

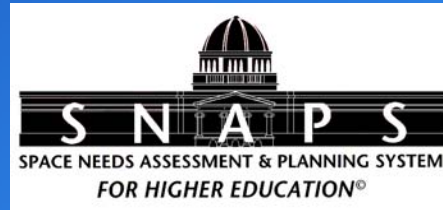


Texas A&M University

College of

Science

Space Needs Assessment



Council for the Built Environment

Office of

Facilities Coordination

April 2010

Campus Wide Space Needs Assessment

Office of Facilities Coordination
Texas A&M University



Units to be Assessed



- **Agriculture & Life Sciences**
 - Academic Units
 - AgriLife Research
 - AgriLife Extension
 - Texas Forest Service
 - Texas Veterinary Medical Diagnostic Laboratory
- **Architecture**
- **Bush School of Government & Public Service**
- **Mays Business School**
- **Education & Human Development**
- **Dwight Look College of Engineering**
 - Academic Units
 - Texas Engineering Experiment Station
 - Texas Engineering Extension Service
 - Texas Transportation Institute
- **Geosciences**
- **Liberal Arts**
- **Science**
- **Veterinary Medicine & Biomedical Sciences**

Provost Request

- **Academic Support Units**



Science

	Square Feet
Normalized Need:	(86,562)
• Phase I Gain	+ 62,562
Post Phase I Need	(24,000)
• <i>Phase II Gain</i>	+ 63,006
<i>Post Phase II Need</i>	39,006
• Fall 2008 SNAPS	(231,683)

Campus Wide Space Needs Assessment

Office of Facilities Coordination
Texas A&M University



Science

Faculty Reinvestment
Council for the Built Environment
Phase I Report

May 2006

College	Department	Assignable Area			Total Current & Phase I	Actual Cost
		Current	Net New	Total		
Science		0	62,562	62,562	62,562	\$ 2,275,964
Butler space from Geosciences		0	660	660	660	\$ -
BSBE Renovation	Biology	0	5,550	5,550	5,550	\$ 375,736
BSBW Renovation	Biology	0	23,415	23,415	23,415	\$ 742,409
Butler Renovation	Biology	0	17,938	17,938	17,938	\$ 47,310
Blocker space from CLA (Renovation)		0	7,538	7,538	7,538	\$ 4,950
FP&C Renovation (Munnerlyn)		0	7,461	7,461	7,461	\$ 425,559
Renovate Lab Space in Reed-McDonald	Chemistry	0	21,335	21,335	21,335	\$ 680,000

Phase II Faculty Reinvestment Space Status

Council for the Built Environment (CBE)

Space Assignments by Year

#	College	CBE post phase 1 assessed need	YEAR						TOTAL Assignable Area	Assignable SF Remaining Need
			2006	2007	2008	2009	2010	2011		
4	Science	24,000	-	-	7,247	55,759	-	-	63,006	(39,006)
5	Mitchell Building Net				55,759				55,759	
6	ILSB Partnership				-					
7	Munnerlyn partnership with Engineering			7,247	-	-	-		7,247	50% of 14,493 sf

Campus Wide Space Needs Assessment

Office of Facilities Coordination
Texas A&M University



Science



Summary

Space Needs

- Space Quality**

- Biology
- Chemistry
- Teague

- New Bldgs**

- ILSB (Biol, Chem, Stat)
 - 22,505 sqft
 - 22,864 sqft vacated
- Mitchell Physics
 - 143,737 sqft
- Cyclotron Addition
 - 10,598 sqft

- Proximity**

- Research/Teaching**

Fire & Life Safety

Facility Condition

COMPUTED SPACE NEEDS

DRAFT Fall 2008
Science

Summary By Unit

Pg Department/User Name		Assignable Area			Actual of Computed	Headcount Personnel
		CURRENT Area -	Computed	Difference		
3	Dean	48,530	48,530	0		0
8	Biology	127,995	176,321	-48,326		275
13	Chemistry*	219,834	243,660	-23,826		614
18	Cyclotron Institute	49,115	102,992	-53,877		83
23	Mathematics	50,027	69,905	-19,878		516
28	Physics	66,672	138,693	-72,021		208
33	Statistics	20,201	27,151	-6,950		164
38	Inst -Applied Math & Comp.	1,510	5,509	-3,999		28
43	Cntr for Chemical Char & Analysis	7,873	10,679	-2,806		14
49	APPENDIX: Personnel Summary	0	0	0		0
52	APPENDIX: Personnel Listing	0	0	0		0
84	APPENDIX: Special Use Request	0	0	0		0
88	APPENDIX: Space Inventory	0	0	0		0
		0	0	0		0
		0	0	0		0
		0	0	0		0
		0	0	0		0
Total		591,757	823,440	-231,683	71.9%	1,902
Adjustments						
	Plus Classrooms	3,637	0	0		0
	Less:	0	0			0
Adjusted TOTAL		595,394	823,440	-228,046		1,902

*Chemistry space needs are currently under development.

-
- **Facilities Condition Assessment**
-



Science

Bldg#	Building Name	Year Built	GSF	Replacement Cost	Total Project Cost *	FCNI **	Assigned GSF	% Assigned GSF	Share of Project Cost
376	CHEMISTRY BUILDING ADDITION	1986	115,797	45,182,000	\$19,960,935.00	0.44	108,058	93.32	\$2,994,140
391	JAMES J. CAIN '51 BUILDING	1986	173,481	44,960,000	\$20,221,314.00	0.45	87,458	50.41	\$3,033,197
392	ENGINEERING/PHYSICS OFFICE TOWER	1984	46,953	12,222,000	\$4,695,648.00	0.38	17,890	38.10	\$704,347
420	MILNER HALL	1911	48,268	13,610,000	\$5,644,011.00	0.41	48,268	100.00	\$846,602
434	LUEDECKE BUILDING (CYCLOTRON)	1966	80,464	23,833,000	\$16,654,785.00	0.70	76,947	95.63	\$2,498,218
436	REED-MCDONALD BUILDING	1960	77,435	27,633,000	\$2,453,815.00	0.09	26,381	34.07	\$368,072
445	TEAGUE RESEARCH CENTER	1966	63,515	23,801,000	\$12,385,156.00	0.52	16,225	25.55	\$1,857,773
449	BIOLOGICAL SCIENCES BLDG. WEST	1967	96,038	37,473,000	\$23,278,062.00	0.62	86,709	90.29	\$3,491,709
459	HORTICULTURE GREENHOUSE	1949	7,612	1,691,000	\$851,320.00	0.50	3,436	45.14	\$127,698
464	STATE CHEMIST BUILDING	1909	20,027	6,627,000	\$4,013,063.00	0.61	13,245	66.14	\$601,959
465	BUTLER HALL	1916	29,699	11,588,000	\$6,682,649.00	0.58	28,236	95.07	\$1,002,397
467	BIOLOGICAL SCIENCES BLDG. EAST	1950	62,273	21,985,000	\$11,652,760.00	0.53	55,741	89.51	\$1,747,914
484	CHEMISTRY BUILDING	1928	205,393	80,141,000	\$45,569,907.00	0.57	194,934	94.91	\$6,835,486
511	HEEP LABORATORY BUILDING-	1957	40,476	15,793,000	\$9,893,944.00	0.63	3,513	8.68	\$1,484,092
521	HELDENFELS HALL	1963	104,949	40,225,000	\$22,618,277.00	0.56	77,274	73.63	\$3,392,742
524	BLOCKER BUILDING	1981	257,953	72,732,000	\$23,077,351.00	0.32	94,731	36.72	\$3,461,603
715	CHEMISTRY CHEMICAL STORAGE		387	n/a	n/a	n/a	387	100.00	n/a
717	STORAGE AND LAB--CYCLOTRON		4,304	n/a	n/a	n/a	4,304	99.99	n/a
718	STORAGE--CYCLOTRON		617	n/a	n/a	n/a	617	100.00	n/a
959	PLANT SCIENCE GREENHOUSE		1,515	n/a	n/a	n/a	758	50.03	n/a
965	BEASLEY LABORATORY	1978	6,060	2,303,000	\$745,156.00	0.32	427	7.05	\$111,773
967	PURCHASING & STORES - VOLATILE STORAGE		1,000	n/a	n/a	n/a	1,000	100.00	n/a
1238	ROBOTIC OBSERVATORY	2003	354	105,000	\$0.00	0.00	354	100.00	\$0
1239	PHYSICS TEACHING OBSERVATORY	2003	3,814	1,075,000	\$102,754.00	0.10	3,814	100.00	\$15,413
1530	INTERDISCIPLINARY LIFE SCIENCES BUILDING		218,540	n/a	n/a	n/a	55,949	25.60	n/a
1599	RESEARCH PARK		70,000	n/a	n/a	n/a	7,508	10.73	n/a
3400	UNIVERSITY SERVICES BLDG	1982	153,000	32,072,000	\$4,400,303.00	0.14	46,920	30.67	\$660,045
7080	BIOLOGY STORAGE		3,101	n/a	n/a	n/a	3,101	100.00	n/a
8512	WAREHOUSE		9,838	n/a	n/a	n/a	4,355	44.27	n/a

* Includes capital renewal, deferred maintenance and plant adaptation for the next ten years

** Facility condition needs index (total project cost / replacement cost)

Fire and Life Safety Report for College of Science

April 7, 2010

Acronyms: FAS – Fire alarm system
FCA – Facility condition analysis
SFM – State Fire Marshal

Major Buildings

0376-Chemistry Building Addition ('86 Wing)

- Fully sprinkled; good FAS; no major FLS issues
- FCA – Replace sprinkler heads

0391-James J. Cain '51 Building (Engineering/Physics Classroom)

- Partially sprinkled; FAS in need of replacement (work request pending); exit sign upgrades
- FCA – Replace exit signs; interior door replacement; fire alarm system replacement; fire sprinkler extension

0392-ENGINEERING/PHYSICS OFFICE TOWER

- FAS in need of replacement; no sprinkler system; stairwell hardware needs to be reworked
- FCA – Fire sprinkler installation; fire alarm system replacement; exit sign upgrade

0420-Milner Hall

- Good FAS; no sprinkler system; general FLS upgrades (rated stairwells; exit signs, emergency lights)
- FCA – Install fire sprinkler; replace FAS (*system will hit 20 year life in 2015*); install exit signs; install fire rated corridor doors; install safety glazing at exit

0434-Luedecke Building (Cyclotron)

- Good FAS (but getting old); no sprinkler system; stairwell code issues
- FCA – Emergency light replacement; install fire rated corridor doors; fire alarm system replacement; fire sprinkler installation

0436-Reed-McDonald Building

- Good FAS; fully sprinkled; recently upgraded stairwell enclosures;
- FCA – Elevator lobby corrections (*EHS disagrees – not required since fully sprinkled*)

0445-Teague Research Center

- Good FAS; not sprinkled;
- FCA – fire sprinkler installation

0449-Biological Sciences Bldg. West (SFM Schedule - \$908,000, FY10)

- Good FAS; not sprinkled; exit stairwell code issues;
- FCA – Construct elevator lobby enclosures; install sprinkler system; emergency shower/eyewash replacement

0464-State Chemist Building (Old State Chem) (SFM Schedule - \$198,000, FY11)

- Good FAS; no sprinkler; no enclosed stairways; needs general FLS upgrades; 2nd exit off basement exit past main building transformer
- FCA – Fire sprinkler installation; exit sign upgrade

0465-Butler Hall (SFM Schedule - \$297,000, FY11)

- Good FAS; no sprinkler system; single exit from upper floors (*will meet SFM alternate means of compliance with installation of sprinkler system*)
- FCA – add new secondary egress stair; install sprinkler system; fire alarm system replacement; eliminate fire rating compromises

0467-Biological Sciences Bldg East (SFM Schedule - \$588,000, FY10)

- Old FAS; no sprinkler system; minor FLS issues (exit signs, penetrations, etc)
- FCA – Elevator lobby enclosures; exit sign replacement and upgrade; fire alarm system replacement

0484-Chemistry Building ('28, '32, '59 and '72 Wings) (SFM Schedule – FY09, nearing design completion)

- Good FAS; partially sprinkled; lacks exit signage and emergency lights (current PHPL project to correct these items)
- FCA – Install fire sprinkler system; add exit signs; Halon fire suppression alternative; replace sprinkler head in 32 wing (*disagree – heads replaced with recall in last two years*); interior door upgrades

0511-Heep Laboratory Building (Old Heep on Main Campus)

- Good FAS; no sprinkler; stairwells do not exit directly to the outside as required by code; general FLS upgrades (exit signs, emergency lights, etc)
- FCA – Emergency shower and eyewash replacement; refurbish exterior fire escape stairs (*these are being removed under current project*); fire sprinkler installation

0521-Heldenfels Hall (SFM Schedule - \$992,000)

- Good FAS; no sprinkler; stairwells do not exit directly to the outside as required by code; general FLS upgrades (exit signs, emergency lights, etc)
- FCA – Elevator lobby enclosure; install fire sprinkler system;

0524-Blocker Building (SFM Schedule - completed)

- Good FAS; fully sprinkled; recent FLS upgrade
- FCA – replace exit signs; elevator lobby enclosure (*EHS disagrees due to being fully sprinkled*)

3400-University Services Bldg. (Old TI Building)

- Half of sprinkler system is out of service; very old FAS; needs general FLS upgrades (emergency lighting and exit sign upgrade)
- FCA – Emergency shower & eyewash replacement; install exit signs; replace fire alarm system

Small and Other Buildings

0459-Horticulture Greenhouse

- No FAS; no sprinkler system; minor FLS issues – exit signs, etc.
- FCA – install FAS; install emergency lights and exit signs;

0715-Chemistry Chemical Storage

- Small chemical storage bldg – no sprinkler or fire alarm system
- FCA – None

0717-Storage and Lab--Cyclotron

- FCA – None

0718-Storage - Cyclotron

- FCA – None

0959-Plant Science Greenhouse

- No Fire alarm system; no sprinkler system; needs general FLS upgrades
- FCA – None

0965-Beasley Laboratory

- No Fire alarm system; no sprinkler system; needs general FLS upgrades
- FCA – Install Fire sprinkler system; install fire alarm system

0967-Purchasing & Stores - Volatile Storage

- No FAS; no sprinkler (bulk chemical storage for Chemistry)
- FCA – None

1238-Robotic Observatory

- Small 2 room facility; Fire alarm tied to 1239; not sprinkled
- FCA - None

1239-Physics Teaching Observatory

- Good FAS; not sprinkled
- FCA – Replace FAS (*disagree – facility only a few years old*)

7080-Biology Storage

- No sprinkler; no FAS; general FLS upgrades
- FCA – None

8512-Warehouse

- No FAS; No sprinkler system;
- FCA - None