

APPENDIX 10

SPACE STANDARDS

(University of North Carolina only)

The evolution of room configurations and needs at today's institutions of higher education have clarified the need for updated space planning standards in selected categories of space. To this end, the University of North Carolina, in conjunction with higher education consultants (Eva Klein and Associates, Ltd.), in 1997-98 developed space planning standards to be used as an additional variable in the evaluation of capital project needs at the UNC campuses.

It should be noted that the criteria presented here are *planning* guidelines for current and future needs based on specific assumptions of program, enrollment, employment, and/or research growth during a given planning period. They are therefore neither *programming* nor *design* standards for use as either architectural or cost estimation guides. In addition, these standards do not attempt to address quality issues of space in terms of either facility condition or suitability for current and future needs. Differences in institutional missions, program diversity, or specific strategic plans were also not included as components of the development. As a result, these standards are not intended as exclusive or absolute indicators for determination of project needs. Given these limitations, the adopted criteria are used within various standard formulas to develop totals for predicted space for each campus. These figures are in turn used, in comparison with inventoried space statistics, to calculate hypothetical surplus/deficit assignable square footages in the selected categories.

Space planning standards were developed for the first four series of HEGIS Room Use Codes as defined in both the national and N.C. facilities classification manuals:

100 Series - Classroom Facilities - The standards apply only to the 110-Classroom Room Use Code. Room Use Code 115 (Classroom Service) is omitted in the calculations in accordance with typical comparative reporting practices in higher education.

*The most recent set of national space criteria was developed in 1985: Space Planning Guidelines, Council of Educational Facility Planners, International.

200 Series - Laboratory Facilities - Two types of laboratory space were studied:

210 - Class Laboratory - This includes only those laboratories that are used for regularly scheduled instruction. Excluded are areas classified as 215-Class Laboratory Service, 220-Open Laboratory (irregularly scheduled), and 225-Open Laboratory Service.

250/255 - Research/Nonclass Laboratory (and Service) - Based again on typical industry reporting standards, this analysis also includes space classified as 255-Research/Nonclass Laboratory Service as an aggregate for calculations. Only 250/255 space further classified under the Program Codes for Research (codes 21 and 22) are used in the calculations.

300 - Office Facilities - Recommendations for office space standards aggregate inventoried square footages for the four Room Use Codes in the 300-series: 310-Office, 315-Office Service, 350-Conference Room, and 355-Conference Room Service. This is again in accordance with recently inventoried space standards for higher education systems and institutions throughout the country.

400 - Study Facilities - For study facilities, separate figures for predicted space are calculated for 410-Study Room, 420-Stack, 430-Open-Stack Study Room (using an assumption of an equal assignment of space to stack and study area within the formula), 440-Processing Room, and 455-Study Service. For surplus/deficit estimations, these figures are aggregated to study, stack, and service space and then subset under Program Code 41-Library Services for application to campus central libraries (i.e., excludes departmental libraries and study areas within residential and other buildings).

CLASSROOM (110) STANDARDS

Average Student Station Size <i>(See Table 16)</i>	18 ASF
Average Weekly Room Hours <i>(Also Room Utilization Rate - see Table 3)</i>	35 hours/week
Station Occupancy Ratio <i>(Also Percent Student Station Utilization - see Table 7)</i>	65%
Space Factor <i>(see Table 9)</i>	0.79

CLASS (TEACHING) LABORATORY (210) STANDARDS

Space Factors are based on a Percent Student Station Utilization (Station Occupancy Ratio) of 75% and a Weekly Room Hour (Room Utilization Rate) standard of 20 hours.

		ASF	<u>Space Teaching Lab Category</u>	<u>Discipline</u>	<u>Per Station</u>	<u>Factor</u>
Highly Intensive	Engineering (including Textiles), Applied Design, Dance, Dramatic Arts.	108				7.2
Intensive	Agriculture, Architecture, Biological Sciences, Health Professions, Library Sciences, Physical Sciences.	70				4.67
Moderately Intensive	Communications, Computer/ Info Tech, Education, Art, Home Economics, Law, Psychology.	50				3.33
Non-Intensive	Business, Cinematography, Music, Language, Letters, Mathematics, Public Affairs, Social Sciences.	33				2.2

RESEARCH/NONCLASS LABORATORY (250/255) STANDARDS

For immediate implementation, a research space planning standard ASF allowance of 9,000 square feet per \$1 million of organized research expenditures, averaged over five years, is recommended for

application to only the two major research universities—UNC-Chapel Hill and N.C. State University. For all other UNC institutions, program considerations, and not planning standards, remain as the basis for justification for research space capital requests. A recommendation is in place to ultimately develop four categories of disciplines with corresponding ASF allowances per \$1 million of averaged expenditures:

RESEARCH/NONCLASS LABORATORY (250/255) STANDARDS (continued)

<u>Research Lab Category</u>	<u>Discipline</u>	<u>ASF per \$1 M Averaged Organized Research Expenditures</u>
Highly Intensive	Production Agriculture/ Animal, Crop, Poultry, Soil Sciences.	11,000
Intensive	Agricultural Sciences (other than Production Agriculture), Architecture and Related Programs, Conservation and Renewable Resources/Textiles, Forestry, Marine Sciences, Engineering, Health Professions, Physical Sciences.	9,000
Moderately Intensive	Biological Sciences, Home Economics, Psychology.	6,000
Non-Intensive	Applied Math/Statistics, Business, Communications, Education, Fine Arts, Languages, Law, Letters, Library Sciences, Public Affairs, Social Sciences.	4,000

OFFICE FACILITY (310/315, 350/355) STANDARDS

Office standards are based on an aggregation of all office facilities space (Office-310, Office

Service-315, Conference Room-350, Conference Room Service-355). Deducted from this aggregation are areas classified under Program Codes 52, 72-76, and 91-92 (see pp. 108-109, and 113). Five standards of ASF allowance, based on personnel categories, were developed.

Administrative	275 ASF
Instructional and Professional	190 ASF
Technical and Clerical	140 ASF
Graduate Assistants	60 ASF
Student Employees	25 ASF

STUDY FACILITY (410, 420, 430, 440, 455) STANDARDS

Central Libraries only (Program Code 41)

Study Space (<i>Includes 410-Study Room and 50% of 430-Open-Stack Study Room space</i>)	25 ASF per station for 20% of FTE students plus 8% of FTE faculty.
Stack Space (<i>Includes 420-Stack and 50% of 430-Open-Stack Study Room Space</i>)	0.08 ASF per volume
Service Space (<i>Includes 440-Processing Room and 455-Study Service space</i>)	15% of the combined predicted requirement for study and stack space.

