June 30, 2009

To: Budget Advisory Committee

From: Bruno Nachtergaele and Stan Nosek
Co-Chairs, Capital & Space Budget Advisory Subcommittee

Re: Transmittal of Capital and Space Budget Advisory Subcommittee Recommendations

Dear Colleagues:

This memo respectfully transmits the recommendations of the Capital and Space Budget Advisory Subcommittee (CSBAS) for consideration by the Budget Advisory Committee (BAC).

Background

The CSBAS is one of five subcommittees charged by the BAC to develop recommendations relating to capital planning and space that might offer financial relief in the face of significant reductions to the University’s budget. In particular:

The immediate charge for each of the committees is to establish guiding principles and priorities to guide budget planning and to recommend specific changes to university business processes. Recommendations are also sought about the most critical programs and services that ought to be protected, to the extent possible. Finally, the committees will be asked to identify ways to reduce or consolidate services and expenses, reallocated resources, and generate new resources.

The CSBAS met eight times during the past five months to discuss and formulate this report. Attachment 1 lists the CSBAS membership.

Planning Principles

The deliberations of the CSBAS were guided by a series of planning principles that were established during early meetings. The principles were continuously adjusted and refined during subsequent meetings as discussion of particular issues highlighted elements of the principles that could be more clearly stated. The principles provided helpful guideposts that enabled the committee to evaluate various ideas. The principles are attached as Attachment 2.

Recommendations

Attachment 3 presents CSBAS recommendations in a matrix format, corresponding to the information requested by the Budget Advisory Committee. Each recommendation is briefly described and the potential for budget savings is discussed. In many cases, our recommendations are not expected to yield significant short-term budget savings. However, significant medium- to long-term savings may be possible if our recommendations are successfully implemented. For each recommendation, the matrix identifies metrics, data sources, and next steps that should be evaluated for implementation, along with suggestions for campus constituents who should be consulted during the detailed evaluation and implementation stage.

In general, our recommendations focus on comprehensively evaluating the capital and space implications of academic planning aspirations, increasing the transparency of the campus capital planning process and providing incentives for more efficient and effective utilization of scarce campus resources, particularly space.
Committee members are concerned that the capital and space requirements for attaining academic planning goals are not fully evaluated prior to undertaking new programs. In particular, we recommend that academic plans include detailed analysis of capital facility costs (e.g., new building or leased space), upgrade of physical and/or additional administrative infrastructure support requirements; and ongoing cost of maintaining appropriate levels of support. Such analysis should include both one-time and ongoing costs for the long term.

Moreover, the committee felt that capital project investment decisions are sometimes made without clear articulation of competing priorities or tradeoffs. The recently published UC Davis Ten Year Capital Financial Plan identifies a process that provides for wider campus participation and input to the capital planning process. This process appears to be a step in the right direction and should be evaluated and improved as necessary over time. Attachment 4 is the process excerpt from the capital plan.

More efficient utilization of campus space could yield significant benefits, however current campus policies do not create incentives for departments to efficiently use space. With nearly nine million square feet of state-supportable space on campus, a one percent increase in the efficiency of overall space utilization represents nearly 90,000 square feet of space. The campus has approximately 350,000 square feet of lease space in the community of Davis at an annual cost of about $5 million. A four percent increase in the space utilization could conceivably eliminate the need for such leases. We recommend implementing policies to provide incentives for more effective space utilization.

The campus should continuously seek ways to more efficiently use scarce resources such as electricity, water, and other utilities. Auxiliary units are inherently incentivized to be efficient because they pay the full cost associated with their enterprises. Centrally funded units do not have the same incentives because the campus pays their bills. We suggest implementing policies that measure, allocate, and provide incentives for efficient use of such centrally funded resources.

The CSBAS appreciates the opportunity to provide these recommendations and looks forward to responding to any questions or providing additional clarification if needed.

Respectfully submitted,

Stan Nosek, Co-Chair  
Vice Chancellor, Office of Administration

Bruno Nachtergale, Co-Chair  
Chair, Academic Senate Planning and Budget Committee

Attachments:
1. Capital and Space Budget Advisory Subcommittee Membership
2. Capital and Space Budget Advisory Subcommittee Planning Principles
3. Capital and Space Budget Advisory Subcommittee Recommendations Matrix
Attachment 1

Capital and Space Budget Advisory Subcommittee
Committee Membership
June 30, 2009

Committee Members:
Bruno Nachtergaele, Professor and Chair, Mathematics (Committee Co-Chair)
Stan Nosek, Vice Chancellor of Administration (Committee Co-Chair)

Diane Bahr, Manager, Communications Resources
Ted DeJong, Professor, Plant Sciences
Marj Dickinson, Assistant Vice Chancellor, University Relations
Andy Hargadon, Associate Professor, Graduate School of Management
Ines Hernandez-Avila, Professor, Native American Studies
Donna Olsson, Executive Assistant Dean, College of Biological Sciences
John Pascoe, Professor and Executive Associate Dean, School of Veterinary Medicine
Thomas Rush, Manager, UC Davis Health System Facilities Design and Construction
Adam Talley, Senior Assistant Dean, School of Law
Steve Tharratt, Professor, School of Medicine
John Stenzel, Lecturer, University Writing Program

Staff:
Mike Sheehan, Associate Director, Student Housing
Karl Mohr, Assistant Vice Chancellor, Resource Management and Planning
Attachment 2

Budget Advisory Committee
Capital and Space Subcommittee

Draft Capital and Space Planning Principles
Proposed Final – June 23, 2009

1. The academic planning process should iteratively evaluate the resource implications of academic aspirations, including capital and space requirements.

2. UC Davis should reaffirm its long-standing commitment to sustainability and stewardship in all aspects of its planning and operations. Sustainability at UC Davis should encompass financial sustainability of the academic enterprise. Financial sustainability with respect to capital projects and space include cost-effective construction of facilities needed to support the campus mission, the full costs of operating and maintaining facilities at appropriate service levels, and the periodic need to renew and update facilities. UC has system-wide sustainability policies that require new buildings to exceed Title 24 of the California Energy Code by 20%, and to strive to achieve a LEED “silver” rating or higher for all new buildings.

3. Capital facilities planning and design should consider and, to the extent possible, enable program modifications in acknowledgment that instruction and research techniques surely change over time.

4. The campus should implement policies to more accurately reflect that space and the utilities that support space are valuable resources and to create financial incentives for efficient use of such resources.

5. The campus should create an inclusive, transparent and accountable decision making process for capital funding and streamline capital planning processes.

6. Capital facility standards should balance program needs with cost-effectiveness, including life-cycle cost analysis that accounts for operation and maintenance.

7. Space standards should be periodically reviewed and modified to reflect changes in program needs.
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<th>Idea/Recommendation</th>
<th>Description</th>
<th>Potential Budget Savings</th>
<th>Metrics/Data sources/Next steps</th>
<th>Who should be consulted?</th>
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<td>1. Proposed academic plans should contain and be evaluated for their financial consequences – both capital and operating – as part of the plan review process. Academic plans need to include financial planning. Such analyses should include capital facility costs (e.g., new building or leased space), upgrade of physical and/or additional administrative infrastructure support requirements; and ongoing cost of maintaining appropriate levels of support. The analysis should include both one-time and ongoing costs.</td>
<td>The academic planning process invites articulation of visions and aspirations to grow academic and research programs. However, generally there is little if any financial analysis of proposed academic plans or programs. This recommendation suggests that such financial analysis be incorporated in to the academic planning process to insure that decisions to pursue academic initiatives are informed.</td>
<td>Immediate budget savings are likely to be minimal, and long term budget savings are not necessarily implied. The primary purpose of the recommendation is to better inform decision making and establishment of academic priorities. Note: There may be up-front costs in order to assist in preparing the Colleges for the needed financial planning. A model for this analysis and engagement is the assessment provided by ORMP in support of federal stimulus program grant funding opportunities.</td>
<td>The analysis envisioned should quantify the full range of costs of providing appropriate levels of service and support to initiatives proposed in the academic plan. Such costs include: - Personnel required to support the initiative; - capital costs of new or renovated space to accommodate the initiative; - annual cost of operating and maintaining such space including energy and other utility costs; - extraordinary administrative or regulatory program requirements; Provide tools to assist with the calculations, staff support from ORMP, process needed to develop and review financials.</td>
<td>Academic program advocates, the Academic Senate, regulatory service providers, and other campus constituents as necessary to inform the analysis. CODVC should be involved in this process.</td>
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## Capital and Space Budget: Advisory Subcommittee
### Subcommittee Report Topics Matrix

**Final Proposed for Submission to Budget Advisory Committee – June 23, 2009**

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<td>2. Implement policies that measure, allocate and provide incentives for efficient use of space</td>
<td>Current space allocation processes create little incentive for efficient and effective use of space. While the campus maintains information about how space is assigned, there is no formal utilization assessment to ensure appropriate use of assigned space. Space requests are generally made “on the margin,” without detailed analysis as to whether existing space is being appropriately utilized. In addition, units have little external incentive to address underutilized space.</td>
<td>More efficient space utilization may enable releasing off-campus lease space and related lease costs. Longer term budget savings could be realized from reducing the amount of new or renovated space needed to serve program needs. The campus has nearly nine million square feet of state-supportable space. Thus, for every one percent gain in space utilization efficiency, the campus could realize nearly 90,000 square feet of space, saving more than $1 million per year in lease costs. Currently, the campus has approximately 350,000 square feet of lease space in Davis.</td>
<td>Some campuses have implemented or considered implementing space charge programs to create financial incentives; next steps should include a survey of such programs to understand “best practices” and build upon the work and experience of others. Possible ideas include creating financial incentives (e.g. space “charges” or “rebates”) and/or a more formalized space utilization analysis process. One of the key next steps will be to define and develop the baseline space inventory which would be used in such a program.</td>
<td>Unit-level space coordinators; Academic Senate; Council of Deans and Vice Chancellors.</td>
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<td>3. Create an inclusive, transparent and accountable prioritization and decision making process for capital funding and streamline capital planning processes.</td>
<td>The committee is concerned that the process by which capital funding priorities are established and implemented is not readily understood by the campus community. The recently published Ten-Year Capital Financial Plan describes a process that would reengage the Academic Senate and Council of Deans and Vice Chancellors in an annual cycle of updating the capital plan.</td>
<td>Immediate budget savings are likely to be minimal, and long term budget savings are not necessarily implied. The primary purpose of the recommendation is to help the campus community understand the issues and analysis that lead to the establishment of campus capital investment priorities.</td>
<td>Evaluate the renewed consultation process outlined in the Ten-Year Capital Financial Plan and amend as necessary. Evaluate how other campuses conduct their capital planning consultation process. Clearly define the new process, how it will be shared with the campus, how all constituents are represented and who/what group has final decision making authority. The capital planning process description from the Ten Year Capital Plan is attached to this report.</td>
<td>Academic Senate, Council of Deans and Vice Chancellors. Define how small departments and academic units are represented in this process.</td>
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<td>(Principles 1 and 5)</td>
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<td>4. Evaluate and determine an appropriate balance between investing in new capital facilities, reinvesting in existing facilities and addressing deferred maintenance needs with the goal being to maintain appropriate standards of care. (Principles 3 &amp; 6)</td>
<td>The Committee is concerned that the capital plan may have recently focused on construction of new facilities at the expense of maintaining the existing campus physical plant. A plan needs to be developed to address the deferred maintenance needs of the campus.</td>
<td>Budget savings are not necessarily implied. The primary purpose of the recommendation is to thoughtfully consider investments needed to maintain the quality of the existing campus environment.</td>
<td>Evaluate capital investment programs of universities with comparable program breadth, facilities and infrastructure systems.</td>
<td>Academic Senate, Council of Deans and Vice Chancellors.</td>
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<td>5. Implement policies that measure, allocate and incentivize efficient use of energy</td>
<td>Efficient utilization of scarce resources should always be a priority, all the more so in times of extraordinary budget duress. Managers and users of campus resources should seek ways to align incentives for efficient resource uses. At least, providing usage data that compares utility use across campus can raise awareness and thus create savings. The Utilities Consumption Dashboard (<a href="http://facilities.ucdavis.edu/dashboard/">http://facilities.ucdavis.edu/dashboard/</a>) is one example of an information sharing tool. A further step would provide financial incentives by allocating resource costs to end users. The campus Climate Action Plan should consider this approach in evaluating strategies to achieve campus and system-wide energy conservation goals.</td>
<td>The campus pays approximately $24 million annually for gas and electricity in centrally funded space. Thus, a one percent reduction in overall use is equivalent to about $240,000 in annual budget savings. Similar metrics can be developed for other campus utilities. A potential benefit of increased efficiency will be a reduced need for increasing central plant capacity.</td>
<td>Evaluate methods for measuring (e.g., metering) use of campus utilities and infrastructure systems and communicating with campus users to increase awareness of consumption patterns. Evaluate methods for allocating utility and infrastructure costs to end users.</td>
<td>Resource managers; Academic Senate, Council of Deans and Vice Chancellors.</td>
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Attachment 4
(Excerpted from Ten-Year Capital Financial Plan)

Capital Planning Process

Capital planning is a continuous and iterative process that evaluates the capital needs identified by academic plans and assesses alternatives to meet such needs in the context of anticipated capital resources. The planning process provides opportunities for participation by students, faculty, staff, administration, and the design professional community. Importantly, in addition to determining priorities for the allocation of capital resources, the process creates a framework of accountability to ensure that capital resources are managed wisely and appropriately.

Important elements of the campus capital planning process include:

- Meeting with academic and administrative leadership to discuss opportunities, challenges, and priorities;
- Aligning identified priorities with anticipated capital resources;
- Identifying tradeoffs and issues associated with capital investments (e.g., use of external financing that creates dollar-for-dollar opportunity costs in the operating budget and ongoing operating costs of capital facilities);
- Presenting alternatives to campus leadership that illustrate how the capital plan meets campus priorities.

Implementation

Once a capital project gains standing within the plan and reaches the point of implementation, the project is formally reviewed and approved at three distinct points in its development: definition, programming, and design. This section describes the nature of the reviews and approvals that occur at these phases of each project.

A Project Brief establishes the initial parameters of a project’s scope, program, planning and design objectives. Project Briefs are prepared by the Capital Planning unit within the Office of Resource Management and Planning, with assistance from program experts, Architects & Engineers and Campus Planning. The Project Brief is reviewed and approved by the Provost and Executive Vice Chancellor, allowing the project to proceed into the subsequent programming phase.

A Project Brief typically includes:

- Programmatic objectives;
- Planning & design objectives in accordance with the campus Physical Design Framework;
- Site selection;
- Funding sources;
- Conceptual cost model;
- Conceptual project schedule.

The subsequent phase of project development involves more robust definition of the project’s scope, program, planning and design objectives and cost model. The resulting Project Program document provides the information needed to efficiently and effectively begin the subsequent design process. A Project Program typically includes:

- Programmatic and functional requirements;
- Planning & design objectives - in accordance with this Design Framework;
- Area requirements and space tabulations;
- Sustainable design objectives in accordance with sustainability policy;
- Building systems requirements;
- Cost model;
- Project schedule.
Oversight of this programming effort is the responsibility of the Project Advisory Committee, which ensures that the program is developed consistent with the approved Project Brief. This committee is appointed by the Provost and Executive Vice Chancellor and typically consists of the following individuals:

- Program Representative Vice Chancellor or Dean – Co Chair;
- Vice Chancellor Resource Management & Planning – Co Chair;
- Key program representatives (faculty & staff);
- Students;
- Representatives from Architects & Engineers, Capital Planning and Campus Planning units;
- Other key stakeholders from the campus community.

The Project Program is reviewed and approved by the Chancellor’s Committee on Planning & Design. Upon approval by the committee, a separate executive summary document, the Project Planning Guide is issued. Approval of the Project Program and issuance of the Project Planning Guide allows the project to proceed into the subsequent design phase. The Chancellor’s Committee on Planning & Design is comprised as follows:

- Chancellor – Chair;
- Provost and Executive Vice Chancellor;
- Vice Chancellor Resource Management & Planning;
- Vice Chancellor Administration;
- Vice Chancellor Student Affairs;
- Vice Chancellor University Relations.

The campus capital planning and implementation process provides opportunities for the campus community to participate in shaping the capital plan and ensures appropriate oversight and accountability to the plan.