

Notes from:

Harvey H. Kaiser and Eva Klein. "Space Standards: Some Recent Lessons." *Facilities Manager*, Volume 22, Number 1, January/February 2006.

Article based on 1997 national survey of space standards.

Increasing Interest in Space Standards in Higher Education

- Increasing demands for accountability
- Trend: increased space utilization and/or renovation, vs. new construction
- Interest from state legislatures
- Impact of new technology

Categories of Space Standards in Use

Space planning standards

- Used for capital budget planning
- Usually expressed as assignable square feet (ASF)
 - Guidelines for current and future needs
 - Can't be used for programming. e.g., a general planning goal of 16 ASF does *not* mean every classroom should be exactly 16 ASF per station.
- Compare actual inventoried space to predicted need → calculate space surpluses or deficits
- Requires a detailed, current space inventory

Space utilization standards

- Used to analyze efficiency of existing space
- May be called productivity factors or room utilization rate (RUR)
- Compare actual use to potential use
- Measure weekly room use in hours and percentage of seats occupied in any given hour

Space programming standards

- Used as design guidelines for new construction or renovation
- Specific details: room sizes, characteristics, equipment
- Used to plan an actual project

Common Industry Sources:

- *Space Planning for Institutions of Higher Education*. CEFPI, 2006.
- *Higher Education Facilities Planning and Management Manuals*. WICHE, 1971.
- Bareither and Schillinger. *University and Space Planning*. 1968.
- For libraries: *Standards for College Libraries*. Association of Research Libraries, 1986.
- For data collection: *Postsecondary Education Facilities Inventory and Classification Manual*. National Center for Education Statistics, 2006. [Downloadable .PDF]

Common Units of Measurement

- User quantities: Student and faculty/staff full-time equivalent (FTE); Student Contact Hours (SCH)
- Stations
- Utilization: Weekly room hours (WRH); Station Occupancy Ratios (SOR)

Results from Survey of State Systems

- Classrooms: range of 14-22 ASF, with mean of 16.6 ASF
- Offices: range of 125-190 ASF, with mean of 143 ASF
- Study facilities/reading room: standard is 25% of FTE students at 25 ASF / FTE

Space standards should be:

- Flexible guidelines (not absolute standards)
- Minimum expectation (not a “hurdle rate”)
- Used as guidelines to estimate whether sufficient space has been provided
- Not used to design specific facilities

Facility Condition as a Factor

Space planning standards are quantitative (surplus/deficit calculations) and don't address:

- Physical condition of a space
- Suitability for a particular activity
- Technology needs

Some state systems, e.g., California (UC), use criteria for facilities conditions as additional components for analysis in capital budget prioritization.

Many institutions collect data about condition in one- to three-year inspection cycles, using categories from *Higher Education General Information Survey* (HEGIS). Six condition categories range from "satisfactory" to "termination."

Technology

- Few standards have been developed for technology-intensive instructional space.
- Uses include laptop computers, Internet, new lab configurations, open access computer labs, distance learning facilities

Preliminary survey results:

- Technology-intensive classrooms: range of 18-28 ASF
- Computer classrooms and class labs: range of 35-45 ASF