Integrated Academic, Financial, Strategic and Facility Planning at Stanford University

SCUP 40, July 2005
Washington, DC

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Session Overview

- **Lessons Learned to Date -** from Stanford's efforts to link academic, financial, strategic and facility planning
  - University – wide space planning guidelines
  - Space utilization studies
- **A brief look** at three cases using space guidelines and utilization studies
  - School of Education
  - School of Earth Sciences
  - Business Affairs Division
- **An in-depth look** at one case using a whole cost approach
  - School of Humanities and Sciences
- Questions and answers

Lessons Learned To Date

Lessons Learned to Date:
Space Planning Guidelines

What We'll Cover

- How we developed space planning guidelines
- Our goals in the process
- Stanford's general context as related to the guidelines
- How the guidelines turned out
- Questions/Food for thought

Lessons Learned to Date:
Space Planning Guidelines

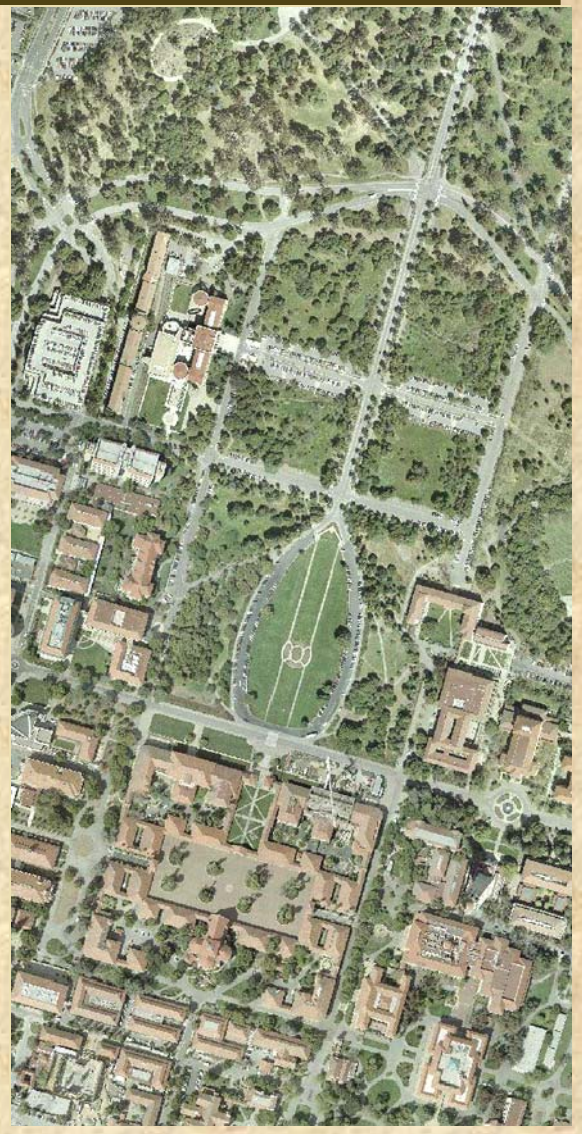
❖ Our Goals in the Process

- To develop guidelines, not standards
- To promote key goals:
  Equity -Consistency -Efficiency -Flexibility
- To keep the guidelines simple, practical, not overly formulaic, and focused on generic spaces
- To apply the guidelines both in new construction and renovation projects
- To learn from what has been successful already
- To continually update and improve the guidelines

Lessons Learned To Date:
Space Planning Guidelines

- Stanford's General Context

  - 15 million gross square feet
  - Growth constrained by a General Use Permit (2 million GSF allowed, numerous conditions of approval)
  - Tight budget climate – high aspirations and lagging fundraising



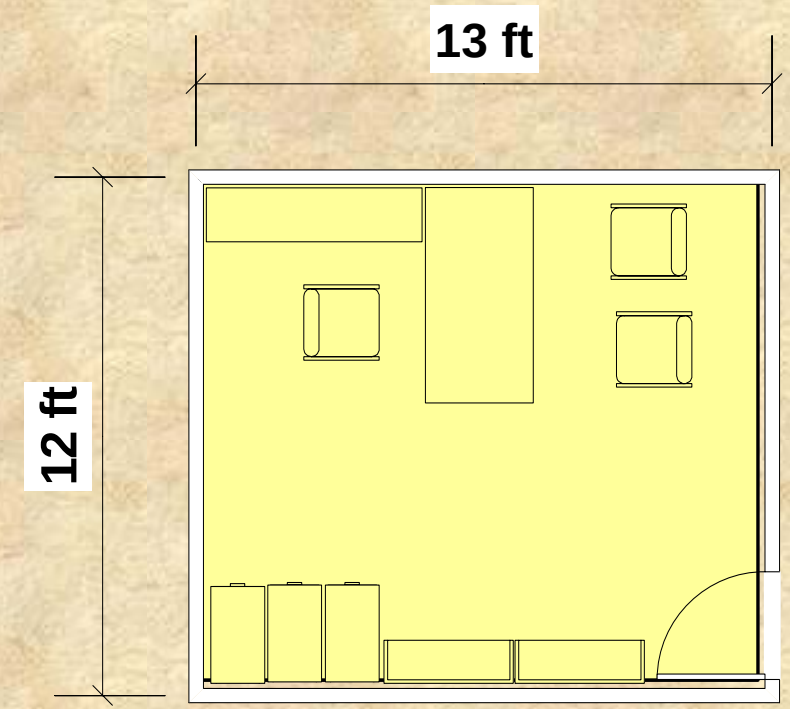
Lessons Learned To Date:
Space Planning Guidelines

- How the Guidelines Turned Out
  - Offices:
    - Dean/VP
    - Full-time faculty
    - Visiting scholars, visiting faculty, and research associates
    - Emeritus faculty
    - Staff
    - Students
  - Classrooms, Computer Clusters, Conference Rooms
  - Research and Laboratory Space

Space Guidelines: http://cpm.stanford.edu/DCP_ArtSpaceGuidelines.pdf

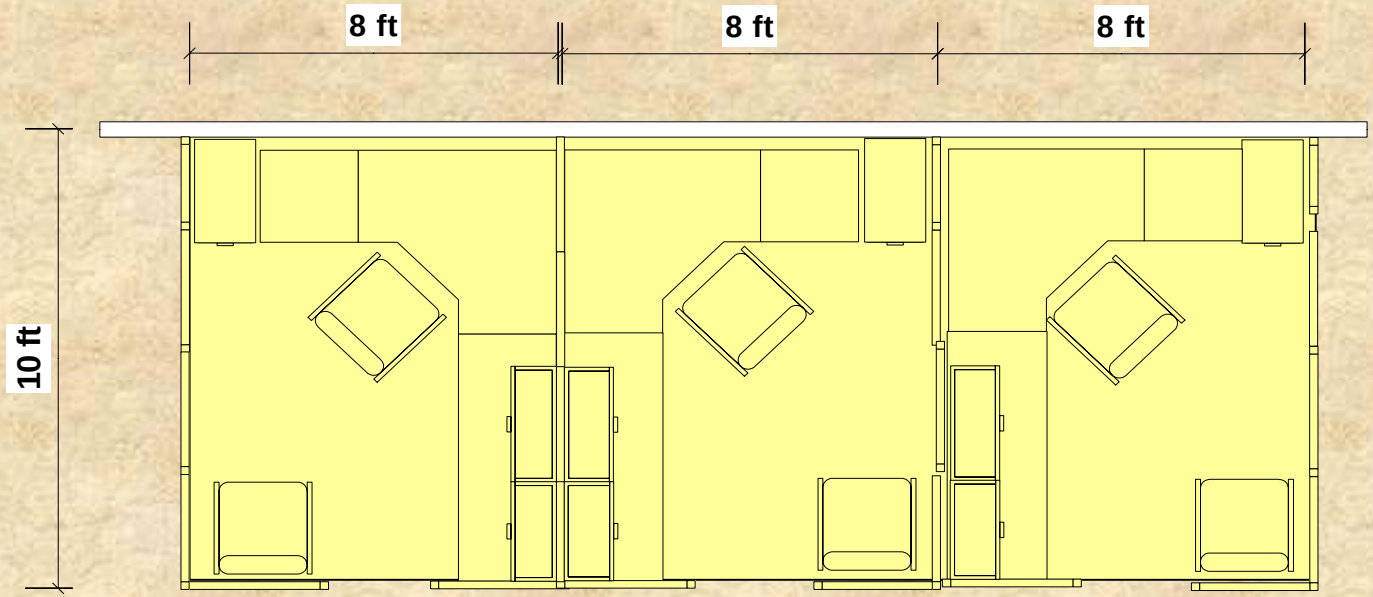
Lessons Learned To Date:
Space Planning Guidelines

Diagram of Faculty Office



Lessons Learned To Date:
Space Planning Guidelines

Diagram of Cubicle Environment



Lessons Learned To Date:
Space Planning Guidelines

- Questions/Food for Thought

  - How to provide incentives for following the guidelines?
  - What to do in cases of “non compliance”?
  - How to develop laboratory planning guidelines?
  - How to continue to institutionalize the guidelines?

Lessons Learned To Date:
Utilization Studies

- Goals
- Process
- Questions/Food for Thought

Lessons Learned To Date:
Utilization Studies

- Goals

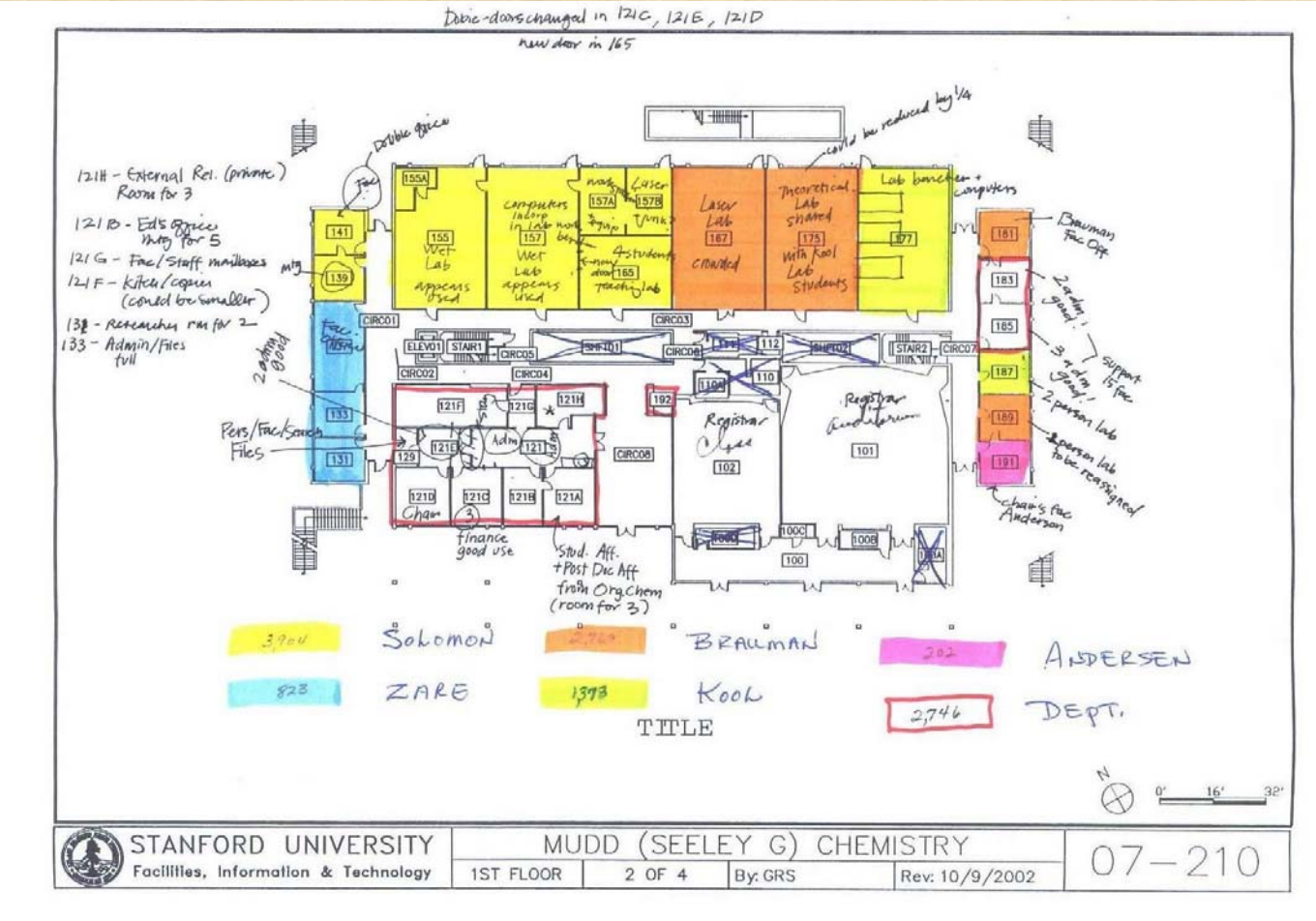
- To determine how space is actually being used
- To enter utilization information into database, to be actively used by schools/areas in managing space
- To assess alignment with space planning guidelines
- To work with school/areas to improve utilization

Lessons Learned To Date:
Utilization Studies

- Process

  - Straightforward – walk-throughs of areas, taking notes on floor plans
  - Entry of data into University-wide database, tailored to school needs
  - Communication about results, questions, strategies, next steps

Lessons Learned To Date:
Utilization Studies



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Utilization Studies

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  - Straightforward – walk-throughs of areas, taking notes on floor plans
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Lessons Learned To Date:
Utilization Studies

- Questions/Food for Thought

- Time-consuming and data intensive process – how to streamline?
- How to keep the studies updated?
- Value/utility of the process

Three Stanford Cases:

A Brief Look

Three Stanford Cases
A Brief Look

- Three quite different kinds of schools/areas
  - School of Education
  - School of Earth Sciences
  - Business Affairs
- All were willing partners
- Each found surprising results
- Each has pursued changes as a result of findings

Three Stanford Cases
A Brief Look

School of Education

- Context:
  - Two buildings and one modular
  - 65,280 nasf, 46 faculty and about 380 graduate students
  - Mostly an office-based program
  - Study initiated at Provost's request

Three Stanford Cases
A Brief Look

- Major Findings:
  - Faculty office sizes were often too large, plus faculty have a custom of “handing down” offices
  - Storage is a school-wide issue, and there is no storage policy
  - Research projects ebb and flow, but are allowed to customize space so that flexibility is lost

Three Stanford Cases
A Brief Look

- Changes since the study:
  - Dean has taken over determination of who gets which faculty office – oversized offices are being held as retirements occur
  - Other changes TBD

Three Stanford Cases
A Brief Look

School of Earth Sciences

- Context:
  - Three buildings
  - 117,681 nasf
  - 46 faculty, 120 undergraduates and 280 graduate students
  - Offices and labs
  - New Dean worried about shortage of space requested the study

Three Stanford Cases:
School of Earth Sciences

- Major Findings:
  - Rock storage out of control! Too much stored and in key areas
  - Need to repurpose parts of buildings to “highest and best use”
  - Oversized faculty offices in one of the buildings
  - Student space not allocated equitably

Three Stanford Cases
A Brief Look

- Changes Since the Study:
  - Rocks catalogued, teaching collections only on site, others moved to off-site storage
  - Reorganization of student space
  - Lab study underway
  - School space policies being developed

Three Stanford Cases
A Brief Look

Business Affairs Division

- Context:
  - 26 locations
  - 183,149 nasf
  - Over 800 staff in 8 business units, mostly an office program
  - Cooperated with space study at Provost's request

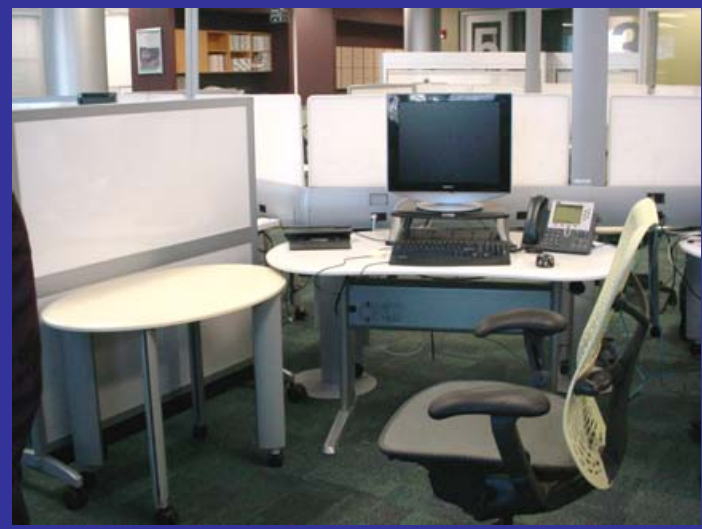
Three Stanford Cases
A Brief Look

- Major Findings:
  - Over 10% vacancy rate overall, due to cut-backs, but vacancies were spread throughout the office locations
  - Many staff in substandard space on campus
  - Inconsistent allocation of offices versus cubicles

Three Stanford Cases
A Brief Look

- Changes since the study:
  - Consolidation of vacancies, so that two full modular buildings could be recovered for surge space
  - Improvement of staff spaces in key areas
  - New thinking about cubicle/office spaces

Cool Space Ideas



Three Stanford Cases
A Brief Look

Themes in Common

- You need to have the space data to address space issues
- Having space guidelines in place is key
- Customs and historical precedents abound
- Strong leadership helps to promote change

In Depth Look at H&S

In Depth Look at H&S:
Overview

530 on duty academic council faculty
400 adjunct teaching faculty
500 staff

28 academic departments
53 non-departmental programs, centers, etc

80% of Stanford undergraduate majors
50% of Stanford's graduate students

Over 1,000,000 gsf in 60 buildings

Consolidated budget of $285M ($115M general funds; $75M grants & contracts; $95M gifts)

In Depth Look at H&S:
How “Planning” has worked in the past

In Depth Look at H&S:
Whole Cost Exercise

❑ Goals

- Conduct a thorough analysis of the drivers of the School's budget (strategic directions, academic priorities, facilities)
- Develop an academically driven, rational resource allocation model allowing the School to align internal allocation with current academic programming realities and long term plans
- Create robust tools and models to fully cost additions of faculty, programs and facilities on an ongoing basis
- Involve the School more effectively in academic planning and related policy development through faculty and staff advisory groups

In Depth Look at H&S:
Whole Cost Exercise

- *Phase 1- Background, Methodology and Data*

  - Analyze historical data, including budget, student enrollments, numbers of faculty, grants & contracts volume, and facilities costs for each unit
  - Define the major cost drivers
  - Identify internal & external benchmarks to be used to develop planning models
  - Role of data in decision making and budgeting - inform versus drive

Department Profile: 2002-03 Academic/Fiscal Year

School:	**School of Humanities & Sciences**
Area:	**H&S-Soc Sciences**
Department:	**Psychology**

1993 NRC Ranking

Faculty Primary Appointment Headcount	30
Tenure Line	29
Non-Tenure Line	1
Faculty FTE:	29.0
On-Duty FTE:	25.8

Total Students	170
Undergraduates	102
Reg Grads-Other	5
Reg Grads-PHD	46
TGR-Other	0
TGR-PHD	17

Other Non-Tenure Line Faculty	1
Lecturer/Sr. Lecturer	
Other Ranks	1

Non-Teaching Staff	44
Exempt	1
Non-Exempt	15
Bargaining Unit	28

Degrees	114
Bachelor	87
Masters	15
Doctorate	12

Teaching Activity

Courses Taught	Classroom Courses	Individualized Instruction
Professorial Faculty	79.8	231.5
Lecturer/Sr. Lecturer	13.0	10.0
Others	4.0	
Total Courses	96.8	241.5

Units Taught	Classroom Courses	Individualized Instruction
Professorial Faculty	11,945	2,244
Lecturer/Sr. Lecturer	1,677	45
Others	177	
Total Units	13,799	2,289

Sponsored Activity

Total Sponsored Expense	$6,292,062
US	$5,815,788
Non-US	$476,274
New Proposals	27
New Awards	16
New Awards Amount	$7,873,205

Expenses

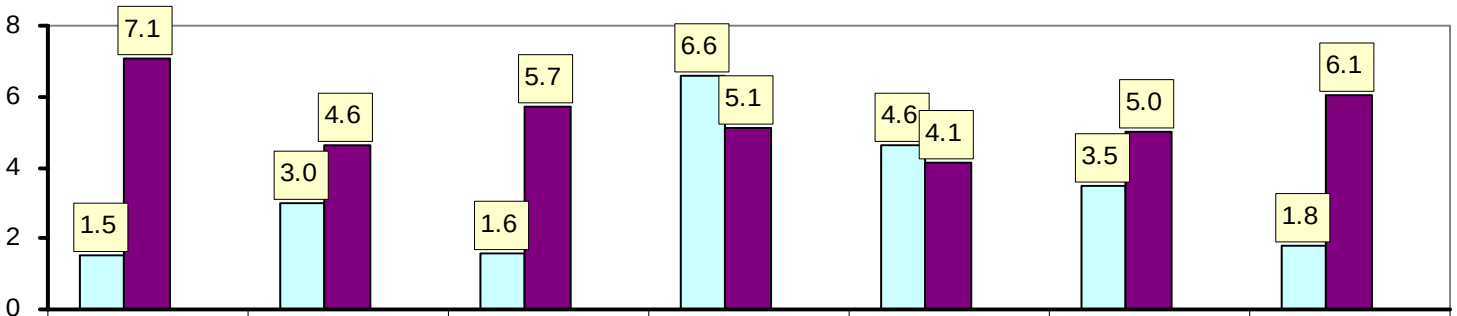
	All Other Functions	Sponsored Research (Fn 2)
Fac Salaries	$2,760,494	$569,490
Other Teaching Salaries	17,648	49,479
RA Salaries	509,114	435,054
TA Salaries	178,015	677
Other Salaries	1,283,852	1,029,333
Benefits	1,080,462	418,869
Grad Aid or Stipends	1,747,648	45,910
UG Aid	2,269	15,600
All Other Expense	1,119,726	1,245,084
Indirect Charges	28,372	42
Total	$8,727,600	$3,809,538

Sources of Revenues

General Funds	$3,204,011
Designated	763,080
Endowed	282,482
Expendable	(57,563)
Grants and Contracts	6,292,062
OB funds from transfers	3,636,777
Total	$14,120,849

FY02-03 Avg Social Sciences: Undergraduate Degree Granted & Professorial Units Taught/On-Duty Faculty FTE

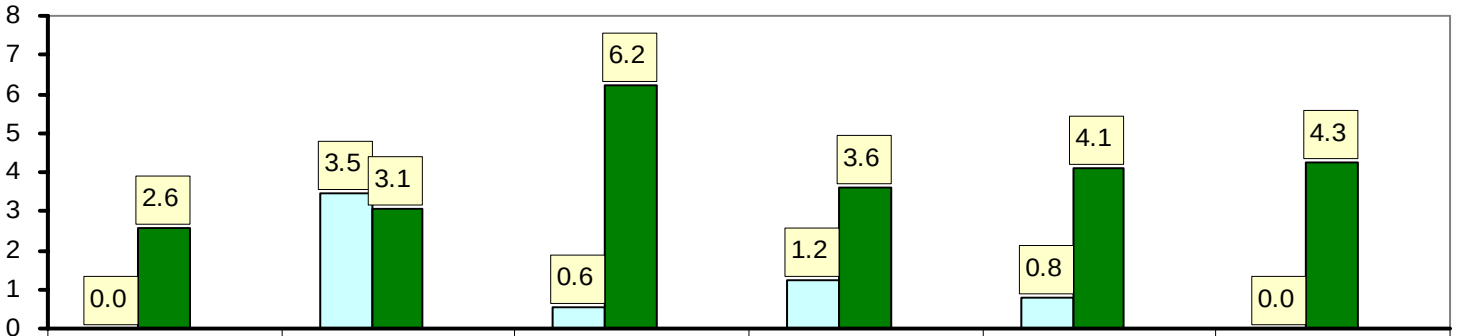
(Units Taught/On-Duty Faculty In Hundreds)



	Anthropological Science	Communication	Cultural & Social Anthropology	Economics	Political Science	Psychology	Sociology
UGDegree/OnDutyFaculty	1.5	3.0	1.6	6.6	4.6	3.5	1.8
ProfUnits/OnDutyFacultyIn00's	7.1	4.6	5.7	5.1	4.1	5.0	6.1
AvgOn-DutyFaculty	6	10	10	24	22	26	12

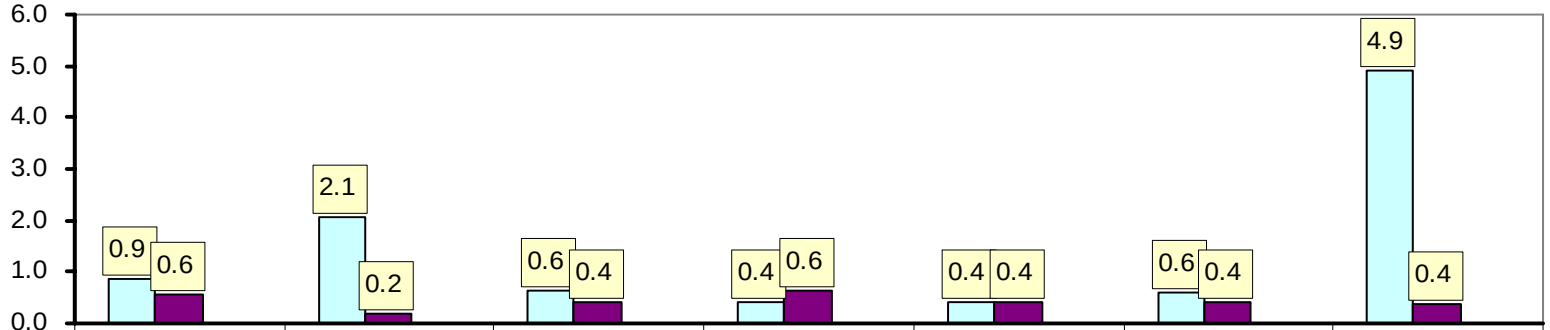
FY02-03 Avg Sciences: Undergraduate Degree Granted & Professorial Units Taught/On-Duty Faculty FTE

(Units Taught/On-Duty Faculty In Hundreds)



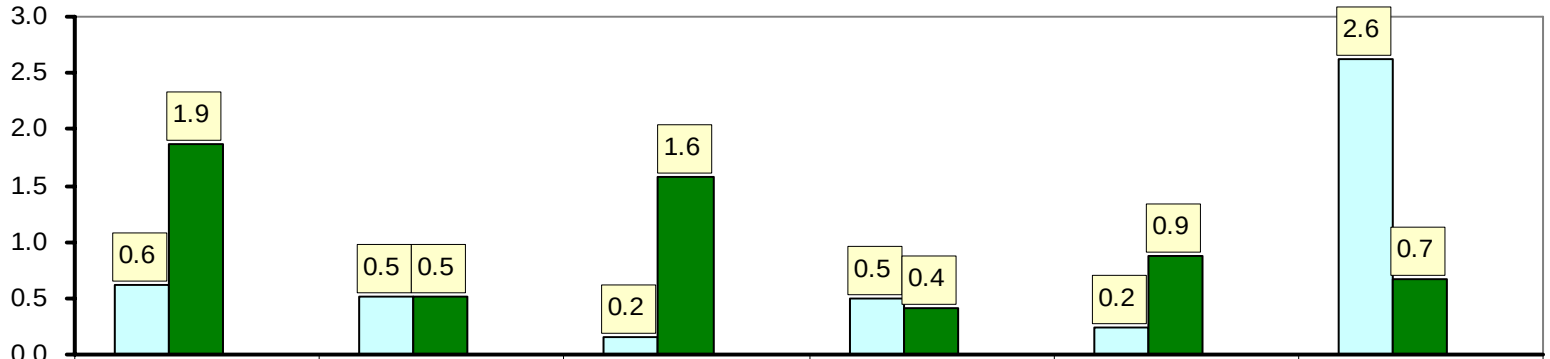
	Applied Physics	Biological Sciences	Chemistry	Mathematics	Physics	Statistics
UGDegree/OnDutyFaculty	0.0	3.5	0.6	1.2	0.8	0.0
ProfUnits/OnDutyFacultyIn00's	2.6	3.1	6.2	3.6	4.1	4.3
AvgOn-DutyFaculty	7	37	19	27	21	12

FY02-03 Average Social Sciences: Master's & PhD Degree Granted Per On-Duty Faculty FTE



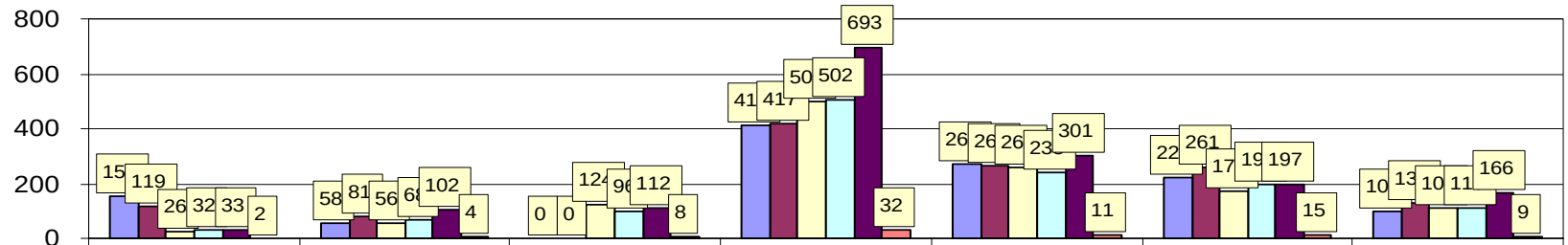
	Anthropological Science	Communication	Cultural & Social Anthropology	Economics	Political Science	Psychology	Sociology
Masters/OnDutyFaculty	0.9	2.1	0.6	0.4	0.4	0.6	4.9
PhD/OnDutyFaculty	0.6	0.2	0.4	0.6	0.4	0.4	0.4
AvgOn-DutyFaculty	6	10	10	24	22	26	12

FY02-03 Average Sciences: Master's & PhD Degree Granted Per On-Duty Faculty FTE



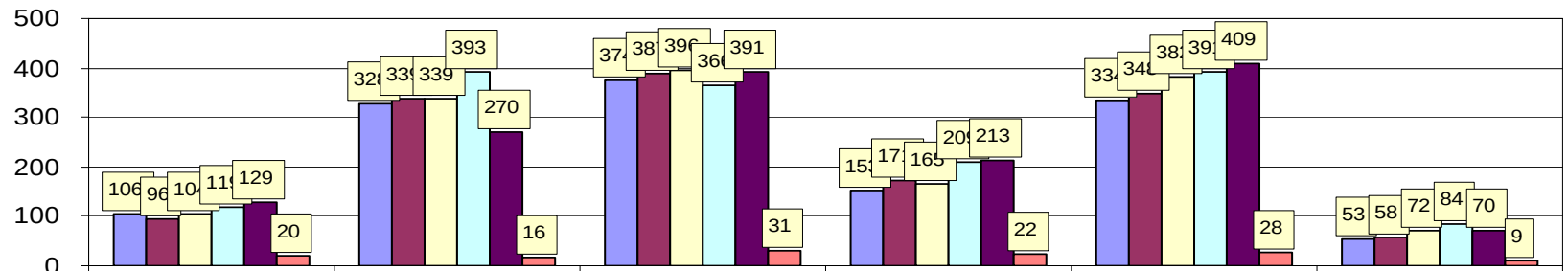
	Applied Physics	Biological Sciences	Chemistry	Mathematics	Physics	Statistics
Masters/OnDutyFaculty	0.6	0.5	0.2	0.5	0.2	2.6
PhD/OnDutyFaculty	1.9	0.5	1.6	0.4	0.9	0.7
AvgOn-DutyFaculty	7	37	19	27	21	12

FY99-FY03 Social Sciences: Graduate Applications & FY03 Enrollment



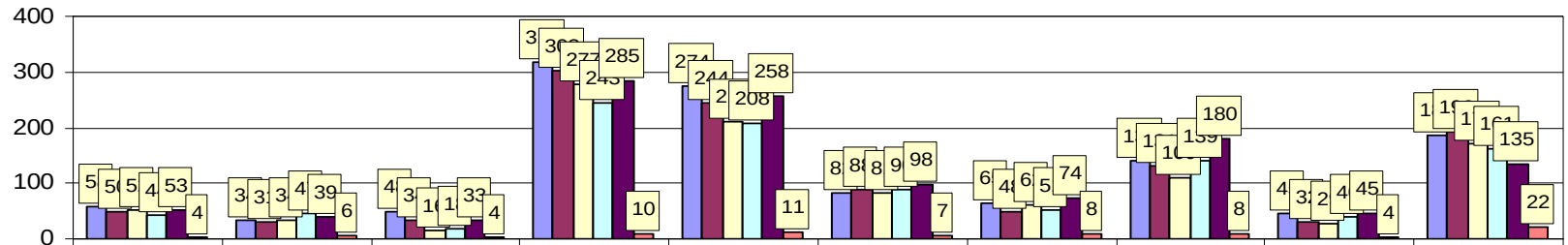
	Anthropological Science	Communication	Cultural & Social Anthropology	Economics	Political Science	Psychology	Sociology
FY1999	156	58	0	410	269	222	101
FY2000	119	81	0	417	263	261	131
FY2001	26	56	124	501	260	172	109
FY2002	32	68	96	502	238	196	110
FY2003	33	102	112	693	301	197	166
FY03 Enrollment	2	4	8	32	11	15	9

FY99-FY03 Sciences: Graduate Applications & FY03 Enrollment



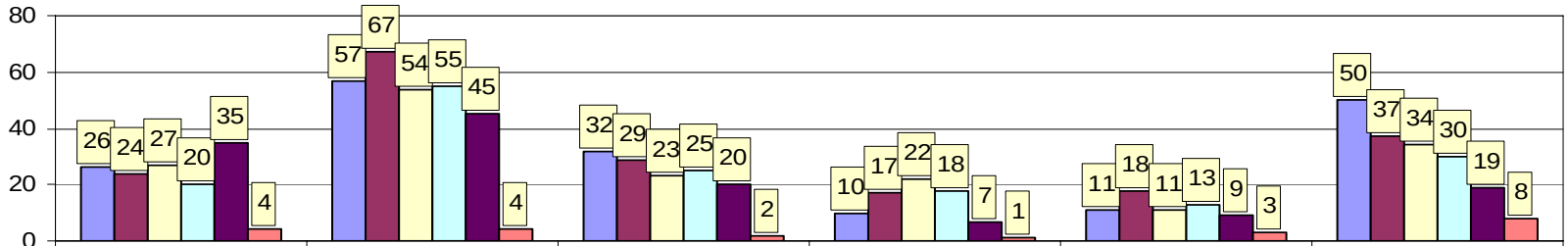
	Applied Physics	Biological Sciences	Chemistry	Mathematics	Physics	Statistics
FY1999	106	328	374	153	334	53
FY2000	96	339	387	171	348	58
FY2001	104	339	396	165	382	72
FY2002	119	393	366	209	391	84
FY2003	129	270	391	213	409	70
FY03 Enrollment	20	16	31	22	28	9

FY99-FY03 Humanities: Graduate Applications & FY03 Enrollment



	Art	Classics	Drama	English	History	Linguistics	Music	Philosophy	Religious Studies	DLCL
FY1999	58	34	48	319	274	82	65	139	45	186
FY2000	50	31	34	302	244	88	48	131	32	192
FY2001	52	34	16	277	211	81	62	109	29	171
FY2002	44	47	18	243	208	90	51	139	40	161
FY2003	53	39	33	285	258	98	74	180	45	135
FY03 Enrollment	4	6	4	10	11	7	8	8	4	22

FY99-FY03 DLCL: Graduate Applications & FY03 Enrollment



	Asian Languages	Comparative Literature	French & Italian	German Studies	Slavic Languages & Literatures	Spanish & Portuguese
FY1999	26	57	32	10	11	50
FY2000	24	67	29	17	18	37
FY2001	27	54	23	22	11	34
FY2002	20	55	25	18	13	30
FY2003	35	45	20	7	9	19
FY03 Enrollment	4	4	2	1	3	8

In Depth Look at H&S:
Whole Cost Exercise

- *Phase 2 – Data Analysis and Model Development*
  - Establish academic planning assumptions and constraints – including number of faculty, graduate and undergraduate students, facilities limitations, fundraising goals, and base funding
  - Develop planning models

    Examples:

    Faculty exit and hiring models

    Graduate student cohort and total student projections

    Infrastructure support budget needs

    Space needs and facilities budget requirements
  - Devise 10-year cost, fundraising, and funding model
  - Parallel work on School-wide space utilization study (to be described in more detail later)

In Depth Look at H&S:
Whole Cost Exercise

- ***Phase 2 –*** *Data Analysis and Model Development*

Applying Constraints:

- On-going base costs
  - Faculty salaries/benefits
  - Other teaching/benefits
  - Staff salaries/benefits
  - Graduate Aid
  - Facilities & operations
- Recurring one-time costs
  - Recruitments
  - Retentions
  - Governance
  - Facilities

funded billets

positions

student billets

} **Current & Evolving**

In Depth Look at H&S:
Whole Cost Exercise

- *Phase 3* - Development of Long-Range Plans

  - Evaluate strategies for allocation of resources in alignment with academic plan
  - Evaluate cost reduction or reallocation options
  - Move toward decision-making more tightly joined with financial constraints & opportunities
  - Create master space plan

In Depth Look at H&S:
Space Utilization Study

- School-wide study in progress as described earlier, in partnership with Capital Planning group
- Distribution and discussion of space guidelines
  - Dean to Faculty Chairs
  - Executive Dean to Department & Program Administrators
- Central Quad completed first – historic buildings; little internal flexibility
  - Detailed building-level recommendations for better space utilization
  - Overall observations regarding efficiencies that might be gained

In Depth Look at H&S:
Space Utilization Study

Examples:

- Administrative staff members occupying private offices
- Many faculty offices larger than space guidelines
- Some faculty members have 2 or more offices
- Visitor/lecturer offices are frequently not shared
- Emeritii offices are frequently not shared and sometimes quite large

In Depth Look at H&S:
Space Utilization Study

Examples: (cont)

- “Historic” departmental libraries are often not well used
- Varied classroom ownership obscures use information
- Standards are lacking for grad student space
- Specialized storage needs

In Depth Look at H&S:
Space Utilization Study

Library, Room 51A

In Depth Look at H&S:
Space Utilization Study

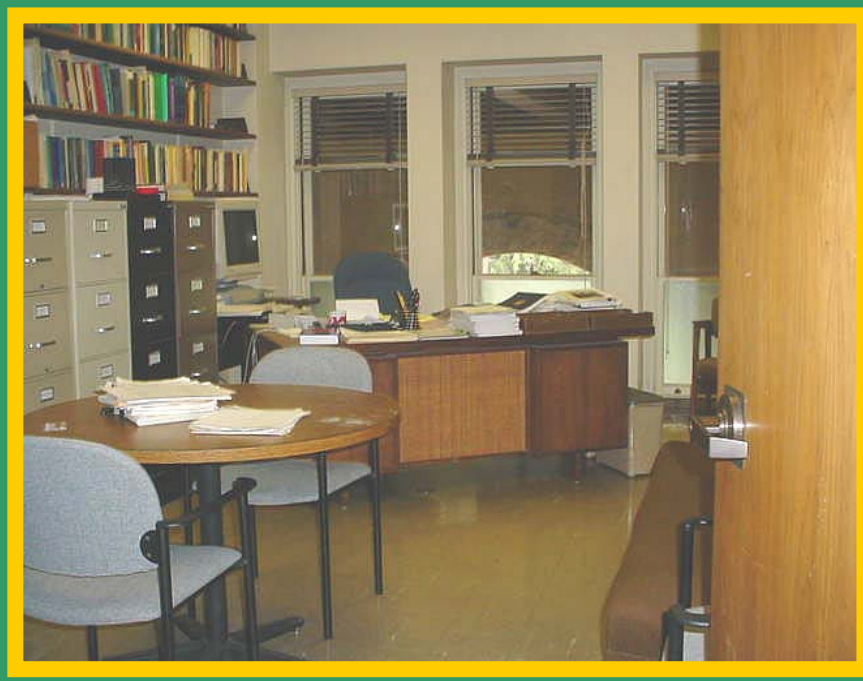
Student Advisors Room

Student Course Associates Room

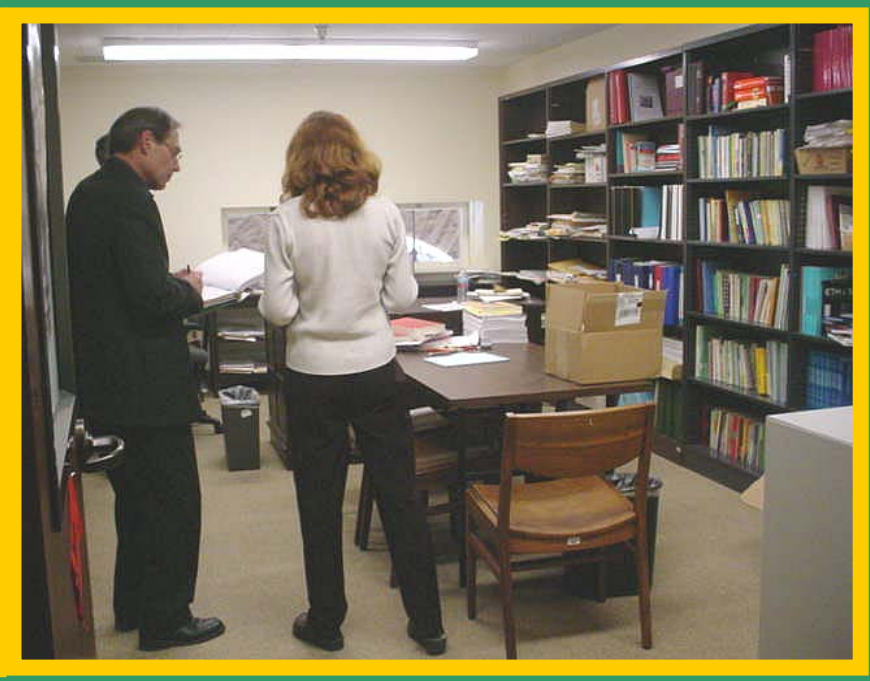
In Depth Look at H&S:
Space Utilization Study

History Storage, Room 301

In Depth Look at H&S:
Space Utilization Study



Emeritii Private Office



Oversized Faculty Office

In Depth Look at H&S:
Space Utilization Study

Administrator in Faculty-sized Office

In Depth Look at H&S:
Space Utilization Study

Next Steps:

- Application of space guidelines related to H&S space management policies
- Alignment of department and program space planning efforts with academic needs and space guidelines
- Weave unit space needs and plans into a school-wide master plan; understand & communicate constraints
- Challenges of making it happen: historic buildings, costs, academic culture
- Getting a little help from our friends!

Questions and Comments