronting the courtyard, is a circular covered walk. Access to each lab and the offices is via an "air lock" or vestibule -- lessening the loss of conditioned air to the outdoors or infiltration of dust and sand.

On the outer side of the lab ring is a series of outdoor patios shaded by a circular trellis mimicking the great circle trellis. This is intended for outdoor class projects when temperatures are moderate and the sun is not too intense. The Phase Four complex is tied to the central chiller plant and is to be provided an additional chiller for more capacity. The Phase Four project also provides a new higher capacity west campus power feed to serve it and future developments to the north, such as the play fields and lighting.



**RENDERING OF PHASE FOUR
FINE AND PERFORMING ARTS**

**FIRST FLOOR PLAN
PHASE IV FINE AND PERFORMING
ARTS COMPLEX**



- **BUILDING CAPACITIES**

The main campus, as the following will indicate, now has a sizable total square footage -- currently according to the Space Inventory 91,138 ASF. After completion of Phase IV under construction, it will rise to 117,551 ASF.

Like many college campuses, there are shortages in some categories while surpluses in others. This section evaluates the need for space based primarily upon state standards and recommendations for campuses the size of Palo Verde College rather than program needs for space as identified in other sections of this report.

There are already identified shortages in office space as well as instructional support (Audiovisual/Radio/TV). In addition to that, there are large potential shortages in Library. Countering that could be a growing surplus of lecture classrooms and labs, particularly after completion of Phase IV. The ideal solution is to find a way to avoid building new space and balance the surplus uses against those where there is a shortage.

The following sections will roughly estimate the potential shortages and surpluses using state Title V Space Standards as a measure. It can be a guide to planning for future new and remodel space needs.

- o **Temporary Buildings**

Many campuses rely heavily upon temporary portable buildings to make up their space shortfalls. These are sometimes considered a "badge of need" in terms of qualifying for permanent space. But others consider it a "badge of poor planning", or failure to anticipate need for space early enough to do something about it via qualifying for permanent facilities.

Temporary buildings often become permanent and remain for decades on end. Their installation and local financing by districts relieves the state of the financial burden of providing permanent space. Furthermore, they are extremely inefficient in use of energy and, via their light construction, a poor solution for an extreme hot desert climate like the Palo Verde Valley.

- o **State Title V Space Standards**

The following is a review of building space on campus following the state standards for usage of space.

- **Capacity versus Non-Capacity Space**

The California Community Colleges regulate through its Title V standards five Types of community college interior space: 100 lecture (classrooms), 200 Laboratory, 300 Office, 400 Library, and 530 Audiovisual/Radio/TV. These are governed by strict formulas tied to usage and sometimes referred to as "capacity space".

Other space Types are not subject to fixed standards and are typically called "non-capacity" or "all other" space. They are: 520 Physical Education, 540 Clinic, 550 Demonstration (Child Care), 560 Field Buildings, 610 Theater Arts, 620 Exhibition Areas, 630 Cafeteria, 650 Staff Lounge, 660 Bookstore, 670 Recreation, 680 Meeting Rooms, 690 Locker Rooms, 710 Data Processing/Computer Lab, 720 Maintenance & Shop Facility, 730 Warehouse, and 800 Health Care.

- **Assignable versus Non-Assignable Space**

Both capacity and non-capacity space are classified as Assignable Square Footage (ASF). Other space is generally classified as non-assignable space. This includes corridors and circulation, balconies and overhangs, wall thicknesses and columns/shafts, toilets and janitor rooms, mechanical, electrical, and telecommunications support spaces. These are also not governed by fixed standards. However assignable and non-assignable space combined becomes Gross Square Footage (GSF). And the ratio of assignable to gross square footage determines the building efficiency that is governed for various types of uses from a low of 65% to about 80%

- o **Capacity Space**

The following is a review of the five capacity Space Types as they apply to current and projected space needs at the main campus. But before going into them, it is helpful to review the distribution of the enrollments generated at the various district sites and off-campus

programs. These are shown on the following table and represent data collected from Fall 2007:

Main Campus (Blythe area):	
On-Campus + Spring Street	8,282.25 WSCH (33.6%)
Instructional Services Agreements off campus	7,000.47 WSCH (28.4%)
Prison Programs off campus	9,372.77 WSCH (38.0%)
Total Main Campus	24,655.49 WSCH (100%)
Needles	1,485.94 WSCH
Total District	26,141.43 WSCH

*These numbers differ slightly from those in the 2009 Five Year Plan

- **100 Lecture**

Lecture halls and classrooms are subject to a use requirement of 53 hours of lecture time per week with 2/3rds of the stations occupied. This is in order to achieve full 100% usage. The allowable space computes to 15 Assignable Square Feet (ASF) per student station. Small colleges like Palo Verde are given a 10% increase.

This level of usage is extremely difficult to accomplish, even with the large enrollments and class sizes of larger institutions. Furthermore, class sizes within Palo Verde College classrooms are very small. The 1996 Plan determined the average class size at the old campus (Lecture and Lab classes combined) to be 14 or 15 students. Most classrooms at the new Mesa campus were therefore sized at 20-24 students, or about 400 ASF.

This plan has determined that there has been no measurable increase in average class size at the main campus. It does not mean the college hasn't grown. In fact there are many more courses offered today than in 1996. But despite the greater number of courses and some larger enrollment classes (maybe 30 students), average on-campus class sizes remain small.

The college faces a conundrum that while most class sizes are very small and fit well into the originally designed small class-

rooms, larger class sizes require larger rooms at least a few hours a week. To address the intermittent weekly need for larger classrooms, the following are possible solutions:

- CL 101 Assembly Room whose current use is primarily public meetings and classified 610 Theater Arts is well suited as a large lecture hall.
- The soon to be completed Phase IV 984 ASF classroom will provide a large lecture space capable of accommodating up to 50.
- CS 234 and 236 are distant learning labs whose sizes might allow for more student stations and regular lecture, in addition to the current use.
- One of the following groups of paired classrooms, CL 117-118-119 and CL 214-215 (one the student lounge) could be combined into a larger 800 ASF room by removing the demising partition or installing an operable wall for flexibility.
- The two Demonstration Labs in the Phase II Technology Building may have available hours for non-technology class uses, particularly during evenings.
- Laboratories throughout campus tend to be larger and have a lower weekly use requirement. When not scheduled for lab and where they are physically well suited, the free time could be scheduled for lecture.

CS 209 is an example of a room currently used as a large classroom but actually classified 400 Library. It was originally intended as a learning assistance language tutorial lab and its location between the library and the Superintendent-President's Office makes it remote from other classrooms. That space may be more valuable for other uses.

Given the small class sizes and a recent finding that over 60% of the Fall 2007 WSCH was actually earned off campus, the main campus may have more classroom space than it currently needs. Detailed data to support this finding can be derived from the Educational Master Plan chapter. According to the Five Year Plan, by 2015 after completion of Phase IV and not counting the Public Safety/Health Services Building, there will be about 1,700 ASF of surplus lecture space.

It is recommended that unless on-campus enrollments increase significantly, the 1,700 ASF of surplus classroom space be converted to other uses. Furthermore, if there are shortages of classrooms at peak hours, consideration should be given to scheduling lecture classes in unscheduled labs where they are suitable.

- **200 Laboratory**

Labs are tied to a similar usage requirement as lecture rooms. Its formula is less onerous and is based on 27.5 hours usage per week with 85% of the stations occupied. There is no small college adjustment for Lab. While lecture rooms are given a fixed allotment of space per student station (15 ASF), labs are given varying amounts of space in accordance with their usage. It ranges from a high of 200 ASF per station for industrial programs such as Auto Mechanics to a low of 30 ASF per station for Business and Management. Most programs fall in-between in the range of 40-60 ASF per station. Lab programs are therefore only required to schedule their space for roughly half the time as Lecture and they are given on average more than three times the space.

Lab space on campus is not currently showing a surplus to the same extent as Lecture. This may in part due to the off-campus WSCH containing comparatively less Lab than Lecture WSCH. Furthermore, with the seven new labs being added in Phase IV, it will broaden the college's ability to teach specialized lab programs, resulting in an increasing percentage of Lab WSCH being taught overall. The actual Lab WSCH increase will need to be tracked in the Five Year Plan in coming years.

But regardless, there appears to be a future surplus of lab space. Looking ahead to enrollments projected for 2015 and not counting the capacity of future projects (Public Safety/Health Services Building and the Child Development Center), it would compute to roughly 140% capacity. Applying that percentage against the total Lab square footage after Phase IV of 29,908 ASF would show a surplus of roughly 8,500 ASF*.

Subtracted from the 8,500 ASF would be Secondary Effects space, or space freed up by construction of new space. When

Phase IV is completed, it will free up a 400 ASF lab assigned to Music that could be converted to other uses. In addition to that would likely be one faculty office of 100 ASF. Accounting for both lowers the surplus to about 8,000 ASF*.

The downtown Spring Street site currently supports much of the college art programs. Upon completion of Phase IV, those programs will move on campus – freeing up that space for other uses.

If the Public Safety/Health Services Building is later built, it will free up two additional labs and support space used for Nursing. That will free-up an additional 2,400 ASF of Lab and 200 ASF of Office space for other uses for a net additional availability of about 2,600 ASF – further lowering the lab surplus to about 5,400 ASF*.

** It should be noted that the lab surplus is difficult to accurately convert to square footage because of the differing allocations of space for the various lab disciplines.*

It is recommended that beyond the conversions cited above, lab space should be retained, even if over capacity. This is because of its inherent versatility to double up and accommodate overflow lecture uses when required.

- **300 Office**

Office space is subject to a different use formula than Lecture and Lab. It is tied to the total number of Full Time Equivalent Faculty (FTEF) on campus. Each individual FTEF is generally considered a certificated individual, although there is a space allowance for administrators who may not be certificated. Each FTEF earns an allotment of 140 ASF of office space. For small colleges like Palo Verde College, the allotment increases to 160 ASF. That allotment must cover all office uses, ranging from faculty offices, student services and clerical staff offices, the college president, bookstore office, and maintenance offices. The Educational Master Plan chapter reveals shortages in many of the student services operations and even administration.

One related casualty was the original student lounge and activity spaces next to the food service at the north end of the College Services (CS) Building. This was converted to the VP of Instruction office suite, which in turn led to the conversion of a classroom in the Classroom/Lab (CL) Building to a lounge. Library space, mainly the former Learning Assistance Center in the upstairs CS Building has been taken over piecemeal by EOP&S and Financial Aid, as well as Information Technology (IT) support staff. All have grown far beyond what was projected when the campus was planned.

Palo Verde College has a unique situation of a fast-growing faculty and staff needed to support not only on-campus programs, but also growing off-campus distant learning programs. This includes the Instructional Services Agreement (ISA) programs and those at the prisons. It has resulted in not only a larger faculty but also a fast growing IT support staff. The rate of on-campus faculty and staff growth likely exceeds the on-campus student growth rate. In fact, at the time of the 1996 Plan, five years before the move to the new campus, there were an estimated 52 full time equivalent staff on campus. With only a moderate allowance for growth, this was used as the basis for the office accommodations at the new Mesa Campus. In 2009 there are 108 full time equivalent staff -- more than double!

Adjustments have recently been made to the Five Year Plan to account for this special situation via a higher estimated FTEF growth rate than the on-campus student growth rate. Using the adjusted figures, the office formula shows that the current office space shortfall is about 7,000 ASF and will actually grow after completion of Phase IV in 2012 to about 7,700 ASF. After completion of the Public Safety/Health Services Building the shortfall increases further to about 8,100 ASF.

There are several possible options to address the office shortage: 1) convert surplus or freed-up classroom and lab space to office use, 2) move the distant learning program faculty and staff present occupying about 1,500 ASF off campus, most likely to the downtown Spring Street site, 3) install temporary office portables, 4) construct a new office addition or free-standing

permanent building, 5) relocate the library to new space to free up needed office space.

With 1), the net available surplus lecture and lab space will be about 7,100 ASF after completion of Phase IV – roughly matching the current need. However there is a substantial time delay inherent with this option and it may result in offices spread out.

With 2) moving the distant learning program staff off campus will reduce the office shortfall in 2012 to about 5,600 ASF – lessening the overall problem. However there is the potential impact of separating the support staff from many instructors who concurrently teach on and off campus. This could be an effective short-term solution.

With 3), it can be challenging to locate a site with suitable utility connections that isn't already earmarked as a potential permanent building site. And it comes with the energy and operational inefficiencies inherent with free-standing temporaries.

With 4), a new building or addition would be a desirable solution, especially if it were tied to other construction in a more favorable funding category. Office space is a low priority for funding.

With 5), relocating to the present library, were it to be relocated to a new building, would be perhaps the most desirable of all in the sense that it maintains the cohesiveness of the various operations most in need of additional office space. However it comes with an inherent lengthy time delay to relocate the library first.

- 400 Library

Library space is subject to a slightly different usage formula than Lecture and Lab. It is based on Day Credit (sometimes called Day-Graded) Enrollment. That figure covers only daytime students and those taking credit classes only. It does not count evening students. However it can count off-campus daytime students if served by the library. The college, excluding Needles has about 1,200 Full Time Equivalent Students (FTES) of on and off campus students subject to the calculation for size of recommended holdings. It also has approximately 4,500 Day Graded

Enrollments (DGE) by head count, a figure which includes incarcerated students who directly receive library services – therefore qualifying as Day-Graded.

- Title V Library Space Standards
The following is a calculation for total library space using the formula driven by the current 4,500 DGE:

Initial Increment	3,795 ASF
Under 3,000 DGE @ 3.83 ASF/DGE	11,490 ASF
3,000-9,000 EDG @ 3.39 ASFDGE	5,085 ASF
Total Area	20,370 ASF

At the main campus, 10,767 ASF according to the Space Inventory is presently assigned as 400 Library space. It is based on 92% of the student enrollment attending the Palo Verde CCD Blythe campus in 2008 with the balance of 8% attending the Needles Center. That would imply that the library is presently about half the state standard in size. However that is not the whole picture: a significant amount of library space has been turned into non-library uses. This is with the result that the actual space currently allocated to the library-proper, not including offices, is only about 8,000 ASF. That would result in a Capacity/ Load Ratio of only 40% against the 20,370 ASF presently earned under Title V.

This is illustrated on the floor plan on the following page with the approximate current library colored in blue and about 4,000 ASF of area converted to other uses colored in tan. Space allocated to distance learning and audiovisual support (all classified AV/ Radio/TV) are colored in green and represent about 2,300 ASF.

In addition to the shortfall of space, the library's holdings are currently 15,778 circulating volumes and 1,763 reference volumes – totaling 17,541 bound volumes. In addition are 34 periodicals, including newspapers. It is supplemented by E-brary electronic titles, Gale electronic reference titles and other electronic sources. However the language in Title V references number of

“bound volumes”, which suggests the college’s collection could be below the standards defined by the state:

- Title V Library Standards for Holdings**
The following summarizes the Title V library standards for collections for community colleges the size of Palo Verde College. There are actually two standards: 1) based on an FTES model, 2) based on a DGE model:

1. FTES Model		
Total volumes, 1,000 - 30,000 FTES	40,000	volumes
Total periodicals, 1,000-3,000 FTES	300	subscriptions
2. DGE Model		
Initial Increment	16,000	volumes
Under 3,000 DGE @ 8 vols/DGE	24,000	volumes
3,000-9,000 DGE @ 7 vols/DGE	7,000	volumes
Total DGE Model	47,000	volumes

As the Educational Master Plan notes, this is an isolated community that perhaps more than most needs a full scope library. The lack of floor space may indirectly be responsible for the undersized holdings.

Palo Verde College’s library was originally planned to occupy most of the second floor CS Building. Part of the space was temporarily allocated to the Learning Center (Learning Assistance and Tutorial Center) that occupied the 4,000 ASF south facing portion. That space represented the future expansion for the library-proper to about 12,000 ASF. It was with the intention of moving the Learning Center elsewhere when library growth was needed. If the space on the north currently devoted to AV/Radio/TV were also added, it would raise the total available space to about 14,300 ASF. But that figure is still well below the 20,370 ASF presently earned.



COLLEGE SERVICES BUILDING

- CS203 RECEPTION
- CS204 MEETING ROOM
- CS205 ADMN.ASSIST.
- CS206 PRESIDENT
- CS207 WORK ROOM
- CS208 TOILET
- CS209 MULTIPURPOSE LAB. (LANGUAGE LAB)
- CS210 DSPS HIGH TECH CENTER
- CS211 ASSESSMENT
- CS213 TUTOR C
- CS214 TUTOR B
- CS215 TUTOR A
- CS217 GROUP STUDY A
- CS219 LIBRARY LOBBY
- CS220 REFERENCE/PERIODICALS
- CS221 READING AREA
- CS222 COMPUTER STUDY AREA
- CS223 LIBRARY STACKS
- CS224 GROUP STUDY C
- CS225 STUDY B
- CS226 STUDY A
- CS228 TECHNICAL PROCESSIN
- CS229 OFFICE A
- CS230 OFFICE B
- CS231 A.V./T.V. EQUIPMENT
- CS233 INTERACTIVE DISTANCE LEARNING LAB A
- CS234 CONTROL BOOTH
- CS235 INTERACTIVE DISTANCE LEARNING LAB B
- CS236 TELECOM
- CS237 ELECTRICAL AND FIRE SPRINKLER CONTROL ROOM
- CS238 STAIR TO ROOF
- CS239 MEN'S TOILET
- CS241 JANITOR
- CS242 WOMEN'S TOILET
- CS244 EQUIPMENT STORAGE
- CS245

SECOND FLOOR PLAN

The Learning Center, soon after college occupancy, was moved to the central mall of the CL Building and combined with the Independent Learning facility there. But its vacated space was converted to other uses, most occupying space still classified as 400 Library. That includes conversion of the Language Lab CS-209 to a classroom and the open learning center space to EOP&S offices and counseling and DSP&S uses. Three of the four library study rooms and the three tutoring rooms have been converted to private offices, mainly for IT and counseling staff. Student tutorial or study rooms were not replicated in the CL Building learning center relocation. Only one of the original library study rooms, CS 224, remains available for students.

The present library appears to be isolated from many functions, particularly the campus academic instructional core and the Learning Center, with which it would ordinarily interact. That may negatively affect its usage.

The college needs to reassess the role of its library in the community and also serving the many off-campus programs, including the Needles Center. If it is determined that a full-scope library is needed, three possible courses of action are possible: 1) build a new free-standing library plus AV/TV media and IT facilities, 2) expand the CS Building to the northeast to enlarge the existing library, 3) remove all non-library functions in the area adjoining the library in order to allow it to expand in place.

With 1), none of the iterations of the master plans, including the current 2007 Plan specifically addressed the concept of a free-standing library. However there were indications of future building sites for long-range expansion, library included.

With 2), the 1996 Plan did show a potential northeast expansion of the library, but it would impinge on the expanded staff parking lot.

With 3), the outcome would be a permanently small 12,000-14,300 ASF library, along with the challenge of relocating the offices and AV/TV facilities.

Planning must recognize the likelihood that the library and related functions will eventually outgrow its present location. A free-standing library now rather than later, especially if combined with AV/TV media and IT facilities, could be a desirable option to expand needed services. It will free up CS Building and other space for new uses and is in a favorable funding category. And given that the Learning Center has already relocated to the CS Building where most academic instruction is centered, as well as in the Phase IV complex, a library located between the two might be more functional and accessible.

- 530/535 Audiovisual/Radio/TV

Similar to Library space, this category of space (AV/TV) is also based on Day Graded Enrollment. AV/TV space generally comprises instructional support facilities such as recording facilities, media storage and recording, distance learning and transmission, and other technology in support of faculty or student learning. Also included is Instructional Technology (IT) space for computers, servers, and IT staff workstations.

According to the state formula, the campus would qualify for approximately 11,500 ASF against the present allocation in the Space Inventory of 3,120 ASF. The Capacity/Load Ratio is only about 27% -- reinforcing the master plan finding of a major need for expansion. The net space shortfall (according to Title V standards) computes to 8,380 ASF.

There is the fact that the large AV/TV facility conjoined to the Phase II Technology Building had to be deleted for budget. That facility would have added approximately 3,500 ASF of additional 530/535 space. It represented an overt attempt to bring the AV/TV space on campus closer to state standards.

Through investigation by this master plan, it has been determined that IT uses often occupy space categorized as 400 Library and 300 Office when it could be 530/535 AV/TV space. Some IT staff workstations and equipment have displaced other intended staff needs (librarians and faculty in particular) and student study rooms. This will need to be updated in the Space Inventory before a final determination for expansion is made.

IT and other AV/TV spaces are inefficiently spread out throughout the CS and CL Buildings, when a consolidated facility would be more efficient and space saving.

Similar to the library, the college needs to assess and update the role of AV/TV and IT services in serving its far-flung operations. It is clear from the master plan process that IT facilities are deficient and should be consolidated where possible. Furthermore given the tremendous reliance upon technology for distant learning, training and support facilities for faculty using these technologies (or who should be using them) is a significant need.

- **Capacity Space Conclusions**

If one relied upon the current Space Inventory and current enrollments and staffing growth trends and a strict adherence to the Title V space formulas, the following would summarize the net facilities surpluses and shortfalls:

Lecture Surplus	1,700 ASF
Lab Surplus (estimated)	5,400 ASF
Total Surplus	7,100 ASF
Office Shortfall	-8,100 ASF
Library Shortfall	-12,000 ASF
AV/Radio/TV Shortfall	-8,380 ASF
Total Shortfall	28,480 ASF

The above figures suggest that the shortfalls exceed the surpluses by a factor of four. This means there is a potential of 21,380 ASF of net new capacity space needed at the main campus. But it requires a careful assessment of the actual need, especially with Library and AV/TV.

- **Non-Capacity Space**

The following is a brief review of the non-capacity Space Types

as they may apply to current and projected space needs at the main campus:

- **520 Physical Education**

With the recent completion of the Phase III Physical Education complex, it is unlikely that additional interior space will be needed in the foreseeable future. With a full regulation spectator gymnasium and two sizable PE activity rooms, college and PE program needs should be covered for many years. The two locker-shower facilities, sized for the future pool as well as the indoor and outdoor PE program needs, should also be adequate for the foreseeable future. This is unless locker room requirements for the proposed Public Safety/Health Services Building intended to share the present PE locker room begin to exceed the capacity. In that event, expansion may be needed.

If there were an immediate need for PE facilities, it centers on the pool and additional field facilities, particularly softball and a running track. Much of these had to be eliminated for budget reasons from the Phase III scope. Nighttime lighting is also a need in order to use the outdoor facilities at night when it is cool. The lighting was designed, but was also deleted for budget. The extreme hot climate and deficiencies with the high school pool (the only public pool in town) underscore the desirability for a pool at the college that would serve a community as well as a programmatic need.

- **540 Clinic**

This Type covers usages related to student health. As the college grows, there may develop a need for a student health clinic with space for a nurse and emergency medical services. Larger colleges provide this as they grow to the point of sufficient economy of scale to support such a facility. But local considerations such as low income and poverty can also be a consideration.

There is no current space set aside on campus or in the master plan for a student health clinic. Typical locations

for such facilities are in or near a student activity center, near student services facilities, or near PE facilities where injuries are most likely to occur. There is already a Physical Therapy/Training Room and adjacent First Aid and staff office space inside the Phase III PE Complex. This, with added equipment and an appropriately trained staff person, should suffice for a health clinic, if needed.

- **550 Demonstration (Child Development)**

This Type encompasses the existing downtown Don Kuykendall Child Development Center and its planned new replacement on campus. The downtown facility is in a 3,660 GSF temporary building with an attached play yard appropriately scaled to its 41 child licensed capacity. It currently occupies 3,244 ASF that is allocated to two children's rooms with a shared children's toilet, two offices, a lounge, a warming kitchen, and staff toilet.

The current facility with only two children's age level rooms is wholly inadequate for the needs of the college and community. Its remote location 6 miles from campus exacerbates that. The proposed permanent Child Development Center (see CDC Floor Plan the following page) would provide 9,259 ASF (13,467 GSF) to cover 5 age levels, infant and toddler through four years. It comprises an on campus licensed facility for 60 children while providing a college instructional lab, a kitchen in support of small pantries at each children's rooms, and other support space.

- **560 Field Buildings**

This Type primarily covers agricultural buildings. The original 1996 Plan did anticipate the construction of buildings in support of an agricultural program.

As Palo Verde College is no longer currently contemplating these programs, there should be no need for 560 space.

- **610 Theater Arts**

This Type covers all assembly uses of space. At Palo Verde College, there is CL 101, a 140 seat Assembly Room and

accessory spaces. Added to that will be the new Phase IV 400 seat Theater with Scene Shop, Green Room, and accessory spaces currently under construction. Supplementing that is the main gymnasium that provides a large assembly space up to a thousand or more.

The needs of the college appear well covered by existing and under construction new assembly and support space.

- **620 Exhibition**

This Type covers exhibit spaces, art galleries, and their support spaces. At present, the planned stand alone Phase IV Student Art Gallery has been instead combined with the main lobby for the theatre. It was done for budget reasons yet can be functional because of the inherent availability of security during performances and the availability of the staffed ticket/theater manager office every day. Other available exhibit spaces include the two Malls inside the CS and CL buildings and the lobbies in the Phase II and III complexes.

Given the availability of excellent exhibit spaces, a dedicated exhibit space or gallery is not likely a current need.

- **630 Cafeteria/Food Service**

This Type covers college food services facilities. Palo Verde College has a pair of cafeteria dining rooms and a snack bar/food court/catering-type kitchen and counter. Supplementing that is the Mall that doubles as a food court dining space and opens onto the large patio facing a view of the valley. With food service provided by an outside contracted vendor, this matches well college needs at its current size. It has accommodated a wide variety of uses, including the catering of large community and college events down to every day food service. The kitchen counter is supplemented by a bookstore coffee bar open for some extended hours. The cafeteria rooms, divisible by a movable partition, are highly versatile in accommodating the varying needs for student, staff, and public meetings. The smaller room could serve as a large classroom. If there were a weakness, it is the absence of a student activity center next to the Cafeteria.

Given the current location of a temporary student lounge in the CL Building, this may actually discourage student use of the food facilities, potentially harming the business of the vendor. That is evidenced by high turnover of the vendors.

The needs of the college appear to be well served by existing 630 space. However, were there ever consideration of a free-standing Student Center, some food service, particularly a snack bar might locate there. Another potential for a snack bar operation, albeit intermittent (possibly portable), is at the Phase III PE Complex during large spectator events or in the event of a pool, possibly throughout the summer months.

- **650 Staff Lounge**

The college currently has no designated staff lounge. The Cafeteria presently serves as a de-facto lounge, along with possibly some of the office workrooms. Lounges are typically low in priority for funding, yet can be an important need for employee morale.

With the high concentration of full time staff, particularly in the CS Building, a staff lounge there would be a desirable addition if space for it could be found.

- **660 Bookstore**

This Type embodies bookstore retail and warehouse space and also can cover bookstore accounting workspaces so long as they are not offices. The existing bookstore serves not only the college, but also the prison programs and possibly other off-site instruction. This added load has resulted in the storage room being short of space, probably causing some spillover into the retail space. At the same time, the retail space appears only lightly used after the rush periods. Consideration might be made of alternative solutions such as direct shipment from the publisher to the prisons or accommodating this function in less costly warehouse space.

Notwithstanding the space allocation issues, overall bookstore space appears adequate for the peak periods when

bookstores see most of their usage. In fact it would be more costly than it is worth to carve up or otherwise reconstruct the space to meet short term needs. The college will eventually grow to fully utilize it. The Bookstore is however a function that by its nature could move out of the CS Building into temporary space or as a part of a free-standing student center. Doing so would raise the questions of where to put the temp without interfering with future permanent buildings and also whether the temporary location would negatively affect bookstore revenues.

- **670 Recreation**

This Type embodies student activity spaces. Though the original CS Building set aside a student lounge and student government rooms on the first floor, it was converted to office uses before construction was complete. Initially that space accommodated the VP of Instruction and the foundation and public information. But recently the latter two were converted to offices in support of the Nursing/Allied Health programs. Both are inappropriately located in terms of proximity to functions they serve or are related to.

Though there have been attempts to attract students to the CS Building via amenities such as a pool table, its location next to the VP of Instruction whose office fronts the student patio may inhibit student use. To compensate, a classroom on the second floor of the CL Building was designated the Student Lounge. However this location in the midst of instructional space is inappropriate for all but the quietest activities.

Students need a "home" for their activities and government -- a place to play loud music and generally "hang-out". There are three possible options: 1) move it to the original location, 2) move it into temporary portables, 3) seek state funding for a new Student Center.

With 1), the original location next to food service, bookstore, the Mall, and the outdoor patio remains ideal. It would however require relocation of the offices.

With 2), it would be possible using solely district funds to construct a student center using temporary portables, possibly liberated from the Needles High School site if no longer needed there. But locating them close enough to other facilities and near utilities, yet not interfering with future building plans, will be a challenge.

With 3) since a permanent facility was already constructed in part using state funds as a part of Phase I, it is unlikely that the state would support another student facility.

- **680 Meeting Rooms**

This Type covers meeting rooms intended for public use, rather than conference rooms that are classified 300 Office. Meeting rooms in several locations on campus were provided in Phase I with one additional room in Phase IV. They include CS 114, CS 119, CS 204, CL 108, CL 113 in Phase I and the one room in Phase IV. Of these maybe half have been converted to office or IT use – evidencing the serious need for offices and IT space.

Meeting Rooms are always in short supply at college campuses that rely heavily on group decision-making and consensus for their governance. Though there are two larger rooms (cafeteria, assembly room) available for public meetings on campus, the real need is for rooms sized for 5-15. Unfortunately those often coincide with office sizes and are in continual shortage.

- **690 Locker Rooms (Logistical Support/Campus Security)**

This Type covers locker and other support space for campus security and also maintenance staff in the general category of Logistical Support. It can also include a Post-certified armory and secure office space with a public counter. Many colleges, especially when they reach the size or level of hazard to require armed security or police staff will require dedicated space for campus security. It functions to secure the property during periods of non-operation of the college as well as the more obvious deterrent to conflicts on campus and parking and vehicular control.

Palo Verde College has probably not reached a size that would justify campus police. But it should be planned for in the future. The preferred location is a presence near areas of student congregation such as a student center. Location near parking for entry and egress control is probably not an issue.

- **710 Data Processing/Computer Lab**

This Type is restricted to non-instructional space and is generally used to complement the instructional support functions outlined for 530 AV/TV space. It would cover larger server rooms and power conditioning spaces, as well as phone switch rooms, and the like.

With the increasing dependence upon distance learning and the proliferation of instructional technology used by the IT and Learning Center/Library staff as well as energy management systems, the present situation of space shortage is reaching a critical point. The real space needs are probably embodied by something close to the current 8,380 ASF AV/TV shortfall along with modest expansion to existing 710 space. Possible solutions include 1) vacating a large function such as the library to a new building in order to make room, 2) install a temporary portable to house the data processing equipment, 3) construct a new building or addition to house these functions, 4) find an off campus location to remotely accommodate the equipment.

With 1), it would be favorable in that it keeps the temperature sensitive equipment inside a permanent building served by the central chiller plant and close to the present network distribution centered on the CL Building.

With 2), this would perhaps be least satisfactory for the same reasons.

With 3), this could be a potential solution, possibly via reconstituting the omitted TV Studio from Phase II by introducing new functions to its interior layout. Its drawings are already DSA approved.

With 4), this is an unknown in terms of transmission of data to a remote site and the problem of the remote location of the staff. However some campuses have been known to utilize such off campus solutions via a vender-contracted operation.

- **720 Maintenance Shop & 730 Warehouse**

The current Maintenance and Operations/Warehouse complex was built in advance of Phase I and wholly with district funds. It has an office grouping with meeting space and a plan room with toilets, etc, above which is a storage loft. Alongside that is a high bay main warehouse and work area. It also serves as the receiving facility for the college. While it appears to meet current needs, through the recent introduction of storage containers there is an implied growing shortage of permanent space. Alongside the site was the originally planned central plant, but that is likely not to occur. Surrounding the main building is paved parking and outdoor work area. There is an absence of fencing for security.

As new buildings are completed and site development is expanded via landscaping and PE fields and even the photovoltaic array, there will be an increasing demand for shop and equipment storage, as well as supplies and items like furniture/equipment storage and repair. Designated shops for various trades and crafts needed on a day-to-day basis (plumbing, electrician, locksmith, carpentry, welding) are also generally absent and could become future needs unless this work is let out to private contractors. Finally, there is the impact of the second campus in Needles that has extremely limited support maintenance and storage space. Support from the main campus may be necessary.

It is likely that the existing complex will need expansion in the future. That will depend upon the level of service required of college staff versus outside vendors and its role in serving the Needles Center. The work yard should regardless be fully fenced.

SUSTAINABLE STRATEGIES

With the change of our nation's administration toward a greater sensitivity to the environment and serious mounting environmental concerns related to global warming and regional water shortages, consideration of sustainable "green" design strategies should be a part of every college master plan. And despite the ever-persistent funding limitations, there were a number of important strategies for "green" architecture and planning at Palo Verde College already used on its original master plan and the four phases of construction so far.

This occurred voluntarily, years before the introduction of state financial incentives for sustainable design -- only just released this past year. The college was also planned and constructed before the arrival of Leed™ (Leadership in Energy and Environmental Design) standards to California. Yet the strategies and solutions used would likely have earned it significant Leed points. The point system, developed by the US Green Building Council, is broken down into the following generalized six categories that would apply to a college campus:

1. Sustainable Sites
2. Water Efficiency
3. Energy & Atmosphere
4. Materials & Resources
5. Indoor Environmental Quality
6. Innovation in Design

Other criteria are:

- Locations & Linkages
- Awareness & Education
- Regional Priority

The Leed point system has been updated to acknowledge the specific climatic conditions in which a project is built. For Palo Verde College in Blythe (as well as Needles) there are special regional priority points given to projects that respond directly to the region's climate and other characteristics.

They are defined in more detail on the US Green Building Council website: www.usgbc.org

At Palo Verde College, the following "green" solutions were or are currently being adopted:

1. Grid-Free Photovoltaic Power Supply. This is described in the 1997 Updated Facilities Master Plan under Photovoltaic Array. It will result in the college generating, via sunlight, its entire power requirements over an annualized basis.
2. Additions to the photovoltaic system capacity might include covering the trellises and even parking stalls with more panels. This provides the added benefit of shade.
3. Daylighting using Well-Shaded Openings for Natural Lighting. This is described under Phase One and the description of the daylighted mall and other features. It is recommended that these features, including future expanded use of skylights, be included with future buildings.
4. Near 100% Retention of Storm Water Run-off. All storm drainage from the major buildings and paving is directed to the east ravine on the lower campus where is a water retention settling basin on the college property sized to absorb all rainwater and other run-off. In addition to that are underground dry wells at the south side of the two main buildings that are connected to the building roof drains. The only run-off from college development capable of flowing off site is the direct rainfall on College Drive that empties onto 6th Avenue. Other options that might be considered include rainwater retention tanks to capture the roof run-off and use it directly for irrigation. But this may prove ineffective due to the low rainfall in the region – only approximately 5” per year.
5. Zeriscape Trees and Plant Selection. Plant materials at the college, with the exception of turf needed to bind the sandy soil and for the main PE field, was from a palette of indigenous desert plants and other heat loving, water conserving varieties. Water conserving irrigation was also accomplished through use of bubblers rather than sprinklers where appropriate. Some drip systems are even in use. But large areas of the developed campus remain natural desert landscape, requiring no water.
6. High Thermal Mass Construction. This is described under the Climatically Appropriate Architecture section and also under construction of phases One, Three, and Four buildings. Future buildings should continue this strategy that takes advantage of the high diurnal temperature swings though insulated and/or shaded building masses.
7. White “Cool” Roofing. All four phases of construction use a conventional built-up Tremco or equivalent roofing. But all have been given a coating of white material to reflect the sun and reduce the heat gain. This was not required by code at the time of Phase I and II, but was done in to reduce cooling costs and prolong the roofing life.
8. High Performance Dual Glazing. Dual, high performance low-e glazing is used at the high clerestories to maximize the harvesting of visible daylight while reflecting heat-gaining infrared light. Dual tinted glazing is used at most floor level vision windows to reduce glare while minimizing heat gain and heat loss.
9. Correct Building Orientation for Desert Climate. This is also described under the Climatically Appropriate Architecture section. The future buildings presently planned are either oriented east-west (Child Development Center) or well-shaded on the east and west elevations (Public Safety/ Health Services Building). Major entrances are situated to avoid heavy west exposure where heat gain is greatest during the hot seasons. Many entrances are oriented either north or south and are well shaded.
10. Shaded Outdoor Pedestrian Circulation. The “great circle” trellis and walkway provide some measure of shade and protection from the sun. Augmenting this might be the planting of overhead heat loving vines (such as Bougainvillea) or the installation of heavy gauge greenhouse fabric on top of the wood trellis members. An energy-saving alternative might be to use it so support another set of photovoltaic panels for the needed shade. No matter how accomplished, this is an important contribution toward the protection of individuals who are sensitive to the heat and sun and possibly susceptible to heat stroke and exhaustion. As the buildings are expanded westward and northward, shaded or fully covered walkways need to be a part of the design.
11. Protected Courtyards and Shaded Outdoor Spaces. The concept of a protected inner courtyard was explained under the Phase Four description and related descriptions for other projects that use this feature. These, especially where they would accommodate outdoor activities otherwise impossible during the hot season, should be encouraged to supplement reliance upon the indoor mechanically cooled spaces. The circular trellis there might also have photovoltaic panels installed instead of vegetation for shade.

12. Air Lock Vestibules at Major Entries. All the major entrances to the four existing buildings are protected by use of an outer enclosed vestibule that slows the loss of conditioned air to the exteriors. It also has impeded the infiltration of sand and dust when the wind blows. That feature is part of Phase Four and should be incorporated into all future projects.

13. High Efficiency Central Chiller Plant. In Blythe, mechanical cooling is needed nearly year-round because of the hot climate. Heating is relatively short in duration and then only for morning warm-up during winter. Three of the four main buildings are served by a central chilled water plant. Cooling originally came by means of an evaporative condenser-type chiller plant. That ultimately proved unsatisfactory because of poor water quality and high maintenance costs. The chillers have since been replaced by air-cooled varieties that, though less in total efficiency, use no water for condenser cooling and still far exceed the efficiency of individual package-type cooling units. A major advantage of the central chilled water system (now expanded to handle Phase Four) is the ability to utilize its inherent benefits of a diversity factor. This is accomplished by tying multiple buildings together into one system and recognizes that not every building is in full use throughout the day. Overall the diversity factor lessens the total cooling demand over that required for independent systems in each building. It also provides redundancy in case part of the system is down for maintenance and repairs. Some future buildings may be too remote to be tied into the central chiller plant, which already has limitations on its own electrical power supply. Larger future buildings may need to have their own central chilled water systems.

14. Localized Construction Content. Poured-in-place concrete via tilt-up construction was consciously decided upon because it utilized a local concrete batch plant in Blythe. Each completed tilt-up concrete panel provides both the structure, fire proofing, and finish system -- reducing the high expense and environmental effects of trucking the otherwise component materials over 200 miles and more to the site. Provisions for housing specialized labor at motels and apartments in Blythe also eliminated part of the long distance commuting.

15. High Recycled Content. Materials such as steel reinforcing, steel framing and decking, and interior steel studs were selected because of

the high recycled content of steel. Furthering the goal of recycled content might occur in the area of carpet selection and other finish materials.

16. Incorporation of Public Transit into the Campus Plan. The campus plan via its loop road system was consciously laid out to encourage use of public transit. It was to counteract the effect of the remote location of the college from downtown. This is accomplished by providing a convenient looped route through campus with direct access to each major building. The loop road was provided sufficient width and turning radius for the maneuvering of the Roadrunner public transit busses. In front each building is a bus stop shelter situated to be closer on average to each building than regular parking. Convenient public transit also recognizes the needs of the disabled and the poor who frequently do not have access to or the use of a private vehicle. Future buildings should be located where possible on the likely transit route through campus.

17. High Efficiency Interior and Exterior Lighting. Lighting of Phase One and later projects has utilized the most energy efficient fixtures available without selecting difficult-to-find specialty fixtures. One feature that has been misunderstood is the exterior lighting atop the roofs of the two main buildings. Here, there is a daylight overhead clerestory that otherwise would be dark at night. But via the rooftop fixtures, the same lighting effect is created without the heat load of interior lighting. These fixtures have been left off after criticism of its apparent waste of electricity for what appears to be flood lighting. But in fact, those fixtures if lighted (and the interior mall lights turned off) would likely save energy and improve the visibility of the college.

18. Mall Concept. This feature described under Building Construction creates an "indoor campus" with sufficient open daylighted space to provide a haven from periods of extreme heat. Many aspects are innovative and would have earned considerable Leed points in the 6th category of Innovative Design.

- Environmental Impacts of Construction

One avoidable area of environmental damage during construction was the free rein of the property given construction vehicles and for items like materials storage. This was prohibited on the drawings but waived or ignored. The result is extensive damage to the fragile desert soil crust and ground cover -- which has in turn caused serious problems of sand

and dust infiltration. Much of the damaged area north of the loop road has finally been planted with turfed fields and other ground cover. Future projects should be carefully monitored in those terms.

- **Absence of Trees for Shade and Wind Breaks**
An unfortunate byproduct of the chronic insufficiency of budget has been the elimination of trees or reduction in their sizes. There is also the general avoidance of use of high and low shrubs that might otherwise address the wind and sand problems. But they harbor sidewinder rattlesnakes that constitute a hazard. This problem was especially evident in the case of the Phase Three PE Field project where the trees surrounding the field and other turf areas were eliminated. But it has occurred in varying degrees with other projects as well.

There is a need for shade throughout the campus, especially where persons are required to be out of doors. Shade for parking is also a need to protect against excessive heat gain in vehicles. Finally, shade around the buildings is needed to avoid "heat islands" where extreme temperatures are generated on man-made surfaces where there is an absence of trees for shade or green ground cover. The heat island effect can increase cooling requirements and may even exceed HVAC system cooling capacities. The heat island effect is especially evident along the south side of the CS and CL buildings. The college should augment the existing tree plantings with more trees where possible, especially in areas where they address the problems cited above.

- **EIR/CEQA UPDATE**
Shortly after completion of the 1996 Master Plan, an EIR (Environmental Impact Report) was completed for the new Mesa Campus. Formally considered a "Program EIR", it covered the entire planned construction program of 1996 and incorporated all the clearly defined building projects up to and including Phase IV, along with its required infrastructure. The EIR was completed in 1997 by Terra Nova Planning and Research (John Criste) of 400 South Farrell, Suite B-205, Palm Springs 92262. It is recorded under Clearinghouse Number 97021064.

3. NEEDLES EDUCATIONAL CENTER FACILITIES MASTER PLAN

The Needles operation was formally taken over in early 1999 from the San Bernardino Community College District and San Bernardino Valley College that had operated it for many years. Concurrently, Palo Verde Community College District increased the size of its Board of Trustees from five to seven members.

- **DEVELOPMENT TIME LINE**

The following summarizes the time line development of the Needles Center:

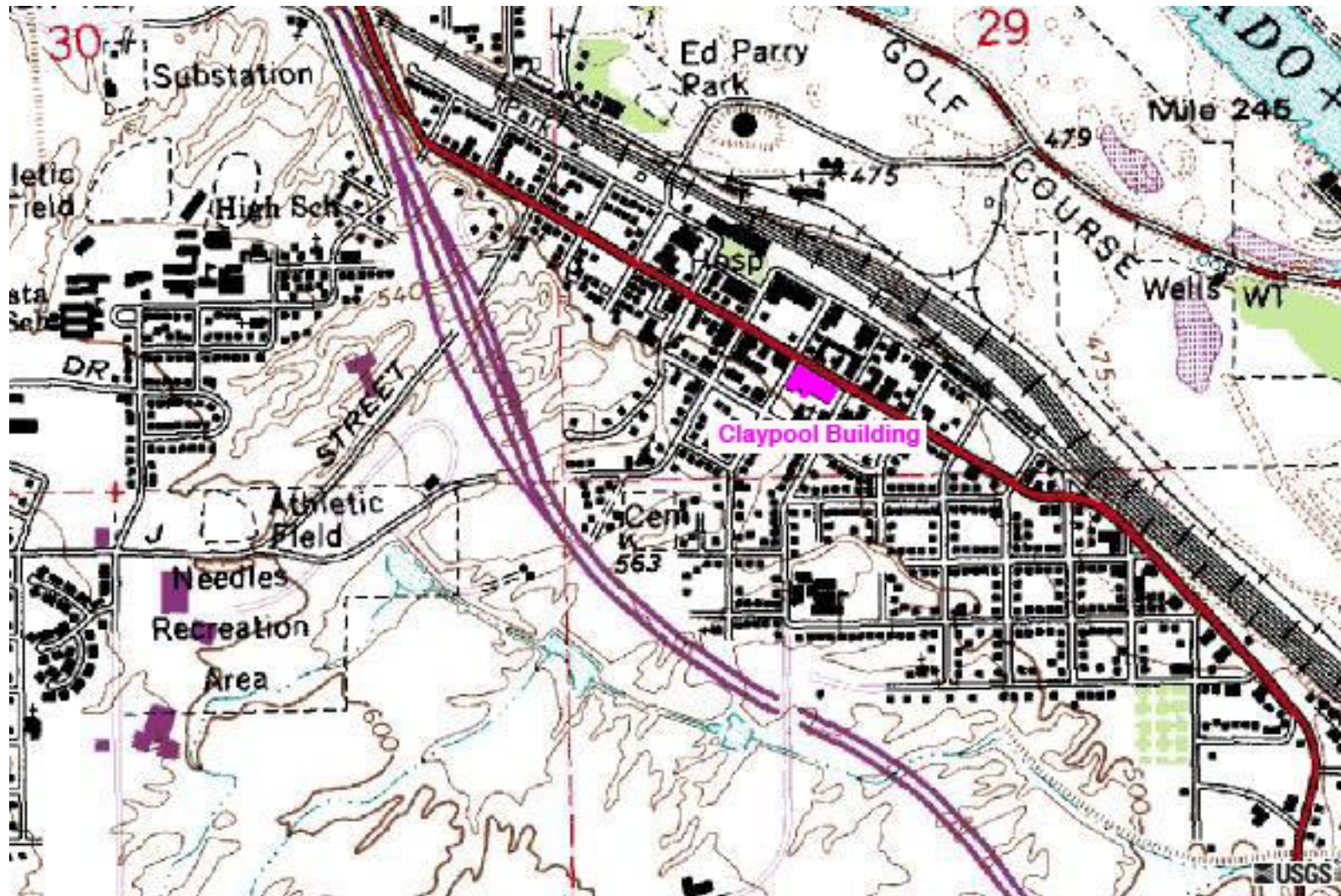
- o In Fall 1999 after a short period for reorganization, Palo Verde College opened an expanded curriculum of class offerings at its newly formed Needles Outreach at Needles High School. Supplementing the earlier evening offerings were daytime college classes made possible through the installation of three college-owned temporary buildings on the high school property. One building houses administrative and student services operations, the other two house the instructional space.
- o In early 2003, the Claypool family approached the district with an offer to donate its hardware store property in downtown Needles. Concurrently in early 2003 the district was exploring five other sites:
 - 1) the city-owned El Garces railroad station
 - 2) the former Needles Hospital next to El Garces
 - 3) BLM property in East Needles alongside the Colorado River
 - 4) the 7 acre McShane property in West Needles alongside the Colorado River
 - 5) an unused Medical Building close to the current hospital
- o In late 2003, the district commissioned Dr. Pell and the architect, Spencer/Hoskins associates, to prepare the December 2003 Due Diligence Report on the Claypool property that seemed to show the most promise. The architect brought in a structural engineer, Martin-HBL, to perform a “ball-park” structural analysis. The report was formally presented to the Board of Trustees in January, 2004.
- o In December 2004, the Claypool family donated its hardware store properties in downtown Needles to the District to be used as a permanent location for the Needles Educational Center.



- o In 2005, the citizens of Needles approved a two-thirds majority bond to fund the reconstruction of the Claypool Building to house a permanent Needles Educational Center.
- o In February 2006 the Needles Outreach Center was granted full Educational Center status by CPEC (California Postsecondary Education Commission) and the BOG (California Community College Board of Governors).
- o In February 2006 the Board of Trustees approved an alternative procedure for plan review and inspection described under the AB-425 legislation. It applies only to off-campus community college buildings and provides an alternative approval process to DSA (Division of the State Architect).
- o As of early 2009 reconstruction of the Claypool Building comprising the permanent Needles Educational Center was completed and occupied in July, 2009 in preparation for Fall 2009 semester classes which began in August.
- **DECEMBER 2003 DUE DILIGENCE REPORT**

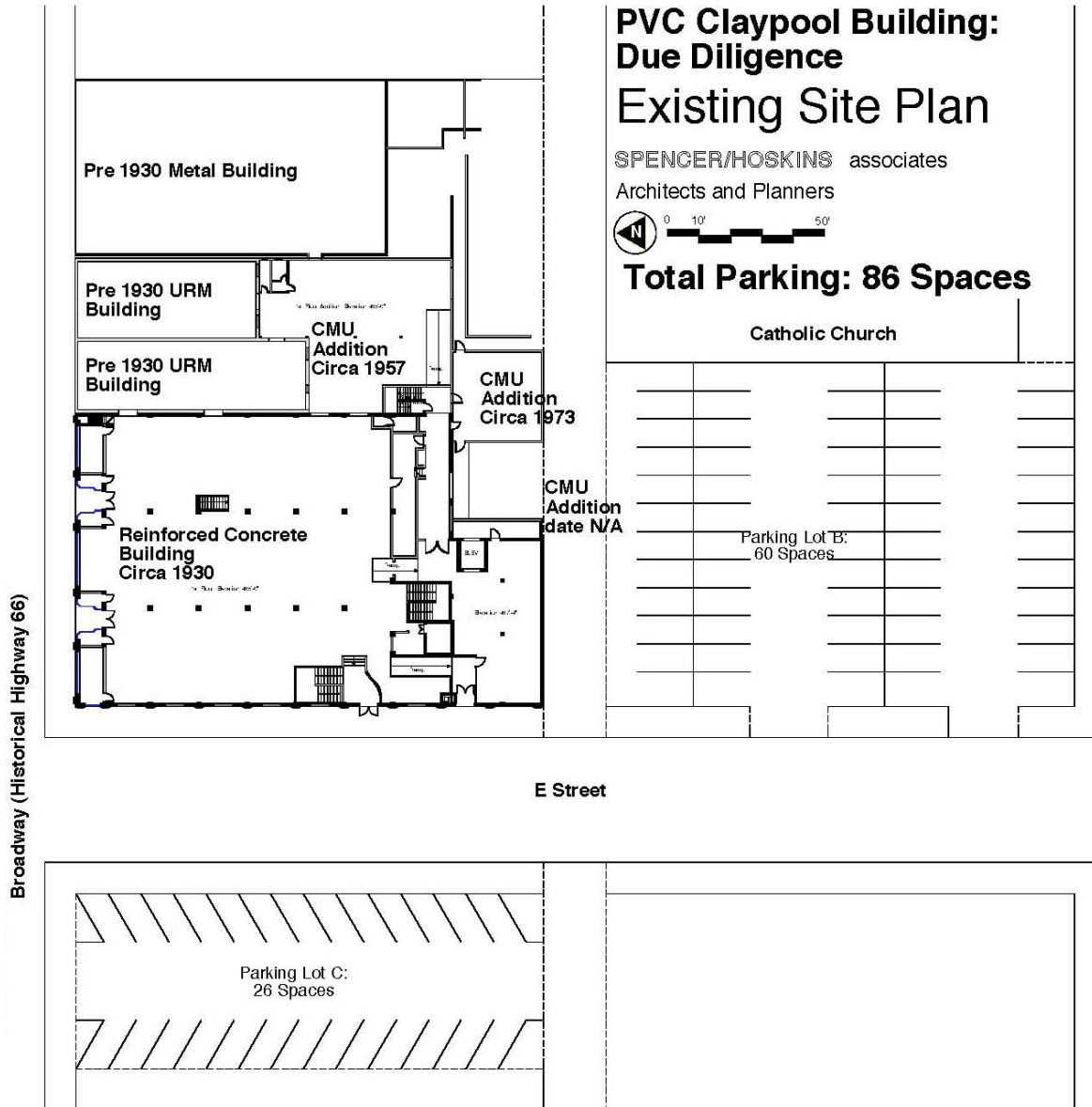
This comprised a precursor to this educational and facilities master plan for Needles. It made the following significant findings:

 - o The Claypool Building was viewed as ideally located in downtown Needles within walking distance of its poorest residents (see Needles Claypool Downtown map on page 150).



NEEDLES CLAYPOOL DOWNTOWN MAP

- o The site is outside the 2 mile airport clearance zone and well removed from any known seismic fault lines – two statutory considerations in locating a campus.
 - o It lay within Seismic Zone 2 typical of Arizona and the only area within California with such mild seismicity (Blythe by comparison is in Seismic Zone 3 and most of the urbanized area of California is in Seismic Zone 4).
 - o Though Needles was not growing in 2003, potential enrollments at the new Center were estimated at about 375 students (250 FTES or 3,750 WSCH).
 - o 250 FTES, while below the minimum threshold for a Center (500 minimum FTES) was sufficient to support a Center, requiring 16,642 ASF of space. That would translate to about 25,657 GSF of total building space at 65% efficiency.
 - o A hypothetical educational curriculum was developed in order to better define needed classroom, lab, and library and other instructional support. A space program was developed that showed a hypothetical need for two classrooms (1,200 ASF), four computerized labs and an open computer learning center (3,786 ASF), two distance learning labs with support spaces (2,754 ASF), and a library (5,142 ASF).
 - o A hypothetical staff and service plan was developed in order to simulate needed office (2,940 ASF) and student activities (820 ASF) space.
 - o The Claypool building complex of six buildings added up to a total of 42,161 GSF. However the main 1930 reinforced concrete building as originally constructed was 26,440 GSF – almost perfectly matching the estimated 25,657 GSF need.
 - o The main floor level with its high bay construction was deemed well suited for Library and independent study, along with open student services functions. The portion lying under the mezzanine was suited for public toilets and student activities with direct outdoor access.
 - o The basement with normal height ceilings was the best suited for classrooms and labs.
 - o The mezzanine level overlooking the main floor was best suited for open administrative and faculty offices.
 - o The main entrance, instead of traditionally facing Broadway, would best be located at the near and adjacent to the parking.
 - o The five other buildings, all marginal, were therefore deemed unneeded for the Center. If removed, that land would provide room for open activity space and parking if needed.
 - o Total land area computed to be only 1.26 acres – well below the informal minimum threshold for a Center (see page 153)
 - o Required parking to support 375 students and staff was estimated at 75-80 stalls. Existing parking on the Claypool property at 86 stalls already exceeds that.
 - o The 1930 main building was deemed by Martin-HBL structurally suitable for restoration and upgrade.
 - o The 1930 main building, while shrouded in a modernized metal canopy, was a rare Art Deco gem awaiting restoration.
 - o Estimated costs in 2003 dollars for the Claypool Building restoration were: Construction + Contingency = \$4,265,000; Plans, Plan Check & Construction Management = \$610,000; Testing & Inspection = \$135,000; Equipment = \$1,315,000. Total project was estimated at \$6,325,000.
- Using data from the Due Diligence Report, a local 2/3rds majority bond was put to the voters in San Bernardino County (Riverside County voters in the Palo Verde Valley did not take part). It was limited to \$6,000,000, an amount modestly less than the \$6,325,000 estimate but reflected the maximum amount possible under the then current assessed property valuation in the affected area. The bond election passed by one vote!



2009 NEEDLES CENTER FACILITIES MASTER PLAN

An educational master plan for Needles was developed as a further refinement of the work done on the Due Diligence Report. This occurred in 2006 and involved working closely with the Needles Center staff (Dorothy Machula and others). From that a more comprehensive educational plan was developed and the final floor plans were designed.

• SITE PLANNING

The Needles Center facilities master plan is mainly embodied by the restoration of the 1930 main building and its floor plan. All five of the other buildings on the property were removed (see page 154).

o Phase II Building Expansion

As the site plan indicates, there is room now for a modest building expansion, should the need ever arise, and even some green space. Given the available space, there has been a proposal submitted in the Five Year Plan for a free-standing addition housing primarily “wet” science and art labs with faculty offices. It would address the absence of plumbing in the existing basement labs. It would be located on the east end of the property fronting Broadway, but linked via a covered walk to the south entrance canopy or to existing exit door from the Student Activities room. That project was projected to contain four labs, each with a 1,500 ASF lab and prep room for 1) Biological Sciences, 2) Physical Sciences, 3) Art Drawing and Painting, and 4) Music lab and practice. Accompanying them would be 1,500 ASF of Office to support faculty office needs. The overall building was estimated at about 10,000 GSF. However the justification for this project is extremely remote, given the large amount of capacity already available in the Claypool Building. There have also been questions raised as to whether the expansion might better be devoted to work force training programs such as nursing, auto mechanics, and/or hospitality. For now therefore this project has been placed on hold to allow the Center to become established and allow further planning to take place.

o Mechanical Equipment Enclosure

The site plan indicates the introduction of an enclosed mechanical equipment yard on the east side of the Claypool Building. This enclosure houses the building cooling equipment mounted on grade

and was necessitated by the inability structurally to accommodate such equipment atop the roof. Budget limitations resulted in elimination of the originally-designed masonry wall enclosure that would have helped decrease noise and block the view of the equipment. A chain link enclosure was substituted for security. Long term however, a solid wall may be needed if equipment noise is a problem.

o Parking

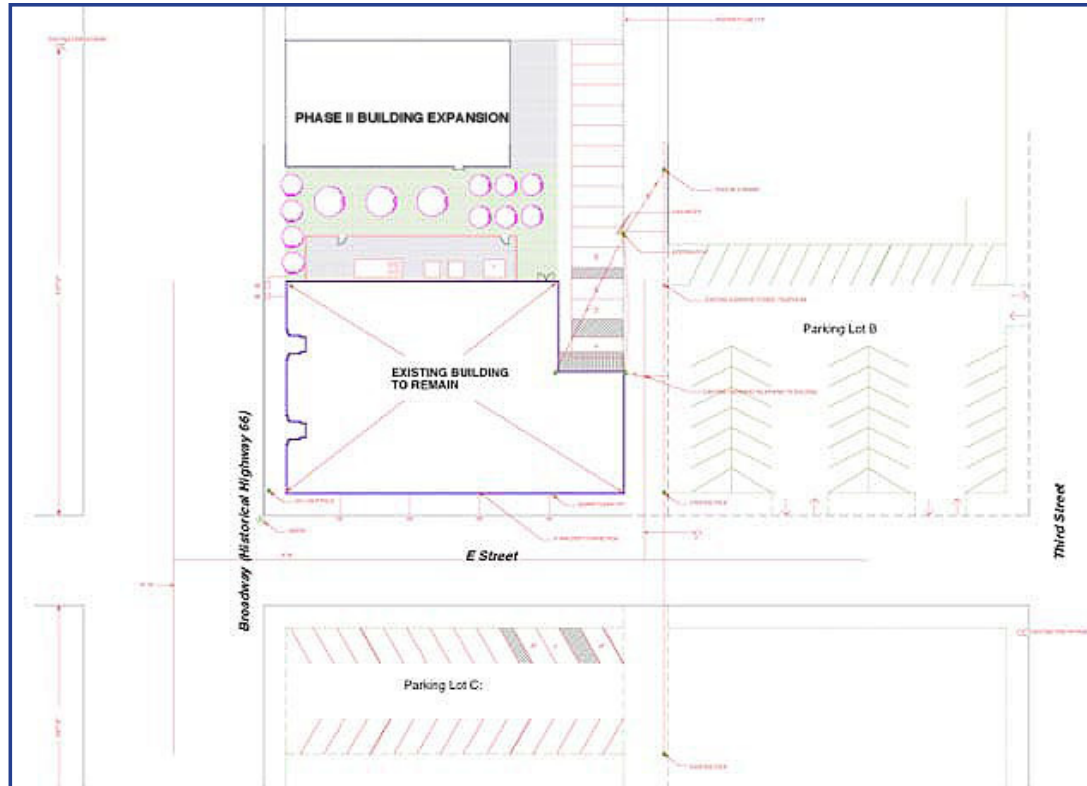
Existing parking in the two original Claypool Building parking lots has been left unchanged. This provides an estimated 86 stalls, albeit some quite narrow and constrained. None were wheelchair compliant and involved either crossing E Street or the public alley behind the building. As a result, one van accessible and three wheelchair parking stalls were added immediately behind the building with a new sidewalk routed direct to the main entrance. These stalls, accessible from the alley, meet the required handicap parking accommodation and are lighted. An additional 10 new stalls off the alley were also designed but eliminated for budget. These would have compensated for lost parking stalls through reorientation and restriping of the original lot.

o Parking Lot Lighting

Parking lots had lighting at the time of the gift to the College. That lighting has been retained. Therefore, eliminated was the parking lot lighting, along with the repaving and reconfiguration/restriping of the two main parking lots. Electrical working drawings for the parking lot lighting were completed and are available if lighting proves insufficient. Minimum lighting standards adopted by the state for “light density use” parking lots is .5 foot candle.

o Disabled Access

As described in the section on parking, disabled access to the campus is accommodated via the new south entrance and its dedicated parking stalls. Wheelchair access to one of the north Broadway entrances was considered but rejected due to the absence of accessible parking and the narrowness of the sidewalks. Before the I-40 Freeway was built, Broadway had been widened to accommodate US 66 traffic, sadly by narrowing the sidewalks. As a result, the existing sidewalk is only 5’ wide and has an excessive cross slope (far



Site plan (left) shows a possible green space in between the existing Claypool Building and a future Phase II Building to the east.

Photo (below) is a view of the open space east and south of the Claypool Building where the above developments may take place. It also illustrates the empty planter next to the main entrance where shade trees and ground cover are high priority needs.



exceeding the allowable 2%) that is especially steep and hazardous at the E Street intersection wheelchair ramps. Curbs are also unusually high and provide no legal wheelchair curbside access.

Once inside the building via the motorized south entrance doors, the main elevator is immediately adjacent, as are the public toilets. The elevator provides access to all three floor levels. The main ground floor level formerly split into two levels 26" apart was raised all to one level through use of the raised computer floor system.

- o Landscaping

In addition to introducing the proposed green space east of the Claypool Building, there were design studies for introducing planting islands in the parking lots and to shield the electrical transformers on the south side of the alley. This was again deleted for budget. The only landscaping provision that ultimately survived was a planter with raised seat bench next to the south entrance with provision for irrigation water, but no plantings. There is also an irrigation stub-out at the northeast corner of the mechanical equipment enclosure.

The extreme heat of Needles should encourage consideration for budgeting and design of a landscape plan for the site. Shade Trees for students sitting outdoors as well as to protect automobiles from excessive heat gain is an important need.

- **CLAYPOOL BUILDING RESTORATION**

The Claypool Building restoration followed closely the recommendations of the Due Diligence Report and stayed within the same general recommendations for the distribution of the uses among the three floor levels and the allocation of space. These are illustrated on the three floor plans.

- o Ground Floor Plan (see page 156)

The ground floor or main floor comprises the largest floor area and main entrance to the campus. The entrance is on the south side via an entry patio closest the parking lot. Entrances from the north facing Broadway are treated mainly as emergency exits. Public access to the interior is routed from the south entry past the elevator and northward to the Broadway emergency exits. A cross aisle provides access to the basement stair at the northeast.

The high bay portion of the northern two thirds of the floor is to be occupied by the Library/Learning Center, as well as the Open Work Area, both using open office landscape partitions and furniture. It comprises the public component of the student services and a small Textbook Issue retail function. In addition, the former north storefront display windows have been enclosed to create individual and group study or counseling rooms and four small display windows.

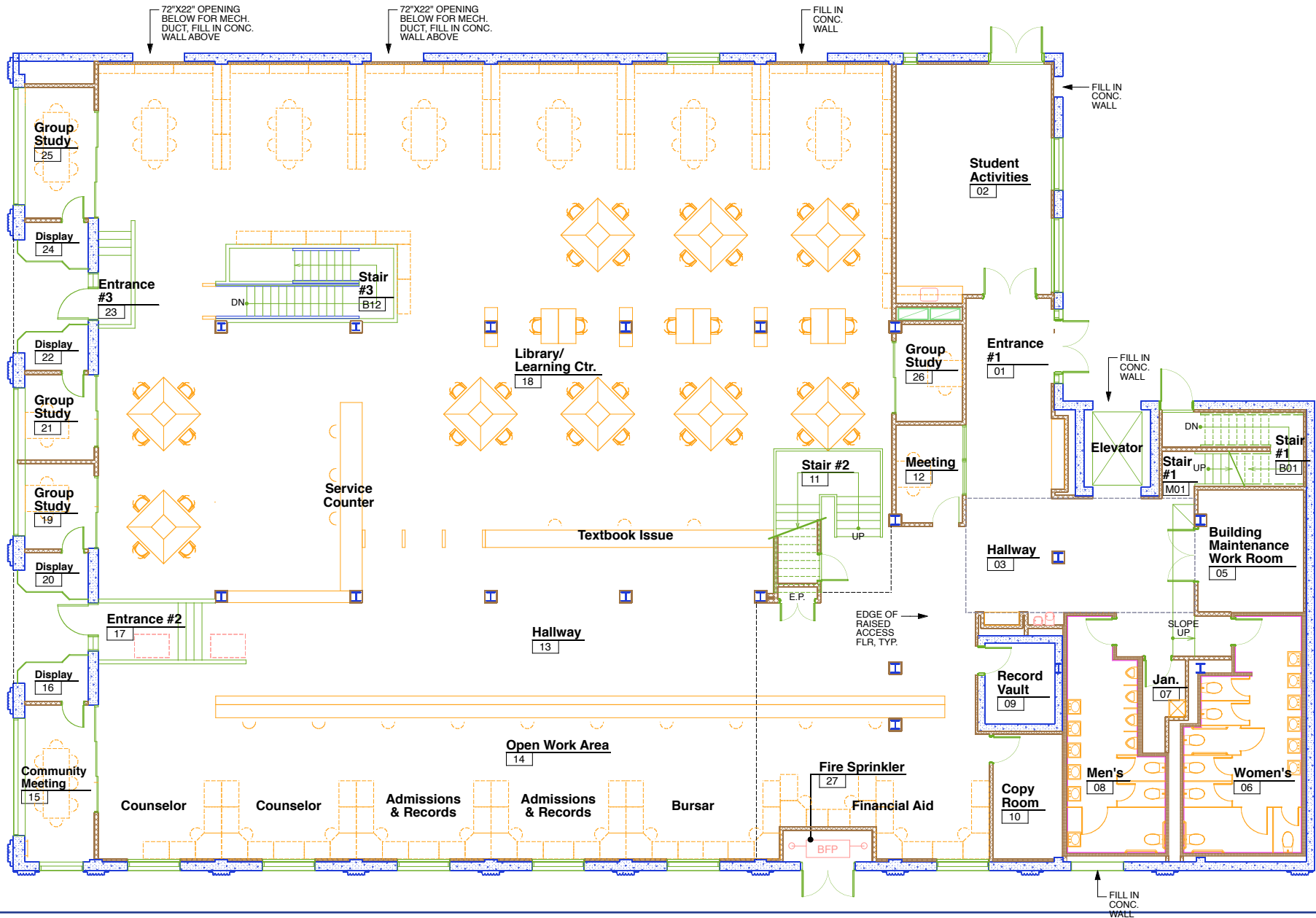
The low bay portion underneath the mezzanine houses the main entrance foyer and a Student Activities room that may double as a community meeting room. Also included are the Record Vault and Copy Room to support the student services. Other functions include public toilets, Building Maintenance Work Room and a Meeting and Group Study room.

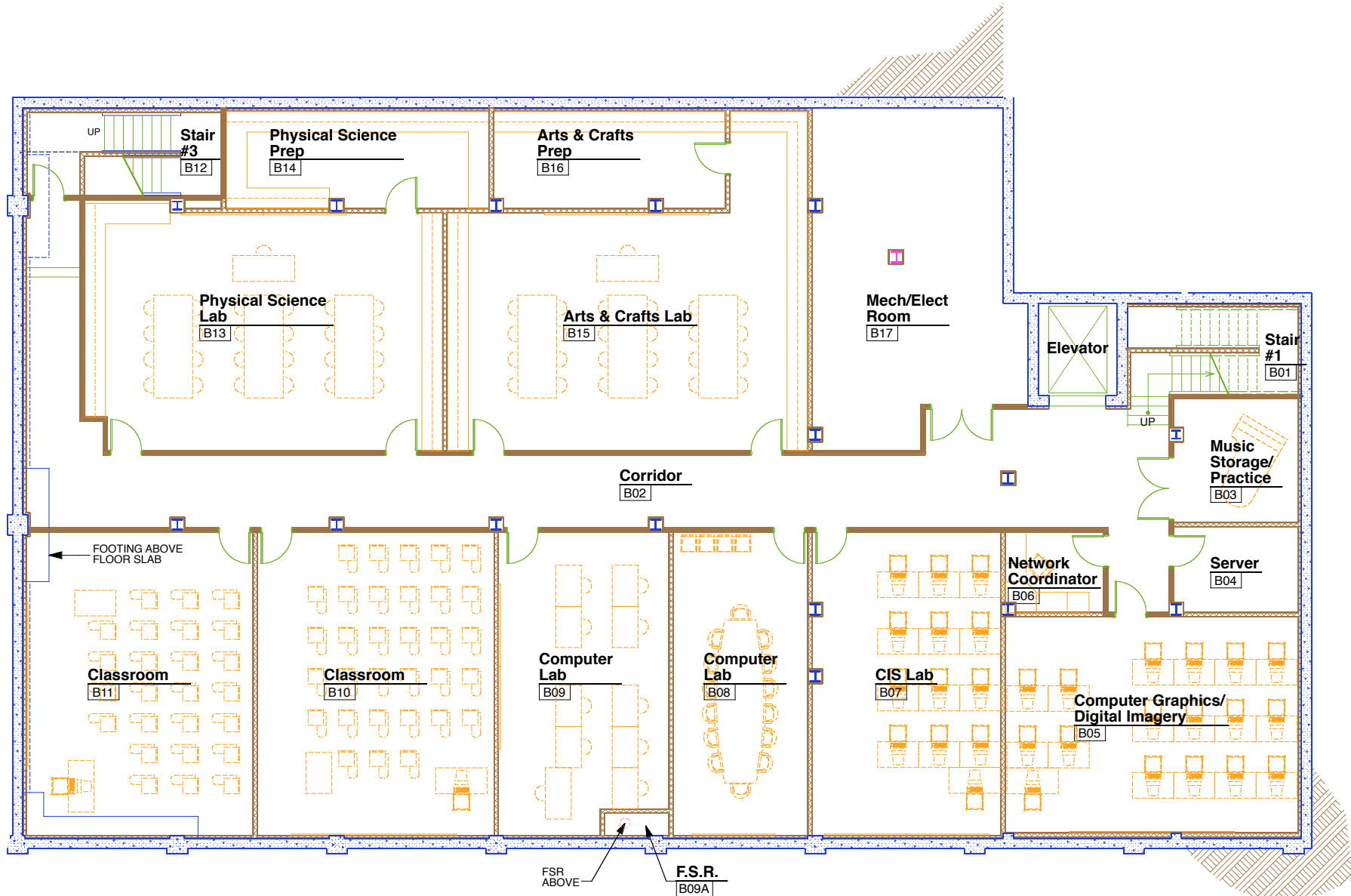
A raised access floor system is used throughout most of the ground floor, the exception being the south end, which is slab on grade. This system provided a solution to the original 26" floor level change and provides not only computer network access but the entire electrical power system via a plug-and-play wiring. This eliminated the need to build wiring into most of the walls, particularly the solid concrete perimeter walls. And exploiting the under floor cavity, the system is used in lieu of supply ductwork to heat and cool the spaces.

- o Basement Floor Plan (see page 157)

The basement is the location of all the classrooms and labs. It is accessible via the elevator and a dedicated south entrance and stair direct down to the basement. The fact that it exits directly to the exterior and not via the ground floor was due to code limitations. A center corridor is routed from the elevator and south stair past the classrooms and labs to the northeast stair that provides a second legal egress and an interior connection to the ground floor.

There are two large labs, one each for Physical Science and Arts and Crafts, both provided a prep room. In addition are four smaller computer labs for various disciplines and two classrooms, one suited for music. A Music Practice/Piano Storage Room is at the south end. Next to it is a Network Server room and an office for the Network Supervisor. Also in the basement is the main electrical room. Similar





to the ground floor, a 12" access floor system is used throughout providing power and data and heating and cooling.

One limitation of the basement for lab use was (and is) the absence of a sewer connection for plumbing. This was the result of the city sewer being much higher in elevation than the basement floor level. The alternative would have been to install a costly sewage pumping station. As a result, there are no plumbing fixtures in the basement, not even a drinking fountain or toilets. These are provided only on the ground floor. Labs in the basement will need to rely curriculum-wise on relatively dry procedures. If water is required, it can be provided via bottled water, with the waste water carried upstairs via the elevator for disposal into the janitor's sink. Long term, if the absence of water becomes a critical concern in the labs, the 12" high raised floor might provide sufficient height and fall to accommodate the introduction of drain pipes routed to a new pump station, in turn providing access to the sewer. There may be sufficient room for a pump station next to the electrical room.

- o Mezzanine Floor Plan (see page 159)
Suspended within the high bay of the ground floor is an open mezzanine occupying the south third of the building. It is accessible via the elevator and an open stair in front of the main lobby. Behind the elevator is a second private stair providing the second legal means of egress. That stair is continued up to the roof and the elevator equipment room.

The mezzanine will house the center's administrative functions and faculty offices, both using open office landscape partitions and furniture. The floor plan indicates an enclosed area at the south end containing two staff toilets and two meeting rooms. Though walled off, this area has been left unfinished because of budget limitations. Plumbing rough-in was provided to the future toilets. Also eliminated for budget was the raised access floor system covering the majority of the mezzanine. Without its 6" elevation that would bring the finish floor to its design height, according to the local fire marshal the mezzanine cannot be occupied. The raised floor omission also eliminated power and communication and heating and cooling distribution.

There is actually a second mezzanine above the north Broadway-facing display and study rooms. This is a holdover from the retail

days and was reopened to restore the original historic high windows that provide a valuable north light source. The mezzanine, divided into three segments has no stair access and is only accessible via portable ladders for cleaning and maintenance purposes.

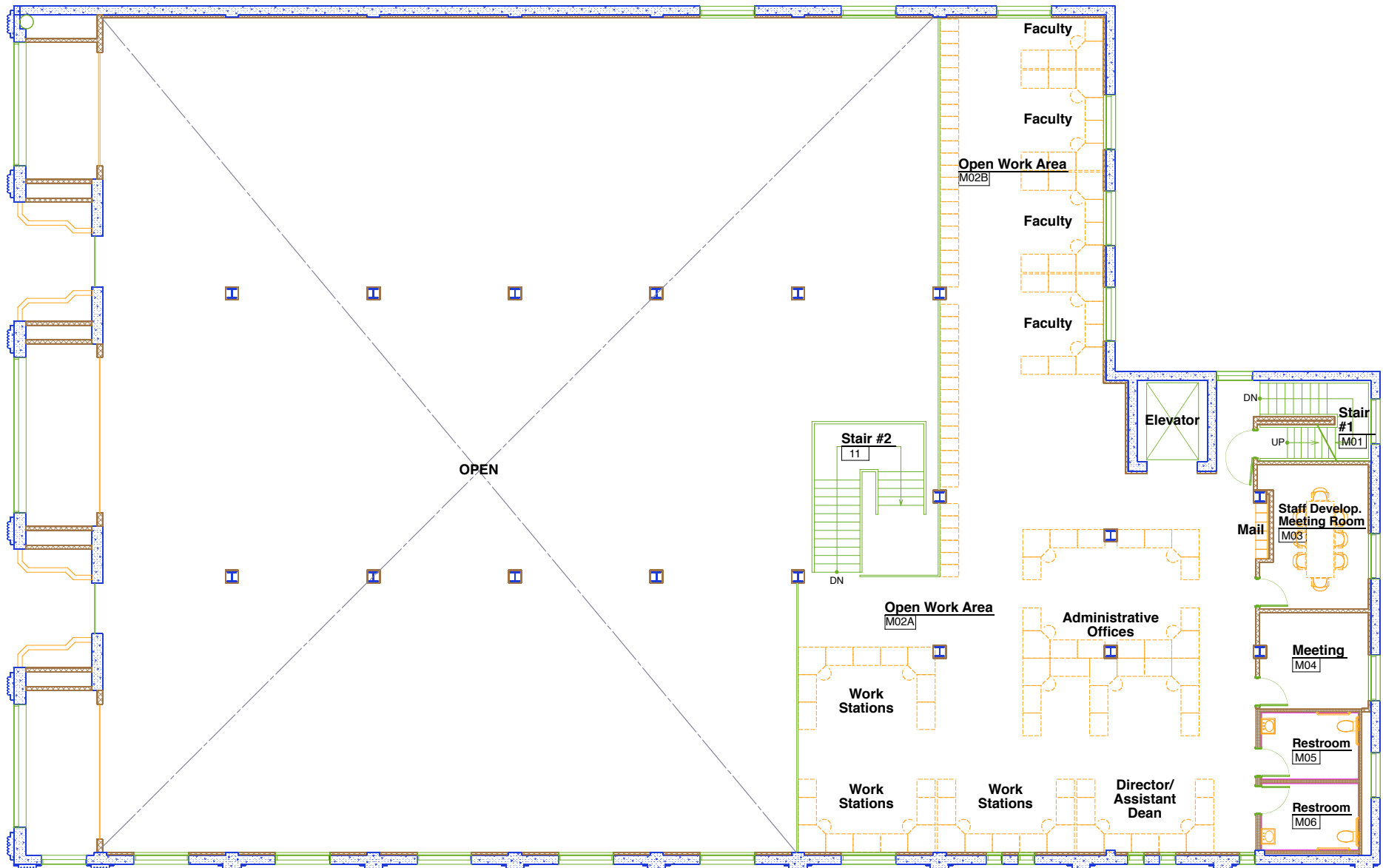
- **CAMPUS ARCHITECTURE**

The Claypool Building is a surviving example of the classic early phase Art Deco period characterized by soaring vertical forms and cast-in detailing. What is especially unique is its location removed from the large towns and cities where they were common. It is a sophisticated urban architectural gem in an isolated rural setting.



Claypool Historic Building





Over the years, the building appearance was periodically changed, culminating in a 1960's modernization by utilizing a metal skin that attempted to unify the main building with several others on the property and facing Broadway. The likely goal was to create the appearance of a single large, up to date, modern retail business. The installation of the skin by nailing directly into the concrete did considerable damage and upon removal required extensive exterior patching and restoration. Where exposed this required the concrete to be painted.



Claypool Building 2009

- o Climate & Climatically Appropriate Architecture
The climate of Needles is very similar to Blythe. The architectural response to it would therefore be quite similar. Typical of a hot inland climate, via high diurnal temperature swings it is subject to high daytime temperatures while evenings can be comfortable. However in 2008, reported temperatures in Needles during a protracted heat wave didn't fall below 100°F at night for the first time. Due to the greater proximity to the Colorado River humidity may at times be high. It is also in the monsoonal moisture flow pattern that periodically results in torrential rain during late Summer.

The response at the Claypool Building restoration was to utilize the high thermal mass of the reinforced concrete exterior walls by insulating them on the exterior rather than more conventionally on the interior. The one exception to this was the exposed concrete west elevation where the concrete was repaired and left exposed to preserve the Art Deco architecture. The north side in particular had a considerable amount of glass and also the least exposure to heat gain. The exterior insulation with a smooth concrete-appearing surface proved an economical solution by hiding the severe damage to the concrete surfaces and also reducing HVAC equipment sizes and ductwork over what would have been required with a more conventional solution.

- o Interior Acoustics
One of the challenging problems with the high bay spaces and hard interior surfaces in the Claypool Building is the tendency for poor acoustics. This was exacerbated by the elimination for budget of the acoustic ceilings in the basement classrooms and labs. There it is most problematic in the two large labs where the floor surfaces are hard. The problem is lessened in the classrooms and the computer rooms where there is carpeting.

The problem is worst on the ground floor with its high ceilings (17'-plus), long horizontal dimensions (80' wide x 120') and lack of sound absorbent material. It results in excessive reverberation that may interfere with speech clarity and result in distracting noise.

Wall mounted fiberglass acoustic panels may be the only effective solution. According to the acoustic engineer, hanging drapery or banners, will do little to absorb the sound. Again due to budget, these

panels were left out of the project and will need to be funded via the equipment budget.

Furniture and office landscape wall panel units should also be carefully selected in terms of their sound absorbency in order to quiet and tone down the reverberation.



Basement Lab without carpeting

Basement Classroom with carpeting



Main "high bay" space on the ground floor - subject to excessive reverberation.

BUILDING CAPACITIES

A detailed study of the individual space Types is probably less relevant to the Needles Center than for the main Blythe campus. This is because a center frequently doesn't need the full compliment of buildings that compose a full service campus. However it is of value to analyze it in terms of the five Capacity categories of space: 100 lecture (classrooms), 200 Laboratory, 3) 300 Office, 400 Library, and 530 Audiovisual/Radio/TV.

The Needles Center in Fall, 2007 generated a total of 1,485.94 Lecture + Lab WSCH. This was generated by 272 students, 231 of whom were Day Graded. This is a significant drop from the 2003 estimated total of approximately 3,000 WSCH. That figure was the basis of the Due Diligence Report estimate of a starting enrollment at the Needles Center of 3,750 WSCH.

Reasons for the drop can be attributed to a number of possible issues: an aging population along with a significant decline in average income over the past 6 years. At Needles High School where the Needles Center has been temporarily housed, there were several daytime college programs in 2003 designed to serve the high school students: an arts program generating about 500 WSCH and a GED program generating about 225 WSCH. The arts program is now gone due to budget cuts and the GED program has dropped in half, for a net loss since 2003 of about 615 WSCH. Other losses likely relate to the general population decline and economic problems of the community. However some of the decline may be related to the college programs being on the high school campus when they would better attended at the new site.

For the above reasons, the capacities that were built into the Claypool Building Restoration are far above what current enrollments would justify. That will likely change after the programs actually move into the new facility in Fall 2009.

- **100 Lecture**
According to the latest updated Space Inventory, there is a total of 1,363 ASF of Lecture classroom space. It has a capacity for 2,882 Lecture WSCH, exceeding 1,485.94 Lecture + Lab WSCH currently being generated at the high school site.
- **200 Laboratory**
There is a total of 3,727 ASF of Laboratory space. It has a capacity of 1,607 WSCH. In combining the Lecture and Lab WSCH capacities, they add up to a total of 4,489 WSCH, of which 36% is allocated to Lab.

- **300 Office**
There is a total of 1,396 ASF of Office space. This does not account for the planned offices on the mezzanine level that cannot be occupied until the raised floor is installed and other work is finished. Using a formula of 160 ASF/FTEF, it supports a faculty of 9 plus a staff of 9.
- **400 Library**
There is a total of 4,270 ASF of Library space currently classified as such in the Space Inventory. However it is part of the larger open ground floor room that includes an area set aside for assembly. The full Title V allotment could be slightly larger at 3,795 initial allotment + 885 = 4,680 ASF.
- **530/535 Audiovisual/Radio/TV**
There is a total of 875 ASF of AV/TV spaces, part of which is composed of the basement network spaces. Again, with a day graded enrollment of 231, the Title V initial allotment could be as large as 3,500 initial allotment + 347 = 3,847 ASF.

SUSTAINABLE STRATEGIES

At the Needles Center with a tiny site and an existing building, there are fewer things that can be done with regard to sustainability. However what was done is exemplary and should serve as a good example to the community. The major items, some already introduced above, are:

1. **Utilization of the thermal mass with external insulation.** This strategy takes advantage of the high diurnal temperature swings by utilizing the thermal mass inherent in the concrete walls and floors to stabilize the interior temperature by insulating it on the exterior. This solution reduced the cooling capacity required from 87 tons to 70 tons (25%) and saved about a third of the insulation thickness (2" versus 3") required if it were placed instead on the interior side of the walls.
2. **Under Floor Displacement Heating and Cooling.** This system, likely to be universally applied to many building types in the future, saves energy and improves building comfort. In hot climates, it benefits from the tendency for cool air to fall and warm air to rise by introducing the cool supply air at the floor level and returning the warmed air at the ceiling level. This is the reverse of conventional air conditioning systems that introduce much cooler air (typically 55° F) at the ceilings, then force it at high velocity down to the floor level. With under floor air, energy savings

accrue in two ways: 1) less chilling by introducing the supply air at 65° F, and 2) conditioning only the lowest 5' or 6' of the room actually occupied

3. **High Performance Glazing.** New exterior glazing replacing that at the original storefront windows are dual glazed low-e glass. The high windows above the front mezzanine were repaired and re-glazed as necessary in their original wood divided lite frames and with original historic "wavy" glass. The west-facing windows contain some historic leaded stain glass and were also preserved and coated with a glare-reducing tint. Due to budget shortages, interior window shades needed on the west windows was deferred and will need to be covered by the equipment budget. Other replacement glazing on the remaining elevations is primarily dual glazing similar to the storefront windows.
4. **White "Cool" Roof.** A single ply membrane white roofing was used atop thick polystyrene foam insulation. The insulation is sloped to induce positive drainage. Rooftop air conditioning with its tendency to introduce leaks was avoided through use of the ground level HVAC Equipment. The roof with a unencumbered exposure to the south sun would be an ideal location for a photovoltaic array.
5. **Zoned Air Conditioning System.** The underfloor air system, served by three large package units, is carefully zoned to follow the changing heat loads on and within the building. This ultimately saves energy and improves comfort. At the ground floor, there are three zones, an east zone to address the morning sun., a central zone, and a west zone to address the afternoon sun. The mezzanine has its own zone as well as the basement. Individual temperature and ventilation control at the basement classrooms is via VAV (variable air volume) boxes mounted under the floor. Small split air conditioning units serve each of the north-facing study rooms that occupy the former storefront display windows. Two special back up units serve the main server room in the basement and the elevator equipment room in the penthouse.



Main entrance on the south side of the building (above)



Typical restored leaded glass window and iron grille on the west facade (above right)



Former Broadway main entrance with restored Art Deco archway and display case windows (right).

SUMMARY

The Palo Verde Community College District was founded in 1947 with an initial enrollment of 17 students. Today the District provides educational services for more than 5,000 students at multiple locations. The two major locations, Palo Verde College and the Needles Center, are both well located, and have excellent facilities which will enable the district to provide excellent teaching/learning and services for its citizen base for many years to come.

During the fall of 2008, District officials contacted the Campus Planning Group for the purpose of retaining the Group to update the 1996 Palo Verde College Educational and Facilities Master Plan. This was a direct result of the Western Association of Schools and Colleges Accreditation requiring the District to update the 1996 Plan. The Group through interviews with faculty and staff, analysis of student enrollment data, collection and analysis of economic and population data/information from a range of reliable sources accomplished these objectives:

- **Forecast Student Enrollments and Weekly Student Contact Hours (WSCH)** in five-year increments for the District (top right table)
- **Forecast Student Enrollments and WSCH** changes for Palo Verde College, the Needles Center, the Spring Street site, and Instructional Service Agreements in five-year increments (through 2020 (bottom right table)
- Each **Instructional discipline** was defined using TOP Code definitions. These included Student Enrollments, WSCH and the number of class projections in five-year increments through 2020.
- The **Superintendent/President and the three Vice Presidents** positions were described, including services provided, number of students served, organization, and staffing.
- **Facility** needs for each discipline and service/office were identified, and where appropriate, facility recommendations were formulated to be used in the annual Five-year Construction Plan updating process.
- A **Facility Summary** was completed to guide future facility planning for both Palo Verde College and the Needles Center.

New or modified Instructional disciplines and services were identified for District consideration where population and economic analysis demonstrated a need. These included:

WEEKLY STUDENT CONTACT HOUR FORECAST FOR THE PALO VERDE COMMUNITY COLLEGE DISTRICT FALL 2007, 2015, AND 2020 SEMESTERS

	Weekly Student Contact Hours		
	Fall 2007	Fall 2015	Fall 2020
District	26,141.43	31,526.59	35,970.63

WEEKLY STUDENT CONTACT HOUR FORECAST BY ATTENDANCE LOCATION FALL 2007, 2015, AND 2020 SEMESTERS

Location	Weekly Student Contact Hours		
	Fall 2007	Fall 2015	Fall 2020
Instructional Services Agreement	7,000.47	8,442.57	9,632.65
Palo Verde College	16,166.76	19,497.11	22,245.46
Spring Street	1,488.28	1,794.87	2,047.87
Needles Center	1,485.94	1,792.04	2,044.65
Total *	26,141.45	31,526.59	35,970.63

* Note: 2007= 871FTES, 2015= 1,051 FTES, 2020 = 1,199 FTES
The location proportions will adjust as the Needles Center develops, new programs are developed for the Inmate population and Palo Verde College/Needles Center

- An **ADN (Registered Nurse) degree program** be considered for either Palo Verde College or the Needles Center. Other Health industry degree/certificate programs should also be considered by the Office of Instruction for future program needs. The reason is simple; the Health industry is a growth industry with quality job opportunities for persons completing Associate degree and/or Certificate programs. There are federal funds that encourage the development of health industry programs, and the health industry is noted for supporting college health programs.
 - **Public Safety** is a second major growth industry. With the Ironwood and Chuckawalla Valley State Prisons nearby, a Public Safety Academy appeared a natural for Palo Verde College. However, Academies are difficult to secure. Two major obstacles the District would have to overcome are transportation access and housing for large numbers of participants. Federal funds are also available to support college public safety programs, including recent stimulus moneys.
 - Reduce the two **LVN program** to one, the “Fast-track” certificate program. It is popular and it works (see recommendation under Register Nursing).
 - Create a **Business Administration degree program** that articulates with CSU, San Bernardino. (If it articulates with CSU, SB, it will articulate with all accredited major university Business Administration degrees.).
 - Update the **Office Administration program** for the technology found in today’s office environment. A variety of degree/certificate programs could be designed to meet student learning needs (Situs degree/certificate planning).
 - The **College Work Study program** needs to grow exponentially from the present 15 participates to a 100 or more students. It also needs to be taken into the community. Community work study jobs provide quality work experience, typically better than those on the college campus, and also provide the necessary matching monies for the program. These are typically structured on 50/50 funding basis: 50 percent employer and 50 percent federal work study funds This also enables students to qualify for the Cooperative Work Experience program, and thereby generate additional FTES revenue for the District., Community based work study programs help unite the community and the college, and provide a small measure of economic development.
 - The **Cooperative Work Experience program** needs to be developed to help students learn employee skills through job sites in the community.
 - If Palo Verde College is to engage in **Intercollegic Athletic competition**, the College will need vibrant College Work Study, Federal Stafford Loan, Housing, Food Service, Student Activities and Student Conduct programs.
 - A **Child Development Center** is needed for the Palo Verde College campus, financed by state construction funds. It would serve as both the Child Development instructional program training center as well as a Child Development Center for children of Palo Verde College students as well as children from the community. Currently, few children of CARE or Cal-WORKS students are served by the Palo Verde College CDC.
 - Several **services** need or will need facilities to fit their future services, these include:
 - Admissions and Records
 - Counseling
 - DSP&S
 - EOPS/CARE
 - Financial Aid
 - Student Activities (including ASB)
 - Information Systems
 - Faculty Offices
 - Distance Education
 - Biology/Health Lab at Needles Center
 - Child Development Center
 - Storage
 - Vice President of Instruction
 - Library
- Facility planning needs to provide a student friendly, logical matriculation process (the first five services listed above). Planning could affect the location of Administrative Services as well.
- It is imperative that Palo Verde College and the Needles Center provide outstanding teaching/learning for the **reading, writing and mathematics** at the Basic Skills and Remedial (pre-college) levels for students. For

2007/08, 60 percent of entering students scored at the English Basic Skills level and 21 percent at Remediation level, 81 percent of students. For mathematics, 69 percent of entering students scored at the Basic Arithmetic level, conversely, only 6 percent were ready for College Algebra (fulfills the General Education requirement for Mathematics for CSU/UC). These demonstrate that reading, writing and mathematic deficiencies are pervasive among entering Palo Verde students. The percentages are comparable for the Inmate student population. These offerings should have “state of the art” learning technology, classrooms/laboratories and library support. District officials and faculty members should refrain from the “Blame Game.” They just need to get the job done.

- **Population projections** for the city of Needles show decreases continuing through 2020. It was noted that there are some encouraging signs of recovery. For planning purposes, the Claypool Building should enable the student population far outgrow the community projection. The Center should attract back Needles residents who are not attending Mohave DDC and perhaps a number of Arizona residents. Student enrollment should double, triple or quadruple. Fall 2003 should provide the standard for growth: 2,843 WSCH or 94.8 FTES. Instructional programs that address employment opportunities in the Needles, Bullhead City, Lake Havasu, and Laughlin communities could significantly impact enrollment, e.g., an ADN degree program.
- The District needs to identify the reasons for the **Hispanic population** being so under-represented, for example, only 26.5 percent of students list themselves as Hispanic. This compares with 58 percent of the population in the Blythe area being Hispanic.
- **English-as-a-Second Language** enrollments are small. At the same time, more than 3,500 persons in the Blythe area English communication skills.
- The **WSCH/FTES for non-credit class offerings** are low. As state funding for non-credit classes is based on actual student attendance (positive attendance), this is a costly problem. Beyond the loss of revenue, teaching/learning is a vigorous process needing frequent reiteration/repetition. The present rate of attendance cannot provide quality learning for students.
- The **Attendance Locations** for the District reveal enrollment and attendance patterns that make facility planning difficult. For example, enroll-

ment in the Instructional Service Agreements and Inmates made up 63 percent of the District student population for the 2007 Fall Semester, and a majority of WSCH/FTES produced. Yet, these students did not step foot on the Palo Verde College Campus. The Inmate student population received instruction via Distance Education, and benefited for Matriculation services such as Admissions and Records, Counseling, Assessment, EOPS, DSP&S, Bookstore and Library.

- As the economic data demonstrate, both Blythe and Needles provide **Hospitality Industry** services to large numbers of travelers and water recreation seeking populations. Currently, there are no upscale hotels/resorts, and at most 1,000 hotel/motel rooms in either location. Neither city is known as a food capital that attracts tourists. Career jobs requiring a degree or certificate are few, if any. For example, there are not enough restaurants in the greater Blythe area to absorb a dozen cooks each year from a cooking certificate program. The greater Needles area provides greater opportunities. The future El Garces and the Fort Mohave hotel/casino should provide opportunities for inexperienced certificate level cooks. No doubt, the Executive Chefs will initially come from outside the area. In addition to these opportunities, Laughlin hotels/casino and restaurants as well as restaurants in Bullhead City and Lake Havasu City provide an employment market for cooks. The downside is teaching and production kitchens are expensive, and the laboratory environment dictates a fairly low instructor/student ratio. Faculty salary schedules and degree requirements virtually preclude being able to hire an experienced Executive chef level instructor.

Hotel/Casinos management degree programs would be fairly easy to structure off a Business Administration degree; as of this writing, the District does not have such a degree in its curriculum. Hotel management degrees and/or certificates should articulate with those of the College of Hotel Management at UNLV.

Typically, hotels/casinos/resorts such as those in Laughlin and Las Vegas have an employee ratio of 1.5 employees per hotel room. The majority of these are house keeping/food service related. Short-term house keeping training might be a possibility. This is especially true if customer service, employee skills and English language skills are included.

The District could give consideration to a Fee-based Culinary School that

would operate as an entrepreneur enterprise. This would make it financially feasible to install teaching and production kitchens and hire qualified faculty. Such an undertaking would necessitate housing, food, work study, and Stafford Loan programs (These would be degree/certificate programs of sufficient duration as to qualify for financial aid programs.)

If the District is interested in studying a culinary undertaking, Steve Beno at College of the Desert would be able to provide usable advice. Steve is a graduate of the Culinary Institute of America, Hyde Park, New York and a former instructor at the Culinary Institute, and he was the founding Director of the COD Culinary Institute. He has scars of trying to make a high quality culinary school go in an academic environment.

- Based on **state capacity/load ratios**, Palo Verde College is overbuilt for classroom and laboratory space, but needing faculty office, and service space. State construction funds for services are more difficult to get than those for library, classroom and laboratory space. Facility planning is and will continue to be a complex undertaking to identify, and plan for future needs.