BACKGROUND

Based on discussion during the First Reading of this report to the Board in April, several changes to the Guidelines and project review process have been made, noted herein in italics.

Minnesota State Colleges and Universities expects to present a Fiscal Year 2008-2013 capital budget plan to the Minnesota Department of Finance, Governor and Legislature in June 2007 consistent with the state’s anticipated capital bonding program for the 2008 legislative session. As part of that plan, specific project recommendations will be submitted only for the FY2008 bonding bill. Projects recommended for the later years of FY2010-2015 will serve as "points of departure" planning guides for future state bonding requests.

At the time of this writing, the Legislature is still in session and has not acted on a capital bonding bill. However, colleges and universities should be planning for the 2008-2013 capital budget assuming that the 2006 projects will have been authorized and funded prior to the 2008 legislative session.

The foundation for the proposed 2008-2013 capital budget is the Minnesota State Colleges and Universities Strategic Plan adopted in January 2006. Many of the principles in the 2006 Strategic Plan update and enhance previous strategic plans and thus support a continuation of most precepts from earlier capital budgets. The four strategic directions of the latest plan are:

- Increase access and opportunity
- Promote and measure high quality learning programs and services
- Provide programs and services integral to state and regional economic needs
- Innovate to meet current and future educational needs efficiently

Components of the 2006-2011 capital budget plan included funding recommendations of $275 million for 2008 and $250 million for each of the succeeding biennia; prioritization to reflect the Board’s desire to preserve and maintain existing facilities; and addressing the demonstrated facilities needs of the colleges and universities. Important priorities included life safety and asset preservation; program enhancement, particularly in the area of science instruction; facilities revitalization or replacement; and collaborative ventures. Of the $280 million budget in 2006, $110 million was specifically requested for the Higher Education Asset Preservation and Replacement (HEAPR) program. The 2006-2011 plan also featured significant follow-through funding of previously phased construction projects and new construction dollars for those projects funded for design in 2005 or earlier. Additionally, the 2006-2011 plan included requests for land acquisition at five campuses for growth and program issues, and multi-campus programs for demolition and renovations of classroom and laboratories.
CAMPUS RENEWAL AND REINVESTMENT

The Minnesota State Colleges and Universities System includes classroom buildings, libraries, athletic/recreational facilities and other academic structures totaling 20.9 million square feet; and Revenue Fund residence halls, student unions and other revenue producing facilities totaling an additional 4.6 million square feet. The majority of system facilities were constructed during the 1960-1970 time period; some were built over 50 years ago; and less than 10% were constructed in the last ten years.

A baseline architectural/engineering assessment of the physical condition of these facilities was undertaken by the System in 1998-99 to investigate, document and analyze conditions at all 53 college and university campuses. This first systemwide Facilities Condition Assessment estimated that the backlog of deferred maintenance and repair was $498 million at that time. The assessment’s baseline data has been augmented by further work by consultants since that time to include (1) engineering studies of the mechanical and electrical systems at all seven state universities in 2000, seventeen two-year campuses in 2002, and ten two-year campuses in 2004; (2) annual engineering inspections of all existing roofs; and (3) a 2002 study of the status of fire detection and suppression devices.

This information has been consistently helpful in identifying repair and renewal needs for the individual campus as well as the System. However, the information was static and could not be practically or economically updated.

Taking a new approach, a working group composed of college and university leaders representing finance and facilities areas was convened in the fall of 2004 to help create a dynamic data base and model to easily monitor the condition of campus facilities as well as predict renewal and reinvestment needs over time. Such a model would also provide a rational framework for capital planning and assist campuses and the Office of Chancellor in the development of capital projects.

In 2005, the Office of the Chancellor contracted with a national facilities consulting firm, Pacific Partners Consulting Group, to work with colleges and universities in developing the new data base and reinvestment model. In winter 2005 training to initially populate the model occurred at three regional locations with over 130 individuals participating. Initial data collection from the campuses and verification is now complete, providing a 2005 baseline. A second round of training recently occurred in January 2006 with over 59 campus personnel in attendance. The campus data will be updated for a new 2006 baseline by May.

FACILITIES RENEWAL AND REINVESTMENT MODEL (FRRM)

The new model responds to three fundamental objectives:

- Predict building systems replacement or renewal scheduling, and associated costs on a campus and systemwide basis;
- Estimate and update the magnitude of the deferred maintenance backlog;
Provide a sustainable planning tool that has broad profiles and is able to predict future renewal needs for each building; and is easy to update and inexpensive to maintain.

The model provides the added benefits of collecting information in support of multi-year capital planning; saving costs by minimizing the need for detailed condition assessments; identifying buildings where reinvestment may not be cost effective, i.e. they may be candidates for demolition or mothballing; and providing tools to enable consolidation of capital projects in individual buildings as well as across building systems.

**LIFE CYCLE MODELING**

Several parameters are fundamental to the FRRM as a planning tool:

1. Building systems have predictable life expectancies; renewal needs for building systems are cyclical and predictable based on age, construction or quality of manufacture; performance history and maintenance of those systems. These extrapolate to a predicted “life cycle” or useful years left.

2. The remaining life of each building and its “subsystems” can be estimated; reinvestment needs vary year-over-year and can be 200 – 300% higher in costs in some years than in others.

3. Renewal costs can be estimated; and therefore campuses can systematically plan for capital repairs and improvements.

4. Backlog and renewal costs are related. If an item is not funded in the year it is anticipated and needed for renewal, then its cost moves into the backlog.

The FRRM methodology using this life cycle approach was developed at Stanford in the 1980’s. The approach has been endorsed in a book published jointly by APPA, NACUBO and SCUP, and has been implemented on over 100 campuses including the University of California System, Oregon University System, California State University System, University of Texas System, the Smithsonian, and Stanford University.

Subsystem life cycles are the components of the model and are based on industry standards and institutional experience. For example, several building subsystems have predicted life spans such as plumbing fixtures - 25 years; HVAC equipment and controls - 30 years; fire protection systems - 40 years; and interior finishes - 15 years.

In addition to predicting renewal schedules, the FRRM also estimates costs. FRRM uses cost data determined from national sources as well as actual System experience using cost data from recent capital projects. In total, over 26 million square feet of project data was used to develop the cost estimating data base, including 1.2 million square feet of actual building costs data from recent System projects.
Life cycle modeling relates to the year of construction, maintenance history, and ongoing repair and renewal of the facilities. The graph below indicates the years in which new space (in million square feet) has been built in the System.

Since most of the college and university square footage was built 30-40 years ago, and many components of these structures are reaching or have already reached the end of their useful life, it is clear that the needs will be significant in the upcoming years. This has already proven true with roofing and mechanical systems that have failed or are failing.

As noted above, building systems have predictable, cyclical life expectancies. Thus, a renewal curve showing anticipated renewal costs over time is also cyclical. The graph below indicates future annual renewal costs for the System ascertained by the 2005 data indicating the year that renewal is required (data rolled-up from each college and university). The solid line averages the requirements over time.
Examples of life cycle need and systems component costs:

An Example of Renewal Costs by Subsystem (Mudd Classroom Center)

Example of projected renewal cost/year:

A Simplified Example

Mudd Classroom Center
Construction Date: 1970
Gross Square Feet: 10,000

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The FRRM uses data entered by each campus for the base year (2005) and current year (2006) and provides a variety of output information including:

- Building component profiles for each building (or sub-building)
- Detailed estimates of the backlog by building and System-wide
- Detailed renewal projections for the next 30 years by building, location and component system
- Easy to maintain web-based software
Specific estimates are provided per building, as well as per campus, in terms of current backlog and reinvestment and renewal requirements:

From FRRM reports such as the sample above, a campus can document the condition of buildings, the backlog, and specific buildings or building systems that have upcoming renewal requirements.

Campuses can use this information to create a long-range Capital Improvement Plan (CIP) as part of their Facilities Master Plan as well as the short-range six-year plan prepared in conjunction with the biennial Capital Budget. The campus CIP indicates groupings of needs into projects and identifies tentative funding sources such as the campus operating budget, a major capital project, HEAPR project, or other.

The CIP lays the project planning groundwork by incorporating factual building conditions, historical and upcoming renewal data with the unique academic, financial and other program needs of the campus. For example, a 1960 building might have backlog in building envelope (exterior), interior remodeling and partial mechanical and electrical renewal needs. The campus thus might pursue a project that includes major modernization addressing all these requirements. Note that the entire backlog is not expected to be removed in any single project, as some items may be acceptable for current program use and other backlog items may be more critical to remove.

### FUNDING FOR CAMPUS MAINTENANCE AND RENEWAL

Two significant elements that can affect the condition of a facility or building component are the quality of the initial construction and the level of maintenance and repair expended to maintain these components over time. For example, a boiler with a 30-year life expectancy may have its life extended by 10 years with excellent maintenance and timely replacement of components. The same is true relative to the on-going care, maintenance and replacement of equipment in a complete building structure.
Operating funds and capital funds are the two primary sources of funds for maintenance, repair and renewal of facilities. Funding sources from donors, grants and foundations tend to be used for specific new programs or capital projects relating to growth issues, and are not commonly used for basic maintenance and renewal.

Operating funds provide for routine campus operations and maintenance. From a facilities perspective, this includes regularly scheduled maintenance of dynamic equipment; minor tune-ups and repairs to keep systems operating; general housekeeping; and grounds maintenance. Also included are those funds budgeted for Repair and Replacement (R&R). These R&R funds are budgeted towards major repair work and replacement of building systems’ components that extend life cycles beyond their predicted timeframe. Normally, R&R funds should not be used to make improvements, or to change use of all or a portion of a building to another program use. Funds for these “upgrades” should come from other campus sources.

Capital funds are, for the most part, obtained via the biennial capital budget and legislative process. Capital funds go directly to renewal of existing space in cases of major renovation projects. Repair and replacement of building components are normally funded through the Higher Education Asset Preservation and Replacement (HEAPR) program. Capital funds are also used for construction of new space; land acquisition; demolition; and advance design work. The capital budget planning strategy in recent years has been to fund major renovations that remove backlog as well as add new programmatic life (modernization) to the campus.

In recent years, HEAPR has been targeted to replace building components that have already failed (such as leaking roofs), have exceeded their useful life and are in danger of failure (boilers, chillers, mechanical equipment), and other work contained in campus backlog.

In the case of R&R funding, the Office of the Chancellor over the last four years has strongly encouraged campuses to strive for a minimum spending of $1.50 per square foot for R&R. At this time, the system average for R&R spending is still under $1.00 per square foot with some campuses reporting R&R expenditures well below the average. Part of this problem may be the way colleges and universities are recording costs for this R&R work. The Office of the Chancellor is examining financial reporting procedures to improve data collection in the 2007 operating budget year.

**USING THE FRRM FOR THE 2008 CAPITAL BUDGET**

The FRRM reports that the current backlog of the System in 2005 was approximately $635 million. Final results of the 2006 projections will be available shortly, but at this time the backlog is expected to exceed $660 million, not considering potential funding from the 2006 bonding bill. In addition, in the next ten years the System is facing a renewal need in excess of $440 million for major building systems. Utility distribution systems, roads, hardscape, landscape, security systems, and other infrastructure items will require an additional $98 million in the next decade. Add to this the requirement to modernize as facilities projects are undertaken estimated at $260 million. In total, the ten-year renewal requirement is $800 million.

To minimally “keep up” with current conditions thus requires $80 million annually ($160 million per biennium) for the next decade. Add to this the need to reduce the backlog or “catch up” with
work not accomplished. Reducing the backlog by 50% over the next ten years requires an additional $32 million per year or $64 million per biennium. The total System need is therefore $112 million per year or $224 million per biennium. The following chart indicates how the backlog could be reduced by 50% while upcoming renewal needs are also funded in the next decade. Note that this funding requirement does not include improvements for growth or program needs.

Capital and HEAPR project requests for 2008 will use this FRRM data to inform and enable prudent financial choices for the stewardship of System facilities.

![Chart showing capital budget guidelines for FY 2008-2013](chart)

FUNDING AND CAMPUS STEWARDSHIP

The Facilities Condition Index (FCI) is a nationally accepted measurement to evaluate the condition of a building or a campus of buildings. FCI is the amount of deferred maintenance (backlog) divided by the replacement cost of either a single building or campus. The lower the FCI is, the better the condition of the building or campus. Some experts indicate that an FCI of 4% is “good” and should be a target to pursue. That may be unrealistic however. Many higher education officials consider a campus in good condition with an FCI below 10%.

Data indicates that the current FCI for the System as a whole averages 14%. It is significant to note that if reinvestment is not accomplished over the next 10 years, 38 of the 53 System campuses will increase their FCI between 14% and 39%; and 23 out of the 53 will be above 23%. For our immediate purposes it is suggested that a plan be pursued to decrease the backlog by 50% over the next ten years, lowering the System-wide FCI to 7%. A ten year, 50% reduction plan was chosen as a reasonable, measurable and fiscally realistic approach to gradually improve individual campus conditions as well as bring campuses more “in line” across the System.
It is equally significant that campuses which have maintained their physical plant in good condition should not be disadvantaged in the capital budget process. These physical plants should be maintained at their current level of good condition. Their “low” or “average” FCI should not be allowed to increase as many of them face costly renewal requirements in the near term.

Thus it is proposed that funding be earmarked for a combination of specific line item capital projects and HEAPR projects to reduce the FCI of campuses above 14% and simultaneously fund the upcoming renewal needs of the remaining campuses to prevent growth in their backlog and increasing their FCI.

It is equally important that colleges and universities continue to fund ongoing repair and replacement projects that directly affect the FCI and long-term renewal needs. To do so, a funding level of at least $1.00 per square foot should be strongly encouraged at each campus.

A summary of backlog, renewal needs and the corresponding FCI for each campus is contained in Attachment A.

2008-2013 CAPITAL BUDGET PLAN

As noted above, the proposed 2008-2013 capital budget will reflect the January 2006 System Strategic Plan. Projects must also consider the following planning principles that are informed by the four directions in the Strategic Plan:

- Provide affordable access
- Focus on student success
- Work collaboratively and in partnership: inter-campus; campus-to-campus; campus-to-community and/or industry
- Advance diversity
- Promote global competency practice stewardship
- Encourage innovation in academic delivery; use of facilities and technology; innovative partnerships and response to workforce needs
- Demonstrate accountability
- Provide value
- Pursue quality and continuous improvement
- Meet and efficiently respond to community and workforce needs

Basic and sound planning concepts for integrated academic, technology, finance and facilities plans of the institutions serve as the foundation on which capital priorities are evaluated. These plans, addressing each institution’s vision for future academic and student services needs, should demonstrate facilities requirements in support of the academic mission.

A major initiative launched in 1998 has resulted in the creation of campus master facilities plans at all colleges and universities. Board policy requires all campuses to update their facilities master plan every five years to assure that adequate stewardship and appropriate reinvestment in the physical plant is taking place. Nine master facilities plans that were completed more than
five years ago have been updated and presented to and approved by the Office of Chancellor, with 12 proposed for update review and approval in 2006. All projects proposed for the FY2008-2013 capital budget must relate to the campus master facilities plan.

In addition to the strategic directions, the guidelines presented herein are a continuation of those used in prior capital budget planning which demonstrate a strong focus on asset preservation and facility renewal. In addition, the FY2008-2013 capital budget guidelines stress the following:

- Updating and modernizing facilities throughout the system using the FRRM information as benchmarks;
- Limiting new construction to “right size” campuses where necessary to address programmatic and enrollment growth needs through innovative academic, facilities and technology solutions;
- Encouraging campuses to “right size” through partial demolition coupled with modernization and programmatic upgrade of remaining space; and
- Continuing to improve energy efficiency of existing as well as new structures; increasing overall campus sustainability.

Finally, a scoring mechanism will again be used by Technical Advisory Teams to group campus projects for further evaluation. The scoring mechanism, shown in Attachment B, correlates to the Department of Finance’s scoring process used in the Governor’s evaluation of projects.

In order to complete the activities necessary to submit a 2008-2013 capital budget for consideration by the Governor and Legislature in 2008, a work plan has been developed and is presented in Attachment C. The core element of this process is the identification of capital needs by each college and university, development of the required predesign and project description documents, and submission to the Chancellor and Board for consideration.

Definitions that are applicable to the capital budget process are contained in Attachment D.

2008-2013 CAPITAL BUDGET GUIDELINES

Many of the following capital budget planning guidelines could be aligned with multiple components of the Strategic Plan. For ease of use, the guidelines have been assigned to one specific category. However, in the actual writing and scoring of the projects, campuses may refer to one or more components of the Strategic Plan that best reflect the proposed project.

1. INCREASE ACCESS AND OPPORTUNITY

- **Planned projects that connect to populations, workforce issues or other areas:** Program development and related capital improvements reflecting increased access for students, particularly non-traditional students, or other means to expand access to higher education.

- **Collaboration:** Expanding access to underserved areas and creating efficiencies through joint use of facilities to support joint and/or distance delivery programs.
• **Facilities right-sizing:** Emphasis given to projects responding to demonstrated demographic or program growth to ensure access for educational and workforce needs. Additionally, campuses that address stable or declining demographics and programs by demolition of underutilized or obsolete square footage and target renovation of other parts of the campus for program enhancement or facilities renewal including **upgrading academic learning space and integration of technology for alternative delivery options,** will also gain emphasis.

• **Operational costs:** Proposed projects must include evidence that the campus can meet estimated operating costs, including existing debt and proposed project debt.

2. **PROMOTE AND MEASURE HIGH QUALITY LEARNING PROGRAMS AND SERVICES**

• **Planning components:** Six-year Board of Trustees capital plan; prior legislative recognition or appropriation; project relationship to current master facilities plan; and completeness of a predesign continue to be important in the evaluation process.

• **Project must have a completed predesign** prior to the final write-up and evaluation by the Technical Advisory Teams. Predesigns must include alternatives or options to the final solution. Options may include modified class scheduling, various initial cost and operational cost ramifications of building new or renovating existing space. Predesign to include specific space utilization relationships and data that directly connect the project to the FRRM for backlog reduction and reinvestment. The FRRM data will be a critical piece of the justification and rationale for the project in the predesign.

• **Space Utilization:** Enhanced and robust use of the learning space improves learning programs and services; and allows improved student access and increased space utilization resulting in cost savings that in turn directly benefits students.

Projects that improve the space utilization of a campus through reprogramming, creative scheduling, renovation or new square footage will be advantaged. For purposes of evaluation, only the current campus-reported space utilization information from the Integrated Student Record System (ISRS) from fall 2005 must be used. This is actual campus space use data with percentage of utilization based on a 32 hour week. Campuses are encouraged to use this specific occupancy and seat usage to explain why renovation or changes in the campus are required. Note that previous space utilization studies are outdated and are not considered valid.

ASF (assignable square feet) may not be used as a benchmark, unless the campus master facilities plan or other recent study clearly describes the current situation. ASF data found in the ISRS system is not accurate (does not contain leased space, campuses have entered different net-to-gross space data, etc.). ASF will not be used as a measure of space; rather only the current space utilization data will be used. (However, GSF/FYE may be used as a high level benchmark. Note that technical college programs generally require large amounts of space and thus this is not as an important benchmark as the number of classrooms or labs and how those spaces are best used in terms of number of classes and number of seats involved.)
Credit Hour production per classroom or lab will continue to be used as a means to describe space utilization and justify new space. This information is found in the ISRS system, but separate from the space utilization data. (Hourly student enrollment by campus is an ITS Management Report, Report Category: Enrollment; Enrollment Indicators: Hours by Campus. The campus can use will have to add the hours reported for Summer, Fall and Spring together to get one full year of credit hour production.)

- **Condition of Facilities (Backlog and Renewal):** Stewardship of existing facilities and on-going maintenance and repair programs enhance the learning experience, affect recruitment and retention, and provide accessibility to programs. Data now available in the 2005 FRRM should be used to describe the backlog of maintenance and repair and acknowledge renewal needs that are satisfied by the proposed project. Updated 2006 campus-generated data will be available in May.

  - Each campus will document the current Facilities Condition Index (FCI) based on current FRRM data. FCI = backlog of deferred maintenance as listed in the FRRM divided by replacement value of the building where the project is located as well as the entire campus. This data should be used as part of a project’s predesign submittal for capital and HEAPR requests. All capital projects for a campus must, in some manner, assist in reducing the backlog or addressing renewal needs unless otherwise justified.

  - Campuses will be scored relative to the positive impact the proposed project will have on:
    - Reducing the backlog of deferred maintenance
    - Reducing overall building and campus FCI
    - Addressing current and future renewal requirements identified in the FRRM

  - Projects will be favored that improve the overall campus or building FCI, particularly where campuses are above the systemwide average FCI.

  - Intent is to reduce the backlog on campuses with FCI’s above the 2005 system average FCI of 14%, and to reduce the overall system backlog by 50% over the next ten years. Campuses with good FCI ratings will not be allowed to “backslide,” but rather will be examined for their renewal needs to maintain or lower the current FCI. The intent is to improve campuses with high FCI’s while still maintaining those campuses that are in acceptable condition. Points will be added to a project that reduces a “high” FCI as well as funding renewal projects that maintain or lower the FCI of campuses with lower than average FCI.

  - Higher Education Asset Preservation and Replacement (HEAPR) projects submitted for the 2008 Capital Budget must be referenced to backlog reduction or reinvestment using the FRRM data. Preference will be given to projects that improve the overall FCI. To augment the planning methodology, campuses will be required to create a 6-year HEAPR plan as they update their Facilities Master Plan similar to the 6-year project specific capital budget request.
Effective use of Repair and Replacement (R&R) funds will also be evaluated as it relates to reduction of the backlog or funding renewal needs. Campuses will also be evaluated on the dollar amount currently spent for Repair and Replacement (R&R) and modernization using operating funds. Demonstrated accomplishments in 2006 as well as proposed 2007 R&R budgeting will be a part of the evaluation.

3. PROVIDE PROGRAMS AND SERVICES INTEGRAL TO STATE AND REGIONAL ECONOMIC NEEDS

- **Partnerships as a key component of the project:** Partnerships with other system institutions to pursue shared learning environments including lab and instructional space that connect faculty, program and students across institutions. Additionally, partnerships with industry that leverage industry knowledge and investment in support of applied research and shared laboratory space.

- **Projects are clearly defined and rationale is compelling:** Description of academic or workforce related programs impacted; specific workforce connection; overall rationale is clear in addition to the information on backlog, reinvestment and space utilization.

- **Projects that bring private funds or other sources of funding will be favored:** Projects that include significant financial participation through use of non-state money will be recognized. However, campuses with limited outside financial resources will not be disadvantaged. Specifics of regional collaboration or partnerships should be detailed in the project narrative.

- **Economic vitality objective** involving workforce development and community partnerships is emphasized. Specifics on how a project will meet high-demand state or regional workforce and/or economic growth needs must be documented.

4. INNOVATION TO MEET CURRENT AND FUTURE EDUCATIONAL NEEDS EFFICIENTLY

- **Creation of innovative learning spaces and instructional delivery models** including construction of instructional laboratories and classrooms to support interactive technologies that transform pedagogy and the learning experience and connect faculty and students from across institutions and beyond.

- **Facilities providing flexibility to support multifunctional class sessions** made possible by technology, including interactive and engaging learning space design that promotes faculty-to-student and student-to-student collaborative learning environments.

- **Design of space that supports multiple uses and services** where students can access a full range of academic and non-academic resources.
- **Collaborations that enable flexibility, innovation and effective use of space.** Proposals demonstrate active collaboration among administrators and faculty, along with staff in facilities, registrar’s office, IT, media and student services to plan new and flexible scheduling for the use of classroom and online facilities. Hybrid classes, for example, might require classrooms and labs at intermittent times during a semester or heavily at semester beginning and end. Plans for use of existing and new space should involve institution-wide discussion about course and semester schedules, ongoing versus intermittent needs for facilities and technologic tools.

- **Creates an innovative education delivery method:** Elements may be leadership in new models of learning and teaching environments; innovative curricula that are shareable through digital repositories; interactive learning technology that takes full advantage of modern research to promote active learning in collaborative virtual communities. Emphasize projects that stimulate critical thinking and growth for skill development that augments economic community development.

- **Planning components:** Six-year Board approved capital plan; updated facilities master plan and completed predesign specifically addressing academic programs, workforce development, facilities renewal and relationship to technology.

- **Solution is “best value for learning:”** Students receive an educational benefit proportional to the cost of the project.

- **Utility and infrastructure must be supportive of the project:** Inadequate capacity or functional obsolescence of utility infrastructure must be addressed and budgeted in the capital request. Documentation and detailed evidence will be required in project predesign noting that existing or potentially renewed utilities and infrastructure (parking, sidewalks, etc.) are able to support the proposed capital project.

**HIGHER EDUCATION ASSET PRESERVATION AND REPLACEMENT (HEAPR)**

An increasingly important component of capital budgets in the last three biennia has been the request for major repair and replacement funding under the Higher Education Asset Preservation and Repair (HEAPR) program. The FY2000, 2002 and 2004 capital requests for HEAPR were $100 million for each biennium; and in FY2006 it was $110 million. This is in line with the top priority of the Board of Trustees for long-term stewardship of the state's investment in existing facilities.

Prior HEAPR programs focused heavily on roof repair and replacement; mechanical and electrical infrastructure repair and replacement; general asset preservation; and improvements for fire and life safety. Projects were developed based on an increased awareness of campus administrations regarding the need to clearly identify and prioritize repair and renewal requirements as well as the knowledge base provided by the 1998-99 system wide Facilities Condition Assessment report and subsequent Office of Chancellor studies. The FY2008 HEAPR component of the capital budget represents the first such budget informed by the new FRRM model.
The 1998-99 Facilities Condition Assessment identified a $498 million (1998 dollars) backlog of repair, maintenance and renewal work across all 53 campuses. While substantial HEAPR and capital funding has been provided in prior capital bonding appropriations, it has been insufficient, even when coupled to the annual operating budget and emphasis on capital project renewal to adequately maintain campus facilities or to reverse a growing backlog of needed repair and renewal. Indeed, the backlog was estimated at $635 million by the FRRM in 2005. Using preliminary 2006 data, the backlog could now be in excess of $660 million (to be confirmed in May). The legislature supported a HEAPR appropriation of $41.5 million in FY2005 and substantial capital renovation work. This will make substantial progress towards stabilizing the backlog; however, continued high level funding for HEAPR is necessary in the years ahead to bring the backlog under control. Accordingly, the 2008 capital budget for HEAPR will once again recommend a funding amount of at least $110 million systemwide.

The 2008-2013 HEAPR guidelines further respond to the need for continued assessment of the condition of physical plant statewide; central management of a roof repair and replacement program (campuses are responsible for annual maintenance and minor repair, and roof project prioritization); analysis of base line data and life expectancy on mechanical and electrical infrastructure systems; analysis of fire, life safety and code compliance issues; allocation of annual operating funds specifically towards physical plant maintenance and repair; and timely delivery of projects funded from the capital HEAPR appropriation.

HEAPR BUDGET GUIDELINES

The 2008 HEAPR program will follow the Board's long established principles for preserving and improving the physical plant infrastructure to support quality education. It will also align with the strategic goal of stewardship of resources. Specifically, the HEAPR program will strive to keep students, staff and the public “warm, safe and dry”:

1. Focus on preservation and renewal to protect the state’s investment in facilities, and to offer high quality, safe, attractive facilities where students can succeed. Stewardship will be reflected by an improvement of the Facilities Condition Index (FCI). Goal will be to reduce high FCI ratings whenever possible or to assure that a campus will continue to maintain a low FCI. A copy of the updated FCI assessment and the project scenario clearly identifying the applicable HEAPR items must be attached to the request.

2. Consider life safety, environmental impacts, energy conservation, operation and maintenance costs, and accessibility issues in context with existing campus resources.

3. Maximize functionality of the facility to accommodate current academic programs.

4. Provide an infrastructure backbone for reliable utility services for all campus activities and to support technology to enhance teaching and learning.

5. Partner with college and university operating budget efforts in maintenance of facilities.

6. Per statute, comply with one or more of the following: code compliance, including health and safety; ADA requirements; hazardous material abatement; access improvement; air quality
improvement; or building or infrastructure repairs necessary to preserve the interior and exterior of existing buildings; and renewal to support existing programs.

7. Projects must be over $25,000 in total cost. Projects that are substantive, complex or exceed $1 million dollars are required to have a predesign study or engineering analysis indicating review of the estimated initial and operational costs of the proposed solution has been made.

8. Planned to guarantee construction delivery within 30 months of June 2008 (encumbrance of all funds by June 30, 2010; expenditure of all funds by December 31, 2010).

PRIORITY FOR HEAPR PROJECTS

To maintain sound facilities, and stressing “warm, safe and dry” campus conditions, priority will be given to the following HEAPR projects:

**Roofs:** Each campus should include roofs identified by their campus roof management report as requiring repair or replacement in 0-4 years. The Office of the Chancellor will determine a reasonable capital roof investment program that matches available state contractor resources for delivery of the program within a 30-month timeframe. Roof requests from campuses will be organized into a 5-year roof replacement budget plan.

**Major mechanical and electrical system repair and replacement:** Many HEAPR items are not “deferred maintenance” inasmuch as they are planned replacement or repair of items that have reached the end of their useful life. Many large HVAC (heating, ventilating and air conditioning) and electrical distribution systems are nearing or exceeding 40 years of age and require replacement. For this category, all mechanical and electrical infrastructure project requests over $1 million must be accompanied by a completed preliminary engineering report funded by the institution. This report will need to study options for repair and replacement, impact of initial cost, operational costs and overall energy efficiency. Preliminary reports should be completed by institutions using operating funds prior to February 2007 for all major infrastructure projects over $1 million. After review by the Office of the Chancellor, projects may be considered for advance design either funded by campus operating or advance HEAPR design funds.

**Fire Protection, Detection and Warning:** The HEAPR budget will continue to focus on fire safety items and code compliance at existing facilities. An effort will be made to fund all high priority fire detection, monitoring, protection and other code related items. A fire detection, monitoring, protection and testing plan should be included in each campus’ asset protection and loss control plan.

**Facilities Condition Index (FCI):** Projects should reduce the building or campus FCI, thus noting the improvement and addressing backlog of deferred maintenance and/or renewal issues. The goal is to reduce the “high” FCI campus ratings, while maintaining or even lowering “low” FCI ratings.
NEXT STEPS IN THE PROCESS:

Per the Work Plan, Attachment C, institutions planning to submit projects for the 2008 capital budget should now be actively working on a predesign document for a project that has emerged from Master Academic and Facilities plans. Office of the Chancellor Facilities and Academic Affairs Units will augment the project review process with additional campus and Office of the Chancellor personnel to provide greater depth in project evaluation from a regional and statewide academic perspective.

Capital budget requests and initial project documentation must be submitted to the Office of the Chancellor in August 2007 for initial 50% predesign identification and for preliminary review by October 27, 2006. Final documentation must be submitted by December 22, 2006.

Technical review of projects is scheduled to take place in January 2007. The scoring guidelines have been modified since the April reading for technical reviews and are contained in Attachment B. Project Analysis Teams composed of campus academic, technology, finance and facilities personnel along with system office representatives will score each project. (Over 50 people participated in the 2006 capital budget process in January 2005.) The results of this scoring process will be presented to the Board in February and March 2007 in preparation for the public hearings. Further review of the projects will be undertaken by staff including analysis of criteria involving distribution of the capital budget by region and institutional type, space utilization, capacity to execute projects, and other planning criteria.

Presidents (or their designees) will present project requests at public hearings to the Finance and Facilities Committee of the Board, Chancellor, and Office of the Chancellor staff.

Following presentations and input from the Finance and Facilities Committee, a final, prioritized project list will be presented to the Leadership Council in April 2007 with an anticipated final capital budget presented to the Board of Trustees in May and, for approval in June 2007.

RECOMMENDED COMMITTEE ACTION:
The Facilities/Finance Policy Committee recommends that the Board of Trustees adopt the following motion.

RECOMMENDED MOTION:
The Board of Trustees approves the FY2008-2013 Capital Budget Guidelines as presented. The Board strongly endorses the concept of improving those facilities and campuses with a higher than average Facilities Condition Index (FCI), while at the same time ensuring those campuses with an acceptable FCI are adequately maintained. Further, the Board urges colleges and universities to adequately budget and spend operating funds for facilities repair and renewal at the target amount of $1.00 per square foot for the 2007-08 bienniums.