

southwestern community college district
facilities master plan

april 2013

VISION 2025



SOUTHWESTERN COLLEGE

CW/P
hpi



Message from the Superintendent / President

Southwestern Community College District

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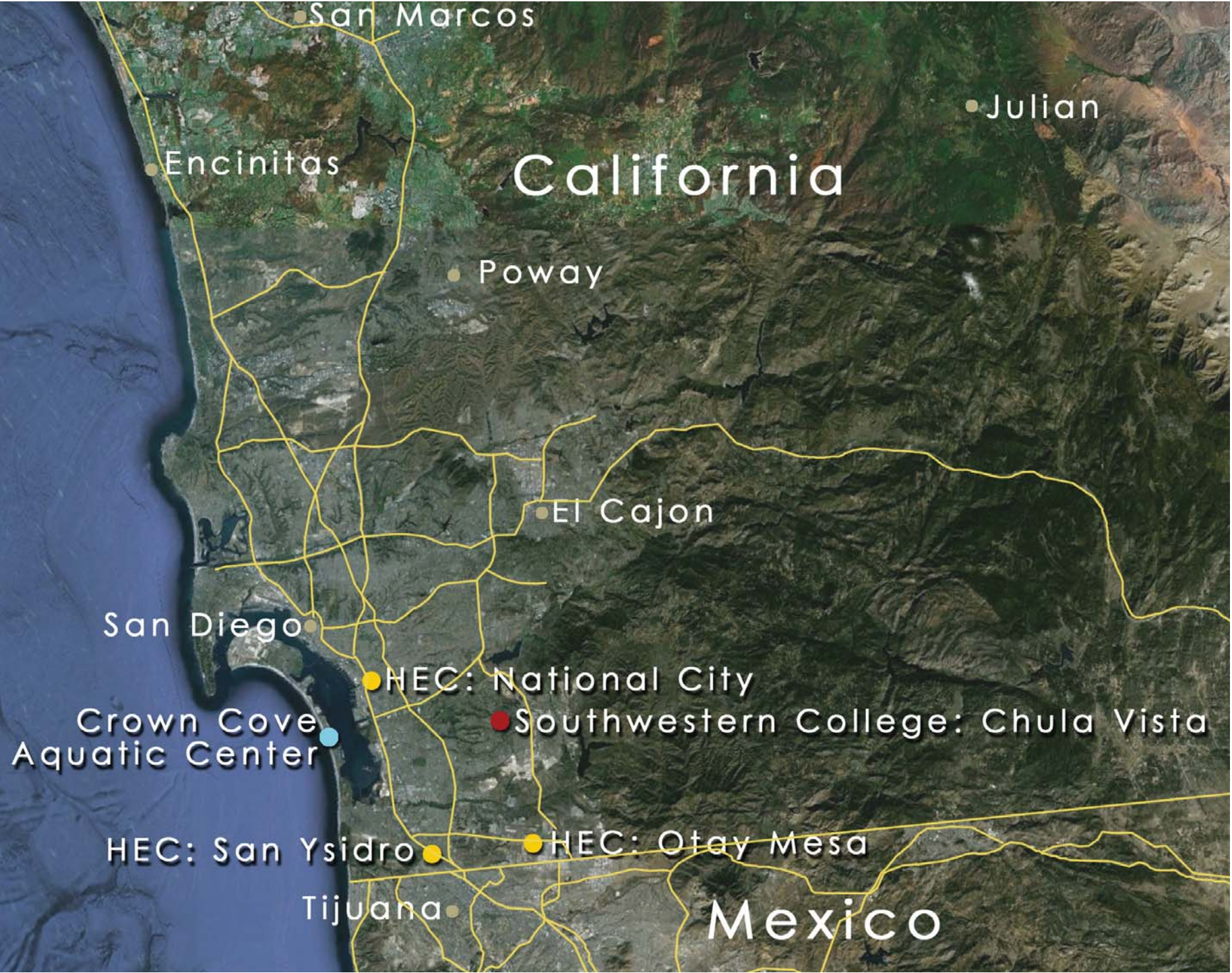
SOUTHWESTERN COMMUNITY COLLEGE

Southwestern College began offering classes to 1,657 students in 1961, with temporary quarters at Chula Vista High School. Ground-breaking for the present 156-acre Chula Vista campus was held in 1963; by September 1964 initial construction was completed and classes were being held at the new campus on the corner of Otay Lakes Road and H Street in Chula Vista

In 1988, Southwestern College established its Higher Education Center at San Ysidro on the memorial site of the McDonalds tragedy. The College again expanded its off-campus locations in 1998 by establishing the higher Education Center at National City. A new Higher Education Center at Otay Mesa opened its doors in 2007 as a regional center for educational training and development. In 2009, a new state-of-the-art facility replaced the previous San Ysidro site to serve its students and the community.

In addition to its Centers, Southwestern College also provides off-campus classes at several extension sites throughout the District and operates an Aquatic Center in Coronado, in conjunction with the California Department of Boating and Waterways and the California Department of Parks and Recreation. Current enrollments – at all locations – exceeds 20,000 students. More than a half-million students have attended Southwestern College since its opening.

The Western Association of Schools has continuously accredited SWC. The college offers a comprehensive curriculum, preparing students for transfer to four-year colleges or universities and for jobs and career advancements.



INSTITUTIONAL MISSION, VISION AND VALUES

MISSION STATEMENT

Southwestern Community College District promotes student learning and success by committing to continuous improvement that includes planning, implementation, and evaluation. We serve a diverse community of students by providing a wide range of dynamic and high quality academic programs and comprehensive student services.

The College District provides educational opportunities in the following areas: associates degree and certificate programs; transfer; professional, technical, and career advancement; basic skills; personal enrichment; non-credit adult education; community services; and economic, workforce, and community development.

VISION

Southwestern Community College District builds an exceptional community of learners and leaders who will promote social, educational and economic advancement.

GOVERNING BOARD INSTITUTIONAL GOALS

- Goal 1

Ensure a state-of-the-art teaching, learning, and work environment that supports and encourages student success.
- Goal 2

Ensure that the College District budget effectively addresses fiscal challenges such that instructional, student support, and operational integrity is maintained. Budget plans will prioritize all locations based on the SCCD focused Mission and will include plans to optimize resources and generate additional revenue.
- Goal 3

Continue development of integrated data systems that provide information for measurable student success by supporting efficient college operations, and institutional decision-making. Build a culture of evidence.
- Goal 4

Ensure maintenance of full accreditation status and continue to use accreditation standards to guide strategic planning and operations.

OUR VALUES

PRIORITIES STRENGTHENING OUR INSTITUTION

- Physical and Financial Resources*
- SWC will act in a responsible, accountable and transparent manner in budget and financial matters, and will actively and ethically seek outside sources of funding in order to preserve financial solvency.
- SWC will provide that th college’s design and infrastructure meets the evolving needs of all students, faculty, staff and community in support of an innovative learning environment.
- Establish and provide financial information systems that are transparent and easily accessible in support of the budget development process.
 - Maximize utilization of existing facilities and develop new facilities based on ever-changing student learning needs, emerging technologies, Governing Boards goals and the SWC Strategic Plan.



CHAPTER 1

INTRODUCTION TO THE FACILITIES MASTER PLAN (FMP)

INTRODUCTION TO THE FMP

Introduction to the Facilities Master Plan (FMP)

OVERVIEW

The Facilities Master Plan provides a current perspective for future academic and support services space, buildings and overall college/campus core amenity improvements. As a companion document to the Educational Master Plan, the FMP supports the development of the institution through the year 2025. The recommendations developed in this plan will depend upon and may require additional consideration in future planning. The Plan becomes a framework for campus development and addresses the following objectives.

- Create a functional and usable space/facilities plan based on the EMP that updates the previous assessment for space identified in the 2008 Southwestern Educational and Facilities Master Plan.
- Review and assess the current conditions of the college and the higher education centers related to the academic and support service programs and validate through quantifiable measures, the data to support future space needs for the District
- Obtain qualitative input from the campus/center community in support of the EMP and quantitative data from the research resources in the District.
- Match space needs with the curriculum, create modern teaching facilities and learning environments, and provide modern support services sufficient to serve students needs.
- Provide an overview for infrastructure planning, the development of campus standards and design guidelines, address deferred maintenance and general campus improvements.
- Evaluate traffic circulation and pedestrian way-finding with a goal of enhancing student access and student safety

- Be a resource for decision making in support of the distribution of Measure R Bond monies for current capital projects, as well as providing additional opportunities for state funding.
- Produce a well conceived and well justified plan for capitol outlay projects that are an outcome of a sound master planning process.

ASSESSMENT

Planning as a process should be both operational as well as strategic. The process must also incorporate existing planning as well as offering new recommendations based on recent District/College analysis. A planning model was generated to address the District's capacity for generating future Weekly Student Contact Hours (WSCH) and achieved enrollment growth. The model was based on the demographics of the effective service area and the ability of the District to attract new students. It is anticipated that the recommendations developed in this plan will depend upon and require additional consideration in future planning.

- Determine space tolerance thresholds for current buildings on campus and at the centers and to evaluate the types of spaces offered, their capacity for modification (including expansion), and their ability to accommodate future growth of the programs served
- Determine the future space needs of the academic and support services programs and establish a curriculum baseline composed of Weekly Student Contact Hours (WSCH), the number of sections offered, the number of enrolled students per class section, and the distribution of lecture versus laboratory hours. When viewed by discipline, a calculated need was established. Using this analysis, plus the historic trends of previous District growth,

- provide a growth factor to be applied to future development of each program of instruction and support services of the institution
- Access the capacity to reuse some existing buildings that were vacated as a result of new construction projects
- Determine the impact on the user-constituency groups. The assessment process focuses on the impacts and possible displacement of personnel and functions, the requirements for any swing space during construction/renovation phases, additional financial implications to the District due to possible secondary effects, and the ultimate impact on students and staff
- Following the assessment, the process assists the District in its decision making related to available options to the building/facility program

OUTCOMES

Planning was conducted through a collaborative planning process to update the Facilities Master Plan. Focus group interviews and questionnaires involved capturing the information necessary to evaluate a facilities condition plus the possible growth needs anticipated over the next 10 -15 years. These assumptions became the building blocks of the final “action plan” for facilities development.

- The capacities of the programs of instruction, the evaluation of space needs were viewed from both a quantitative and qualitative perspective
- The building facilities program identifies recommended new construction, renovation for reuse, modernization and possible secondary effects
- Student access and circulation connected to parking on

- campus along with the impact of pedestrian circulation was assessed and suggested modifications proposed
- Estimated expansion and centralization of support service elements were centralized and the services evaluated to address the development of related new technologies
- New construction projects were proposed to provide opportunities to improve space efficiencies
- Phased sequencing patterns minimized the need for on-campus swing space for interim use
- The scope involved a review of previous projects completed and those projects remaining in the queue.
- The establishment of a direction for additional construction and/or remodeling projects was proposed.
- As part of the process it became necessary to identify key elements in each project and associate them with the discipline/department needs
- In addition to facilities, a series of site improvement projects were identified to enhance the campus environment and integrate campus access, egress and student movement on-campus.

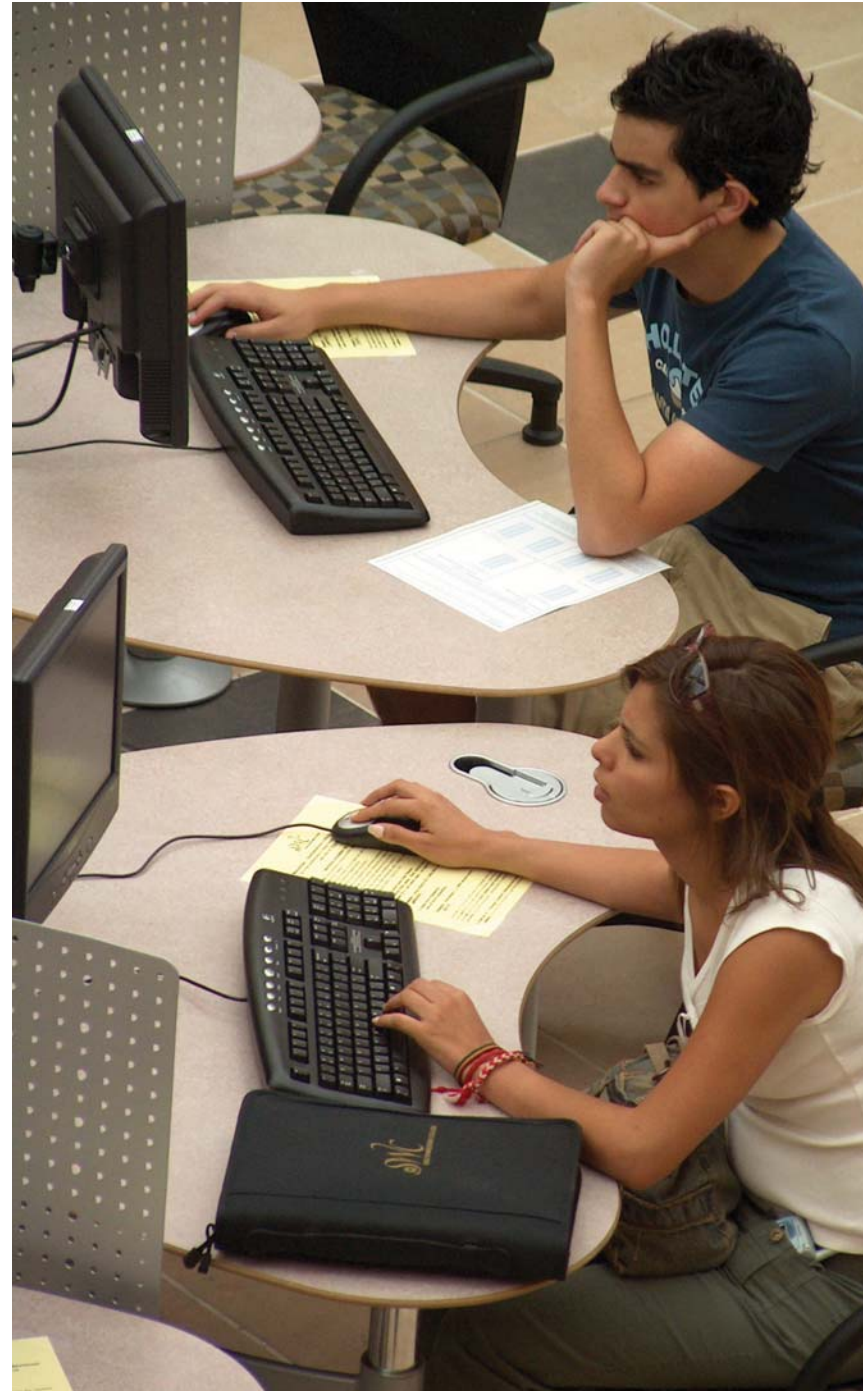


CHAPTER 2

LINKING TO THE EDUCATIONAL MASTER PLAN (EMP)

LINKING TO THE EMP

Linking to the Educational Master Plan (EMP)



OVERVIEW

Linking the Educational Master Plan's goals, strategies, and productivity to space quantification completes the process and balances the current and future curriculum, instructional delivery modes, effective learning environment, and necessary support structures.

While the current and immediate future economic indicators are somewhat uncertain and the district will need to address declining financial support, it is anticipated the District will return to positive growth in the foreseeable future. By 2015, as finances return to the new norm, new student enrollments should begin to expand and the District return to a more positive financial perspective and pattern of growth. Planning must address both long-term and well as meeting short-term goals.

The Facilities Master Plan relied on and was guided by the findings in the Educational Master Plan. Primary among those findings were the following consideration:

- The characteristics of the District's effective service area
- The District's course and program reviews as well as institutional effectiveness evaluations
- The potential for growth in the area
- The need for additional and/or better configurations of space into the future

CHARACTERISTICS OF THE EFFECTIVE SERVICE AREA

Based on an analysis of residential zip codes reported by enrolled students, the vast majority of students live within a drive time of 20-minutes from the Chula Vista campus. This area comprises the effective service area of the college. The key characteristics of this effective service area are noted below:

- The population was 1,179,286 in 2000. It is projected to be 1,341,698 by 2016. The subset of the area that is the official College district area alone will reach approximately 548,000 in 2020 and 701,000 by 2050. That represents a 51% change from the 2008 population of 462,787 in the official district area alone.
- The annual rate of population change is projected at 69%, slightly above the San Diego County projection. The median age projection at 33.5 years is two years younger than the County projected median age in 2016.
- The area for greatest growth is Otay Mesa followed by Barrio Logan, which is outside the official College district area. The Otay Mesa growth depends upon the actual development of San Diego City land in two high-density residential areas described in the updated 2011 Community Plan.
- There are pockets of poverty and unemployment in the district service area, notably in National City, Imperial Beach and Lemon Grove.
- The effective service area was 37% Hispanic in 2000 and is projected to become 47% Hispanic by 2016.
- Approximately 43% of the adult population age 23+ in the effective service area is a high school graduate or less. Around 46% of the adult population in this area has only a high school diploma or some college courses, but they do not have a college degree.

- The California Department of Finance projects an annual 18% decrease in the number of high school graduates between 2009-10 and 2020-21 in San Diego County. However, a gradual increase in graduates is expected to start in 2016-17 and continue to 2020-21.
- In the effective service area 16% of the population in 2010 was in the age range 15 to 24. It is projected that the portion of the population in this age range will drop by only 0.8% by 2016.

Effective Service Area



SUMMARY

- The rate of population growth will be a potentially strong point for the College going forward. The County is projected annually to grow 0.67%. There will be some new residents who are not familiar with the College or its Higher Education Centers and should be reached with a marketing message. From 2011 to 2016 the population will rise. Approximately 17,200 people per year are projected to enter the county during this period.
- Residents have moderate incomes, comparable to the state median, but many will have to sacrifice in order to attend college.
- The near-term (2014-15 to 2016-17) leveling out in high school graduates throughout the county suggests there will not be growing numbers of very young adults to accommodate at the College, but there will remain a steady stream of younger students. Beyond 2018 the projected number of graduates increases sharply suggesting the possibility of much younger student populations in the long term.
- The educational attainment percentages among adults 25 years or older indicates that at least 44% of the adults in the effective service area are candidates for postsecondary education.

A 3D pie chart illustrating the distribution of education levels among respondents. The chart is divided into six segments, each with a distinct color and a 3D effect. The segments are arranged in a circle, with labels and percentages placed around them. The data is as follows:

Education Level	Percentage
Less than High School	15%
High School Graduate	21%
Some College	22%
Associate Degree	8%
Bachelor's Degree	21%
Graduate Degree	13%

Source: Cambridge West Partnership, LLC

PROJECTIONS

The Educational Master Plan notes that the determinants for Southwestern College largely relied on the demographic characteristics of the effective service area, opportunities to meet educational needs and demand, and the region's high school graduation history. Additionally evaluated in the forecast for growth were the following:

- Past historical trends for headcount and weekly student contact hours (WSCH)
- Strength of the current program of instruction
- The economic vitality of the region and the ability of the area to generate new employment
- The proximity to major transportation infrastructure

Non-quantifiable/intangible factors included:

- Past reputation of the College
- Strength of the educational mission
- Ability to achieve the educational mission
- Capacity to compete in the educational marketplace

Given these factors, Southwestern College was determined to have the capacity to grow at a sustained rate of 2.1% for unduplicated headcount and 2.57% for WSCH through 2025. The translation of this projected growth, in terms of absolute values, is noted in the accompanying charts.

Year	Number of employees
2011	20,030
2015	21,155
2020	23,016
2025	25,862

Source: Cambridge West Partnership, LLC

2.6% annual WSCH growth

Year	WSCH Value
2011	223,387
2015	233,653
2020	261,653
2025	304,023

Source: Cambridge West Partnership, LLC





CHAPTER 3

FUTURE PROGRAM OF INSTRUCTION

FUTURE PROGRAM OF INSTRUCTION

Future Program Of Instruction



PHASE ONE: THE BASELINE

Forecasting the future program of instruction is related to the determination of Weekly Student Contact Hours (WSCH). While curricular content cannot be accurately predicted to 2025, certain assumptions may be made that are pertinent to the long-range forecasting process. It is assumed that the educational mission will remain somewhat consistent with past practice. With an estimate of projected WSCH and projected enrollments, the number of sections that are necessary to support this WSCH can be predicted relationally. Following the forecasting process, the projected WSCH is then correlated with capacity. Capacity is viewed as the necessary and appropriate space identified in the state standards to service the forecasted WSCH. While state standards of capacity are critical to the establishment of predicted space needs, all planning must also address the adequacy of the spaces to create an effective learning environment. This process forms the basis of the forecasting efforts that follow.

The fall 2011 semester was used as a starting point with the program of instruction providing a snapshot in time that served as historical perspective when compared to the previous data and it represented the most complete analysis available at the time. To address the capacities for the future, a planning model was created. This planning model, or “baseline”, provided the foundation from which a future program of instruction could be projected.

This baseline is captured in summary form in the following diagrams. The key elements include the number of sections offered, the total enrollments, the average seats per section, the total WSCH, the full-time equivalent students (FTES), and the total lecture and laboratory hours.

SOUTHWESTERN COLLEGE CHULA VISTA CAMPUS

- 1,603 course offerings, 178,450 WSCH, and 6,001 FTES
- Average section size – 34.33 students
- 77% lecture and 23% laboratory hours
- 81% of Curriculum represents General Education/Transfer
- 1.5% Non-Credit, Continuing Education WSCH
- College produces 80% of District WSCH/FTES

	Section	Enrolled	Seats /			Lecture	Lab	%	%
School	Numbers	Seats	Section	WSCH	FTES	Hours	Hours	Sections	WSCH
Arts & Communication	206	6,589	31.99	23,013	767	540	383	12.9	12.9
Health, Exercise Science & Applied Tech	284	8,866	31.22	30,424	1,067	483	633	17.7	17.0
Language & Literature	354	9,678	27.34	37,859	1,262	1,355	10	22.1	21.2
Mathematics, Science & Engineering	317	10,808	34.00	42,571	1,419	960	348	19.8	24.0
Social Science, Humaities & Business	408	14,245	34.91	41,958	1,398	11,276	2,912	25.5	23.5
Non-Credit	34	4,852		2,625	88	0	0	2.1	1.4
Total	1,603	55,038	34.33	178,450	6,001	14,614	4,286	100	100

Fall 2011 Baseline Summary

HIGHER EDUCATION CENTER OTAY MESA

- 167 course offerings, 15,711 WSCH, and 621 FTES
- Average section size – 23.27 students
- 39% lecture and 61% laboratory hours
- Center focus on Health and Safety – produce 40% of center
- WSCH/FTES
- Programs in Associate Degree Nursing, Vocational Nursing,
- Surgical Technology, etc. as well as Administration of Justice,
- Paramedic/EMT, and Fire Technology
- Center produces 7.1% of District WSCH/FTES

	Section	Enrolled	Seats Per			Lecture	Lab	% %	
School	Numbers	Seats	Section	WSCH	FTES	Hours	Hours	Sections	WSCH
Arts & Communication	2	58	29.00	201	6	4	2	1.2	1.0
Health, Exercise Science & Applied Tech	6	115	19.17	508	17	15	38	3.6	3.0
Language & Literature	8	209	26.13	916	31	34	0	3.8	6.0
Mathematics, Science & Engineering	17	496	29.18	2,169	72	51	39	10.2	14.0
Social Science, Humaities & Business	45	1,207	26.82	4,880	162	124	106	26.9	31.0
Health Occupations	76	1,529	20.12	6,356	212	134	426	45.5	40.0
Other: Insurance/Leadership	13	273	21.00	681	21	36	0	7.8	4.0
Total	167	3,887	23.27	15,711	521	398	611	100	100

Fall 2011 Baseline Summary

HIGHER EDUCATION CENTER NATIONAL CITY

- 184 course offerings, 13,917 WSCH, and 463 FTES
- Average section size – 24.87 students
- 69% lecture and 31% laboratory hours
- Program emphasis on Dental Hygiene and Medical Assisting
- General Education programs produce 69% of Center WSCH and Health Occupations produce 24% WSCH
- Space available for Small Business Operation
- Center produces 6.2% of District WSCH/FTES

Fall 2011 Baseline Summary

	Section	Enrolled	Seats Per			Lecture	Lab	% %	
School	Numbers	Seats	Section	WSCH	FTES	Hours	Hours	Sections	WSCH
Arts & Communication	9	275	30.56	1,029	34	27	2	4.9	7.4
Health, Exercise Science & Applied Tech	18	336	18.67	878	29	20	7	9.8	6.3
Language & Literature	18	510	28.33	2,156	72	74	0	9.8	15.5
Mathematics, Science & Engineering	28	883	31.54	3,352	112	85	21	15.2	24.1
Social Science, Humaities & Business	39	1,093	28.03	3,079	103	105	11	21.2	22.1
Health Occupations	65	1,270	19.54	3,333	111	79	137	35.3	24.0
Non-Credit	7	210	30.00	90	3	0	0	3.8	0.6
Total	184	4,577	24.87	13,917	463	390	178	100	100

HIGHER EDUCATION CENTER SAN YSIDRO

- 168 course offerings, 13,783 WSCH, and 459 FTES
- Average section size – 25.81 students
- 84% lecture and 16% laboratory hours
- 80% of instructional hours are General Education offerings
- Program emphasis on General Education/Transfer and Child Development
- Center produces 6.2% of District WSCH/FTES

Fall 2011 Baseline Summary

	Sections	Enrolled	Seats Per			Lecture	Lab	% %	
School	Number	Seats	Section	WSCH	FTES	Hours	Hours	Sections	WSCH
Arts & Communication	13	330	25.38	1,111	37	28	16	7.7	8.1
Health, Exercise Science & Applied Tech	9	215	23.89	659	22	12	15	5.4	4.8
Language & Literature	50	1,247	24.94	4,870	162	183	8	29.8	35.3
Mathematics, Science & Engineering	18	624	34.67	2,393	80	67	0	10.7	17.4
Social Science, Humaities & Business	78	1,921	24.63	4,750	158	187	50	46.4	34.5
Total	168	4,337	25.81	13,783	459	477	89	100	100

PHASE TWO: PROJECTIONS

The projections for future programs of instruction are not intended as parameters for the curriculum and/or actual numbers of sections to be offered in a given term, but rather to provide a perspective of what the current curriculum would look like if extended forward. Whatever the future curriculum becomes, the need for space would be still governed by specific amounts of lecture, laboratory and support service space. Growth for the benchmark years of 2015, 2020 and 2025 was projected at an annual rate of 2.57%.

The space projections make the jump from Weekly Student Contact Hours (WSCH) to the space and facilities necessary to support that WSCH. Starting with the fall 2011 baseline, the capacity to generate WSCH has been converted into State of California standards necessary to service the necessary lecture and laboratory functions. The scope includes a balance between the current space each program occupies and the projected need for programmatic space for the future.

For the purpose of this plan, a factor of 18 assignable square feet (ASF) per student station was used to estimate lecture classroom space need. While the state standard for lecture is currently 15 ASF per student station, this number has proved to be inadequate for both construction and instructional purposes. Due to modern classroom furniture types, technology considerations, teaching modalities and classroom orientation, the more appropriate factor is 18 to 20 ASF.

Tables 2.1 – 2.4 depict projected space needs in assignable square feet (ASF) for the benchmark years 2015, 2020, and 2025. The tables represent a summary of the projected assignable square feet (ASF) capacity for the future program of instruction by “Schools”. While the forecast is presented in summary form, the actual process was conducted at the discipline/program level. The capacity to generate WSCH was used as the key element for identifying the amount of lecture and laboratory space required to support future programs of instruction.

SOUTHWESTERN COLLEGE CHULA VISTA CAMPUS

The summary analysis of space deficit indicates that this campus has an overall shortage of lecture classroom space needs of approximately 33,600 ASF. While the bottom line summary of laboratory classrooms appears adequate, upon examination of the detail by discipline/program, there is a shortage of laboratory spaces in Mathematics, Science & Engineering and Arts & Communication of slightly over 12,000 ASF.

Table 2.1

Southwestern College	Current	Projected	Projected	Projected
	2011	2015	2020	2025
<i>FTES</i>	6,001	6,222	7,112	7,663
<i>WSCH Lecture</i>	135,109	144,083	165,184	188,276
<i>WSCH Laboratory</i>	40,717	42,571	48,171	55,672
<i>WSCH Total</i>	175,826	186,654	213,355	243,948
<i>ASF Lecture</i>	61,739	73,266	83,204	95,339
<i>ASF Laboratory</i>	108,912	71,825	81,617	93,484
<i>ASF Other</i>	5,440	0	0	0
<i>ASF Total</i>	176,091	145,091	164,821	188,823
<i>Number of Sections</i>	1,603	1,654	1,817	2,045
<i>Seats per Section</i>	34	34	35	35

Table 2.1

School	Current				Projected									
	Fall Sem 2011				2015			2020			2025			
	Lec	Lab	Other	Total	Lec	Lab	Total	Lec	Lab	Total	Lec	Lab	Total	
	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	ASF	
Arts & Communication	9,988	27,265	3,940	41,196	7,451	24,134	31,585	8,440	26,634	35,074	9,619	30,730	40,349	
Health, Exercise Science & Tech	5,883	38,552	0	44,435	7,447	12,764	20,211	8,690	14,809	23,499	10,164	17,362	27,526	
Language & Literature	14,273	5,376	508	20,157	20,764	647	21,411	23,377	777	24,154	26,318	849	27,167	
Mathematic, Science & Engineering	13,883	27,663	0	41,546	17,299	26,044	43,343	19,102	29,711	48,813	21,623	33,293	54,916	
Social Science, Humanities & Business	15,481	7,225	0	22,706	18,337	4,167	22,504	21,199	4,757	25,956	24,747	5,645	30,392	
Child Dev, Library, Study Skills	2,231	2,831	992	6,054	1,968	4,069	6,037	2,396	4,929	7,325	2,868	5,605	8,473	
Campus Total	61.739	108.912	5.440	176.094	73.266	71.825	145.091	83.204	81.617	164.821	95.339	93.484	188.823	

HIGHER EDUCATION CENTER OTAY MESA

There is no specific space need for lecture classroom space at this time and out to 2025. However, there will be a need for as much as 13,000 ASF in laboratory classrooms closely tied to programs in Safety and Allied Health on campus (Nursing programs – 6,500 ASF, Administration of Justice – 2,000 ASF, Fire Science and EMT – 4,500 ASF).

Table 2.2

Otay Mesa HEC	Current 2011	Projected 2015	Projected 2020	Projected 2025
FTES	522	575	626	728
WSCH Lecture	7,685	8,482	9,070	10,779
WSCH Laboratory	8,026	8,773	9,708	11,046
WSCH Total	15,711	17,255	18,778	21,825
ASF Lecture	9,060	4,364	4,671	5,553
ASF Laboratory	10,727	18,779	20,182	23,650
ASF Other	4,970	0	0	0
ASF Total	24,757	23,143	24,853	29,203
Number of Sections	168	170	170	178
Seats per Section	23	25	30	34

Table 2.2

Current					Projected								
Fall Sem 2011					2015			2020			2025		
School	Lec ASF	Lab ASF	Other ASF	Total ASF	Lec ASF	Lab ASF	Total ASF	Lec ASF	Lab ASF	Total ASF	Lec ASF	Lab ASF	Total ASF
Arts & Communication	0	0	0	0	65	215	280	74	245	319	86	281	367
Health, Exercise Science & Tech	0	1,320	1,470	2,790	289	2,418	2,707	303	2,481	2,784	348	2,851	3,199
Language & Literature	0	0	0	0	560	0	560	629	0	629	647	0	647
Math, Science & Engineering	0	3,745	0	3,745	806	2,451	3,257	851	2,558	3,409	1,026	2,939	3,965
Soc Sci, Humanities & Bus	0	0	0	0	1,292	3,281	4,573	1,432	3,692	5,124	1,682	4,260	5,942
Health Occupations	0	5,000	3,500	8,500	985	10,414	11,399	964	11,206	12,170	1,284	13,319	14,603
Other: Insurance/Leadership				0	367	0	367	418	0	418	480	0	480
General Lecture/Lab	9,060	662		9,722									
Campus Total	9,060	10,727	4,970	24,757	4,364	18,779	23,143	4,671	20,182	24,853	5,553	23,650	29,203

HIGHER EDUCATION CENTER NATIONAL CITY

The lecture classrooms at the National City HEC appear adequate through the year 2025. However, there is a deficit of approximately 3,500 ASF in laboratory space to support the current programs in Medical Laboratory Technology and Medical Office Professional.

Table 2.3

National City HEC	Current 2011	Projected 2015	Projected 2020	Projected 2025
<i>FTES</i>	464	490	543	639
<i>WSCH Lecture</i>	10,810	11,597	12,762	14,946
<i>WSCH Laboratory</i>	3,017	3,100	3,417	4,101
<i>WSCH Total</i>	13,827	14,697	16,179	19,047
<i>ASF Lecture</i>	9,617	5,969	6,574	7,691
<i>ASF Laboratory</i>	6,588	7,591	8,348	10,022
<i>ASF Other</i>	0	0	0	0
<i>ASF Total</i>	16,205	13,560	14,922	17,713
<i>Number of Sections</i>	184	176	190	205
<i>Seats per Section</i>	25	28	30	34

Table 2.3

Current					Projected								
Fall Sem 2010					2015			2020			2025		
Location	Lec ASF	Lab ASF	Other ASF	Total ASF	Lec ASF	Lab ASF	Total ASF	Lec ASF	Lab ASF	Total ASF	Lec ASF	Lab ASF	Total ASF
Arts & Communication	0	0	0	0	517	184	701	591	210	801	680	241	921
Health, Exercise Science & Tech	0	1,909	0	1,909	432	1,162	1,594	489	1,195	1,684	587	1,573	2,160
Language & Literature	0	0	0	0	1,224	0	1,224	1,326	0	1,326	1,522	0	1,522
Math, Science & Engineering	0	1,719	0	1,719	1,509	1,337	2,846	1,678	1,334	3,012	1,979	1,754	3,733
Soc Sci, Humanities & Bus	0	0	0	0	1,429	300	1,729	1,567	344	1,911	1,860	395	2,255
Health Occupations	0	2,960	0	2,960	858	4,608	5,466	923	5,265	6,188	1,063	6,059	7,122
General Lecture/Lab	9,617	0	0	9,617									
Campus Total	9,617	6,588	0	16,205	5,969	7,591	13,560	6,574	8,348	14,922	7,691	10,022	17,713

HIGHER EDUCATION CENTER SAN YSIDRO

The San Ysidro HEC space projected need for additional facilities indicates a shortage of 4,000 ASF in lecture classrooms and 3,700 ASF in laboratory space by the year 2025. This will require a new facility that could accommodate an additional 10 lecture classrooms, a larger open computer lab, and significant space to accommodate the expanding Child Development Program.

Table 2.4

San Ysidro HEC	Current 2011	Projected 2015	Projected 2020	Projected 2025
FTES	459	502	550	636
WSCH Lecture	12,045	13,151	14,389	16,666
WSCH Laboratory	1,738	1,897	2,123	2,415
WSCH Total	13,783	15,048	16,512	19,081
ASF Lecture	4,548	6,772	7,407	8,582
ASF Laboratory	2,199	4,712	5,240	5,917
ASF Other	2,188	0	0	0
ASF Total	8,935	11,484	12,647	14,499
Number of Sections	168	170	170	178
Seats per Section	26	28	30	34

Table 2.4

Current					Projected								
Fall Sem 2011					2015			2020			2025		
Location	Lec ASF	Lab ASF	Other ASF	Total ASF	Lec ASF	Lab ASF	Total ASF	Lec ASF	Lab ASF	Total ASF	Lec ASF	Lab ASF	Total ASF
Arts & Communication	0	669	0	669	376	1,109	1,485	430	1,273	1,703	500	1,477	1,977
Health, Exercise Science & Tech	0	820	2,188	3,008	418	1,503	1,921	473	1,573	2,046	544	1,632	2,176
Language & Literature	0	0	0	0	2,669	248	2,917	2,887	283	3,170	3,347	334	3,681
Math, Science & Engineering	0	0	0	0	1,438	0	1,438	1,471	0	1,471	1,690	0	1,690
Soc Sci, Humanities & Bus	0	710	0	710	1,871	1,852	3,723	2,146	2,111	4,257	2,501	2,474	4,975
General Lecture/Lab	4,548	0	0	4,548			0			0			
Campus Total	4,548	2,199	2,188	8,935	6,772	4,712	11,484	7,407	5,240	12,647	8,582	5,917	14,499

CHAPTER 4

SOUTHWESTERN COMMUNITY COLLEGE DISTRICT TODAY

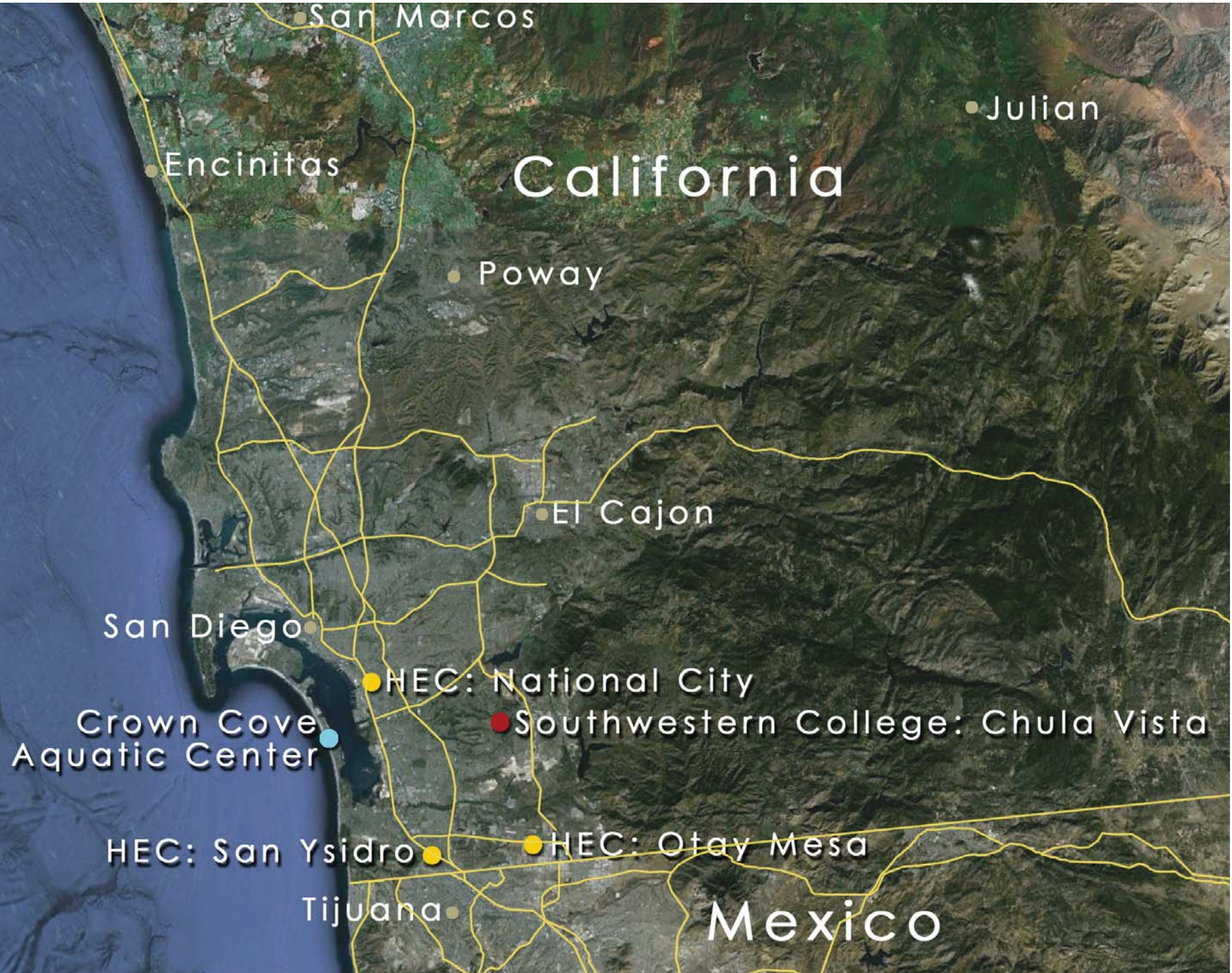
SWCCD
TODAY

Southwestern Community College District Today

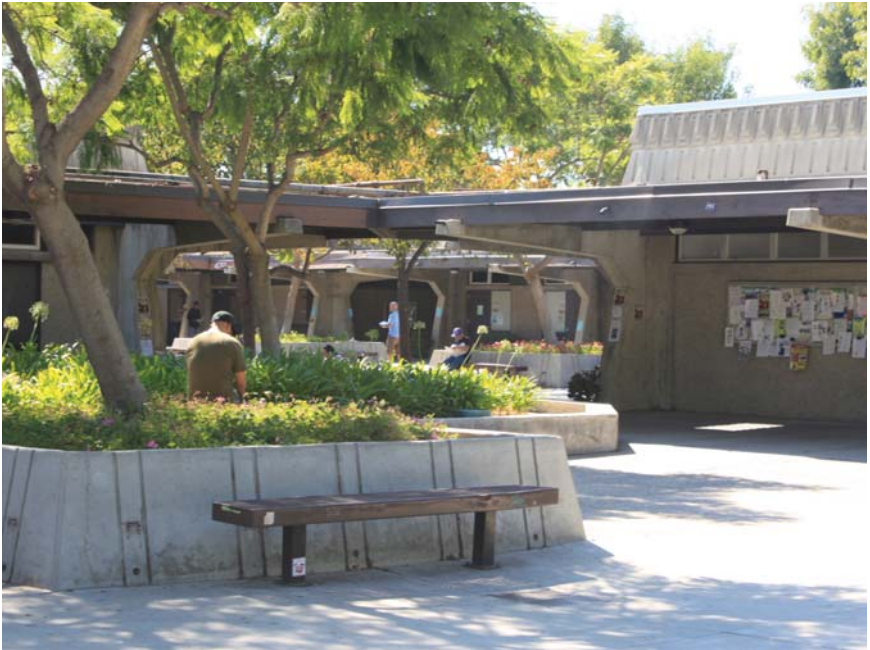
OVERVIEW

Southwestern College is comprised of the original 156 acre Chula Vista Campus and three higher education centers in San Ysidro, National City and Otay Mesa.

In addition to the Chula Vista Campus and its Centers, Southwestern College provides educational opportunities at multiple extension sites throughout the District and operates an Aquatic Center in Coronado. These sites are not District owned and are therefore not addressed in the Facilities Master Plan.



- Southwestern College at Chula Vista
- Southwestern College Higher Education Center
- Southwestern College Extension Site



CHULA VISTA CAMPUS

The SWCC Chula Vista Campus occupies 156 acres at the southwest corner of Otay Lakes Road and H Street in the City of Chula Vista

The northeast edge of the campus fronts Otay Lakes Road which serves as the public or front door to the campus. Limited access is provided from H Street on the northern edge of the campus. The balance of the campus perimeter abuts single family residential neighborhoods to the south and west.

The campus is generally defined by a developed, centralized academic core ringed by a two-way loop road and parking. Separated from the academic core by the ring road are athletic fields and support facilities which occupy a significant portion of the northern and western edges of the campus, and the original CTE (horticulture and automotive) and Maintenance / Operations facilities southwest of the core.

In recent years, as the campus has grown, development has occurred outside of the academic core including administrative offices, temporary classrooms and a Child Development Center. These facilities, together with additional surface parking, occupy the southwest quadrant of the campus.

Approximately 11.5 acres at the north corner of the campus fronting the Otay Lakes Road and H Street intersection, as well as approximately 8.5 acres at the southern edge of the campus abutting adjoining residential neighborhoods, are undeveloped.

The campus site generally slopes from the south to the north with significant grade differences between the academic core and the parking to the south / southeast (approximately 8 - 18 feet) as well as between the academic core and the sports facilities and undeveloped area fronting Otay Lakes Road and H Street (approximately 45 feet). These grade differences create ADA and universal accessibility issues / considerations.



● Educational
 ● Residential
 ● Retail
 ● Religious Institution
 ● Public Park

Age & Condition Of Buildings & Infrastructure

Existing Building Stock

The age and condition of campus facilities varies. As indicated in the adjacent table the majority of the original campus buildings were constructed in the mid- sixties and early seventies. By the end of the planning period addressed in this master plan these facilities will be 50 to 60 years of age.

Notable exceptions include the 2002 LRC; 2004 Child Development Center; the 1600 Buildings (modular office and classroom facilities) constructed in 1991; and the 640, 650 and 660 Buildings constructed in 1999.

With the exception of the current Student Services Center (originally the campus Library and repurposed in 2002) and Myan Hall, the original instructional and support buildings are one story, exterior loaded, concrete frame buildings developed in academic clusters and connected by deep, wood framed overhangs and canopies.

While a limited number of the early buildings have been repurposed and / or upgraded as indicated in the adjacent table, the majority of these buildings are in need of extensive renovation and /or replacement of building systems to correct deterioration resulting from deferred maintenance, building systems reaching or exceeding their useful life, and the need to meet current instructional and technology needs.

To assess, from a maintenance perspective, the current condition of each building on campus, discussions were held with the campus’ maintenance and operations team. Buildings were evaluated by component systems including the building envelope (roof condition, canopy conditions, painting), plumbing systems, mechanical systems age and condition, electrical systems age and capacity, and the need for day to day maintenance. These discussions resulted in the ranking of buildings on a scale of 1 to 5, characterized as follows:

- 1. The building is in good working condition
- 2. The building requires minimum improvements (cosmetic)
- 3. The building requires moderate improvements (system repair)
- 4. The building requires heavy improvements (replacement of systems)
- 5. The building has major deficiencies

As depicted in the adjacent diagram, the majority of buildings were ranked as a condition of 3 or higher.

A summary of our analysis indicates the following:

- The majority of buildings will be exceeding 50 years of age by 2025, the planning horizon selected for the Facilities Master Plan
- Due to a lack of maintenance over time the majority of the early campus building are in need of significant renovation and or replacement of building systems. They are in need of “renewal” if they are to continue in service for any significant period.
- The number of older, relatively small, exterior loaded buildings, coupled with significant deferred maintenance issues creates a day to day maintenance burden and cost
- While age of a building may not be a significant factor in the continued use, renovation or repurposing of any specific building, the efficiency of the building envelope, the need to support growth and the need to support current technology and instruction all contribute to renewal costs approaching the cost of replacement, as well as operating costs which will likely exceed those resulting from replacement and consolidation.

Infrastructure

Consistent with the age and condition of facilities much of the infrastructure has reached or surpassed its useful life. The threat to disruption of operations and cost to maintain these systems on a daily basis is a burden to the Campus.

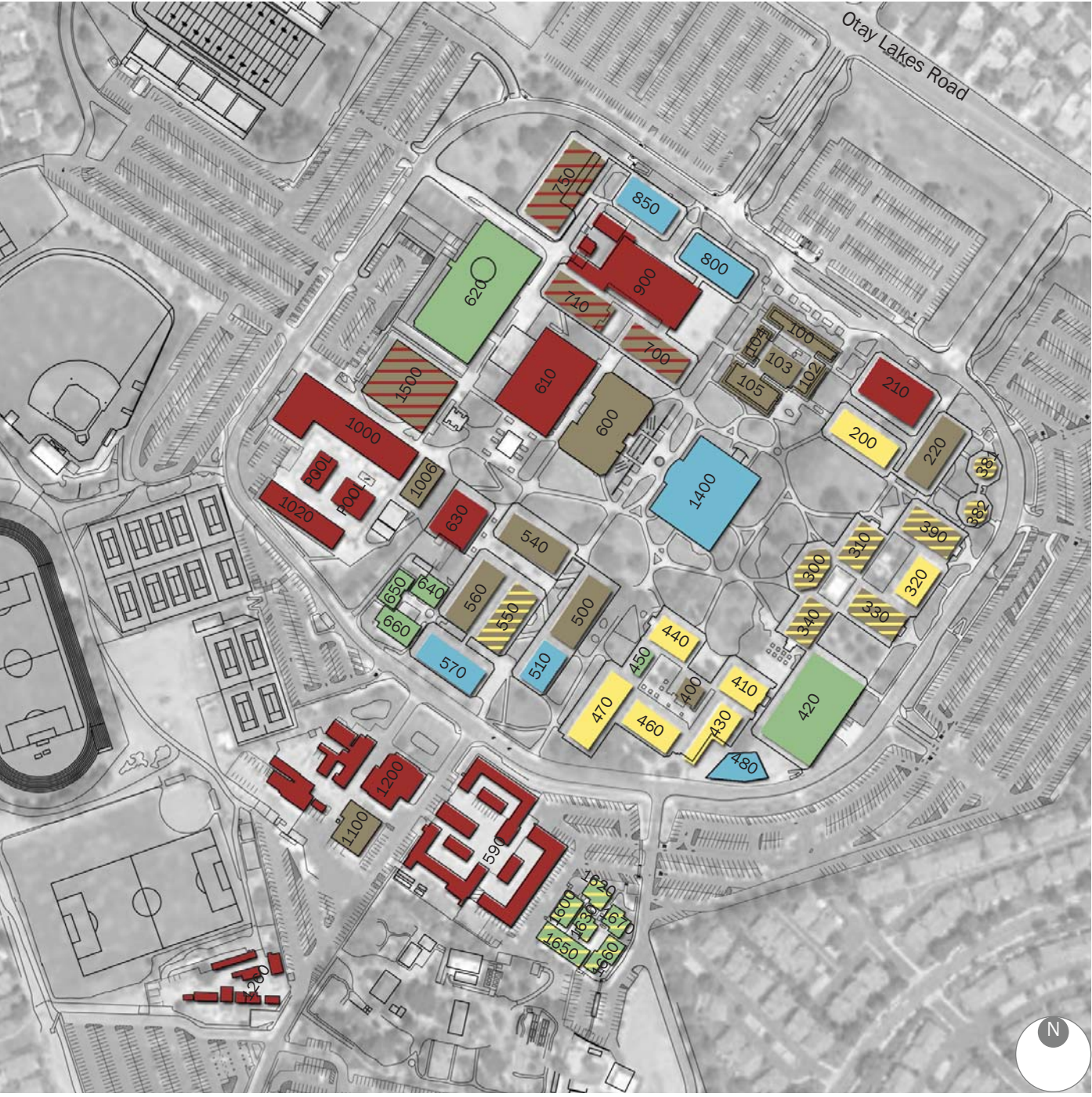
The campus is currently completing a Central Plant adjacent to the Field House and Stadium. A chilled water distribution system has been completed in the northeast half of the existing perimeter road. The plant is capable of serving significantly more load than the currently connected buildings and should be sufficient to meet the needs of the 2025 plan however further analysis is required to confirm this understanding. The central plant equipment is modular. The space within the central plant is sufficient to support an increase in equipment as necessary to operate all buildings within the campus core.

An irrigation lateral extending to the campus from the municipal, non-potable (irrigation) system in Otay Lakes Road has been completed. The system has not been activated or extend to serve the campus core.

Building Number	Building Name	Year Built
100	Administration	1965
102	Staff Lounge	1965
103	Classroom	1965
104	Academic Senate	1965
105	Classroom	1971
200	Business	1965
210	Administration	1978
220	Business	1966
300	Science Lecture	1965
310	Biology	1965
315	Animal Storage	1965
316	Greenhouse	1965
320	Life Science	1981
330	Chemistry	1965
340	Physics	1965
381	Exhibit Hall	1967
382	Planetarium	1967
390	Mathematics	1966
400	Office	1965
410	English	1965
420	Academic Success Center	2002
430	Classroom	1979
440	Language	1965
450	Office	1972
460	Behavior Science	1974
470	Social Science	1974
500	Graphics	1965
510	Classroom	1971
540	Electronics	1965
550	Tech/ Human SVC	1974
560	General Classroom	1974
570	Photography Lab	1978
590	Automotive	1971
600	ASO	1965
610	Student Union	1965
620	Learning Resource Center	2002
630	Bookstore	1981
640	Journalism	1999
650	Resource TR	1999
660	Community Service	1999

Building Number	Building Name	Year Built
700	Art	1965
710	Art Gallery	1969
750	Art	1975
850	Music	1975
900	Auditorium	1969
1000	Physical Ed	1965
1006	Women's - Activity	1969
1100	Warehouse	1978
1200	Maintenance	1965
1250	Auto Maintenance	1968
1400	One Stop SSC	1965
1500	Gymnasium	1965
1600	Classroom (Modular)	1991
1620	Classroom (Modular)	1991
1630	Conference (Modular)	1991
1650	Business Operation (Modular)	1991
1660	Classroom (Modular)	1991
1670	Classroom (Modular)	1991
1680	Classroom (Modular)	1991
1700	Team	1972
1710	Concession	1971
1735	Child Development	1998
1800	Horticulture	1986
1810	Greenhouse	1976
1900	Information Booth	1989
2000	Child Development Center	2004

Condition Ranking



VEHICULAR ACCESS, CIRCULATION & PARKING

Vehicular Access and Circulation

Vehicular access to the campus is limited to two major arterials, Otay Lakes Road to the east (4 entries) and H Street (1 entry) to the north. Vehicular access to the southwest edge of the campus through the residential neighborhood from Woodcrest Street is limited to emergency vehicles. Over two thirds of the campus perimeter abuts residential neighborhoods without access.

The Otay Lakes Road entries are generally well distributed. The northern most entry southeast of the Otay Lakes Road and H Street intersection is limited to right-in / right-out movements. The southernmost entry is not signalized. The two primary entries, Elmhurst and Gotham, are signalized. All entries would benefit from enhanced signage and a unified, identifiable landscape and entrance character.

The H Street access is signalized however vehicular approach from the west is abrupt and lacks a right hand deceleration lane. This entry lacks appropriate signage and other forms of college branding.

All vehicular entries terminate on a two-way loop road, which circumnavigates the academic core. Parking generally lies outside the loop road and is bifurcated from the academic core. This leads to significant pedestrian and vehicular conflicts (18 striped crossings) as pedestrians attempt to access the campus from parking, considerably slowing vehicular traffic at peak times. The result is congestion and unsafe pedestrian conditions.

The adjacent diagram depicts the current organization of the Chula Vista Campus in a simplistic way: the parking (●) sits outside of the vehicular loop (●) which rings the academic core (●). Pedestrians → are forced to cross the loop road to gain access to the core.

Parking

With the exception of peak enrollment periods the Chula Vista Campus is very adequately parked. One measure of parking adequacy is the ratio of unduplicated student enrollment to the number of on-campus spaces. Today, there are approximately 4,300 parking spaces on Campus. The 2011 unduplicated enrollment for the Chula Vista Campus is approximately 20,330 students. This equates to a current ratio of approximately 4:1.

On-site parking is generally well distributed relative to the intensity of student use and, with the exception of the new lots to the southwest edge of campus, in relative close proximity to the academic core. The bulk of campus parking is currently located along Otay Lakes Road northeast of the academic core (Lots A, B & O) and along the south perimeter of the campus (Lots C & D). Lots O, A, B, C & D account for over 55% of the campus parking; due to access, ease of entry and proximity to academic space, these parking lots are the most frequently used. Approximately 20% of the available parking is located south and west of the Maintenance and Operations facilities (Lots E, F & G); these lots are the least used primarily due to distance from the academic core and the difficulty / time required to access. The balance of parking, most readily accessed from H Street (Lots H, I, J, K, L, M & N), serves the Library and adjoining athletic facilities and fields.

With the exception of Lot O, all on-campus lots are accessed from the loop road. However, due to congestion, a large number of students access the south lots (Lots C & D) from the southernmost Otay Lakes Road entry and traverse these lots searching for parking. This traffic, combined with the irregular geometry and organization of these lots, results in congestion, pedestrian conflicts and unsafe conditions.

Service

Facilities requiring service vehicle access are distributed in multiple locations on campus. These primarily include Maintenance / Operations and Warehousing, the Time Out Cafe, Automotive Technology, the Book Store, the Cafeteria, Mayan Hall and the Fine Arts Labs.

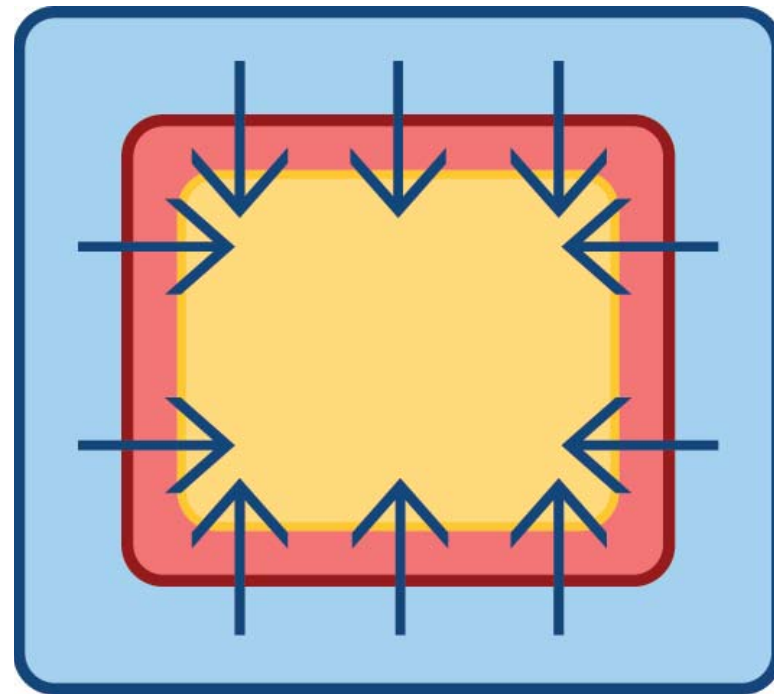
Service vehicles share the loop roadway with general traffic. Access from the loop road to the buildings served is relatively direct and, with the exception of service to the Cafeteria, does not create significant service / pedestrian conflicts, other than the conflicts inherent in the loop road pedestrian crossings previously noted. Service vehicle access to the Cafeteria is problematic in that it crosses the primary north / south pedestrian access to the south side of the Library.











Public Transportation

The Chula Vista Campus includes a well located on-site transit drop off on the east edge of the campus core. The drop-off is sited in close proximity of the public safety office between the Gotham Street and Elmhurst Street entries. The transit stop appears to be heavily used and facilitates easy, accessible, direct access to core of the campus.

Currently four bus routes access the campus: 705A, 707, 709 & 712. Additional drop-offs occur both north and south bound on Otay Lakes Road.

Current Campus Organization



-  Arterial Road
-  Vehicular Entry
-  Transit Drop Off
-  Parking
-  2 Way Loop Road
-  On Site Vehicular Circulation
-  Service Vehicle Access
-  Parking Lot (per SWC Campus Map)
-  Pedestrian / Vehicular Conflicts
-  Striped Pedestrian Crossings



PEDESTRIAN ACCESS & OPEN SPACE

Open Space

The academic core of the Chula Vista Campus is visually pleasing, campus like and the landscape is mature.

The early master plan for the campus provided for a series of single story building clusters, organized by academic discipline at the edge of the campus and radiating around the original 2 story library (Building 1400, now Student Services Center) and a centralized, open campus core. Time has done little to change the concept however the campus has grown, programs have expanded, many academic disciplines spill from cluster to cluster, and the library has moved to the north edge of the academic core. The resulting campus retains a sense of open space at its core. This space today is “ornamental” in character and defined by mature trees, well maintained significant turf and planting, and a series of meandering pathways connecting buildings.

While the campus possesses a significant amount of open space few of the “public buildings” at the core of the campus (The Student Center, Student Union / Cafeteria, and Student Services Center) have adjoining open space which adequately supports or encourages formal and / or informal student activities, study or socialization. Missing from the central open space today is a sense of identity, student life and campus energy.

Pedestrian Circulation and Wayfinding

Pedestrian access to the core from adjoin parking is difficult at best and at worst unsafe, due the separation created by the loop road. (see Vehicular Access and Parking for further discussion of this issue)

Pedestrian way finding, the ability to easily and conveniently find your way from parking to your destination, or from one destination or building to the next, is difficult, even for those familiar with the campus. Planning considerations include:

- A lack of consistent, appropriately scaled and located building and pedestrian signage.
- Pedestrian “gateways” from parking to the academic core are poorly defined, do not present a consistent, welcoming / landscape / hardscape character, lack appropriate signage, and generally provide limited vistas (visual access) to the campus core.
- Visual access from parking and pedestrian gateways to the center of campus is limited. The one exception being the East / West pedestrian spine spanning from the transit drop off at the northeast edge of the campus through the academic core to the 500’s building cluster on the southwest edge.
- The majority of the buildings on campus are of similar architectural character, size and scale. The sameness of the buildings and adjoining covered walkways, a lack clear, adequate signage and the internalized courtyard all contribute to the difficulty of finding your way from point to point.

Elevation changes across the site create challenges with respect to ADA requirements and universal accessibility. Parking Lots C and D are elevated above the campus core from 10 - 18 feet. The north edge of the academic core is elevated above the undeveloped lot at the corner of the Otay Lakes Road / H Street intersection by more than 40 feet. The grade differences provide a unique opportunity of creating pedestrian bridges to and from the academic core.

Pedestrian access from the campus core to the undeveloped land at the northeast corner of campus and from the academic core to the southwest quadrant of the campus (administrative offices, temporary classrooms, Child Development Center, CTE facilities and Parking Lots G & F) should be integrated in future campus planning.

Open, Mature Campus Core













Early Master Plan



East / West Pedestrian Spine



Diagram Key

-  Vehicular Entry
-  Pedestrian Crosswalk
-  Central Open Space
-  Pedestrian Circulation
-  Parking
-  2 Way Loop Road
-  On Site Vehicular Circulation
-  Transit Drop Off
-  Elevation Point
-  Parking Lot (per SWC Campus Map)





KEY CONSIDERATION FOR THE FUTURE

Based on the findings from the Educational Master Plan, inputs from the college community and on-campus visits, several key considerations were identified as pertinent to the development of the Facilities Master Plan.

MEETING DEMANDS FOR GROWTH

Based on the current space inventory and the projected growth approximately 69,800 ASF of additional classroom space will be needed in the District by the year 2025, or whenever 304,023 WSCH is achieved.

Southwestern College’s Chula Vista Campus will need approximately 45,600 ASF in combined lecture and laboratory facilities primarily in the Schools of Mathematics, Science and Engineering and Arts & Communication by the year 2025.

The Higher Education Centers at Otay Mesa, National City and San Ysidro have a combined need for an additional 24,200 ASF in combined lecture and laboratory facilities.

ADDRESSING AN AGING CAMPUS

Thirty-three academic buildings on campus were constructed between 1965 and 1969. By the year 2025 these buildings will be between 56 to 60 years old. Since that time only six have been modified and only one since the year 2000.

Between 1970 and 1979 nineteen (19) buildings have been added to the campus, five have been modified in some way. Four of these projects were related to current Bond activity: the ASO (Building 600) in 2000; Building 510 in 2011; the Academic Success Center (Building 420) in 2005; and a Photography remodel of Building 570 in 2011.

PRIMARY INFRASTRUCTURE NEEDS

The existing infrastructure has served Southwestern College for over 40 years. Failing infrastructure has been a persistent problem on the campus, particularly over the past ten years. Most mechanical and utility systems are in need of some repair.

MAINTAIN LANDSCAPING & OPEN SPACE

Landscaping should be an asset to the campus and to the community in general. As a mature campus, the landscaping is well defined and significant in its distribution. Existing trees should be maintained if feasible.

ADDRESS AREAS TO SUPPORT STUDENT COLLABORATION

The District should continue to focus on providing dispersed spaces on campus for students to gather and communicate, multiple seating and gathering spaces distributed though out the campus.

SUPPORTING THE CORE MISSION OF THE DISTRICT

Consideration was given to insuring that facilities in the future support the core mission of the College/District – i.e. a strong program of transfer/general education, basic skills preparation and workforce preparation. Facilities of the future should ensure that the programs in the sciences, mathematics, language arts, humanities, career technical education, and basic skills are adequately accommodated.

ACCESS, VEHICULAR CIRCULATION & STUDENT PATHWAYS

Access to the campus, entry points, vehicular circulation and on campus traffic patterns are prime planning considerations. The points of entry and exit, transit drop off, and campus wide signage must be addressed. Consideration should be given to balancing parking with future facility locations. Visibility and

signage enhance pedestrian circulation into and throughout the campus. A focus on improved campus zoning and pathways of movement for students within the campus become critical features.

SPACE UTILIZATION / DISTRIBUTION OF SPACE

Whenever possible, space allocations should conform with Title 5 standards and allowances for the key space categories monitored by the state. Even without current state funding, it is in the College’s best interest to keep itself in a “funding worthy” position for that time in the future when funding becomes available.

TECHNOLOGY CONSIDERATIONS

Facilities planning is closely linked to and aligned with technology. The association between instruction, support services and technology is impacted by distance learning, classroom and support service needs, and anticipated future technological innovations.

THE MAINTENANCE IMPERATIVE

Maintenance is imperative to the facilities planning process. Key maintenance issues that need to be addressed as part of the Facilities Master Plan include:

- The adequacy of the current and projected maintenance organizational structure to support new or renovated facilities
- The need to generate an overall comprehensive and long-term plan for maintenance.
- A long-term commitment of funding for maintenance.

