

October 2010

Updated January 2011

# University of Colorado Boulder Campuswide Space Needs Analysis



*\*photo courtesy of Flagship 2030*

Document prepared by:

PAULIEN & ASSOCIATES, INC.  
899 Logan St., Suite 508  
Denver, CO 80203-3156  
(303) 832-3272 Phone  
(303) 832-3380 Fax  
[www.paulien.com](http://www.paulien.com)





Document prepared by:

PAULIEN & ASSOCIATES, INC.  
Denver, Colorado

Daniel K. Paulien, *President*  
Lisa M. Keith, *Associate Principal*

## ACKNOWLEDGEMENTS

This document is the result of cooperation and assistance from the dedicated staff at the University of Colorado - Boulder. Every person's contribution of information, time, and effort is sincerely appreciated. The consultant extends special thanks to the following individuals:

Paul Leef, *Director of Planning, Design, and Construction*  
Philip Simpson, AIA, *Assistant Director for Facilities Planning*  
Noel Cummings, *Assistant Director for Facilities Management*  
Robin Suitts, *Capital Program Administrator*  
Karen Lorimer, *Administrative Assistant for Planning Administration*

*(in alphabetical order)*

Mark Gelernter, *Dean for College of Architecture and Planning*  
David Getches, *Dean, School of Law*  
William Kaempfer, *Vice Provost and Associate Vice Chancellor for Budget and Planning*  
Manuel Laguna, *Interim Dean, Leeds School of Business*  
Keith Maskus, *Co-Chair, Flagship 2030 Facilities Task Force; Associate Dean, College of Arts and Sciences*  
Lorrie Shepard, *Dean for School of Education*  
Daniel Sher, *Dean, College of Music*  
Barry Sloan, *Associate Dean, School of Education*  
John Stevenson, *Interim Dean, The Graduate School*  
Stein Sture, *Vice Chancellor for Research*  
Paul Voakes, *Dean, School of Journalism and Mass Communication*  
James Williams, *Dean for Library Administration*  
JoAnn Zelasko, *Assistant Dean, College of Engineering and Applied Science*

All photos by PAULIEN & ASSOCIATES, INC. staff except where noted.

## **Report Updated January 2011:**

This report was provided to the client in October 2010. Subsequently, the client requested additional review and refinement of specific information. As a result, selected text and tables were updated in January 2011.



## TABLE OF CONTENTS

<b>Section 1: Executive Summary.....</b>	<b>9</b>
Introduction .....	9
Review of Facilities Since the 2000 Master Plan.....	9
Benchmarking.....	10
Findings at a Glance .....	11
Comparison of Benchmarking and Normative Guidelines.....	12
Correlation of Findings to Flagship 2030.....	12
<i>Academic Needs and Space Utilization .....</i>	<i>13</i>
<i>Recreation, Open Space &amp; Athletics .....</i>	<i>14</i>
<i>Living-Learning Environments and North of Boulder Creek.....</i>	<i>14</i>
<b>Section 2: Planning Assumptions .....</b>	<b>17</b>
Enrollment Projections .....	17
Faculty and Staffing Projections.....	17
Research Projections .....	18
Space Assumptions.....	20
<b>Section 3: Benchmarking .....</b>	<b>23</b>
Institutional Characteristics .....	23
Campuswide Benchmarking Results .....	25
Research Benchmarking Results .....	26
Athletics Benchmarking Results .....	28
<b>Section 4: Space Needs Analysis Outcomes .....</b>	<b>31</b>
Limitations of Analysis .....	34
<b>Section 5: Existing Space Analysis .....</b>	<b>37</b>
Inventory of Existing Space.....	37
Existing Space Allocation.....	38
Facilities Growth Since the 2000 Master Plan .....	38
Age and Condition of Existing Facilities.....	39
<i>Age of Facilities by Space Type .....</i>	<i>39</i>
<i>Age of Facilities by College and School.....</i>	<i>41</i>
<i>Facilities Condition by Space Type .....</i>	<i>42</i>
<i>Facilities Condition by College and School.....</i>	<i>43</i>
Space Classifications.....	45
<b>Section 6: Classroom and Teaching Laboratory Utilization.....</b>	<b>49</b>
How Is Utilization Determined?.....	49
Which Classrooms are Included? .....	49
Scheduled Classroom Use by Day and Hour.....	50
Classroom Utilization Analysis By College/School.....	52
Classroom Utilization Analysis by Capacity .....	54
Classroom Utilization by Building .....	56
Classroom Precinct Study.....	57
National Perspective on Classroom Utilization .....	59
Teaching Laboratory Utilization.....	59
National Perspective on Teaching Laboratory Utilization.....	61

<b>Section 7: Space Needs Guideline Application .....</b>	<b>65</b>
Process.....	65
On-Site Work Sessions.....	65
Guideline Assumptions and Application .....	66
Classroom & Classroom Service Space .....	66
Teaching Laboratories & Service Space .....	68
Open Laboratories.....	70
Research Laboratories .....	71
Office Space (Academic and Administrative) .....	74
<i>Academic Office Space Analysis .....</i>	<i>74</i>
<i>Administrative Office Space Analysis .....</i>	<i>76</i>
Library Space .....	76
<i>Library Guideline Analysis - University Libraries .....</i>	<i>77</i>
<i>Library Guideline Analysis - Law Library.....</i>	<i>78</i>
<i>Library Analysis .....</i>	<i>78</i>
Assembly & Exhibit Space .....	79
Other Department Space (Academic and Administrative) .....	80
Other Academic Department Space .....	80
Other Administrative Department Space.....	82
Student Recreation and Athletics .....	83
<i>Student Recreation .....</i>	<i>83</i>
<i>Athletics .....</i>	<i>83</i>
Student Union / Center Space (including Dining and Bookstore Space).....	84
Student Health Care Facilities .....	85
Physical Plant.....	85
Residence Life Space .....	85
<i>Undergraduate Housing .....</i>	<i>85</i>
<i>Graduate / Family-Style Housing.....</i>	<i>86</i>
<b>Section 8: College/School and Administrative Unit Findings.....</b>	<b>91</b>
Findings Overview .....	91
<i>Academic Units .....</i>	<i>91</i>
<i>Administrative Units.....</i>	<i>91</i>
<b>Appendix A: ASF by Building for Fall 2009 .....</b>	<b>163</b>
<b>Appendix B: ASF by Building - Projected Existing ASF.....</b>	<b>185</b>
<b>Appendix C: Peer Benchmarking .....</b>	<b>207</b>
Definitions and Assumptions.....	207
<b>Appendix D: Research Performance Indicators by Department .....</b>	<b>221</b>



# **Section 1**

## **Executive Summary**

---



## SECTION 1: EXECUTIVE SUMMARY

### Introduction

Paulien & Associates, Inc. was selected in March 2010 to conduct space needs planning in support of the master planning effort for the University of Colorado Boulder ("CU-Boulder"). Paulien & Associates met with many members from the Flagship 2030 Academic Needs and Space Utilization Task Force. In some cases the Dean of the College or School joined the meeting. These informal work sessions were held in May and sometimes included a tour of some of the College's or School's facilities.

Facilities, course, staffing, enrollment, and research data for Fall 2009 was collected and the information used in developing this Space Needs Analysis. Fall 2009 is also referred to as the base year throughout this report. The consultant validated some of this information with University officials during the on-site meetings and in subsequent telephone conversations. During the on-site tours, the inventory file was updated to reflect current space use. The facilities tours were not in-depth; therefore only obvious inconsistencies were noted.

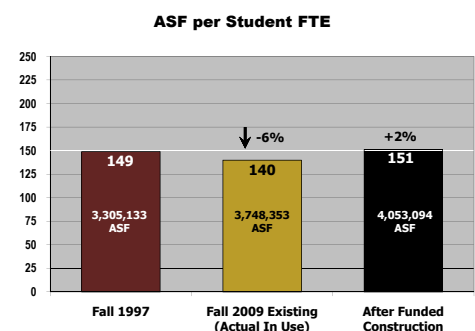
The 2020 and 2030 planning horizons reflect the projections set forth in CU Flagship 2030 and the supporting Task Force reports for enrollments, faculty growth, research growth, and additional housing.

The Space Needs Analysis reviews CU-Boulder's existing and projected existing facilities and quantifies the University's current and future space requirements using space standards and guidelines deemed appropriate by the consultant. Existing building plans and program plans were also used to guide the analysis. The analysis is quantitative and does not make allowances for existing space quality.

### Review of Facilities Since the 2000 Master Plan

Since Fall 1997 (which was the base year of the 2000 Master Plan), student enrollment has grown by 21% from 25,109 students to 30,196 students, with the majority of the increase in undergraduate students, a 24% increase from 20,437 students to 25,408 students. Research activity has also grown dramatically from FY 1998 to FY 2010.

***How have the physical resources kept up with this growth?*** Excluding housing, the assignable square footage (ASF) has only increased by 13% (443,000 ASF) from 3,305,000 ASF in Fall 1997. The bulk of this space increase is related to offices, other departmental space, and classroom space. Once the funded capital projects that are under construction are available for use and existing space is vacated (net addition of approximately 305,000 ASF) the built facilities will have increased by a total of 23%. These projects include the new IBS building, new Basketball/Volleyball Practice Facility, Center for Community, JILA Expansion, Systems Biotechnology Building, and the Visual Arts Complex. While the Visual Arts Complex is now open it was still under construction during Fall 2009.



About 33% of this new space is research laboratory space, 19% is student center space, 14% is offices and another 12% is instructional space. Some of these facilities will not be completed for another couple of years. Because student growth is growing faster than facilities are being built, the space per student is decreasing.

Residential space has increased by 10% since Fall 1997.

## Benchmarking

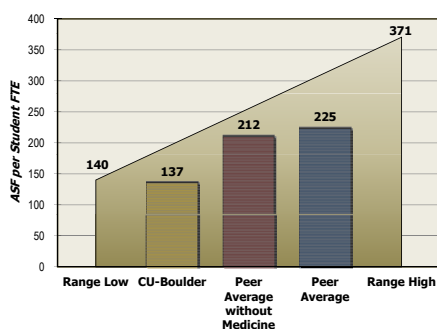
A peer analysis was conducted comparing the following public universities

- University of Arizona – Tucson
- University of California – Berkeley
- University of California – Los Angeles
- University of Florida
- Indiana University – Bloomington
- University of Kansas – Lawrence
- University of Michigan – Ann Arbor
- University of Nebraska – Lincoln
- University of Oregon
- University of Washington – Seattle
- University of Wisconsin – Madison

Space data, student full-time equivalents (FTE), and full-time (FT) faculty counts were collected from each of the institutions. Additional information was gathered from university fact books, web sites, and planning offices. Research data was obtained from the National Science Foundation (NSF).

On the whole, CU-Boulder has about 50 to 55% less space than the peer institutions, excluding housing. CU-Boulder averages about 137 ASF per Student FTE compared to an average of 225 ASF per student FTE for the peers. When medical and veterinary school space and students are excluded, the average decreases to about 212 ASF per student. The peers average about 3,910 ASF per FT faculty. CU-Boulder has about 2,493 ASF per FT faculty which is 36% less than the peer average.

ASF per Student FTE Comparisons



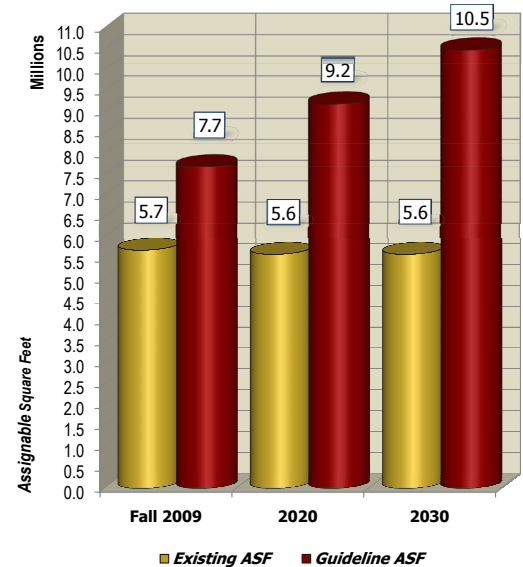
The peer average for research expenditures, as reported by NSF, is about \$549 million. Excluding the medical and veterinary schools the average drops to about \$346 million. CU-Boulder for FY 08 (most recent NSF peer data) had just over \$261 million in research expenditures. This is 24% and 52% less than the average excluding and including medical and veterinary school expenditures, respectively. The average space per \$100,000 in research expenditures for the peers excluding medical and veterinary schools is 281 ASF per \$100,000 in expenditures. CU-Boulder has 24% less space per \$100,000 at 213 ASF per \$100,000.

With regard to Athletic space, CU-Boulder has about 30% less space than the average of the peers. When looking at only the PAC-10 schools, CU-Boulder has about 29% more space. Because most of the PAC-10 schools are located in climates that are milder than the Colorado climate, a better comparison is the University of Oregon. Oregon has about as much athletic space as the average of the entire list of peers (about 450,000 ASF). This again points to the fact that CU-Boulder has about 134,000 less space than it should have.

## Findings at a Glance

- The analysis reflects a snapshot in time for Fall 2009. The 2020 and 2030 planning horizons reflect the projections set forth in CU Flagship 2030 and its various Task Force reports for enrollments, faculty growth, research growth, and additional housing.
- CU-Boulder averages 140 ASF per Student FTE (non annualized, fall term). This is 39% lower than the 225 ASF the peer universities average.
- Classroom utilization is very high for centrally scheduled classrooms averaging 42 weekly room hours at 72% student station occupancy. When departmentally owned classrooms are included, the average drops to 37 weekly room hours at 69% student station occupancy. This average is still good for an institution of CU-Boulder's caliber.
- Teaching laboratories average 20 hours per week of scheduled use. This average is good relative to other institutions similar to CU-Boulder.
- Space deficits exist in every space category.
- The largest deficit of space is in research, instructional space (classrooms, teaching laboratories and open laboratories combined), recreation/athletics and office.
- The actual use of the research laboratory space need will be split between research laboratories and office space to house the research professionals.
- Residential space shows a large space need of between 612,500 ASF and 2,850,000 ASF when 1,700 to 4,300 beds are the projected need.
- Because of the need for more research space, the Natural Sciences (College of Arts & Sciences), College of Engineering & Applied Science, and the Vice Chancellor for Research areas show the greatest need for space. However, the Colleges of Music and Architecture & Planning also have significant needs for space.

Existing Space Compared to Guideline Need



## Space Needs Analysis

Space Type	Fall 2009 Student Headcount = 30,196			Projected Existing ASF	2020 Students = 32,797		2030 Students = 34,951	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Instructional Space	543,441	802,229	(258,788)	577,231	834,852	(257,621)	881,836	(304,605)
Research Space	533,862	982,720	(448,858)	635,279	1,238,224	(602,945)	1,601,534	(966,255)
Office Space	1,165,778	1,270,395	(104,617)	1,208,151	1,359,515	(151,364)	1,414,450	(206,299)
Library Space	326,978	350,806	(23,828)	326,978	365,885	(38,907)	380,554	(53,576)
Assembly & Exhibition Space	104,823	198,322	(93,499)	133,017	214,728	(81,711)	224,100	(91,083)
Other & Support Space	422,197	516,958	(94,761)	443,847	615,075	(171,228)	659,816	(215,969)
Recreation / Athletics	433,888	712,060	(278,172)	455,896	728,364	(272,468)	741,542	(285,646)
Student Union / Center Space	140,973	275,931	(134,958)	199,110	295,173	(96,063)	314,559	(115,449)
Student Health Care Facilities	12,555	13,406	(851)	13,431	14,356	(925)	15,137	(1,706)
Residential Space	1,917,789	2,530,289	(612,500)	1,417,526	3,530,026	(2,112,500)	4,267,526	(2,850,000)
Space Available for Reuse	92,618		92,618	238,076		238,076		238,076
<b>CU-Boulder Total</b>	<b>5,694,902</b>	<b>7,653,116</b>	<b>(2,050,832)</b>	<b>5,648,542</b>	<b>9,196,198</b>	<b>(3,785,732)</b>	<b>10,501,054</b>	<b>(4,852,512)</b>
CU System Space	67,284			67,284				
Outside Organizations	66,371			66,371				

ASF = Assignable Square Feet



### Comparison of Benchmarking and Normative Guidelines

As discussed earlier, the peer average amount of space per student FTE is 212 ASF excluding medical and veterinary schools. When reviewing the amount of space per student FTE the normative guidelines produced, the range is from a low of 191 ASF per student FTE to a high of 206 ASF per student FTE. In order to bring CU-Boulder up to the average of the peers an additional 561,000 ASF is needed at the base year. This additional amount of space decreases at the planning horizons to about 185,000 ASF for the 2030 planning horizon. The reason for the decrease at the target years is that the CU projected growth in research is dramatic. The additional space is a lump sum figure and cannot be broken out by type of space or by which units need the space.

### Comparison of Benchmarking and Normative Guidelines

Space Type	Fall 2009 Student FTE = 26,812			Projected Existing ASF	2020 Student FTE = 28,713		2030 Student FTE = 30,275	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Normative Non-Residential Analysis	3,684,495	5,122,827	(1,438,332)	3,992,940	5,666,172	(1,673,232)	6,233,528	(2,240,588)
Average ASF per Student FTE		191			197		206	
Additional Non Residential Space Needed to meet Peer Average of 212 ASF per Student FTE*		561,317			420,984		184,772	
<b>Non-Residential Space Total</b>	<b>3,684,495</b>	<b>5,684,144</b>	<b>(1,999,649)</b>	<b>3,992,940</b>	<b>6,087,156</b>	<b>(2,094,216)</b>	<b>6,418,300</b>	<b>(2,425,360)</b>
Residential Space	1,917,789	2,530,289	(612,500)	1,417,526	3,530,026	(2,112,500)	4,267,526	(2,850,000)
<b>CU-BOULDER TOTAL</b>	<b>5,602,284</b>	<b>8,214,433</b>	<b>(2,612,149)</b>	<b>5,410,466</b>	<b>9,617,182</b>	<b>(4,206,716)</b>	<b>10,685,826</b>	<b>(5,275,360)</b>
CU System Space	67,284			67,284				
Outside Organizations	66,371			66,371				

ASF = Assignable Square Feet

\*The space amount needed to bring CU-Boulder up to the average of the peers decreases dramatically due to the growth in research.

### Correlation of Findings to Flagship 2030

Flagship 2030 has eight core initiatives as follows:

1. Enhancing Education and Scholarship
2. Fostering Research Excellence
3. Enhancing Graduate Education
4. Ensuring Access
5. Supporting the Mission
6. Investing in the Tools for Success
7. Learning in a Diverse World
8. Serving Colorado, the Community, and Our Graduates

The Flagship 2030 team created several Task Forces to think about several strategic areas. They are:

- Academic Needs and Space Utilization
- Recreation, Open Space & Athletics
- Living-Learning Environments
- North of Boulder Creek

The consultant feels that the analysis developed reflects the needs stated in each of the Task Force reports and, should additional space be constructed, will help CU-Boulder achieve its core initiatives. In particular, the analysis addresses or concurs with the following Task Force findings:

***Academic Needs and Space Utilization***

- Classrooms – The analysis shows a strong need for classroom space with a 56% deficit for Fall 2009 and a 62% deficit at the Future Year. The range of space needed is from 123,000 ASF to 146,000 ASF.
- Studios – The need for studio space is embedded in the Teaching Laboratory and Open Laboratory space categories. In both areas, there is a strong need shown for studio space for Architecture, Music, Film Studies, and Theatre & Dance.
- Performance Venues and Exhibition Spaces – The Assembly & Exhibit space category shows a need for space ranging from 81,700 ASF to 91,100 ASF after the Visual Arts Complex is added. About half of this need is specifically shown for Music and Theatre & Dance.
- Faculty & Staff Offices – At both the base and target years, a range of academic office space is needed from 97,500 ASF up to 189,800 ASF. This incorporates the projected faculty growth shown in the Task Force Report plus additional growth to meet the 2030 planning horizon and generates need for staff office spaces as well. The average faculty office size is 158 ASF, which is more than the 150 ASF guideline used in the office analysis. Many of the faculty offices are in buildings that were constructed prior to office space guidelines or policy directing the size of faculty offices. Some of the building averages are more than 30% greater than the 150 ASF faculty office size used for this analysis. For some units the analysis may show a slight surplus of office space but the reality is that there is a shortage of offices.
- Graduate Student Offices – The office guidelines used in the study provided 50 ASF for each graduate student and graduate, research, and teaching assistant.
- Research and Teaching Laboratories – A tremendous amount of space is needed in both of these categories. For teaching laboratories an additional need ranging from 81,400 ASF to 105,400 ASF is shown. For research laboratories, FY 2010 research expenditures were used to calculate research laboratory needs for Fall 2009. The amount of space needed is about 450,000 ASF. With projected research growth, this need increases significantly at the planning targets to 603,000 ASF for 2020 and 966,000 for 2030.

- Student Services — Even with the addition of the Center for Community, the analysis indicates that there will still be a shortage of about 116,000 ASF at the 2030 planning horizon. This shortage includes meeting room/ballroom needs as well as additional student dining and gathering spaces.
- Over one-third of all space assigned to the colleges and schools is of poor quality, with a facilities condition index (FCI) of less than 65%. Approximately 15% of all space has an FCI of 44% or less.
- One third of the total campus ASF is rated below 65% or worse. Another third of all facilities are in average to good quality space.

***Recreation, Open Space & Athletics***

The space needs analysis indicates a need for about 278,000 ASF to 286,000 ASF total for recreation and athletics, which addresses the indoor needs stated in the Task Force report. The analysis only addresses indoor recreation and athletic needs.

***Living-Learning Environments and North of Boulder Creek***

As stated earlier, the consultant planned for 1,500 additional undergraduate beds at the base year and 2020 planning horizon, and a need for 2,000 additional beds at the 2030 planning horizon. This includes the growth in undergraduate international students. For graduate and family-style housing, the consultants planned for 200 units at the base year, 1,700 units for 2020, and 2,300 units for the 2030. For the planning horizon, the family-style housing projections include a complete replacement of all existing family-style units. The growth in family-style housing takes into account the growth in graduate international students. This resulted in a need for about 612,500 ASF to 2.85 million ASF of additional space.



## **Section 2**

### **Planning Assumptions**



## SECTION 2: PLANNING ASSUMPTIONS

### Enrollment Projections

CU-Boulder either directly or through its website, provided the consultant with Fall 2009 student headcount and full-time equivalent (FTE) enrollment figures. The student headcount projections provided by the University were from the Flagship 2030 enrollment projections. The enrollment growth from Fall 2009 to the Flagship 2030 projections is an overall 16% enrollment growth. However, the graduate enrollment growth is projected at 58%, while the undergraduate enrollment growth is about 8%.

For the 2020 planning horizon, the enrollment growth is nine percent (9%), with a four percent (4%) growth in undergraduates and a 31% growth in graduate students.

Because many of the guidelines used in this analysis are based on student full-time equivalents (FTE), the headcount to FTE ratio was extrapolated using the existing headcount to FTE ratio. These enrollment projections are the foundation for projecting the space needs at CU-Boulder for the 2020 and 2030 planning horizons.

### Faculty and Staffing Projections

The consultants used the tenured/tenure track (TTT) faculty growth projections shown in the Task Force for Academic Needs and Space Utilization Study for the 2020 planning horizon. For the 2030 target, the consultants calculated the difference between the 2020 enrollment projection and the 2030 enrollment projection. The percent increase was then used to calculate the additional tenured/tenure-track (TTT) faculty needed to meet the projected student enrollment. By calculating the difference in the student growth and applying that to the total TTT after the 2020 faculty increase is added, the targeted student faculty ratio for 2020 is then carried forward to 2030. The overall growth in students from 2020 to 2030 is a seven percent (7%) increase. The projected growth in graduate students from 2020 to 2030 is a 20% increase. The seven percent (7%) increase was applied to all areas except for the School of Law and the Graduate School where the 20% growth factor was used.

CU-Boulder needs about 108 more faculty above the 220 faculty projected by the Task Force for Academic Needs and Space Utilization. The 108 additional faculty were distributed among the disciplines using the same ratios used in the Task Force report.

#### Enrollment Projections

	Headcount				
	Fall 2009*	Fall 2020**	Percent Increase	Fall 2030**	Percent Increase
Undergraduate	25,408	26,516	4%	27,401	8%
Graduate	4,788	6,281	31%	7,550	58%
<b>TOTAL</b>	<b>30,196</b>	<b>32,797</b>	<b>9%</b>	<b>34,951</b>	<b>16%</b>

Fall Term FTE				
Undergraduate	24,084	25,134		25,973
Graduate	2,728	3,579		4,302
<b>TOTAL</b>	<b>26,812</b>	<b>28,713</b>		<b>30,275</b>

\* Source: Historical Enrollment Statistics, posted at <http://www.colorado.edu/pba/records/enr1877/intro.htm>

\*\* Source: [http://www.colorado.edu/pba/records/flagship/TXX\\_BSmoothVersG.xls](http://www.colorado.edu/pba/records/flagship/TXX_BSmoothVersG.xls) with 950 International Students

**Faculty Growth Projections** (*Tenured and Tenure-Track*)

College / School / Unit	Fall 2009 Tenured & Tenure- Track Faculty**	2020 Faculty Increase*	2020 Total Faculty	Student Growth from 2020 to 2030	2030 Total Faculty	Add'l Faculty Needed from 2020 to 2030	2030 Faculty Increase
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
Formula			(A+B)		(C*(1+D))	(E-C)	(B+F)
Arts & Sciences	726	126	852		915	63	189
Arts	52	8	60	7%	65	5	13
Humanities	176	25	201	7%	216	15	40
Natural Science	341	60	401	7%	430	29	89
Social Science	143	33	176	7%	189	13	46
Other	14	0	14	7%	15	1	1
Engineering	179	30	209	7%	224	15	45
Leeds School of Business	54	20	74	7%	80	6	26
School of Journalism & Mass Communication	22	8	30	7%	33	3	11
School of Law****	37	7	44	20%	53	9	16
Education	32	3	35	7%	38	3	6
Architecture & Planning***	9	4	13	7%	14	1	5
Music	55	2	57	7%	61	4	6
Grad School (Institutes)****	0	20	20	20%	24	4	24
<b>TOTAL</b>	<b>1,114</b>	<b>220</b>	<b>1,334</b>		<b>1,442</b>	<b>108</b>	<b>328</b>

\* Totals taken from the Report of the Master Plan Task Force on Academic Needs and Space Utilization, page 12.

\*\* Faculty counts are from the Fall 2009 summarized staffing file from the Office of Planning, Budget, and Analysis.  
Does not include faculty under University Libraries.

\*\*\* Fall 2009 faculty counts taken from the College of Architecture and Planning phone book supplied by the College.

\*\*\*\* Graduate growth factor from 2020 to 2030 was applied.

The remaining non-TTT faculty and staffing projections were based on the enrollment growth percentages shown in the Enrollment Projection table. The faculty rate of growth is in keeping with the projected student growth. For this study, it is assumed that staff will grow at half the rate that faculty will grow.

There was some discussion as to how research faculty and professionals should grow in relationship to the growth in research activity and expenditures. Over the last two decades, Paulien & Associates has had the privilege of working on various building program plans for CIRES, LASP, and CASA. In tracking the amount of space, research dollars, and faculty and staff these units had at the time the program plans were performed, there is no direct correlation in growth of facilities and staff to the amount of dollars. If the consultants grew these areas proportionate to the research growth, the amount of office space generated would be very large. As a result, the consultants increased the research professionals in proportion to the student enrollment increases. This was done with the understanding that a portion of the large growth in research space would probably be used for research offices rather than laboratories.

## Research Projections

Research growth was discussed with University officials and reviewed in the Task Force for Academic Needs and Space Utilization Study. The consultant



downloaded the Office of Research's annual report which provided research expenditures for the most recent fiscal year (FY 10). This report was used to project the future needs analysis.

The research activity is projected to grow at about five percent (5%) per year compounded annually. Research expenditures are used rather than awards as expenditures tend to level out the highs and lows that awards can generate on a year-to-year basis when reviewing awards by program. For fiscal year 2010 (FY 2010) there was approximately \$454,387,000 generated in awards but only \$330,945,670 in research expenditures. Projecting forward at five percent (5%) compounded annually, this generates about \$539,076,000 or 55% growth for the 2020 planning horizon. Growth to 2030 is a 153% increase or \$878,097,000.

The consultants were asked to adjust the growth for inflation. There is not one national or statewide inflation rate and most predictions go out to only 2019 or 2020. There are different sources one could go to for an inflation rate including the U.S. Office of Management and Budget, NASA, and the U.S. Bureau of Labor Statistics to name a few. Some of these websites have not been recently updated. However, the U.S. Bureau of Labor Statistics did have a recent posting from July 2010. The Bureau's website has a current inflation rate of 1.23% based on a 12 month change in the Consumer Price Index. The mean is 2.41% which is founded on a 10 year moving average. Based on the consultant's research a 2.41% inflation factor was used for this analysis.

Using the 2.41% inflation factor produces a net growth rate of 2.59% compounded annually. For 2020 the projected growth is 26% or \$427,373,000 (2010 dollars). The projected growth for 2030 is 63% or \$551,896,000 (2010 dollars). These overall growth rates were used to project research space needs.

## Research Growth

	Projection		
	FY 2010	2020	2030
	(Constant Dollars)		
<b>Research Expenditures</b>	\$330,945,670	\$539,075,624	\$878,097,387
Growth Rate (compounded annually)	5.00%		
<b>Percent Growth</b>		<b>55%</b>	<b>153%</b>
Inflation Factor*: 2.41%			
<b>Research Expenditures in 2010 Dollars</b>		\$427,372,921	\$551,896,068
Net Growth Rate (adjusted for inflation compounded annually)	2.59%		
<b>Percent Growth (Used in the Analysis)</b>		<b>26%</b>	<b>63%</b>

\* The U.S. Bureau of Labor Statistics and Yale economist Robert Shiller have set the current inflation rate (as of July 2010) at 1.23% based on a 12 month change in CPI with the mean being 2.41% which is derived from the 10 year moving average.

## Space Assumptions

The Future Year analysis reflects the addition of the Visual Arts Complex (which was not open for Fall 2009), the IBS building, JILA Expansion, Systems Biotechnology Building, the new Basketball/Volleyball Practice Facility, the Smith Hall Addition, Williams Village Phase II Pod C, and the Center for Community. The buildings shown as being razed for both planning horizons are the existing family-style housing units. These housing units include: Athens Court, Athens North Court, Family/Staff Court, Marine Court, Newton Court, and Smiley Court. These buildings equate to about 606,200 ASF.

The Systems Biotechnology Building will house the Colorado Initiative in Molecular Biotechnology (CIMB). This program is in transition from the Office of the Provost and the College of Arts & Sciences to the Vice Chancellor for Research. For the purpose of this study the building support spaces, amenities, and core facilities were split into thirds between the three primary occupants — Biochemistry, CIMB, and Chemical & Biological Engineering.

### New Construction

Building / Department	TOTAL ASF	Class-rooms	Teaching Labs	Open Labs	Research Labs	Offices	Ath-letics	Assembly/ Exhibit	Other Space	Student Center	Student Health	Phys. Plant	Residence Life
<b>Basketball/Folleybal Fractice Facility</b>													
Athletics	23,597					1,589	22,008						
<b>Center for Community</b>													
Provost & Executive Vice Chancellor	6,886					4,784			2,102				
Vice Chancellor, Diversity, Equity & Community Engagement	12,637					8,230			4,407				
Vice Chancellor, Student Affairs	80,970					27,039			4,470	48,585	876		
<b>Total</b>	<b>100,493</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40,053</b>	<b>0</b>	<b>0</b>	<b>10,979</b>	<b>48,585</b>	<b>876</b>	<b>0</b>	<b>0</b>
<b>Institute of Behavioral Science</b>													
IBS	29,647				805	24,934			3,908				
<b>JILA Expansion</b>													
JILA	18,896				8,526	5,150			5,220				
<b>Smith Hall Expansion</b>													
Housing	21,400												21,400
<b>Systems Biotechnology Building</b>													
Arts & Sciences	60,343	3,140	3,630	984	31,978	8,749		3,965	4,714	3,183			
Engineering & Applied Science	62,018	3,139	3,630	1,314	27,532	14,541		3,965	3,183	4,714			
Vice Chancellor, Research	59,584		171	1,214	33,104	15,985		857	5,067	3,186			
<b>Total</b>	<b>181,945</b>	<b>6,279</b>	<b>7,431</b>	<b>3,512</b>	<b>92,614</b>	<b>39,275</b>	<b>0</b>	<b>8,787</b>	<b>12,964</b>	<b>11,083</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Visual Arts Complex</b>													
Arts & Sciences	99,417	7,918	34,162	17,102		16,998		19,576	3,661				
Facilities Management	4,023					150						3,873	
<b>Total</b>	<b>103,440</b>	<b>7,918</b>	<b>34,162</b>	<b>17,102</b>	<b>0</b>	<b>17,148</b>	<b>0</b>	<b>19,576</b>	<b>3,661</b>	<b>0</b>	<b>0</b>	<b>3,873</b>	<b>0</b>
<b>Williams Village Phase II Pod C</b>													
Arts & Sciences (RAP)	1,760	1,150				610							
Housing	82,755					2,700							80,055
<b>Total</b>	<b>84,515</b>	<b>1,150</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,310</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>80,055</b>
<b>NEW CONSTRUCTION TOTAL</b>	<b>563,933</b>	<b>15,347</b>	<b>41,593</b>	<b>20,614</b>	<b>101,945</b>	<b>131,459</b>	<b>22,008</b>	<b>28,363</b>	<b>36,732</b>	<b>59,668</b>	<b>876</b>	<b>3,873</b>	<b>101,455</b>

ASF = Assignable Square Feet



# **Section 3**

## **Benchmarking**



### SECTION 3: BENCHMARKING

The Benchmarking Analysis tables on the following pages illustrate

CU-Boulder requested that Paulien & Associates, Inc., conduct a peer analysis using benchmarking techniques. Comparisons of the following public universities formed the sample for this study:

- University of Arizona – Tucson
- University of California – Berkeley
- University of California – Los Angeles
- University of Florida
- Indiana University – Bloomington
- University of Kansas – Lawrence
- University of Michigan – Ann Arbor
- University of Nebraska – Lincoln
- University of Oregon
- University of Washington – Seattle
- University of Wisconsin – Madison

The University of Texas – Austin was also selected to be part of this study, but they did not submit their information. Therefore, the response rate was 92%. In each case, the main or flagship campus was selected for comparison. Each institution was contacted via email and/or telephone and asked to participate in the study.

Fall 2009 Student full-time equivalents (FTE), full-time (FT) faculty headcount, and detailed space data by school and college were secured from each of the institutions. Student FTE enrollment and FT Faculty was used to normalize the space data in assignable square feet (ASF). Research data was collected from the National Science Foundation and the Center for Measuring University Performance. University websites, fact books, and planning offices were also used for supplemental information regarding research and athletic sports.

### Institutional Characteristics

The institutions were compared on whether they had the schools and colleges that exist in Boulder. All of them have at least six of the eight schools and colleges in Boulder, as illustrated in the *Peer Institution Matrix* on the following page.

Of the eleven institutions participating in this analysis, four are land grant institutions, four are sea grant institutions, and six have medical schools (two of which also have veterinary medical schools). The University of California – Berkeley, Indiana University – Bloomington, University of Kansas – Lawrence, and University of Oregon are more similar in mission to the CU-Boulder campus. Student FTE enrollments have a large range spanning from a low of 21,700 student FTE (Oregon) to a high of 44,500 student FTE (Florida). The average student FTE was 35,444 which is 32% more students than CU-Boulder has currently (or CU-Boulder has 24% fewer students than the average of the peers). The following tables show each institution's characteristics, mission, base data characteristics, and program mix.

#### Characteristics and Mission

Institutions	Land Grant	Sea Grant	Medical School
University of Arizona - Tucson	X		X
University of California - Berkeley	*		
University of California - Los Angeles	*		X
University of Florida	X	X	X
Indiana University - Bloomington			
University of Kansas - Lawrence			
University of Michigan - Ann Arbor		X	X
University of Nebraska - Lincoln	X		
University of Oregon			
University of Washington		X	X
University of Wisconsin - Madison	X	X	X
University of Colorado Boulder			

\* The University of California system is the state's land grant member. UC Berkeley was its original land-grant college, but UC Davis and UC Riverside later assumed much of that role.

### Base Data Characteristics

Institution	Total Campus ASF	Student FTE	FT Faculty	Faculty/ Student Ratio
University of Arizona - Tucson	7,066,952	38,360	2,165	1:18
University of California - Berkeley	8,108,534	35,808	1,450	1:25
University of California - Los Angeles	8,965,735	39,989	1,954	1:20
University of Florida	10,577,471	44,477	3,772	1:12
Indiana University - Bloomington	7,388,536	39,375	1,798	1:22
University of Kansas - Lawrence	4,062,780	28,982	1,104	1:26
University of Michigan - Ann Arbor	14,803,077	39,949	2,994	1:13
University of Nebraska - Lincoln	6,281,285	21,835	1,102	1:20
University of Oregon	3,084,280	21,689	1,173	1:18
University of Washington - Seattle	7,330,562	41,308	3,152	1:13
University of Wisconsin - Madison	11,430,859	38,117	3,389	1:11
<b>BENCHMARK AVERAGE</b>	<b>8,100,006</b>	<b>35,444</b>	<b>2,187</b>	<b>1:18</b>
<b>University of Colorado Boulder</b>	<b>3,684,495</b>	<b>26,886</b>	<b>1,478</b>	<b>1:18</b>
<i>CU-Boulder Compared to Average</i>	<i>(4,415,511)</i>	<i>(8,558)</i>	<i>(709)</i>	
<i>CU-Boulder as Percent of Average</i>	<i>(55%)</i>	<i>(24%)</i>	<i>(32%)</i>	

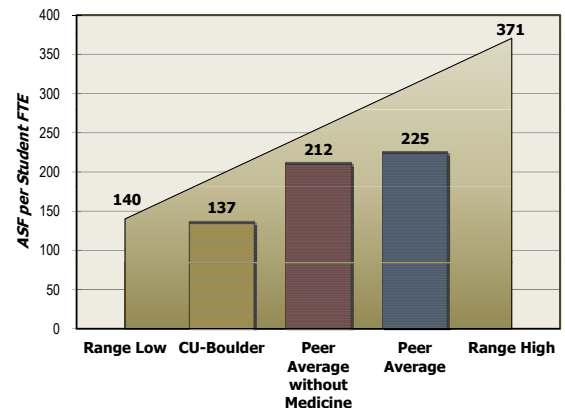
### Peer Institution Matrix

College/School/Division	University of Colorado Boulder	University of Arizona - Tucson	University of California - Berkeley	University of California - Los Angeles	University of Florida	Indiana University - Bloomington	University of Kansas - Lawrence	University of Michigan - Ann Arbor	University of Nebraska-Lincoln	University of Oregon	University of Washington - Seattle	University of Wisconsin - Madison
Architecture & Planning	X	X	X	X	X		X	X	X	X	X	
Arts & Sciences	X	XXXX	XX	X	X	X	XX	XX	X	X	X	X
Business	X	X	X	X	X	X	X	X	X	X	X	X
Education	X	X	X	X	X	X	X	X	X	X	X	X
Engineering & Applied Science	X	X	X	X	X		X	X	X		X	X
Journalism & Mass Communication	X		X		X	X	X	X				X
Law	X	X	X	X	X	X	X	X	X	X	X	X
Music	X	X			X	X	X	X	X	X	X	X
<b>COUNT</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>8</b>	<b>6</b>	<b>8</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>7</b>
<b>Other Colleges/Schools:</b>												
Allied Health							X					
Agriculture & Life Sciences		X			X							X
Agricultural Sciences & Natural Resources								X				
Dentistry					X			X			X	
Environment										X		
Environmental Studies												X
Health, Physical Education, & Recreation						X						
Human Ecology												X
Information			X					X			X	
Informatics & Computing						X						
International Studies												X
Library & Information Science						X						X
Kinesiology								X				
Medicine		X			X		X	X			X	X
Natural Resources			X					X				
Nursing		X			X	X	X	X			X	X
Optical Sciences		X										
Optometry			X			X						
Pharmacy		X			X		X	X			X	X
Public & Environmental Affairs						X						
Public Affairs				X							X	X
Public Health		X	X		X			X			X	
Public Policy			X					X				
Social Welfare			X				X					
Social Work						X		X			X	X
Theater, Film, & Television				X								
Veterinary Medicine					X							X

## Campuswide Benchmarking Results

- On average, the eleven peer institutions reported 8.1 million total campus ASF without residential space. Normalizing space by removing the medical schools and veterinary schools, the total campus average drops to 7.3 million ASF.
- CU-Boulder has 50 to 55% less space, excluding housing, than the list of peers.
- When total ASF is standardized by student FTE, CU-Boulder has 35% to 39% less space per student FTE than the peers.
- CU-Boulder has 36% less space per FT faculty than the peers.
- College and School Level Results
- Each peer institution provided detailed space data at the college and school level. Since no two universities have the same organizational structure and academic departments, the consultants combined programs to most closely equal the existing program mix and structure at CU-Boulder.
- CU-Boulder is at the bottom or below the scale in space per student except for Music, Law, and Education.
- Architecture & Planning shows a wide variance of space as does Education when reviewing space per student.
- When looking at space per FT faculty, CU-Boulder is at the bottom or below the scale except for Architecture & Planning which may be an anomaly considering that the College is split between the CU-Boulder and CU-Denver campus.
- The space per FT Faculty shows a wide variance for Architecture and Education. However, for Arts & Sciences, Journalism & Mass Communication, and Music the range is tighter.

ASF per Student FTE Comparisons



The graphs to the right and on the following pages illustrate the outcomes by college and school. The bar represents the high and low range of the ASF per student FTE or FT faculty for each unit. The triangle delineates CU-Boulder's ASF. As an example, for the College of Architecture & Planning, the highest point on the bar (319 ASF per Student FTE) was reported by UCLA while the lowest point on the bar (66 ASF per student FTE) was reported by Florida. The College of Architecture & Planning within CU-Boulder was calculated at 59 ASF per student FTE as noted by the triangle. The corresponding table reports the average for this College as 126 ASF per student FTE.

### Benchmarking Analysis Summary

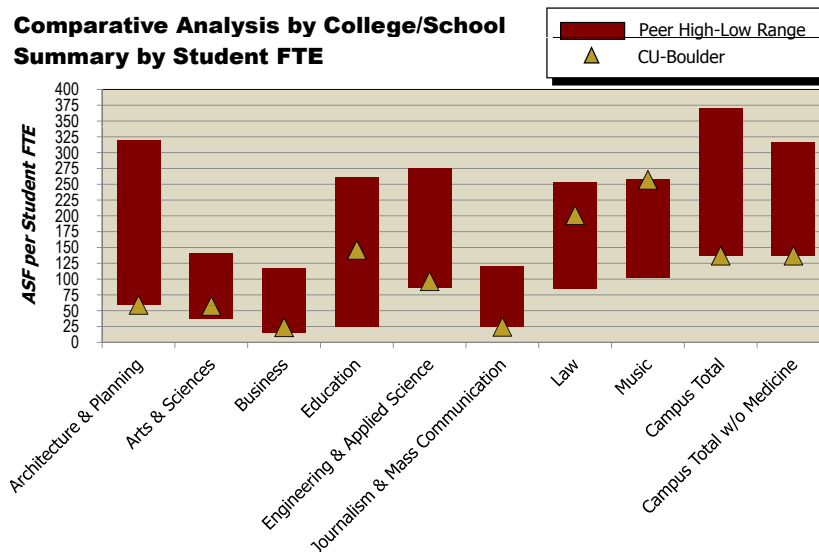
Benchmark Institutions	Total Campus ASF	ASF per Student FTE	ASF per FT Faculty	Total Campus ASF w/o Medicine	ASF per Student FTE w/o Medicine
University of Arizona - Tucson	7,066,952	184	3,264	6,300,928	174
University of California - Berkeley	8,108,534	226	5,592	8,108,534	226
University of California - Los Angeles	8,965,735	224	4,588	n/a	n/a
University of Florida	10,577,471	238	2,804	9,267,959	213
Indiana University - Bloomington	7,388,536	188	4,109	7,388,536	188
University of Kansas - Lawrence	4,062,780	140	3,680	4,062,780	140
University of Michigan - Ann Arbor	14,803,077	371	4,944	12,420,738	317
University of Nebraska - Lincoln	6,281,285	288	5,700	6,281,285	288
University of Oregon	3,084,280	142	2,629	3,084,280	142
University of Washington - Seattle	7,330,562	177	2,326	6,031,005	154
University of Wisconsin - Madison	11,430,859	300	3,373	10,134,470	280
<b>BENCHMARK AVERAGE</b>	<b>8,100,006</b>	<b>225</b>	<b>3,910</b>	<b>7,308,052</b>	<b>212</b>
<b>University of Colorado Boulder</b>	<b>3,684,495</b>	<b>137</b>	<b>2,493</b>	<b>3,684,495</b>	<b>137</b>
<b>CU-Boulder Compared to Average</b>	<b>(4,415,511)</b>	<b>(88)</b>	<b>(1,417)</b>	<b>(3,623,557)</b>	<b>(75)</b>
<b>CU-Boulder as Percent of Average</b>	<b>(55%)</b>	<b>(39%)</b>	<b>(36%)</b>	<b>(50%)</b>	<b>(35%)</b>



### CU-Boulder's Ranking to Comparison

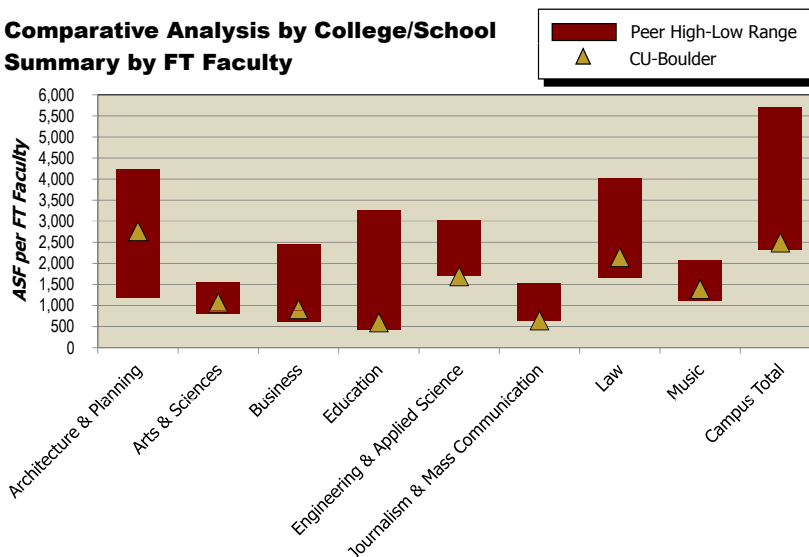
College / School	ASF per Student		CU-Boulder	Average
	HIGH	LOW		
Architecture & Planning	319	66	59	126
Arts & Sciences	141	38	58	69
Business	116	15	24	44
Education	261	25	146	102
Engineering & Applied Science	275	87	97	145
Journalism & Mass Communication	121	29	25	53
Law	253	85	201	138
Music	236	102	257	169
<b>Campus Total</b>	<b>371</b>	<b>140</b>	<b>137</b>	<b>225</b>
<b>Campus Total w/o Medicine</b>	<b>317</b>	<b>140</b>	<b>137</b>	<b>212</b>

**Comparative Analysis by College/School Summary by Student FTE**



College / School	ASF per FT Faculty		CU-Boulder	Average
	HIGH	LOW		
Architecture & Planning	4,249	1,177	2,762	2,198
Arts & Sciences	1,551	811	1,067	1,322
Business	2,456	611	910	1,191
Education	3,257	417	598	1,531
Engineering & Applied Science	3,037	1,910	1,692	2,457
Journalism & Mass Communication	1,546	800	645	1,206
Law	4,029	1,654	2,146	2,593
Music	2,071	1,105	1,390	1,604
<b>Campus Total</b>	<b>5,700</b>	<b>2,326</b>	<b>2,493</b>	<b>3,910</b>

**Comparative Analysis by College/School Summary by FT Faculty**



## Research Benchmarking Results

The consultants reviewed various research statistics in order to determine whether or not good planning metrics were used to develop research laboratory space needs. The table following shows research rankings, FY 08 NSF research expenditure, research space, space per \$100,000 in research expenditures, and research space per FT faculty. To the degree possible, the data was normalized so that expenditures with and without medical and veterinary schools could be analyzed.

- Based on the latest NSF published data, CU-Boulder has between 25% and 52% less in research expenditures than the peers. The average amount of research expenditures is \$549,184,636 including medical schools and \$345,584,600 without medical and veterinary schools.
- In reviewing space per \$100,000 in expenditures, CU-Boulder has between 7% and 24% less space. Excluding medicine, the average is 281 ASF per \$100,000 and CU-Boulder has 213 ASF per \$100,000.
- CU-Boulder has 28% less research space per FT faculty than the peer.

## Research Comparative Analysis

Institutions (ordered by FY 08 NSF Expenditures)	TARU		FY 08 NSF		FY 08 NSF		Research		Research		Research		Research Space		Total	
	Number of Measures in Top 25 Public*	Number of Measures in Top 26-50 Public*	Ranking*	Ranking*	Expenditures	Expenditures	without Medicine	Medicine	without Medicine	Medicine	Space (ASF)	Space (ASF)	per \$100,000 in Expenditures	per \$100,000 excluding Medicine	Research Space per FT Faculty	Research Space per FT Faculty
University of Wisconsin - Madison	9	0	3	3	\$881,777,000	\$679,277,000	\$518,490,000	1,398,471	1,179,086	214	206	227	214	206	557	557
University of Michigan - Ann Arbor	9	0	4	4	\$876,390,000	\$518,490,000	n/a	1,867,896	1,179,086	231	227	n/a	214	n/a	895	895
University of California - Los Angeles***	9	0	5	5	\$871,478,000	n/a	n/a	1,867,896	1,179,086	214	227	n/a	214	n/a	895	895
University of Washington	8	1	8	8	\$765,135,000	\$369,412,000	\$591,770,000	1,267,018	1,327,770	166	202	224	166	202	402	402
University of California - Berkeley***	9	0	18	18	\$591,770,000	\$330,545,000	\$330,545,000	1,488,610	1,074,552	255	325	224	224	325	916	916
University of Florida	8	1	19	19	\$584,170,000	\$330,545,000	\$330,545,000	1,488,610	1,074,552	255	325	224	224	325	916	916
University of Arizona	7	0	24	24	\$545,869,000	\$386,606,000	\$386,606,000	1,112,285	853,328	204	221	204	204	221	514	514
Indiana University - Bloomington	4	2	39	39	\$411,939,000	\$145,076,000	\$145,076,000	614,509	614,509	149	424	424	149	424	342	342
University of Nebraska - Lincoln	0	2	52	52	\$229,761,000	\$229,761,000	\$229,761,000	437,409	437,409	190	190	190	190	190	397	397
University of Kansas - Lawrence	1	2	82	82	\$215,364,000	\$137,531,000	\$137,531,000	473,196	473,196	220	344	344	220	344	429	429
University of Oregon	0	3	153	153	\$67,378,000	\$67,378,000	\$67,378,000	300,788	300,788	446	446	446	446	446	256	256
<b>Average</b>	<b>6</b>	<b>3</b>	<b>37</b>	<b>37</b>	<b>\$549,184,636</b>	<b>\$345,584,600</b>	<b>\$345,584,600</b>	<b>1,164,086</b>	<b>840,507</b>	<b>229</b>	<b>281</b>	<b>213</b>	<b>229</b>	<b>281</b>	<b>525</b>	<b>525</b>
<b>University of Colorado Boulder<sup>1</sup></b>	<b>3</b>	<b>4</b>	<b>25</b>	<b>25</b>	<b>\$261,123,000</b>	<b>\$261,123,000</b>	<b>\$261,123,000</b>	<b>555,560</b>	<b>555,560</b>	<b>213</b>	<b>213</b>	<b>213</b>	<b>213</b>	<b>213</b>	<b>376</b>	<b>376</b>
CU-Boulder Compared to Average	(3)	(3)	(12)	(12)	(288,061,636)	(84,461,600)	(84,461,600)	(608,526)	(284,947)	(16)	(68)	(68)	(16)	(68)	(149)	(149)
CU-Boulder % Compared to Average	(48%)	(48%)	(32%)	(32%)	(52%)	(24%)	(24%)	(52%)	(34%)	(7%)	(24%)	(24%)	(7%)	(24%)	(28%)	(28%)

\* The Top American Research Universities (TARU) 2009 Annual Report from The Center for Measuring University Performance uses 2007 data. Institutions are ranked on nine data measures. Institutions ranking in the top 25 have at least one measure that is ranked in the top 25 public institutions. Those that have at least one measure ranked in the top 26 to 50 institutions are included. The higher the number the higher the ranking.

\*\* The lower the number the higher the ranking.

\*\*\* The University of California system includes office space within its space use coding of research labs. Additionally, its reporting system does not break apart research space from instructional laboratory space.

\*\*\*\* Medical Research Expenditures for FY 08 were obtained from best available sources: NSF, institutional grants and contracts reports and institutional research offices. FY 08 NSF Research Expenditures were used as the base.

1. The FY 08 NSF Expenditures included the University of Colorado as a whole. Supplemental NSF data was found that separated the expenditures by campus.

## Athletics Benchmarking Results

The consultants also reviewed athletic space of the peers. The peers are split by conference. There is an overall average and an average for each conference except for the SEC conference in which there is only one institution. Overall CU-Boulder has about 30% less space than the average of peers. When compared to the average of the peers that are in the Big 12 and Big 10 conferences, CU-Boulder has a shortage of between 45% and 55%, respectively.

When reviewing the amount of space relative to the PAC-10, CU-Boulder has about 29% more space. This statistic can be misleading from the stand point that many of the PAC-10 schools are in climates that are milder than the Colorado climate. The other university in the PAC-10 that shares a similar climate as CU-Boulder is the University of Oregon. The amount of space Oregon has is comparable to the overall average of the 11 institutions. Again, this points to a shortage of space of about 134,000 ASF.

### Athletics Peer Analysis

	NCAA Conf.	Total Athletics Space	Office Space	Non-Office Athletic Space	Office Space as Percent of Total
Indiana University	Big 10	671,982	66,091	605,891	10%
University of Michigan	Big 10	652,122	46,569	605,553	7%
University of Wisconsin - Madison	Big 10	775,808	69,617	706,191	9%
University of Kansas	Big 12	541,799	67,337	474,462	12%
University of Nebraska - Lincoln**	Big 12	605,558	49,404	556,153	8%
University of Arizona	PAC-10	297,551	43,696	253,855	15%
University of California - Berkeley	PAC-10	213,663	33,961	179,702	16%
University of California - Los Angeles	PAC-10	117,993	47,346	70,647	40%
University of Oregon	PAC-10	443,756	28,983	414,773	7%
University of Washington	PAC-10	157,318	n/a	157,318	n/a
University of Florida	SEC	479,829	66,480	413,349	14%
<b>Overall Average</b>		<b>450,671</b>	<b>51,948</b>	<b>403,445</b>	<b>14%</b>
<b>Big 10 Average</b>		<b>699,971</b>	<b>60,759</b>	<b>639,212</b>	<b>9%</b>
<b>Big 12 Average</b>		<b>573,678</b>	<b>58,371</b>	<b>515,308</b>	<b>10%</b>
<b>PAC-10 Average</b>		<b>246,056</b>	<b>38,497</b>	<b>215,259</b>	<b>19%</b>
<b>University of Colorado Boulder*</b>	<b>Big 12</b>	<b>316,316</b>	<b>27,614</b>	<b>288,702</b>	<b>9%</b>
CU-Boulder Compared to Average		(134,355)	(24,334)	(114,743)	(5%)
CU-Boulder % Compared to Average		(30%)	(47%)	(28%)	
CU-Boulder Compared to Big 10		(383,655)	(33,145)	(350,510)	+0%
CU-Boulder % Compared to Big 10		(55%)	(55%)	(55%)	
CU-Boulder Compared to Big 12		(257,362)	(30,757)	(226,606)	(2%)
CU-Boulder % Compared to Big 12		(45%)	(53%)	(44%)	
CU-Boulder Compared to PAC-10		+70,260	(10,883)	+73,443	(11%)
CU-Boulder % Compared to PAC-10		+29%	(28%)	+34%	

\*Includes the new Basketball and Volleyball Practice facilities. CU will be moving from the Big 12 to the PAC-10.

\*\* University of Nebraska will be moving to the Big 10.



# **Section 4**

## **Space Needs Analysis**

### **Outcomes**



### SECTION 4: SPACE NEEDS ANALYSIS OUTCOMES

The Space Needs Analysis tables on the following pages illustrate the space needs in a more detailed manner than the Executive Summary shows. Space deficits currently exist for almost all space categories and increase under the Future Year. Space deficits are greatest for the following space types:

- Residence Life (housing)
- Research Laboratories (both wet and dry labs)
- Academic Offices
- Student Recreation Space
- Classrooms
- Instructional Laboratories
- Athletics
- Student Space (including food services and student center space)
- Assembly & Exhibit Space (i.e., fine arts, museums, planetariums, botanical garden, etc.)
- Physical Plant space

Most of the academic and administrative units show a need for additional space. All of the Colleges show a significant need for additional space. The College of Music shows a need for 84% more space. The College of Architecture & Planning shows a need for 69% more space, and the College of Engineering & Applied Science shows a need for approximately 65% more space. The School of Journalism shows a deficit of 70%. From a square footage perspective, the Natural Sciences, the College of Engineering, and campuswide classroom space show the largest space needs.

The Vice Chancellor for Research includes a large portion of the research space need. The Vice Chancellor for Administration includes Physical Plant space which has a significant need for additional space at the target years. The Vice Chancellor for Student Affairs is short student space, recreation space, and student health care.

## Section 4

### Space Needs Analysis Outcomes

### Space Needs Analysis

#### Space Needs Analysis by Space Type

Fall 2009 Student Headcount = 30,659					2020 Student Headcount = 32,797		2,030 Student Headcount = 34,951	
College / School / Unit	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Projected Existing ASF	Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Non-Residential Space								
Academic Space	2,687,912	3,641,255	(953,343)	2,904,320	4,061,451	(1,157,131)	4,562,124	(1,657,804)
Classroom Space	221,799	345,240	(123,441)	237,022	361,525	(124,503)	382,761	(145,739)
Laboratory Total	855,504	1,439,709	(584,205)	975,488	1,711,551	(736,063)	2,100,609	(1,125,121)
Teaching Laboratories	228,151	309,523	(81,372)	226,678	315,407	(88,729)	332,561	(105,883)
Open Laboratories	93,491	147,466	(53,975)	113,531	157,920	(44,389)	166,514	(52,983)
Research Laboratories	533,862	982,720	(448,858)	635,279	1,238,224	(602,945)	1,601,534	(966,255)
Academic Offices & Service	916,491	1,013,985	(97,494)	953,612	1,094,210	(140,598)	1,143,365	(189,753)
Library	326,978	350,806	(23,828)	326,978	365,885	(38,907)	380,554	(53,576)
Assembly & Exhibit	104,823	198,322	(93,499)	133,017	214,728	(81,711)	224,100	(91,083)
Other Academic Department Space	262,317	293,193	(30,876)	278,203	313,552	(35,349)	330,735	(52,532)
Services and Administration	562,695	769,512	(206,817)	632,724	876,357	(243,633)	929,862	(297,138)
Administrative Offices & Service	249,287	256,410	(7,123)	254,539	265,305	(10,766)	271,085	(16,546)
Student Union / Center Space	140,973	275,931	(134,958)	199,110	295,173	(96,063)	314,559	(115,449)
Physical Plant	129,836	170,142	(40,306)	133,709	244,097	(110,388)	268,529	(134,820)
Other Administrative Department Space	30,044	53,623	(23,579)	31,935	57,426	(25,491)	60,552	(28,617)
Student Health Care Facilities	12,555	13,406	(851)	13,431	14,356	(925)	15,137	(1,706)
Athletics and Recreation	433,888	712,060	(278,172)	455,896	728,364	(272,468)	741,542	(285,646)
Recreation	167,278	312,060	(144,782)	167,278	328,364	(161,086)	341,542	(174,264)
Athletics	266,610	400,000	(133,390)	288,618	400,000	(111,382)	400,000	(111,382)
Non-Residential Space Total	3,684,495	5,122,827	(1,438,332)	3,992,940	5,666,172	(1,673,232)	6,233,528	(2,240,588)
Residence Life								
Housing	1,917,789	2,530,289	(612,500)	1,417,526	3,530,026	(2,112,500)	4,267,526	(2,850,000)
Available Space for Reuse								
Unassigned/Uncoded Space	63,858		63,858	60,154		60,154		60,154
Inactive/Conversion Space	28,760		28,760	177,922		177,922		177,922
Available Space for Reuse Total	92,618		92,618	238,076		238,076		238,076
CU-BOULDER TOTAL	5,694,902	7,653,116	(1,958,214)	5,648,542	9,196,198	(3,547,656)	10,501,054	(4,852,512)
CU System Space	67,284			67,284				
Outside Organizations	66,371			66,371				

ASF = Assignable Square Feet



## Space Needs Analysis by College/Unit

Fall 2009 Student Headcount = 30,659				2020 Student Headcount = 32,797			2,030 Student Headcount = 34,951	
College / School / Unit	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Projected Existing ASF	Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
<b>Academic Units</b>								
<b>Colleges / Schools</b>	<b>1,864,072</b>	<b>2,436,863</b>	<b>(572,791)</b>	<b>2,003,599</b>	<b>2,695,266</b>	<b>(691,667)</b>	<b>3,010,089</b>	<b>(1,006,490)</b>
College of Architecture & Planning	49,247	74,625	(25,378)	49,247	80,450	(31,203)	83,525	(34,278)
College of Arts & Sciences	975,285	1,206,896	(231,611)	1,040,710	1,355,826	(315,116)	1,535,869	(495,159)
Arts	147,757	161,878	(14,121)	155,369	172,013	(16,644)	179,920	(24,551)
Humanities	76,249	93,287	(17,038)	76,249	101,480	(25,231)	107,332	(31,083)
Natural Sciences	640,835	826,783	(185,948)	698,038	944,302	(246,264)	1,100,630	(402,592)
Social Sciences	83,019	84,819	(1,800)	83,019	95,838	(12,819)	104,105	(21,086)
Other Units	27,425	40,129	(12,704)	28,035	42,193	(14,158)	43,882	(15,847)
College of Engineering & Applied Science	333,124	442,745	(109,621)	392,003	505,755	(113,752)	587,995	(195,992)
College of Music	94,829	156,498	(61,669)	94,829	161,499	(66,670)	174,406	(79,577)
Leeds School of Business	55,942	66,353	(10,411)	55,942	72,652	(16,710)	76,436	(20,494)
School of Education	24,672	34,953	(10,281)	24,672	37,196	(12,524)	39,765	(15,093)
School of Journalism & Mass Communication	14,678	22,036	(7,358)	14,678	24,907	(10,229)	26,310	(11,632)
School of Law	94,496	87,517	6,979	94,496	95,456	(960)	103,022	(8,526)
Classroom Space	221,799	345,240	(123,441)	237,022	361,525	(124,503)	382,761	(145,739)
<b>Other Academic Units</b>	<b>828,374</b>	<b>1,221,335</b>	<b>(392,961)</b>	<b>914,807</b>	<b>1,383,128</b>	<b>(468,321)</b>	<b>1,568,978</b>	<b>(654,171)</b>
Provost & Executive Vice Chancellor	130,033	136,583	(6,550)	131,931	141,658	(9,727)	147,090	(15,159)
Continuing Education & Professional Studies	10,547	16,100	(5,553)	10,547	16,784	(6,237)	17,198	(6,651)
Vice Chancellor, Diversity, Equity & Community Engagement	8,812	11,975	(3,163)	12,637	13,710	(1,073)	13,945	(1,308)
Vice Chancellor, Research & Dean, Graduate Studies	402,567	748,361	(345,794)	483,277	891,160	(407,883)	1,060,339	(577,062)
University Libraries	276,415	308,316	(31,901)	276,415	319,816	(43,401)	330,406	(53,991)
<b>Academic Total</b>	<b>2,692,446</b>	<b>3,658,198</b>	<b>(965,752)</b>	<b>2,918,406</b>	<b>4,078,394</b>	<b>(1,159,988)</b>	<b>4,579,067</b>	<b>(1,660,661)</b>
<b>Administrative Units</b>								
Office of the Chancellor	4,859	5,100	(241)	4,859	5,100	(241)	5,285	(426)
Senior Vice Chancellor and Chief Financial Officer	365,901	502,900	(136,999)	389,498	507,711	(118,213)	510,932	(121,434)
Vice Chancellor, Administration	246,442	305,999	(59,557)	250,465	384,281	(133,816)	411,755	(161,290)
Vice Chancellor, Student Affairs	374,847	650,630	(275,783)	429,712	690,686	(260,974)	726,489	(296,777)
<b>Administrative Total</b>	<b>992,049</b>	<b>1,464,629</b>	<b>(472,580)</b>	<b>1,074,534</b>	<b>1,587,778</b>	<b>(513,244)</b>	<b>1,654,461</b>	<b>(579,927)</b>
<b>Residence Life</b>								
Housing	1,917,789	2,530,289	(612,500)	1,417,526	3,530,026	(2,112,500)	4,267,526	(2,850,000)
<b>Available Space for Reuse</b>								
Unassigned/Uncoded Space	63,858		63,858	60,154		60,154		60,154
Inactive/Conversion Space	28,760		28,760	177,922		177,922		177,922
<b>Available Space for Reuse Total</b>	<b>92,618</b>		<b>92,618</b>	<b>238,076</b>		<b>238,076</b>		<b>238,076</b>
<b>CU-BOULDER TOTAL</b>	<b>5,694,902</b>	<b>7,653,116</b>	<b>(1,958,214)</b>	<b>5,648,542</b>	<b>9,196,198</b>	<b>(3,547,656)</b>	<b>10,501,054</b>	<b>(4,852,512)</b>

ASF = Assignable Square Feet

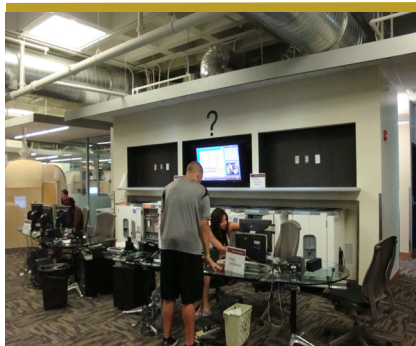
**Limitations of Analysis**

The consultant analyzed university data provided by CU-Boulder for staffing, courses, and facilities information. The data provides a “snapshot in time” of staff, course enrollments, and facilities at the University. Because space is constantly being shifted from one unit to another due to renovations and new construction, some units may have some false reads as they may have too much space (i.e., the inventory shows occupancy of two different locations) or not enough space (i.e., the inventory doesn’t reflect any space as being occupied).

The Space Needs Analysis is a quantitative analysis only. All permanent existing space is counted regardless of its quality. Because several rooms in the facilities inventory have multiple functions (e.g., one room containing a reception space, clerical workstation, storage and filing), it is impossible to accurately distribute the existing space among the appropriate room use and functional categories whereas the proposed area calculations are distributed among the room use and functional categories. Therefore, the relationship between existing space and proposed guideline space for individual categories should be considered as rough comparisons. The only true comparison is between a unit’s total existing space and proposed guideline space.

Space needs analysis for the purpose of planning is a process that estimates space amounts likely to be needed by various units of an institution at current and projected enrollment, staffing and activity levels. Reliability of the findings of any space needs study depends on several factors including the quality of the data, the appropriateness of the space standards used, and the validity of the projections.

The scope of this study did not identify every individual department requirement and did not include detail normally developed in room-by-room program planning of specific facilities. This study is not intended to replace program level analysis. Further, this study only analyzed space needs and did not evaluate the quality of existing space or the suitability of the space. Unless otherwise noted, all findings are in assignable square feet (ASF). ASF is defined as the area measured within the interior walls of a room that can be assigned to a program. It does not include circulation, mechanical or building service spaces.



# **Section 5**

## **Existing Space Analysis**

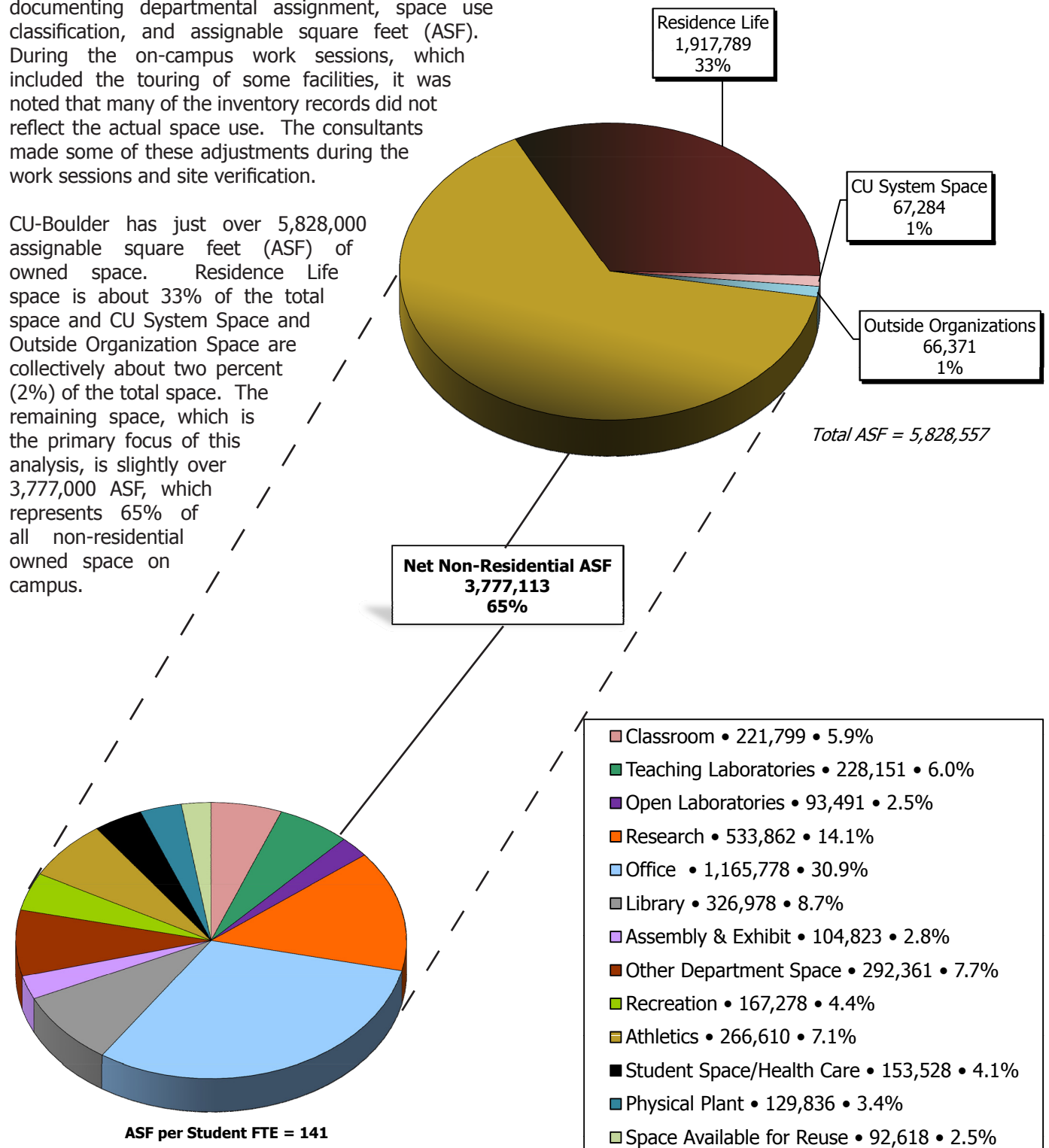


### SECTION 5: EXISTING SPACE ANALYSIS

#### Inventory of Existing Space

CU-Boulder provided a room-by-room inventory documenting departmental assignment, space use classification, and assignable square feet (ASF). During the on-campus work sessions, which included the touring of some facilities, it was noted that many of the inventory records did not reflect the actual space use. The consultants made some of these adjustments during the work sessions and site verification.

CU-Boulder has just over 5,828,000 assignable square feet (ASF) of owned space. Residence Life space is about 33% of the total space and CU System Space and Outside Organization Space are collectively about two percent (2%) of the total space. The remaining space, which is the primary focus of this analysis, is slightly over 3,777,000 ASF, which represents 65% of all non-residential owned space on campus.



### Existing Space Allocation

Between classrooms, teaching laboratories, and open laboratories, the instructional space is about 15% of the Net Non-Residential ASF at CU-Boulder. Office space is 31% of its total net space. Library space is approximately 9%. Research space is about 14% of the net space.

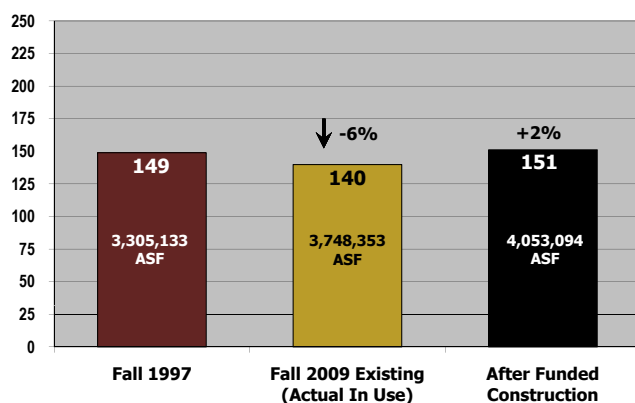
Overall CU-Boulder has about 140 ASF per student full-time equivalent (FTE) including Athletics. If the funded construction (including the Visual Arts Complex, Systems Biotechnology Building, JILA Expansion, Center for Community, the new Basketball/Volleyball practice facility, and the new IBS building) is included as existing ASF (referred to as Projected Existing ASF throughout the study) the space per student FTE would increase to 149 ASF per student FTE.

### Facilities Growth Since the 2000 Master Plan

Since the 2000 Master Plan, approximately 379,400 ASF has been added to CU-Boulder's inventory without including the funded construction projects currently underway. Office space and other departmental space have grown considerably over the last 13 years. Athlete space has grown by 13%. Classroom space has seen about 9% growth, research laboratory space has seen minimal growth of 2%, and instructional laboratories (teaching and open labs) have seen a 4% loss of space.

**Even with the increase in facilities the student growth has outpaced the addition of built resources. While facilities have increased by 13% the student population has increased by 21%. The net result is 6% less space per student FTE. This is before current funded construction.**

ASF per Student FTE



### Facilities Growth (excluding Residential Space)

Space Use Type	From 1997 Master Plan to Fall 2009				From 1997 to After Funded Construction			
	Fall 1997 from 2000 Master Plan	Fall 2009 Existing	Increase / (Decrease)	Percent Change	Newly Funded Construction*	TOTAL ASF After Funded Construction	Increase / (Decrease)	Percent Change
Classrooms	203,311	221,799	18,488	9%	15,223	237,022	33,711	17%
Teaching Labs	170,402	228,151	57,749	34%	(1,473)	226,678	56,276	33%
Open Labs	150,803	93,491	(57,312)	(38%)	20,040	113,531	(37,272)	(25%)
Research Labs	523,747	533,862	10,115	2%	101,417	635,279	111,532	21%
Offices	869,440	1,165,778	296,338	34%	42,373	1,208,151	338,711	39%
Library	313,443	326,978	13,535	4%	0	326,978	13,535	4%
Assembly & Exhibit	80,818	104,823	24,005	30%	28,194	133,017	52,199	65%
Other Dept. Space	294,287	356,219	61,932	21%	14,182	370,401	76,114	26%
Recreation	164,000	167,278	3,278	2%	0	167,278	3,278	2%
Athletics	236,921	266,610	29,689	13%	22,008	288,618	51,697	22%
Student Space	146,882	153,528	6,646	5%	58,904	212,432	65,550	45%
Physical Plant	151,079	129,836	(21,243)	(14%)	3,873	133,709	(17,370)	(11%)
<b>TOTAL ASF**</b>	<b>3,305,133</b>	<b>3,748,353</b>	<b>443,220</b>	<b>13%</b>	<b>304,741</b>	<b>4,053,094</b>	<b>747,961</b>	<b>23%</b>

\*Includes: Basketball/Volleyball Practice Facility, IBS Building, Center for Community, JILA expansion, Systems Biotechnology Building, and Visual Arts Complex.

\*\* Excludes residential space and the inactive conversion space.

At present there is an additional 305,000 ASF in capital projects that have been funded many of which are under construction. Including these projects, the growth in built facilities since 1997 is about 23%. If there is no significant increase in student population when these additional facilities are completed, the space per student will increase by 2%.

As another point of comparison, research awards have increased by 54% from FY 1998 until FY 2008. By contrast, research space has only increased by 21%.

### **Age and Condition of Existing Facilities**

CU-Boulder officials requested that the Paulien team review the age and condition of the existing facilities. The Facilities Management supplied the information required for this analysis. While age of facility does not necessarily equate to quality of facility, it can be an indicator of condition and suitability.

The goal of the University is for the facilities to have a rating of 85% or better – the higher the percentage, the better the condition of the facility. For the review of facilities condition index (FCI), the consultant split facilities condition into six categories: not rated (meaning no rating was provided); 30% or Worse; 31% to 44%; 45% to 64%; 65 to 84%; and 85% or Better. If a facility reaches an FCI of 30% or worse, demolition of the facility should be a consideration. A facility whose FCI is 31% to 44% is generally viewed as a facility that is in poor condition. An FCI of 45% to 84% generally indicates that the building is below average to about average. It may mean that the building's mechanical systems are at the end of their useful life, or that the building is not ADA compliant, or has life safety issues, or the roof may need to be replaced. There is any number of conditions that could cause the building to have a low FCI.

As a final note, neither the age of the building nor its FCI is an indicator of educational adequacy. A legacy building may have been recently renovated which would give it a higher than average FCI, but it may be inadequate for the purposes in which it is being used. As an example, some older buildings regardless of their condition may never be appropriate for instructional or research laboratories. This may be due to: inappropriate floor to ceiling heights; the dimensions of the original structure may not allow for aspect ratios that are suitable for the proposed use; inadequate infrastructure to support equipment and weight loads needed by the occupants; or the building occupies valuable land at a low floor area ratio. Review of existing facilities for educational adequacy was not part of the scope of services for this study.

### ***Age of Facilities by Space Type***

- Less than 5% of the total existing space is 5 years old or under
- Approximately 37% of the total space is more than 50 years old
- About 17% of the total Library space is 5 years old or newer which is the Wise Law Library.

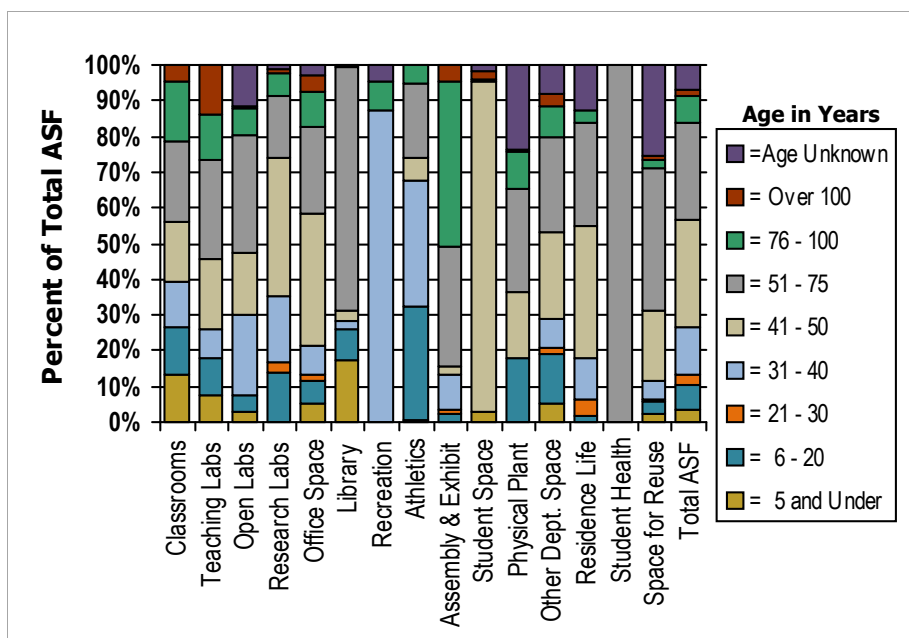
## Section 5

### Existing Space Analysis

### Space Needs Analysis

- About 13% of the total classroom space is 5 year old or newer
- Fifty percent (50%) of the total Assembly & Exhibit Space is over 76 years old which is the largest proportion of older space.
- Proportionately, Athletics has the largest amount of new space where over 30% is between 6 and 20 years old.
- About eight percent (8%) of all facilities do not have a year built in the building inventory.

### ASF by Space Type and Age



Space Type	5 and Under	6 - 20	21 - 30	31 - 40	41 - 50	51 - 75	76 - 100	Over 100	Age Unknown	TOTAL ASF
Classrooms	28,885	30,182		27,475	38,354	49,913	36,941	10,049	0	221,799
Teaching Labs	16,656	23,966		18,149	45,144	63,807	29,310	31,119	0	228,151
Open Labs	2,798	4,226		21,190	15,891	30,922	7,187	728	10,549	93,491
Research Labs	365	73,084	17,501	96,862	208,397	91,669	34,372	5,343	6,269	533,862
Office Space	59,170	75,091	22,899	91,298	430,762	286,654	112,734	54,390	32,780	1,165,778
Library	57,078	28,353		7,849	8,834	223,317			1,547	326,978
Recreation				146,130			13,123		8,025	167,278
Athletics	1,386	85,139	266	93,609	16,525	56,239	13,446		0	266,610
Assembly & Exhibit		2,539	1,121	10,454	2,415	35,121	48,625	4,548	0	104,823
Student Space	3,988				130,841	165		3,197	2,782	140,973
Physical Plant	359	22,893			23,961	37,288	13,671	682	30,982	129,836
Other Dept. Space	14,717	41,690	5,270	23,348	70,617	76,793	26,056	10,605	23,265	292,361
Residence Life		30,734	87,236	226,295	706,470	557,713	62,798		246,543	1,917,789
Student Health						12,555			0	12,555
Space for Reuse	2,107	2,993	653	5,211	17,958	37,042	2,181	967	23,506	92,618
<b>TOTAL ASF</b>	<b>187,509</b>	<b>420,890</b>	<b>134,946</b>	<b>767,870</b>	<b>1,716,169</b>	<b>1,559,198</b>	<b>400,444</b>	<b>121,628</b>	<b>386,248</b>	<b>5,694,902</b>

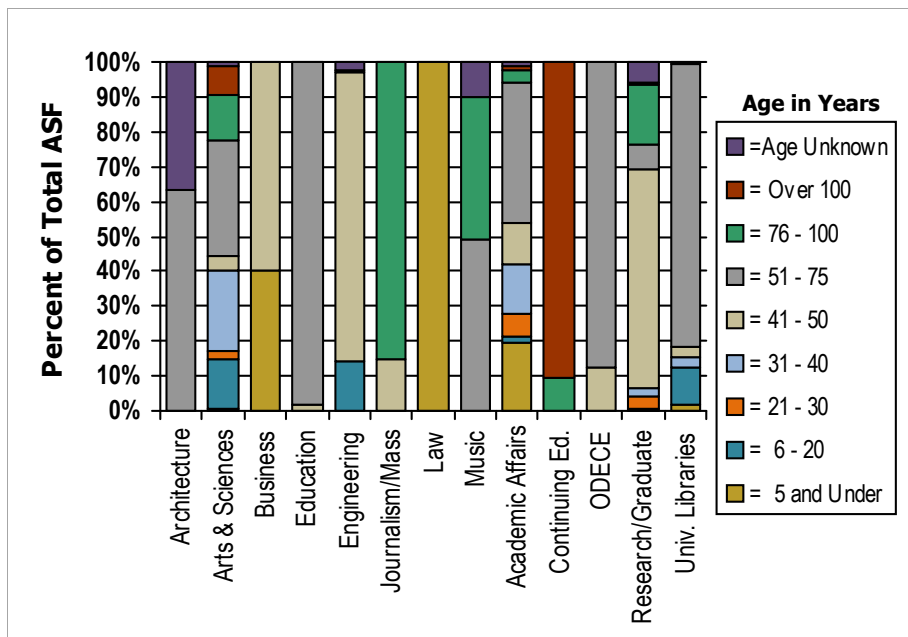
ASF = Assignable Square Feet



### Age of Facilities by College and School

- Proportionately, Continuing Education and Journalism & Mass Communication have the largest percentage of space in facilities that are 76 years or older. Continuing Education has over 90% of its space in facilities that are over 100 years old.
- All of Music's space is over 50 years old with over 40% being over 76 years old.
- Education, Architecture, The Office of Diversity, Equity & Community Engagement (ODECE), and University Libraries have large portions of their facilities that are over 50 years old.
- Arts & Sciences has 55% of its space in facilities that are over 50 years old with 20% being in facilities older than 75 years old. The Humanities and Social Sciences each have half of their facilities in space that is over 75 years old. The administrative portion of the Arts & Sciences (Other) has 35% of its space in facilities that are over 75 years old.
- The School of Law and the Leeds School of Business are in the newest space on campus.
- About 18% of Academic Affairs space is five years old or under.

### ASF by College/School and Age



### ASF by College/School and Age

College / School	5 and Under	6 - 20	21 - 30	31 - 40	41 - 50	51 - 75	76 - 100	Over 100	Age Unknown	TOTAL ASF*
Architecture						31,597			18,120	49,717
Arts & Sciences	7,850	147,851	23,917	237,169	46,251	338,112	137,466	89,046	9,742	1,037,404
Business	30,121				45,187					75,308
Education					414	26,498				26,912
Engineering		48,945			291,505	2,101			9,034	351,585
Journalism/Mass Comm					2,376		13,738			16,114
Law	108,659									108,659
Music						48,278	40,713		9,708	98,699
Academic Affairs	24,884	2,726	9,030	18,823	18,163	54,980	5,013	1,249	2,010	136,878
Continuing Ed.							1,007	9,815		10,822
ODECE					1,105	7,707			0	8,812
Research/Graduate	905	2,362	14,357	8,321	259,212	31,284	69,320	3,691	23,590	413,042
Univ. Libraries	5,445	28,663		7,849	8,834	224,809			1,547	277,147
<b>TOTAL ASF*</b>	<b>177,864</b>	<b>230,547</b>	<b>47,304</b>	<b>272,162</b>	<b>673,047</b>	<b>765,366</b>	<b>267,257</b>	<b>103,801</b>	<b>73,751</b>	<b>2,611,099</b>

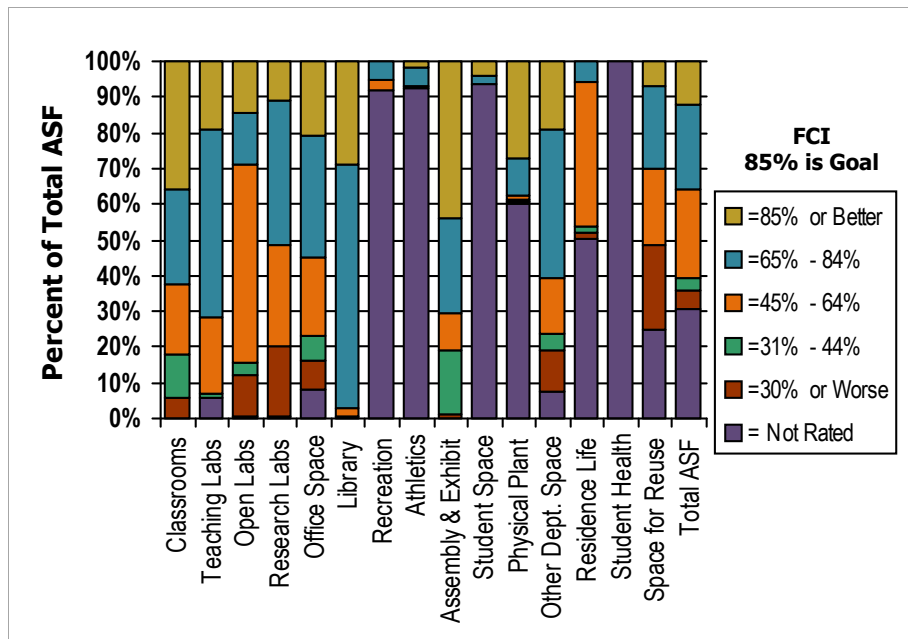
\*Total is for the units included and not a campuswide total.

ASF = Assignable Square Feet

### Facilities Condition by Space Type

- About 30% of all space does not have a facilities condition rating. The majority of this space is auxiliary funded. Unrated facilities are in Recreation, Athletics, Student Space, Residence Life, and Student Health. Sixty percent (60%) of all Physical Plant space is also unrated.
- About 36% of all facilities are in good to average condition. Just over 12% of the total ASF is rated 85% or better. About 22% of the total ASF is rated 65% to 84%.
- Another third of the total ASF is rated below 64% or worse. Nine percent (9%) of the total ASF has an FCI of 44% or worse.
- Only 36% of all classroom space has an FCI of 85% or better suggesting that the current pool of classrooms needs updating.
- About 18% of classroom space and open labs and 20% of research space are in poor condition (FCI of 44% or less). When looking at instructional space and broadening the FCI range to under 65%, the percentage of poor space increases dramatically. Just under 38% of all classrooms, 23% of teaching laboratories, 70% of open laboratories, and just under 50% of all research labs are all below average.
- The majority of all teaching laboratory space is rated under 85% indicating that these facilities are in need of upgrading.
- The bulk of all Library space is rated between 65% and 84% suggesting that these facilities continue to need improvement.
- About 45% of the space available for reuse is in poor condition – rated 64% or less. Half of the poor space has a rating of 30% or worse. Just over 20% of the space available for reuse is not rated. These findings suggest that the greater part of this space will need some form of renovation before being occupied.

## ASF by Space Type and Facilities Condition



Space Type	Not Rated	30% or Worse	31% - 44%	45% - 64%	65% - 84%	85% or Better	TOTAL ASF
Classrooms	0	12,226	27,570	43,549	58,552	79,902	221,799
Teaching Labs	12,740		3,337	48,475	119,781	43,818	228,151
Open Labs	696	10,839	2,957	52,082	13,417	13,500	93,491
Research Labs	3,880	104,512		149,701	216,775	58,994	533,862
Office Space	95,033	92,115	81,284	255,040	402,040	240,266	1,165,778
Library	1,547			7,849	223,985	93,597	326,978
Recreation	154,155			4,514	8,609		167,278
Athletics	246,638		1,408		13,446	5,118	266,610
Assembly & Exhibit	0	1,437	18,323	10,939	27,891	46,233	104,823
Student Space	131,761	165		172	3,541	5,334	140,973
Physical Plant	78,207	696	415	1,724	13,465	35,329	129,836
Other Dept. Space	21,517	34,875	12,122	47,154	121,301	55,392	292,361
Residence Life	959,375	33,913	36,985	773,158	114,358		1,917,789
Student Health	12,555						12,555
Space for Reuse	22,806	22,324		19,486	21,724	6,278	92,618
<b>TOTAL ASF</b>	<b>1,740,910</b>	<b>313,102</b>	<b>184,401</b>	<b>1,413,843</b>	<b>1,358,885</b>	<b>683,761</b>	<b>5,694,902</b>

ASF = Assignable Square Feet

### Facilities Condition by College and School

- Architecture has the largest percentage of space with an FCI of 30% or worse. While Arts & Sciences only has 10% with this rating, the amount of space is five times that of Architecture. The rest of Architecture's space (over 65%) is rated below average.
- The Vice Chancellor for Research and Dean of Graduate School has about 30% of its space in facilities that are rated 30% or worse with another 5% in facilities rated 31% to 44%.

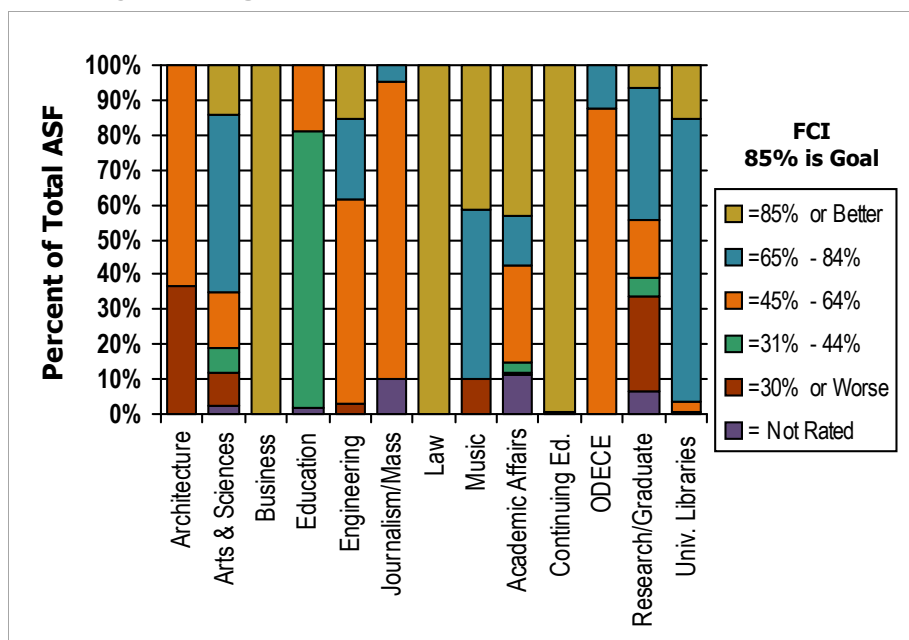
## Section 5

### Existing Space Analysis

### Space Needs Analysis

- Eighty percent (80%) of Education's space has an FCI of 31% to 44% with its remaining space in facilities that are rated between 45% and 64%.
- Journalism & Mass Communication occupies space where 80% of it is in below average condition – 45% to 64%.
- Most of ODECE's space is below average.
- About 60% of Engineering's space is rated between 45% and 64% – below average.
- Arts & Sciences has 32% of its space in facilities that are rated 64% or worse. The Humanities have 55% of its space in buildings with FCIs of 44% or less. The Social Sciences has 40% of its space in facilities that are rated 31% to 44%. About 32% of the Natural Sciences are in spaces with FCI ratings of 31% to 44%.
- The Leeds School of Business, School of Law, and Continuing Education all occupy spaces that are in good condition.

### ASF by College/School and Facilities Condition



College / School	Not Rated	30% or Worse	31% - 44%	45% - 64%	65% - 84%	85% or Better	TOTAL ASF*
Architecture		18,120		31,597			49,717
Arts & Sciences	23,552	99,279	73,618	168,369	523,157	149,429	1,037,404
Business						75,308	75,308
Education	414		21,390	5,108			26,912
Engineering	0	11,135		205,221	81,415	53,814	351,585
Journalism/Mass Comm	1,658			13,738	718		16,114
Law						108,659	108,659
Music		9,708			48,278	40,713	98,699
Academic Affairs	15,541	907	3,646	38,367	23,548	54,869	136,878
Continuing Ed.				57		10,765	10,822
ODECE	0			7,707	1,105		8,812
Research/Graduate	27,916	110,180	22,992	68,262	157,109	26,583	413,042
Univ. Libraries	1,547			7,849	239,088	28,663	277,147
<b>TOTAL ASF*</b>	<b>70,628</b>	<b>249,329</b>	<b>121,646</b>	<b>546,275</b>	<b>1,074,418</b>	<b>548,803</b>	<b>2,611,099</b>

ASF = Assignable Square Feet

## Space Classifications

Facility space is calculated according to major space classifications as outlined in the National Center for Education Statistics, Postsecondary Education Facilities Inventory and Classification Manual, 2006 Edition. Some additional points of clarification are:

- Classrooms are those rooms that are regularly scheduled.
- Teaching laboratories are laboratories that are regularly scheduled.
- Open laboratories are laboratories that are irregularly scheduled. This category includes open computer laboratories. They may be laboratories used as combination teaching laboratories and open access laboratories. The Open Laboratory category includes music practice rooms, art studios, and laboratories built for one individual or a small group. It also includes senior capstone space and collaborative learning areas.
- Research laboratories are laboratories in which research is conducted. It also includes space that supports the main research laboratory.
- Office includes offices, office supply and storage areas, workrooms, reception areas, conference rooms, and conference room service space.
- Library space is defined as space dedicated to the main and branch libraries, and not departmental study rooms that serve as an unofficial library.
- Assembly/Exhibit Space is space that accommodates many persons for events such as dramatic and musical activities or space that is used for exhibitions of materials or art such as a museum or an art gallery. It includes planetariums and herbariums.
- Other Academic/Administrative Department Space includes: departmental libraries; building or departmental student lounges, armories, media production rooms, clinics, demonstration rooms, meeting rooms, and central computer or telecommunications space. It also includes field buildings, animal quarters, and greenhouses that support instruction. Field buildings and greenhouses in support of physical plant and campus grounds are included as Physical Plant Space.
- Recreation space is indoor space and may include gymnasias, locker rooms, dance studios, equipment storage, and fitness centers.
- Athletics space is indoor space (outdoor fields and outdoor spectator seating are excluded) and includes such areas as gymnasias, pools, locker rooms, equipment storage, strength training areas, training rooms, and concessions.
- Student Health Care includes space that is used to care for students. It may include a pharmacy.
- Student Space is space used for university life and student activities functions. It includes the bookstore, non-residential student dining, student lounges, student organization and government space, and ballroom space.
- Physical Plant support facilities provide centralized space for support systems and services to a campus.





---

# **Section 6**

## **Classroom and Teaching Laboratory Utilization**

---





## **SECTION 6: CLASSROOM AND TEACHING LABORATORY UTILIZATION**

### **How Is Utilization Determined?**

The utilization of classrooms and teaching laboratories was examined using CU-Boulder's Fall 2009 course and facilities data. Understanding how classrooms and teaching laboratories are scheduled and utilized provides the foundation for and assists in the formulation of the guideline application for these two space categories. The number of student stations for each classroom was first provided in the facilities inventory. Supplemental data provided by the University Registrar as well as field verification provided additional input. The teaching laboratories did not have student stations; therefore, student station occupancy percentages could not be calculated.

The utilization analysis includes scheduled classroom use by day and time of day, as well as classroom and teaching laboratory utilization analyzing average weekly room hour use and student station occupancy percentage. This information is used to guide the space needs analysis component in the overall master planning process.

The utilization of a room is determined by calculating the average enrollment of the courses taught in a room along with total weekly student contact hours, weekly room hours, and student station occupancy percentage. Weekly student contact hours are calculated by multiplying the enrollment of a course by the weekly contact, or room hours, during which the course is held. Weekly room/contact hours are determined by calculating the number of hours a course meets (start and end times) and multiplying the result by the number of days the course meets each week. Both of these factors are totaled on a room-by-room basis. If a course does not meet for a full term, the number of hours for a room is prorated by the number of weeks in a semester.

**WEEKLY ROOM/CONTACT HOURS (WRH OR WCH)** = No. of Days X ((End Time - Start Time)/60)

**WEEKLY STUDENT CONTACT HOURS (WSCH)** = Students X Weekly Room/Contact Hours

**WEEKLY STUDENT CONTACT HOUR CAPACITY** = Student Stations X Weekly Room/Contact Hours

**STUDENT STATION OCCUPANCY %** = WSCH / WSCH Capacity

**HOURS PER SEAT** = WSCH / No. of Student Stations

The student station occupancy for a room is determined by dividing the room's weekly student contact hours by the room's weekly student contact hour capacity (a course's weekly contact hours times the room's number of student stations).

### **Which Classrooms are Included?**

For this analysis, only those classrooms that are centrally scheduled classrooms or departmental classrooms with scheduled use are included. The facilities

inventory indicated that there were 270 classrooms; however, only 235 of those rooms had scheduled use. There were approximately 35 rooms (all of which were assigned to an academic department) that did not have any scheduled use or were only scheduled for about three hours per week. These 35 rooms were excluded from the utilization analysis but their total square footage was included in the classroom space needs. The consultants recommend that these rooms be reviewed for their primary use and be reclassified accordingly. For more details, see *Section 7 • Space Needs Guideline Applications, Classroom and Classroom Service Space*.

### Scheduled Classroom Use by Day and Hour

For Fall 2009, Monday through Friday, from 9:30 AM until 2:59 PM no fewer than 75% of all rooms are scheduled as an average. The most scheduled times are at 11:00 AM, 1:00 PM, and 2:00 PM on Tuesdays and Thursdays when 85% of all rooms are scheduled. The next most heavily scheduled time is at 10:00 AM also on Tuesdays and Thursdays. On Tuesdays and Thursdays there are several times throughout the day where 80% or more of the classrooms are scheduled. Not surprisingly, use on Friday afternoon starting at 3:00 PM is the lowest, although 41% of the classrooms are scheduled up until 4:00 PM which is higher than normal. There is very little scheduled use on Saturdays and Sundays.

It is worth noting that when an institution consistently reaches and exceeds the 80% level of classrooms in use, the more difficult it becomes to find available classrooms in the right geographical locations with the right classroom capacities. CU-Boulder is consistently reaching these levels between the hours of 9:30 AM and 2:59 PM which tend to be the heaviest scheduled time on most residential campuses. The following table and graphs illustrate the classroom use by most popular start times each day of the week. The average percent of classrooms in use is based on Monday through Friday.

### Scheduled Classroom Use by Day and Popular Start Time

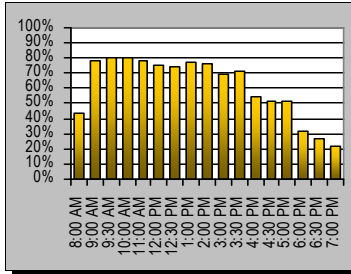
Time of Day	Monday		Tuesday		Wednesday		Thursday		Friday		Average*	
	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use
8:00 AM	103	44%	149	63%	114	49%	147	63%	96	41%	128	55%
9:00 AM	184	78%	139	59%	182	77%	140	60%	178	76%	161	69%
9:30 AM	188	80%	191	81%	185	79%	191	81%	178	76%	189	80%
10:00 AM	188	80%	196	83%	188	80%	196	83%	182	77%	192	82%
11:00 AM	183	78%	199	85%	183	78%	200	85%	174	74%	191	81%
12:00 PM	176	75%	173	74%	177	75%	175	74%	163	69%	175	75%
12:30 PM	175	74%	178	76%	176	75%	183	78%	162	69%	178	76%
1:00 PM	180	77%	198	84%	183	78%	199	85%	163	69%	190	81%
2:00 PM	179	76%	199	85%	181	77%	197	84%	160	68%	189	80%
3:00 PM	161	69%	170	72%	171	73%	169	72%	96	41%	168	71%
3:30 PM	167	71%	167	71%	177	75%	159	68%	97	41%	168	71%
4:00 PM	128	54%	171	73%	145	62%	163	69%	27	11%	152	65%
4:30 PM	120	51%	167	71%	138	59%	166	71%	25	11%	148	63%
5:00 PM	120	51%	95	40%	129	55%	95	40%	4	2%	110	47%
6:00 PM	75	32%	72	31%	76	32%	62	26%	0	0%	71	30%
6:30 PM	64	27%	58	25%	63	27%	50	21%	0	0%	59	25%
7:00 PM	52	22%	51	22%	47	20%	40	17%	0	0%	48	20%

Note: Based on total classrooms of 235

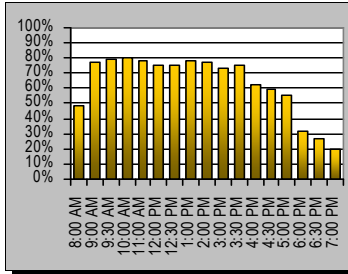
\* Based upon the consultant's experience, Friday is typically underutilized, therefore the average is calculated on Monday thru Thursday use.

October 2010

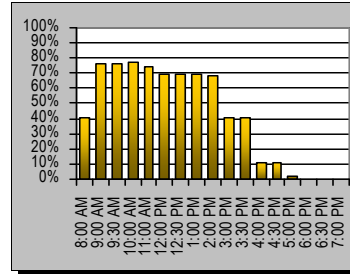
## Percent of Classrooms In Use Monday



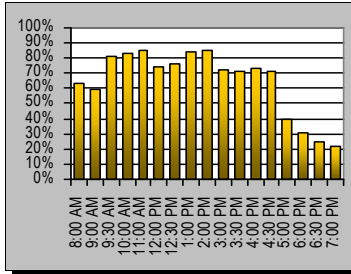
## Wednesday



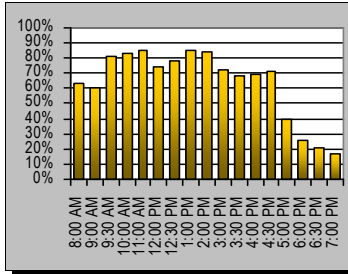
## Friday



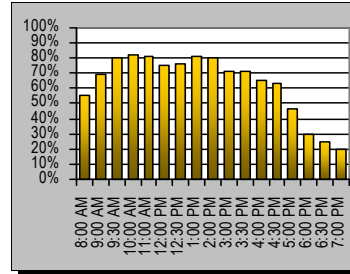
## Tuesday



## Thursday



## Average (Mon-Thurs)



Of the 235 classrooms there are 164 (about 70%) that are under the purview of the Registrar. Approximately 88% of these centrally scheduled classrooms are in use Monday through Friday from 9:30 AM through 2:59 PM. The peak time is on Thursday at 11:00 AM when 91% of the classrooms are scheduled. Even at 8:00 AM on Tuesdays and Thursdays over 80% of these rooms are in use. The strong utilization of these rooms illustrate that the Registrar is in need of more classrooms. As will be shown on the following pages, departmental classrooms are not scheduled nearly as much. If some of the departmental classrooms can be turned into centrally scheduled classrooms, some additional efficiencies could be gained.

The following tables and graphs show the scheduling patterns for centrally scheduled classrooms only.

## Section 6

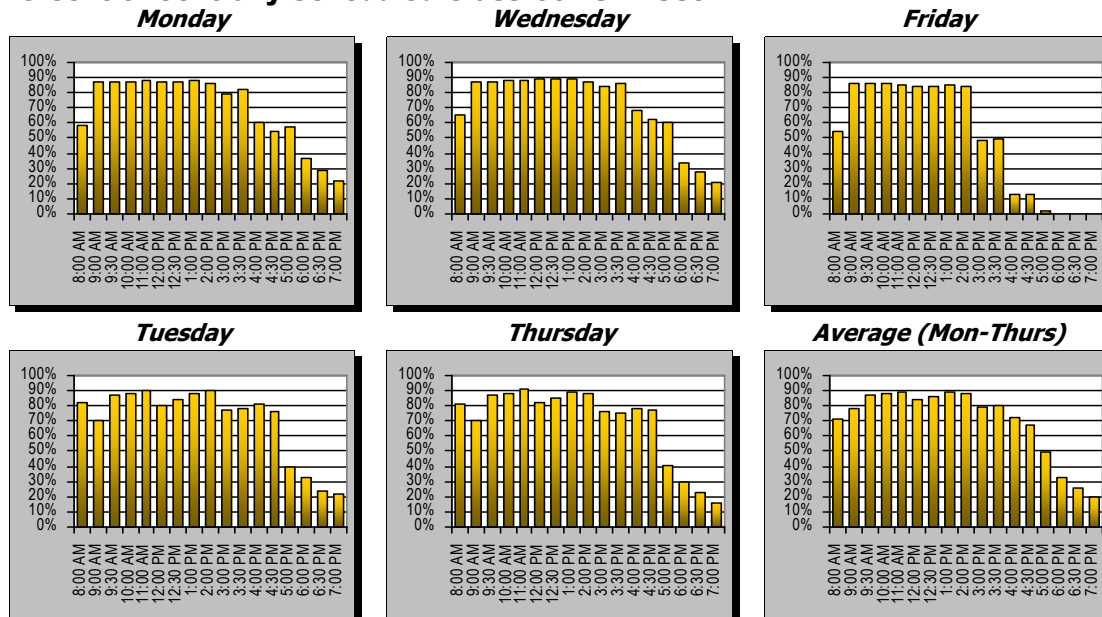
### Centrally Scheduled Classroom Use by Day and Popular Start Time

Time of Day	Monday		Tuesday		Wednesday		Thursday		Friday		Average*	
	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use
8:00 AM	95	58%	135	82%	106	65%	133	81%	88	54%	117	71%
9:00 AM	143	87%	114	70%	142	87%	115	70%	141	86%	129	78%
9:30 AM	143	87%	142	87%	142	87%	143	87%	141	86%	143	87%
10:00 AM	142	87%	144	88%	144	88%	145	88%	141	86%	144	88%
11:00 AM	144	88%	148	90%	144	88%	149	91%	139	85%	146	89%
12:00 PM	142	87%	132	80%	146	89%	134	82%	138	84%	139	84%
12:30 PM	143	87%	137	84%	146	89%	139	85%	138	84%	141	86%
1:00 PM	144	88%	145	88%	146	89%	146	89%	140	85%	145	89%
2:00 PM	141	86%	147	90%	142	87%	144	88%	137	84%	144	88%
3:00 PM	129	79%	126	77%	138	84%	125	76%	81	49%	130	79%
3:30 PM	134	82%	128	78%	141	86%	123	75%	82	50%	132	80%
4:00 PM	98	60%	133	81%	111	68%	128	78%	22	13%	118	72%
4:30 PM	89	54%	124	76%	102	62%	127	77%	21	13%	111	67%
5:00 PM	94	57%	65	40%	99	60%	68	41%	3	2%	82	50%
6:00 PM	60	37%	54	33%	55	34%	50	30%	0	0%	55	33%
6:30 PM	48	29%	39	24%	46	28%	37	23%	0	0%	43	26%
7:00 PM	36	22%	36	22%	34	21%	27	16%	0	0%	33	20%

Note: Based on total classrooms of 164

\* Based upon the consultant's experience, Friday is typically underutilized, therefore the average is calculated on Monday thru Thursday use.

### Percent of Centrally Scheduled Classrooms In Use



### Classroom Utilization Analysis By College/School

Overall, the 235 classrooms are scheduled an average of 37 hours per week at 69% student station occupancy. The centrally scheduled classrooms are scheduled the most with an average of 42 hours per week at 72% student station occupancy which is among some of the highest utilization rates that the consultant sees for Universities like CU-Boulder. Collectively, the departmental classrooms averaged 26 weekly room hours with a 58% occupancy average. The Leeds School of Business uses its 16 classrooms the next highest, averaging

October 2010

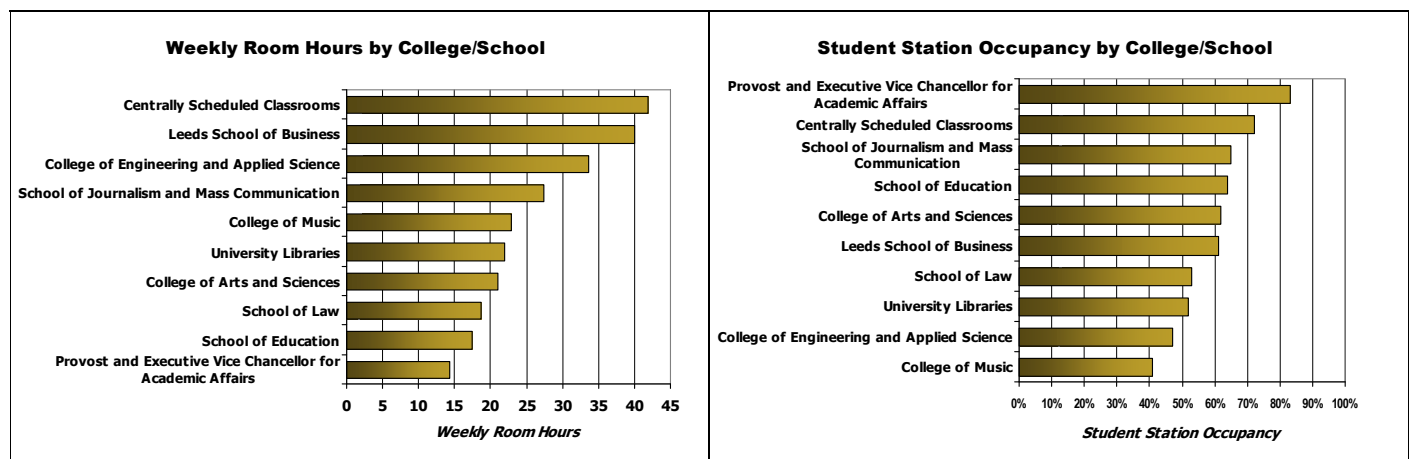
40 hours per week followed by Engineering and Applied Science at 34 hours per week. The lowest use is the two classrooms assigned to the Provost, which are scheduled 14 hours per week. Slightly higher use was shown for classrooms assigned to the School of Education at 18 hours per week and the School of Law at 19 hours per week.

The two classrooms assigned to the Provost have the best student station occupancy average at 83% followed by the centrally scheduled classrooms with a 72% fill rate. The lowest occupancy average is attained by the College of Music at 41%. Slightly higher occupancy was achieved by the eight classrooms in the College of Engineering and Applied Science at 47%. Both the Library and School of Law classrooms are around 52% as an average occupancy rate.

As stated earlier, the centrally scheduled classrooms are at full capacity. With the high occupancy rates achieved, this provides very little flexibility as CU-Boulder looks to grow its student enrollment.

## Classroom Utilization Analysis by College/School Summary

College/School Unit	No. of Rooms	Average Room Size	Average ASF per Station	Average Section Size	Average Weekly Room Hours	Hours in Use Student Station Occupancy %
Centrally Scheduled Classrooms	164	824	17	42	42	72%
College of Arts and Sciences	21	633	22	18	21	62%
College of Engineering and Applied Science	8	791	19	22	34	47%
College of Music	6	645	19	14	23	41%
Leeds School of Business	16	1,051	19	33	40	61%
Provost and Executive Vice Chancellor for Academic Affairs	3	380	24	12	14	83%
School of Education	3	438	19	15	18	64%
School of Journalism and Mass Communication	3	479	25	13	27	65%
School of Law	10	1,038	17	35	19	53%
University Libraries	1	422	21	11	22	52%
<b>AVERAGE TOTAL</b>	<b>235</b>	<b>809</b>	<b>18</b>	<b>36</b>	<b>37</b>	<b>69%</b>



## Section 6

### Classroom Utilization Analysis by Capacity

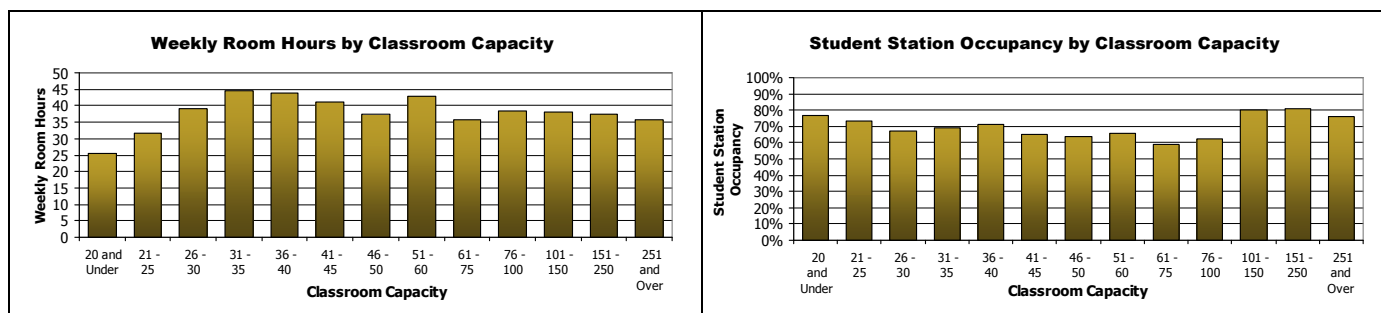
The 22 classrooms with capacities of 31 to 35 stations have the highest average weekly room hour average at 45 hours, followed by the 21 rooms with a capacity of 36 to 40, averaging 44 hours per week. Also worth noting are the eleven rooms that seat between 51 and 60 with a 43 hour average and the fourteen rooms that seat between 41 and 45 with a 41 weekly room hour average. Classrooms with capacities of 20 and Under are scheduled the least at 26 hours per week – there are 31 rooms in this size range. Also with a lower average (32 WRH) are the 24 classrooms with capacities of 21 to 25.

The nine (9) rooms with capacities of 61 to 75 have the lowest student station occupancy rate at 59% while the two groups that seat between 151 and 250 and 101 to 150 have an impressive 81% and 80% student station occupancy average respectively. Usually classrooms with capacities of over 100 tend to have much lower student station occupancy rates.

CU-Boulder does not appear to follow typical utilization trends. Usual trends show that smaller capacity classrooms are not scheduled as much as the larger classrooms, so as the capacity of the classrooms increases, so do the weekly room hours. Conversely, smaller classrooms tend to have a greater student station occupancy ratio while the larger rooms have a lower student station occupancy ratio with many as low as 25% to 33%.

### Classroom Utilization Analysis by Capacity Summary

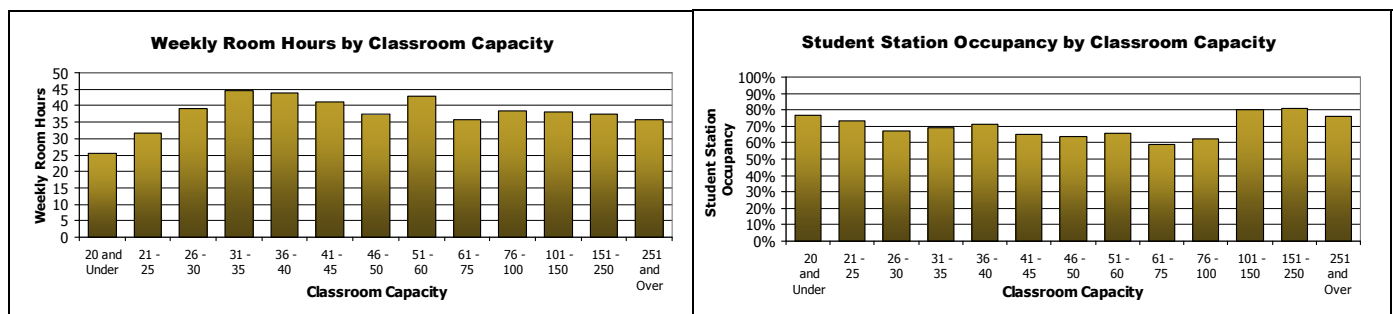
Room Capacity	No. of Rooms	Average Room Size	Average ASF per Station	Average Section Size	Average Weekly Room Hours	Hours in Use Student Station Occupancy %
20 and Under	31	395	22	13	26	77%
21 - 25	24	548	23	17	32	73%
26 - 30	39	459	17	18	39	67%
31 - 35	22	593	18	24	45	69%
36 - 40	21	650	17	27	44	71%
41 - 45	14	722	17	28	41	65%
46 - 50	26	859	18	30	37	64%
51 - 60	11	871	16	35	43	66%
61 - 75	9	1,166	17	40	36	59%
76 - 100	20	1,304	15	54	38	62%
101 - 150	7	1,608	13	99	38	80%
151 - 250	7	2,099	11	148	37	81%
251 and Over	4	3,881	10	305	36	76%
<b>AVERAGE TOTAL</b>	<b>235</b>	<b>809</b>	<b>18</b>	<b>36</b>	<b>37</b>	<b>69%</b>



Below are graphs for the 164 Centrally Scheduled Classrooms by Capacity. The capacity group with the lowest use is the 20 and Under capacity group where the 16 rooms are scheduled 31 hours per week. There are four capacity groups where the occupancy averages tend to dip lower than the others – 41 to 45, 46 to 50, 51 to 60, and 61 to 75.

### Centrally Scheduled Classroom Utilization Analysis by Capacity

Room Capacity	No. of Rooms	Average Room Size	Average ASF per Station	Average Section Size	Average Weekly Room Hours	Hours in Use Student Station Occupancy %
20 and Under	16	385	21	15	31	82%
21 - 25	13	461	20	18	41	76%
26 - 30	30	442	16	20	43	71%
31 - 35	20	567	17	24	45	71%
36 - 40	19	647	17	27	46	71%
41 - 45	8	718	17	27	44	62%
46 - 50	18	841	17	31	43	65%
51 - 60	9	870	16	36	47	68%
61 - 75	4	1,161	16	49	44	68%
76 - 100	9	1,243	14	65	43	73%
101 - 150	7	1,608	13	99	38	80%
151 - 250	7	2,099	11	148	37	81%
251 and Over	4	3,881	10	305	36	76%
<b>AVERAGE TOTAL</b>	<b>164</b>	<b>824</b>	<b>17</b>	<b>42</b>	<b>42</b>	<b>72%</b>





## Section 6

### Classroom Utilization by Building

For this part of the analysis, the consultants reviewed only those buildings that contained more than four classrooms. The 17 buildings listed collectively house 78% of the classrooms included in this utilization study. For the 183 classrooms contained within them, the weekly room hour average increases to 39 hours per week with a 70% student station occupancy.

Of the buildings listed, the classrooms in both Clare Small Arts & Sciences and Hellems Arts & Sciences Buildings average 45 hours of scheduled use per week, the most of all 17 buildings. Hale Science Building, Eaton Humanities Building, Muenzinger Psychology and Biopsychology Building, Guggenheim

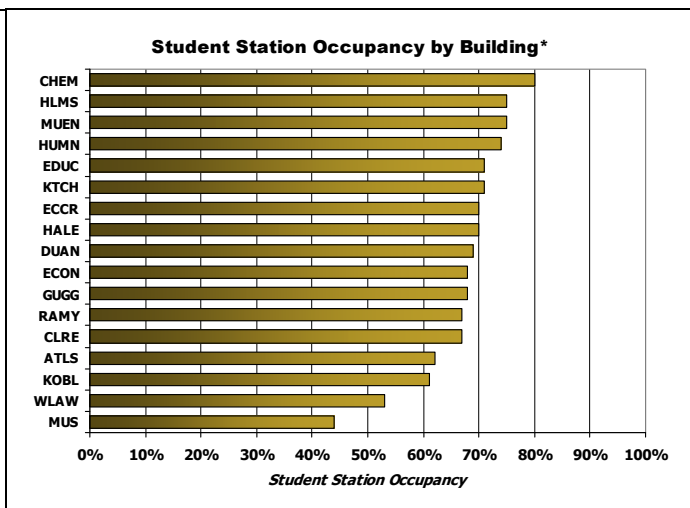
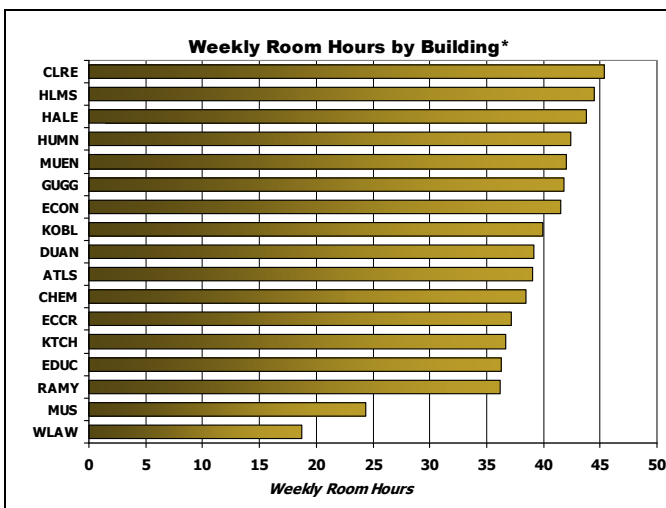
Geography Building, Economics Building, and Leeds School of Business each averages between 40 and 44 hours per week. The classrooms in the Wolf Law Building only average 19 hours per week and the classrooms in Imig Music Building average 24 hours per week, which are the lowest of all 17 buildings. Both of these buildings also have the lowest student station occupancy percentages.

The five classrooms in Cristol Chemistry and Biochemistry Building have the highest occupancy average at 80% followed by Hellems Arts & Sciences Building and Muenzinger Psychology and Biopsychology Building each at 75% and the Eaton Humanities Building at 74%.

### Classroom Utilization Analysis by Building Summary\*

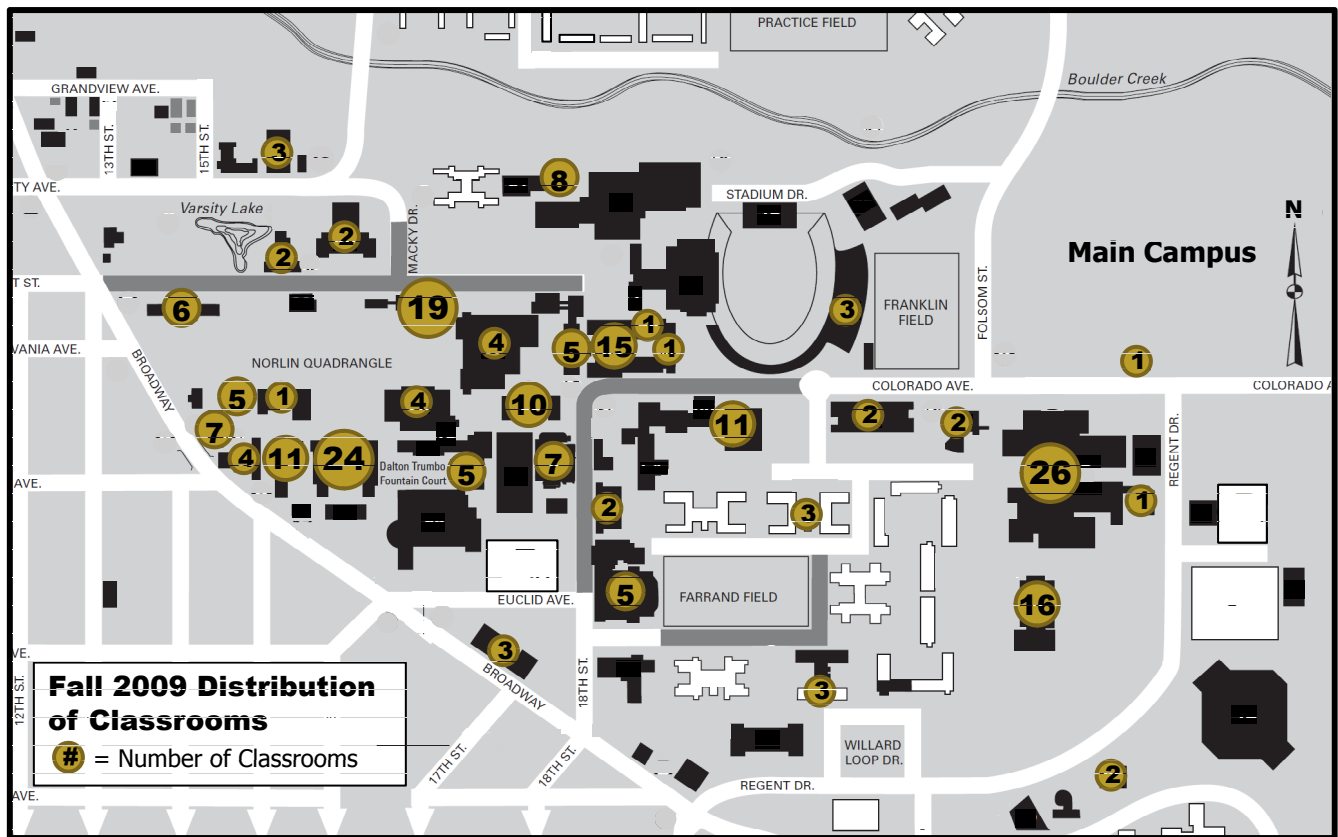
Building Name and Id		No. of Rooms	Average Room Size	Average ASF per Station	Average Section Size	Average Weekly Room Hours	Hours in Use Student Station Occupancy %
Atlas Center	ATLS	7	999	22	37	39	62%
Clare Small Arts & Sciences	CLRE	8	575	15	26	45	67%
Cristol Chemistry & Biochem Bldg	CHEM	5	1,476	15	113	39	80%
Duane Physics	DUAN	11	635	16	26	39	69%
Eaton Humanities Bldg	HUMN	19	885	21	41	42	74%
Economics Bldg	ECON	7	613	17	24	41	68%
Education Bldg	EDUC	11	613	17	28	36	71%
Engineering Classroom Wing	ECCR	19	799	15	38	37	70%
Guggenheim Geography Bldg	GUGG	5	657	18	25	42	68%
Hale Science Bldg	HALE	6	929	15	50	44	70%
Hellems Arts & Sciences Bldg	HLMS	24	622	15	33	45	75%
IMIG Music Bldg	MUS	5	586	20	13	24	44%
Ketchum Arts & Sciences Bldg	KTCH	10	498	16	22	37	71%
Koelbel Building - Leeds Sch of Bus	KOBL	16	1,051	19	33	40	61%
Muenzinger Psych & Biopsych	MUEN	15	914	16	52	42	75%
Ramaley Biology Bldg	RAMY	5	1,026	14	56	36	67%
Wolf Law Building	WLAW	10	1,038	17	35	19	53%
<b>AVERAGE TOTAL</b>		<b>183</b>	<b>802</b>	<b>17</b>	<b>37</b>	<b>39</b>	<b>70%</b>

\* For Buildings with more than 4 classrooms.



\* For Buildings with more than 4 classrooms.



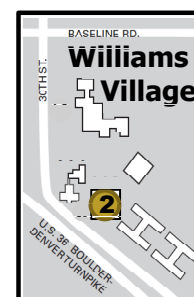
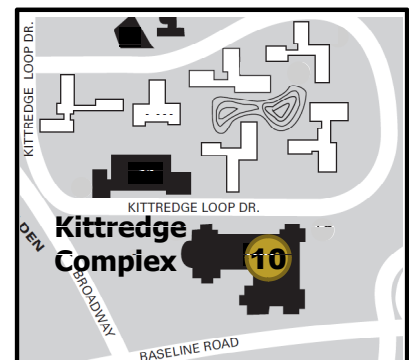


## Classroom Precinct Study

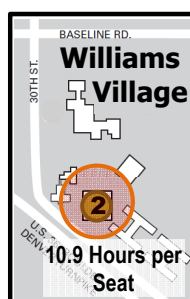
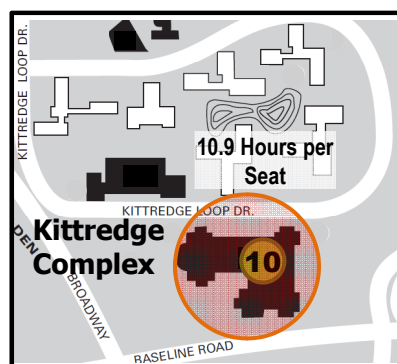
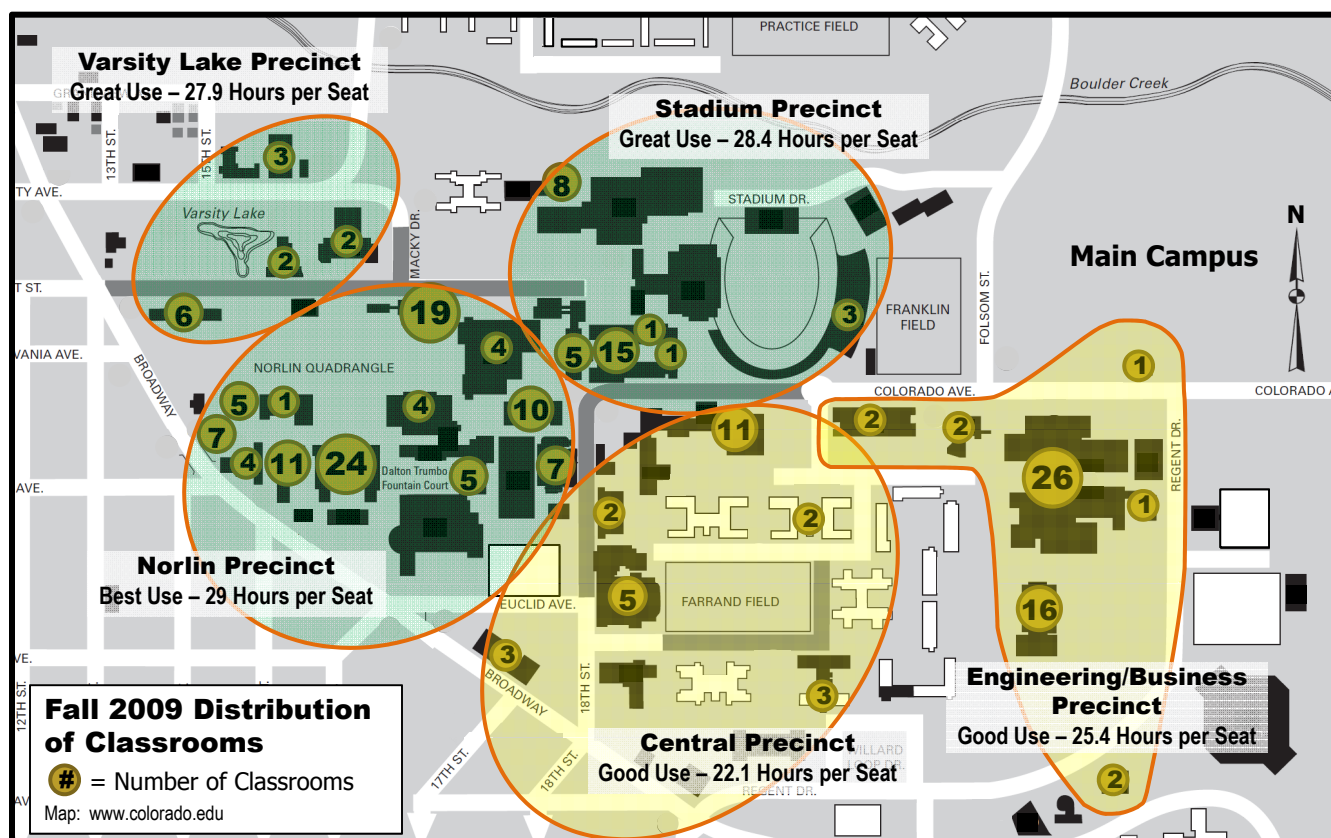
To put the findings described previously into perspective, the consultant reviewed the distribution of the 235 classrooms by building. The following map illustrates the classroom densities which allowed the consultant to split the campus into classroom precincts. These precincts are somewhat arbitrary based upon geography and walking distances. The circle on each building indicates the number of classrooms in each building.

Seven precincts were chosen and labeled as, Norlin, Stadium, Varsity Lake, Engineering/Business, Central, Kittredge, and Williams. Taking the results of the utilization findings by building and totaling them by precinct starts to illustrate the most utilized and productive areas on campus. The total weekly student contact hours (WSCH) generated in the classrooms is divided by the total number of seats located in the precinct which produces the average weekly hours per seat. The average for the campus is 26.5 hours per seat which is 13% higher than the classroom utilization target set for this study (35 weekly room hours time 67% student station occupancy equals 23.5 weekly seat hours).

When reviewing the individual classroom precincts, Norlin has the greatest seat usage at 29 weekly hours, about six hours greater than the target. The Stadium and Varsity Lake precincts also exceed the utilization target. The Engineering/Business Precinct is short about one hour per seat and the Central precinct is about three hours short of the target. Both the Kittredge and Williams precincts are less than half of the target.



## Section 6



### Classroom Precinct Usage

Precinct	No. of Class-rooms	Total No. of Seats	Weekly Student Contact Hours	Average Weekly Hours per Seat
Norlin	101	4,989	144,706	29.0
Stadium	33	2,134	60,644	28.4
Varsity Lake	13	600	16,760	27.9
Engineering/Business	50	3,104	78,804	25.4
Central	26	875	19,378	22.1
Kittredge	10	639	6,993	10.9
Williams	2	50	547	10.9
<b>CU-Boulder Average</b>				<b>26.5</b>
<b>Space Needs Utilization Target</b>				<b>23.5</b>

## National Perspective on Classroom Utilization

Approximately half the states either have a statewide expectation or there are system expectations in one or more of their public higher education systems. The lowest classroom target currently in use is 30 hours per week. That used to be a widely accepted standard and remains the most commonly used figure. In many jurisdictions it was based on day usage only, with evening and weekend usage being excluded from the expectation. Recently, the more common practice is to use that target as an all-hours expectation.

In a few states, much higher utilization targets have been adopted. The average of those systems which have classroom utilization targets is now 35 hours.

The consultants have performed utilization studies for over 100 campuses. The most common findings are between 25 average weekly hours per classroom and 35 average weekly hours per classroom. This is scheduled use, for credit instruction.

The second utilization factor, which is normally part of the utilization expectation in those jurisdictions which have adopted them, is the percentage of seats filled when the rooms are in use. The most widely used number remains 60%. There has recently been a strong push to increase the utilization factor to 67%. One jurisdiction, the Arizona Board of Regents, has gone to 75% for a particular subset of classrooms. In the many studies the consultant has conducted, the actual use tends to be between 50% and 65%. Because institutions do not ultimately control the final enrollment in a specific course, there will always be a degree of mismatch between estimated course size and the actual size of the course.

### National Classroom Guideline Survey

Scheduled Use	Weekly Room Hours	Student Station Occupancy Percentage
Average of Guidelines	35	64%
Median	32	65%
Most Used Guideline	30	60%
<b>Study Goals</b>	<b>35</b>	<b>65%</b>
<b>CU-Boulder</b>	<b>37</b>	<b>69%</b>
<b>CU-Boulder General Purpose Classrooms</b>	<b>42</b>	<b>72%</b>

## Teaching Laboratory Utilization

The Fall 2009 facilities inventory reflected more than 233 rooms classified as teaching laboratories. However, only 114 of the teaching laboratories had any scheduled use verifiable through the Fall 2009 course data. As a result of some of the tours conducted at the time of the work sessions, the consultants reclassified approximately a dozen rooms. In conversation with CU-Boulder officials, it was discovered that many of these rooms serve as secondary laboratories or support to the main laboratory. Additionally, some of these laboratories may be best classified as an open laboratory (220 space use code). The remaining 119 rooms have been excluded from this utilization study but the space has been included in the teaching laboratory space needs analysis.

As the tables and charts indicate, CU-Boulder teaching laboratories averaged 20 room hours per week. The facilities inventory does not track the number of student stations contained within these laboratories as they are departmental spaces; therefore, a student station occupancy rate cannot be calculated.

The School of Business had the highest average scheduled usage at 25 hours among the colleges and schools. The Natural Sciences in the College of Arts &

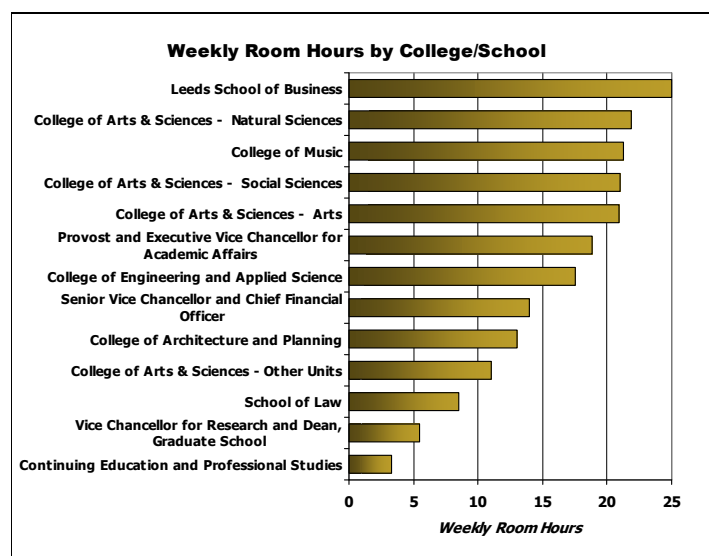
## Section 6

Sciences has 50 laboratories that averaged 22 hours per week, which is about 44% of the total number of teaching laboratories included in this utilization study. The College of Music and the Arts and Social Sciences, units of the College of Arts & Sciences, each averaged 21 hours per week. The College of Engineering and Applied Science schedules its 19 laboratories an average of 18 hours per week.

There are a few laboratories included in this utilization study that may also need to be reclassified. These include the teaching laboratories under Continuing Education, School of Law, and the Vice Chancellor for Research and Dean of the Graduate School. These laboratories, while used for instruction, may be more of an open laboratory.

### Teaching Laboratory Utilization Analysis by College/School Summary

College/School Unit	No. of Rooms	Average Room Size	Average Section Size	Average Weekly Room Hours
College of Architecture and Planning	2	545	18	13
College of Arts & Sciences - Arts	21	1,843	17	21
College of Arts & Sciences - Natural Sciences	50	943	19	22
College of Arts & Sciences - Social Sciences	2	527	13	21
College of Arts & Sciences - Other Units	1	3,353	15	11
College of Engineering and Applied Science	19	1,549	19	18
College of Music	6	1,287	23	21
Continuing Education and Professional Studies	1	798	6	3
Leeds School of Business	1	1,457	31	25
Provost and Executive Vice Chancellor for Academic Affairs	6	1,010	17	19
School of Law	2	638	11	9
Senior Vice Chancellor and Chief Financial Officer	1	800	21	14
Vice Chancellor for Research and Dean, Graduate School	2	680	11	6
<b>AVERAGE</b>		<b>230</b>	<b>18</b>	<b>20</b>
<b>TOTAL</b>	<b>114</b>			



# **National Perspective on Teaching Laboratory Utilization**

As with classroom utilization, guideline targets are usually implemented by states, systems, or institutions within the public education sector. These targets tend to oversimplify the use of teaching laboratories. Some guideline targets are based on discipline while others are based on the intensity in which a discipline relies on laboratories for instructional delivery.

The most used guideline targets have expectations of 20 hours per week at an 80% student station occupancy rate. In an effort to increase the use of it laboratories, one state has raised its utilization goals to an extreme of 40 hours per week at 85% student station occupancy. One set of published guidelines recommends 11.25 weekly room hours for certain heavily equipped labs such as engineering, agriculture, and the health professions but maintains the 80% student station occupancy rate.

While 80% student station occupancy is most used in guideline targets, the majority of universities rarely achieve it. In reality, occupancy averages that the consultants have studied typically range between 60% and 75%.

Teaching laboratory usage has as much to do with course level, instructional methods, and student research activities and capstone experiences, as it does discipline or discipline type. It is not unusual to find lower scheduled use (ten hours and under) in upper division laboratories. On the other hand, entry level laboratories can have much higher levels of scheduled use – 20 hours or more.

When more than one laboratory is required and is equipped in the same fashion as another, serious consideration should be given to making sure that a higher level of usage is being achieved. Laboratories tend to be subject specific and do not lend well to sharing among disciplines. However, more laboratories are being used for interdisciplinary activities which can assist in achieving higher weekly room hour usage. Conversely, if customized labs are required for interdisciplinary activities then scheduled use may be low.

Laboratory utilization can be more difficult to measure through standardized course data. The reasons for this are many. A laboratory is sometimes a suite of rooms that are split into activity specific functions. The students arrive for class and then rotate through the different rooms. Sometimes a class is split into smaller cohorts where some use the lab through the first half of the semester and the others use the lab for the second half. Many upper division laboratories are also used for student research activities or capstone experiences and have very low regularly scheduled use.

Laboratories have additional time demands that classrooms typically do not have which is one of the reasons the hourly expectation is lower. For example, there is setup and preparation time required, sometimes for a class, sometimes for the day. Other laboratories require an experiment to stay set up for multiple lab sessions or the entire semester which precludes the room from other scheduled activity.

## **National Teaching Laboratory Guideline Survey**

<b>Scheduled Use</b>	<b>Weekly Room Hours</b>	<b>Student Station Occupancy Percentage</b>
Average of Guidelines	23	78%
Median	23	80%
Most Used Guideline	20	80%
<b>Study Goals</b>	<b>20</b>	<b>80%</b>
<b>CU-Boulder</b>	<b>20</b>	<b>Unknown*</b>

\* The CU-Boulder facilities inventory does not include student stations for teaching labs since they are considered departmental space.





# **Section 7**

## **Space Needs Guideline Application**





**SECTION 7: SPACE NEEDS GUIDELINE APPLICATION****Process**

Paulien & Associates was provided with facilities, course and staffing data from Fall 2009. The facilities inventory provides building, square footage, room use and departmental information on a room-by-room basis. The course data contains the course number and description, student enrollments, course capacity, start and stop times, and meeting locations. The staffing data contains the departmental code, major employee category, and number of employees. This data provided a snapshot of the activities for the Fall 2009 term which is used as the analysis' base year.

In addition to these main datasets, other information was collected to assist in the analysis. The additional data included: historical and projected student enrollments; research expenditure information for fiscal year 2009; library collections and study station counts; program plans for buildings under construction or recently approved and funded. The University's strategic Plan, Flagship 2030, and all of the supporting task force reports were used in creating the analysis.

The course data is used to study the present utilization of classrooms (room use code 110) and teaching laboratories (room use code 210) and to project space needs for both of these facility types. It is a reliable source of information for the Colleges and Schools and provides a good picture of how these instructional facilities are used or how much instructional space is needed.

The facilities data is used to quantify existing space amounts and the staffing information is used to estimate office space needs and review research activity.

**On-Site Work Sessions**

The consultants came to campus on several different occasions to meet with college and school representatives from the Academic Needs and Space Utilization Task Force committee. In many cases the Dean or Associate or Assistant Dean participated in the meeting.

These work sessions were held so that the consultant could understand whether or not the space needs of the college or school were fully represented in the Academic Needs and Space Utilization Task Force report and tour some of the college's or school's space. Because Paulien & Associates has participated in the CU-Boulder master planning efforts and many building programming efforts over the last couple of decades, the consultant team was already familiar with the campus. However, the team wanted to tour new facilities or renovated spaces to further understand how the colleges and schools were currently using their space.

The facilities inventory was spot checked for accuracy of space use codes and departmental assignment at the time of the tour. Some changes were made to the inventory records so that it would reflect current usage and occupancy.

### **Guideline Assumptions and Application**

This section summarizes the space needs by functional space category. The Colorado Commission on Higher Education (CCHE) rescinded their space guidelines for master planning a few years ago. Therefore; the consultant team relied upon their experience at determining appropriate space guidelines for this analysis. The consultant also received guidance from CU-Boulder's Planning Office to understand the internal guidelines used for new construction. Besides the consultants' experience, the basis for some of the analysis rests upon benchmarking, review of design and/or program plans completed for prior projects, and empirical data to project space needs. For some space categories, the guidelines employed in this study are more detailed and appropriate for this level of an analysis.

The operating assumption in applying these different methods was to provide CU-Boulder with enough space to conduct its current and future activities. The sections below specify the guideline(s) applied to each space category and provides an explanation of the guideline application. In order to apply the various guidelines and conduct the space needs analysis, several assumptions were made in this report. Assumptions applied to the specific space categories are listed in this section.

### **Classroom & Classroom Service Space**

Classrooms are defined as any room generally used for scheduled instruction requiring no special equipment and referred to as a "general purpose" classroom, seminar room, or lecture hall. Classroom service space directly supports one or more classrooms as an extension of the classroom activities, providing media space, preparation areas, or storage. The classroom station size is considered as including the classroom service area space. However, additional service space can be justified on a program or classroom basis.

There are many spaces classified as classrooms in the facilities inventory such as the classrooms that are in the residence halls. Many of these spaces did not show any scheduled use. The campus may better reflect the use of these spaces by reclassifying them to other space use categories.

Prior to 2000, many guidelines for classroom space were developed at a time when tablet armchair classrooms were the predominant seating preference. These guidelines called for approximately 15 ASF per student station which is significantly lower than what today's active learning-centered classrooms require. Classrooms that have good sight lines which are required by technology and flexible seating arrangements needed for collaborative instructional methods usually average between 20 and 25 ASF per student station. For this exercise, the consultants used 22 ASF per student station. This factor will provide enough space for a variety of seating arrangements across the CU-Boulder campus.

Review of the classroom utilization analysis presented previously in this document showed that classrooms at the CU-Boulder campus are scheduled more than the desired utilization expectations and centrally scheduled

classrooms far exceed the utilization expectations. However, current classroom capacities show that the average square footage per student station is 18% less than the guideline selected for this analysis.

Classroom space requirements are determined by a formula that takes the target utilization of 35 hours per week, multiplies it by the target student station occupancy of 67% and divides the result into the 22 square feet per student station. This calculation produces a guideline of 0.938 ASF per weekly student contact hour (WSCH) for lecture and seminar courses. Assignable square feet per weekly student contact hour (ASF/WSCH) is calculated as follows:

**Lecture Guideline per Weekly Student Contact Hour (WSCH):**

$$\frac{22 \text{ ASF/STATION}}{35 \text{ WEEKLY ROOM HOURS} \times 67\% \text{ STUDENT STATION OCCUPANCY}} = 0.938 \text{ ASF/WSCH}$$

As further explanation, the total number of weekly contact hours for a lecture course section is obtained by multiplying the enrollment of the course section by the number of meeting hours in one week. For example a mathematics course with 45 students enrolled which meets three (3) times a week for one hour produces 135 weekly student contact hours (WSCH). Multiplying the 135 weekly student contact hours by the classroom guideline of 0.938 generates 126.6 ASF of classroom space.

**EXAMPLE OF CLASSROOM GUIDELINE APPLICATION**

**Step 1 • Calculate Weekly Student Contact Hours for Lecture Section**

Enrollment (45) X Weekly Room Hours (3) = Weekly Student Contact Hours (135)

**Step 2 • Calculate Classroom Guideline**

$$\frac{22 \text{ ASF/Station}}{45 \text{ Weekly Room Hours} \times 67\% \text{ Student Station Occupancy}} = 0.938 \text{ ASF/WSCH}$$

**Step 3 • Calculate Guideline Square Footage**

Weekly Student Contact Hours (135) X ASF/WSCH (0.938) = Guideline Square Footage (126.6)

There is no true comparison of existing classroom space to guideline space on a program-by-program basis. This is due to the fact that the guidelines are applied by course so that the departmental classroom needs can then be calculated; however, the majority (70%) of the classrooms are viewed as a campuswide resource, are centrally scheduled, and under the purview of the University Registrar. So while a department may have some departmental classrooms, more than likely, it will need to use general purpose classrooms to meet its needs.

### Classroom & Service Analysis

College / School / Unit	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
College of Architecture and Planning	470	6,329	(5,859)	470	6,502	(6,032)	6,777	(6,307)
College of Arts and Sciences	30,768	259,989	(229,221)	42,852	268,627	(225,775)	281,608	(238,756)
Leeds School of Business	17,767	25,882	(8,115)	17,767	27,772	(10,005)	29,861	(12,094)
School of Education	2,240	4,912	(2,672)	2,240	5,562	(3,322)	6,241	(4,001)
College of Engineering and Applied Science	8,673	29,153	(20,480)	11,812	31,600	(19,788)	34,275	(22,463)
School of Journalism and Mass Communication	1,436	4,754	(3,318)	1,436	4,917	(3,481)	5,180	(3,744)
School of Law	12,820	6,744	6,076	12,820	8,744	4,076	10,555	2,265
College of Music	3,870	5,024	(1,154)	3,870	5,309	(1,439)	5,664	(1,794)
Provost & Exec. Vice Chancellor, Academic Affairs	4,923	2,312	2,611	4,923	2,341	2,582	2,434	2,489
Vice Chancellor, Research & Dean, Graduate School	0	39	(39)	0	49	(49)	58	(58)
University Libraries	732	43	689	732	43	689	46	686
Senior Vice Chancellor and Chief Financial Officer	138,100	0	138,100	138,100	0	138,100	0	138,100
Vice Chancellor, Student Affairs	0	59	(59)	0	59	(59)	62	(62)
<b>TOTAL</b>	<b>221,799</b>	<b>345,240</b>	<b>(123,441)</b>	<b>237,022</b>	<b>361,525</b>	<b>(124,503)</b>	<b>382,761</b>	<b>(145,739)</b>

ASF = Assignable Square Feet

For Fall 2009, there is a university wide need for approximately 123,400 ASF in additional classroom space. While there is 15,000 ASF of new classroom space being built, an additional 124,500 ASF is needed for 2020 and 146,000 ASF is needed for 2030.

University officials requested that the use of Residential Academic Programs (RAP) be reviewed. In the Fall 2009 course data provided by the Office of the Registrar, there were 38 courses identified as RAP. Only 36 of those courses had enrollments, which totaled to 828 students. Of the 36 courses, 20 courses did not have a room location and only 10 of the 20 had a building location. While most of the RAP courses did not contribute to the classroom utilization study (shown in Section 6), all but one of the 36 courses contributed to the classroom needs analysis illustrated above. The one omitted course had enrollment but no start and end time and, therefore, could not generate weekly room hours.

Collaborative learning environments and technology require more space per student than traditional classroom arrangements. Presently, the average student station size is 18 ASF for all the classrooms. For the General Purpose Classrooms the average decreases to 17 ASF. The guideline used in the analysis is approximately 20% greater than what exists, which is a strong driver for the space deficit in this category. As new classrooms are constructed they will require more space than in the past. As existing classrooms are renovated seating capacity will be lost to accommodate technology and to create a collaborative environment.

### Teaching Laboratories & Service Space

Teaching laboratories are defined as rooms used primarily by regularly scheduled classes that require special purpose equipment to serve the needs

October 2010

of particular disciplines for group instruction, participation, observation, experimentation, or practice. Because stations in teaching laboratories tend to vary by discipline, the ASF per student station and weekly room hour expectations requirements may also vary accordingly.

For this analysis the consultants used 20 weekly room hours and 80% student station occupancy rate as utilization targets. The Teaching Laboratory Space Standards table shows the amount of space per student station, including service space, and the utilization targets for each discipline that had laboratory courses. The amount of space per student station was based on the consultant's experience, both at the master plan level and at a program plan level. The table to the right illustrates how the guidelines were applied to each discipline with laboratory needs.

It is typical for the scheduled weekly room hour expectation for teaching laboratories to be less than the scheduled use of classrooms due to the need for preparation time of specialized equipment prior to class. Conversely, the student station occupancy is normally higher as the number enrolled in a laboratory exercise is more closely monitored, safety being a key issue as well as the limitations of faculty observation.

For Fall 2009, CU-Boulder shows a need for teaching laboratory space of approximately 81,400 ASF. The College of Engineering and Applied Science and the College of Arts and Sciences collectively generate over 75% of this deficit. In particular, the Chemistry & Biochemistry program in the Natural Sciences division shows a strong need for space as does the College of Architecture & Planning, and the College of Music.

The new space at the Visual Arts Complex was still under construction during Fall 2009. Therefore the Target Year analysis shows the Visual Arts Complex as being completed and the Art program giving up the space in Fleming and the Housing System Service Center, which results in a net decrease of space. Additionally the Target Year shows the Systems Biotechnology Building as being available for use. The amount of temporary space occupied by Art and Art History was more than the programmed space in the Visual Arts Complex; therefore, this anomaly results in a slight decrease of teaching laboratory space.

## Teaching Laboratory Space Standards

Program	ASF/ Station	Student Station Occupancy	Weekly Room Hours	ASF/ WSCH
<b>College of Architecture and Planning</b>	80	80%	20	5.00
<b>College of Arts &amp; Sciences</b>				
<b>Arts &amp; Humanities</b>				
Art	80	80%	20	5.00
Dance / Theatre	150	80%	20	9.38
Film Studies	50	80%	20	3.13
<b>Natural Sciences</b>				
Chemistry & Biochemistry / Physics	75	80%	20	4.69
EEB / Environmental Studies / Physiology / MCDB	65	80%	20	4.06
Astrophysical & Planetary Sciences / Atmospheric & Oceanic Sciences / Geography / Geological Sciences	60	80%	20	3.75
Mathematics	40	80%	20	2.50
Psychology	50	80%	20	3.13
<b>Social Sciences</b>				
Anthropology	60	80%	20	3.75
<b>College of Engineering</b>	80	80%	20	5.00
Aerospace Engineering / Mechanical Engineering	140	80%	20	8.75
Chemical & Biological / Civil, Environmental & Architectural / General Engineering / Lockheed Martin Engineering Management	120	80%	20	7.50
Electrical, Computer & Energy / Interdisciplinary Telecommunications	100	80%	20	6.25
Computer Science	60	80%	20	3.75
<b>College of Music</b>	60	80%	20	3.75
<b>School of Business</b>	40	80%	20	2.50
<b>School of Education</b>	40	80%	20	2.50
<b>School of Journalism &amp; Mass Communication</b>	50	80%	20	3.13
<b>School of Law</b>	50	80%	20	3.13

WSCH = Weekly Student Contact Hour; ASF = Assignable Square Feet

The 2020 Target Year shows a slight increase in need at 88,700 ASF. The 2030 planning horizon shows a much greater need for 105,900 ASF of additional teaching laboratory space. Almost all programs show a need for more space of this type.

### Teaching Laboratories & Service Analysis

College / School / Unit	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
College of Architecture and Planning	1,090	18,630	(17,540)	1,090	18,705	(17,615)	19,780	(18,690)
College of Arts and Sciences	155,087	185,319	(30,232)	149,813	187,391	(37,578)	197,286	(47,473)
Leeds School of Business	1,457	3,188	(1,731)	1,457	3,281	(1,824)	3,443	(1,986)
School of Education	0	110	(110)	0	130	(130)	154	(154)
College of Engineering and Applied Science	43,049	74,156	(31,107)	46,679	76,703	(30,024)	81,020	(34,341)
School of Journalism and Mass Communication	305	4,606	(4,301)	305	4,896	(4,591)	5,291	(4,986)
School of Law	2,404	584	1,820	2,404	744	1,660	891	1,513
College of Music	7,892	20,197	(12,305)	7,892	20,805	(12,913)	21,804	(13,912)
Provost & Exec. Vice Chancellor, Academic Affairs	13,257	2,678	10,579	13,257	2,682	10,575	2,807	10,450
Continuing Education and Professional Studies	798	0	798	798	0	798	0	798
Vice Chancellor, Research & Dean, Graduate School	2,012	55	1,957	2,183	70	2,113	85	2,098
Senior Vice Chancellor and Chief Financial Officer	800	0	800	800	0	800	0	800
<b>TOTAL</b>	<b>228,151</b>	<b>309,523</b>	<b>(81,372)</b>	<b>226,678</b>	<b>315,407</b>	<b>(88,729)</b>	<b>332,561</b>	<b>(105,883)</b>

ASF = Assignable Square Feet

### Open Laboratories

The space classified as Open Laboratories includes rooms that are open for student use and that are not used on a regularly scheduled basis (space use codes 220, 225, 230, and 235). These rooms may provide equipment to serve the needs of particular disciplines for group instruction in informally or irregularly scheduled classes. Alternatively, these rooms are used for individual student experimentation, observation, or practice in a particular field of study. The size of these laboratories is based on equipment size, the station size, and student count desired, and therefore should be determined on an individual basis. Types of rooms included in this category include computer laboratories, language laboratories, learning labs, tutorial and testing facilities, and music practice rooms, and studios. For purposes of this analysis, senior capstone space is also considered open laboratory space as well as collaborative learning spaces.

Open laboratories are not specifically addressed by most guideline systems. In recent benchmarking and consulting work with several statewide systems, the consultant found between five (5) and ten (10) ASF per student FTE allocated for space in this category. The consultants note that the amount of space that CU-Boulder has classified in this category is three and one-half (3.5) ASF per Student FTE, at the lower end of what the consultants expect to find.

The consultants believe that a reasonable guideline for CU-Boulder in open laboratory space is five and one-half (5.5) ASF per Student FTE. This guideline



is sufficient to provide the CU-Boulder programs with space lacking in this category such as studios and music practice rooms, as well as some senior capstone space and collaborative learning spaces. The guideline produced a deficit of about 54,000 ASF or 58% of existing open laboratory space for Fall 2009. After the addition of the studio spaces in the Visual Arts Center and the computing labs in the Systems Biotechnology Building (about 20,000 ASF total), the deficit decreases to about 53,000 ASF for the 2030 planning horizon.

The guideline was portioned out among the existing programs based upon needs expressed during the on-site work sessions, existing building programs, the Master Plan Task Force Report on Academic Needs and Space Utilization, and current and projected student FTE enrollments. A specific allotment of open laboratory space was provided to the Provost and Executive Vice Chancellor for future collaborative learning and capstone spaces and other open laboratories that have yet to be determined for CU-Boulder. For some units, such as Architecture and Planning, it is best to review the needs in the open laboratory in conjunction with the needs shown in the teaching and research laboratory space categories as activities conducted in each of these spaces often overlap.

### Open Laboratories & Service Analysis

College / School / Unit	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
College of Architecture and Planning	29,649	32,000	(2,351)	29,649	34,500	(4,851)	36,000	(6,351)
College of Arts and Sciences	32,270	58,736	(26,466)	49,782	61,509	(11,727)	65,242	(15,460)
Leeds School of Business	1,342	1,500	(158)	1,342	1,700	(358)	1,700	(358)
College of Engineering and Applied Science	15,348	27,056	(11,708)	16,662	27,632	(10,970)	29,864	(13,202)
School of Journalism and Mass Communication	461	800	(339)	461	1,200	(739)	1,200	(739)
School of Law	846	846	0	846	846	0	846	0
College of Music	8,014	12,000	(3,986)	8,014	13,000	(4,986)	14,000	(5,986)
Provost & Exec. Vice Chancellor, Academic Affairs	3,734	12,234	(8,500)	3,734	13,734	(10,000)	13,734	(10,000)
Vice Chancellor, Research & Dean, Graduate School	757	1,224	(467)	1,971	2,729	(758)	2,858	(887)
University Libraries	1,070	1,070	0	1,070	1,070	0	1,070	0
<b>TOTAL</b>	<b>93,491</b>	<b>147,466</b>	<b>(53,975)</b>	<b>113,531</b>	<b>157,920</b>	<b>(44,389)</b>	<b>166,514</b>	<b>(52,983)</b>

ASF = Assignable Square Feet

### Research Laboratories

Research laboratories (250s) are rooms used for unscheduled laboratory experimentation or training in research methods and observation. The research may be conducted by either faculty or students for both funded and non-funded research. This room type does not have utilization expectations.

The computation of research space is a complex issue. There are different approaches that could be used at this level of planning – a space factor per \$100,000 in research expenditures; or a space factor per research team; or a space factor per tenured/tenure track faculty. Officials at CU-Boulder provided the research expenditures for Fiscal Year 2010. The consultants

reviewed a variety of the University's research performance indicators to assist in developing the best approach for determining research space needs. The table following reviews for each major unit space per \$100,000 in research expenditures, square footage per tenure/tenure-track faculty, and expenditures per tenure/tenure-track faculty. Appendix D shows detailed expenditures by program.

### Research Performance Indicators June 2010

FY 2010						
College / School / Unit	No. of Projects	Total Expenditures	Existing ASF**	Tenured/ Tenure-Track Faculty*	ASF per \$100,000	ASF per T/T-T Faculty
Assoc VC Undergraduate Education	9	\$1,714,493			n/a	n/a
VC Academic & Campus Technology	36	\$2,197,765			n/a	n/a
VC Research & Dean of Graduate School	1,329	\$178,335,589	106,143		60	n/a
Assoc VC & Dean Cont Ed & Summer	4	\$26,553			n/a	n/a
College of Arts and Sciences	1,233	\$81,888,562	289,574	601	354	482
<i>Arts and Humanities</i>	27	\$2,191,705	0	148	n/a	n/a
Arts	1	\$472	0	26	n/a	n/a
Humanities	26	\$2,191,233	0	122	n/a	n/a
<i>Natural Sciences</i>	1,112	\$77,038,131	282,037	333	366	847
<i>Social Sciences</i>	94	\$2,658,726	7,537	120	283	63
School of Business	4	\$2,677,093	913	52	34	18
School of Education	59	\$4,687,585		30	n/a	n/a
College of Engineering and Applied Science	953	\$52,648,928	136,862	174	260	787
College of Music	2	\$8,116		55	n/a	n/a
School of Journalism & Mass Communication	2	\$204,190		22	n/a	n/a
School of Law	10	\$1,027,140		36	n/a	n/a
Libraries	9	\$43,353			n/a	n/a
Vice Chancellor for Student Affairs	11	\$5,079,401			n/a	n/a
Diversity & Equity	3	\$406,902			n/a	n/a
<b>TOTAL</b>	<b>3,664</b>	<b>\$330,945,670</b>	<b>533,492</b>	<b>970</b>	<b>161</b>	<b>550</b>

\* Tenured/Tenure-Track Faculty included only if unit has space or research expenditures.

When reviewing the existing square footage per \$100,000, the consultants found that many programs did not have a direct correlation between existing space allocations, faculty home departments and research expenditures. In other words, there are units at CU-Boulder with large amounts of sponsored research dollars that do not have substantial amounts of research space and visa versa. This is not uncommon at institutions that have a large number of interdisciplinary and transdisciplinary research programs.

There are three areas where most of the research space is allocated: the Vice Chancellor for Research and Dean of the Graduate School, the Natural Sciences in the College of Arts and Sciences, and the College of Engineering and Applied Science. The Social Sciences also have some research space as does the School of Business. The Vice Chancellor for Research is the reporting unit for all of the Institutes where research space is allocated, but the faculty are dispersed among their home departments.

As a result of this disconnect, the consultants decided to use a space factor per \$100,000 in research expenditures. These space factors are appropriate and were applied to those units with existing research space or where non-office based research space is required. The Research Guidelines table shows the



October 2010

guidelines applied to those units that had research expenditures for FY 2010 as well as existing space or a demonstrated need for research space. For those units that require small computational labs, resource rooms, or a collaboration room, very low square footages were applied such as the case for Business, Humanities, and Education.

Growth in research expenditures was projected at 5% compounded annually and adjusted for inflation. The inflation factor was set at 2.41%, resulting in a net growth of 2.59% compounded annually. The FY 2010 research expenditures were \$330,945,670. For the 2020 Target Year, the projection is \$427,372,921 (2010 dollars) and \$551,896,068 (2010 dollars) for the 2030 planning horizon.

The Research Analysis below shows the result of the guideline application. The guidelines produced a 84% deficit of approximately 449,000 ASF for Fall 2009. All units show a need for additional research space. For the College of Arts & Sciences, 79% of the need is in the Natural Sciences and 21% of the need is in the Social Sciences. The research space under the Vice Chancellor for Research is attributed to CIRES, CLAS, IBG, IBS, ICS, INSTAAR, JILA, and LASP.

## Research Laboratory Guidelines

Disciplines / Programs	ASF / \$100,000
Natural and Physical Sciences	500
Engineering, Psychology, and Speech Language & Hearing Sciences	350
Geography, Social Sciences, and CARTSS	250
Institutes under the Vice Chancellor for Research	250
Mathematics	100
Business	50
Education	25

NOTE: Guidelines only applied to those units with existing research space.

## Research Laboratories & Service Analysis

College / School / Unit	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
College of Arts and Sciences	289,574	360,605	(71,031)	321,552	454,365	(132,813)	587,790	(266,238)
Leeds School of Business	913	1,339	(426)	913	1,687	(774)	2,182	(1,269)
School of Education	0	1,172	(1,172)	0	1,477	(1,477)	1,910	(1,910)
College of Engineering and Applied Science	136,862	183,640	(46,778)	164,394	231,389	(66,995)	299,336	(134,942)
School of Journalism and Mass Communication	370	800	(430)	370	1,000	(630)	1,000	(630)
Vice Chancellor, Research & Dean, Graduate School	106,143	435,164	(329,021)	148,049	548,306	(400,257)	709,316	(561,267)
<b>TOTAL</b>	<b>533,862</b>	<b>982,720</b>	<b>(448,858)</b>	<b>635,278</b>	<b>1,238,224</b>	<b>(602,946)</b>	<b>1,601,534</b>	<b>(966,256)</b>

ASF = Assignable Square Feet

The 2030 planning horizon existing space reflects over 100,000 ASF in research space gains by the additions of the new IBS building, JILA expansion and the Systems Biotechnology Building. Even after the addition of this funded construction, the research deficit increases to 603,000 ASF for the 2020 Target Year and 966,000 ASF, a 152% shortage, at the 2030 horizon. This shortage is reflective of the projected growth in research activity.

It should be noted that a portion of this space may actually be developed as research office space. Many of the institutes have non-CU staff that require offices. Some of this space is now housed in leased property. It is anticipated that the units of NOAA, NEON, NREL, USGS, and NSO will need space, expansion room, or will move existing space to CU-owned facilities.

### Office Space (Academic and Administrative)

The guideline application for office space needs is based upon major categories of staff types and the additional application of space amounts for office service and conference space needs. The University provided summary staffing information with IPEDS code, title, and department. The consultant then organized each into major categories as shown in the Office Guidelines table. Guidance from the Office of Planning, Design and Construction was used to establish the office space guidelines based on their internal planning standards.

#### Office Space Guidelines

Employee Type: <i>Applied per Headcount</i>	Office ASF	Conference ASF	Service ASF
Executive / Administrative / Managerial	200-400	50	30
Faculty including Research, Visiting, and Clinical	150	20	30
Studio Faculty Offices	225	20	30
Law Faculty	175	20	30
Faculty (FT Non Tenure Track) including Instructors and Lecturers	150	0	0
Emeriti Faculty	50	0	0
Part-time Faculty (assumes three to an office) including PT adjuncts, instructors, and lecturers	50	0	0
Other Professionals including those Skilled Craft and Service & Maintenance workers that require offices	150	15	20
Research Professionals (Professional Research Assistants, Research Associates)	150	15	30
Law Professionals	175	15	30
Technical & Paraprofessional	100	15	15
Clerical & Secretarial	100	15	15
Part Time Other Professionals	50	0	0
Graduate / Teaching / Research Assistants (Students)	50	0	0
Student Worker	25	0	0
Skilled Crafts	0	0	0
Service & Maintenance	0	0	0
Library Personnel (Office Space in Library Guidelines)		0	0

Additional service space and conference room space as needed by individual units.

These guidelines determine office space needs based on the headcount of major categories of staff and application of space amounts for office service and conference space needs. The consultants also developed guidelines that are specific to certain titles. For example, the executive/administrative/managerial employee type such as the Chancellor and Vice Chancellor require larger offices and a greater allocation for conference room and service space. Additionally some units have conference room and service space needs beyond what normal guidelines provide. There are also units that are in suite-style office arrangements where internal office circulation space is included as service space. These units also needed additional service space beyond the provisions on the guidelines. In all these cases, the consultant added additional amounts of space that would create a defensible analysis.

### Academic Office Space Analysis

The analysis shows a space deficit for Fall 2009 in academic office space totaling about 97,500 ASF. The largest deficit is in the Arts & Sciences although some of this deficit may be offset by the surplus under the Vice Chancellor for Research as some individuals have office space at the institutes. The College of Music also shows a strong need for additional studio office space.

At the 2020 planning horizon, the deficit increases to about 140,600 ASF, and the 2030 planning target also increases to 190,000 ASF. The College of Engineering and Applied Science increases its existing office space by about 26,000 ASF and then shows a surplus of space. About half of this surplus is in conference room space. It may be that some of this conference room space should be allocated to research as it supports the research teams.

October 2010

## Academic Offices & Service Analysis

College / School / Unit	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
College of Architecture and Planning	8,210	8,995	(785)	8,210	10,245	(2,035)	10,745	(2,535)
College of Arts and Sciences	379,077	440,975	(61,898)	379,687	482,120	(102,433)	506,920	(127,233)
Leeds School of Business	42,560	46,050	(3,490)	42,560	51,445	(8,885)	53,985	(11,425)
School of Education	18,503	25,045	(6,542)	18,503	26,745	(8,242)	28,370	(9,867)
College of Engineering and Applied Science	115,727	124,655	(8,928)	130,268	134,290	(4,022)	140,235	(9,967)
School of Journalism and Mass Communication	11,242	13,360	(2,118)	11,242	15,260	(4,018)	16,085	(4,843)
School of Law	29,636	28,670	966	29,636	30,870	(1,234)	32,210	(2,574)
College of Music	21,229	33,675	(12,446)	21,229	34,875	(13,646)	36,895	(15,666)
Provost & Exec. Vice Chancellor, Academic Affairs	64,588	68,530	(3,942)	64,574	70,360	(5,786)	72,445	(7,871)
Continuing Education and Professional Studies	7,100	13,255	(6,155)	7,100	13,845	(6,745)	14,050	(6,950)
Vice Chancellor, Diversity, Equity, & Community Engagemen	8,812	8,475	337	8,230	8,710	(480)	8,945	(715)
Vice Chancellor, Research & Dean, Graduate School	209,807	202,300	7,507	232,374	215,445	16,929	222,480	9,894
<b>TOTAL</b>	<b>916,491</b>	<b>1,013,985</b>	<b>(97,494)</b>	<b>953,613</b>	<b>1,094,210</b>	<b>(140,597)</b>	<b>1,143,365</b>	<b>(189,752)</b>

ASF = Assignable Square Feet

When it comes to office space analysis, it is important to keep in mind that while there may be a surplus of space, there may not be enough doors or rooms. Therefore, the overall deficit may actually be more than what is being portrayed in the analysis due to inventory issues and existing structural constraints.

The average faculty office size is 158 ASF. The sizes range from a low of 108 ASF to a high of 261 ASF. To be expected, the College of Music has a greater average (180 ASF) due to the need for studio offices. The analysis uses 150 ASF as a general size for fulltime faculty offices. Some offices are located in legacy buildings where the offices were built to greater square footage standards than the one utilized in this study. For example, Duane Physics averages 159 ASF per faculty office.

Economics and Hellems average 164 ASF. Offices in the Engineering Electrical and Mechanical wings average 190 ASF. Ketchum Arts & Sciences average 198 ASF. Conversely, there are buildings where the averages are considerably lower, such as the Leeds School of Business, which averages 124 ASF.

### Average Faculty Office Size by College/School/Unit

College/Administrative Unit	Room Use Code	No. of Offices	Average Assignable Square Feet	Minimum	Maximum
College of Architecture and Planning	312 Faculty Office	21	143	89	250
College of Arts and Sciences	312 Faculty Office	924	159	61	347
College of Engineering and Applied Science	312 Faculty Office	236	158	66	319
College of Music	312 Faculty Office	75	180	77	338
Continuing Education and Professional Studies	312 Faculty Office	1	261	261	261
Leeds School of Business	312 Faculty Office	98	124	53	276
Provost & Exec. Vice Chancellor, Academic Affairs	312 Faculty Office	21	162	59	302
School of Education	312 Faculty Office	52	156	81	301
School of Journalism and Mass Communication	312 Faculty Office	34	163	87	277
School of Law	312 Faculty Office	63	162	141	302
Vice Chancellor, Diversity, Equity, & Community Eng	312 Faculty Office	1	108	108	108
Vice Chancellor, Research & Dean, Graduate School	312 Faculty Office	126	169	66	294
<b>INSTITUTION COUNT AND AVERAGE</b>		<b>1,652</b>	<b>158</b>	<b>53</b>	<b>347</b>

**NOTE:** Only offices that have between 50 ASF and 350 ASF have been included.

### Administrative Office Space Analysis

The Fall 2009 Administrative Office Analysis shows a deficit of office space of approximately 7,000 ASF. Student Affairs has the greatest deficit at about 12,500 ASF. At the 2030 planning horizon, the surpluses become deficits totaling to about 16,500 ASF for 2030.

### Administrative Offices & Service Analysis

College / School / Unit	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Office of the Chancellor	4,859	5,100	(241)	4,859	5,100	(241)	5,285	(426)
Senior Vice Chancellor and Chief Financial Officer	88,722	86,135	2,587	90,311	89,405	906	91,535	(1,224)
Vice Chancellor, Administration	73,717	70,710	3,007	73,867	73,185	682	74,915	(1,048)
Vice Chancellor, Student Affairs	81,989	94,465	(12,476)	85,502	97,615	(12,113)	99,350	(13,848)
<b>TOTAL</b>	<b>249,287</b>	<b>256,410</b>	<b>(7,123)</b>	<b>254,539</b>	<b>265,305</b>	<b>(10,766)</b>	<b>271,085</b>	<b>(16,546)</b>

ASF = Assignable Square Feet

### Library Space

The consultant acknowledges the changing trends in modern day libraries. The reference collection, many periodicals, and some of the up-to-date collections are being digitized and are available electronically. Stack space is being converted to study stations. Learning commons and cyber cafés are now the fabric of the library.

Even with these transformations, the best way to predict the space needs of the library is by understanding the amount of print collections, number of students, and amount and types of technical services and staffing the library needs.

Most of the guideline systems for library space utilize one set of factors for collections, another for users (study stations), and a third for service space. The consultants reviewed different guidelines that have been used in recent years. For library collections, the consultants recommend a sliding scale guideline starting with .10 ASF per volume to .07 ASF per volume for collection space. If compact shelving is being used then .004 ASF per volume should be used for that portion of the collection that will be stored on compact units.

Study space calculations for this analysis were based upon the current study space ratios to student headcount on either a campuswide basis or, in the case of the Law Library, a discipline-specific basis. Spaces used for individual, group, microfiche/film reading, and computer stations inside the library are considered study stations. Seats within a cafe are not considered library study stations. In determining the guidelines for study station sizes, the consultants believe 30 ASF per study station is appropriate, understanding that some will require less and others will require more.

Service space is calculated on a percent of the total collection and study station space. Depending on the type of library, the recommendation is either 10% or 12.5% of the total collection and study station space for service and staff space. ***It should be noted that the service space calculation is intended to include office space for the library faculty and staff.*** The office portion of the service space calculation was generated by using

October 2010

actual and projected faculty and staff counts. See *Section 8: College/School Administrative Unit Findings*, University Libraries.

The University Library system has five branch libraries, Business, Earth Sciences / Map, Engineering, Math/Physics, and Music. Additionally, the campus stores part of its collections at a state-of-the-art, high density, storage facility named PASCAL – Preservation and Access Service Center for Colorado Academic Libraries. The University Library Administration provided details on collections, study station counts, and average acquisition rates for the Library system for Fall 2009. Approximately 1.1 million volumes are being stored at PASCAL. Therefore the collection space needed has been reduced by 1.1 million volumes.

## Library Guideline Analysis - University Libraries

The following table illustrates how the library guidelines were applied and the amount of space needed for the University Libraries. For Fall 2009, the University Libraries need approximately 32,000 ASF in space. This need increases to 43,400 ASF for 2020 and 54,000 ASF for the 2030 planning horizon. It should be noted that the guidelines applied to this analysis are conservative. In a programming exercise it may be determined that more space is needed. Currently, the library has unmet space needs. For example, it has a large set of special collections that is being housed in the basement, where there is no climate or moisture control.

### University Libraries

#### Library Collections

	Current Items	Conversion Factor	Fall 2009 Volumes	Volume Growth	2020 Volumes	Volume Growth	2030 Volumes
Volumes	3,321,632	1.00	3,321,632	5.00%	3,487,714	10.00%	3,653,795
<b>Total Volume Equivalents</b>			3,321,632		3,487,714		3,653,795

### Library Guideline Application and Analysis

<i>No. of Volume Equivalents</i>						Fall 2009 Guideline ASF	2020 Guideline ASF	2030 Guideline ASF
<i>Collection Space</i>	0 - 150,000	150,001 - 300,000	300,001 - 600,000	600,001 - 2,000,000	2,000,001 and above			
<i>ASF per Volume</i>	0.10	0.09	0.08	0.07	0.04			
Fall 2009 Collection Space	15,000	13,500	24,000	98,000	46,257			
2020 Collection Space	15,000	13,500	24,000	98,000	52,070			
2030 Collection Space	15,000	13,500	24,000	98,000	57,883			
Total Collection Space						196,757	202,570	208,383
<i>Study Space</i>	Percent of FTE	Fall 2009 FTE	Fall 2009 Stations	2020 FTE	2020 Stations	2030 FTE	2030 Stations	
Undergraduate Students	10%	24,084	2,408	25,134	2,513	25,973	2,597	
Graduate Students	5%	2,728	136	3,579	179	4,302	215	
Faculty (FTE)	0%	1,557	0	0	0	1,866	0	
<b>Total Study Stations</b>	100% @ 30 ASF/Station		2,545		2,692		2,812	
Total Study Space						76,350	80,760	84,360
<b>TOTAL COLLECTION &amp; STUDY SPACE</b>						<b>273,107</b>	<b>283,330</b>	<b>292,743</b>
<b>Service Space</b> (12.5% of Total Collection & Study Space)						<b>34,138</b>	<b>35,416</b>	<b>36,593</b>
<i>Service Space Includes:</i>								
<i>Office &amp; Office Service Space</i>						26,735	27,765	28,645
<i>Processing, Circulation Desk, Storage, etc.</i>						7,403	7,651	7,948
<b>TOTAL LIBRARY GUIDELINE SPACE</b>						<b>307,246</b>	<b>318,746</b>	<b>329,336</b>
<i>Existing Space</i>						275,345	275,345	275,345
<b>SURPLUS / (DEFICIT)</b>						<b>(31,901)</b>	<b>(43,401)</b>	<b>(53,991)</b>

**Library Guideline Analysis - Law Library**

Following is library analysis for the William A. Wise Law Library. The analysis indicates a surplus of space in the library for Fall 2009 clear through the 2030 planning horizon. General observation concurs with this finding, as the library has the ability to convert existing stack space to compact shelving on the lower level. Then freed stack space can be converted to study stations or group study areas.

**William A. Wise Law Library****Library Collections**

	Current Items	Conversion Factor	Fall 2009 Volumes	Volume Growth	2020 Volumes	Volume Growth	2030 Volumes
Print Volumes	302,000	1.00	302,000	20.00%	362,400	46.00%	440,920
<b>Total Volume Equivalents</b>			<b>302,000</b>		<b>362,400</b>		<b>440,920</b>

**Library Guideline Application and Analysis**

						Fall 2009 Guideline ASF	2020 Guideline ASF	2030 Guideline ASF
No. of Volume Equivalents								
Collection Space	0 - 250,000	250,001 - 500,000	500,001 - 750,000	750,001 - 2,000,000	2,000,001 and above			
ASF per Volume	0.10	0.04	0.04	0.04	0.04			
Fall 2009 Collection Space	25,000	1,820	0	0	0	26,820	28,934	31,682
2020 Collection Space	25,000	3,934	0	0	0			
2030 Collection Space	25,000	6,682	0	0	0			
Total Collection Space								
Study Space	Percent of Headcount	Fall 2009 Headcount	Fall 2009 Stations	2020 Headcount	2020 Stations	2030 Headcount	2030 Stations	
Undergraduate Students	0%	0	0	0	0	0	0	12,780
Graduate Students	80%	533	426	580	464	620	496	
Faculty (Headcount)	0%	0	0	0	0	0	0	
Total Study Stations	100% @ 30 ASF/Station		426		464		496	
Total Study Space						12,780	13,920	14,880
TOTAL COLLECTION & STUDY SPACE						39,600	42,854	46,562
Service Space (10.0% of Total Collection and Study Space)						3,960	4,285	4,656
TOTAL LIBRARY GUIDELINE SPACE						43,560	47,139	51,218
Existing Space						51,633	51,633	51,633
SURPLUS / (DEFICIT)						8,073	4,494	415

**Library Analysis**

For Fall 2009, the analysis shows that the libraries have a 7% shortage of space or a need for approximately 23,800 additional ASF. For the Target Year, a 12% space deficit is shown resulting in a need for 38,900 ASF of additional space for 2020. The 2030 horizon shows an increase in the deficit to 53,600 ASF. The majority of the projected deficits can be attributed to student enrollment growth.



October 2010

## Library Analysis

College / School / Unit	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
School of Law	51,633	43,560	8,073	51,633	47,139	4,494	51,218	415
University Libraries	275,345	307,246	(31,901)	275,345	318,746	(43,401)	329,336	(53,991)
<b>TOTAL</b>	<b>326,978</b>	<b>350,806</b>	<b>(23,828)</b>	<b>326,978</b>	<b>365,885</b>	<b>(38,907)</b>	<b>380,554</b>	<b>(53,576)</b>

ASF = Assignable Square Feet

## Assembly & Exhibit Space

Assembly and exhibit space is defined as any room designed and equipped for the assembly of large numbers of people. This includes theaters, auditoriums, concert halls, and arenas. Exhibit spaces are used for exhibition of materials, works of art, or artifacts intended for general use by students and the public.

In recent years Paulien & Associates has been using a guideline originally promulgated by the Council of Educational Facility Planners International. This guideline has a core allowance of 22,450 ASF for institutions with a minimum of 5,000 Student FTE and an active fine arts program. It then allows for an additional six (6) ASF per Student FTE over the 5,000 FTE minimum. The guideline is intended to support the academic programs of an institution. In cases where there are additional facilities of this type which support not only the academic program but have a significant outreach/community component, additional allocations of space are added to this guideline.

## Assembly & Exhibit Analysis

College / School / Unit	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
College of Architecture and Planning	3,030	6,000	(2,970)	3,030	6,000	(2,970)	6,000	(2,970)
College of Arts and Sciences	18,222	55,365	(37,143)	41,594	60,165	(18,571)	61,965	(20,371)
Leeds School of Business	0	2,000	(2,000)	0	2,000	(2,000)	2,000	(2,000)
School of Education	0	2,000	(2,000)	0	2,000	(2,000)	2,000	(2,000)
College of Engineering and Applied Science	2,539	6,504	(3,965)	6,504	6,504	0	6,504	0
School of Law	0	2,000	(2,000)	0	2,000	(2,000)	2,000	(2,000)
College of Music	38,357	70,060	(31,703)	38,357	71,666	(33,309)	79,238	(40,881)
Vice Chancellor, Research & Dean, Graduate School	42,675	54,393	(11,718)	43,532	64,393	(20,861)	64,393	(20,861)
<b>TOTAL</b>	<b>104,823</b>	<b>198,322</b>	<b>(93,499)</b>	<b>133,017</b>	<b>214,728</b>	<b>(81,711)</b>	<b>224,100</b>	<b>(91,083)</b>

ASF = Assignable Square Feet

An additional allotment of 40,000 ASF for CU-Boulder at the base year and 50,000 ASF for both planning horizons has been added. The reason for this addition is that the guideline is not large enough to cover the needs of the CU Museum of Natural History.

The guideline application produced a deficit of 93,500 ASF for Fall 2009 of assembly and exhibit space at CU-Boulder. This deficit decreases to 81,700 ASF for the 2020 target and 91,100 ASF for the 2030 horizon. The consultants portioned the guideline among the departments requiring this space type. The increase in existing space at the 2020 Target Year includes the addition of the auditorium and the auditorium prefunction space, and the gallery (about 8,700 ASF) in the Systems Biotechnology Building and the art museum space and exhibition areas in the Visual Arts Complex (19,000 ASF).

The College of Music has the greatest need for this space type as it needs additional rehearsal facilities, a stated need for a 1,000 seat performance venue, and a 300-450 seat auditorium with appropriate support spaces for Opera. About half of the need is met for the College of Arts & Sciences at the target years, which reflects the new gallery space for the CU Museum of Art in the Visual Arts Complex. The additional needs shown under Arts & Sciences are for rehearsal and performance spaces for Theatre and Dance and a small exhibition area for Anthropology. The need for museum space under the Vice Chancellor for Research reflects the need for an expansion of the CU Museum of Natural History and the need for a science museum. The Task Force on Space Needs and Utilization suggested both of these museums be moved to the East Campus.

The Schools of Business, Education, and Law all have need for some exhibition space. Without programming the particulars, 2,000 ASF has been allocated to each of these schools, recognizing this space need.

### **Other Department Space (Academic and Administrative)**

The space classified as Other Department Space includes all other space assigned to a department that has not been included in the other classifications of classrooms, teaching laboratories, open laboratories, research, or office. These areas consist of a variety of spaces including:

- armories
- study rooms
- clinics
- demonstration rooms
- learning center space
- food facilities
- media production
- animal quarters
- lounges
- meeting rooms
- shop space
- greenhouses
- computer rooms

Due to the diversity of these spaces and the different ways various campuses might classify these spaces, they are not always addressed by recognized guideline systems.

### **Other Academic Department Space**

There is about 262,000 ASF assigned to this space category. The following lists the major amounts of space and users of each space type included under this category.

- Central storage (730 space use code) is about 63,000 ASF spread throughout 55 different academic units – Theatre & Dance has the most space at about



13,200 ASF; Architecture has about 4,900 ASF; CIRES at 3,800 ASF; and Music at 3,300 ASF. Art & Art History had temporary storage of about 10,700 ASF which is shown as being vacated at the Target Year.

- Departmental study/resource rooms (400 space use code) accounts for another 63,000 ASF across 38 departments. ITS has about 38% of the space at 24,000 ASF, and the Leeds School of Business with about 3,000 ASF of the total space.
- Approximately 40,600 ASF of non-physical plant shop space is occupied by seventeen different units — 13,000 ASF is assigned to the College of Music; JILA has 5,500 ASF; LASP 3,800 ASF; CIRES 3,700 ASF; and Physics has 3,200 ASF.
- Approximately 21,200 ASF is animal facilities, the majority of which belongs to Molecular, Cellular, & Developmental Biology; Psychology; IBG; Ecology & Evolutionary Biology; and Integrative Physiology. New animal facilities are being built in the Systems Biotechnology Building which is reflected in the Target Years.
- Greenhouses under Ecology & Evolutionary Biology (14,500 ASF) and Chemistry (1,900 ASF) are about 16,400 ASF
- About 16,500 in computing spaces (server rooms, mainframes, system areas) about half is assigned to ITS Administration with LASP (1,800 ASF) and CIRES (1,500 ASF) each having about 10% of the total space, and another 25 units having some space ranging from 25 ASF to 800 ASF each.
- Departmental lounges total approximately 12,700 ASF under 21 different units.
- There is 6,500 ASF in clinic spaces belonging to Speech, Language & Hearing Sciences (4,000 ASF) and Psychology (2,500 ASF).
- The ROTC programs have 6,000 ASF in armory space.
- There is about 23,000 ASF in these space use categories under 39 different units: meeting rooms, miscellaneous food service facilities; media production spaces; hazardous materials, demonstration rooms, merchandising space; and vehicle storage.

Other academic space at CU-Boulder averages 10 ASF per Student FTE. The consultants believe that a reasonable guideline to apply in this category is 11 ASF per Student FTE. This factor reflects the needs of all the CU-Boulder programs for Fall 2009 plus the space that is currently under construction, and additional spaces of this type that are being planned for the near future. The guideline application shows a space deficit of around 30,900 ASF in this category for Fall 2009, an increase in the deficit to 35,300 ASF for 2020, and a 52,500 ASF deficit for the 2030 horizon.

### Other Academic Department Space Analysis

College / School / Unit	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
College of Architecture and Planning	7,268	9,000	(1,732)	7,268	11,000	(3,732)	11,000	(3,732)
College of Arts and Sciences	101,055	102,713	(1,658)	95,099	107,093	(11,994)	113,483	(18,384)
Leeds School of Business	7,427	7,976	(549)	7,427	8,239	(812)	8,826	(1,399)
School of Education	6,169	6,626	(457)	6,169	6,844	(675)	7,331	(1,162)
College of Engineering and Applied Science	19,599	23,551	(3,952)	24,313	26,054	(1,741)	27,853	(3,540)
School of Journalism and Mass Communication	2,300	2,470	(170)	2,300	2,551	(251)	2,734	(434)
School of Law	6,886	8,766	(1,880)	6,886	10,766	(3,880)	12,766	(5,880)
College of Music	19,337	20,566	(1,229)	19,337	21,153	(1,816)	22,469	(3,132)
Provost & Exec. Vice Chancellor, Academic Affairs	48,454	53,141	(4,687)	50,366	54,882	(4,516)	58,104	(7,738)
Continuing Education and Professional Studies	2,649	2,845	(196)	2,649	2,939	(290)	3,148	(499)
Vice Chancellor, Diversity, Equity, & Community Engagement	0	3,500	(3,500)	4,407	5,000	(593)	5,000	(593)
Vice Chancellor, Research & Dean, Graduate School	41,173	52,039	(10,866)	51,982	57,031	(5,049)	58,021	(6,039)
TOTAL	262,317	293,193	(30,876)	278,203	313,552	(35,349)	330,735	(52,532)

ASF = Assignable Square Feet

As with the open laboratory space category, the guideline was portioned out among the existing programs.

### Other Administrative Department Space

Other administrative space averaged slightly more than one (1) ASF per student FTE, which is significantly less than what the consultant would expect. Part of this may be due to the fact that certain administrative functions are done by University of Colorado System offices which are not included in this study. There is about 30,000 ASF included in this space category. The space types included are very similar to the Other Academic Department Space. The following lists the space types included and the major occupants of the space.

- Central storage is about 8,700 ASF of the total allocated in twelve different administrative units. The majority of the space is split between Public Safety, Registration Services, and RPS-Research Building Systems.
- There is about 5,000 ASF of central service space belonging Imaging Services.
- The Alumni Association has about 4,700 of exhibition space for its museum collection..
- There is about 4,600 ASF of meeting room space dispersed among five units – Admissions; Planning, Budget & Analysis; and Career Services; RPS-Research Building Systems; and Housing.
- Media production space for University Communications accounts for 2,400 ASF.
- The remaining 4,600 ASF is in physical training rooms, non physical plant shop space, lounges, and computer rooms

The guideline used for the analysis is two (2) ASF per Student FTE. The guideline application shows a space deficit of about 23,600 ASF at the base

October 2010

year. For the target year deficits increase to 25,500 ASF for 2020 and 28,600 for 2030.

## Other Administrative Department Space Analysis

College / School / Unit	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Senior Vice Chancellor and Chief Financial Officer	9,769	16,765	(6,996)	9,769	18,306	(8,537)	19,397	(9,628)
Vice Chancellor, Administration	11,740	20,147	(8,407)	11,740	21,999	(10,259)	23,311	(11,571)
Vice Chancellor, Student Affairs	8,535	16,711	(8,176)	10,426	17,121	(6,695)	17,844	(7,418)
<b>TOTAL</b>	<b>30,044</b>	<b>53,623</b>	<b>(23,579)</b>	<b>31,935</b>	<b>57,426</b>	<b>(25,491)</b>	<b>60,552</b>	<b>(28,617)</b>

ASF = Assignable Square Feet

## Student Recreation and Athletics

### Student Recreation

This category includes rooms that have space use codes of 520, 523, 525, 670, 675, and 730 which are used for student recreation. The facilities are located in the Student Recreation Center, Carlson Gymnasium, Bear Creek Commons, and includes the Clare Small Arts & Sciences' natatorium. For the student recreation analysis, the consultants are using a guideline developed by Bareither & Schillinger in their book University Space Planning. Application of the guideline includes 12.1 ASF for each undergraduate student, 25% of the graduate students, and 15% of non-student staff

Application of this guideline for Fall 2009 shows a current need for approximately 144,800 ASF of additional space in this category. As the University grows to 35,000 students, the need for additional space in this category increases to 161,100 ASF for 2020 and 174,300 ASF for the 2030 horizon. This need is for indoor recreation space only. Outdoor playing fields would be in addition to this finding. The office need for the Recreation Center – Special Operations is about 7,000 ASF, which brings the total 2030 space need for this unit to just under 350,000 ASF.

### Athletics

The need for athletic space is based on the number, type, and level of competitive sports played. CU-Boulder is joining the Pac-10 Conference NCAA Division I in 2011 when it becomes the PAC-12. CU-Boulder has 16 varsity sports. Due to the varied space requirements of indoor athletics program space, there is no one guideline that addresses this space category. The consultants conducted a comparative analysis of athletic space as part of the benchmarking for this analysis. Based on the consultant's knowledge of indoor athletic facilities, 400,000 ASF for athletic space is a reasonable amount

### Recreation Guideline Analysis

Fall 2009	FTE	Guideline Percentage	Guideline Users	Guideline ASF (Users * 12.1)
Undergraduate Students	24,084	100%	24,084	291,416
Graduate Students	2,728	25%	682	8,252
Total Faculty and Staff	6,827	15%	1,024	12,391
<b>Total Guideline ASF</b>				<b>312,060</b>
<i>Existing ASF</i>				<i>167,278</i>
<b>Surplus / (Deficit)</b>				<b>(144,782)</b>

2020	FTE	Guideline Percentage	Guideline Users	Guideline ASF (Users * 12.1)
Undergraduate Students	25,134	100%	25,134	304,121
Graduate Students	3,579	25%	895	10,826
Total Faculty and Staff	7,392	15%	1,109	13,416
<b>Total Guideline ASF</b>				<b>328,364</b>
<i>Existing ASF</i>				<i>167,278</i>
<b>Surplus / (Deficit)</b>				<b>(161,086)</b>

2030	FTE	Guideline Percentage	Guideline Users	Guideline ASF (Users * 12.1)
Undergraduate Students	25,973	100%	25,973	314,273
Graduate Students	4,302	25%	1,076	13,014
Total Faculty and Staff	7,854	15%	1,178	14,255
<b>Total Guideline ASF</b>				<b>341,542</b>
<i>Existing ASF</i>				<i>167,278</i>
<b>Surplus / (Deficit)</b>				<b>(174,264)</b>

of square footage to use as a guideline for this master planning exercise. The amount of space generated for this space type does not include offices for the staff. It includes only the 520 range of room use codes plus space for concessions, training facilities, locker/shower rooms, and meeting/viewing/conference facilities required to support intercollegiate athletics. Space needs calculated in this report are for indoor space only and do not include the needs for outdoor athletic facilities.

There is approximately 266,600 ASF of existing space located in the Carlson Gymnasium, Dal Ward Athletic Center, Coors Events Center, Balch Fieldhouse Complex, Soccer Locker Room, the Stadium, and a variety of temporary buildings. The guideline application shows a total deficit of about 134,000 ASF for the base year. For the planning horizons, the existing ASF increases by 22,000 ASF, reflecting the completion of the new Basketball / Volleyball Practice Facility. As a result of the new facility, the deficit increases to 111,400 ASF for both the 2020 and 2030 planning targets.

The total space need for the Athletic program includes the 400,000 ASF of indoor space plus approximately 25,000 ASF of office facilities for a total of 425,000 ASF.

### Student Union / Center Space (including Dining and Bookstore Space)

Widely used formulas recommend nine (9) or ten (10) ASF per student for generating student space. These guidelines for space application provide space for the various functions and the space use code designations that are typically found in a comprehensive student center including: food service (630s), bookstore (660s), lounge (650s), recreation space (670s), meeting space (680s), student government/club space (300s and 680s), and other student service type space categories. Existing facilities in this category include space in the University Memorial Center (Vice Chancellor, Student Affairs), the CU Book Store (Vice Chancellor, Administration), and food services in the Leeds School of Business and the School of Law.

The existing facilities counted in this category average 5.3 ASF per student FTE. The guideline applied by the consultants is nine (9) ASF per student FTE for student space at CU-Boulder. At Fall 2009 enrollment levels, the application of this space guideline shows a deficit of about 135,000 ASF. At the target years,

the deficit decreases to approximately 96,100 ASF for 2020 and 115,400 ASF for the 2030 planning year. This is due to the additional dining facilities in the Systems Biotechnology Building and the Center for Community.

### Student Union/Center Space Analysis

College / School / Unit	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
College of Arts and Sciences	0	3,183	(3,183)	3,183	3,183	0	3,183	0
Leeds School of Business	2,243	4,300	(2,057)	2,243	4,300	(2,057)	4,300	(2,057)
College of Engineering and Applied Science	0	3,183	(3,183)	3,183	3,183	0	3,183	0
School of Law	3,091	3,091	0	3,091	3,091	0	3,091	0
Vice Chancellor, Research & Dean, Graduate School	0	3,186	(3,186)	3,186	3,186	0	3,186	0
Vice Chancellor, Administration	31,149	45,000	(13,851)	31,149	45,000	(13,851)	45,000	(13,851)
Vice Chancellor, Student Affairs	104,490	213,988	(109,498)	153,075	233,230	(80,155)	252,616	(99,541)
<b>TOTAL</b>	<b>140,973</b>	<b>275,931</b>	<b>(134,958)</b>	<b>199,110</b>	<b>295,173</b>	<b>(96,063)</b>	<b>314,559</b>	<b>(115,449)</b>

ASF = Assignable Square Feet

## Student Health Care Facilities

The variety of services offered by student health care programs vary from institution to institution. The space included as student health care at CU-Boulder is the non-office space in the Wardenberg Health Center and CAPS – Counseling and Psychological Services. The office space needed for both of these units is calculated and included under Student Affairs administrative offices.

For this analysis the consultants used 0.50 ASF per student FTE. The guideline application shows a deficit of space for this space type at the base year and both target years of approximately 850 ASF, 900 ASF, and 1,700 ASF respectively. CAPS is projected to be in the new Center for Community building at the Future Year.

The approximate amount of facilities required for Campus Health Services at the University would be the total of the Student Health Care guideline plus the office space required by its personnel.

## Physical Plant

Physical plant space includes room use codes 720 through 765 and excludes parking decks. If central storage space (730s) is not space assigned to and controlled by physical plant operations, it is counted in other space categories such as other academic or administrative department space, library, athletics, or residence life.

Most guidelines suggest a percentage of 6% to 8% of all square footage on campus, minus existing physical plant and residence life space, be used to drive master plan needs in this category. In most cases, these percentages generate a space need that is greater than the amount of physical plant space typically found at an institution. From previous studies, the consultants have found that the average percentage used to drive physical plant space needs is approximately 4% to 6%.

For CU-Boulder the consultant applied four and one-half percent (4.5%) as the physical plant guideline. At the base year, the guideline is calculated against existing ASF minus residence space, but for future projections, it is calculated against the projected guideline ASF minus residence space. In the base year, the guideline generated about a 40,360 ASF deficit. For the 2020 planning horizon, a 110,000 ASF deficit is shown, which increases to 135,000 ASF for 2030.

## Residence Life Space

### *Undergraduate Housing*

Across the nation, there are changes in student demands for housing. These changes result in more housing space per student in most recently constructed facilities. A guideline widely used in higher education residence life planning is 275 ASF per bed. A 275 ASF per bed guideline provides sufficient space

for a variety of housing types ranging from traditional double-loaded corridor layouts to suite and apartment-style housing. This analysis uses 275 ASF per bed as the guideline to address undergraduate housing needs. The consultant recognizes that CU-Boulder has been able to obtain a much more efficient square footage (less than 150 ASF per bed) for its traditional double-loaded corridor layout. However, for future housing the 275 ASF will give the institution some flexibility as to the types of housing it offers and the implementation of additional living-learning concepts which require more community space in each building.

According to the Task Force report on Living-Learning Environments, CU-Boulder needs to increase its residence capacity by 1,500 beds minimum in order to accommodate first year students and a residential population of 20% returning students for a successful Residential Academic Program (RAP). For a more effective percentage (30%) of returning students and a successful Residential College, 2,000 beds are needed.

This analysis uses 1,500 as the additional number of beds that is needed beyond the current housing stock for the Fall 2009 analysis. For the 2030 analysis, 2,000 beds is used as the additional number of beds needed. Multiplying the 275 ASF per additional bed generates a need for about 412,500 ASF more residence life space at the base year. At the 2030 planning horizon, using 2,000 beds as the number of additional beds needed, a need for an additional 550,000 ASF is calculated.

### ***Graduate / Family-Style Housing***

The majority of the family-style housing is north of Boulder Creek. It includes Athens Court, Athens North Court, Family/Staff Court, Marine Court, and Newton Court. These communities contain a total of 650 units. There are approximately 200 units at Smiley Court which is located just south of Boulder Creek near East Campus and the Research Park. In total, there are about 850 existing units.

The units just north of Boulder Creek are 40 to 70 years old without any substantial renovation. Their life-expectancy has expired and they need to be replaced. The desire is to replace this housing with about 1,300 units at a minimum. At maximum density, this area could support up to 1,900 units. The 200 units at Smiley Court also need to be replaced.

Currently there are 200 family-style units planned at Williams Village. These new units could provide the domino effect needed to replace some of the existing family-style housing stock. The goal of the University is to provide housing for 20% of the graduate student population by the end of the planning period. In total, there is a need for 1,700 to 2,300 family-style units, which includes the housing need for graduate international students. The goal of the Department of Housing and Dining Services is to develop sub communities within the overall community. These sub communities would have between 200 and 300 apartments each with their own unique identity. Those units that are not rented to students will be rented to faculty and staff.

October 2010

For Fall 2009, 200 new family-style units are included in the analysis (those planned at Williams Village). The guideline used for family-style housing is 1,000 ASF. This amount per unit will allow for not only the housing unit itself but the auxiliary spaces need to build these communities. For the target years, complete replacement of the existing family-style housing units is planned thereby increasing the need to 1,700 units for 2020 and the complete build-out of 2,300 units in the 2030 planning horizon. The existing family-style complexes have been removed from the inventory – a total of about 500,000 ASF.

The table below shows progression of housing units for both undergraduate and graduate/family-style housing units.

## Residential Space

	ASF per Bed	Fall 2009		2020		2030	
		No. of New Beds	Total ASF	No. of New Beds	Total ASF	No. of New Beds	Total ASF
<b>Existing ASF</b>			<b>1,917,789</b>		<b>1,917,789</b>		<b>1,917,789</b>
New Undergraduate Housing (includes undergraduate international students)	275	1,500	412,500	1,500	412,500	2,000	550,000
Family-Style Housing (includes graduate international students)	1,000	200	200,000	1,700	1,700,000	2,300	2,300,000
<b>New Housing Total</b>		<b>1,700</b>	<b>+612,500</b>	<b>3,200</b>	<b>+2,112,500</b>	<b>4,300</b>	<b>+2,850,000</b>
<b>Minus Housing to be Razed</b> (includes Athens Court, Athens North Court, Faculty/Staff Court, Marine Court, Newton Court, and Smiley Court)			<b>0</b>		<b>-606,178</b>		<b>-606,178</b>
<b>Plus New Construction</b> (includes Smith Hall Addition and Williams Village Phase II Pod C)					<b>+105,915</b>		<b>+105,915</b>
<b>TOTAL ASF</b>			<b>2,530,289</b>		<b>3,530,026</b>		<b>4,267,526</b>







---

# **Section 8**

## **College/School and Administrative Unit Findings**

---



**SECTION 8: COLLEGE/SCHOOL AND ADMINISTRATIVE UNIT FINDINGS****Findings Overview**

The following pages illustrate each of the colleges', schools' and administrative units' space needs findings. It shows the current and future space needs analysis. The bar chart graphs its existing space and projected existing space compared to the current and future guideline assignable square feet (ASF). How the office space guidelines were applied is also shown. There is also a crosstab report showing what buildings and in which space categories the unit currently has space. The schools and administrative units are ordered as follows:

**Academic Units**

College of Architecture and Planning

College of Arts and Sciences

*Arts (includes Art & Art History, Colorado Shakespeare Festival, Film Studies, and Theatre & Dance)*

*Humanities*

*Natural Sciences*

*Social Sciences*

*Other (includes Academic Advising, Residential Academic Program, ASSETT, Offices of the Dean, and IT Administration)*

College of Engineering and Applied Science

College of Music

Leeds School of Business

School of Education

School of Journalism and Mass Communication

School of Law

Continuing Education and Professional Studies

Provost & Executive Vice Chancellor, Academic Affairs

Vice Chancellor, Diversity, Equity & Community Engagement

Vice Chancellor, Research & Dean, Graduate School

**Administrative Units**

Office of the Chancellor

Senior Vice Chancellor and Chief Financial Officer

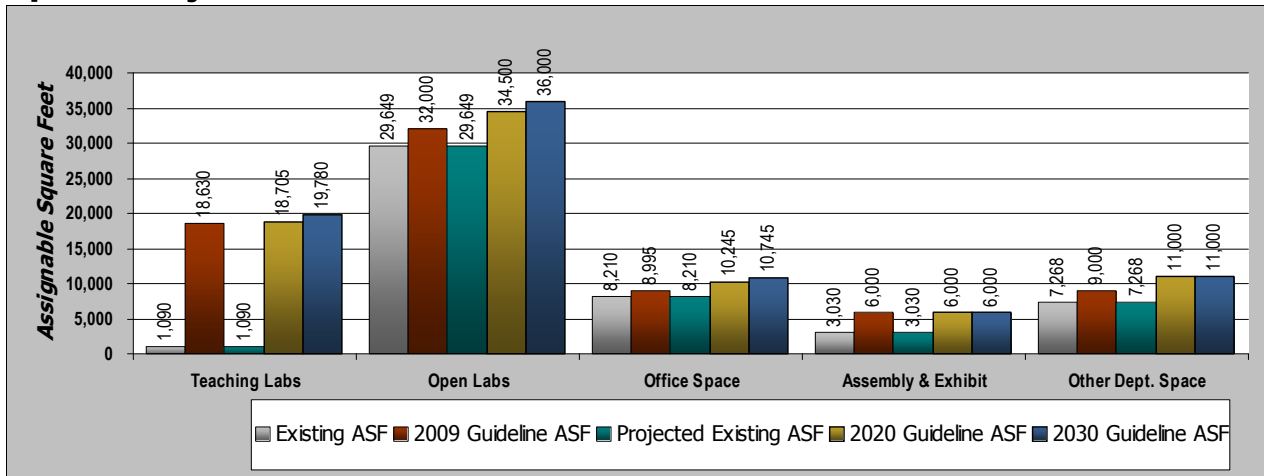
Vice Chancellor, Administration

Vice Chancellor, Student Affairs

## Section 8

### College of Architecture and Planning

#### Space Analysis



ASF = Assignable Square Feet

#### Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>								
Teaching Laboratories & Service	1,090	18,630	(17,540)	1,090	18,705	(17,615)	19,780	(18,690)
Open Laboratories & Service	29,649	32,000	(2,351)	29,649	34,500	(4,851)	36,000	(6,351)
Academic Offices & Service	8,210	8,995	(785)	8,210	10,245	(2,035)	10,745	(2,535)
Assembly & Exhibit	3,030	6,000	(2,970)	3,030	6,000	(2,970)	6,000	(2,970)
Other Academic Department Space	7,268	9,000	(1,732)	7,268	11,000	(3,732)	11,000	(3,732)
<b>TOTAL</b>	<b>49,247</b>	<b>74,625</b>	<b>(25,378)</b>	<b>49,247</b>	<b>80,450</b>	<b>(31,203)</b>	<b>83,525</b>	<b>(34,278)</b>

ASF = Assignable Square Feet

#### Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Ctr for Innovation		10,549		435				7,136	18,120
Environmental Design	1,090	19,100		7,775		3,030		132	31,127
<b>TOTAL</b>	<b>1,090</b>	<b>29,649</b>		<b>8,210</b>		<b>3,030</b>		<b>7,268</b>	<b>49,247</b>

## College of Architecture and Planning

## Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009	
		Head- count	Total Guideline ASF Existing ASF
Manager	150	1	150
Faculty - Tenured	150	9	1,350
Faculty (Non Tenure Track) (FT)	150	34	5,100
Future T/TT Faculty	150	0	0
Emeritus Faculty	50	4	200
Other Professionals	150	3	450
Technical/Paraprofessional	100	4	400
Clerical & Secretarial	100	3	300
Research Assistant (Student)	50	1	50
Graduate Assistant	50	3	150
<b>Total Office Space</b>			<b>8,150 6,756</b>
<i>Total Service Space</i>			<i>465 986</i>
<i>Total Conference Room Space</i>			<i>380 468</i>
<b>TOTAL</b>		<b>62</b>	<b>8,995 8,210</b>
<b>Surplus/(Deficit)</b>			<b>(785)</b>

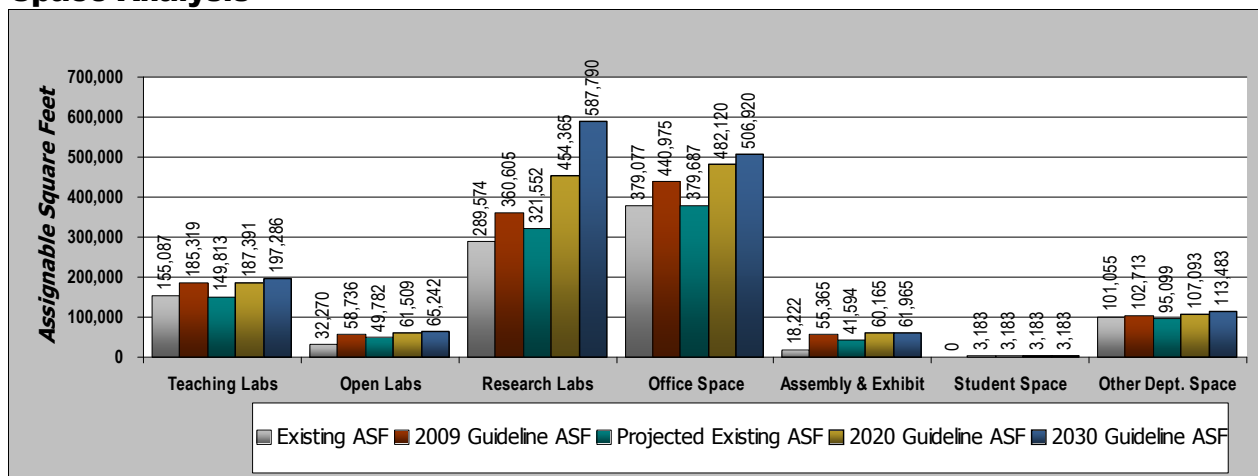
## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Manager	150	1	150		1	150	
Faculty - Tenured	150	9	1,350		9	1,350	
Faculty (Non Tenure Track) (FT)	150	37	5,550		39	5,850	
Future T/TT Faculty	150	4	600		5	750	
Emeritus Faculty	50	4	200		4	200	
Other Professionals	150	3	450		3	450	
Technical/Paraprofessional	100	4	400		4	400	
Clerical & Secretarial	100	3	300		3	300	
Research Assistant (Student)	50	1	50		1	50	
Graduate Assistant	50	3	150		3	150	
<b>Total Office Space</b>			<b>9,200</b>	<b>6,756</b>		<b>9,650</b>	<b>6,756</b>
<i>Total Service Space</i>			<i>585</i>	<i>986</i>		<i>615</i>	<i>986</i>
<i>Total Conference Room Space</i>			<i>460</i>	<i>468</i>		<i>480</i>	<i>468</i>
<b>TOTAL</b>		<b>69</b>	<b>10,245</b>	<b>8,210</b>	<b>72</b>	<b>10,745</b>	<b>8,210</b>
<b>Surplus/(Deficit)</b>			<b>(2,035)</b>			<b>(2,535)</b>	

## Section 8

### College of Arts and Sciences

#### Space Analysis



ASF = Assignable Square Feet

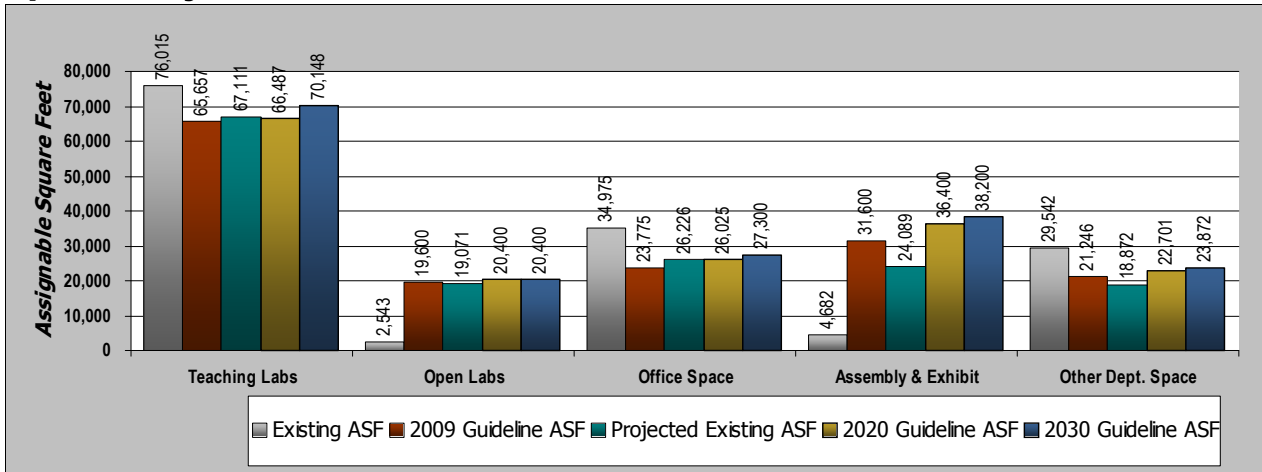
#### Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Academic Space								
Teaching Laboratories & Service	155,087	185,319	(30,232)	149,813	187,391	(37,578)	197,286	(47,473)
Open Laboratories & Service	32,270	58,736	(26,466)	49,782	61,509	(11,727)	65,242	(15,460)
Research Laboratories & Service	289,574	360,605	(71,031)	321,552	454,365	(132,813)	587,790	(266,238)
Academic Offices & Service	379,077	440,975	(61,898)	379,687	482,120	(102,433)	506,920	(127,233)
Assembly & Exhibit	18,222	55,365	(37,143)	41,594	60,165	(18,571)	61,965	(20,371)
Other Academic Department Space	101,055	102,713	(1,658)	95,099	107,093	(11,994)	113,483	(18,384)
Academic Space Subtotal	975,285	1,203,713	(228,428)	1,037,527	1,352,643	(315,116)	1,532,686	(495,159)
Services and Administration								
Student Union/Center Space	0	3,183	(3,183)	3,183	3,183	0	3,183	0
TOTAL	975,285	1,206,896	(231,611)	1,040,710	1,355,826	(315,116)	1,535,869	(495,159)

ASF = Assignable Square Feet

## College of Arts &amp; Sciences - Arts

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Academic Space								
Teaching Laboratories & Service	76,015	65,657	10,358	67,111	66,487	624	70,148	(3,037)
Open Laboratories & Service	2,543	19,600	(17,057)	19,071	20,400	(1,329)	20,400	(1,329)
Academic Offices & Service	34,975	23,775	11,200	26,226	26,025	201	27,300	(1,074)
Assembly & Exhibit	4,682	31,600	(26,918)	24,089	36,400	(12,311)	38,200	(14,111)
Other Academic Department Space	29,542	21,246	8,296	18,872	22,701	(3,829)	23,872	(5,000)
TOTAL	147,757	161,878	(14,121)	155,369	172,013	(16,644)	179,920	(24,551)

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Atlas Center	2,460			3,031				452	5,943
Carlson Gymnasium	800								800
Fleming Building	30,326			20,435		169		14,193	65,123
Hellems Arts & Scien								85	85
Housing Sys Service	12,740	574		5,312				138	18,764
Macky Auditorium	861	1,969		214				533	3,577
Temporary Bldg 40								132	132
Temporary Bldg 65				1,319				238	1,557
Temporary Bldg 65 Ga								344	344
Temporary Bldg 72								13,105	13,105
University Theatre	28,828			4,664		4,513		322	38,327
Visual Arts Complex									
<b>TOTAL</b>	<b>76,015</b>	<b>2,543</b>		<b>34,975</b>		<b>4,682</b>		<b>29,542</b>	<b>147,757</b>

## Section 8

### College of Arts & Sciences - Arts

#### Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Director	200	2	400	
Chair	200	3	600	
Manager	150	2	300	
Faculty - Tenured	150	33	4,950	
Faculty - Tenure Track	150	19	2,850	
Faculty (Non Tenure Track) (FT)	150	11	1,650	
Faculty (Non Tenure Track) (PT)	50	18	900	
Artist/Scholar in Residence	150	1	150	
Visiting Faculty	150	1	150	
Future T/TT Faculty	150	0	0	
Other Professionals	150	8	1,200	
Technical/Paraprofessional	100	18	1,800	
Clerical & Secretarial	100	4	400	
Teaching Assistant	50	12	600	
Graduate Assistant	50	52	2,600	
Student Worker	25	41	1,025	
Student Worker (No Office Needed)	0	38	0	
Skilled Crafts (No Office Needed)	0	1	0	
<b>Total Office Space</b>			<b>19,575</b>	<b>32,638</b>
<i>Total Service Space</i>			<i>2,320</i>	<i>1,730</i>
<i>Total Conference Room Space</i>			<i>1,880</i>	<i>607</i>
<b>TOTAL</b>		<b>264</b>	<b>23,775</b>	<b>34,975</b>
<b>Surplus/(Deficit)</b>			<b>11,200</b>	

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Director	200	2	400		2	400	
Chair	200	3	600		3	600	
Manager	150	2	300		2	300	
Faculty - Tenured	150	33	4,950		33	4,950	
Faculty - Tenure Track	150	19	2,850		19	2,850	
Faculty (Non Tenure Track) (FT)	150	12	1,800		12	1,800	
Faculty (Non Tenure Track) (PT)	50	21	1,050		21	1,050	
Artist/Scholar in Residence	150	1	150		1	150	
Visiting Faculty	150	1	150		1	150	
Future T/TT Faculty	150	8	1,200		13	1,950	
Other Professionals	150	8	1,200		8	1,200	
Technical/Paraprofessional	100	18	1,800		18	1,800	
Clerical & Secretarial	100	4	400		4	400	
Teaching Assistant	50	13	650		14	700	
Graduate Assistant	50	57	2,850		61	3,050	



## College of Arts &amp; Sciences - Arts

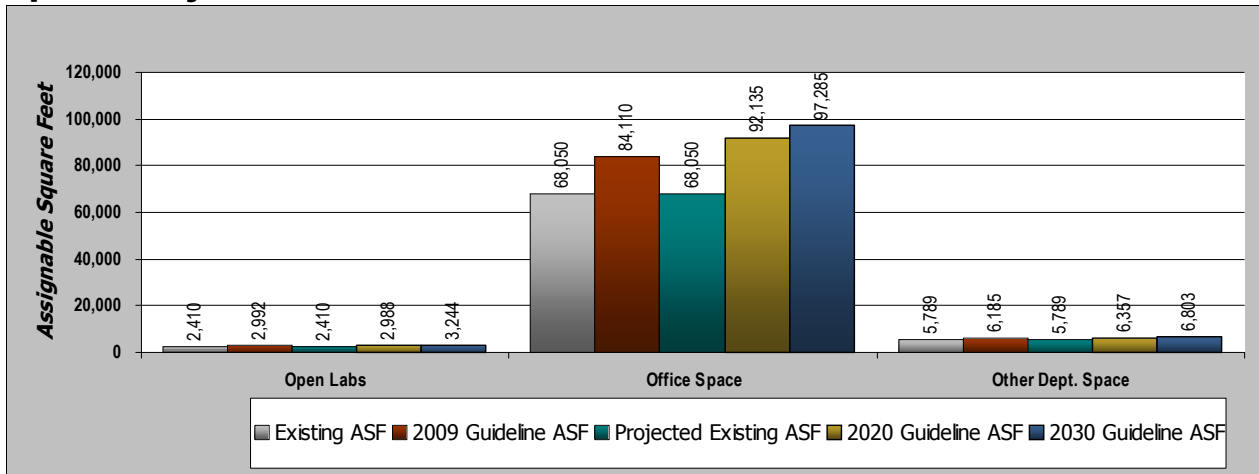
## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Student Worker	25	43	1,075		44	1,100	
Student Worker (No Office Needed)	0	40	0		41	0	
Skilled Crafts (No Office Needed)	0	1	0		1	0	
<b>Total Office Space</b>			<b>21,425</b>	<b>25,552</b>		<b>22,450</b>	<b>25,552</b>
<i>Total Service Space</i>			<i>2,560</i>	<i>480</i>		<i>2,710</i>	<i>480</i>
<i>Total Conference Room Space</i>			<i>2,040</i>	<i>194</i>		<i>2,140</i>	<i>194</i>
<b>TOTAL</b>		<b>286</b>	<b>26,025</b>	<b>26,226</b>	<b>298</b>	<b>27,300</b>	<b>26,226</b>
<b>Surplus/(Deficit)</b>			<b>201</b>			<b>(1,074)</b>	

## Section 8

### College of Arts & Sciences - Humanities

#### Space Analysis



ASF = Assignable Square Feet

#### Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>								
Open Laboratories & Service	2,410	2,992	(582)	2,410	2,988	(578)	3,244	(834)
Academic Offices & Service	68,050	84,110	(16,060)	68,050	92,135	(24,085)	97,285	(29,235)
Other Academic Department Space	5,789	6,185	(396)	5,789	6,357	(568)	6,803	(1,014)
<b>TOTAL</b>	<b>76,249</b>	<b>93,287</b>	<b>(17,038)</b>	<b>76,249</b>	<b>101,480</b>	<b>(25,231)</b>	<b>107,332</b>	<b>(31,083)</b>

ASF = Assignable Square Feet

#### Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Denison Arts & Scien				2,989					2,989
Eaton Humanities Bld				9,475				912	10,387
Education Bldg				399					399
Environmental Design				5,112					5,112
Gates Woodruff Wome				421					421
Hellems Arts & Scien		2,410		21,946				652	25,008
IBS5				1,539				120	1,659
Ketchum Arts & Scien				2,138				232	2,370
Macky Auditorium				1,702				200	1,902
McKenna Languages				11,752					11,752
Norlin Library				633				2,730	3,363
Science Learning Lab				2,015				615	2,630
Stadium Building				1,517					1,517
Temp Bldg 1 at Clar				2,835				151	2,986
Temporary Bldg 97				903				177	1,080
Woodbury Arts & Scie				2,674					2,674
<b>TOTAL</b>		<b>2,410</b>		<b>68,050</b>				<b>5,789</b>	<b>76,249</b>

## College of Arts &amp; Sciences - Humanities

## Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Director	200	4	800	
Chair	200	10	2,000	
Assistant Director	150	1	150	
Manager	150	1	150	
Faculty - Tenured	150	123	18,450	
Faculty - Tenure Track	150	53	7,950	
Faculty (Non Tenure Track) (FT)	150	117	17,550	
Faculty (Non Tenure Track) (PT)	50	49	2,450	
Artist/Scholar in Residence	150	7	1,050	
Visiting Faculty	150	3	450	
Future T/TT Faculty	150	0	0	
Adjunct Faculty	50	3	150	
Other Professionals	150	8	1,200	
Research Professional (FT)	150	4	600	
Research Professional (PT)	75	6	450	
Research Associate	150	1	150	
Technical/Paraprofessional	100	16	1,600	
Clerical & Secretarial	100	14	1,400	
Teaching Assistant	50	177	8,850	
Research Assistant (Student)	50	2	100	
Graduate Assistant	50	108	5,400	
Student Worker	25	49	1,225	
<b>Total Office Space</b>			<b>72,125</b>	<b>58,540</b>
<i>Total Service Space</i>			<i>6,820</i>	<i>6,013</i>
<i>Total Conference Room Space</i>			<i>5,165</i>	<i>3,153</i>
<b>TOTAL</b>		<b>756</b>	<b>84,110</b>	<b>67,706</b>
<b>Surplus/(Deficit)</b>			<b>(16,404)</b>	

## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Director	200	4	800		4	800	
Chair	200	10	2,000		10	2,000	
Assistant Director	150	1	150		1	150	
Manager	150	1	150		1	150	
Faculty - Tenured	150	123	18,450		123	18,450	
Faculty - Tenure Track	150	53	7,950		53	7,950	
Faculty (Non Tenure Track) (FT)	150	127	19,050		135	20,250	
Faculty (Non Tenure Track) (PT)	50	52	2,600		54	2,700	
Artist/Scholar in Residence	150	7	1,050		7	1,050	
Visiting Faculty	150	3	450		3	450	
Future T/TT Faculty	150	25	3,750		40	6,000	

## Section 8

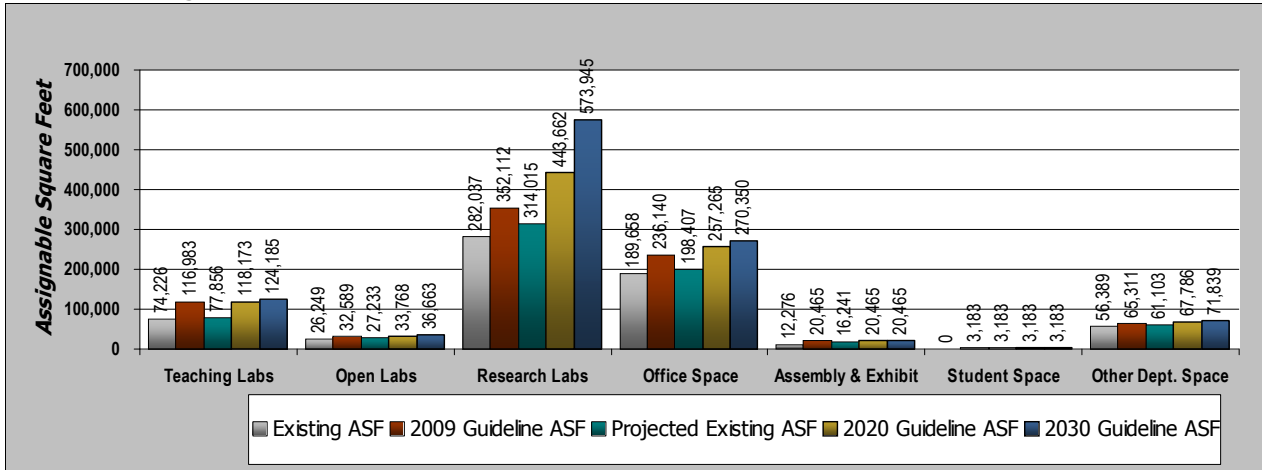
### College of Arts & Sciences - Humanities

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Adjunct Faculty	50	3	150		3	150	
Other Professionals	150	8	1,200		8	1,200	
Research Professional (FT)	150	4	600		4	600	
Research Professional (PT)	75	6	450		6	450	
Research Associate	150	1	150		1	150	
Technical/Paraprofessional	100	16	1,600		16	1,600	
Clerical & Secretarial	100	14	1,400		14	1,400	
Teaching Assistant	50	194	9,700		205	10,250	
Research Assistant (Student)	50	2	100		2	100	
Graduate Assistant	50	118	5,900		124	6,200	
Student Worker	25	50	1,250		50	1,250	
<b>Total Office Space</b>			<b>78,900</b>	<b>58,540</b>		<b>83,300</b>	<b>58,540</b>
<i>Total Service Space</i>			<i>7,570</i>	<i>6,013</i>		<i>8,020</i>	<i>6,013</i>
<i>Total Conference Room Space</i>			<i>5,665</i>	<i>3,153</i>		<i>5,965</i>	<i>3,153</i>
<b>TOTAL</b>		<b>822</b>	<b>92,135</b>	<b>67,706</b>	<b>864</b>	<b>97,285</b>	<b>67,706</b>
<b><i>Surplus/(Deficit)</i></b>			<b><i>(24,429)</i></b>			<b><i>(29,579)</i></b>	

## College of Arts &amp; Sciences - Natural Sciences

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Academic Space								
Teaching Laboratories & Service	74,226	116,983	(42,757)	77,856	118,173	(40,317)	124,185	(46,329)
Open Laboratories & Service	26,249	32,589	(6,340)	27,233	33,768	(6,535)	36,663	(9,430)
Research Laboratories & Service	282,037	352,112	(70,075)	314,015	443,662	(129,647)	573,945	(259,930)
Academic Offices & Service	189,658	236,140	(46,482)	198,407	257,265	(58,858)	270,350	(71,943)
Assembly & Exhibit	12,276	20,465	(8,189)	16,241	20,465	(4,224)	20,465	(4,224)
Other Academic Department Space	56,389	65,311	(8,922)	61,103	67,786	(6,683)	71,839	(10,736)
Academic Space Subtotal	640,835	823,600	(182,765)	694,855	941,119	(246,264)	1,097,447	(402,592)
Services and Administration								
Student Union/Center Space	0	3,183	(3,183)	3,183	3,183	0	3,183	0
TOTAL	640,835	826,783	(185,948)	698,038	944,302	(246,264)	1,100,630	(402,592)

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Admin & Rsch Ctr EC			2,901	1,419					4,320
Benson Earth Science	5,068		18,816	13,236				242	37,362
Bruce Curtis Bldg			665	632					1,297
Carlson Gymnasium	106		5,087	5,793				938	11,924
CASA			13,453	8,040				1,539	23,032
Clare Small Arts & S	2,500		2,638	2,775				26	7,939
Cristol Chemistry &			57,104	10,310				3,319	70,733
Ctr for Innovation			4,752	1,993					6,745
Duane Physics	9,537	18,895	23,007	28,967				5,910	86,316
Ekeley Sciences Bldg	19,565	1,272	18,159	10,348				441	49,785

## Section 8

### College/School and Administrative Unit Findings

### Space Needs Analysis

#### College of Arts & Sciences - Natural Sciences

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Engineering Chemical				231					231
Engineering Classroom	717	624		626					1,967
Engineering Office T				4,783				118	4,901
Fiske Planetarium &		631		644		10,454		1,181	12,910
Greenhouse No 1 At M								2,969	2,969
Guggenheim Geograp		506	302	7,887				152	8,847
Ketchum Arts & Scien	3,337			930					4,267
LASP - Lab for Atmos			1,995	3,605					5,600
Mathematics Building		1,887		12,274					14,161
MCD Biology Building	5,565		35,484	10,121				8,724	59,894
Muenzinger Psych & B	5,840	822	27,425	27,309				9,495	70,891
Porter Biosciences	2,772	842	40,975	9,467				1,531	55,587
Ramaley Biology Bldg	14,794		22,688	16,161				7,392	61,035
Research Park Greenh								9,738	9,738
Science Learning Lab			6,439	1,051				464	7,954
Sommers-Bausch Obs	2,620			628		1,822		874	5,944
Stadium Building	1,805	770	147	8,049				840	11,611
Systems Biotech									
Temp Bldg 1 at Clar				1,149					1,149
Temporary Bldg 97				1,230					1,230
Warehouse No 3								496	496
<b>TOTAL</b>	<b>74,226</b>	<b>26,249</b>	<b>282,037</b>	<b>189,658</b>		<b>12,276</b>		<b>56,389</b>	<b>640,835</b>

**College of Arts & Sciences - Natural Sciences**
**Office Space Guideline Application**

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Director	200	7	1,400	
Chair	200	13	2,600	
Manager	150	1	150	
Distinguished Professor	150	9	1,350	
Faculty - Tenured	150	242	36,300	
Faculty - Tenure Track	150	91	13,650	
Faculty (Non Tenure Track) (FT)	150	48	7,200	
Faculty (Non Tenure Track) (PT)	50	48	2,400	
Artist/Scholar in Residence	150	3	450	
Visiting Faculty	150	3	450	
Research Faculty	150	9	1,350	
Future T/TT Faculty	150	0	0	
Future Research Faculty	150	0	0	
Adjunct Faculty	50	5	250	
Post-Doctoral Fellow	150	13	1,950	
Other Professionals	150	23	3,450	
Research Professional (FT)	150	159	23,850	
Research Professional (PT)	75	64	4,800	
Research Associate	150	253	37,950	
Technical/Paraprofessional	100	43	4,300	
Clerical & Secretarial	100	38	3,800	
Teaching Assistant	50	420	21,000	
Research Assistant (Student)	50	333	16,650	
Graduate Assistant	50	8	400	
Student Worker	25	342	8,550	
Student Worker (No Office Needed)	0	24	0	
Skilled Crafts (No Office Needed)	0	1	0	
Service/Maintenance (No Office Needed)	0	9	0	
<b>Total Office Space</b>			<b>194,250</b>	<b>149,422</b>
<i>Total Service Space</i>			<i>25,765</i>	<i>21,603</i>
<i>Total Conference Room Space</i>			<i>16,125</i>	<i>18,633</i>
<b>TOTAL</b>		<b>2,209</b>	<b>236,140</b>	<b>189,658</b>
<b>Surplus/(Deficit)</b>			<b>(46,482)</b>	

**Office Space Guideline Application for Planning Horizons**

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Director	200	7	1,400		7	1,400	
Chair	200	13	2,600		13	2,600	
Manager	150	1	150		1	150	
Distinguished Professor	150	9	1,350		9	1,350	
Faculty - Tenured	150	242	36,300		242	36,300	

## Section 8

### College of Arts & Sciences - Natural Sciences

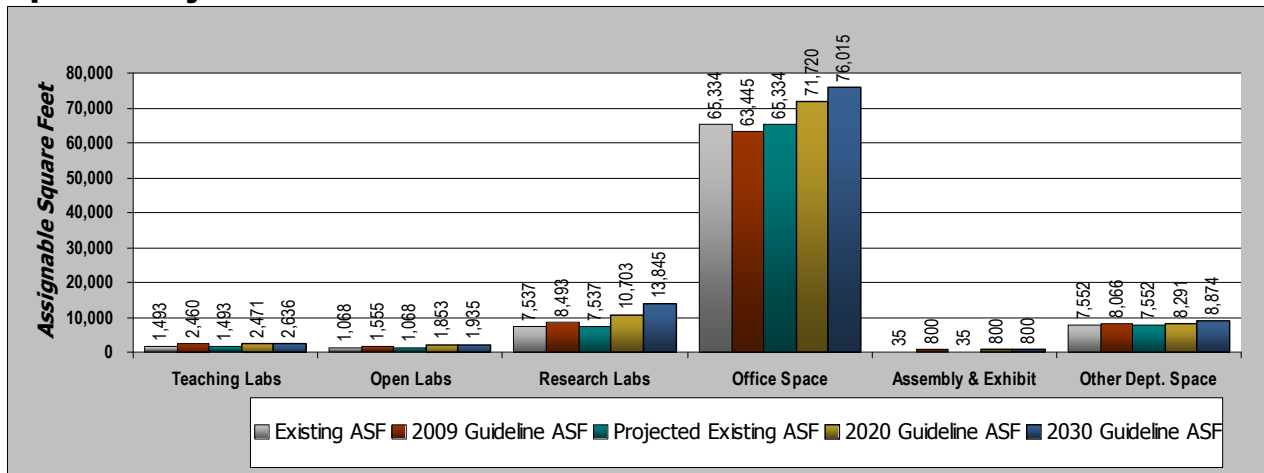
#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Faculty - Tenure Track	150	91	13,650		91	13,650	
Faculty (Non Tenure Track) (FT)	150	52	7,800		53	7,950	
Faculty (Non Tenure Track) (PT)	50	51	2,550		54	2,700	
Artist/Scholar in Residence	150	3	450		3	450	
Visiting Faculty	150	3	450		3	450	
Research Faculty	150	9	1,350		9	1,350	
Future T/TT Faculty	150	60	9,000		89	13,350	
Future Research Faculty	150	3	450		6	900	
Adjunct Faculty	50	5	250		5	250	
Post-Doctoral Fellow	150	14	2,100		15	2,250	
Other Professionals	150	23	3,450		23	3,450	
Research Professional (FT)	150	166	24,900		171	25,650	
Research Professional (PT)	75	66	4,950		68	5,100	
Research Associate	150	265	39,750		274	41,100	
Technical/Paraprofessional	100	43	4,300		45	4,500	
Clerical & Secretarial	100	38	3,800		38	3,800	
Teaching Assistant	50	457	22,850		489	24,450	
Research Assistant (Student)	50	363	18,150		387	19,350	
Graduate Assistant	50	8	400		8	400	
Student Worker	25	357	8,925		367	9,175	
Student Worker (No Office Needed)	0	25	0		26	0	
Skilled Crafts (No Office Needed)	0	1	0		1	0	
Service/Maintenance (No Office Needed)	0	9	0		9	0	
<b>Total Office Space</b>			<b>211,325</b>	<b>156,202</b>		<b>222,075</b>	<b>156,202</b>
<i>Total Service Space</i>			<i>28,255</i>	<i>21,603</i>		<i>29,695</i>	<i>21,603</i>
<i>Total Conference Room Space</i>			<i>17,685</i>	<i>20,602</i>		<i>18,580</i>	<i>20,602</i>
<b>TOTAL</b>		<b>2,384</b>	<b>257,265</b>	<b>198,407</b>	<b>2,506</b>	<b>270,350</b>	<b>198,407</b>
<b>Surplus/(Deficit)</b>			<b>(58,858)</b>			<b>(71,943)</b>	



## College of Arts &amp; Sciences - Social Sciences

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Academic Space								
Teaching Laboratories & Service	1,493	2,460	(967)	1,493	2,471	(978)	2,636	(1,143)
Open Laboratories & Service	1,068	1,555	(487)	1,068	1,853	(785)	1,935	(867)
Research Laboratories & Service	7,537	8,493	(956)	7,537	10,703	(3,166)	13,845	(6,308)
Academic Offices & Service	65,334	63,445	1,889	65,334	71,720	(6,386)	76,015	(10,681)
Assembly & Exhibit	35	800	(765)	35	800	(765)	800	(765)
Other Academic Department Space	7,552	8,066	(514)	7,552	8,291	(739)	8,874	(1,322)
TOTAL	83,019	84,819	(1,800)	83,019	95,838	(12,819)	104,105	(21,086)

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Admin & Rsch Ctr EC				2,837				297	3,134
Armory Trailer				753					753
Communication Disord		299	2,872	4,933				4,142	12,246
Economics Bldg				9,924				456	10,380
Gates Woodruff Wome				1,779				645	2,424
Hale Science Bldg	1,493	222	4,665	9,183		35		1,277	16,875
Hellem Arts & Scien				9,760				393	10,153
IBS5				676					676
Ketchum Arts & Scien		547		21,708				114	22,369
Muenzinger Psych & B				232					232
Norlin Library				1,287				228	1,515
Temp Bldg 1 at Clar				401					401
Temporary Bldg 93				1,861					1,861
<b>TOTAL</b>	<b>1,493</b>	<b>1,068</b>	<b>7,537</b>	<b>65,334</b>		<b>35</b>		<b>7,552</b>	<b>83,019</b>

## Section 8

### College of Arts & Sciences - Social Sciences

#### Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Director	200	2	400	
Chair	200	12	2,400	
Distinguished Professor	150	1	150	
Faculty - Tenured	150	94	14,100	
Faculty - Tenure Track	150	48	7,200	
Faculty (Non Tenure Track) (FT)	150	28	4,200	
Faculty (Non Tenure Track) (PT)	50	24	1,200	
Research Faculty	150	1	150	
Clinical Faculty	150	4	600	
Future T/TT Faculty	150	0	0	
Future Research Faculty	150	0	0	
Adjunct Faculty	50	14	700	
Other Professionals	150	3	450	
Research Professional (FT)	150	4	600	
Research Professional (PT)	75	9	675	
Research Associate	150	10	1,500	
Technical/Paraprofessional	100	15	1,500	
Clerical & Secretarial	100	18	1,800	
Teaching Assistant	50	188	9,400	
Research Assistant (Student)	50	13	650	
Graduate Assistant	50	83	4,150	
Student Worker	25	55	1,375	
Student Worker (No Office Needed)	0	17	0	
<b>Total Office Space</b>			<b>53,200</b>	<b>57,447</b>
<i>Total Service Space</i>			<i>5,835</i>	<i>5,172</i>
<i>Total Conference Room Space</i>			<i>4,410</i>	<i>2,715</i>
<b>TOTAL</b>		<b>643</b>	<b>63,445</b>	<b>65,334</b>
<b>Surplus/(Deficit)</b>			<b>1,889</b>	

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Director	200	2	400		2	400	
Chair	200	12	2,400		12	2,400	
Distinguished Professor	150	1	150		1	150	
Faculty - Tenured	150	94	14,100		94	14,100	
Faculty - Tenure Track	150	48	7,200		48	7,200	
Faculty (Non Tenure Track) (FT)	150	29	4,350		30	4,500	
Faculty (Non Tenure Track) (PT)	50	24	1,200		27	1,350	
Research Faculty	150	1	150		1	150	
Clinical Faculty	150	4	600		5	750	
Future T/TT Faculty	150	33	4,950		46	6,900	

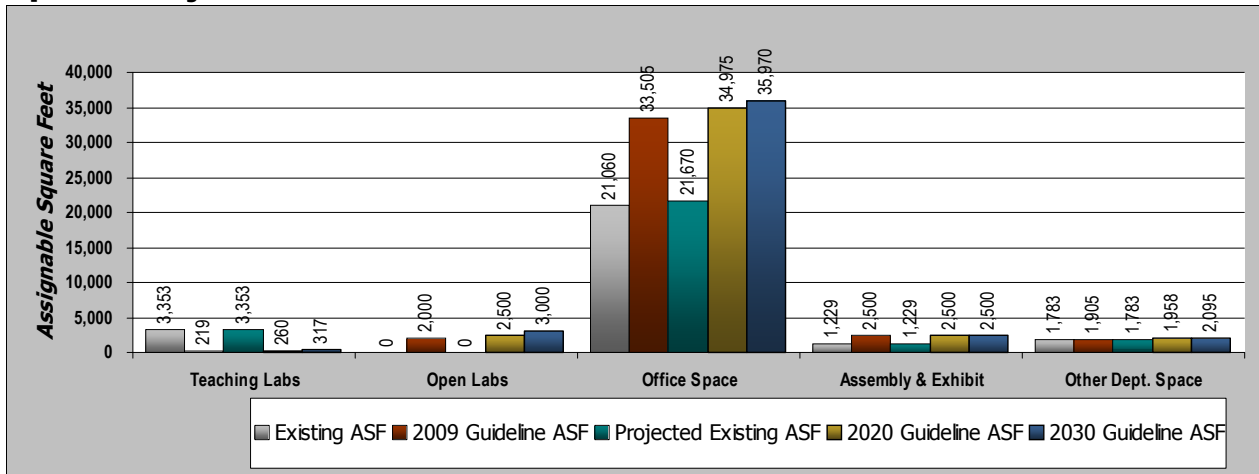
## College of Arts &amp; Sciences - Social Sciences

## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Future Research Faculty	150	1	150		1	150	
Adjunct Faculty	50	14	700		15	750	
Other Professionals	150	3	450		3	450	
Research Professional (FT)	150	4	600		4	600	
Research Professional (PT)	75	9	675		10	750	
Research Associate	150	10	1,500		11	1,650	
Technical/Paraprofessional	100	15	1,500		15	1,500	
Clerical & Secretarial	100	18	1,800		18	1,800	
Teaching Assistant	50	207	10,350		217	10,850	
Research Assistant (Student)	50	13	650		15	750	
Graduate Assistant	50	90	4,500		95	4,750	
Student Worker	25	56	1,400		57	1,425	
Student Worker (No Office Needed)	0	18	0		18	0	
<b>Total Office Space</b>			<b>59,775</b>	<b>57,447</b>		<b>63,325</b>	<b>57,447</b>
<i>Total Service Space</i>			<i>6,855</i>	<i>5,172</i>		<i>7,305</i>	<i>5,172</i>
<i>Total Conference Room Space</i>			<i>5,090</i>	<i>2,715</i>		<i>5,385</i>	<i>2,715</i>
<b>TOTAL</b>		<b>706</b>	<b>71,720</b>	<b>65,334</b>	<b>745</b>	<b>76,015</b>	<b>65,334</b>
<b>Surplus/(Deficit)</b>			<b>(6,386)</b>			<b>(10,681)</b>	

## College of Arts &amp; Sciences - Other Units

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>								
Teaching Laboratories & Service	3,353	219	3,134	3,353	260	3,093	317	3,036
Open Laboratories & Service	0	2,000	(2,000)	0	2,500	(2,500)	3,000	(3,000)
Academic Offices & Service	21,060	33,505	(12,445)	21,670	34,975	(13,305)	35,970	(14,300)
Assembly & Exhibit	1,229	2,500	(1,271)	1,229	2,500	(1,271)	2,500	(1,271)
Other Academic Department Space	1,783	1,905	(122)	1,783	1,958	(175)	2,095	(312)
<b>TOTAL</b>	<b>27,425</b>	<b>40,129</b>	<b>(12,704)</b>	<b>28,035</b>	<b>42,193</b>	<b>(14,158)</b>	<b>43,882</b>	<b>(15,847)</b>

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Baker Hall				1,296					1,296
Buckingham Hall				335					335
Darley Commons				815					815
Duane Physics				82					82
Eaton Humanities Bld				179				872	1,051
Farrand Hall				565					565
Fleming Building				1,919		1,229		159	3,307
Hellems Arts & Scien				472					472
Ketchum Arts & Scien				678				537	1,215
Libby Hall	3,353			348					3,701
Macky Auditorium				1,463					1,463
McKenna Languages				147					147
Old Main				6,349					6,349
Science Learning Lab								215	215
Sewall Hall				836					836
Smith Hall				190					190

October 2010

## College of Arts & Sciences - Other Units

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Stadium Building				133					133
Williams Village C									
Woodbury Arts & Scie				5,253					5,253
<b>TOTAL</b>	<b>3,353</b>			<b>21,060</b>		<b>1,229</b>		<b>1,783</b>	<b>27,425</b>

## Section 8

### College of Arts & Sciences - Other Units

#### Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250	
Associate Dean	200	4	800	
Director	200	2	400	
Associate Director	200	3	600	
Assistant Dean	150	1	150	
Assistant Director	150	2	300	
Manager	150	3	450	
Faculty - Tenured	150	5	750	
Faculty (Non Tenure Track) (FT)	150	20	3,000	
Faculty (Non Tenure Track) (PT)	50	12	600	
Future T/TT Faculty	150	0	0	
Emeritus Faculty	50	118	5,900	
Other Professionals	150	72	10,800	
Technical/Paraprofessional	100	30	3,000	
Clerical & Secretarial	100	6	600	
Research Assistant (Student)	50	1	50	
Student Worker	25	29	725	
Student Worker (No Office Needed)	0	16	0	
<b>Total Office Space</b>			<b>28,375</b>	<b>17,440</b>
<i>Total Service Space</i>			<i>2,610</i>	<i>2,739</i>
<i>Total Conference Room Space</i>			<i>2,520</i>	<i>881</i>
<b>TOTAL</b>		<b>325</b>	<b>33,505</b>	<b>21,060</b>
<b>Surplus/(Deficit)</b>			<b>(12,445)</b>	

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250		1	250	
Associate Dean	200	4	800		5	1,000	
Director	200	2	400		2	400	
Associate Director	200	3	600		3	600	
Assistant Dean	150	1	150		1	150	
Assistant Director	150	2	300		2	300	
Manager	150	3	450		3	450	
Faculty - Tenured	150	5	750		5	750	
Faculty (Non Tenure Track) (FT)	150	22	3,300		23	3,450	
Faculty (Non Tenure Track) (PT)	50	13	650		14	700	
Future T/TT Faculty	150	1	150		2	300	
Emeritus Faculty	50	118	5,900		118	5,900	
Other Professionals	150	76	11,400		77	11,550	
Technical/Paraprofessional	100	31	3,100		32	3,200	
Clerical & Secretarial	100	6	600		6	600	

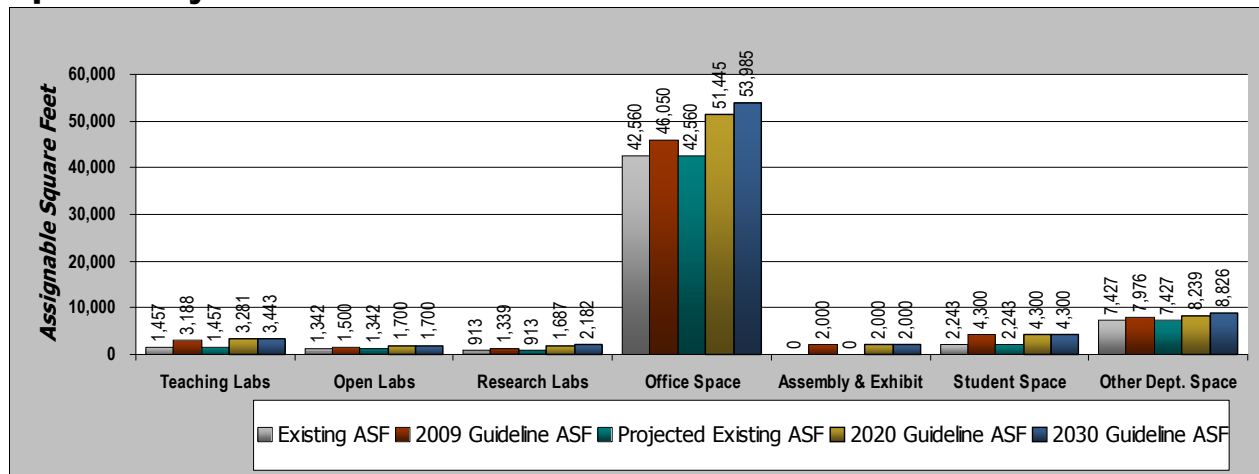
## College of Arts &amp; Sciences - Other Units

## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Research Assistant (Student)	50	1	50		1	50	
Student Worker	25	31	775		31	775	
Student Worker (No Office Needed)	0	17	0		17	0	
<b>Total Office Space</b>			<b>29,625</b>	<b>18,050</b>		<b>30,425</b>	<b>18,050</b>
<i>Total Service Space</i>			<i>2,735</i>	<i>2,739</i>		<i>2,830</i>	<i>2,739</i>
<i>Total Conference Room Space</i>			<i>2,615</i>	<i>881</i>		<i>2,715</i>	<i>881</i>
<b>TOTAL</b>		<b>337</b>	<b>34,975</b>	<b>21,670</b>	<b>343</b>	<b>35,970</b>	<b>21,670</b>
<b>Surplus/(Deficit)</b>			<b>(13,305)</b>			<b>(14,300)</b>	

## Leeds School of Business

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Academic Space								
Teaching Laboratories & Service	1,457	3,188	(1,731)	1,457	3,281	(1,824)	3,443	(1,986)
Open Laboratories & Service	1,342	1,500	(158)	1,342	1,700	(358)	1,700	(358)
Research Laboratories & Service	913	1,339	(426)	913	1,687	(774)	2,182	(1,269)
Academic Offices & Service	42,560	46,050	(3,490)	42,560	51,445	(8,885)	53,985	(11,425)
Assembly & Exhibit	0	2,000	(2,000)	0	2,000	(2,000)	2,000	(2,000)
Other Academic Department Space	7,427	7,976	(549)	7,427	8,239	(812)	8,826	(1,399)
Academic Space Subtotal	53,699	62,053	(8,354)	53,699	68,352	(14,653)	72,136	(18,437)
Services and Administration								
Student Union/Center Space	2,243	4,300	(2,057)	2,243	4,300	(2,057)	4,300	(2,057)
TOTAL	55,942	66,353	(10,411)	55,942	72,652	(16,710)	76,436	(20,494)

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Koelbel Building - L	1,457	1,342	913	42,560			2,243	7,427	55,942
<b>TOTAL</b>	<b>1,457</b>	<b>1,342</b>	<b>913</b>	<b>42,560</b>			<b>2,243</b>	<b>7,427</b>	<b>55,942</b>



**Office Space Guideline Application**

Staffing Type	Office Guideline ASF per Headcount	Fall 2009	
		Head- count	Total Guideline ASF Existing ASF
Dean	250	1	250
Associate Dean	200	3	600
Director	200	8	1,600
Associate Director	200	4	800
Assistant Director	150	8	1,200
Manager	150	4	600
Faculty - Tenured	150	33	4,950
Faculty - Tenure Track	150	19	2,850
Faculty (Non Tenure Track) (FT)	150	28	4,200
Faculty (Non Tenure Track) (PT)	50	37	1,850
Artist/Scholar in Residence	150	1	150
Visiting Faculty	150	1	150
Future T/TT Faculty	150	0	0
Emeritus Faculty	50	6	300
Adjunct Faculty	50	1	50
Other Professionals	150	25	3,750
Research Professional (FT)	150	7	1,050
Research Associate	150	1	150
Technical/Paraprofessional	100	12	1,200
Clerical & Secretarial	100	8	800
Teaching Assistant	50	4	200
Research Assistant (Student)	50	26	1,300
Student Worker	25	131	3,275
Skilled Crafts (No Office Needed)	0	1	0
Additional Service Space (8,000 asf)	0	0	0
<b>Total Office Space</b>			<b>31,275 28,189</b>
<i>Total Service Space</i>			<i>11,500 11,506</i>
<i>Total Conference Room Space</i>			<i>3,275 2,865</i>
<b>TOTAL</b>		<b>369</b>	<b>46,050 42,560</b>
<b>Surplus/(Deficit)</b>			<b>(3,490)</b>

**Office Space Guideline Application for Planning Horizons**

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250		1	250	
Associate Dean	200	3	600		3	600	
Director	200	8	1,600		8	1,600	
Associate Director	200	4	800		5	1,000	
Assistant Director	150	9	1,350		9	1,350	
Manager	150	4	600		4	600	
Faculty - Tenured	150	33	4,950		33	4,950	
Faculty - Tenure Track	150	19	2,850		19	2,850	

## Section 8

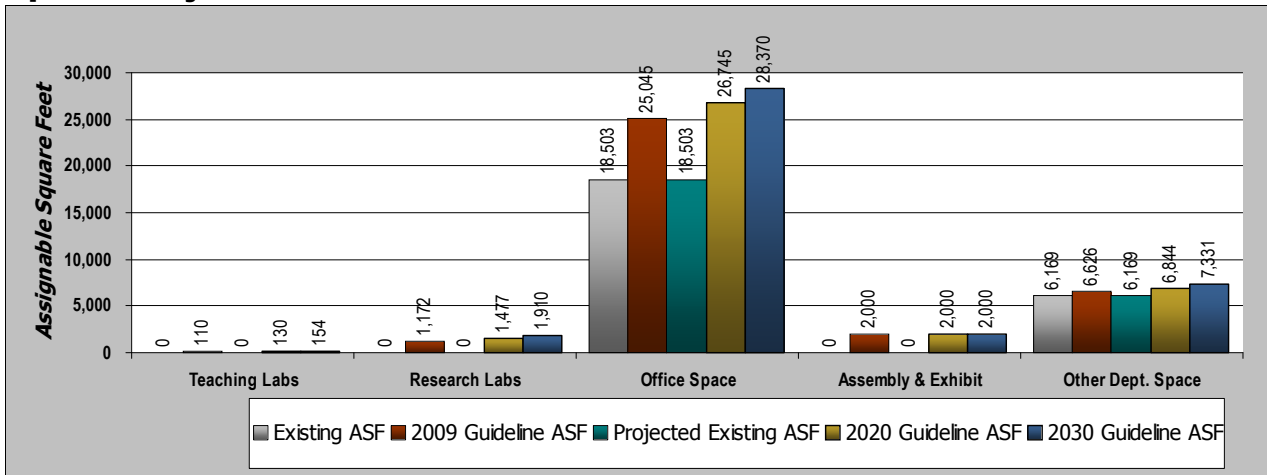
### Leeds School of Business

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Faculty (Non Tenure Track) (FT)	150	31	4,650		32	4,800	
Faculty (Non Tenure Track) (PT)	50	40	2,000		43	2,150	
Artist/Scholar in Residence	150	1	150		1	150	
Visiting Faculty	150	1	150		1	150	
Future T/TT Faculty	150	20	3,000		26	3,900	
Emeritus Faculty	50	6	300		6	300	
Adjunct Faculty	50	1	50		1	50	
Other Professionals	150	26	3,900		27	4,050	
Research Professional (FT)	150	7	1,050		8	1,200	
Research Associate	150	1	150		1	150	
Technical/Paraprofessional	100	13	1,300		13	1,300	
Clerical & Secretarial	100	8	800		9	900	
Teaching Assistant	50	4	200		5	250	
Research Assistant (Student)	50	28	1,400		30	1,500	
Student Worker	25	137	3,425		141	3,525	
Skilled Crafts (No Office Needed)	0	1	0		1	0	
Additional Service Space (8,000 asf)	0	0	0		0	0	
<b>Total Office Space</b>			<b>35,525</b>	<b>28,189</b>		<b>37,575</b>	<b>28,189</b>
<i>Total Service Space</i>			<i>12,165</i>	<i>11,506</i>		<i>12,440</i>	<i>11,506</i>
<i>Total Conference Room Space</i>			<i>3,755</i>	<i>2,865</i>		<i>3,970</i>	<i>2,865</i>
<b>TOTAL</b>		<b>406</b>	<b>51,445</b>	<b>42,560</b>	<b>427</b>	<b>53,985</b>	<b>42,560</b>
<b>Surplus/(Deficit)</b>			<b>(8,885)</b>			<b>(11,425)</b>	

## School of Education

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Academic Space								
Teaching Laboratories & Service	0	110	(110)	0	130	(130)	154	(154)
Research Laboratories & Service	0	1,172	(1,172)	0	1,477	(1,477)	1,910	(1,910)
Academic Offices & Service	18,503	25,045	(6,542)	18,503	26,745	(8,242)	28,370	(9,867)
Assembly & Exhibit	0	2,000	(2,000)	0	2,000	(2,000)	2,000	(2,000)
Other Academic Department Space	6,169	6,626	(457)	6,169	6,844	(675)	7,331	(1,162)
TOTAL	24,672	34,953	(10,281)	24,672	37,196	(12,524)	39,765	(15,093)

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Education Bldg				15,353				4,390	19,743
Science Learning Lab				3,150				1,365	4,515
Warehouse No 4								414	414
<b>TOTAL</b>				<b>18,503</b>				<b>6,169</b>	<b>24,672</b>

## Section 8

### School of Education

#### Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250	
Associate Dean	200	2	400	
Director	200	2	400	
Distinguished Professor	150	1	150	
Faculty - Tenured	150	19	2,850	
Faculty - Tenure Track	150	10	1,500	
Faculty (Non Tenure Track) (FT)	150	10	1,500	
Faculty (Non Tenure Track) (PT)	50	96	4,800	
Research Faculty	150	1	150	
Future T/TT Faculty	150	0	0	
Future Research Faculty	150	0	0	
Emeritus Faculty	50	5	250	
Other Professionals	150	3	450	
Research Professional (FT)	150	17	2,550	
Research Associate	150	6	900	
Technical/Paraprofessional	100	1	100	
Clerical & Secretarial	100	15	1,500	
Research Assistant (Student)	50	34	1,700	
Graduate Assistant	50	30	1,500	
Student Worker	25	21	525	
<b>Total Office Space</b>			<b>21,475</b>	<b>15,537</b>
<i>Total Service Space</i>			<i>2,070</i>	<i>1,891</i>
<i>Total Conference Room Space</i>			<i>1,500</i>	<i>876</i>
<b>TOTAL</b>		<b>274</b>	<b>25,045</b>	<b>18,304</b>
<b>Surplus/(Deficit)</b>			<b>(6,741)</b>	

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250		1	250	
Associate Dean	200	2	400		2	400	
Director	200	2	400		2	400	
Distinguished Professor	150	1	150		1	150	
Faculty - Tenured	150	19	2,850		19	2,850	
Faculty - Tenure Track	150	10	1,500		10	1,500	
Faculty (Non Tenure Track) (FT)	150	11	1,650		12	1,800	
Faculty (Non Tenure Track) (PT)	50	105	5,250		111	5,550	
Research Faculty	150	1	150		1	150	
Future T/TT Faculty	150	3	450		6	900	
Future Research Faculty	150	1	150		1	150	
Emeritus Faculty	50	5	250		5	250	
Other Professionals	150	3	450		3	450	

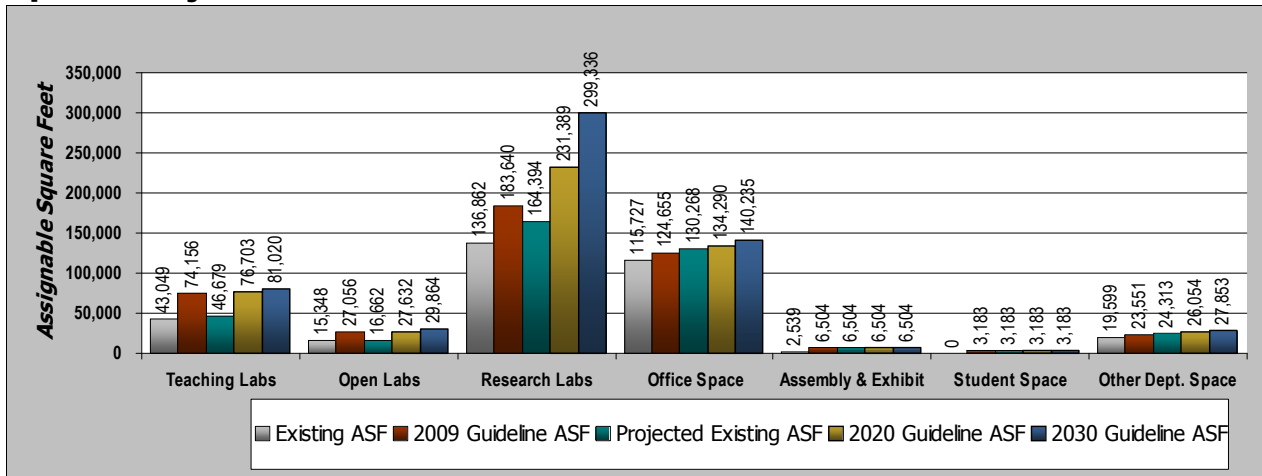
## School of Education

### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Research Professional (FT)	150	17	2,550		18	2,700	
Research Associate	150	6	900		6	900	
Technical/Paraprofessional	100	1	100		1	100	
Clerical & Secretarial	100	15	1,500		16	1,600	
Research Assistant (Student)	50	37	1,850		39	1,950	
Graduate Assistant	50	33	1,650		35	1,750	
Student Worker	25	21	525		23	575	
<b>Total Office Space</b>			<b>22,975</b>	<b>15,537</b>		<b>24,375</b>	<b>15,537</b>
<i>Total Service Space</i>			<i>2,190</i>	<i>1,891</i>		<i>2,325</i>	<i>1,891</i>
<i>Total Conference Room Space</i>			<i>1,580</i>	<i>876</i>		<i>1,670</i>	<i>876</i>
<b>TOTAL</b>		<b>294</b>	<b>26,745</b>	<b>18,304</b>	<b>312</b>	<b>28,370</b>	<b>18,304</b>
<b>Surplus/(Deficit)</b>			<b>(8,441)</b>			<b>(10,066)</b>	

## College of Engineering and Applied Science

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Academic Space								
Teaching Laboratories & Service	43,049	74,156	(31,107)	46,679	76,703	(30,024)	81,020	(34,341)
Open Laboratories & Service	15,348	27,056	(11,708)	16,662	27,632	(10,970)	29,864	(13,202)
Research Laboratories & Service	136,862	183,640	(46,778)	164,394	231,389	(66,995)	299,336	(134,942)
Academic Offices & Service	115,727	124,655	(8,928)	130,268	134,290	(4,022)	140,235	(9,967)
Assembly & Exhibit	2,539	6,504	(3,965)	6,504	6,504	0	6,504	0
Other Academic Department Space	19,599	23,551	(3,952)	24,313	26,054	(1,741)	27,853	(3,540)
Academic Space Subtotal	333,124	439,562	(106,438)	388,820	502,572	(113,752)	584,812	(195,992)
Services and Administration								
Student Union/Center Space	0	3,183	(3,183)	3,183	3,183	0	3,183	0
TOTAL	333,124	442,745	(109,621)	392,003	505,755	(113,752)	587,995	(195,992)

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Admin & Rsch Ctr EC			453	1,729				450	2,632
Ctr for Innovation				4,267				1,231	5,498
Discovery Learning			12,391	7,006				1,247	20,644
Drescher Undergradua	12,236	2,339		1,309		2,539		2,237	20,660
Engineering Administ				4,659				210	4,869
Engineering Aerospace	5,033	1,787	11,916	10,552				174	29,462
Engineering Chemical	3,401	637	17,786	11,469				2,830	36,123
Engineering Civil &	5,274	2,324	28,454	8,990				1,121	46,163
Engineering Classroo			3,600	4,893				153	8,646
Engineering Comp Sci		2,702	4,902	1,796				467	9,867

## College of Engineering and Applied Science

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Engineering Electric	14,531	1,400	31,254	17,610				5,142	69,937
Engineering Mechanic	1,564	4,159	16,461	10,575				1,807	34,566
Engineering North To			2,475	3,024				193	5,692
Engineering Office T			133	24,814				2,324	27,271
Engineering South To	1,010		772	1,107					2,889
Engineering Stores &			6,265	130					6,395
Lesser House				1,797				13	1,810
Systems Biotech									
<b>TOTAL</b>	<b>43,049</b>	<b>15,348</b>	<b>136,862</b>	<b>115,727</b>		<b>2,539</b>		<b>19,599</b>	<b>333,124</b>

## Section 8

### College of Engineering and Applied Science

#### Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250	
Director - Institute/Faculty	200	2	400	
Associate Dean	200	3	600	
Director	200	14	2,800	
Chair	200	6	1,200	
Assistant Dean	150	2	300	
Distinguished Professor	150	3	450	
Faculty - Tenured	150	127	19,050	
Faculty - Tenure Track	150	47	7,050	
Faculty (Non Tenure Track) (FT)	150	25	3,750	
Faculty (Non Tenure Track) (PT)	50	20	1,000	
Artist/Scholar in Residence	150	8	1,200	
Visiting Faculty	150	9	1,350	
Research Faculty	150	6	900	
Future T/TT Faculty	150	0	0	
Emeritus Faculty	50	25	1,250	
Adjunct Faculty	50	27	1,350	
Post-Doctoral Fellow	150	3	450	
Other Professionals	150	37	5,550	
Research Professional (FT)	150	37	5,550	
Research Professional (PT)	75	16	1,200	
Research Associate	150	54	8,100	
Technical/Paraprofessional	100	21	2,100	
Clerical & Secretarial	100	22	2,200	
Teaching Assistant	50	123	6,150	
Research Assistant (Student)	50	327	16,350	
Graduate Assistant	50	28	1,400	
Student Worker	25	386	9,650	
Skilled Crafts (No Office Needed)	0	3	0	
Service/Maintenance (No Office Needed)	0	1	0	
Additional Conference Space (4,000 asf)	0	0	0	
<b>Total Office Space</b>			<b>101,600</b>	<b>96,488</b>
<i>Total Service Space</i>			<i>11,045</i>	<i>7,700</i>
<i>Total Conference Room Space</i>			<i>12,010</i>	<i>11,539</i>
<b>TOTAL</b>		<b>1,383</b>	<b>124,655</b>	<b>115,727</b>
<b>Surplus/(Deficit)</b>			<b>(8,928)</b>	

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250		1	250	
Director - Institute/Faculty	200	2	400		2	400	



## College of Engineering and Applied Science

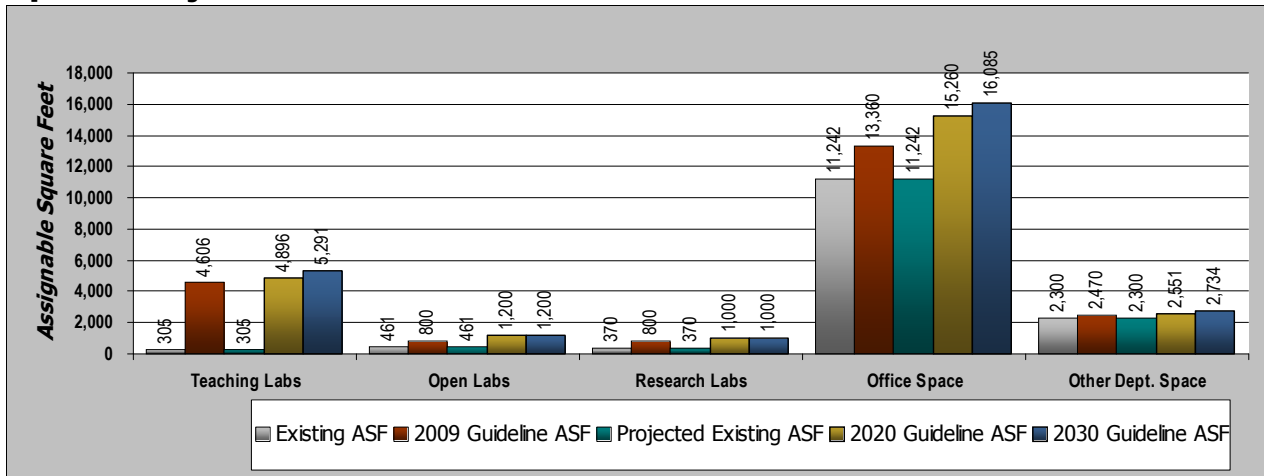
## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Associate Dean	200	3	600		3	600	
Director	200	14	2,800		14	2,800	
Chair	200	6	1,200		6	1,200	
Assistant Dean	150	2	300		2	300	
Distinguished Professor	150	3	450		3	450	
Faculty - Tenured	150	127	19,050		127	19,050	
Faculty - Tenure Track	150	47	7,050		47	7,050	
Faculty (Non Tenure Track) (FT)	150	26	3,900		26	3,900	
Faculty (Non Tenure Track) (PT)	50	22	1,100		22	1,100	
Artist/Scholar in Residence	150	8	1,200		9	1,350	
Visiting Faculty	150	9	1,350		9	1,350	
Research Faculty	150	6	900		6	900	
Future T/TT Faculty	150	30	4,500		45	6,750	
Emeritus Faculty	50	25	1,250		25	1,250	
Adjunct Faculty	50	29	1,450		30	1,500	
Post-Doctoral Fellow	150	3	450		3	450	
Other Professionals	150	37	5,550		38	5,700	
Research Professional (FT)	150	38	5,700		39	5,850	
Research Professional (PT)	75	16	1,200		17	1,275	
Research Associate	150	56	8,400		58	8,700	
Technical/Paraprofessional	100	21	2,100		21	2,100	
Clerical & Secretarial	100	22	2,200		22	2,200	
Teaching Assistant	50	135	6,750		144	7,200	
Research Assistant (Student)	50	358	17,900		378	18,900	
Graduate Assistant	50	31	1,550		32	1,600	
Student Worker	25	402	10,050		416	10,400	
Skilled Crafts (No Office Needed)	0	3	0		3	0	
Service/Maintenance (No Office Needed)	0	1	0		1	0	
Additional Conference Space (4,000 asf)	0	0	0		0	0	
<b>Total Office Space</b>			<b>109,600</b>	<b>109,060</b>		<b>114,575</b>	<b>109,060</b>
<i>Total Service Space</i>			<i>12,035</i>	<i>7,700</i>		<i>12,625</i>	<i>7,700</i>
<i>Total Conference Room Space</i>			<i>12,655</i>	<i>13,508</i>		<i>13,035</i>	<i>13,508</i>
<b>TOTAL</b>		<b>1,483</b>	<b>134,290</b>	<b>130,268</b>	<b>1,549</b>	<b>140,235</b>	<b>130,268</b>
<b>Surplus/(Deficit)</b>			<b>(4,022)</b>			<b>(9,967)</b>	

## Section 8

### School of Journalism and Mass Communication

#### Space Analysis



ASF = Assignable Square Feet

#### Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>								
Teaching Laboratories & Service	305	4,606	(4,301)	305	4,896	(4,591)	5,291	(4,986)
Open Laboratories & Service	461	800	(339)	461	1,200	(739)	1,200	(739)
Research Laboratories & Service	370	800	(430)	370	1,000	(630)	1,000	(630)
Academic Offices & Service	11,242	13,360	(2,118)	11,242	15,260	(4,018)	16,085	(4,843)
Other Academic Department Space	2,300	2,470	(170)	2,300	2,551	(251)	2,734	(434)
<b>TOTAL</b>	<b>14,678</b>	<b>22,036</b>	<b>(7,358)</b>	<b>14,678</b>	<b>24,907</b>	<b>(10,229)</b>	<b>26,310</b>	<b>(11,632)</b>

ASF = Assignable Square Feet

#### Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Admin & Rsch Ctr EC				718					718
Armory	305	339	370	8,988				2,300	12,302
University Memorial		122		1,536					1,658
<b>TOTAL</b>	<b>305</b>	<b>461</b>	<b>370</b>	<b>11,242</b>				<b>2,300</b>	<b>14,678</b>

## School of Journalism and Mass Communication

## Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009	
		Head- count	Total Guideline ASF Existing ASF
Dean	250	1	250
Associate Dean	200	1	200
Director	200	2	400
Assistant Dean	150	1	150
Manager	150	3	450
Faculty - Tenured	150	15	2,250
Faculty - Tenure Track	150	7	1,050
Faculty (Non Tenure Track) (FT)	150	3	450
Artist/Scholar in Residence	150	1	150
Future T/TT Faculty	150	0	0
Emeritus Faculty	50	2	100
Adjunct Faculty	50	26	1,300
Other Professionals	150	6	900
Research Professional (PT)	75	5	375
Technical/Paraprofessional	100	3	300
Clerical & Secretarial	100	4	400
Teaching Assistant	50	12	600
Research Assistant (Student)	50	17	850
Graduate Assistant	50	3	150
Student Worker	25	33	825
<b>Total Office Space</b>			<b>11,150 9,871</b>
<i>Total Service Space</i>			<i>1,155 1,191</i>
<i>Total Conference Room Space</i>			<i>1,055 180</i>
<b>TOTAL</b>		<b>145</b>	<b>13,360 11,242</b>
<b>Surplus/(Deficit)</b>			<b>(2,118)</b>

## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250		1	250	
Associate Dean	200	1	200		1	200	
Director	200	2	400		2	400	
Assistant Dean	150	1	150		1	150	
Manager	150	3	450		3	450	
Faculty - Tenured	150	15	2,250		15	2,250	
Faculty - Tenure Track	150	7	1,050		7	1,050	
Faculty (Non Tenure Track) (FT)	150	3	450		3	450	
Artist/Scholar in Residence	150	1	150		1	150	
Future T/TT Faculty	150	8	1,200		11	1,650	
Emeritus Faculty	50	2	100		2	100	
Adjunct Faculty	50	28	1,400		30	1,500	
Other Professionals	150	6	900		6	900	

## Section 8

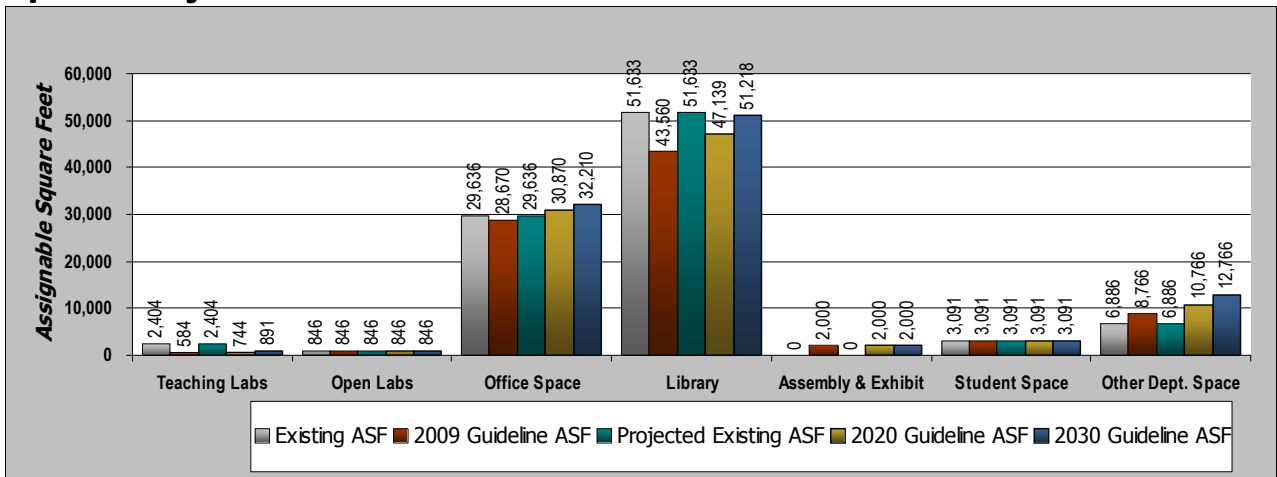
### School of Journalism and Mass Communication

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Research Professional (PT)	75	5	375		5	375	
Technical/Paraprofessional	100	3	300		3	300	
Clerical & Secretarial	100	4	400		4	400	
Teaching Assistant	50	13	650		14	700	
Research Assistant (Student)	50	19	950		20	1,000	
Graduate Assistant	50	3	150		3	150	
Student Worker	25	35	875		36	900	
<b>Total Office Space</b>			<b>12,650</b>	<b>9,871</b>		<b>13,325</b>	<b>9,871</b>
<i>Total Service Space</i>			<i>1,395</i>	<i>1,191</i>		<i>1,485</i>	<i>1,191</i>
<i>Total Conference Room Space</i>			<i>1,215</i>	<i>180</i>		<i>1,275</i>	<i>180</i>
<b>TOTAL</b>		<b>160</b>	<b>15,260</b>	<b>11,242</b>	<b>168</b>	<b>16,085</b>	<b>11,242</b>
<b>Surplus/(Deficit)</b>			<b>(4,018)</b>			<b>(4,843)</b>	

## School of Law

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Academic Space								
Teaching Laboratories & Service	2,404	584	1,820	2,404	744	1,660	891	1,513
Open Laboratories & Service	846	846	0	846	846	0	846	0
Academic Offices & Service	29,636	28,670	966	29,636	30,870	(1,234)	32,210	(2,574)
Library	51,633	43,560	8,073	51,633	47,139	4,494	51,218	415
Assembly & Exhibit	0	2,000	(2,000)	0	2,000	(2,000)	2,000	(2,000)
Other Academic Department Space	6,886	8,766	(1,880)	6,886	10,766	(3,880)	12,766	(5,880)
Academic Space Subtotal	91,405	84,426	6,979	91,405	92,365	(960)	99,931	(8,526)
Services and Administration								
Student Union/Center Space	3,091	3,091	0	3,091	3,091	0	3,091	0
TOTAL	94,496	87,517	6,979	94,496	95,456	(960)	103,022	(8,526)

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Wolf Law Building	2,404	846		29,636	51,633		3,091	6,886	94,496
<b>TOTAL</b>	<b>2,404</b>	<b>846</b>		<b>29,636</b>	<b>51,633</b>		<b>3,091</b>	<b>6,886</b>	<b>94,496</b>

## Section 8

### School of Law

#### Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250	
Director - Institute/Faculty	200	1	200	
Director	200	2	400	
Associate Director	200	2	400	
Assistant Dean (Law)	175	5	875	
Assistant Director (Law)	175	1	175	
Manager (Law)	175	1	175	
Distinguished Professor (Law)	175	1	175	
Faculty - Tenured (Law)	175	25	4,375	
Faculty - Tenure Track (Law)	175	11	1,925	
Faculty (Non Tenure Track FT) (Law)	175	19	3,325	
Clinical Faculty (Law)	175	1	175	
Future T/TT Faculty (Law)	175	0	0	
Adjunct Faculty	50	15	750	
Other Professionals (Law)	175	4	700	
Research Associate	150	2	300	
Technical/Paraprofessional	100	7	700	
Clerical & Secretarial	100	10	1,000	
Teaching Assistant	50	12	600	
Research Assistant (Student)	50	1	50	
Student Worker	25	58	1,450	
Library Personnel (Office Space in Librar	0	24	0	
Additional Service Space (6,000 asf)	0	0	0	
<b>Total Office Space</b>			<b>18,000</b>	<b>19,974</b>
<i>Total Service Space</i>			<i>8,535</i>	<i>7,445</i>
<i>Total Conference Room Space</i>			<i>2,135</i>	<i>2,217</i>
<b>TOTAL</b>		<b>203</b>	<b>28,670</b>	<b>29,636</b>
<b>Surplus/(Deficit)</b>			<b>966</b>	

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250		1	250	
Director - Institute/Faculty	200	1	200		1	200	
Director	200	2	400		2	400	
Associate Director	200	2	400		2	400	
Assistant Dean (Law)	175	5	875		6	1,050	
Assistant Director (Law)	175	1	175		1	175	
Manager (Law)	175	1	175		1	175	
Distinguished Professor (Law)	175	1	175		1	175	
Faculty - Tenured (Law)	175	25	4,375		25	4,375	
Faculty - Tenure Track (Law)	175	11	1,925		11	1,925	

## School of Law

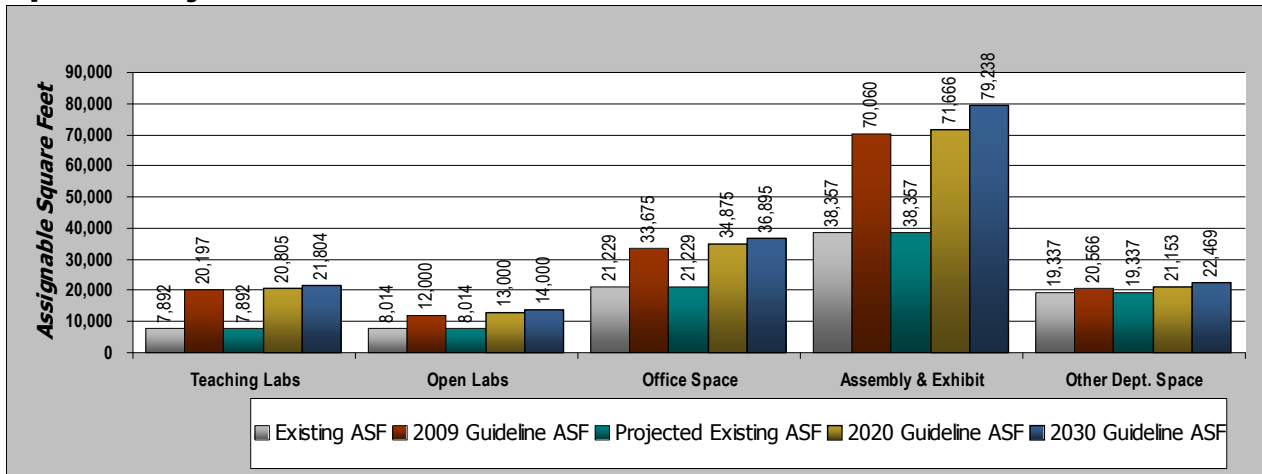
## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Faculty (Non Tenure Track FT) (Law)	175	21	3,675		22	3,850	
Clinical Faculty (Law)	175	1	175		1	175	
Future T/TT Faculty (Law)	175	7	1,225		9	1,575	
Adjunct Faculty	50	16	800		17	850	
Other Professionals (Law)	175	4	700		4	700	
Research Associate	150	2	300		2	300	
Technical/Paraprofessional	100	7	700		8	800	
Clerical & Secretarial	100	10	1,000		11	1,100	
Teaching Assistant	50	13	650		14	700	
Research Assistant (Student)	50	1	50		1	50	
Student Worker	25	61	1,525		63	1,575	
Library Personnel (Office Space in Library G	0	26	0		28	0	
Additional Service Space (6,000 asf)	0	0	0		0	0	
<b>Total Office Space</b>			<b>19,750</b>	<b>19,974</b>		<b>20,800</b>	<b>19,974</b>
<i>Total Service Space</i>			<i>8,805</i>	<i>7,445</i>		<i>8,955</i>	<i>7,445</i>
<i>Total Conference Room Space</i>			<i>2,315</i>	<i>2,217</i>		<i>2,455</i>	<i>2,217</i>
<b>TOTAL</b>		<b>219</b>	<b>30,870</b>	<b>29,636</b>	<b>231</b>	<b>32,210</b>	<b>29,636</b>
<b>Surplus/(Deficit)</b>			<b>(1,234)</b>			<b>(2,574)</b>	

## Section 8

### College of Music

#### Space Analysis



ASF = Assignable Square Feet

#### Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Academic Space								
Teaching Laboratories & Service	7,892	20,197	(12,305)	7,892	20,805	(12,913)	21,804	(13,912)
Open Laboratories & Service	8,014	12,000	(3,986)	8,014	13,000	(4,986)	14,000	(5,986)
Academic Offices & Service	21,229	33,675	(12,446)	21,229	34,875	(13,646)	36,895	(15,666)
Assembly & Exhibit	38,357	70,060	(31,703)	38,357	71,666	(33,309)	79,238	(40,881)
Other Academic Department Space	19,337	20,566	(1,229)	19,337	21,153	(1,816)	22,469	(3,132)
TOTAL	94,829	156,498	(61,669)	94,829	161,499	(66,670)	174,406	(79,577)

ASF = Assignable Square Feet

#### Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Ctr for Innovation				507				9,201	9,708
IMIG Music Bldg	6,389	7,168		16,070		10,548		5,597	45,772
Macky Auditorium	1,503	846		4,652		27,809		4,539	39,349
<b>TOTAL</b>	<b>7,892</b>	<b>8,014</b>		<b>21,229</b>		<b>38,357</b>		<b>19,337</b>	<b>94,829</b>



**College of Music**
**Office Space Guideline Application**

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250	
Associate Dean	200	2	400	
Director	200	3	600	
Assistant Director	150	2	300	
Distinguished Professor (Studio)	225	1	225	
Faculty - Tenured (Studio)	225	36	8,100	
Faculty - Tenure Track (Studio)	225	18	4,050	
Faculty (Non Tenure Track) (FT)	150	9	1,350	
Faculty (Non Tenure Track) (PT)	50	26	1,300	
Artist/Scholar in Residence	150	4	600	
Future T/TT Faculty	150	0	0	
Emeritus Faculty	50	12	600	
Adjunct Faculty	50	4	200	
Other Professionals	150	12	1,800	
Technical/Paraprofessional	100	16	1,600	
Clerical & Secretarial	100	7	700	
Teaching Assistant	50	90	4,500	
Graduate Assistant	50	10	500	
Student Worker	25	76	1,900	
Service/Maintenance (No Office Needed)	0	1	0	
<b>Total Office Space</b>			<b>28,975</b>	<b>19,462</b>
<i>Total Service Space</i>			<i>2,595</i>	<i>903</i>
<i>Total Conference Room Space</i>			<i>2,105</i>	<i>864</i>
<b>TOTAL</b>		<b>330</b>	<b>33,675</b>	<b>21,229</b>
<b>Surplus/(Deficit)</b>			<b>(12,446)</b>	

**Office Space Guideline Application for Planning Horizons**

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250		1	250	
Associate Dean	200	2	400		2	400	
Director	200	3	600		3	600	
Assistant Director	150	2	300		2	300	
Distinguished Professor (Studio)	225	1	225		1	225	
Faculty - Tenured (Studio)	225	36	8,100		36	8,100	
Faculty - Tenure Track (Studio)	225	18	4,050		18	4,050	
Faculty (Non Tenure Track) (FT)	150	10	1,500		10	1,500	
Faculty (Non Tenure Track) (PT)	50	28	1,400		30	1,500	
Artist/Scholar in Residence	150	4	600		5	750	
Future T/TT Faculty	150	2	300		6	900	
Emeritus Faculty	50	12	600		12	600	
Adjunct Faculty	50	4	200		5	250	

## Section 8

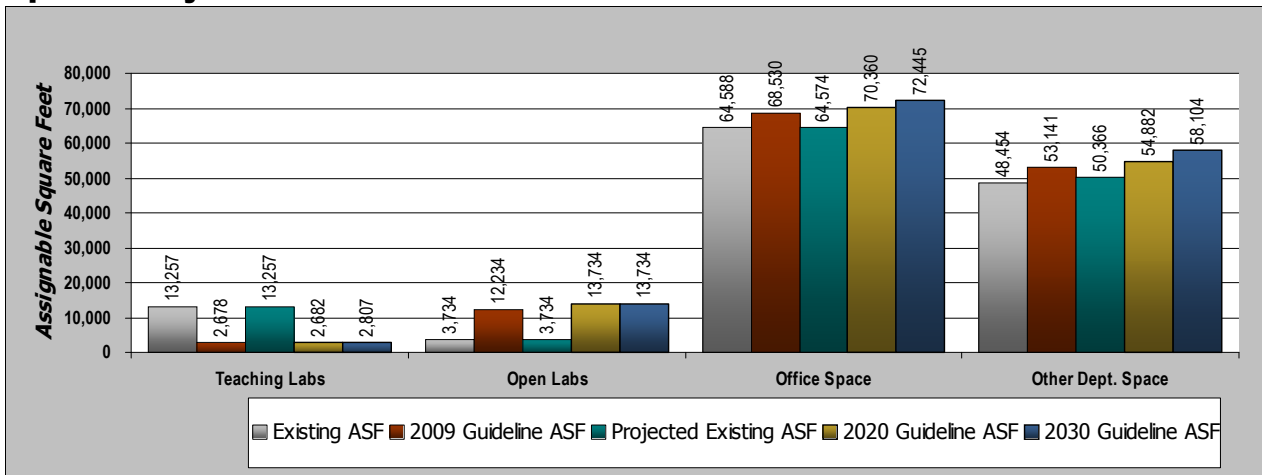
### College of Music

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Other Professionals	150	12	1,800		13	1,950	
Technical/Paraprofessional	100	16	1,600		18	1,800	
Clerical & Secretarial	100	7	700		7	700	
Teaching Assistant	50	98	4,900		104	5,200	
Graduate Assistant	50	11	550		12	600	
Student Worker	25	80	2,000		83	2,075	
Service/Maintenance (No Office Needed)	0	1	0		1	0	
<b>Total Office Space</b>			<b>30,075</b>	<b>19,462</b>		<b>31,750</b>	<b>19,462</b>
<i>Total Service Space</i>			<i>2,655</i>	<i>903</i>		<i>2,855</i>	<i>903</i>
<i>Total Conference Room Space</i>			<i>2,145</i>	<i>864</i>		<i>2,290</i>	<i>864</i>
<b>TOTAL</b>		<b>348</b>	<b>34,875</b>	<b>21,229</b>	<b>369</b>	<b>36,895</b>	<b>21,229</b>
<b><i>Surplus/(Deficit)</i></b>			<b><i>(13,646)</i></b>			<b><i>(15,666)</i></b>	

## Provost &amp; Exec. Vice Chancellor, Academic Affairs

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Academic Space								
Teaching Laboratories & Service	13,257	2,678	10,579	13,257	2,682	10,575	2,807	10,450
Open Laboratories & Service	3,734	12,234	(8,500)	3,734	13,734	(10,000)	13,734	(10,000)
Academic Offices & Service	64,588	68,530	(3,942)	64,574	70,360	(5,786)	72,445	(7,871)
Other Academic Department Space	48,454	53,141	(4,687)	50,366	54,882	(4,516)	58,104	(7,738)
TOTAL	130,033	136,583	(6,550)	131,931	141,658	(9,727)	147,090	(15,159)

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Admin & Rsch Ctr EC				306					306
Armory	1,658							63	1,721
Atlas Center	11,209	1,415		8,401				1,730	22,755
Balch Fieldhouse Com								3,226	3,226
Benson Earth Science								1,081	1,081
Center for Community									
Clare Small Arts & S								1,261	1,261
Computing Center				13,021				4,611	17,632
Cristol Chemistry &								85	85
Duane Physics								597	597
Eaton Humanities Bld	297			569					866
Economics Bldg		351						351	702
Education Bldg				150				1,187	1,337
Ekeley Sciences Bldg								451	451
Engineering Chemical								738	738
Engineering Civil &								1,874	1,874
Engineering Classroo				148				3,530	3,678
Engineering Mechanic								570	570

## Section 8

### Provost & Exec. Vice Chancellor, Academic Affairs

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Environmental Design				3,406				190	3,596
Guggenheim Geograp								1,151	1,151
Hellems Arts & Scien								773	773
IBS5				807					807
IMIG Music Bldg				76					76
Ketchum Arts & Scien				59				670	729
Koelbel Building - L				93				4,296	4,389
Mathematics Building								276	276
Muenzinger Psych & B				110					110
Norlin Library				3,642				3,393	7,035
Regent Administrativ				4,550				110	4,660
Stadium Building	93	1,397		17,191				7,286	25,967
Telecommunications C				6,169				2,861	9,030
University Admin Ctr				89					89
University Club				531					531
University Memorial				98				1,177	1,275
Walnut Distribution								2,010	2,010
Willard Hall		571		5,098				1,948	7,617
Wolf Law Building				74				958	1,032
<b>TOTAL</b>	<b>13,257</b>	<b>3,734</b>		<b>64,588</b>				<b>48,454</b>	<b>130,033</b>

## Provost &amp; Exec. Vice Chancellor, Academic Affairs

## Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009	
		Head- count	Total Guideline ASF Existing ASF
Vice Chancellor	300	2	600
Associate Vice Chancellor	250	3	750
Executive/Administrative/Managerial	200	1	200
Director - Institute/Faculty	200	1	200
Director	200	25	5,000
Associate Director	200	6	1,200
Assistant Vice Chancellor	200	1	200
Assistant Director	150	1	150
Manager	150	3	450
Faculty - Tenured	150	1	150
Faculty (Non Tenure Track) (FT)	150	8	1,200
Faculty (Non Tenure Track) (PT)	50	28	1,400
Visiting Faculty	150	1	150
Adjunct Faculty	50	14	700
Other Professionals	150	180	27,000
Research Professional (FT)	150	3	450
Research Associate	150	4	600
Technical/Paraprofessional	100	59	5,900
Clerical & Secretarial	100	26	2,600
Teaching Assistant	50	1	50
Research Assistant (Student)	50	2	100
Graduate Assistant	50	2	100
Student Worker	25	139	3,475
Student Worker (No Office Needed)	0	182	0
Service/Maintenance (No Office Needed)	0	1	0
Additional Service Space (900 asf)	0	0	0
Additional Conference Space (500 asf)	0	0	0
<b>Total Office Space</b>			<b>52,625 48,926</b>
<i>Total Service Space</i>			<i>9,135 9,817</i>
<i>Total Conference Room Space</i>			<i>6,770 5,845</i>
<b>TOTAL</b>		<b>694</b>	<b>68,530 64,588</b>
<b>Surplus/(Deficit)</b>			<b>(3,942)</b>

## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Vice Chancellor	300	2	600		2	600	
Associate Vice Chancellor	250	3	750		3	750	
Executive/Administrative/Managerial	200	1	200		1	200	
Director - Institute/Faculty	200	1	200		1	200	
Director	200	25	5,000		25	5,000	
Associate Director	200	6	1,200		6	1,200	

## Section 8

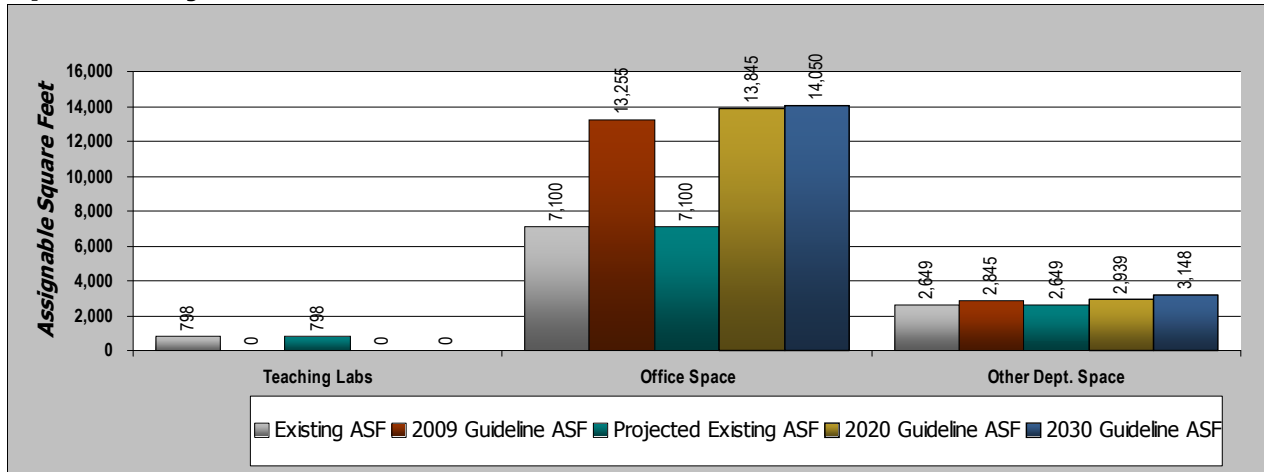
### Provost & Exec. Vice Chancellor, Academic Affairs

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Assistant Vice Chancellor	200	1	200		1	200	
Assistant Director	150	1	150		1	150	
Manager	150	3	450		3	450	
Faculty - Tenured	150	1	150		1	150	
Faculty (Non Tenure Track) (FT)	150	8	1,200		9	1,350	
Faculty (Non Tenure Track) (PT)	50	30	1,500		32	1,600	
Visiting Faculty	150	1	150		1	150	
Adjunct Faculty	50	15	750		16	800	
Other Professionals	150	187	28,050		195	29,250	
Research Professional (FT)	150	3	450		3	450	
Research Associate	150	4	600		4	600	
Technical/Paraprofessional	100	61	6,100		62	6,200	
Clerical & Secretarial	100	26	2,600		26	2,600	
Teaching Assistant	50	1	50		1	50	
Research Assistant (Student)	50	2	100		2	100	
Graduate Assistant	50	2	100		2	100	
Student Worker	25	144	3,600		151	3,775	
Student Worker (No Office Needed)	0	191	0		197	0	
Service/Maintenance (No Office Needed)	0	1	0		1	0	
Additional Service Space (900 asf)	0	0	0		0	0	
Additional Conference Space (500 asf)	0	0	0		0	0	
<b>Total Office Space</b>			<b>54,150</b>	<b>49,312</b>		<b>55,925</b>	<b>49,312</b>
<i>Total Service Space</i>			<i>9,305</i>	<i>9,417</i>		<i>9,480</i>	<i>9,417</i>
<i>Total Conference Room Space</i>			<i>6,905</i>	<i>5,845</i>		<i>7,040</i>	<i>5,845</i>
<b>TOTAL</b>		<b>720</b>	<b>70,360</b>	<b>64,574</b>	<b>746</b>	<b>72,445</b>	<b>64,574</b>
<b>Surplus/(Deficit)</b>			<b>(5,786)</b>			<b>(7,871)</b>	

## Continuing Education and Professional Studies

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>								
Teaching Laboratories & Service	798	0	798	798	0	798	0	798
Academic Offices & Service	7,100	13,255	(6,155)	7,100	13,845	(6,745)	14,050	(6,950)
Other Academic Department Space	2,649	2,845	(196)	2,649	2,939	(290)	3,148	(499)
<b>TOTAL</b>	<b>10,547</b>	<b>16,100</b>	<b>(5,553)</b>	<b>10,547</b>	<b>16,784</b>	<b>(6,237)</b>	<b>17,198</b>	<b>(6,651)</b>

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Clare Small Arts & S				57					57
Continuing Education	798			6,909				1,833	9,540
Macky Auditorium				134				816	950
<b>TOTAL</b>	<b>798</b>			<b>7,100</b>				<b>2,649</b>	<b>10,547</b>

## Continuing Education and Professional Studies

## Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Executive Director	250	1	250	
Dean	250	1	250	
Director	200	8	1,600	
Assistant Dean	150	1	150	
Assistant Director	150	1	150	
Manager	150	1	150	
Faculty (Non Tenure Track) (FT)	150	7	1,050	
Faculty (Non Tenure Track) (PT)	50	18	900	
Other Professionals	150	18	2,700	
Technical/Paraprofessional	100	13	1,300	
Clerical & Secretarial	100	9	900	
Student Worker	25	25	625	
Lecturer/Adjunct (No Office Needed)	0	158	0	
Additional Service Space (900 asf)	0	0	0	
<b>Total Office Space</b>			<b>10,025</b>	<b>5,118</b>
<i>Total Service Space</i>			<i>1,980</i>	<i>1,595</i>
<i>Total Conference Room Space</i>			<i>1,250</i>	<i>387</i>
<b>TOTAL</b>		<b>261</b>	<b>13,255</b>	<b>7,100</b>
<b>Surplus/(Deficit)</b>			<b>(6,155)</b>	

## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Executive Director	250	1	250		1	250	
Dean	250	1	250		1	250	
Director	200	8	1,600		8	1,600	
Assistant Dean	150	1	150		1	150	
Assistant Director	150	1	150		1	150	
Manager	150	1	150		1	150	
Faculty (Non Tenure Track) (FT)	150	8	1,200		8	1,200	
Faculty (Non Tenure Track) (PT)	50	20	1,000		21	1,050	
Other Professionals	150	19	2,850		19	2,850	
Technical/Paraprofessional	100	14	1,400		14	1,400	
Clerical & Secretarial	100	9	900		10	1,000	
Student Worker	25	26	650		27	675	
Lecturer/Adjunct (No Office Needed)	0	166	0		171	0	
Additional Service Space (900 asf)	0	0	0		0	0	



## Continuing Education and Professional Studies

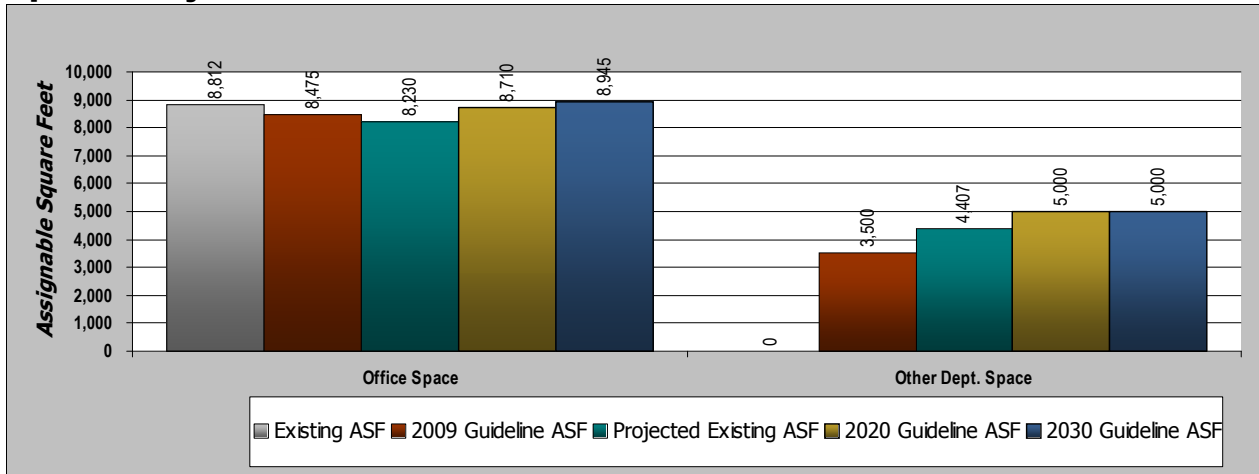
## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
<b>Total Office Space</b>			10,550	5,118		10,725	5,118
<i>Total Service Space</i>			2,015	1,595		2,030	1,595
<i>Total Conference Room Space</i>			1,280	387		1,295	387
<b>TOTAL</b>		275	13,845	7,100	283	14,050	7,100
<b><i>Surplus/(Deficit)</i></b>			(6,745)			(6,950)	

## Section 8

### Vice Chancellor, Diversity, Equity, & Community Engagement

#### Space Analysis



ASF = Assignable Square Feet

#### Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>								
Academic Offices & Service	8,812	8,475	337	8,230	8,710	(480)	8,945	(715)
Other Academic Department Space	0	3,500	(3,500)	4,407	5,000	(593)	5,000	(593)
<b>TOTAL</b>	<b>8,812</b>	<b>11,975</b>	<b>(3,163)</b>	<b>12,637</b>	<b>13,710</b>	<b>(1,073)</b>	<b>13,945</b>	<b>(1,308)</b>

ASF = Assignable Square Feet

#### Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Center for Community									
Regent Administrativ				1,105					1,105
Willard Hall				7,707					7,707
<b>TOTAL</b>				<b>8,812</b>					<b>8,812</b>

## Vice Chancellor, Diversity, Equity, &amp; Community Engagement

## Office Space Guideline Application

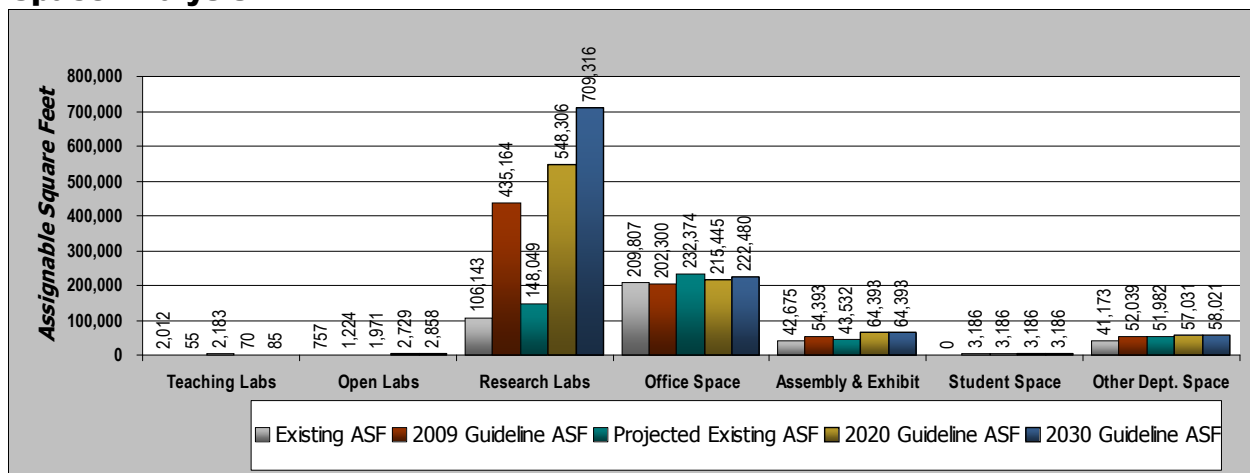
Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Director	200	3	600	
Assistant Director	150	1	150	
Other Professionals	150	29	4,350	
Technical/Paraprofessional	100	4	400	
Clerical & Secretarial	100	4	400	
Student Worker	25	40	1,000	
<b>Total Office Space</b>			<b>6,900</b>	<b>6,665</b>
<i>Total Service Space</i>			820	1,923
<i>Total Conference Room Space</i>			755	224
<b>TOTAL</b>		<b>81</b>	<b>8,475</b>	<b>8,812</b>
<b>Surplus/(Deficit)</b>			<b>337</b>	

## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Director	200	3	600		3	600	
Assistant Director	150	1	150		1	150	
Other Professionals	150	30	4,500		31	4,650	
Technical/Paraprofessional	100	4	400		4	400	
Clerical & Secretarial	100	4	400		4	400	
Student Worker	25	42	1,050		44	1,100	
<b>Total Office Space</b>			<b>7,100</b>	<b>8,230</b>		<b>7,300</b>	<b>8,230</b>
<i>Total Service Space</i>			840	0		860	0
<i>Total Conference Room Space</i>			770	0		785	0
<b>TOTAL</b>		<b>84</b>	<b>8,710</b>	<b>8,230</b>	<b>87</b>	<b>8,945</b>	<b>8,230</b>
<b>Surplus/(Deficit)</b>			<b>(480)</b>			<b>(715)</b>	

## Vice Chancellor, Research &amp; Dean, Graduate School

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Academic Space								
Teaching Laboratories & Service	2,012	55	1,957	2,183	70	2,113	85	2,098
Open Laboratories & Service	757	1,224	(467)	1,971	2,729	(758)	2,858	(887)
Research Laboratories & Service	106,143	435,164	(329,021)	148,049	548,306	(400,257)	709,316	(561,267)
Academic Offices & Service	209,807	202,300	7,507	232,374	215,445	16,929	222,480	9,894
Assembly & Exhibit	42,675	54,393	(11,718)	43,532	64,393	(20,861)	64,393	(20,861)
Other Academic Department Space	41,173	52,039	(10,866)	51,982	57,031	(5,049)	58,021	(6,039)
Academic Space Subtotal	402,567	745,175	(342,608)	480,091	887,974	(407,883)	1,057,153	(577,062)
Services and Administration								
Student Union/Center Space	0	3,186	(3,186)	3,186	3,186	0	3,186	0
TOTAL	402,567	748,361	(345,794)	483,277	891,160	(407,883)	1,060,339	(577,062)

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Admin & Rsch Ctr EC			7,228	24,552				2,265	34,045
Aspen								131	131
Atlas Center				905					905
Bruce Curtis Bldg	1,334			4,222		15,850			21,406
CIRES			4,048	7,797		1,121		738	13,704
Clare Small Arts & S				519		4,966			5,485
Ctr for Innovation			1,517	13,915				523	15,955
Dining Hall								1,784	1,784
Duane Physics			5,455	203					5,658
Ekeley Sciences Bldg	678		5,422	8,487				3,485	18,072

## Vice Chancellor, Research &amp; Dean, Graduate School

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Engineering Office T				127					127
Hazmat Shed								73	73
Henderson Bldg (Muse				2,869		18,323			21,192
IBS Problem Behavior				6,812				823	7,635
IBS1				3,718				779	4,497
IBS2				2,584				184	2,768
IBS3			153	4,129				84	4,366
IBS4			376	1,069				179	1,624
IBS5				1,800					1,800
IBS6				1,723				283	2,006
IBS7				815				1,054	1,869
IBS8				852					852
Inst for Behavioral			1,731	6,870				5,596	14,197
Institute of Behavio									
JILA - Joint Inst fo		290	21,870	26,758		1,437		7,507	57,862
JILA NEW									
Kiowa Lab			730						730
Kitchen								334	334
Kitchen Cooler								103	103
LASP - Lab for Atmos			794	8,541				385	9,720
LASP Space Technolo			24,571	36,873		978		5,312	67,734
Latrine								280	280
Life Sci Research La			5,611	1,591				566	7,768
Litman Research Lab			18,852	15,477				1,245	35,574
Marine St Science Ct			417						417
Marr Alpine Laborato		467	1,679	1,461				665	4,272
MCD Biology Building			128						128
Megaron Classroom				851					851
Moore's Collins Famil								1,176	1,176
Muenzinger Psych & B				2,663					2,663
Observatory			106						106
Ponderosa Garage								319	319
Regent Administrativ				4,079					4,079
Research Lab No 2			2,411	14,670				4,687	21,768
Systems Biotech									
Temporary Bldg 82 (f				2,067					2,067
Tundra Lab			1,195						1,195
Wardenburg Student H			1,849	808					2,657
Warehouse No 1								613	613
<b>TOTAL</b>	<b>2,012</b>	<b>757</b>	<b>106,143</b>	<b>209,807</b>		<b>42,675</b>		<b>41,173</b>	<b>402,567</b>

## Section 8

### Vice Chancellor, Research & Dean, Graduate School

#### Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Associate Vice Chancellor	250	2	500	
Executive/Administrative/Managerial	200	1	200	
Director - Institute/Faculty	200	7	1,400	
Director	200	4	800	
Associate Director	200	3	600	
Assistant Director	150	2	300	
Manager	150	8	1,200	
Faculty (Non Tenure Track) (PT)	50	1	50	
Artist/Scholar in Residence	150	1	150	
Visiting Faculty	150	3	450	
Research Faculty	150	3	450	
Future T/TT Faculty	150	0	0	
Future Research Faculty	150	0	0	
Post-Doctoral Fellow	150	4	600	
Other Professionals	150	94	14,100	
Research Professional (FT)	150	512	76,800	
Research Professional (PT)	75	94	7,050	
Research Associate	150	163	24,450	
Technical/Paraprofessional	100	23	2,300	
Clerical & Secretarial	100	16	1,600	
Research Assistant (Student)	50	227	11,350	
Graduate Assistant	50	16	800	
Student Worker	25	269	6,725	
Skilled Crafts (No Office Needed)	0	2	0	
Service/Maintenance (No Office Needed)	0	3	0	
Additional Service Space (900 asf)	0	0	0	
Additional Conference Space (500 asf)	0	0	0	
Additional Conference Space (1,000 asf)	0	0	0	
Additional Conference Space (2,000 asf)	0	0	0	
Additional Conference Space (4,000 asf)	0	0	0	
<b>Total Office Space</b>			<b>151,875</b>	<b>165,028</b>
<i>Total Service Space</i>			<i>24,755</i>	<i>20,051</i>
<i>Total Conference Room Space</i>			<i>25,670</i>	<i>24,728</i>
<b>TOTAL</b>		<b>1,458</b>	<b>202,300</b>	<b>209,807</b>
<b>Surplus/(Deficit)</b>			<b>7,507</b>	

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Associate Vice Chancellor	250	2	500		2	500	
Executive/Administrative/Managerial	200	1	200		1	200	
Director - Institute/Faculty	200	7	1,400		7	1,400	

## Vice Chancellor, Research &amp; Dean, Graduate School

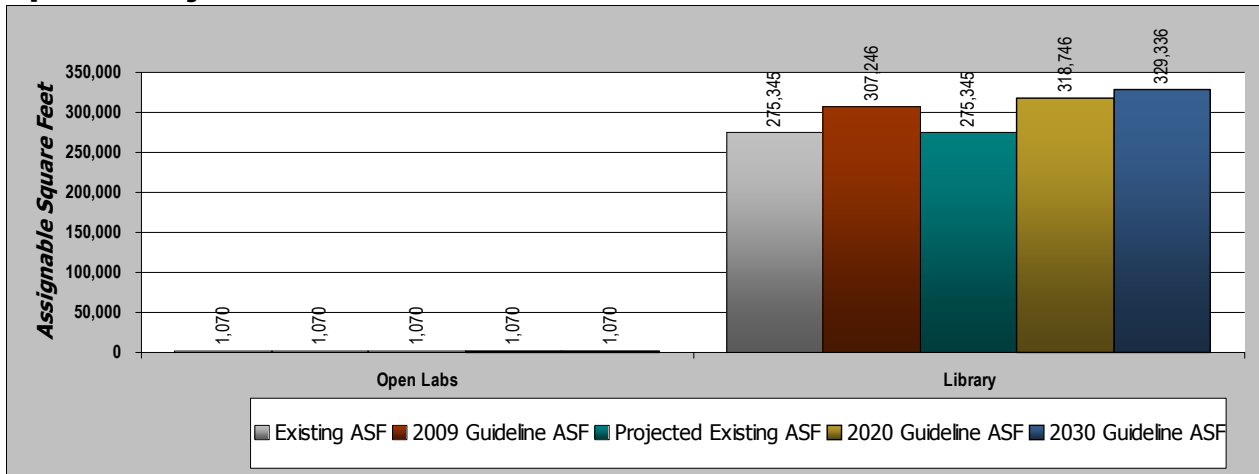
## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Director	200	4	800		4	800	
Associate Director	200	3	600		3	600	
Assistant Director	150	2	300		2	300	
Manager	150	8	1,200		8	1,200	
Faculty (Non Tenure Track) (PT)	50	1	50		1	50	
Artist/Scholar in Residence	150	1	150		1	150	
Visiting Faculty	150	3	450		3	450	
Research Faculty	150	3	450		3	450	
Future T/TT Faculty	150	20	3,000		24	3,600	
Future Research Faculty	150	1	150		2	300	
Post-Doctoral Fellow	150	4	600		5	750	
Other Professionals	150	98	14,700		100	15,000	
Research Professional (FT)	150	538	80,700		553	82,950	
Research Professional (PT)	75	97	7,275		101	7,575	
Research Associate	150	171	25,650		177	26,550	
Technical/Paraprofessional	100	23	2,300		23	2,300	
Clerical & Secretarial	100	16	1,600		16	1,600	
Research Assistant (Student)	50	246	12,300		263	13,150	
Graduate Assistant	50	17	850		18	900	
Student Worker	25	283	7,075		290	7,250	
Skilled Crafts (No Office Needed)	0	2	0		2	0	
Service/Maintenance (No Office Needed)	0	3	0		3	0	
Additional Service Space (900 asf)	0	0	0		0	0	
Additional Conference Space (500 asf)	0	0	0		0	0	
Additional Conference Space (1,000 asf)	0	0	0		0	0	
Additional Conference Space (2,000 asf)	0	0	0		0	0	
Additional Conference Space (4,000 asf)	0	0	0		0	0	
<b>Total Office Space</b>			<b>162,300</b>	<b>191,355</b>		<b>168,025</b>	<b>191,355</b>
<i>Total Service Space</i>			<i>26,485</i>	<i>16,984</i>		<i>27,335</i>	<i>16,984</i>
<i>Total Conference Room Space</i>			<i>26,660</i>	<i>24,035</i>		<i>27,120</i>	<i>24,035</i>
<b>TOTAL</b>		<b>1,554</b>	<b>215,445</b>	<b>232,374</b>	<b>1,612</b>	<b>222,480</b>	<b>232,374</b>
<b>Surplus/(Deficit)</b>			<b>16,929</b>			<b>9,894</b>	

## Section 8

### University Libraries

#### Space Analysis



ASF = Assignable Square Feet

#### Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>								
Open Laboratories & Service	1,070	1,070	0	1,070	1,070	0	1,070	0
Library	275,345	307,246	(31,901)	275,345	318,746	(43,401)	329,336	(53,991)
<b>TOTAL</b>	<b>276,415</b>	<b>308,316</b>	<b>(31,901)</b>	<b>276,415</b>	<b>319,816</b>	<b>(43,401)</b>	<b>330,406</b>	<b>(53,991)</b>

ASF = Assignable Square Feet

#### Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Student Center	Other Acad Space	TOTAL OF ASF
Admin & Rsch Ctr EC					668				668
Benson Earth Science					10,139				10,139
Duane Physics					7,849				7,849
IMIG Music Bldg					9,788				9,788
Koelbel Building - L					13,611				13,611
Mathematics Building					18,214				18,214
Norlin Library		1,070			213,529				214,599
Walnut Distribution					1,547				1,547
<b>TOTAL</b>		<b>1,070</b>			<b>275,345</b>				<b>276,415</b>

**NOTE:** The University shows that there is slightly over 25,000 ASF of existing office space for University Libraries. In conducting library space needs, the office space is normally included as library space. This is the approach used for this analysis.



**University Libraries**
**Office Space Guideline Application**

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250	
Faculty - Tenured	150	11	1,650	
Faculty - Tenure Track	150	16	2,400	
Faculty (Non Tenure Track) (FT)	150	19	2,850	
Faculty (Non Tenure Track) (PT)	50	3	150	
Artist/Scholar in Residence	150	1	150	
Emeritus Faculty	50	20	1,000	
Other Professionals	150	20	3,000	
Technical/Paraprofessional	100	46	4,600	
Clerical & Secretarial	100	50	5,000	
Graduate Assistant	50	1	50	
Student Worker	25	23	575	
Student Worker (No Office Needed)	0	223	0	
Service/Maintenance (No Office Needed)	0	3	0	
<b>Total Office Space</b>			<b>21,675</b>	
<i>Total Service Space</i>			<i>2,710</i>	
<i>Total Conference Room Space</i>			<i>2,350</i>	
<b>TOTAL</b>		<b>437</b>	<b>26,735</b>	<b>0</b>
<b>Surplus/(Deficit)</b>			<i>n/a</i>	

**Office Space Guideline Application for Planning Horizons**

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Dean	250	1	250		1	250	
Faculty - Tenured	150	11	1,650		11	1,650	
Faculty - Tenure Track	150	16	2,400		16	2,400	
Faculty (Non Tenure Track) (FT)	150	21	3,150		22	3,300	
Faculty (Non Tenure Track) (PT)	50	3	150		3	150	
Artist/Scholar in Residence	150	1	150		1	150	
Emeritus Faculty	50	20	1,000		20	1,000	
Other Professionals	150	21	3,150		22	3,300	
Technical/Paraprofessional	100	48	4,800		50	5,000	
Clerical & Secretarial	100	52	5,200		54	5,400	
Graduate Assistant	50	1	50		1	50	
Student Worker	25	24	600		25	625	
Student Worker (No Office Needed)	0	234	0		241	0	
Service/Maintenance (No Office Needed)	0	3	0		3	0	

## Section 8

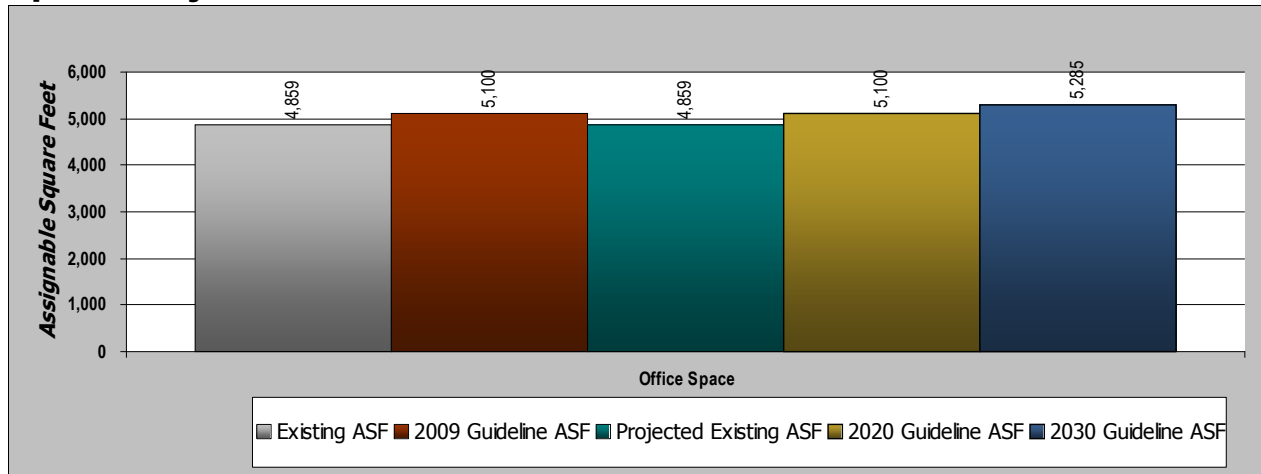
### University Libraries

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
<b>Total Office Space</b>			22,550			23,275	
<i>Total Service Space</i>			2,790			2,870	
<i>Total Conference Room Space</i>			2,425			2,500	
<b>TOTAL</b>		456	27,765	0	470	28,645	0
<b><i>Surplus/(Deficit)</i></b>			n/a			n/a	

## Office of the Chancellor

### Space Analysis



ASF = Assignable Square Feet

### Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
<b>Services and Administration</b>								
Administrative Offices & Service	4,859	5,100	(241)	4,859	5,100	(241)	5,285	(426)
<b>TOTAL</b>	<b>4,859</b>	<b>5,100</b>	<b>(241)</b>	<b>4,859</b>	<b>5,100</b>	<b>(241)</b>	<b>5,285</b>	<b>(426)</b>

ASF = Assignable Square Feet

### Existing Space by Building

Building	Teaching Labs	Admn Offices	Phys Ed/ Rec	Athletics	Student Center	Physical Plant	Other Admn Space	TOTAL OF ASF
University Admin Ctr		4,684						4,684
University Memorial		175						175
<b>TOTAL</b>		<b>4,859</b>						<b>4,859</b>

## Section 8

### Office of the Chancellor

#### Office Space Guideline Application

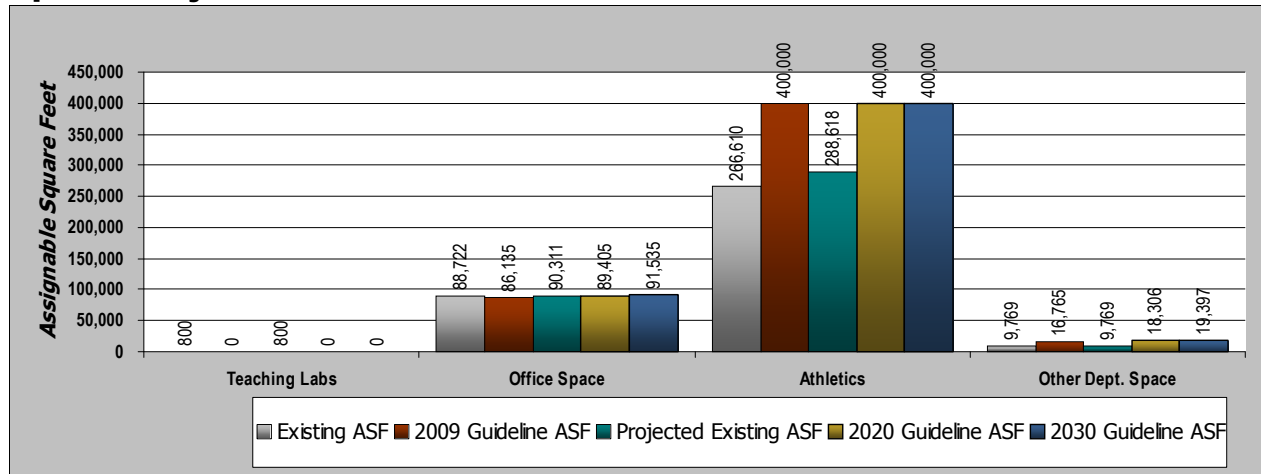
Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Chancellor	400	1	400	
Executive Vice Chancellor & Provost	350	1	350	
Executive/Administrative/Managerial	200	1	200	
Director	200	1	200	
Other Professionals	150	8	1,200	
Student Worker	25	6	150	
Additional Service Space (2,000 asf)	0	0	0	
<b>Total Office Space</b>			<b>2,500</b>	<b>2,877</b>
<i>Total Service Space</i>			<i>2,280</i>	<i>1,631</i>
<i>Total Conference Room Space</i>			<i>320</i>	<i>351</i>
<b>TOTAL</b>		<b>18</b>	<b>5,100</b>	<b>4,859</b>
<b>Surplus/(Deficit)</b>			<b>(241)</b>	

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Chancellor	400	1	400		1	400	
Executive Vice Chancellor & Provost	350	1	350		1	350	
Executive/Administrative/Managerial	200	1	200		1	200	
Director	200	1	200		1	200	
Other Professionals	150	8	1,200		9	1,350	
Student Worker	25	6	150		6	150	
Additional Service Space (2,000 asf)	0	0	0		0	0	
<b>Total Office Space</b>			<b>2,500</b>	<b>2,877</b>		<b>2,650</b>	<b>2,877</b>
<i>Total Service Space</i>			<i>2,280</i>	<i>1,631</i>		<i>2,300</i>	<i>1,631</i>
<i>Total Conference Room Space</i>			<i>320</i>	<i>351</i>		<i>335</i>	<i>351</i>
<b>TOTAL</b>		<b>18</b>	<b>5,100</b>	<b>4,859</b>	<b>19</b>	<b>5,285</b>	<b>4,859</b>
<b>Surplus/(Deficit)</b>			<b>(241)</b>			<b>(426)</b>	

## Senior Vice Chancellor and Chief Financial Officer

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Academic Space								
Teaching Laboratories & Service	800	0	800	800	0	800	0	800
Services and Administration								
Administrative Offices & Service	88,722	86,135	2,587	90,311	89,405	906	91,535	(1,224)
Other Administrative Department Space	9,769	16,765	(6,996)	9,769	18,306	(8,537)	19,397	(9,628)
Services and Administration Subtotal	98,491	102,900	(4,409)	100,080	107,711	(7,631)	110,932	(10,852)
Athletics and Recreation								
Athletics	266,610	400,000	(133,390)	288,618	400,000	(111,382)	400,000	(111,382)
TOTAL	365,901	502,900	(136,999)	389,498	507,711	(118,213)	510,932	(121,434)

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Admn Offices	Phys Ed/ Rec	Athletics	Student Center	Physical Plant	Other Admn Space	TOTAL OF ASF
Admin & Rsch Ctr EC		29,093					3,233	32,326
Balch Fieldhouse Com		1,367		47,767				49,134
Balch Fieldhouse Pre				14,912				14,912
Basketball/Volleybal								
Benson Earth Science	800							800
Carlson Gymnasium		104		13,446				13,550
Coors Events/Confere		1,153		93,609				94,762
Ctr for Innovation		424					1,878	2,302
Dal Ward Athletic Ce		8,064		43,925				51,989
Health Physics Lab		602						602
Marine St Science Ct		132					1,117	1,249
Potts Field Track St				1,226				1,226

## Section 8

### Senior Vice Chancellor and Chief Financial Officer

Building	Teaching Labs	Admn Offices	Phys Ed/ Rec	Athletics	Student Center	Physical Plant	Other Admn Space	TOTAL OF ASF
Practice Football FI				266				266
Regent Administrativ		29,536					1,444	30,980
Research Lab No 2		936						936
Ski Center/Athletic		1,312		1,613				2,925
Soccer Locker Room				1,386				1,386
Stadium Building		12,275		5,118				17,393
Stadium Sky Box		1,148		39,988				41,136
Stadium Ticket Build				387				387
Stadium Warehouse, N				1,559				1,559
Temporary Bldg 9				1,408				1,408
University Admin Ctr		1,827						1,827
University Club		398					1,276	1,674
University Memorial		351						351
Willard Hall							821	821
<b>TOTAL</b>	<b>800</b>	<b>88,722</b>		<b>266,610</b>			<b>9,769</b>	<b>365,901</b>

## Senior Vice Chancellor and Chief Financial Officer

## Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Senior Vice Chancellor	350	1	350	
Associate Vice Chancellor	250	2	500	
Athletic Director	250	1	250	
Executive/Administrative/Managerial	200	4	800	
Director	200	20	4,000	
Associate Director	200	12	2,400	
Assistant Director	150	23	3,450	
Manager	150	7	1,050	
Other Professionals	150	208	31,200	
Technical/Paraprofessional	100	72	7,200	
Clerical & Secretarial	100	59	5,900	
Student Worker	25	129	3,225	
Student Worker (No Office Needed)	0	137	0	
Skilled Crafts (No Office Needed)	0	4	0	
Service/Maintenance (No Office Needed)	0	9	0	
Additional Service Space (2,000 asf)	0	0	0	
Additional Service Space (3,000 asf)	0	0	0	
Additional Service Space (4,000 asf)	0	0	0	
<b>Total Office Space</b>			<b>60,325</b>	<b>64,018</b>
<i>Total Service Space</i>			<i>17,225</i>	<i>17,751</i>
<i>Total Conference Room Space</i>			<i>8,585</i>	<i>6,809</i>
<b>TOTAL</b>		<b>688</b>	<b>86,135</b>	<b>88,578</b>
<b>Surplus/(Deficit)</b>			<b>2,443</b>	

## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Senior Vice Chancellor	350	1	350		1	350	
Associate Vice Chancellor	250	2	500		2	500	
Athletic Director	250	1	250		1	250	
Executive/Administrative/Managerial	200	4	800		4	800	
Director	200	20	4,000		20	4,000	
Associate Director	200	12	2,400		14	2,800	
Assistant Director	150	25	3,750		25	3,750	
Manager	150	7	1,050		7	1,050	
Other Professionals	150	219	32,850		224	33,600	
Technical/Paraprofessional	100	74	7,400		78	7,800	
Clerical & Secretarial	100	62	6,200		62	6,200	
Student Worker	25	134	3,350		139	3,475	
Student Worker (No Office Needed)	0	143	0		148	0	
Skilled Crafts (No Office Needed)	0	4	0		4	0	
Service/Maintenance (No Office Needed)	0	9	0		10	0	

## Section 8

### Senior Vice Chancellor and Chief Financial Officer

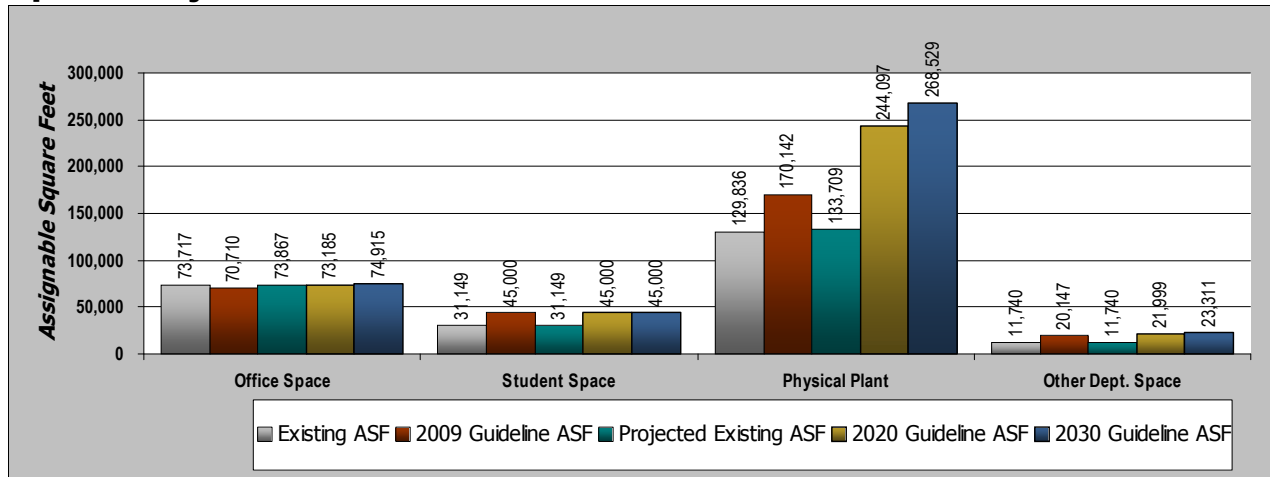
#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Additional Service Space (2,000 asf)	0	0	0		0	0	
Additional Service Space (3,000 asf)	0	0	0		0	0	
Additional Service Space (4,000 asf)	0	0	0		0	0	
<b>Total Office Space</b>			<b>62,900</b>	<b>65,607</b>		<b>64,575</b>	<b>65,607</b>
<i>Total Service Space</i>			<i>17,580</i>	<i>17,751</i>		<i>17,800</i>	<i>17,751</i>
<i>Total Conference Room Space</i>			<i>8,925</i>	<i>6,809</i>		<i>9,160</i>	<i>6,809</i>
<b>TOTAL</b>		<b>717</b>	<b>89,405</b>	<b>90,167</b>	<b>739</b>	<b>91,535</b>	<b>90,167</b>
<b><i>Surplus/(Deficit)</i></b>			<b><i>762</i></b>			<b><i>(1,368)</i></b>	



## Vice Chancellor, Administration

## Space Analysis



ASF = Assignable Square Feet

## Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
Services and Administration								
Administrative Offices & Service	73,717	70,710	3,007	73,867	73,185	682	74,915	(1,048)
Student Union/Center Space	31,149	45,000	(13,851)	31,149	45,000	(13,851)	45,000	(13,851)
Physical Plant	129,836	170,142	(40,306)	133,709	244,097	(110,388)	268,529	(134,820)
Other Administrative Department Space	11,740	20,147	(8,407)	11,740	21,999	(10,259)	23,311	(11,571)
TOTAL	246,442	305,999	(59,557)	250,465	384,281	(133,816)	411,755	(161,290)

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Admn Offices	Phys Ed/ Rec	Athletics	Student Center	Physical Plant	Other Admn Space	TOTAL OF ASF
Admin & Rsch Ctr EC		14,046					1,045	15,091
Atlas Center						359		359
Bear Creek Commons						367		367
Carpenter Shop						1,102		1,102
Discovery Learning		123						123
Duane Physics							23	23
Education Bldg						415		415
Ekeley Sciences Bldg		75						75
Electric Shop						188		188
Electric Supply Bldg						1,186		1,186
Engineering Electric		70				108		178
Engineering Stores &							66	66
Environmental Design		1,407						1,407
Environmental Health		5,599				6,281	1,586	13,466
Fire Tools						102		102
Garage						648		648
Garage Shed						141		141
Gatehouse/Info Booth		26						26

## Section 8

### College/School and Administrative Unit Findings

### Space Needs Analysis

#### Vice Chancellor, Administration

Building	Teaching Labs	Admn Offices	Phys Ed/ Rec	Athletics	Student Center	Physical Plant	Other Admn Space	TOTAL OF ASF
Grounds and Service		1,530				10,810		12,340
Grounds Warehouse						1,531	336	1,867
Guggenheim Geograp						234		234
Health Physics Lab		158				676	158	992
Koelbel Building - L		154						154
Marine St Science Ct						696		696
Marr Alpine Laborato		90						90
McKenna Languages		116						116
Norlin Library		113						113
Police & Parking Ser		9,322				7,969	2,014	19,305
Power House		322				10,616		10,938
Regent Administrativ		1,259						1,259
Regent Dr Autopark						1,805		1,805
Research Lab No 2		18,546				1,382		19,928
Stadium Building		8,865				27,503	4,432	40,800
Stadium Sky Box		112				13,119		13,231
Transportation Cente		1,672				6,812		8,484
University Club		347						347
University Memorial		5,339			28,367		605	34,311
University Theatre		206				448		654
Vehicle Storage						874		874
Visual Arts Complex								
Walnut Distribution		3,478			2,782	30,615	119	36,994
Warehouse No 1						457	368	825
Warehouse No 2						1,921		1,921
Warehouse No 3						444	988	1,432
Warehouse No 4						1,027		1,027
Willard Hall		742						742
<b>TOTAL</b>		<b>73,717</b>			<b>31,149</b>	<b>129,836</b>	<b>11,740</b>	<b>246,442</b>

## Vice Chancellor, Administration

## Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009		
		Head- count	Total Guideline ASF	Existing ASF
Vice Chancellor	300	1	300	
Executive Director	250	2	500	
Executive/Administrative/Managerial	200	12	2,400	
Director	200	12	2,400	
Associate Director	200	2	400	
Assistant Director	150	6	900	
Manager	150	8	1,200	
Other Professionals	150	107	16,050	
Skilled Crafts (Office Needed)	150	10	1,500	
Service/Maintenance (Office Needed)	150	35	5,250	
Technical/Paraprofessional	100	106	10,600	
Clerical & Secretarial	100	59	5,900	
Student Worker	25	70	1,750	
Clerical & Secretarial (No Office Needed)	0	25	0	
Student Worker (No Office Needed)	0	223	0	
Skilled Crafts (No Office Needed)	0	111	0	
Service/Maintenance (No Office Needed)	0	222	0	
Additional Service Space (500 asf)	0	0	0	
Additional Service Space (1,400 asf)	0	0	0	
Additional Service Space (3,000 asf)	0	0	0	
Additional Conference Space (500 asf)	0	0	0	
Additional Conference Space (2,000 asf)	0	0	0	
<b>Total Office Space</b>			<b>49,150</b>	<b>53,974</b>
<i>Total Service Space</i>			<i>12,155</i>	<i>11,990</i>
<i>Total Conference Room Space</i>			<i>9,405</i>	<i>7,753</i>
<b>TOTAL</b>		<b>1,011</b>	<b>70,710</b>	<b>73,717</b>
<b>Surplus/(Deficit)</b>			<b>3,007</b>	

## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Vice Chancellor	300	1	300		1	300	
Executive Director	250	2	500		2	500	
Executive/Administrative/Managerial	200	13	2,600		13	2,600	
Director	200	12	2,400		12	2,400	
Associate Director	200	2	400		2	400	
Assistant Director	150	6	900		7	1,050	
Manager	150	8	1,200		8	1,200	
Other Professionals	150	112	16,800		114	17,100	
Skilled Crafts (Office Needed)	150	10	1,500		10	1,500	
Service/Maintenance (Office Needed)	150	37	5,550		38	5,700	
Technical/Paraprofessional	100	110	11,000		114	11,400	

## Section 8

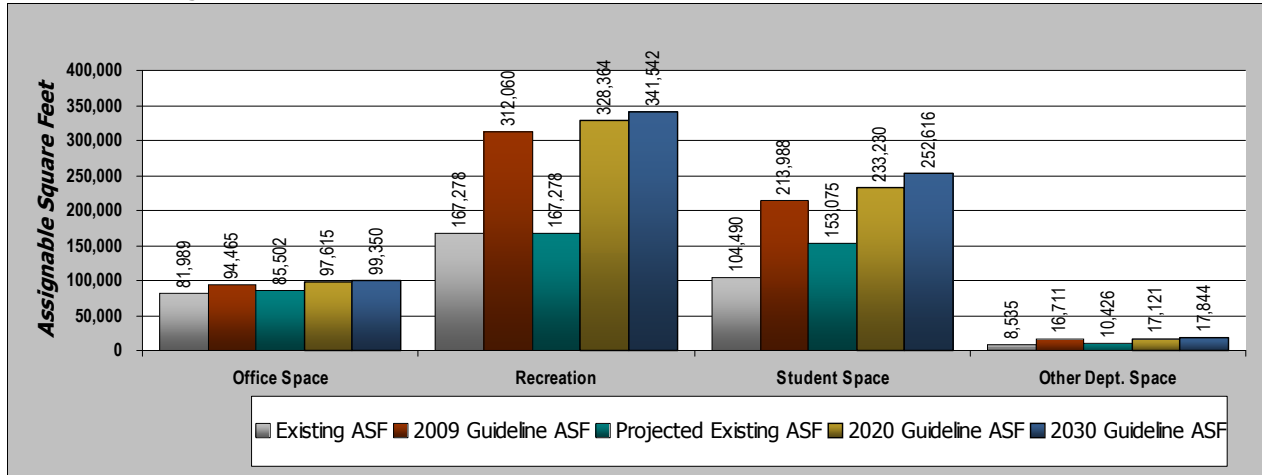
### Vice Chancellor, Administration

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Clerical & Secretarial	100	61	6,100		64	6,400	
Student Worker	25	74	1,850		75	1,875	
Clerical & Secretarial (No Office Needed)	0	26	0		27	0	
Student Worker (No Office Needed)	0	234	0		241	0	
Skilled Crafts (No Office Needed)	0	116	0		121	0	
Service/Maintenance (No Office Needed)	0	233	0		239	0	
Additional Service Space (500 asf)	0	0	0		0	0	
Additional Service Space (1,400 asf)	0	0	0		0	0	
Additional Service Space (3,000 asf)	0	0	0		0	0	
Additional Conference Space (500 asf)	0	0	0		0	0	
Additional Conference Space (2,000 asf)	0	0	0		0	0	
<b>Total Office Space</b>			<b>51,100</b>	<b>54,124</b>		<b>52,425</b>	<b>54,124</b>
<i>Total Service Space</i>			<i>12,435</i>	<i>11,990</i>		<i>12,640</i>	<i>11,990</i>
<i>Total Conference Room Space</i>			<i>9,650</i>	<i>7,753</i>		<i>9,850</i>	<i>7,753</i>
<b>TOTAL</b>		<b>1,057</b>	<b>73,185</b>	<b>73,867</b>	<b>1,088</b>	<b>74,915</b>	<b>73,867</b>
<b>Surplus/(Deficit)</b>			<b>682</b>			<b>(1,048)</b>	

## Vice Chancellor, Student Affairs

### Space Analysis



ASF = Assignable Square Feet

### Current, 2020, and 2030 Space Needs

Space Category	Fall 2009			Projected Existing ASF	2020		2030	
	Existing ASF	Guideline ASF	Surplus/ (Deficit)		Guideline ASF	Surplus/ (Deficit)	Guideline ASF	Surplus/ (Deficit)
<b>Services and Administration</b>								
Administrative Offices & Service	81,989	94,465	(12,476)	85,502	97,615	(12,113)	99,350	(13,848)
Student Union/Center Space	104,490	213,988	(109,498)	153,075	233,230	(80,155)	252,616	(99,541)
Other Administrative Department Space	8,535	16,711	(8,176)	10,426	17,121	(6,695)	17,844	(7,418)
<i>Services and Administration Subtotal</i>	<i>195,014</i>	<i>325,164</i>	<i>(130,150)</i>	<i>249,003</i>	<i>347,966</i>	<i>(98,963)</i>	<i>369,810</i>	<i>(120,807)</i>
<b>Athletics and Recreation</b>								
Recreation	167,278	312,060	(144,782)	167,278	328,364	(161,086)	341,542	(174,264)
<b>TOTAL</b>	<b>362,292</b>	<b>637,224</b>	<b>(274,932)</b>	<b>416,281</b>	<b>676,330</b>	<b>(260,049)</b>	<b>711,352</b>	<b>(295,071)</b>

ASF = Assignable Square Feet

### Existing Space by Building

Building	Teaching Labs	Admn Offices	Phys Ed/ Rec	Athletics	Student Center	Physical Plant	Other Admn Space	TOTAL OF ASF
Aden Hall		395						395
Admin & Rsch Ctr EC		299						299
Arnett Hall		572						572
Baker Hall		1,273						1,273
Bear Creek Apt A		949						949
Bear Creek Commons			8,025					8,025
Buckingham Hall		378						378
Carlson Gymnasium			8,609					8,609
Center for Community								
Cheyenne Arapaho Ha		1,333						1,333
Childrens Ctr DACR		467						467
Clare Small Arts & S			4,514					4,514
College Inn Conf Ctr		1,608						1,608
Cristol Chemistry &					165			165

## Section 8

### College/School and Administrative Unit Findings

### Space Needs Analysis

#### Vice Chancellor, Student Affairs

Building	Teaching Labs	Admn Offices	Phys Ed/ Rec	Athletics	Student Center	Physical Plant	Other Admn Space	TOTAL OF ASF
Darley Commons		1,125						1,125
Darley Towers		661						661
Engineering Office T					344			344
Engineering South To					172			172
Fam Housing Commun		286						286
Farrand Hall		198						198
Hallett Hall		9,686						9,686
Housing System Maint		1,997						1,997
Kittredge Commons		3,946						3,946
Kittredge West Hall		140						140
Libby Hall		1,041						1,041
Old Main		225			3,197		4,657	8,079
Regent Administrativ		5,371					72	5,443
Sewall Hall		29						29
Smith Hall		132						132
Stearns Towers		107						107
Student Recreation C		6,980	146,130					153,110
University Club		2,096					344	2,440
University Memorial		13,531			100,612		734	114,877
Wardenburg Student H		10,159					149	10,308
Willard Hall		16,762					2,579	19,341
Williams Vill Heatin		243						243
Williams Village C								
<b>TOTAL</b>		<b>81,989</b>	<b>167,278</b>		<b>104,490</b>		<b>8,535</b>	<b>362,292</b>

## Vice Chancellor, Student Affairs

## Office Space Guideline Application

Staffing Type	Office Guideline ASF per Headcount	Fall 2009	
		Head- count	Total Guideline ASF Existing ASF
Associate Vice Chancellor	250	1	250
Executive Director	250	3	750
Director	200	55	11,000
Associate Director	200	8	1,600
Assistant Vice Chancellor	200	1	200
Assistant Director	150	28	4,200
Manager	150	23	3,450
Adjunct Faculty	50	1	50
Other Professionals	150	150	22,500
Other Professional (PT)	50	23	1,150
Research Professional (FT)	150	2	300
Research Professional (PT)	75	6	450
Technical/Paraprofessional	100	114	11,400
Clerical & Secretarial	100	82	8,200
Research Assistant (Student)	50	29	1,450
Student Worker	25	99	2,475
Other Professional (No Office Needed)	0	13	0
Student Worker (No Office Needed)	0	1,606	0
Skilled Crafts (No Office Needed)	0	60	0
Service/Maintenance (No Office Needed)	0	315	0
Additional Service Space (900 asf)	0	0	0
Additional Service Space (1,400 asf)	0	0	0
Additional Conference Space (2,000 asf)	0	0	0
<b>Total Office Space</b>			<b>69,425 63,280</b>
<i>Total Service Space</i>			<i>11,870 10,504</i>
<i>Total Conference Room Space</i>			<i>13,170 8,205</i>
<b>TOTAL</b>		<b>2,619</b>	<b>94,465 81,989</b>
<b>Surplus/(Deficit)</b>			<b>(12,476)</b>

## Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Associate Vice Chancellor	250	1	250		1	250	
Executive Director	250	3	750		3	750	
Director	200	55	11,000		55	11,000	
Associate Director	200	8	1,600		8	1,600	
Assistant Vice Chancellor	200	1	200		1	200	
Assistant Director	150	30	4,500		31	4,650	
Manager	150	23	3,450		23	3,450	
Adjunct Faculty	50	1	50		1	50	
Other Professionals	150	158	23,700		160	24,000	
Other Professional (PT)	50	24	1,200		25	1,250	

## Section 8

### Vice Chancellor, Student Affairs

#### Office Space Guideline Application for Planning Horizons

Staffing Type	Office Guideline ASF per Headcount	2020			2030		
		Head- count	Total Guideline ASF	Existing ASF	Head- count	Total Guideline ASF	Existing ASF
Research Professional (FT)	150	2	300		2	300	
Research Professional (PT)	75	6	450		6	450	
Technical/Paraprofessional	100	118	11,800		122	12,200	
Clerical & Secretarial	100	85	8,500		88	8,800	
Research Assistant (Student)	50	32	1,600		34	1,700	
Student Worker	25	103	2,575		106	2,650	
Other Professional (No Office Needed)	0	14	0		14	0	
Student Worker (No Office Needed)	0	1,687	0		1,734	0	
Skilled Crafts (No Office Needed)	0	62	0		64	0	
Service/Maintenance (No Office Needed)	0	330	0		340	0	
Additional Service Space (900 asf)	0	0	0		0	0	
Additional Service Space (1,400 asf)	0	0	0		0	0	
Additional Conference Space (2,000 asf)	0	0	0		0	0	
<b>Total Office Space</b>			<b>71,925</b>	<b>71,813</b>		<b>73,300</b>	<b>71,813</b>
<i>Total Service Space</i>			<i>12,195</i>	<i>7,277</i>		<i>12,370</i>	<i>7,277</i>
<i>Total Conference Room Space</i>			<i>13,495</i>	<i>6,412</i>		<i>13,680</i>	<i>6,412</i>
<b>TOTAL</b>		<b>2,743</b>	<b>97,615</b>	<b>85,502</b>	<b>2,818</b>	<b>99,350</b>	<b>85,502</b>
<b>Surplus/(Deficit)</b>			<b>(12,113)</b>			<b>(13,848)</b>	



---

# **Appendix A**

## **ASF by Building for Fall 2009**

---



### **APPENDIX A: ASF BY BUILDING FOR FALL 2009**

Appendix A shows the amount of space by building included in the space needs analysis by major space category as defined in the study for Fall 2009.

### Assignable Square Feet by Building

for Fall 2009

	Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/Rec	Athletics	Assembly/Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Absaroka															107						107
Aden Hall						395									18,817						19,212
Admin & Rsch Ctr East Campus				10,582	31,561	43,438	668							7,290			2,955	0	17,500	143	114,137
Alumni Ctr Garage Annex																					
Andrews Hall																			752		752
Armory															39,797						39,797
Armory Trailer	1,436	1,963	339	370	8,988									2,363					312		15,771
Arnett Hall						572															572
Aspen																					
Athens Ct A1														131	224						355
Athens Ct A2															5,448						5,448
Athens Ct A3															5,448						5,448
Athens Ct A4															2,592						2,592
Athens Ct B1															5,448						5,448
Athens Ct B2															3,102						3,102
Athens Ct B3															6,493						6,493
Athens Ct C1															3,102						3,102
Athens Ct C2															7,182						7,182
															7,182						7,182

**Assignable Square Feet by Building****for Fall 2009**

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Athens North Ct																			
Atlas Center																			
8,960	13,669	1,415		12,337								359	2,182			118		128	742
Baker Hall																			
852				1,296	1,273									68,819					72,240
Baker Hall Ancillary Bldg																			
														737					737
Balch Fieldhouse Complex																			
				1,367				47,767					3,226						52,360
Balch Fieldhouse Pressbox																			
								14,912											14,912
Basketball/Volleyball Practice Fac																			
					0			0											0
Bear Creek Apt A																			
					949									123,137					124,086
Bear Creek Apt B																			
														123,406					123,406
Bear Creek Commons																			
							8,025					367							8,392
Benson Earth Sciences Bldg																			
3,394	5,868		18,816	13,236		10,139							1,323						52,776
Bicycle Registration Building																			
																50			50
Bighorn																			
														109					109
Bison																			
														109					109
Bobcat																			
														109					109
Brackett Hall																			
														19,124					19,124
Bruce Curtis Bldg																			
3,453	1,334		665	4,854					15,850										26,156
Buckingham Hall																			
582					378									33,176		376			34,847

## Assignable Square Feet by Building

for Fall 2009

Class-rooms			Teaching Labs			Open Labs			Research Labs			Acad Offices			Admn Offices			Library			Phys Ed/ Rec			Athletics			Assembly /Exhibit			Student Center			Central Cmptr			Physical Plant			Other Dept Space			Residence Life			Health Care			Unasgnd Uncoded			Inactive			CU System			Outside Agencies			TOTAL ASF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Carlson Gymnasium																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
906						5,087			5,793			104						8,609			13,446															938															34,883																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Carpenter Shop																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

## Assignable Square Feet by Building

for Fall 2009

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Coors Events/Conference Center																			
					1,153				93,609										94,762
Coyote																			
														109					109
Cristol Chemistry & Biochem Bldg																			
8,278			57,104	10,310						165				3,404		1,408			80,669
Crosman Hall																			
														17,430					17,430
Dal Ward Athletic Center																			
				8,064				43,925											51,989
Darley Commons																			
2,472				815	1,125									23,166					27,578
Darley Towers																			
					661									69,097					69,758
Denison Arts & Sciences Bldg																			
				2,989															2,989
Dining Hall																			
													1,784						1,784
Discovery Learning Cntr																			
			12,391	7,006	123								1,247			143			20,910
Drescher Undergraduate Engineering																			
1,103	12,236	2,339		1,309					2,539					2,237					21,763
Duane Physics																			
11,690	9,537	18,895	28,462	29,252		7,849							6,530			2,678			114,893
Eaton Humanities Bldg																			
17,457	297			10,223									1,784			258			30,019
Economics Bldg																			
4,474		351		9,924									807						15,556
Education Bldg																			
7,111				15,902								415	5,577				231		29,236
Ekeley Sciences Bldg																			
3,460	20,243	1,272	23,561	18,835	75								4,377			1,860			73,703
Electric Shop																			
												188							188
Electric Supply Bldg																			
												1,186							1,186

## Assignable Square Feet by Building

for Fall 2009

Classrooms & Labs					Academics & Support					Facilities & Services										Totals		
Classrooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF		
Engineering Administration Wing																						
Engineering Aerospace Wing																						
Engineering Chemical Wing																						
Engineering Civil & Enviro Wing																						
Engineering Classroom Wing																						
Engineering Comp Science Dept Wing																						
Engineering Electrical Wing																						
Engineering Mechanical Wing																						
Engineering North Tower																						
Engineering Office Tower																						
Engineering South Tower																						
Engineering Stores & Labs																						
Environmental Design Bldg																						
Environmental Health & Safety Cntr																						
Euclid Av Autopark																						
Faculty-Staff Ct A																						
Faculty-Staff Ct B																						
Faculty-Staff Ct C																						



**Assignable Square Feet by Building****for Fall 2009**

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Faculty-Staff Ct D																			
														2,264					2,264
Faculty-Staff Ct E																			
														2,873					2,873
Faculty-Staff Ct F																			
														2,877					2,877
Faculty-Staff Ct G																			
														2,873					2,873
Faculty-Staff Ct H																			
														2,873					2,873
Faculty-Staff Ct J																			
														2,873					2,873
Faculty-Staff Ct Shed																			
														531					531
Fam Housing Community Center																			
					286									1,229					1,515
Family Housing Expansion (TB32)																			
														1,016					1,016
Family Housing Expansion (TB33)																			
														3,520					3,520
Family Housing Expansion (TB34)																			
														532					532
Family Housing Expansion (TB35)																			
														962					962
Family Housing Expansion (TB87)																			
														952					952
Farrand Hall																			
4,601				565	198									68,537		464			74,365
Finch																			
														108					108
Fire Tools																			
												102							102
Fiske Planetarium & Sci Center																			
	631			644					10,454					1,181					12,910
Fleming Building																			
124	30,326			22,354					1,398					14,352			9,229		77,783

## Assignable Square Feet by Building

for Fall 2009

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/Rec	Athletics	Assembly/Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Flycatcher														106						106
Garage												648								648
Garage Shed												141								141
Gatehouse/Info Booth					26															26
Gates Woodruff Womens Studies Cott				2,200									645							3,111
Goshawk														107						107
Greenhouse No 1 At Macky													2,969							2,969
Grounds and Service Center				1,530								10,810								12,340
Grounds Warehouse												1,531	336							1,867
Grouse														108						108
Guggenheim Geography Bldg	3,429	506	302	7,887								234	1,303			300				13,961
Hale Science Bldg	5,671	1,493	222	4,665	9,183				35				1,277							22,546
Hallett Hall					9,686									50,186		0				59,872
Hazmat Shed																				
Health Physics Lab					760									73						73
Hellems Arts & Sciences Bldg	15,479	2,410		32,178								676	158			84				1,678
Henderson Bldg (Museum)													1,903							51,970
Henderson Bldg (Museum)				2,869					18,323											21,192
Housing Sys Service Center																				
	12,740	574		5,312									138	10,500		148	160			29,572

## Assignable Square Feet by Building

for Fall 2009

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Housing System Maintenance Center																		
					1,997										29,676			31,673
Hummingbird																		
														108				108
IBS Problem Behavior																		
				6,812										823				7,635
JMG Music Bldg																		
2,928	6,389	7,168		16,146		9,788			10,548					5,597		246		58,810
Inst for Behavioral Genetics																		
			1,731	6,870										5,596	343			14,540
Inst of Behav Sci No 1																		
				3,718										779		0		4,497
Inst of Behav Sci No 2																		
				2,584										184		0		2,768
Inst of Behav Sci No 3																		
			153	4,129										84		0		4,366
Inst of Behav Sci No 4																		
			376	1,069										179		0		1,624
Inst of Behav Sci No 5																		
				4,822										120		0		4,942
Inst of Behav Sci No 6																		
				1,723										283		0		2,006
Inst of Behav Sci No 7																		
				815										1,054		0		1,869
Inst of Behav Sci No 8																		
				852												0		852
Institute of Behavioral Science																		
			0	0														0
Jay																		
														100				100
JILA - Joint Inst for Lab Astrophys																		
		290	21,870	26,758					1,437					7,507		372		58,234
JILA NEW																		
			0	0														0
JUNCO																		
														106				106

## Assignable Square Feet by Building

for Fall 2009

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Ketchum Arts & Sciences Bldg																				
4,980	3,337	547		25,513										1,563						35,930
Kiowa Lab																				
			730																	730
Kitchen																				
														334						334
Kitchen Cooler																				
														103						103
Kittredge Commons																				
					3,946									34,060						38,006
Kittredge West Hall																				
						140								45,516						45,656
Koelbel Building - Leeds Sch of Bus																				
17,767	1,457	1,342	913	42,653	154	13,611				2,243				11,723		1,621		688	1,833	96,005
Koenig Alumni Center																				
																			5,164	5,164
LASP - Lab for Atmos & Space Phys																				
			2,789	12,146										385						15,417
LASP Space Technology Rsch Ctr																				
			24,571	36,873					978					5,312						67,734
Latrine																				
														280						280
Lesser House																				
291				1,797										13						2,101
Libby Hall																				
1,543	3,353			348	1,041									65,252						71,537
Life Sci Research Lab (RI-4)																				
			5,611	1,591										566		641				8,409
Limber																				
														506						506
Litman Research Lab (RI-1)																				
			18,652	15,477										1,245		221				35,795
Macky Auditorium																				
1,364	2,364	2,815		8,165					27,809					6,088						48,605
Marine Court A																				
														29,087						29,087

**Assignable Square Feet by Building****for Fall 2009**

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Marine Court B																			
														8,871					8,871
Marine Court C																			
														2,313					2,313
Marine Court D																			
														3,581					3,581
Marine Court E																			
														4,312					4,312
Marine Court F																			
														2,884					2,884
Marine Court G																			
														9,377					9,377
Marine Court H																			
														8,871					8,871
Marine Court J																			
														9,377					9,377
Marine Court K																			
														8,871					8,871
Marine St Science Ctr (RI-6)																			
			417		132							696	1,117			8,090		1,028	21,920
Marmot																			
														108					108
Marr Alpine Laboratory																			
		467	1,679	1,461	90								665						4,362
Mathematics Building																			
5,131		1,887		12,274		18,214							276			15			37,797
MCD Biology Building																			
3,097	5,565		35,612	10,121									8,724			1,359			64,478
McKenna Languages Bldg																			
775				11,899	116														12,790
Megaron Classroom																			
				851															851
Mertensia																			
														426					426
Moore's Collins Family Lodge																			
													1,176	1,058					2,234

**Assignable Square Feet by Building**

**for Fall 2009**

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Muenzinger Psych & Biopsych																				
13,960	5,840	822	27,425	30,314										9,495		242				88,098
Newton Ct 1A																				
														22,231						22,231
Newton Ct 1B																				
														22,204						22,204
Newton Ct 2A																				
														8,046						8,046
Newton Ct 2B																				
														8,046						8,046
Newton Ct 2C																				
														7,280						7,280
Newton Ct 2D																				
														8,046						8,046
Newton Ct 2E																				
														8,046						8,046
Newton Ct 2F																				
														8,046						8,046
Newton Ct 2G																				
														8,046						8,046
Newton Ct 2H																				
														8,046						8,046
Newton Ct 2J																				
														8,046						8,046
Newton Ct 2K																				
														8,046						8,046
Newton Ct 2L																				
														7,280						7,280
Newton Ct 2M																				
														8,046						8,046
Newton Ct 2N																				
														8,046						8,046
Newton Ct 2P																				
														8,046						8,046
Newton Ct 2R																				
														8,046						8,046

**Assignable Square Feet by Building****for Fall 2009**

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Newton Ct 2S																			
														8,046					8,046
Newton Ct 2T																			
														8,046					8,046
Newton Ct 2U																			
														8,046					8,046
Newton Ct 2V																			
														8,162					8,162
Newton Ct 2W																			
														8,046					8,046
Newton Ct 2X																			
														8,046					8,046
Newton Ct 2Y																			
														8,046					8,046
Newton Ct L2																			
														725					725
Newton Ct L3																			
														995					995
Norlin Library																			
2,304		1,070		5,562	113	213,529							6,351	305					229,234
Nutcracker																			
														109					109
Observatory																			
			106																106
Old Main																			
				6,349	225					3,197			4,657						14,428
One Pearl Plaza																			
																3,316	25,676		28,992
Page Foundation Center																			
																	7,051		7,051
PIKA																			
														108					108
Police & Parking Services Ctr																			
					9,322							7,969	2,014						19,305
Ponderosa Garage																			
													319						319

## Assignable Square Feet by Building

for Fall 2009

Class- rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cmpt	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Ponderosa Lodgepole																				
														1,548						1,548
Porcupine																				
														109						109
Porter Biosciences																				
1,825	2,772	842	40,975	9,467									1,531			2,170			237	59,819
Potts Field Track Storage																				
								1,226												1,226
Power House																				
					322							10,616								10,938
Practice Football Fld Bldg																				
								266												266
Ptarmigan																				
														106						106
Ramaley Biology Bldg																				
5,247	14,794		22,688	16,161									7,392			1,122				67,404
Reed Hall																				
														17,856						17,856
Regent Administrative Center																				
				9,734	36,166								1,626			227	0	868		48,621
Regent Dr Autopark																				
												1,805								1,805
Research Lab No 2																				
			2,411	14,670	19,482							1,382	4,687			4,336		148	2,320	49,436
Research Park Greenhouse																				
													9,738							9,738
Robin																				
														108						108
Sapsucker																				
														102						102
Science Learning Laboratory																				
593			6,439	6,216									2,659			554				16,461
Sewall Hall																				
2,176				836	29									55,462						58,503
Sisken																				
														98						98



**Assignable Square Feet by Building****for Fall 2009**

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Ski Center/Athletic Fieldhouse																			
					1,312			1,613											2,925
Smiley Ct A1																			
														6,968					6,968
Smiley Ct A2																			
														10,459					10,459
Smiley Ct A3																			
														11,268					11,268
Smiley Ct B1																			
														15,734					15,734
Smiley Ct B2																			
														15,734					15,734
Smiley Ct B3																			
														16,182					16,182
Smiley Ct B4																			
														15,742					15,742
Smiley Ct D1																			
														4,384					4,384
Smiley Ct D10																			
														5,142					5,142
Smiley Ct D2																			
														5,142					5,142
Smiley Ct D3																			
														4,388					4,388
Smiley Ct D4																			
														5,142					5,142
Smiley Ct D5																			
														5,142					5,142
Smiley Ct D6																			
														3,428					3,428
Smiley Ct D7																			
														4,384					4,384
Smiley Ct D8																			
														4,384					4,384
Smiley Ct D9																			
														6,856					6,856

## Assignable Square Feet by Building

for Fall 2009

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/Rec	Athletics	Assembly/Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Smiley Ct E1														10,998						10,998
Smiley Ct E2														10,998						10,998
Smiley Ct E3														10,998						10,998
Smiley Ct E4														10,980						10,980
Smiley Ct L1														287						287
Smiley Ct L2														581						581
Smiley Ct L3														287						287
Smith Hall																				
Soccer Locker Room				190	132									32,689						33,011
								1,386												1,386
Sommers-Bausch Observatory	2,620			628					1,822				874							5,944
Stadium Building	2,516	1,898	2,167	147	26,890	21,140		5,118				27,503	12,558			2,270				102,207
Stadium Sky Box						1,260		39,988				13,119								54,367
Stadium Ticket Building																				
Stadium Warehouse, NE of Field								387												387
Stearns Towers																				1,559
1,706					107									154,562						156,375
Student Recreation Center					6,980		146,130									121				153,231
Summer														304						304
Systems Biotechnology Building																				
0	0	0	0	0	0				0	0										0

## Assignable Square Feet by Building

for Fall 2009

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Telecommunications Center																			
				6,169										2,861					9,030
Temp Bldg 1 at Clare Small																			
302				4,385										151					4,838
Temporary Bldg 78																			
																		976	976
Temporary Bldg 9																			
								1,408											1,408
Temporary Bldg 40																			
														132					132
Temporary Bldg 40B																			
																126			126
Temporary Bldg 65																			
				1,319										238		392			1,949
Temporary Bldg 65 Garage																			
														344					344
Temporary Bldg 66																			
																2,788			2,788
Temporary Bldg 70																			
																		2,980	2,980
Temporary Bldg 72																			
														13,105		1,068			14,173
Temporary Bldg 82 (formerly Lec)																			
				2,067															2,067
Temporary Bldg 90																			
																		1,787	1,787
Temporary Bldg 98																			
																		2,191	2,191
Temporary Bldg 99																			
																	1,072		1,072
Temporary Building 88																			
																2,083			2,083
Temporary Building 93																			
				1,861															1,861
Temporary Building 95																			
																	1,432		1,432

## Assignable Square Feet by Building

for Fall 2009

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/Rec	Athletics	Assembly/Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Temporary Building 97																				
				2,133										177						2,310
Teton																				
														108						108
Transportation Center and Annex																				
					1,672								6,812							8,484
Tularoosa																				
Tundra Lab																				
				1,195											109					1,195
Unita																				
														108						108
Univ Admin Ctr Annex																				
																		1,424		1,424
University Admin Ctr																				
				89	6,511													1,677		8,277
University Club																				
2,300				531	2,841									1,620		7,589	0			14,881
University Memorial Center																				
	122			1,634	19,396					128,979				2,516		93			3,060	155,790
University of Colorado Foundation																				
																			26,165	26,165
University Residence																				
															4,858				111	4,969
University Theatre																				
381	28,828			4,664	206				4,513			448	322							39,362
Vehicle Storage																				
													874							874
Visual Arts Complex																				
0	0	0	0	0	0				0			0								0
Walnut Distribution Center																				
					3,478	1,547				2,782		30,615	2,129			112	10,763	576		52,002
Wapati																				
														108						108
Wardenburg Student Health Ctr																				
				1,849	808	10,159								149		12,555				25,520

## Assignable Square Feet by Building

for Fall 2009

Class- rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU System	Outside Agencies	TOTAL ASF
Warehouse No 1																				
												457	981						489	1,927
Warehouse No 2																				
												1,921								1,921
Warehouse No 3																				
												444	1,484							1,928
Warehouse No 4																				
												1,027	414						489	1,930
Wasatch																				
														108						108
Willard Hall																				
2,084		571		12,805	17,504								5,348	19,488		3,556	0			61,366
Williams Vill Heating Plant																				
					243									183						426
Williams Village C																				
0				0	0									0						0
Willow																				
														311						311
Wind River																				
														108						108
Wolf Law Building																				
12,820	2,404	846		29,710		51,633				3,091			7,844			1,343		384	938	111,013
Woodbury Arts & Sciences Bldg																				
																				7,927
Zuni																				
														108						108
GRAND TOTAL																				
221,799	228,151	93,491	533,862	916,491	249,287	326,976	167,278	266,610	104,823	140,973		129,836	292,361	1,917,789	12,555	63,858	28,760	67,284	66,371	5,828,557



---

# **Appendix B**

## **ASF by Building - Projected Existing ASF**

---





### **APPENDIX B: ASF BY BUILDING - PROJECTED EXISTING ASF**

Appendix B shows the projected existing space by building included in the space needs analysis by major space category as defined in the study for the 2020 and 2030 planning horizons. Please note new buildings and existing buildings identified as being demolished in the future.

## Assignable Square Feet by Building

## for Projected Existing ASF

	Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/Rec	Athletics	Assembly/Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Absaroka															107						107
Aden Hall						395									18,817						19,212
Admin & Rsch Ctr East Campus				10,582	31,255	43,438	668							7,290			2,955	306	17,500	143	114,137
Alumni Ctr Garage Annex																			752		752
Andrews Hall																					
Armory															39,797						39,797
Armory Trailer	1,436	1,963	339	370	8,988									2,363					312		15,771
Arnett Hall						572															
Aspen																					
Athens Ct A1														131	224						355
Athens Ct A2															0						0
Athens Ct A3															0						0
Athens Ct A4															0						0
Athens Ct B1															0						0
Athens Ct B2															0						0
Athens Ct B3															0						0
Athens Ct C1															0						0
Athens Ct C2															0						0

**Assignable Square Feet by Building****for Projected Existing ASF**

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Athens North Ct																			
														0					0
Atlas Center																			
8,960	13,669	1,415		12,337								359	2,182			118		128	742
Baker Hall																			
852				1,296	1,273									68,819					72,240
Baker Hall Ancillary Bldg																			
														737					737
Balch Fieldhouse Complex																			
				1,367				47,767					3,226						52,360
Balch Fieldhouse Pressbox																			
								14,912											14,912
Basketball/Volleyball Practice Fac																			
					1,589			22,008											23,597
Bear Creek Apt A																			
					949									123,137					124,086
Bear Creek Apt B																			
														123,406					123,406
Bear Creek Commons																			
							8,025					367							8,392
Benson Earth Sciences Bldg																			
3,394	5,868		18,816	13,236		10,139							1,323						52,776
Bicycle Registration Building																			
																50			50
Bighorn																			
														109					109
Bison																			
														109					109
Bobcat																			
														109					109
Brackett Hall																			
														19,124					19,124
Bruce Curtis Bldg																			
3,453	1,334		665	4,854					15,850										26,156
Buckingham Hall																			
582					378									33,176		376			34,847

## Assignable Square Feet by Building

## for Projected Existing ASF

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Carlson Gymnasium																				
	906		5,087	5,793	104		8,609	13,446						938						34,883
Carpenter Shop																				
												1,102								1,102
CASA -Ctr for Astro & Space Astronomy																				
			13,453	8,040									1,539							23,032
Center for Community																				
				13,014	27,039					48,685			10,979		876					100,493
Center for Innovation & Creativity																				
		10,549	6,269	21,117	424								19,969			4,268				62,596
Cheyenne Arapaho Hall																				
					1,333									70,389						71,722
Chickadee (037D)																				
														106						106
Chickaree (036C)																				
														119						119
Childrens Center (DACR)																				
					467									4,544						5,011
CIRES Coop Inst for Rsch In Env Sc																				
			4,048	7,797					1,121				738			653				14,357
Clare Small Arts & Sciences																				
5,099	2,500		2,638	3,351			4,514		4,966				1,287			321				24,676
Cockerell Hall																				
														17,861						17,861
Coleman Institute Space																				
																	2,426			2,426
College Inn Conf Center																				
					1,608									45,280						46,888
Columbine																				
														369						369
Communication Disorders																				
1,435	299		2,872	4,933									4,142			172				13,853
Computing Center																				
				13,021									4,611							17,632
Continuing Education Center																				
	798			6,909									1,833			275				9,815

## Assignable Square Feet by Building

## for Projected Existing ASF

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Coors Events/Conference Center																			
					1,153			93,609											94,762
Coyote																			
														109					109
Cristol Chemistry & Biochem Bldg																			
8,278			57,104	10,310						165				3,404		1,408			80,669
Crosman Hall																			
														17,430					17,430
Dal Ward Athletic Center																			
				8,064				43,925											51,989
Darley Commons																			
2,472				815	1,125									23,166					27,578
Darley Towers																			
					661									69,097					69,758
Denison Arts & Sciences Bldg																			
				2,989															2,989
Dining Hall																			
													1,784						1,784
Discovery Learning Cntr																			
			12,391	7,006	123								1,247			143			20,910
Drescher Undergraduate Engineering																			
1,103	12,236	2,339		1,309					2,539					2,237					21,763
Duane Physics																			
11,690	9,537	18,895	28,462	29,252		7,849							6,530			2,678			114,893
Eaton Humanities Bldg																			
17,457	297			10,223									1,784			258			30,019
Economics Bldg																			
4,474		351		9,924									807						15,556
Education Bldg																			
7,111				15,902								415	5,577				231		29,236
Ekeley Sciences Bldg																			
3,460	20,243	1,272	23,561	18,835	75								4,377			1,860			73,703
Electric Shop																			
												188							188
Electric Supply Bldg																			
												1,186							1,186

## Assignable Square Feet by Building

## for Projected Existing ASF

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/Rec	Athletics	Assembly/Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Engineering Administration Wing																				
				4,659										210				1,005		5,874
Engineering Aerospace Wing																				
	5,033	1,787	11,916	10,552										174						29,462
Engineering Chemical Wing																				
591	3,401	637	17,786	11,700										3,568		141				37,824
Engineering Civil & Enviro Wing																				
2,070	5,274	2,324	28,454	8,990										2,995		2,367				52,474
Engineering Classroom Wing																				
15,258	717	624	3,600	5,667										3,683		460				30,009
Engineering Comp Science Dept Wing																				
3,615		2,702	4,902	1,796										467						13,482
Engineering Electrical Wing																				
1,003	14,531	1,400	31,254	17,610	70							108		5,142		2,736				73,854
Engineering Mechanical Wing																				
	1,564	4,159	16,461	10,575										2,377		374				35,510
Engineering North Tower																				
			2,475	3,024										193						5,692
Engineering Office Tower																				
			133	29,724						344				2,442						32,643
Engineering South Tower																				
395	1,010		772	1,107						172						701				4,157
Engineering Stores & Labs																				
			6,265	130										66						6,461
Environmental Design Bldg																				
1,941	1,090	19,100	12,887	1,407					3,030					132		3,596				43,183
Environmental Health & Safety Cntr																				
				5,599									6,281	1,586		235				13,701
Euclid Av Autopark																				
																150				150
Faculty-Staff Ct A																				
														0						0
Faculty-Staff Ct B																				
														0						0
Faculty-Staff Ct C																				
														0						0

# Assignable Square Feet by Building

## for Projected Existing ASF

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Faculty-Staff Ct D																			
														0					0
Faculty-Staff Ct E																			
														0					0
Faculty-Staff Ct F																			
														0					0
Faculty-Staff Ct G																			
														0					0
Faculty-Staff Ct H																			
														0					0
Faculty-Staff Ct J																			
														0					0
Faculty-Staff Ct Shed																			
														0					0
Fam Housing Community Center																			
					286									1,229					1,515
Family Housing Expansion (TB32)																			
														1,016					1,016
Family Housing Expansion (TB33)																			
														3,520					3,520
Family Housing Expansion (TB34)																			
														532					532
Family Housing Expansion (TB35)																			
														962					962
Family Housing Expansion (TB87)																			
														952					952
Farrand Hall																			
4,601				565	198									68,537		464			74,365
Finch																			
														108					108
Fire Tools																			
												102							102
Fiske Planetarium & Sci Center																			
	631			644					10,454					1,181					12,910
Fleming Building																			
0	0			1,919					1,229					159			74,476		77,783

## Assignable Square Feet by Building

## for Projected Existing ASF

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/Rec	Athletics	Assembly/Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Flycatcher														106						106
Garage												648								648
Garage Shed												141								141
Gatehouse/Info Booth					26															26
Gates Woodruff Womens Studies Cott				2,200									645							3,111
Goshawk														107						107
Greenhouse No 1 At Macky													2,969							2,969
Grounds and Service Center				1,530								10,810								12,340
Grounds Warehouse												1,531	336							1,867
Grouse														108						108
Guggenheim Geography Bldg	3,429	506	302	7,887								234	1,303			300				13,961
Hale Science Bldg	5,671	1,493	222	4,665	9,183				35				1,277							22,546
Hallett Hall																				
Hazmat Shed					0									50,186		9,686				59,872
Health Physics Lab													73							73
Hellems Arts & Sciences Bldg					760							676	158			84				1,678
Henderson Bldg (Museum)	15,479	2,410		32,178									1,903							51,970
Housing Sys Service Center				2,869					18,323											21,192
	0	0		0										10,500		0	19,072			29,572



**Assignable Square Feet by Building****for Projected Existing ASF**

Class- rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU System	Outside Agencies	TOTAL ASF
Housing System Maintenance Center																				
					1,997									29,676						31,673
Hummingbird																				
														108						108
IBS Problem Behavior																				
				0																0
JMG Music Bldg																				
2,928	6,389	7,168		16,146		9,788			10,548				5,597					246		58,810
Inst for Behavioral Genetics																				
			1,731	6,870									5,596			343				14,540
Inst of Behav Sci No 1																				
				0													4,497			4,497
Inst of Behav Sci No 2																				
				0													2,768			2,768
Inst of Behav Sci No 3																				
			0	0													4,366			4,366
Inst of Behav Sci No 4																				
			0	0													1,624			1,624
Inst of Behav Sci No 5																				
				3,022									120				1,800			4,942
Inst of Behav Sci No 6																				
				0													2,006			2,006
Inst of Behav Sci No 7																				
				0													1,869			1,869
Inst of Behav Sci No 8																				
				0													852			852
Institute of Behavioral Science																				
			805	24,934									3,908							29,647
Jay																				
														100						100
JILA - Joint Inst for Lab Astrophys																				
		290	21,870	26,758					1,437				7,507			372				58,234
JILA NEW																				
			8,526	5,150									5,220							18,896
JUNCO																				
														106						106

## Assignable Square Feet by Building

## for Projected Existing ASF

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Ketchum Arts & Sciences Bldg																				
4,980	3,337	547		25,513										1,563						35,930
Kiowa Lab																				
			730																	730
Kitchen																				
														334						334
Kitchen Cooler																				
														103						103
Kittredge Commons																				
					3,946											34,060				38,006
Kittredge West Hall																				
						140										45,516				45,656
Koebel Building - Leeds Sch of Bus																				
17,767	1,457	1,342	913	42,653	154	13,611				2,243				11,723		1,621		688	1,833	96,005
Koenig Alumni Center																				
																			5,164	5,164
LASP - Lab for Atmos & Space Phys																				
			2,789	12,146										385			97			15,417
LASP Space Technology Rsch Ctr																				
			24,571	36,873					978					5,312						67,734
Latrine																				
														280						280
Lesser House																				
291				1,797										13						2,101
Libby Hall																				
1,543	3,353			348	1,041									65,252						71,537
Life Sci Research Lab (RI-4)																				
			5,611	1,591										566		641				8,409
Limber																				
																506				506
Litman Research Lab (RI-1)																				
			18,652	15,477										1,245		221				35,795
Mackey Auditorium																				
1,364	2,364	2,815		8,165					27,809					6,088						48,605
Marine Court A																				
														0						0

**Assignable Square Feet by Building****for Projected Existing ASF**

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Marine Court B																			
														0					0
Marine Court C																			
														0					0
Marine Court D																			
														0					0
Marine Court E																			
														0					0
Marine Court F																			
														0					0
Marine Court G																			
														0					0
Marine Court H																			
														0					0
Marine Court J																			
														0					0
Marine Court K																			
														0					0
Marine St Science Ctr (RI-6)																			
			417		132							696	1,117			8,090	1,028	21,920	33,400
Marmot																			
														108					108
Marr Alpine Laboratory																			
		467	1,679	1,461	90								665						4,362
Mathematics Building																			
5,131		1,887		12,274		18,214							276			15			37,797
MCD Biology Building																			
3,097	5,565		35,612	10,121									8,724			1,359			64,478
McKenna Languages Bldg																			
775				11,899	116														12,790
Megaron Classroom																			
				851															851
Mertensia																			
														426					426
Moore's Collins Family Lodge																			
													1,176	1,058					2,234

## Assignable Square Feet by Building

## for Projected Existing ASF

Class- rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cmpt	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Muenzinger Psych & Biopsych																				
13,960	5,840	822	27,425	30,314									9,495			242				88,098
Newton Ct 1A															0					0
Newton Ct 1B															0					0
Newton Ct 2A															0					0
Newton Ct 2B															0					0
Newton Ct 2C															0					0
Newton Ct 2D															0					0
Newton Ct 2E															0					0
Newton Ct 2F															0					0
Newton Ct 2G															0					0
Newton Ct 2H															0					0
Newton Ct 2J															0					0
Newton Ct 2K															0					0
Newton Ct 2L															0					0
Newton Ct 2M															0					0
Newton Ct 2N															0					0
Newton Ct 2P															0					0
Newton Ct 2R															0					0

**Assignable Square Feet by Building****for Projected Existing ASF**

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Newton Ct 2S																			
															0				0
Newton Ct 2T																			
															0				0
Newton Ct 2U																			
															0				0
Newton Ct 2V																			
															0				0
Newton Ct 2W																			
															0				0
Newton Ct 2X																			
															0				0
Newton Ct 2Y																			
															0				0
Newton Ct L2																			
															0				0
Newton Ct L3																			
															0				0
Norlin Library																			
2,304		1,070		5,562	113	213,529								6,351	305				229,234
Nutcracker																			
														109					109
Observatory																			
			106																106
Old Main																			
				6,349	225					3,197				4,657					14,428
One Pearl Plaza																			
																3,316	25,676		28,992
Page Foundation Center																			
																	7,051		7,051
PIKA																			
															108				108
Police & Parking Services Ctr																			
					9,322							7,969	2,014						19,305
Ponderosa Garage																			
														319					319

## Assignable Square Feet by Building

## for Projected Existing ASF

Class- rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cmpt	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Ponderosa Lodgepole																				
														1,548						1,548
Porcupine																				
														109						109
Porter Biosciences																				
1,825	2,772	842	40,975	9,467									1,531			2,170			237	59,819
Potts Field Track Storage																				
								1,226												1,226
Power House																				
					322							10,616								10,938
Practice Football Fld Bldg																				
																				266
Ptarmigan																				
														106						106
Ramaley Biology Bldg																				
5,247	14,794		22,688	16,161									7,392			1,122				67,404
Reed Hall																				
														17,856						17,856
Regent Administrative Center																				
				8,629	36,166								1,626			227	1,105	868		48,621
Regent Dr Autopark																				
												1,805								1,805
Research Lab No 2																				
			2,411	14,670	19,482							1,382	4,687			4,336		148	2,320	49,436
Research Park Greenhouse																				
													9,738							9,738
Robin																				
														108						108
Sapsucker																				
														102						102
Science Learning Laboratory																				
593			6,439	6,216									2,659			554				16,461
Sewall Hall																				
2,176				836	29									55,462						58,503
Sisken																				
														98						98

for Projected Existing ASF

Assignable Square Feet by Building

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Ski Center/Athletic Fieldhouse																			
					1,312			1,613											2,925
Smiley Ct A1																			
														0					0
Smiley Ct A2																			
														0					0
Smiley Ct A3																			
														0					0
Smiley Ct B1																			
														0					0
Smiley Ct B2																			
														0					0
Smiley Ct B3																			
														0					0
Smiley Ct B4																			
														0					0
Smiley Ct D1																			
														0					0
Smiley Ct D10																			
														0					0
Smiley Ct D2																			
														0					0
Smiley Ct D3																			
														0					0
Smiley Ct D4																			
														0					0
Smiley Ct D5																			
														0					0
Smiley Ct D6																			
														0					0
Smiley Ct D7																			
														0					0
Smiley Ct D8																			
														0					0
Smiley Ct D9																			
														0					0

## Assignable Square Feet by Building

## for Projected Existing ASF

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/Rec	Athletics	Assembly/Exhibit	Student Center	Central Cmptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Smiley Ct E1														0						0
Smiley Ct E2														0						0
Smiley Ct E3														0						0
Smiley Ct E4														0						0
Smiley Ct L1														0						0
Smiley Ct L2														0						0
Smiley Ct L3														0						0
Smith Hall																				
Soccer Locker Room				190	132									54,089						54,411
								1,386												1,386
Sommers-Bausch Observatory	2,620			628					1,822				874							5,944
Stadium Building	2,516	1,898	147	26,890	21,140			5,118				27,503	12,558			2,270				102,207
Stadium Sky Box					1,260			39,988				13,119								54,367
Stadium Ticket Building																				
Stadium Warehouse, NE of Field								387												387
Stearns Towers								1,559												1,559
1,706				107										154,562						156,375
Student Recreation Center				6,980			146,130									121				153,231
Summer														304						304
Systems Biotechnology Building																				
6,279	7,431	3,512	92,615	39,274				8,787	9,443				14,604							181,945



for Projected Existing ASF

Assignable Square Feet by Building

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Telecommunications Center																			
				6,169										2,861					9,030
Temp Bldg 1 at Clare Small																			
302				4,385										151					4,838
Temporary Bldg 78																			
																		976	976
Temporary Bldg 9																			
								1,408											1,408
Temporary Bldg 40																			
													132						132
Temporary Bldg 40B																			
																126			126
Temporary Bldg 65																			
				1,319									238			392			1,949
Temporary Bldg 65 Garage																			
													344						344
Temporary Bldg 66																			
													2,788						2,788
Temporary Bldg 70																			
																		2,980	2,980
Temporary Bldg 72																			
													13,105			1,068			14,173
Temporary Bldg 82 (formerly Lec)																			
				2,067															2,067
Temporary Bldg 90																			
																		1,787	1,787
Temporary Bldg 98																			
																		2,191	2,191
Temporary Bldg 99																			
																	1,072		1,072
Temporary Building 88																			
																2,083			2,083
Temporary Building 93																			
				1,861															1,861
Temporary Building 95																			
																	1,432		1,432

## Assignable Square Feet by Building

## for Projected Existing ASF

Class- rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admin Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cmpt	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive	CU System	Outside Agencies	TOTAL ASF
Temporary Building 97																				
				2,133										177						2,310
Teton																				
														108						108
Transportation Center and Annex																				
				1,672								6,812								8,484
Tularoosa																				
														109						109
Tundra Lab																				
			1,195																	1,195
Unita																				
														108						108
Univ Admin Ctr Annex																				
																		1,424		1,424
University Admin Ctr																				
				89	6,511													1,677		8,277
University Club																				
	2,300			0	2,841									1,620		7,589	531			14,881
University Memorial Center																				
		122		1,634	19,396					128,979				2,516		93			3,060	155,790
University of Colorado Foundation																				
																			26,165	26,165
University Residence																				
														4,858					111	4,969
University Theatre																				
	381	28,828		4,664	206				4,513			448	322							39,362
Vehicle Storage																				
												874								874
Visual Arts Complex																				
	7,918	34,162	17,102	16,998	150				19,576			3,873	3,661							103,440
Walnut Distribution Center																				
				3,478	1,547					2,782		30,615	2,129			112	10,763	576		52,002
Wapati																				
														108						108
Wardenburg Student Health Ctr																				
			1,849	808	10,159								149		12,555					25,520

# Assignable Square Feet by Building

## for Projected Existing ASF

Class-rooms	Teaching Labs	Open Labs	Research Labs	Acad Offices	Admn Offices	Library	Phys Ed/ Rec	Athletics	Assembly /Exhibit	Student Center	Central Cnptr	Physical Plant	Other Dept Space	Residence Life	Health Care	Unasgnd Uncoded	Inactive System	CU Outside Agencies	TOTAL ASF
Warehouse No 1																			
												457		981					1,927
Warehouse No 2																			
												1,921							1,921
Warehouse No 3																			
												444		1,484					1,928
Warehouse No 4																			
												1,027		414				489	1,930
Wasatch																			
														108					108
Willard Hall																			
2,084		571		4,543	964									2,769	19,488		0	29,997	60,426
Williams Vill Heating Plant																			
					243									183					426
Williams Village C																			
1,150				610	2,700									80,055					84,515
Willow																			
														311					311
Wind River																			
														108					108
Wolf Law Building																			
12,820	2,404	846		29,710		51,633				3,091				7,844		1,343		384	111,013
Woodbury Arts & Sciences Bldg																			
																			7,927
Zuni																			
														108					108
GRAND TOTAL																			
237,022	226,678	113,531	635,279	953,612	254,539	326,976	167,278	288,618	133,017	199,001		133,709	310,247	1,417,526	13,431	60,154	177,922	66,371	5,782,197



---

# **Appendix C**

## **Peer Benchmarking**

---



## **APPENDIX C: PEER BENCHMARKING**

### **Definitions and Assumptions**

Benchmarking is a tool that has been used in various industries for many years. More recently, extraordinary challenges, in addition to the need for developing new ways of demonstrating accountability, have forced higher education institutions to begin using many of the same concepts. Indeed, in the context of institutional outcomes and achievements, such comparisons are often critical to the process of assessment. Besides offering fresh insights into old and new problems, these comparisons provide valuable information that serves to promote change and improvement.

Definitions of benchmarking vary depending on the focus of the study. For the purposes of this study, benchmarking is defined as making direct comparisons with other institutions in order to improve or adapt to best practices.

The information used for this study was taken from the responses the consultant received from the survey. Because different universities classify their space in unique ways, the data used by the consultant may reflect such variations. Most importantly, categories of space type or facilities room uses and assignable square feet have all been taken directly from the data as sent to the consultant. It should be noted that support space (700) includes vehicle storage. Since some campuses have parking garages and other do not, this space category may vary widely. Additionally, the University of California System includes related office space in some of its laboratory categories.

Also, faculty headcounts and student full-time equivalents (FTE) have been taken from the data as sent. For this study, faculty was defined as full-time instructional faculty that includes tenured, tenure track, and non-tenure track professors and instructors or lecturers who have a full-time appointment. This category did not include part-time adjunct instructors or lecturers.

For the purpose of comparing space in University of Colorado at Boulder's academic schools and colleges, the academic units used in the tables in this report include:

- College of Architecture & Planning
- College of Arts & Sciences
- School of Business
- School of Education
- College of Engineering & Applied Science
- School of Journalism & Mass Communication
- School of Law
- School of Music

The following are specific notes about each area.

### ***Architecture & Planning***

The title of the University of Arizona's college is the College of Architecture and Landscape Planning. The University of California – Berkeley's College of Environmental Design was compared here, as was UCLA's School of the Arts & Architecture. The University of Florida supplied information from its College of Design, Construction, & Planning. The University of Kansas' data was from its School of Architecture, Design, & Planning; the University of Michigan's was from its Taubman College of Architecture & Urban Planning. The University of Nebraska's information is from its College of Architecture. The University of Oregon supplied information from its School of Architecture & Allied Arts.

### ***Arts & Sciences***

The peers with schools and colleges of Arts & Sciences are Indiana University, University of Nebraska – Lincoln, and the University of Oregon. UCLA's College of Letters & Science was used for this comparison, as was the University of Florida's College of Liberal Arts & Sciences. The University of Kansas' College of Liberal Arts & Sciences, including its School of the Arts was used here. Several of the peers do not have colleges of Arts & Sciences. In some instances, colleges from the peers were combined for comparison here. The University of Arizona's colleges of Humanities, Science, and Social & Behavioral Sciences were combined. The University of California - Berkeley's College of Letters & Science and College of Chemistry were combined. The University of Michigan's College of Literature, Science, & the Arts was combined with its School of Art & Design. The University of Wisconsin – Madison's College of Letters & Science was compared here without inclusion of the School of Journalism & Mass Communication and the School of Music.

### ***Business***

The following institutions with business schools are: University of Arizona, Berkeley, UCLA, Indiana University, University of Florida, University of Kansas, University of Michigan, University of Nebraska – Lincoln, University of Oregon, and the University of Wisconsin. The title of the University of Arizona's college is the Eller College of Management; UCLA's is the Anderson School of Management. The University of California - Berkeley's school is the Haas School of Business. The University of Florida's business school is titled the Warrington College of Business Administration. Indiana University has the Kelley School of Business. The University of Kansas' business school is titled the School of Business. The University of Michigan has the Ross School of Business. The University of Nebraska has its College of Business Administration. The University of Oregon information is from its Lundquist College of Business. The University of Wisconsin – Madison's School of Business was also compared.

### ***Education***

The University of Arizona College of Education, University of California – Berkeley Graduate School of Education, UCLA Graduate School of Education & Information Studies, University of Florida College of Education, Indiana University School of Education, University of Kansas School of Education,



University of Michigan School of Education, University of Nebraska College of Education & Human Sciences, University of Oregon College of Education, and University of Wisconsin School of Education are included in the analysis.

### ***Engineering & Applied Science***

The colleges compared include the University of Arizona College of Engineering, University of California – Berkeley College of Engineering, UCLA Henry Samueli School of Engineering & Applied Science, University of Florida College of Engineering, University of Kansas School of Engineering, University of Michigan College of Engineering, University of Nebraska College of Engineering, and University of Wisconsin College of Engineering.

### ***Journalism & Mass Communication***

The following institutions supplied data for this school: University of California – Berkeley Graduate School of Journalism; Indiana University School of Journalism; University of Florida College of Journalism & Communications; University of Kansas School of Journalism & Mass Communications; University of Nebraska College of Journalism & Mass Communications; University of Oregon School of Journalism & Communication; and the University of Wisconsin School of Journalism & Mass Communication.

### ***Law***

All of the peer institutions have law schools.

### ***Music***

The Jacobs School of Music at Indiana University, the University of Kansas' School of Music, and the University of Wisconsin's School of Music were compared here, as were the University of Michigan's School of Music, Theatre, & Dance and the University of Oregon's School of Music & Dance.

Assignable Square Feet per Student

ASF per Student																	
Campus Total	ASF per Student	Student FTE	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class		Open		Research		Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)
						Labs (210-215)	Labs (220-235)	Labs (250-255)	Labs (220-235)								
University of Arizona - Tucson	184	38,360	7,066,952	9	40	8	3	29	51	13	12	14	43	2			
University of California - Berkeley	226	35,808	8,108,534	7	56	16	2	37	64	27	15	29	28	1			
University of California - Los Angeles	224	39,989	8,965,735	9	59	3	9	47	85	17	27	17	6	5			
University of Florida	238	44,477	10,577,471	9	44	6	5	33	58	11	22	19	61	15			
Indiana University - Bloomington	188	39,375	7,388,536	9	26	6	5	16	51	17	19	33	32	1			
University of Kansas - Lawrence	140	28,982	4,062,780	8	29	8	4	16	40	15	19	19	7	1			
University of Michigan - Ann Arbor	371	39,949	14,803,077	13	64	10	4	51	99	23	27	28	112	3			
University of Nebraska - Lincoln	288	21,835	6,281,285	12	35	11	5	20	55	18	44	32	55	1			
University of Oregon	142	21,689	3,084,280	10	25	8	3	14	34	16	29	17	12	1			
University of Washington - Seattle	177	41,308	7,330,562	10	44	8	5	31	50	14	31	15	12	1			
University of Wisconsin - Madison	300	38,117	11,430,859	13	67	11	6	50	77	21	37	18	63	3			
PEER AVERAGE	225	35,444	8,100,006	10	44	9	5	31	60	18	26	22	39	3			
University of Colorado Boulder	137	26,886	3,684,495	8	32	8	3	20	44	13	18	10	10	0			
CU-Boulder Compared to Average	(88)	(8,558)	(4,415,511)	(2)	(13)	(0)	(1)	(11)	(16)	(4)	(7)	(11)	(29)	(3)			
CU-Boulder % Compared to Average	(39%)	(24%)	(55%)	(16%)	(28%)	(2%)	(23%)	(36%)	(26%)	(25%)	(29%)	(52%)	(74%)	(85%)			

Assignable Square Feet per Faculty

ASF per Faculty																
	ASF per Faculty	FT Faculty	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class			Research			Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)	
						Labs (210-215)	Open Labs (220-235)	Labs (250-255)	Office & Conf (300's)	Study (400's)						
Campus Total																
University of Arizona - Tucson	3,264	2,165	7,066,952	162	708	135	59	514	906	236	215	248	761	28		
University of California - Berkeley	5,592	1,450	8,108,534	177	1,375	403	57	916	1,576	665	373	709	690	26		
University of California - Los Angeles	4,588	1,954	8,965,735	175	1,201	68	177	956	1,733	356	545	340	133	104		
University of Florida	2,804	3,772	10,577,471	105	522	74	53	395	690	125	254	218	714	176		
Indiana University - Bloomington	4,109	1,798	7,388,536	188	576	133	101	342	1,107	366	413	732	707	21		
University of Kansas - Lawrence	3,680	1,104	4,062,780	212	755	212	114	429	1,045	386	511	493	196	31		
University of Michigan - Ann Arbor	4,944	2,994	14,803,077	179	857	129	51	677	1,322	312	366	377	1,494	38		
University of Nebraska - Lincoln	5,700	1,102	6,281,285	241	703	217	89	397	1,094	362	869	628	1,100	19		
University of Oregon	2,629	1,173	3,084,280	179	458	153	49	256	631	287	536	310	216	13		
University of Washington - Seattle	2,326	3,152	7,330,562	130	572	101	69	402	657	188	412	200	153	14		
University of Wisconsin - Madison	3,373	3,389	11,430,859	145	751	128	66	557	867	241	413	207	711	38		
PEER AVERAGE	3,910	2,187	8,100,006	172	771	159	81	531	1,057	320	446	406	625	46		
University of Colorado Boulder	2,493	1,478	3,684,495	150	579	154	63	361	808	239	332	190	187	8		
CU-Boulder Compared to Average	(1,417)	(709)	(4,415,511)	(22)	(192)	(5)	(17)	(170)	(249)	(82)	(114)	(216)	(438)	(38)		
CU-Boulder % Compared to Average	(57%)	(32%)	(55%)	(13%)	(25%)	(3%)	(21%)	(32%)	(24%)	(25%)	(26%)	(53%)	(70%)	(82%)		

ASF = Assignable Square Feet

## Assignable Square Feet per Student

ASF per Student														
Architecture & Planning	ASF per Student	Student FTE	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class Labs (210-215)	Open Labs (220-235)	Research Labs (250-255)	Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)
University of Arizona - Tucson	146	432	63,126	n/a	69	14	54	1	39	n/a	n/a	9	28	n/a
University of California - Berkeley	115	1,081	124,448	n/a	58	53	3	2	39	2	3	3	11	n/a
University of California - Los Angeles	319	1,333	424,867	4	128	3	111	15	71	2	1	102	10	n/a
University of Florida	66	1,314	87,181	3	35	24	11	1	26	n/a	n/a	1	1	n/a
Indiana University - Bloomington	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University of Kansas - Lawrence	108	882	95,374	2	83	55	29	0	19	3	n/a	1	1	n/a
University of Michigan - Ann Arbor	121	622	75,298	11	77	64	12	1	27	n/a	n/a	2	5	n/a
University of Nebraska - Lincoln	81	601	48,505	1	50	22	28	n/a	22	n/a	1	6	1	n/a
University of Oregon	104	1,665	173,904	6	59	46	8	5	21	1	5	9	4	n/a
University of Washington - Seattle	74	975	72,072	9	34	n/a	32	2	19	1	2	4	5	n/a
University of Wisconsin - Madison	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PEER AVERAGE	126	989	129,419	5	66	35	32	3	31	1	2	15	7	n/a
University of Colorado Boulder	59	840	49,717	1	37	1	35	0	10	0	0	6	6	n/a
CU-Boulder Compared to Average	(67)	(149)	(79,702)	(5)	(29)	(34)	3	(3)	(22)	(1)	(2)	(9)	(1)	n/a
CU-Boulder % Compared to Average	(53%)	(15%)	(62%)	(89%)	(45%)	(96%)	11%	-	(69%)	-	-	(61%)	(14%)	n/a

## Assignable Square Feet per Faculty

ASF per Faculty																
Architecture & Planning	ASF per Faculty	FT Faculty	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class			Open Research		Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)
						Labs (210-215)	Labs (220-235)	Labs (250-255)								
University of Arizona - Tucson	2,869	22	63,126	n/a	1,359	283	1,056	20	766	n/a	n/a	186	558	n/a		
University of California - Berkeley	2,348	53	124,448	n/a	1,175	1,083	61	32	786	42	55	60	230	n/a		
University of California - Los Angeles	4,249	100	424,867	52	1,712	39	1,473	199	953	21	12	1,366	134	n/a		
University of Florida	1,301	67	87,181	59	694	472	207	14	507	n/a	n/a	23	19	n/a		
Indiana University - Bloomington	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
University of Kansas - Lawrence	2,384	40	95,374	33	1,841	1,203	633	6	410	57	n/a	29	13	n/a		
University of Michigan - Ann Arbor	1,177	64	75,298	104	751	624	113	14	258	n/a	n/a	16	47	n/a		
University of Nebraska - Lincoln	2,021	24	48,505	32	1,249	549	700	n/a	553	n/a	23	149	16	n/a		
University of Oregon	2,046	85	173,904	123	1,161	896	163	102	404	13	92	182	71	n/a		
University of Washington - Seattle	1,386	52	72,072	166	639	n/a	599	40	361	11	37	74	98	n/a		
University of Wisconsin - Madison	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
PEER AVERAGE	2,198	56	129,419	81	1,176	644	556	53	555	29	44	231	132	n/a		
University of Colorado Boulder	2,762	18	49,717	26	1,708	61	1,647	0	456	0	0	278	294	n/a		
CU-Boulder Compared to Average	564	(38)	(79,702)	(55)	532	(583)	1,091	(53)	(99)	(29)	(44)	47	162	n/a		
CU-Boulder % Compared to Average	20%	(68%)	(62%)	(68%)	45%	(91%)	196%	-	(18%)	-	-	20%	123%	n/a		

ASF = Assignable Square Feet

ASF = Assignable Square Feet

## Assignable Square Feet per Student

ASF per Student																	
ASF per Student	Student FTE	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class			Open		Research		Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)
					Labs (210-215)	Labs (220-235)	Labs (250-255)										
Arts & Sciences																	
	53	20,010	1,060,834	1	24	4	1	19	25	2	0	0	1	0			
	n/a	22,626	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	60	24,183	1,458,969	1	31	3	2	26	25	1	2	0	1	n/a			n/a
	44	14,996	664,317	1	22	4	1	17	19	0	1	1	0	n/a			n/a
	141	8,891	1,256,156	1	67	14	9	44	55	3	7	6	3	n/a			n/a
	44	18,045	795,721	1	19	6	2	10	18	1	2	3	1	n/a			n/a
	97	18,441	1,786,835	13	37	9	3	25	38	2	2	3	2	n/a			n/a
	98	5,448	531,856	6	42	14	2	26	36	1	2	1	3	0			n/a
	38	12,340	467,685	2	16	3	1	12	16	0	0	3	1	0			0
	54	21,789	1,186,278	1	24	8	3	13	20	1	3	5	1	n/a			n/a
	64	21,958	1,398,766	2	24	6	3	15	29	1	2	4	1	0			0
	69	17,157	1,060,742	3	31	7	3	21	28	1	2	3	1	0			0
	58	17,478	1,006,053	2	27	9	2	17	22	1	2	1	2	0			0
	(12)	321	(54,689)	(1)	(3)	2	(1)	(4)	(6)	(1)	0	(1)	1	(0)			(0)
	(17%)	2%	(5%)	(38%)	(11%)	23%	(30%)	(20%)	(23%)	(53%)	21%	(47%)	91%	-			-

## Assignable Square Feet per Faculty

ASF per Faculty																		
	ASF per Faculty	FT Faculty	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class		Open		Research		Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)	
						Labs (210-215)	Labs (220-235)	Labs (250-255)	Labs (210-215)	Labs (220-235)	Labs (250-255)							
Arts & Sciences	1,289	823	1,060,834	31	589	95	22	472	603	39	10	1	15	1			1	
	n/a	814	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a	
	1,503	971	1,458,969	17	763	70	46	646	632	27	43	5	16	5			n/a	
	1,049	633	664,317	17	529	87	31	411	451	11	22	14	5	5			n/a	
	1,331	944	1,256,156	12	635	136	86	413	516	27	62	53	26	26			n/a	
	1,285	619	795,721	25	543	183	64	296	528	29	45	95	18	18			n/a	
	1,551	1,152	1,786,835	207	595	147	43	405	611	28	26	55	30	30			n/a	
	1,490	357	531,856	98	638	215	30	394	542	19	25	8	47	3			n/a	
	811	577	467,685	37	341	72	15	254	332	7	5	69	19	1			n/a	
	1,447	820	1,186,278	16	630	211	78	341	529	21	78	137	36	36			n/a	
	1,465	955	1,398,766	46	561	149	59	353	663	32	45	94	24	24			0	
	PEER AVERAGE		788	1,060,742	51	582	137	47	399	541	24	36	53	24	1			
	University of Colorado Boulder																	
	CU-Boulder Compared to Average		943	1,006,053	33	506	164	34	307	402	11	44	26	46	0			
	CU-Boulder % Compared to Average		155	(54,689)	(18)	(77)	28	(13)	(91)	(139)	(13)	8	(27)	23	(1)			
		20%	(5%)	(36%)	(13%)	20%	(28%)	(23%)	(26%)	(55%)	21%	(52%)	97%	-				

ASF = Assignable Square Feet

## Assignable Square Feet per Student

ASF per Student																
ASF per Student	Student FTE	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class		Open		Research		Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)
					Labs (210-215)	Labs (220-235)	Labs (250-255)	Labs (255)								
Business	26	3,889	101,036	0	6	0	2	3	18	1	n/a	1	0	n/a		n/a
	54	1,977	105,841	7	5	3	2	n/a	38	n/a	0	1	2	n/a		n/a
	66	1,839	122,203	8	8	n/a	2	6	46	n/a	0	5	n/a	n/a		n/a
	26	4,838	127,267	6	2	n/a	1	0	16	2	0	1	0	n/a		n/a
	34	6,304	211,357	5	1	1	0	0	23	1	0	3	0	n/a		n/a
	15	2,755	41,082	1	1	0	1	0	12	1	1	n/a	n/a	n/a		n/a
	116	2,745	319,295	19	2	1	0	1	52	14	0	28	1	n/a		n/a
	15	3,188	48,796	2	1	1	0	n/a	10	0	n/a	1	0	n/a		n/a
	39	1,870	72,251	10	4	1	3	n/a	17	0	1	4	3	n/a		n/a
	23	2,738	62,969	0	1	n/a	1	n/a	17	2	0	1	1	n/a		n/a
	67	2,283	152,955	9	3	1	3	n/a	44	1	n/a	10	0	0		0
	PEER AVERAGE		44	3,130	124,096	6	3	1	2	2	27	2	0	5	1	0
University of Colorado Boulder		24	3,096	73,709	6	1	0	0	14	1	0	2	0	0	0	0
CU-Boulder Compared to Average		(20)	(34)	(50,387)	(0)	(2)	(1)	(1)	(13)	(1)	(0)	(3)	(1)	(0)	(0)	(0)
CU-Boulder % Compared to Average		(46%)	(1%)	(41%)	(6%)	(62%)	(52%)	(72%)	(49%)	(57%)	-	(65%)	(76%)	-	-	-

## Assignable Square Feet per Faculty

ASF per Faculty															
	ASF per Faculty	FT Faculty	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class Labs		Open Labs (220-235)	Research Labs (250-255)	Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)
						(210-215)	(215)								
Business															
University of Arizona - Tucson	962	105	101,036	7	208	8	89	112	665	33	n/a	33	15	n/a	
University of California - Berkeley	1,534	69	105,841	200	146	79	66	n/a	1,103	n/a	9	28	49	n/a	
University of California - Los Angeles	1,247	98	122,203	142	149	n/a	41	107	863	n/a	4	89	n/a		
University of Florida	1,326	96	127,267	280	82	n/a	69	13	817	76	4	66	1	n/a	
Indiana University - Bloomington	988	214	211,357	156	41	26	3	12	663	29	5	87	6	n/a	
University of Kansas - Lawrence	652	63	41,082	22	54	15	34	5	526	24	27	n/a	n/a		
University of Michigan - Ann Arbor	2,456	130	319,295	406	36	15	9	12	1,101	306	2	582	24	n/a	
University of Nebraska - Lincoln	856	57	48,796	100	82	69	12	n/a	582	17	n/a	63	14	n/a	
University of Oregon	1,184	61	72,251	314	129	37	92	n/a	515	13	23	115	77	n/a	
University of Washington - Seattle	611	103	62,969	13	38	n/a	38	n/a	464	41	10	22	24	n/a	
University of Wisconsin - Madison	1,285	119	152,955	173	62	10	51	n/a	845	13	n/a	183	7	2	
PEER AVERAGE															
	1,191	101	124,096	165	93	32	46	43	740	61	10	127	24	2	
University of Colorado Boulder	910	81	73,709	219	46	18	17	11	525	39	0	72	8	0	
CU-Boulder Compared to Average	(281)	(20)	(50,387)	55	(47)	(14)	(29)	(32)	(215)	(22)	(10)	(54)	(16)	(2)	
CU-Boulder % Compared to Average	(31%)	(20%)	(41%)	33%	(51%)	(44%)	(64%)	(74%)	(29%)	(36%)	-	(43%)	(68%)	-	
ASF = Assignable Square Feet															

ASF = Assignable Square Feet

Assignable Square Feet per Student

ASF per Student																	
Education	ASF per Student	Student FTE	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class		Open		Research		Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)
						Labs (210-215)	Labs (220-235)	Labs (250-255)	Labs (255)								
University of Arizona - Tucson	46	1,515	69,664	3	2	2	2	n/a	n/a	33	2	6	0	n/a	n/a	n/a	n/a
University of California - Berkeley	94	762	71,739	1	35	7	1	27	55	n/a	2	n/a	3	n/a	n/a	n/a	n/a
University of California - Los Angeles	132	934	123,332	6	51	1	3	47	71	n/a	2	1	n/a	n/a	n/a	n/a	n/a
University of Florida	43	1,878	79,851	6	7	4	2	1	27	0	0	2	0	n/a	n/a	n/a	n/a
Indiana University - Bloomington	83	1,250	103,660	2	12	8	3	1	64	1	0	2	n/a	n/a	n/a	n/a	n/a
University of Kansas - Lawrence	83	2,172	180,856	0	6	2	2	2	25	0	50	0	0	n/a	n/a	n/a	n/a
University of Michigan - Ann Arbor	193	525	101,379	27	23	7	8	8	131	n/a	1	10	2	n/a	n/a	n/a	n/a
University of Nebraska - Lincoln	53	3,443	183,863	5	7	5	2	n/a	24	2	3	5	1	n/a	n/a	n/a	n/a
University of Oregon	109	974	106,207	16	3	0	3	0	68	2	11	8	1	n/a	n/a	n/a	n/a
University of Washington - Seattle	25	935	23,331	n/a	n/a	n/a	n/a	n/a	11	n/a	13	1	0	n/a	n/a	n/a	n/a
University of Wisconsin - Madison	261	2,047	534,226	9	68	38	12	18	77	10	84	8	4	n/a	n/a	n/a	n/a
PEER AVERAGE	102	1,494	143,464	8	21	7	4	13	53	3	16	4	1	n/a	n/a	n/a	n/a
University of Colorado Boulder	146	184	26,912	12	0	0	0	0	101	10	0	11	13	n/a	n/a	n/a	n/a
CU-Boulder Compared to Average	44	(1,310)	(116,552)	5	(21)	(7)	(4)	(13)	47	8	(16)	7	11	n/a	n/a	n/a	n/a
CU-Boulder % Compared to Average	43%	(88%)	(81%)	59%	-	-	-	-	89%	302%	-	176%	873%	n/a	n/a	n/a	n/a

Assignable Square Feet per Faculty

ASF per Faculty																	
Education	ASF per Faculty	FT Faculty	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class Labs		Open Labs		Research Labs		Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)
						(210-215)	(220-235)	(250-255)	(250-255)								
University of Arizona - Tucson	995	70	69,664	66	35	35	n/a	n/a	n/a	715	48	125	7	n/a	n/a	n/a	n/a
University of California - Berkeley	2,110	34	71,739	14	774	147	28	599	1,228	n/a	37	n/a	57	n/a	n/a	n/a	n/a
University of California - Los Angeles	1,186	104	123,332	56	456	8	24	424	641	n/a	20	13	n/a	n/a	n/a	n/a	n/a
University of Florida	807	99	79,851	110	132	79	39	14	515	1	1	37	9	n/a	n/a	n/a	n/a
Indiana University - Bloomington	850	122	103,660	25	127	86	29	11	660	13	3	21	n/a	n/a	n/a	n/a	n/a
University of Kansas - Lawrence	2,444	74	180,856	9	184	45	73	67	744	8	1,481	14	4	n/a	n/a	n/a	n/a
University of Michigan - Ann Arbor	2,204	46	101,379	310	259	75	92	93	1,494	n/a	8	113	19	n/a	n/a	n/a	n/a
University of Nebraska - Lincoln	1,599	115	183,863	159	207	158	49	n/a	704	56	102	156	18	n/a	n/a	n/a	n/a
University of Oregon	974	109	106,207	147	30	2	27	1	608	19	94	71	6	n/a	n/a	n/a	n/a
University of Washington - Seattle	417	56	23,331	n/a	n/a	n/a	n/a	n/a	176	n/a	222	13	6	n/a	n/a	n/a	n/a
University of Wisconsin - Madison	3,257	164	534,226	112	848	480	148	220	966	127	1,051	105	47	n/a	n/a	n/a	n/a
PEER AVERAGE		90	143,464	101	305	111	57	179	768	39	286	55	21	n/a	n/a	n/a	n/a
University of Colorado Boulder		45	26,912	50	0	0	0	0	411	42	0	44	51	n/a	n/a	n/a	n/a
CU-Boulder Compared to Average		(933)	(116,552)	(51)	(305)	(111)	(57)	(179)	(357)	3	(286)	(11)	30	n/a	n/a	n/a	n/a
CU-Boulder % Compared to Average		(156%)	(81%)	(51%)	-	-	-	-	(46%)	9%	-	(21%)	145%	n/a	n/a	n/a	n/a

ASF = Assignable Square Feet

## Assignable Square Feet per Student

Engineering & Applied Science		ASF per Student													
		ASF per Student	Student FTE	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class Labs (210-215)	Open Labs (220-235)	Research Labs (250-255)	Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)
University of Arizona - Tucson		154	1,897	291,994	2	90	18	5	66	53	3	n/a	1	6	n/a
University of California - Berkeley		n/a	3,972	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University of California - Los Angeles		100	4,818	479,803	n/a	67	5	4	58	32	0	n/a	1	0	n/a
University of Florida		143	4,464	636,756	3	85	4	10	72	51	2	0	0	1	n/a
Indiana University - Bloomington		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University of Kansas - Lawrence		124	1,499	185,258	5	65	15	16	33	41	0	n/a	0	12	n/a
University of Michigan - Ann Arbor		119	7,689	914,626	8	55	8	4	44	46	1	0	3	6	n/a
University of Nebraska - Lincoln		87	2,865	250,424	3	41	6	3	32	28	2	n/a	1	2	n/a
University of Oregon		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University of Washington - Seattle		157	3,046	478,472	1	88	14	16	57	59	1	2	1	5	n/a
University of Wisconsin - Madison		275	2,591	713,137	0	156	21	19	116	91	20	1	4	3	n/a
PEER AVERAGE		145	3,649	493,809	3	81	11	10	60	50	4	1	1	5	n/a
University of Colorado Boulder		97	3,540	341,797	2	55	12	4	39	33	2	0	2	3	n/a
CU-Boulder Compared to Average		(48)	(109)	(152,012)	(1)	(26)	1	(5)	(21)	(17)	(2)	(1)	0	(2)	n/a
CU-Boulder % Compared to Average		(33%)	(3%)	(31%)	(23%)	(32%)	7%	(56%)	(35%)	(35%)	(55%)	(95%)	31%	(38%)	n/a

## Assignable Square Feet per Faculty

ASF per Faculty																	
Engineering & Applied Science	ASF per Faculty	FT Faculty	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class Labs		Open Labs		Research Labs		Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)
						(210-215)	(215)	(220-235)	(235)	(250-255)							
University of Arizona - Tucson	2,631	111	291,994	42	1,530	313	94	1,123	900	48	n/a	14	96	n/a			n/a
University of California - Berkeley	n/a	191	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
University of California - Los Angeles	3,037	158	479,803	n/a	2,032	140	123	1,769	974	2	n/a	16	13	n/a			n/a
University of Florida	2,166	294	636,756	40	1,296	61	146	1,089	773	26	2	7	22	n/a			n/a
Indiana University - Bloomington	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
University of Kansas - Lawrence	1,910	97	185,258	74	1,000	236	254	510	631	5	n/a	4	187	n/a			n/a
University of Michigan - Ann Arbor	2,613	350	914,626	174	1,215	167	91	957	1,000	19	6	66	134	n/a			n/a
University of Nebraska - Lincoln	1,926	130	250,424	74	902	129	76	697	623	35	n/a	18	46	n/a			n/a
University of Oregon	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
University of Washington - Seattle	2,392	200	478,472	11	1,340	220	249	872	892	20	32	17	80	n/a			n/a
University of Wisconsin - Madison	2,984	239	713,137	4	1,687	228	202	1,256	987	218	11	42	36	n/a			n/a
PEER AVERAGE	2,457	197	493,809	60	1,375	187	154	1,034	847	47	13	23	77	n/a			n/a
University of Colorado Boulder	1,692	202	341,797	43	967	213	76	678	573	28	1	31	49	n/a			n/a
CU-Boulder Compared to Average	(76%)	5	(152,012)	(17)	(409)	26	(78)	(357)	(275)	(18)	(12)	8	(27)	n/a			n/a
CU-Boulder % Compared to Average	(45%)	3%	(31%)	(28%)	(30%)	14%	(51%)	(34%)	(32%)	(40%)	(93%)	36%	(36%)	n/a			n/a

ASF = Assignable Square Feet

ASF = Assignable Square Feet



Assignable Square Feet per Student

ASF per Student													
Journalism & Mass Communication	ASF per Student	Student FTE	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class Labs				Open Research Labs			
						(210-215)	(220-235)	(250-255)	Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Health Care Support (700's) (800's)
University of Arizona - Tucson	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University of California - Berkeley	121	141	17,006	n/a	43	40	3	n/a	69	n/a	5	n/a	4
University of California - Los Angeles	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University of Florida	56	1,229	69,120	3	11	4	6	0	25	n/a	16	0	n/a
Indiana University - Bloomington	29	878	25,440	0	6	5	2	n/a	18	3	n/a	2	n/a
University of Kansas - Lawrence	48	568	27,374	1	20	6	14	n/a	24	4	n/a	n/a	n/a
University of Michigan - Ann Arbor	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University of Nebraska - Lincoln	32	907	29,311	3	9	9	n/a	n/a	12	1	5	2	0
University of Oregon	29	788	23,203	3	8	5	3	n/a	14	1	n/a	3	n/a
University of Washington - Seattle	n/a	n/a	n/a	n/a	9	15	8	n/a	n/a	n/a	n/a	n/a	n/a
University of Wisconsin - Madison	55	370	20,193	9	15	8	7	n/a	27	n/a	n/a	4	n/a
<b>PEER AVERAGE</b>	<b>53</b>	<b>697</b>	<b>30,235</b>	<b>3</b>	<b>16</b>	<b>11</b>	<b>6</b>	<b>0</b>	<b>27</b>	<b>2</b>	<b>9</b>	<b>2</b>	<b>2</b>
University of Colorado Boulder	25	656	16,114	2	2	0	1	1	17	1	2	0	0
CU-Boulder Compared to Average	(28)	(41)	(14,121)	(1)	(14)	(10)	(5)	0	(10)	(1)	(7)	(2)	(2)
CU-Boulder % Compared to Average	(54%)	(6%)	(47%)	(32%)	(89%)	(96%)	(88%)	218%	(37%)	(38%)	(82%)	(89%)	(80%)

Assignable Square Feet per Faculty

ASF per Faculty													
Journalism & Mass Communication	ASF per Faculty	FT Faculty	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class Labs				Open Research Labs			
						(210-215)	(220-235)	(250-255)	Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Health Care Support (700's) (800's)
University of Arizona - Tucson	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University of California - Berkeley	1,546	11	17,006	n/a	553	512	41	n/a	885	n/a	59	n/a	49
University of California - Los Angeles	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University of Florida	1,411	49	69,120	79	277	112	160	4	636	n/a	408	10	n/a
Indiana University - Bloomington	978	26	25,440	2	211	157	55	n/a	610	88	n/a	67	n/a
University of Kansas - Lawrence	1,190	23	27,374	25	495	147	348	n/a	583	87	n/a	n/a	n/a
University of Michigan - Ann Arbor	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University of Nebraska - Lincoln	1,396	21	29,311	131	370	370	n/a	n/a	513	51	226	85	21
University of Oregon	800	29	23,203	81	218	129	89	n/a	390	24	n/a	87	n/a
University of Washington - Seattle	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University of Wisconsin - Madison	1,122	18	20,193	184	303	158	145	n/a	563	n/a	n/a	72	n/a
<b>PEER AVERAGE</b>	<b>1,206</b>	<b>25</b>	<b>30,235</b>	<b>84</b>	<b>347</b>	<b>227</b>	<b>140</b>	<b>4</b>	<b>597</b>	<b>62</b>	<b>231</b>	<b>64</b>	<b>35</b>
University of Colorado Boulder	645	25	16,114	57	45	12	18	15	450	33	41	6	11
CU-Boulder Compared to Average	(562)	(0)	(14,121)	(26)	(301)	(214)	(121)	10	(147)	(29)	(190)	(58)	(24)
CU-Boulder % Compared to Average	(87%)	(1%)	(47%)	(31%)	(87%)	(95%)	(87%)	233%	(25%)	(47%)	(82%)	(90%)	(68%)

ASF = Assignable Square Feet



## Assignable Square Feet per Student

Law	ASF per Student										
	ASF per Student	Student FTE	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class			Research		
						Labs (210-215)	Labs (220-235)	Labs (250-255)	Office & Conf (300's)	Study (400's)	Special Use (500's)
University of Arizona - Tucson	136	698	94,991	11	5	5	1	n/a	60	50	n/a
University of California - Berkeley	145	1,452	210,350	3	13	8	3	2	74	47	0
University of California - Los Angeles	148	1,086	160,287	15	15	5	3	7	51	64	2
University of Florida	108	1,447	156,610	19	6	5	1	n/a	37	41	2
Indiana University - Bloomington	143	812	116,303	17	8	1	6	n/a	46	66	0
University of Kansas - Lawrence	85	766	64,770	13	3	2	1	n/a	31	30	n/a
University of Michigan - Ann Arbor	166	1,165	193,384	17	2	1	1	n/a	68	75	n/a
University of Nebraska - Lincoln	253	400	101,262	39	14	3	10	n/a	44	130	5
University of Oregon	98	558	54,567	28	2	1	1	n/a	45	1	3
University of Washington - Seattle	129	994	127,973	2	23	21	1	1	38	64	0
University of Wisconsin - Madison	107	1,095	116,919	12	5	4	1	n/a	40	44	n/a
<b>PEER AVERAGE</b>	<b>138</b>	<b>952</b>	<b>127,038</b>	<b>16</b>	<b>9</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>48</b>	<b>56</b>	<b>2</b>
<b>University of Colorado Boulder</b>	<b>201</b>	<b>534</b>	<b>107,316</b>	<b>24</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>61</b>	<b>92</b>	<b>0</b>
<i>CU-Boulder Compared to Average</i>	<b>63</b>	<b>(418)</b>	<b>(19,722)</b>	<b>8</b>	<b>(3)</b>	<b>(1)</b>	<b>(1)</b>	<b>(3)</b>	<b>12</b>	<b>36</b>	<b>(2)</b>
<i>CU-Boulder % Compared to Average</i>	<b>46%</b>	<b>(44%)</b>	<b>(16%)</b>	<b>49%</b>	<b>(30%)</b>	<b>(12%)</b>	<b>(41%)</b>	<b>-</b>	<b>25%</b>	<b>65%</b>	<b>-</b>
										<b>135%</b>	<b>7%</b>

## Assignable Square Feet per Faculty

Law	ASF per Faculty										
	ASF per Faculty	FT Faculty	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class			Research		
						Labs (210-215)	Labs (220-235)	Labs (250-255)	Office & Conf (300's)	Study (400's)	Special Use (500's)
University of Arizona - Tucson	3,166	30	94,991	259	122	108	13	n/a	1,396	1,152	n/a
University of California - Berkeley	3,448	61	210,350	83	318	187	83	48	1,761	1,123	8
University of California - Los Angeles	2,055	78	160,287	214	211	73	42	97	706	890	25
University of Florida	2,088	75	156,610	371	110	99	11	n/a	718	797	34
Indiana University - Bloomington	2,154	54	116,303	250	114	18	95	n/a	689	996	4
University of Kansas - Lawrence	1,905	34	64,770	291	71	55	16	n/a	707	682	n/a
University of Michigan - Ann Arbor	4,029	48	193,384	420	61	28	33	n/a	1,646	1,812	n/a
University of Nebraska - Lincoln	3,750	27	101,262	582	201	48	153	n/a	647	1,926	68
University of Oregon	1,654	33	54,567	478	38	23	16	n/a	753	21	54
University of Washington - Seattle	2,559	50	127,973	38	451	412	19	20	746	1,262	8
University of Wisconsin - Madison	1,719	68	116,919	198	81	57	24	n/a	649	708	n/a
<b>PEER AVERAGE</b>	<b>2,593</b>	<b>51</b>	<b>127,038</b>	<b>289</b>	<b>162</b>	<b>101</b>	<b>46</b>	<b>55</b>	<b>947</b>	<b>1,033</b>	<b>29</b>
<b>University of Colorado Boulder</b>	<b>2,146</b>	<b>50</b>	<b>107,316</b>	<b>256</b>	<b>65</b>	<b>48</b>	<b>17</b>	<b>0</b>	<b>648</b>	<b>977</b>	<b>0</b>
<i>CU-Boulder Compared to Average</i>	<b>(447)</b>	<b>(1)</b>	<b>(19,722)</b>	<b>(33)</b>	<b>(97)</b>	<b>(53)</b>	<b>(29)</b>	<b>(55)</b>	<b>(299)</b>	<b>(56)</b>	<b>(29)</b>
<i>CU-Boulder % Compared to Average</i>	<b>(21%)</b>	<b>(1%)</b>	<b>(16%)</b>	<b>(11%)</b>	<b>(60%)</b>	<b>(52%)</b>	<b>(63%)</b>	<b>-</b>	<b>(32%)</b>	<b>(5%)</b>	<b>-</b>
										<b>35%</b>	<b>(35%)</b>

ASF = Assignable Square Feet

Assignable Square Feet per Student

ASF per Student														
Music	ASF per Student	Student FTE	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class Labs (210-215)	Open Labs (220-235)	Research Labs (250-255)	Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	177	1,520	269,263	n/a	67	23	45	n/a	22	8	4	75	1	n/a
	102	552	56,354	n/a	54	42	10	2	32	0	n/a	11	3	n/a
	236	1,028	242,329	15	53	28	25	n/a	42	2	1	111	11	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	192	455	87,425	9	97	77	19	1	52	2	5	20	7	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
137	492	67,416	1	82	39	42	0	21	3	1	27	2	n/a	
PEER AVERAGE				8	71	42	28	1	34	3	3	49	5	n/a
University of Colorado Boulder				257	384	98,699	10	41	21	21	0	55	6	n/a
CU-Boulder Compared to Average				88	(425)	(45,858)	2	(29)	(21)	(7)	(1)	21	3	n/a
CU-Boulder % Compared to Average				52%	(53%)	(32%)	20%	(41%)	(51%)	(26%)	-	63%	94%	n/a

Assignable Square Feet per Faculty

ASF per Faculty																		
	ASF per Faculty	FT Faculty	TOTAL ASF	Class-rooms (100's)	Total Labs (200's)	Class Labs (210-215)	Open Labs (220-235)	Research Labs (250-255)	Office & Conf (300's)	Study (400's)	Special Use (500's)	General Use (600's)	Support (700's)	Health Care (800's)				
Music	University of Arizona - Tucson	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	University of California - Berkeley	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	University of California - Los Angeles	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	University of Florida	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	Indiana University - Bloomington	1,844	146	269,263	n/a	699	235	464	n/a	227	83	43	786	6				
	University of Kansas - Lawrence	1,105	51	56,354	n/a	584	453	111	20	351	3	119	37	n/a				
	University of Michigan - Ann Arbor	2,071	117	242,329	135	468	248	220	n/a	368	17	12	976	95				
	University of Nebraska - Lincoln	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	University of Oregon	1,650	53	87,425	76	835	658	167	11	449	14	44	172	58				
	University of Washington - Seattle	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	University of Wisconsin - Madison	1,348	50	67,416	9	807	388	417	2	205	32	10	268	16	n/a			
	PEER AVERAGE				1,604	83	144,557	74	679	396	276	11	320	30	27	464	43	n/a
	University of Colorado Boulder				1,390	71	98,699	55	224	111	113	0	299	31	0	552	229	n/a
CU-Boulder Compared to Average				(214)	(12)	(45,858)	(19)	(455)	(285)	(163)	(11)	(21)	2	(27)	88	186	n/a	
CU-Boulder % Compared to Average				(15%)	(15%)	(32%)	(26%)	(67%)	(72%)	(59%)	-	(7%)	6%	-	19%	436%	n/a	

ASF = Assignable Square Feet

---

# **Appendix D**

## **Research Performance Indicators by Department**

---



### **APPENDIX D: RESEARCH PERFORMANCE INDICATORS BY DEPARTMENT**

Appendix D shows a more detailed version of the research performance indicators shown in Section 7 under Research Laboratories. This report shows the indicators by department.

### Research Performance Indicators by Department June 2010

FY 2010						
Department	No. of Projects	Total Expenditures	Existing ASF**	Tenured/ Tenure-Track Faculty*	ASF per \$100,000	ASF per T/T-T Faculty
<b>Assoc VC Undergraduate Education</b>	9	\$1,714,493			n/a	n/a
<b>Assoc VC Academic &amp; Campus Tech</b>	36	<b>\$2,197,765</b>			<b>n/a</b>	<b>n/a</b>
ATLAS	34	\$2,147,692			n/a	n/a
CIO Administration	2	\$50,073			n/a	n/a
<b>Assoc VC Research &amp; Dean of Graduate School</b>	<b>1,329</b>	<b>\$178,335,589</b>	<b>106,143</b>		<b>60</b>	<b>n/a</b>
Assoc VC Rsrch & Dean Grad Sch	13	\$1,645,094	1,977		120	n/a
Center/Limb Atmos Sound (CLAS)	10	\$2,665,111			n/a	n/a
Coop Inst Rsrch Env Sci (CIRES)	365	\$54,587,573	11,881		22	n/a
Graduate Teacher Program	1	\$88,824			n/a	n/a
Inst Arctic & Alp Research (INSTAAR)	165	\$9,632,622	25,328		263	n/a
Inst for Behav Genetics (IBG)	117	\$11,583,754	12,221		106	n/a
Inst for Behav Science (IBS)	92	\$5,806,285	529		9	n/a
Inst for Cognitive Science (ICS)	69	\$5,744,588	1,517		26	n/a
Joint Inst for Lab Astroph (JILA)	272	\$18,519,375	27,325		148	n/a
Lab Atmos & Space Physics (LASP)	193	\$67,372,646	25,365		38	n/a
Museum	32	\$689,717			n/a	n/a
<b>Assoc VC &amp; Dean Cont Ed &amp; Summer</b>	4	\$26,553			n/a	n/a
<b>College of Arts and Sciences</b>	<b>1,233</b>	<b>\$81,888,562</b>	<b>289,574</b>	<b>601</b>	<b>354</b>	<b>482</b>
<b>Arts and Humanities</b>	<b>27</b>	<b>\$2,191,705</b>	<b>0</b>	<b>148</b>	<b>n/a</b>	<b>n/a</b>
<i>Arts</i>	1	\$472	0	26	n/a	n/a
Dept of Art and Art History	1	\$472		26	n/a	n/a
<i>Humanities</i>	26	\$2,191,233	0	122	n/a	n/a
Center for American West	3	\$39,974		1	n/a	n/a
Center for Asian Studies	15	\$1,916,392			n/a	n/a
Classics	1	\$40,000		11	n/a	n/a
Colorado Shakespeare Festival	1	\$3,086			n/a	n/a
Asian Languages and Civilizations	1	\$73,871		10	n/a	n/a
English	1	\$20,000		46	n/a	n/a
History	3	\$52,910		32	n/a	n/a
Religious Studies	1	\$45,000		8	n/a	n/a
Spanish & Portuguese	0	\$0		14	n/a	n/a
<b>Natural Sciences</b>	<b>1,112</b>	<b>\$77,038,131</b>	<b>282,037</b>	<b>333</b>	<b>366</b>	<b>847</b>
Applied Mathematics	39	\$2,581,879		16	n/a	n/a
Astro & Planet Sciences (APS)	3	\$15,076		20	n/a	n/a
Center for Int Plasma Stud (CIPS)	26	\$1,864,142	2,379		128	n/a
Chemistry	223	\$17,644,604	81,173	45	460	1,804
Colorado Initiative for Molecular Biotechnology (CIMB) (Chem & Molecular Bio Initiative)	1	\$409,097			n/a	n/a
Cntr/Astro &Space Astron (CASA)	163	\$9,369,178	14,153		151	n/a
Ecology & Evolutionary Biology	57	\$2,275,184	18,173	32	799	568
Fiske Planetarium	2	\$89,928			n/a	n/a
Geography	20	\$443,185	967	20	218	48
Geological Sciences	49	\$1,920,061	18,816	27	980	697
Integrative Physiology	65	\$5,219,350	15,141	20	290	757
Mathematics	12	\$293,333		27	n/a	n/a
MCDB	156	\$15,808,861	73,262	27	463	2,713
Program in Atmospheric and Oceanic Sciences (PAOS)	25	\$844,763	3,367	11	399	306
Physics	146	\$8,335,960	26,622	48	319	555
Psychology and Neuroscience	125	\$9,923,530	27,984	40	282	700
<b>Social Sciences</b>	<b>94</b>	<b>\$2,658,726</b>	<b>7,537</b>	<b>120</b>	<b>283</b>	<b>63</b>
Anthropology	13	\$191,458	4,665	18	2,437	259
CARTSS	13	\$512,920			n/a	n/a
Colorado European Union Center for Excellence (CEUCE)	13	\$177,412			n/a	n/a
Economics	8	\$124,283		30	n/a	n/a

## Research Performance Indicators by Department June 2010

FY 2010						
Department	No. of Projects	Total Expenditures	Existing ASF**	Tenured/ Tenure-Track Faculty*	ASF per \$100,000	ASF per T/T-T Faculty
Ethnic Studies	1	\$4,693		11	n/a	n/a
Linguistics	9	\$284,820		8	n/a	n/a
Political Science	10	(\$32,401)		22	n/a	n/a
Speech Language & Hearing Sciences (SLHS)	22	\$1,385,169	2,872	10	207	287
Sociology	1	\$1,413		21	n/a	n/a
Service Learning	4	\$8,959			n/a	n/a
<b>School of Business</b>	4	\$2,677,093	913	52	34	18
<b>School of Education</b>	59	\$4,687,585		30	n/a	n/a
<b>College of Engineering and Applied Science</b>	<b>953</b>	<b>\$52,648,928</b>	<b>136,862</b>	<b>174</b>	<b>260</b>	<b>787</b>
College of Eng & Applied Sci	4	\$25,511	16,065		62,973	n/a
Aerospace Sciences	178	\$12,006,696	8,645	27	72	320
Chemical Engineering	222	\$12,389,590	20,664	19	167	1,088
Civil Env & Architectural Engin	182	\$6,553,242	31,783	39	485	815
Computer Science	59	\$3,252,251	10,078	30	310	336
Electrical & Computer Engin	137	\$8,913,551	27,390	36	307	761
Engin Dean	32	\$1,644,602	862		52	n/a
Mechanical Engineering	139	\$7,863,485	21,375	23	272	929
<b>College of Music</b>	2	\$8,116		55	n/a	n/a
<b>School of Journalism &amp; Mass Communication</b>	2	\$204,190	370	22	181	17
<b>School of Law</b>	10	\$1,027,140		36	n/a	n/a
<b>Libraries</b>	9	\$43,353			n/a	n/a
<b>Vice Chancellor for Student Affairs</b>	11	\$5,079,401			n/a	n/a
<b>Diversity &amp; Equity</b>	3	\$406,902			n/a	n/a
<b>TOTAL</b>	<b>3,664</b>	<b>\$330,945,670</b>	<b>533,862</b>	<b>970</b>	<b>161</b>	<b>550</b>

\* Tenured/Tenure-Track Faculty included only if unit has space or research expenditures.

\*\* Only includes space that has a research space use code of 250 or 255.

