

Contact: Joan Racki

**STRATEGIES AND POLICIES TO ENSURE OPTIMAL UTILIZATION OF
EXISTING CAMPUS FACILITIES**

Action Requested: Review and discuss additional strategies and policies to ensure optimal utilization of existing campus facilities.

Executive Summary: One of the four priorities of the Board's 2004 – 2009 Strategic Plan is to demonstrate public accountability and effective stewardship of resources, while one of the Board's focus areas for 2005-2006 is to provide greater oversight and direction in property and facilities planning and management, including consideration of additional strategies and policies to ensure optimal use of existing facilities on the campuses. University instructional / research / administrative space increased by almost 1.4 million gross square feet (9.8%) from July 1995 to July 2005.

Board Office review of data from a Fall 2003 comparative space inventory study undertaken for 27 campuses of 14 institutions of higher education (primarily members of the Big Ten), which are members of the Higher Education Facilities Management Association, showed that the University of Iowa and Iowa State University ranked significantly below the mean in the amount of Academic/Administrative Assignable Square Feet per FTE enrollment.

Since the universities are dynamic institutions, space needs are constantly changing. Each of the universities maintains a facilities inventory of its space (consistent with the *Postsecondary Education Facilities Inventory and Classification Manual* [1992 edition]); an accurate inventory is needed to manage the allocation of a university's space. The information is used for institutional and departmental planning, capital improvement programs, and indirect cost negotiation. Each university also has processes and procedures in place to determine the needs for space; to review space assignment, productivity, suitability, utilization and reassignment of space; and to review requests for capital projects. Most day-to-day space needs are relatively narrow in scope and are driven by such things as funded research or the recruitment of new faculty. Since space is a critical resource, it should be managed and allocated based on continued program justification.

While institutional processes and procedures are in place, the Board Office suggests that utilization could be further improved without negatively impacting the educational or research programs of the institutions. The Board should encourage the optimum functional utilization of space within its buildings. The following policies and strategies, many of which are already being implemented by the institutions on either an informal or formal basis, are proposed:

- Institutions should be as thorough and innovative as possible in their allocation and reallocation of space within their existing physical plants.
- Each university should adopt general principles, consistent with the Board's and each university's strategic plan, regarding space assignment and scheduling of classes and should so inform the campus community. Each university should also ensure that its policies and procedures regarding space are consistent with these principles.

- The universities should use their appropriate campus committees to stimulate discussions on improving the utilization of campus space and facilities, and to provide recommendations to the university administration.
- Space planning should continue to be an institutional responsibility and be part of comprehensive long range campus planning, which includes an analysis of the quality, quantity and location of the space.
- Requests for new space should continue to be documented and justified on a functional need basis with a demonstration that the identified program need cannot be met through more efficient use of existing space or renovation, consistent with the Board's previous adoption of the capital project evaluation criteria.
- Each university should review its existing utilization data when planning for new or renovated space; to the greatest extent possible, objective measures should be used to determine space needs. These objective measures could include benchmarking data or objective models, supplemented by further analyses and specialized studies.
- Each university should consider development of policies regarding office space for part-time employees, including adjunct faculty, graduate students and emeritus faculty.
- Each university should keep and utilize for each new construction or renovation project guidelines for the size of offices.
- Each institution should submit with its request to lease space in the general vicinity of the main campus, an explanation of the spaces on campus examined and found unsuitable.
- Classrooms, class laboratories and other facilities should be designed and scheduled for maximum utilization given program needs.
- The universities should strive to design efficient facilities, providing for as much usable (net) square footage as reasonably possible within the gross square footage and program goals of the building.
- For those facilities thought to be obsolete, the institutions should assess their buildings' physical condition, contribution to the university's heritage, adaptability to being efficiently renovated and reused, and viability of reuse versus replacement; based upon this assessment, each university should determine whether it is prudent to retain each of its obsolete structures.

Additional Information:

At its November 2005 meeting, the Property and Facilities Committee adopted a facility stewardship proposal which focuses on ensuring that the costs associated with operations and future capital renewal are identified for each new major addition or new building project. Ensuring the optimal utilization of existing campus facilities is another component of facility stewardship.

The utilization of space is a component of space management, which is defined as the "art and science of maximizing the value of existing space and minimizing the need for new space." (Hier

& Biddison, Facilities Manager, page 17.) Space management thus includes an analysis of the quality or suitability of the space. A comprehensive space management approach provides the highest quality of information, judgment and expertise in making facility decisions that allocate limited resources.

For example, renovation can improve the utilization of space since a university with functionally obsolete space may need significantly more space to support its needs due to the inefficiencies of the available space. Since obsolete space does not support program activities as well as modern space, planning studies undertaken by the universities provide a means to determine the program needs from both quantitative and qualitative perspectives.

Each university's approach and processes, which are slightly different, provide flexibility and responsiveness in planning for and addressing the unique short-and longer-term needs of the programs conducted in support of institutional missions. While there are differences, there are a number of common policies and strategies which could be incorporated into the university processes, as outlined in the Executive Summary section of this memorandum.

An efficient design of new facilities (reasonably high net [usable] to gross efficiency factor) can improve the utilization of facilities since more net assignable square footage can be constructed within a given gross square footage building or a given net assignable square footage will require less gross square feet. There are a number of factors which help drive a realistic efficiency factor, including the building type, building shape based on site and design constraints, limitations of existing building layouts for remodeling projects, and the need for extensive mechanical equipment, especially in research facilities.

Utilization policies employed in other states frequently focus on the utilization of classrooms and teaching (class) laboratories. At the Regent universities these spaces represent a very small percentage of the total net assignable campus space. At the University of Iowa classrooms represent approximately 5.5% of the total space (excluding health care and residential); at Iowa State University classrooms represent 4.5% of the square footage, excluding residential. (See Attachment A.) These numbers are comparable to the average 5.2% reported for 25 public universities, mainly large research campuses. (Fink, Facilities Manager, June 2002.) At the University of Northern Iowa, classrooms represent 9.8% of non-residential space. Since the University is not a research institution, classroom space is expected to be a higher percentage since there would be proportionally less laboratory space.

Factors influencing classroom utilization include available technology within the classroom, as well as the room's condition, capacity, and location. Central campus classrooms are more highly utilized than classrooms located in buildings on the periphery of campus. Reported utilization of classroom space includes only those credit-generating classes that appear on the schedule as meeting regularly. (See Attachment B) Classrooms are used, on a routine basis, for many other academic activities including: departmental sponsored seminars and colloquia, formal tutoring and drop-in course assistance, and faculty meetings because departmental conference rooms are not large enough. While increasing the utilization of the classrooms would have a marginal impact on the total campus space, an improvement could reduce the need for remodeled or new classroom space or permit existing classroom space to be utilized for other purposes.

One of the results of the budget cuts of recent years is that class section sizes are getting larger, resulting in the need to modify space through creation of new rooms or the renovation of old rooms to accommodate the larger size classes.

Since teaching laboratories (class laboratories) usually have lower room utilization than classrooms and since laboratory space is expensive space to construct, operate and maintain, designing laboratories so they can be used for instruction for a variety of courses within a discipline or across disciplines would be cost effective and should be pursued as appropriate. This approach would be consistent with national planning trends reviewed in the literature which indicate that new teaching laboratories are being designed to be more generic, multifunctional, flexible and easily adaptable to change. The literature also reports that instructional laboratory down time is being minimized by setting up supplies and experiments on carts in stock/preparation rooms. (Wisconsin, page 20.)

Some authors have noted that one of the areas in which campuses could concentrate future efforts is the management and distribution of office and support space, which generally accounts for the largest block of space on campus. (Fink, Facilities Manager, April 1996, page 32.) As shown on Attachment A, the largest category of space at the Regent universities is office space. Office facilities represent more than 20% of the nonresidential space at each of the universities, ranging from a low of 21% at the University of Northern Iowa to almost 27% at the University of Iowa (including the University of Iowa Hospitals and Clinics).

Offices as a place of work are important for individuals to be productive and for institutions to be successful. Campus guidelines regarding for whom office space should be provided, as well as for the size of offices could increase the utilization of office space and reduce the amount of new office space or off-campus leased office space which might be needed.

While campuses need a certain level of "swing space" to be used as space is remodeled, the universities should assess whether obsolete facilities should be renovated or demolished.

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DISTRIBUTION OF UNIVERSITY NET ASSIGNABLE SQUARE FEET* - FALL 2005

| Classification | — | | SUI | | | |
|----------------|----------------------|-----------------------|--------------|---------------|-----------------------|---------------|
| | NASF w/o Hospital | % of Total exl res | NASF UIHC | Total NASF | % of Total exl res | % of Total |
| Unclassified | 424,603 | 7.17% | 266,706 | 691,309 | 8.56% | 7.34% |
| Classroom | 327,134 | 5.52% | 873 | 328,007 | 4.06% | 3.48% |
| All Laboratory | 1,280,891 | 21.63% | 16,937 | 1,297,828 | 16.07% | 13.77% |
| Office | 1,539,829 | 26.00% | 638,532 | 2,178,361 | 26.98% | 23.12% |
| Study | 519,154 | 8.77% | 18,002 | 537,156 | 6.65% | 5.70% |
| Special Use | 608,364 | 10.27% | 700 | 609,064 | 7.54% | 6.46% |
| General Use | 676,706 | 11.43% | 74,048 | 750,754 | 9.30% | 7.97% |
| Support | 480,582 | 8.12% | 82,337 | 562,919 | 6.97% | 5.97% |
| Health Care | 64,067 | 1.08% | 1,055,005 | 1,119,072 | 13.86% | 11.88% |
| Subtotal | 5,921,330 | 100.00% | 2,153,140 | 8,074,470 | 100.00% | 85.69% |
| Resid. Fac. | 1,336,232 | | 12,635 | 1,348,867 | | 14.31% |
| Total | 7,257,562 | | 2,165,775 | 9,423,337 | | 100.00% |

* According to Postsecondary Education Facilities Inventory and Classification Manual, 1992 edition.

DISTRIBUTION OF UNIVERSITY NET ASSIGNABLE SQUARE FEET* - FALL 2005

| ISU | | | | UNI | | | |
|----------------|-----------|-----------------------|---------------|----------------|-----------|-----------------------|---------------|
| Classification | NASF | % of Total exl res | % of Total | Classification | NASF | % of Total exl res | % of Total |
| Unclassified | 87,863 | 1.76% | 1.18% | Unclassified | 73,305 | 3.59% | 2.56% |
| Classroom | 226,625 | 4.53% | 3.05% | Classroom | 199,204 | 9.76% | 6.95% |
| All Laboratory | 1,230,269 | 24.62% | 16.55% | All Laboratory | 257,424 | 12.61% | 8.98% |
| Office | 1,260,399 | 25.22% | 16.96% | Office | 430,277 | 21.08% | 15.02% |
| Study | 270,840 | 5.42% | 3.64% | Study | 169,542 | 8.30% | 5.92% |
| Special Use | 931,012 | 18.63% | 12.53% | Special Use | 447,867 | 21.94% | 15.63% |
| General Use | 427,762 | 8.56% | 5.75% | General Use | 360,464 | 17.66% | 12.58% |
| Support | 489,553 | 9.80% | 6.59% | Support | 99,384 | 4.87% | 3.47% |
| Health Care | 73,427 | 1.47% | 0.99% | Health Care | 4,040 | 0.20% | 0.14% |
| Subtotal | 4,997,750 | 100.00% | 67.24% | Subtotal | 2,041,507 | 100.00% | 71.24% |
| Resid. Fac | 2,435,332 | | 32.76% | Resid. | 824,027 | | 28.76% |
| Total | 7,433,082 | | 100.00% | Total | 2,865,534 | | 100.00% |

* According to Postsecondary Education Facilities Inventory and Classification Manual, 1992 edition.

