

Chapter Two Relevant Data and Issues

This chapter will review the facilities-related data for the District and will examine critical issues in facilities areas.

The organization of the Gavilan Community College District will continue to be a single college district with designated educational centers. Because of the close proximity of adjacent community colleges, the Board of Governors of the California Community colleges and the California Post Secondary Education Commission (CPEC), in all likelihood, will not approve additional campuses in the District. However, in the long-term, the state may approve educational centers in the northern (Morgan Hill) and southern (Hollister) areas of the District. Any other satellite education centers will need to be developed without state support by working with other educational institutions, public agencies or as partnerships with local business or industry.

In terms of educational delivery systems, there are two general trends that will need to be addressed. The first is that additional emphasis will be placed upon new learning paradigms and new delivery strategies. New learning paradigms will include instructional delivery strategies that are more individualized, self-paced, and accessible at any time of the day or night. This will require an expanded use of technological devices such as computers and computer-related hardware and software both in classrooms and laboratories, and in learning centers. This will also necessitate college faculty and staff developing the appropriate technological skills to support the new delivery systems. The second area to be addressed will be in student services where increasing student diversity will necessitate additions, deletions, or modifications in the delivery of support services. These services may or may not require use of technology, but will require facility spaces that are capable of being modified, as needs change. Facility planning must take into account the need for development of flexible spaces that are capable of being changed.

College staff will need to be sensitive to these subtle changes in the composition and needs of the student body as these trends continue to develop.

A. Building Information

The following charts describe the relevant data for each building currently listed on the District's Space Inventory. It should be noted that buildings at outlying locations such as the airport, Hollister, Morgan Hill and Gilroy are included in the inventory and have an impact on the overall capacity load ratio for the College. Logically however, they are not included in the facilities master plan for the main campus.

Table II-A
Gavilan College Space Inventory
October 1, 2000

Bldg. #	Building	Year Built	Rm s.	Total ASF	Total GSF	Efficiency (%)	Building Use
1	Aviation	1965	8	11,092	12,151	91.3	Aviation Program
2	Chemistry	1967	13	4,289	5,600	76.6	Chemistry, Physical Science
3	Chemistry	1967	11	3,805	5,600	67.9	Physics, Physical Science
4	Life Science	1967	19	6,388	8,316	76.8	Biology, Life Science
5	Gymnasium	1967	31	20,154	26,109	77.2	Phy. Ed., Athletics
6	Library	1967	73	33,240	38,801	85.7	Library, AV/TV, Media
7	Theater	1967	32	11,296	14,271	79.2	Drama
8	Student Union	1967	39	17,910	20,652	86.7	Student Services, Food, Books
9	Maintenance	1967	11	2,021	5,741	35.2	M & O, Warehouse
10	Cosmetology	1968	18	4,879	7,526	64.8	Cosmetology Program
11	Humanities	1968	16	4,692	6,566	71.5	English, Literature, Reading
12	Art	1968	13	4,825	6,107	79.0	Art Program
13	Pool Building	1970	2	340	1,260	27.0	Swimming Program
14	Business	1971	22	9,679	14,460	66.9	Business, Office, Computers
15	Social Science	1974	31	10,240	11,620	88.1	History, Soc., Psy., Gen. Ed.
16	Art Lecture	1974	5	3,255	3,298	98.7	Art, General Education
17	Field Storage	1971	1	170	406	41.9	Storage
18	Paint Storage	1976	1	115	328	35.1	Storage
19	Garden Storage	1967	1	417	504	82.7	Storage
20	Gas Locker	1967	1	84	123	68.3	Gas Storage
21	Storage	1972	1	686	853	80.4	Storage
25	Music/ Chapel	1993	1	769	923	83.3	Exhibits, Meetings
28	CDC Laboratory	1977	9	1,403	1,600	87.7	Child Development
29	CDC Trailer	1992	8	953	960	99.3	Child Development
30	Welding Bunker	1978	1	90	121	74.4	Welding Storage
31	Occupational	1981	14	13,826	17,811	77.6	Automotive, Welding
34	Athletic Storage	1981	1	320	324	98.8	Storage
35	Admin. Services	1981	11	1,642	2,362	69.5	Business Services
40	Maylock House	1910	5	866	1,632	53.1	Auxiliary Services
100	Hollister Center	1996	13	6,267	8,500	73.7	General Education
200	Morgan Hill Ctr.	1997	12	7,048	10,215	69.0	General Education
	TOTAL			182,761	234,740	77.8	

Table II-B
Gavilan College
Facilities Inventory Based on Category of Space

SPACE CATEGORY	DESCRIPTION	CURRENT SPACE INVENTORY
000	All Other	0
100	Classroom	25,525
210-230	Laboratory	55,113
235-255	Laboratory Service	644
300	Office/Conference	20,828
400	Library	17,829
520-525	Physical Education (Indoor)	19,085
530-535	Instructional Media (AV/TV)	6,707
540-555	Child Care, Clinic	2,411
580	Greenhouse	373
610-625	Assembly/Exhibition	13,427
630-635	Food Service	10,488
650-655	Lounge/Lounge Service	2,605
660-665	Bookstore	1,754
670-690	Meeting /Recreation	1,073
710-715	Data Processing/Comp	682
720-770	Physical Plant	4,217
800	Health Service	0
TOTAL		182,761

Source: Space Inventory and Building Facilities Report, conducted on campus by the Maas Companies, October 2000

5-Year Capital Construction Plan

Each February, the college is required to file a 5-Year Capital Construction Plan with the California Community College Chancellor's Office. This plan serves as the basis for requesting state funding for future capital construction projects. The criteria for state funding is based on a series of formulas that have as their origin the Annual Space Inventory of the District. Essentially, projects are funded by the state when the District demonstrates that the space it currently has in a given category is less than that which is allowed by state formula.

Currently, Gavilan College has three projects that have been funded by the state and are either in the planning or construction stage. These projects are as follows:

- Health Occupations Building
- Child Development Center
- Adaptive Physical Education Building

The Chancellor's Office has placed a moratorium on new facility proposals for the 2001-2002 fiscal year. This is because all funds have been expended on the 1998 higher education bond act. It is anticipated a new bond act will be submitted to the voters in 2002 and future projects will be submitted based on that bond act.

This Facilities Master Plan will serve as the basis for the development of future 5-Year Capital Construction Plans. It is anticipated that approved projects will need to be submitted by February 2002 to be eligible for the 2002 bond act.

Scheduled Maintenance Projects

A 5-Year Plan for Scheduled (Deferred) maintenance was initially developed in December, 1999 and has been updated for December 15, 2000. In accordance with state guidelines, this plan will continue to be updated annually. The current 5-Year Scheduled Maintenance Plan includes the following projects:

Projects for 2000-2001

1.	Install/Replace HVAC Systems-Phase I	\$400,000.00
2.	Roof Replacement-Phase I	\$250,000.00
3.	Replacement and Renovation of Plumbing System-Phase I	\$265,000.00
4.	Electrical and Communication System Replacement and Renovation-Phase I	\$300,000.00
	TOTAL	\$1,215,000.00

Projects for 2001-2002

1.	Install/Replace HVAC Systems-Phase II	\$400,000.00
2.	Roof Replacement-Phase II	\$250,000.00
3.	Replacement and Renovation of Plumbing System-Phase II	\$150,000.00
4.	Electrical and Communication System Replacement and Renovation-Phase II	\$220,000.00
5.	Painting of Building Interiors-Phase I	\$150,000.00
	TOTAL	\$1,170,000.00

Projects for 2002-2003

1.	Install/Replace HVAC Systems-Phase III	\$400,000.00
2.	Roof Replacement-Phase III	\$250,000.00
3.	Replacement and Renovation of Plumbing System-Phase III	\$125,000.00
4.	Electrical and Communication System Replacement and Renovation-Phase III	\$250,000.00
5.	Painting of Building Interiors-Phase II	\$150,000.00
	TOTAL	\$1,175,000.00

Projects for 2003-2004

1.	Roof Replacement-Phase IV	\$250,000.00
2.	Painting of Building Exteriors-Phase I	\$225,000.00
3.	Electrical and Communication System Replacement and Renovation-Phase IV	\$300,000.00
4.	Painting of Building Interiors-Phase III	\$250,000.00
5.	Floor Replacement and Renovation-Phase I	\$150,000.00
	TOTAL	\$1,175,000.00

Projects for 2004-2005

1.	Roof Replacement-Phase V	\$250,000.00
2.	Electrical and Communication System Replacement and Renovation-Phase V	\$300,000.00
3.	Painting of Building Exteriors-Phase II	\$225,000.00
4.	Floor Replacement and Renovation-Phase II	\$150,000.00
5.	Renovation and Repair of Warehouse	\$90,000.00
	TOTAL	\$1,015,000.00

Projects for 2005-2006

1.	Fire Sprinkler System Installation-Phase I	\$250,000.00
2.	Roof Replacement-Phase VI	\$250,000.00
3.	Electrical and Communication System Replacement and Renovation-Phase VI	\$300,000.00
4.	Painting of Building Exteriors-Phase III	\$225,000.00
5.	Floor Replacement and Renovation-Phase III	\$150,000.00
	TOTAL	\$1,175,000.00

Master Plan Information

NOTE: The following information is also contained in the Educational Master Plan for Gavilan Community College District. But, as it is highly relevant to the facilities planning process, it is also included in this document. See the Educational Master Plan for a more detailed analysis of the instructional and support services areas.

Analysis and Comparison of the Existing Instructional Program at Gavilan

The following tables and charts are created for the purpose of presenting data on the instructional program at Gavilan. For purposes of comparison to statewide averages and standards, the divisional breakdowns used by Gavilan will be converted into the uniform Taxonomy of Programs and Service (TOPS) Code Listing.

Internal Structure for the Delivery of the College’s Instructional Program

Presented in Table II-C is a breakdown, by division, of Gavilan College’s current instructional program.

Table II-C
Gavilan College
Divisional Structure
Fall – 2000

<u>Division</u>	<u>Disciplines in the Division</u>
Adaptive Education	1
Allied Health	2
Business and CSIS	9
English	2
Fine Arts	7
Learning Resources	1
Natural Science	8
Physical Education & Athletics	2
Social Sciences, Child Development, Admin of Justice	8
Vocational Technical	8
Interdisciplinary Studies	3

Source: Gavilan Office of Admissions and Records; Analysis the Maas Companies

Disciplines by “TOPS” Code Listing

The Taxonomy of Programs and Services (the TOPS Code Listing) is the standardized method by which the state views and categories the different disciplines for comparison purposes. It varies substantially from the divisional breakdown used by Gavilan to group the various disciplines. Table II-D provides a relational base from which to view the college’s curricular offerings by TOPS code listing.

Table II-D
Summary of Gavilan College's Instructional Disciplines by TOPS Code

<u>Department</u>	<u>TOPS Code</u>	<u>Department</u>	<u>TOPS Code</u>
Accounting	0500	Geography	2200
Automotive Collision Repair	0900	Geology	1900
Adaptive Education	0800	Guidance	4900
Allied Health	1200	Health Education	0800
Administration of Justice	2100	History	2200
Automotive Mechanics Tech.	0900	Humanities	1500
Aviation Maintenance Tech.	0900	Fire Technology	2100
Anthropology	2200	Journalism	0600
Art	1000	Library Science	1600
Astronomy	1900	Mathematics	1700
Athletics	0800	Management	0500
Biology	0400	Marketing	0500
Business Office Tech.	0500	Music	1000
Child Development	1300	Physical Education	0800
Chemistry	1900	Philosophy	1500
Communications	0600	Physiology	0600
Cosmetology	3000	Paralegal	1400
Computer Graphics and Design	0900	Political Science	2200
Computer Science/Information Sys.	0900	Physical Science	1900
Community Work Experience	4900	Psychology	2000
Ecology	0400	Real Estate	0500
Economics	2200	Sociology	2200
English	1500	Spanish	1100
English as a Second Language	1500	Theatre Arts	1000
General Business	0500	Welding	0900

Source: Maas Companies Database

TOPS Code Listing and Statewide Averages for WSCH

Table II-E is a comparison of statewide and Gavilan averages for curriculum percentages of lecture-generated WSCH and laboratory-generated WSCH. The statewide averages are used as both a baseline and a target for projecting the instructional program of the future.

Table II-E
Comparison of Lecture and Laboratory Weekly Student Contact Hours (WSCH)

<u>Inatructional</u> <u>Discipline</u>	<u>TOPS</u> <u>Code</u>	<u>Statewide</u> <u>Averages</u>		<u>Gavilan</u> <u>Averages</u>	
		<u>% WSCH</u> <u>Lecture</u>	<u>% WSCH</u> <u>Lab</u>	<u>% WSCH</u> <u>Lecture</u>	<u>% WSCH</u> <u>Lab</u>
Biological Science	0400	40	60	55	45
Business / Mgt.	0500	85	15	82	18
Communications	0600	80	20	52	48
Computer Info. Systems	0700	50	50	79	21
Education /PE	0800	25	75	9	91
Engineering/Tech	0900	35	65	27	73
Fine/Applied Arts	1000	40	60	32	68
Foreign Language	1100	85	15	85	15
Health Occupations	1200	40	60	56	44
Consumer Ed/Child Dev	1300	75	25	95	5
Law	1400	80	20	100	0
Humanities	1500	90	10	69	31
Library Science	1600	50	50	38	62
Mathematics	1700	90	10	95	5
Physical Science	1900	40	60	62	38
Psychology	2000	95	5	77	23
Public Affairs/ Services	2100	95	5	83	17
Social Science	2200	95	5	85	15
Commercial Services	3000	40	60	22	78
Interdisciplinary	4900	80	20	57	43

Source: Maas Companies Database

Analysis of Instructional Offerings

Table II-F outlines the productivity of the instructional divisions at Gavilan. For the 1998 fall semester, Gavilan offered a total of 463 net, active class sections that generated a total of 43,246 WSCH and 1,442 active, full-time equivalent students (FTES). The average WSCH per section was 93. The effective WSCH per student enrollment was 8.63.

Table II-F
Analysis of Instructional Offerings
5,014 Student Enrollment-Fall, 1998

<u>Instructional Discipline</u>	<u>TOPS CODE</u>	<u># of Net Sections*</u>	<u>WSCH Generated</u>	<u>FTES Generated</u>
Biological Science	0400	8	1,632	54.4
Business / Mgt.	0500	11	650	21.7
Communications	0600	18	1,360	45.3
Computer Info. Systems	0700	46	1,390	46.3
Education/PE	0800	31	3,672	122.4
Engineering/Tech	0900	17	2,261	75.4
Fine/Applied Arts	1000	33	3,344	111.5
Foreign Language	1100	11	1,299	43.3
Health Occupations	1200	11	1,267	42.2
Consumer Ed/Child Dev.	1300	17	1,154	38.5
Law	1400	4	162	5.4
Humanities	1500	84	10,871	362.4
Library Science	1600	3	33	1.1
Mathematics	1700	30	4,671	155.7
Physical Science	1900	8	1,279	42.6
Psychology	2000	8	1,046	34.9
Public Affairs/Services	2100	8	526	17.5
Social Science	2200	28	2,924	97.5
Commercial Services	3000	5	1,537	51.2
Interdisciplinary	4900	82	2,169	72.3
TOTAL		463*	43,246	
		Gavilan WSCH/Section		93.4
		Statewide Average WSCH/Section		115

Source: Gavilan Office of Admissions, Gavilan Administration and Records & Maas Companies Databases; *Analysis the Maas Companies*

* Class sections were discounted for off-campus work experience, combined and open enrollment courses, and sections with zero attendance to arrive at an effective "net" number of class sections.

Projections for the Future Instructional Program

Using the best available data, the projections that follow provide a quantifiable answer to the question of what the instructional program of the future will look like as Gavilan moves toward a target enrollment of 8,000 students. The projections presented have taken into account the actual performance of each discipline over the past five years and melded this with input from faculty, staff, students, and 58 community college districts in California. Changes in the instructional delivery methods that are anticipated in the future have also been factored into these projections.

Growth in the instructional disciplines has been forecasted at varying rates. The increase of approximately 60% in enrollment growth over the next ten years, therefore, will not come as linear or relational in its application to each instructional discipline. External

and internal factors, demographics, past performance, projected need, and curriculum balance have been taken into account. The projection is meant to serve as a model for the instructional program that will be required to meet a future enrollment of 8,000 students.

The following reference sources were used to arrive at these projections:

1. 1998 Gavilan District Report 17 ASF/OGSF Summary and the Capacities Summary (an inventory of facilities that is recorded with the state Chancellor's Office).
2. 1999 Space Inventory and Facility Building Summary, conducted by the Maas Companies.
3. The Weekly Student Contact Hours (WSCH) Comparison Report (published by the state Chancellor's Office).
4. Enrollment and performance data provided by Gavilan's office of Admission and Records.
5. The Maas Companies' database that is comprised of information from 58 of the 72 community college districts within the state for which the Maas Companies has completed educational and facility master plans.

WSCH and FTES Projections for 6,500 Students

Table II-G provides a perspective for an enrollment of 6,500 students. The data projected suggests a greater emphasis on increasing the efficiency and productivity of the instructional program. At the time when 6,500 enrollment is achieved, active class sections are projected to be 583 and WSCH 59,018. WSCH generated per section would increase from the current 93 to 101. FTES are projected to be 3,935 with an overall WSCH per student enrollment of 9.07.

Table II-G
Gavilan Instructional Program
Projected for 6,500 Student Enrollment
Target Year 2005

<u>Instructional Discipline</u>	<u>TOPS CODE</u>	<u># of "Net" Sections*</u>	<u>Calculated WSCH</u>	<u>Projected Annual FTES</u>
Biological Science	0400	12	1,620	108.0
Business / Mgt.	0500	16	1,392	92.8
Communications	0600	21	2,058	137.2
Computer Info. Systems	0700	54	3,672	244.8
Education/PE	0800	39	4,251	283.4
Engineering/Tech	0900	10	1,650	110.0
Fine/Applied Arts	1000	38	4,104	273.6
Foreign Language	1100	13	1,534	102.3
Health Occupations	1200	13	1,547	103.1
Consumer Ed/Child Dev.	1300	19	1,786	119.1
Law	1400	0	0	0
Humanities	1500	95	11,020	734.7
Library Science	1600	0	0	0
Mathematics	1700	34	4,930	328.7
Physical Science	1900	15	1,965	131.0
Psychology	2000	11	1,375	91.7
Public Affairs/Services	2100	10	920	61.3
Social Science	2200	36	4,032	268.8
Commercial Services	3000	5	1,600	106.7
Interdisciplinary	4900	103	5,974	398.3
New or Re-engineered Progs**		39	3,588	239.2
TOTAL		583*	59,018	3,935

Source: Maas Companies Projections

* Class sections are projected on the basis of "net" number of sections. Excluded are off-campus work experience, combined and open enrollment courses, and sections with zero attendance.

** "New or Re-engineered Programs" are programs that are yet to be determined. They may be new programs/curricular offerings or existing programs/curricular offerings that the college has decided to re-engineer. As such, a TOPS code listing has not been assigned.

WSCH and FTES Projections for 8,000 Students

Table II-H provides a WSCH and FTES perspective for an enrollment of 8,000. Class sections are projected to reach 713 with WSCH of 73,344. WSCH per class section are projected to reach 103. A total of 4,890 FTES are forecasted with WSCH per student enrollment climbing to a level of 9.17.

Table II-H
Gavilan Instructional Program
Projection for 8,000 Student Enrollment
Target Year 2010

<u>Instructional Discipline</u>	<u>TOPS CODE</u>	<u># of "Net" Sections</u>	<u>Calculated WSCH</u>	<u>Estimated FTES</u>
Biological Science	0400	15	2,070	138.0
Business / Mgt.	0500	22	2,222	148.1
Communications	0600	24	2,616	174.4
Computer Info. Systems	0700	63	5,544	369.6
Education/PE	0800	48	5,328	355.2
Engineering/Tech	0900	14	2,408	160.5
Fine/Applied Arts	1000	45	5,040	336.0
Foreign Language	1100	16	1,984	132.3
Health Occupations	1200	15	1,995	133.0
Consumer Ed/Child Dev.	1300	21	2,226	148.4
Law	1400	0	0	0
Humanities	1500	104	12,272	818
Library Science	1600	0	0	0
Mathematics	1700	37	5,106	340.0
Physical Science	1900	19	2,375	158.3
Psychology	2000	13	1,794	119.6
Public Affairs/Services	2100	13	1,274	84.9
Social Science	2200	46	5,520	368.0
Commercial Services	3000	0	0	0
Interdisciplinary	4900	128	7,424	494.9
New or Re-engineered Progs**		70	6,146	409.7
TOTAL		713*	73,344	4,890

Source: Maas Companies Projections

* Class sections are projected on the basis of "net" number of sections. Excluded are off-campus work experience, combined and open enrollment courses, and sections with zero attendance.

** "New or Re-engineered Programs" are programs that are yet to be determined. They may be new programs/curricular offerings or existing programs/curricular offerings that the college has decided to re-engineer. As such, a TOPS code listing has not been assigned.

Current WSCH Lecture/Laboratory Breakdown

Table II-I provides a current breakdown, by instructional discipline, of lecture WSCH and laboratory WSCH for Gavilan. The 1998 fall semester is used as the baseline for comparison.

TABLE II-I
Gavilan Lecture and Laboratory WSCH
By Instructional Discipline
5,014 Students - Fall 1998

<u>Instructional Discipline</u>	<u>TOPS</u> <u>CODE</u>	<u># of "Net"</u> <u>Sections*</u>	<u>Lecture</u> <u>WSCH</u>	<u>Laboratory</u> <u>WSCH</u>	<u>Total</u> <u>WSCH</u>
Biological Science	0400	8	891.9	740.1	1,632.0
Business / Mgt.	0500	11	530.1	120.3	650.4
Communications	0600	18	702.5	657.1	1,359.6
Computer Info. Systems	0700	46	1,095.4	294.8	1,390.2
Education/PE	0800	31	380.2	3,292.1	3,672.3
Engineering/Tech	0900	17	616.6	1,644.5	2,261.1
Fine/Applied Arts	1000	33	1,080.1	2,263.7	3,343.8
Foreign Language	1100	11	1,102.4	196.9	1,299.3
Health Occupations	1200	11	708.2	558.7	1,266.9
Consumer Ed/Child Dev.	1300	17	1,096.5	57.0	1,153.5
Law	1400	4	162	0	162.0
Humanities	1500	84	7,446.9	3,423.9	1,0870.8
Library Science	1600	3	12.5	20.5	33.0
Mathematics	1700	30	4,450.0	220.7	4,670.7
Physical Science	1900	8	799.1	479.5	1,278.6
Psychology	2000	8	802.1	243.7	1,045.8
Public Affairs/Services	2100	8	438.4	87.8	526.2
Social Science	2200	28	2,485.7	438.7	2,924.4
Commercial Services	3000	5	333.3	1,203.3	1,536.6
Interdisciplinary	4900	82	1,231.8	937.2	2,169.0
TOTAL		463*	26,365.8	16,880.4	43,246.2

Source: Analysis, The Maas Companies

* Class sections are projected on the basis of "net" number of sections. Excluded are off-campus work experience, combined and open enrollment courses, and sections with zero attendance.

Lecture/Laboratory WSCH Projected for 6,500 Students

In Table II-J, a perspective is provided relative to WSCH ratios for lecture and laboratory at a point when a student enrollment of 6,500 is achieved. The projections are designed to move Gavilan closer to the statewide averages for lecture/laboratory WSCH ratios.

TABLE II-J
Projection of Lecture and Laboratory WSCH
By Instructional Discipline
6,500 Students –Target Year 2005

<u>Instructional Discipline</u>	<u>TOPS CODE</u>	<u># of "Net" Sections*</u>	<u>Lecture WSCH</u>	<u>Laboratory WSCH</u>	<u>Total WSCH</u>
Biological Science	0400	12	648.0	972.0	1,620
Business / Mgt.	0500	16	1,183.2	208.8	1,392
Communications	0600	21	1,646.4	411.6	2,058
Computer Info. Systems	0700	54	1,836.0	1,836.0	3,672
Education/PE	0800	39	1,062.8	3,188.3	4,251
Engineering/Tech	0900	10	577.5	1,072.5	1,650
Fine/Applied Arts	1000	38	1,641.6	2,462.4	4,104
Foreign Language	1100	13	1,303.9	230.1	1,534
Health Occupations	1200	13	618.8	928.2	1,547
Consumer Ed/Child Dev.	1300	19	1,339.5	446.5	1,786
Law	1400	0	0	0	0
Humanities	1500	95	9,918.0	1,102.0	11,020
Library Science	1600	0	0	0	0
Mathematics	1700	34	4,437.0	493.0	4,930
Physical Science	1900	15	786.0	1,179.0	1,965
Psychology	2000	11	1,306.3	68.8	1,375
Public Affairs/Services	2100	10	874.0	46.0	920
Social Science	2200	36	3,830.4	201.6	4,032
Commercial Services	3000	5	640.0	960.0	1,600
Interdisciplinary	4900	103	4,779.2	1,194.8	5,974
New or Reengineered Progs **		39	2,152.8	1,435.2	3,588
TOTAL		583*	40,581	18,437	59,018

Source: Maas Companies Projections

* Class sections are projected on the basis of "net" number of sections. Excluded are off-campus work experience, combined and open enrollment courses, and sections with zero attendance.

** "New or Re-engineered Programs" are programs that are yet to be determined. They may be new programs/curricular offerings or existing programs/curricular offerings that the college has decided to re-engineer. As such, a TOPS code listing has not been assigned. Lecture/Laboratory ratios have been determined using a 60% to 40% lecture/laboratory ratio.

Lecture/Laboratory WSCH Projected for 8,000 Students

Table II-K provides a lecture and laboratory WSCH projection for an enrollment of 8,000 students. Greater emphasis has been placed on matching efficiency and productivity with growth and expansion over the projected ten-year period.

TABLE II-K
Projection of Lecture and Laboratory WSCH
By Instructional Discipline
8,000 Students –Target Year 2010

<u>Instructional Discipline</u>	<u>TOPS</u> <u>CODE</u>	<u># of "Net"</u> <u>Sections*</u>	<u>Lecture</u> <u>WSCH</u>	<u>Laboratory</u> <u>WSCH</u>	<u>Total</u> <u>WSCH</u>
Biological Science	0400	15	828.0	1,242.0	2,070
Business / Mgt.	0500	22	1,887.7	333.3	2,222
Communications	0600	24	2,092.8	523.2	2,616
Computer Info. Systems	0700	63	2,772	2,772	5,544
Education/PE	0800	48	1,332	3,996	5,328
Engineering/Tech	0900	14	842.8	1,565.2	2,408
Fine/Applied Arts	1000	45	2,016.0	3,024.0	5,040
Foreign Language	1100	16	1,686.4	297.6	1,984
Health Occupations	1200	15	798.0	1,197.0	1,995
Consumer Ed/Child Dev.	1300	21	1,669.5	556.5	2,226
Law	1400	0	0	0	0
Humanities	1500	104	11,045.0	1,227.2	12,272
Library Science	1600	0	0	0	0
Mathematics	1700	37	4,595.0	510.6	5,106
Physical Science	1900	19	950.0	1,425.0	2,375
Psychology	2000	13	1,704.0	89.7	1,794
Public Affairs/Services	2100	13	1,210.0	63.7	1,274
Social Science	2200	46	5,939.2	1,484.8	7,424
Commercial Services	3000	0	0	0	0
Interdisciplinary	4900	128	6,932.2	1,740.8	8,704
New or Reengineered Progs **		70	3,687.6	2,458.4	6,146
TOTAL		713*	50,302	23,042	73,344

Source: Maas Companies Projections

* Class sections are projected on the basis of "net" number of sections. Excluded are off-campus work experience, combined and open enrollment courses, and sections with zero attendance.

** "New or Re-engineered Programs" are programs that are yet to be determined. They may be new programs/curricular offerings or existing programs/curricular offerings that the college has decided to re-engineer. As such, a TOPS code listing has not been assigned. Lecture/Laboratory ratios have been determined using a 60% to 40% lecture/laboratory ratio.

Determination of Space Capacity

When space needs are projected, a total square footage requirement is compared against current space holdings. This comparison results in a net space capacity. The following sections provide a definition of capacity, a listing and explanation of the utilization and planning standards used to determine capacity, and net space capacity in all categories of educational space for Gavilan College.

Facilities Inventory

The inventory of facilities is an important tool in planning and managing college campuses. The California Community Colleges Facilities Inventory Manual includes descriptive data on buildings and rooms for each college district. This information is essential for developing the annual five-year capital construction plan and for scheduling and controlling campus space. In addition, planning for new capital outlay construction projects, projecting future facilities, developing capital outlay and deferred maintenance budgets, and analyzing space utilization are tasks that rely heavily on the facilities inventory documents and procedures.

The Education Code mandates an annual inventory of all facilities in the college district. This document, the 2000 Gavilan Community College District Report 17 ASF/OGSF Summary and Capacities Summary, was used as the basis for the facility assessment. The facilities inventory, as stated, has been integrated into the current database and used for the projection of future building requirements at the college.

Existing and Future Space Capacity

By combining existing and future enrollment estimates with appropriate space use standards, space capacity for the current year or for future years can be developed. Space capacity is the direct relationship between the amount of space available, by type, which may be used to serve students, and the number of students participating in campus programs. Space capacity analysis typically includes the following types of spaces:

Table II-L
Standard Space Categories
Used For Campus Assessment

Classrooms	Lounge
Non-class laboratories	Bookstore
Teaching laboratories	Health services
Library/learning resources	Theatre
Offices	Meeting room
Audio visual, radio and television (instructional media) facilities	Data processing
Teaching gym	Physical plant
Food service	Assembly/Exhibition

The space categories presented in Table II-L represent the majority of the total educational and general facility space on a typical community college campus. Space capacity analysis enables an institution to identify the types of space it needs and/or the

types of space it holds in excess. The analysis of space capacity forms the core of the facilities plan.

Space Utilization and Planning Standards

To determine space capacity requirements for a college's enrollment, the enrollment itself, or an appropriate form thereof, is applied to a set of standards for each type of space.

Prescribed State Space Standards

Title 5 of the California Administrative Code (Sections 57000-57140) prescribes standards for the utilization and planning of most educational facilities in public community colleges. These standards, when applied to the total number of students served (or some variant thereof, e.g., weekly student contact hours), produce total capacity requirements that are expressed in assignable square feet (space available for assignment to occupants). The Title 5 space planning standards used to determine both existing and future capacity requirements are as follows:

- **Classrooms**

Assignable square feet (ASF) per student station	15
Station utilization rate	66%
Average hours room used per week	53

- **Teaching Laboratories**

ASF per student station (See Exhibit IV-D)	
Station utilization rate	85%
Average hours room used per week	27.5

- **Offices, Office Service, Conference Rooms, and Reception Areas**

ASF per FTE instructional staff	140
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- **Library/Learning Resources Facilities**

Base ASF allowance	3,795
ASF for first 3,000 DGE	3.83
ASF per 3,001 - 9,000 DGE	3.39
ASF per for more than 9,000 DGE	2.94

- **Instructional Media/AV, TV, Radio**

Base ASF allowance	3,500
ASF per first 3,000 DGE	1.50
ASF per 3,001 - 9,000 DGE	0.75
ASF per for more than 9,000 DGE	0.25

Each component of these standards is mathematically combined with an appropriate form of enrollment to produce a total assignable square feet (ASF) capacity requirement for each category of space. The sum of these categories represents the total building requirement for the college.

Assignable Square Footage (ASF) Standard for College Laboratory Space

Listed below, in Table II-M, is the Title 5 state standard used to determine assignable square footage for laboratory space. The determination for assignable square footage for lecture is derived via mathematical calculation.

Table II-M
Assignable Square Feet (ASF) for Laboratory Space

Instructional Discipline	TOPS CODE	ASF/Station	ASF/100 WSCH
Biological Science	0400	55	233
Business / Mgt.	0500	30	128
Communications	0600	50	214
Computer Info. Systems	0700	40	171
Education/PE	0800	75	321
Engineering/Tech	0900	75	321
Auto Mechanic	0947	200	856
Auto Technology	0948	75	556
Aviation Maintenance	0950	175	749
Fine/Applied Arts	1000	60	257
Foreign Language	1100	35	150
Health Occupations	1200	50	214
Consumer Ed/Child Dev.	1300	60	257
Law	1400	35	150
Humanities	1500	35	150
Library Science	1600	35	150
Mathematics	1700	35	150
Physical Science	1900	60	257
Psychology	2000	35	150
Public Affairs/Services	2100	50	214
Social Science	2200	35	150
Commercial Services	3000	50	214
Interdisciplinary	4900	60	257
Welding	5341	90	385

Source: Maas Companies - Calculations based on California Code of Regulations Title 5, Chapter 8 Section 57028

Computation of the FTE Instructional Staff

The sample worksheet (Table II-N) must be completed by the district with the submission of the five-year capital construction plan. This worksheet must be updated and submitted by the college each subsequent year. For long-term planning purposes, this worksheet is used to project future staffing for the instructional program.

Table II-N
Worksheet for Computing FTE of Instructional Staff*

Category	Total Professional Instructional and Statutory Staff FTE	Non-Instructional Portion FTE	Net Total Statutory Staff FTE
Instructors			
Counselors			
Department Admin			
Librarians			
Instructional Admin			
Totals			

Source: Maas and Companies and Chancellor's Office

*Please note that this chart must be completed prior to completing Five-Year Capital Construction Plan.

The five categories of full-time equivalent (FTE) staff are specified and defined as follows:

1. **Instructors:** Included are the professional instructional staff for day, extended-day, and adult education, except those whose offices are located in an off campus location.
2. **Counselors:** Includes the professional counseling staff, special programs coordinators, extended opportunity program coordinators, statutory, and Title 5 required staff.
3. **Department Administrators:** Includes professional staff responsible for coordinating or supervising departmental activities. This category is dependent upon the organizational structure of the college but is generally defined as the department chair for an instructional or support service area.
4. **Librarians:** Professional librarians and directors of media services.
5. **Institutional Administrators:** Professional administrators with responsibilities covering the entire institution such as a president, vice president, deans, business managers, etc. This category generally covers all administrators above the department level.

Non-State Space Standards

The state provides standards for utilization and planning for more than 60% of all types of spaces on campus. Capacity estimates for those remaining spaces, representing approximately 40%, are based on a combination of factors including the size and/or nature of the institution. Standards for the remaining types of spaces are presented in Table II-O. These standards were determined based on a national study of space standards and discussions with colleagues in the California community colleges and the chancellor's office.

Table II-O
Assignable Square Footage for Non-State Standard Space Categories

Category of Space	Basis	ASF Factor
Non-class Laboratory	0.095ASF per headcount student	0.095
Teaching Gym	Greater of 2.5 ASF per FTES or 35,000 ASF	2.5-35,000
Assembly/Exhibition	ASF Equal to Student Headcount	100%
Food Service	0.60 ASF per Student Headcount	0.60
Lounge	0.67 ASF per FTES	0.67
Bookstore	1,500 ASF plus 0.67 ASF per Student Headcount	0.75
Health Service	ASF Allowance	1,200
Meeting Room	0.333 ASF per Student Headcount	0.333
Childcare	Greater of 0.4 ASF per Headcount or 6,000 ASF (Also, See State Child Care Standards)	0.40 – 6,000
Data Processing	ASF Allowance	5,000
Physical Plant	ASF Allowance	5% of Total
All Other Space	ASF Allowance	2.5 % of Total

Source: Maas Companies & Chancellor's Office

Methodology and Projections for Future Capacity

The determination of future capacity requirements for Gavilan College is included in the following methodology:

- Enrollment estimates, or the appropriate form thereof, were applied in combination with appropriate space planning standards (space planning standards were presented in the preceding pages) to result in a total space requirement in ASF by type of space.
- The current space inventory for the college was subtracted from the total space requirements described above in step one to result in the net ASF need by type of space for the projected ten-year facilities plan.
- The result, net assignable square footage by type of space for the ten-year cycle, was translated into the facility codes used by the state to evaluate and authenticate the space needs projections.

The quantifiable calculations for assignable square footage began with Table II-F, the credit instructional offerings and WSCH for the college for fall 1998. Tables II-G through II-K project the sections of class and WSCH that will be generated by each instructional discipline as the college achieves the projected enrollment of 8,000 students. The WSCH information generated becomes the basis for the projection of future facility requirements for the college.

Assignable Square Footage for 6,500 Students

Table II-P provides a projection for the assignable square footage required to meet lecture and laboratory space needs for an enrollment of 6,500 students.

TABLE II-P
Projection of Lecture and laboratory ASF for 6,500 Students
Target Year – 2005

Instructional Discipline	TOPS CODE	# of Sections	Lecture ASF	Laboratory ASF	Total ASF
Biological Science	0400	12	278	2,265	2,543
Business / Mgt.	0500	16	508	267	775
Communications	0600	21	706	881	1,587
Computer Info. Systems	0700	54	788	3,140	3,927
Education/PE	0800	39	456	10,234	10,690
Engineering/Tech	0900	10	122	3,630	3,752
Fine/Applied Arts	1000	38	704	6328	7,033
Foreign Language	1100	13	559	345	905
Health Occupations	1200	13	265	1,986	2,252
Consumer Ed/Child Dev.	1300	19	575	1,148	1,722
Law	1400	0	0	0	0
Humanities	1500	95	4,255	1,653	5,908
Library Science	1600	0	0	0	0
Mathematics	1700	34	1,903	740	2,643
Physical Science	1900	15	337	3,030	3,367
Psychology	2000	11	560	103	664
Public Affairs/Services	2100	10	399	105	504
Social Science	2200	36	1,643	302	1,946
Commercial Services	3000	5	275	2,054	2,329
Interdisciplinary	4900	103	2,050	3,071	5,121
New/Re-eng.'ed Progs **		39	924	5,382	6,306
TOTAL		583*	17,308	46,664	63,972

Source: Maas Companies Projections

* Class sections are projected on the basis of “net” number of sections. Excluded are off-campus work experience, combined and open enrollment courses, and sections with zero attendance.

** “New or Re-engineered Programs” are programs that are yet to be determined. They may be new programs/curricular offerings or existing programs/curricular offerings that the college has decided to re-engineer. As such, a TOPS code listing has not been assigned. ASF has been determined using a factor of 375/100WSCH.

Assignable Square Footage for 8,000 Students

Table II-Q provides a projection for the assignable square footage required to meet lecture and laboratory space needs for an enrollment of 8,000 students.

Table II-Q
Projection of Lecture and Laboratory ASF for 8,000 Students
Target Year - 2010

Instructional Discipline	TOPS CODE	# of Sections	Lecture ASF	Laboratory ASF	Total ASF
Biological Science	0400	15	355	2,894	3,249
Business / Mgt.	0500	22	810	427	1,237
Communications	0600	24	898	1,120	2,017
Computer Info. Systems	0700	63	1,189	4,740	5,959
Education/PE	0800	48	571	12,827	13,399
Engineering/Tech	0900	14	195	5,868	6,063
Fine/Applied Arts	1000	45	865	7,772	8,637
Foreign Language	1100	16	723	446	1,170
Health Occupations	1200	15	342	2,562	2,904
Consumer Ed/Child Dev.	1300	21	716	1,430	2,146
Law	1400	0	0	0	0
Humanities	1500	104	4,738	1,841	6,579
Library Science	1600	0	0	0	0
Mathematics	1700	37	1,971	766	2,737
Physical Science	1900	19	408	3,662	4,070
Psychology	2000	13	731	135	866
Public Affairs/Services	2100	13	519	136	656
Social Science	2200	46	2,250	414	2,664
Commercial Services	3000	0	0	0	0
Interdisciplinary	4900	128	2,548	3,816	6,364
New or Re-eng'd Progs**		70	1,582	9,219	10,801
TOTAL		713*	21,413	60,074	81,487

Source: Maas Companies Projections

* Class sections are projected on the basis of "net" number of sections. Excluded are off-campus work experience, combined and open enrollment courses, and sections with zero attendance.

** "New or Re-engineered Programs" are programs that are yet to be determined. They may be new programs/curricular offerings or existing programs/curricular offerings that the college has decided to re-engineer. As such, a TOPS code listing has not been assigned. ASF has been determined using a factor of 375/100WSCH.

Calculation of Net Assignable Square Footage (ASF) of Space for 8,000 Students:

Using data from the previous tables for calculating both prescribed state space standards and non-space state standards, Table 38 provides a net assessment for assignable square footage of all campus facilities to meet the needs of a student enrollment of 8,000. The

data provided is formatted to be consistent with the state code for facilities. The forecast is based on a ten-year period with a target year of 2010.

Table II-R
Building Requirements For 8,000 Students
Target Year 2010

Space Category	Description	Current Space Inventory	ASF for 8,000 Students	Additional ASF Needed 2010
000	All Other	0	0	0
100	Classroom	25,525	21,413	<-4,112>
210-230	Laboratory/Lab. Service	55,113	60,074	4,961
235-255	Non Class Lab./Service	644	2,035	1,391
300	Office/Conference	20,828	23,982	3,154
400	Library	17,829	32,325	14,496
520-525	Physical Education (Indoor)	19,085	35,000	15,915
530-535	Instructional Media (AV/TV)	6,707	11,750	5,043
540-555	Child Care, Clinic	2,411	6,000	3,589
580	Greenhouse	373	665	292
610-625	Assembly/Exhibition	13,427	8,000	<-5,427>
630-635	Food Service	10,488	4,800	<-5,688>
650-655	Lounge/Lounge Service	2,605	3,264	659
660-665	Bookstore	1,754	6,860	5,106
670-690	Meeting /Recreation	1,073	2,664	1,591
710-715	Data Processing/Comp	682	5,000	4,318
720-770	Physical Plant	4,217	10,052	5,835
800	Health Service	0	1,200	1,200
TOTAL		182,761	235,084	52,323

Source: Space Inventory and Report 17, Chancellor's Office, California Community Colleges and Maas Companies calculations based on California Code of Regulations Title 5, Chapter 8 Section 57028

Facility Planning Components

The previous sections of this chapter have outlined the quantitative aspects of the present and future facility needs for Gavilan College. Using this information as a guide, the consultant met with the College's Facility Master Planning Committee to review the physical condition of the current facilities and to develop a long-term plan for future facilities for the college. A summary of the key issues identified as part of the process and the recommended solutions are presented in the sections that follow. Back-up documentation including the Annual space Inventory, 5-Year Capital Construction Plan, 5-Year Scheduled Maintenance Plan and enrollment projects are included in the appendices.

In assessing the facilities at the college, a series of site planning components were identified. These components were as follows:

- College Identity
- Community Outreach
- The Campus Architecture
- Land Utilization
- Facilities Which Support the College's Instructional Program and Support Services
- Scheduled Maintenance Issues

As noted previously, the initial buildings at Gavilan College are approximately 40 years old. Additional buildings were added in the 1970's but it has only been the last two years that any new buildings have been added to the campus. With 147 acres of property, the campus has the physical space to accommodate the projected future growth.

College Identity-Does the architectural form and orientation of the college create a message to the surrounding community by establishing a campus identity?

- There are two primary entrances to the College off Santa Teresa Boulevard. It is difficult to determine which entrance is the primary or "Front Door" of the College. The overall setting is excellent with the campus tucked into the base of the hills and the buildings arranged in a linear manner. The college makes a distinct architectural statement with the pre-cast stone exterior construction utilized throughout the campus. Open space and landscaped areas, including the golf course are prevalent around the perimeter of the campus.
- A preliminary visual assessment of the buildings from any of the perimeter roads gives the impression that the college was master planned with one, agreed upon architectural style. There are only a limited number of buildings that do not reflect this architecture. The existence of portable structures detract from the overall architectural theme.
- The campus signage is limited. This is an area that will need to be addressed as part of the refurbishment of the campus. Signs leading to parking areas are acceptable but pedestrian signs need to be improved.
- Parking can generally be accomplished. New students to the campus may park in the visitor's area and proceed directly to the Student Union building. Other student services are located in the library. As is the case with all colleges, parking is difficult at the beginning of each semester.
- The campus has been constructed in an incremental manner. However, the main cluster of instructional buildings are in close proximity and are

connected by wide walkways. Access for disabled persons continues to be an area that needs to be addressed.

- Exterior lighting on the buildings, grounds and parking areas is fair but should be upgraded as part of the overall Facilities Master Plan.

Community Outreach-Are there plans to extend the educational programs and support services of the college throughout the college's service area?

- Gavilan College is a single college district. The district also includes centers in Morgan Hill, Gilroy and Hollister. Any future programs will be integrated within the current structure.
- The college is presently pursuing partnerships and training programs with local businesses and industries. It is important that the activities result in public/private training programs with the local employers.

Campus Architecture-Does the current and planning architectural style of the campus offer students and employees a sense of order, consistency and an overall feeling that is conducive to learning?

- As indicated in the previous section, the architecture of the college provides a positive impression. The size and design of the pre-cast stone and glass exteriors provides a strong exterior statement.
- Upon detailed analysis, significant portions of the interior spaces do not support a modern, up-to-date learning environment. The existing classrooms and support service facilities do not provide a modern, flexible, technology-enhanced environment. Throughout the campus, the existing classrooms promote a traditional lecture or laboratory environment that offers the instructional staff limited flexibility. These are traditional lecture/laboratory spaces. These spaces do not support individualized learning or new technology systems.
- Future remodel projects for the campus will need to address how the current, traditional space can be modified to reflect a more open, accessible learning environment which supports new teaching technology and individual learning processes.
- The current space inventory for the college indicates there is currently an excess of lecture, office and laboratory space on the campus. When an enrollment of 8,000 students is achieved, classroom space continues to be in excess with a limited amount of demonstrated need for laboratory and office space. This means that future projects must address how the College can

remodel existing lecture, laboratory, office, assembly and food service space to meet the needs of 8,000 students. Based on the square footage provided in the three buildings currently in planning or construction, the college will not be eligible for additional, new buildings in the foreseeable future.

Land Utilization-Is sufficient acreage available for the campus to expand to its proposed maximum build-out capacity? In responding to this question, the following items were mentioned:

- As stated earlier, the campus contains 147 acres of property. The campus has sufficient acreage and building sites to accommodate the projected enrollment of 8,000 students. In reality, it has the capacity to accommodate at least 15,000 students. The college does not have a parking problem. Ultimately, the college should expand the present parking to provide between 1,600 and 2,000 parking spaces when an enrollment of 8,000 students is achieved.
- Attention must be given to maintaining the building exteriors and campus landscaping. Attractive, open space is desirable on the campus. To date, the buildings and grounds of the college reflect good care and have served as the basis of a positive learning environment.
- During peak class times, the present walkways and access to the parking areas are busy but accommodate the student flow.
- There is a need to consider retrofitting and/or replacement of the infrastructure of the campus. Specific items to be addressed include roofs, communication/signal systems, electrical and mechanical systems and heating and air conditioning. Also, because of code changes, the college will need to address the fire prevention systems.

Facilities Which Support the College's Instructional Program and Support Services

Does the current campus environment promote the delivery of instructional programs and support services or does it undermine the process of learning?

- As noted previously, the college has an excess of lecture and laboratory space. A major concern is the updating of current space to accommodate the changes in technology and instructional delivery systems. The present facilities are traditional lecture/laboratory facilities and many do not provide the infrastructure (electrical, and communications, in particular) or flexibility needed in today's changing instructional program needs. In addition, upon reviewing the class size data in relation to room capacities, the actual square footage in some rooms is far beyond that needed for the class size assigned to the room thus creating an immediate shortfall in facilities utilization. To a great extent, facilities are dictating the manner in which instructional

programs and support services are provided. The concept of developing multi-functional instructional spaces that can be used for lecture, laboratory, demonstration or distance learning is critical. Such spaces can be classified as “Remodel for efficiency” projects and thus meet guidelines for state supported projects.

- As part of the master planning process to address the additional needed ASF, it appears the best options for the state funded, 5-Year Capital Construction Plan would be:
 - a. Life/Safety Projects
 - b. Remodels for Efficiency
 - c. Remodel for Technology

- As part of the Educational Master Plan--Unit Planning Guide process, faculty and staff identified the following facility concerns:
 - a. The college needs to provide additional technology systems throughout the campus, a topic to be specifically addressed in the Technology Plan.
 - b. The physical plant at Gavilan College is aging and there is a continuing need to provide human and financial support for increasing maintenance and operations issues.
 - c. In the establishment of budget priorities, the college should continue to address the physical environment of the campus, including both building needs and grounds maintenance.
 - d. The college should continue to give the highest priority to health and safety issues in the day-to-day maintenance of facilities.