Appendix F. Space Standards Overview

This section is intended to provide background to the users of the Facilities Inventory regarding the relationship of specific facilities data to the calculation and use of space standards in the University of California.

Space standards have been used for many years by the University and the State to provide a measure of how much space can be expected to be used in general and professional instruction and research (I&R) programs. These standards rely, in part, on data contained in the facilities inventory. In 1990, new standards were developed by the California Postsecondary Education Commission (CPEC) which has resulted in modifications and additions to the data maintained in the University's facilities inventory system. Although at the time of this writing (February 1993) the new standards have not been adopted, there is every expectation that they will be approved, and that the information presented here will be relevant to users of the facilities data.

What Are Space Standards?

Space standards are formulas used by planners and policy makers to determine space allowances for various types of academic facilities, specifically classrooms, teaching laboratories, research space, and office facilities. The space standards take into account the type of people for whom the space is provided (e.g., budgeted faculty, graduate students), the type of activity being conducted (e.g., research, lecture, studio instruction), and an average amount of space required per person to carry out that activity as well as space to house ancillary personnel, equipment and supplies. For example, 195 square feet are allotted per budgeted faculty member for office-based activities, which would include the faculty member's office and a portion for office support (staff area, supplies, copier room).

In other words, standards provide a reasonable measure, which can be consistently applied across campuses and across programs, that demonstrates the degree to which the space actually used for academic purposes compares to what can be expected to be used for those purposes. Space standards can thus be thought of as a budgeting tool to determine overall space allowances; they are not used as the basis for designing or allocating the space used by an instructional department.

How Are Space Standards Used?

There is a two-part equation which has, on the one hand, the amount of space the campus is *allowed* when standards are calculated (as described above), and, on the other hand, the amount of space currently *available for use*. This second part of the equation is based on facilities data, which, when aggregated, can be compared with the space allowed by the standards. The results of this equation are presented annually to the State in a set of "Space Analysis Tables" both for current and projected years. The data in these tables can be used both by the University and by the State to determine whether there is a quantitative justification for capital projects which would add more space to the campus or change its use.

The critical value of the information presented in this annual analysis should underscore the importance of recording accurate and reliable data about space use.

There are two fundamental concepts that must be understood about the application of space standards: how standard space is defined and identified, and how standard space is categorized according to use.

What Is Standard Space?

Standard space is the subset of campus space that is subject to comparison with the CPEC space standards. In programmatic terms, this subset of space is confined to general and professional instructional programs. The data elements that define this universe of programs are the program classification code and the program standard code. If the program classification code begins with 1.1 or 1.2, the program standard code is "S" (Standard). Therefore, the program is a standard program. All other programs are considered to be nonstandard programs.

In addition, there is a subset of room use codes that are considered to be standard. If the room use code is 010 (Inactive), 110-130 (Classroom Facilities), 210-265 (Research Facilities, Class and Special Class Laboratories), 310-345 (Office Facilities), 510-515 (Central Computing), 560-565 (Media Production), or 710-722 (Shops and Storage), the room standard code is "S" (Standard). Therefore, the room is standard room. Room use codes not listed above are considered to be nonstandard rooms.

Definition of Standard Space

Both the program ***and*** rooms within that program must be standard in order to be regarded as *standard space.*

Standard rooms assigned to a standard program = standard space.

Nonstandard rooms assigned to a standard program = nonstandard space.

Standard rooms assigned to a nonstandard program = nonstandard space.

Nonstandard rooms assigned to a nonstandard program = nonstandard space.

Definition of "Standard" Space	*Room Standard Code is S (STANDARD)*	*Room Standard Code is N (NONSTANDARD)*
Program Standard Code = S (STANDARD) *Program Code Series = 1.1 and 1.2*	STANDARD SPACE	NONSTANDARD SPACE
Program Standard Code = N (NONSTANDARD) *Program Code Series = 1.3 through 8.0*	NONSTANDARD SPACE	NONSTANDARD SPACE

What are the CPEC Categories of Standard Space?

Standard space, as defined above, is categorized into one of four CPEC categories so that its use can be better analyzed and understood. The four CPEC Categories are classrooms, teaching laboratories, offices, and research/scholarly activity areas.

Room Use Codes, when designated standard ***and*** which are tied to a standard program code, are automatically classified into one of these four CPEC categories. Nonstandard rooms are not assigned to any CPEC category. When selecting a room use code that is a standard room, the following assumptions about the four space categories and the standards that are applied to them should be considered:

Classrooms: This CPEC category encompasses rooms used by students for lecture, discussion group, and seminar activities that are a part of the regularly or formally scheduled course requirements. Support space for the rooms in which these activities take place is also included. Room Use Codes 110, 125 and 130 are included in the CPEC Category for Classroom. Rooms in this category may be generally assigned or departmentally controlled.

Teaching Laboratories: This CPEC category encompasses rooms used by students for participation in laboratory exercises, practice activities, and other types of "hands-on" instruction, provided these activities are a part of the regularly or formally scheduled course requirements. Support space for the rooms in which these instructional activities take place is also included. The CPEC Category for Teaching Laboratories includes standard class and special class laboratories and their related support areas (Room Use Codes 260, 261, 265, 711, 716 and 721) ***and*** nonstandard open laboratories (Room Use Codes 270 and 275).

Research/Scholarly Activity: This CPEC category encompasses rooms used primarily, although not exclusively, by budgeted faculty members, postdoctoral scholars and graduate students to carry out research activities in laboratories, studios and other facilities. In addition, the standard covers the space required to carry out the scholarly activities of faculty and students that go hand-in-hand with the research function. The standard also covers service space to support research and scholarly activities. Room Use Codes 010, 210-255, 510, 515, 560, 565, 710, 715 and 720 are included in the CPEC Category for Research/Scholarly Activity.

Office: This CPEC category encompasses rooms used primarily, although not exclusively, by faculty members, postdoctoral scholars, teaching assistants and support staff to carry out the basic "desk-based" academic and administrative functions of an I&R program. The standard also covers meeting room and service space to support the offices and their occupants. Room Use Codes 310-345 are included in the CPEC Category for Office.

0.47

What Are Station Size Categories?

As mentioned above, there are four types of academic facilities which are covered by the CPEC space standards: classrooms, offices, teaching laboratories (which include class and special class labs, open labs, and their related support space), and research/scholarly activity areas. For classroom activities, the space allowance is 0.55 assignable square feet per weekly student contact hour. For office facilities, the space standard is 195 assignable square feet per full-time-equivalent faculty member, teaching assistant, and postdoctoral researcher.

For the remaining two CPEC space categories, that is, teaching laboratory and research/scholarly activity areas, there is no one single space allowance factor that is applied as for classrooms and offices, but rather, "station size categories." These station size categories indicate the average type and amount of space used by *each facilities department* for those two activities. Each facilities department is assigned a class laboratory station size category and a research/scholarly activity station size category.

Class Laboratory Station Size Categories

The term *teaching laboratories* is the umbrella for class laboratories, special class laboratories, open laboratories, and their related support space. The *class laboratory station size category* is applied only to *standard* facilities departments to which class and special class laboratories and their related support areas are assigned. Each standard I&R facilities department is assigned one of five class laboratory station size categories (ranging from 2.0 to 4.5 assignable square feet per weekly student contact hour). The assignment of class laboratory station size categories is made by the campus and approved by the Office of the President. (See Chapter 4, *Room Data Elements,* for the code values, station sizes, and descriptions of the data element, "Class Lab Station Size Code.")

Research Station Size Categories

Each standard I&R facilities department is assigned to one of six research station size categories. The space allowances range from 50 assignable square feet per FTE faculty, graduate student, and postdoctoral researcher for "desk-based" research and scholarly activities up to 500 ASF per FTE faculty and 250 ASF per graduate student and postdoctoral fellow for complex wet and dry lab activities. The assignment of research station size categories is made by the campus and approved by the Office of the President. (See Chapter 4, *Room Data Elements,* for the codes values, station sizes, and descriptions of the data element, "Research Station Size Code.")

Where to Go for More Information

Further information on the calculation and reporting of space standards will be available to the campuses in early 1992. *A Capacity for Learning: Revising Space and Utilization Standards for California Public Higher Education,* produced by the California Postsecondary Education Commission in January of 1990, provides information on the background of space standards in California and on how the new standards were developed.