

The Regents of the University of California

COMMITTEE ON GROUNDS AND BUILDINGS

January 17, 2006

The Committee on Grounds and Buildings met on the above date at the Price Center, San Diego campus.

Members present: Regents Juline, Ruiz, and Schilling; Advisory members Oakley and Miller

In attendance: Regents-designate Coombs and Ledesma, Faculty Representative Brunk, Associate Secretary Shaw, Senior Vice President Mullinix, Vice President Hershman, Chancellors Córdova, Yang, and Fox, and Recording Secretary Bryan

The meeting convened at 11:30 a.m. with Committee Vice Chair Juline presiding. Due to the lack of a quorum, all action was deferred until the Committee reconvened on January 18 (see page 39 below).

1. **APPROVAL OF MINUTES OF PREVIOUS MEETING**

The minutes of the meetings of September 20 and November 15, 2005 were submitted for approval.

2. **AMENDMENT OF THE BUDGET FOR CAPITAL IMPROVEMENTS AND THE CAPITAL IMPROVEMENT PROGRAM FOR NORTH CAMPUS HOUSING, PHASE 1, SAN DIEGO CAMPUS**

The President recommended that the 2005-06 Budget for Capital Improvements and the Capital Improvement Program be amended to include the following project:

San Diego: North Campus Housing, Phase 1 – preliminary plans – \$5 million to be funded from the San Diego campus' share of University of California Housing System Net Revenue Reserves.

It was recalled that the San Diego campus requested approval to begin design on the North Campus Housing, Phase 1 project by using University of California Housing System Net Revenue Reserves in the amount of \$5 million. The campus proposes to initiate planning of on-campus housing for single undergraduate transfer and upper-division students to improve the academic, extracurricular, and social experiences of these students. Phase 1 will provide approximately 500 new student beds in furnished apartments and construct required infrastructure.

The campus plans to propose a second phase of housing in the future. Phase 2 will provide additional capacity and bring the project total up to 1,000 beds.

Overall demand for additional student housing at the San Diego campus is robust. The primary objective of the proposed project is to provide on-campus housing for many of the 1,900 new transfer students who enroll annually at UCSD. The entire inventory of undergraduate housing is being used to satisfy demand from first- and second-year undergraduate students. This use of the existing supply of undergraduate housing by lower-division students is precluding on-campus beds from being available for transfer and upper-division students. With occupancy of the project, transfer students will be afforded an appropriate opportunity to become fully acclimated into the academic life of the campus, and continuing upper-division students will benefit also.

In a report on undergraduate student experience and satisfaction submitted to the chancellor in September 2005 by a committee mainly comprising UCSD students, the academic advantages of living on campus, especially for transfer students, was emphasized. Further, UCSD students are extremely interested in developing additional on-campus housing given the high cost of housing in the greater San Diego region, and not just the adjacent La Jolla and University City communities. The differential between on-campus housing fees and off-campus market rents increases dramatically over time because debt service payments are fixed and account for over half of the costs incurred to operate the campus housing program, and because University housing fees are not affected by private market profit considerations. The project will increase the supply of affordable student housing, and its cost benefits will become more pronounced over time. In addition to cost considerations, the supply of rental units in the community adjacent to UCSD is diminishing, as more than a thousand apartment units in the La Jolla-University City community have been converted into condominiums over the past few years.

The project will advance a key element of the housing goal adopted by the San Diego campus and stated in the 2004 Long Range Development Plan – to accommodate 50 percent of all undergraduate students in campus-owned facilities. In 2005-06, about 6,800 undergraduates (or 33 percent) will be housed in residence halls and apartments. The campus' housing supply is currently 3,520 beds short of meeting the 50 percent goal, and undergraduate enrollment at the San Diego campus is expected to continue to grow through 2010. Development of the project is consistent with campus plans. It promises to provide an increased supply of affordable housing for transfer and upper-division students and enhance the recruitment and retention of these students.

Project Description

The North Campus Housing, Phase 1 and 2 projects will provide apartment units comprised of two, three, and four bedrooms in both high-rise and low-rise buildings. Each apartment will have a living-dining-kitchen area, shared bathroom(s), and a storage area. The non-residential space (approximately 9,500 gsf) will include common spaces such as vending and mail areas, administrative offices, and limited retail space such as a bookstore and café. The housing will be located on the main campus' North Campus neighborhood, within walking distance of the Pangea and Hopkins parking structures.

The specific scopes of Phases 1 and 2 will be determined during the preparation of Preliminary Plans, when the campus determines the number of beds that can be constructed. It is expected that Phase 1 will be approximately 170,000 gsf in low-rise buildings of three- to four-story wood and steel construction as well as the construction of the supporting non-residential support spaces. As part of the Preliminary Plans work for Phase 1, the campus will explore various phasing options to ensure the maximum operational and cost efficiencies for building in two phases.

Occupancy of Phase 1 is planned for late summer 2009, and occupancy of Phase 2 is expected to follow shortly thereafter in 2010.

Green Building Policy and Clean Energy Standard

The project will comply with the Presidential Policy for Green Building Design and Clean Energy Standards dated June 16, 2004. As required by this policy, the project will adopt the principals of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements. Specific information regarding energy efficiency and sustainability will be provided when the project is presented for design approval.

Environmental Consideration

In accordance with the University of California guidelines for the implementation of the California Environmental Quality Act of 1970, an environmental impact analysis will be prepared for consideration by The Regents in conjunction with the project design review and approval at a future meeting.

Funding Plan

The total project cost for Phase 1 is expected to be approximately \$56 million to \$66 million. Expected fund sources will include external financing and the San Diego campus' share of the UCHS Net Revenue Reserves. Payment of the debt service will be from the San Diego campus' share of the UCHS annual net revenues

Future Regental Action

At the conclusion of the proposed preliminary design phase, the campus will return to The Regents to request amendments of the Budget for Capital Improvements and the Capital Improvement Program to advance the Phase 1 project (preliminary plans, working drawings, construction and equipment) and seek approval of external financing. Approval of the budget for Phase 2 will be requested at a later date.

[At this point, Committee Chair Hopkinson joined the meeting.]

Chancellor Fox and Vice Chancellor Watson presented slides illustrating the design.

Regent Ruiz questioned the high cost of beginning the preliminary plans. Vice Chancellor Watson explained that the campus wants to move forward quickly toward the more detailed design and construction phase. The preliminary planning must be fairly detailed and will also address a second construction phase. The campus hopes to return to the Committee for design approval by November 2006 in order to open the facility in summer 2009.

In response to a question asked by Regent Schilling, Chancellor Fox reported that the community is supportive of the campus' long range planning and has responded favorably to campus expansion. Mr. Watson noted that housing more students on campus diminishes traffic and other impacts on the neighboring communities.

Faculty Representative Oakley was supportive of the plan's concept; however, he noted that concerns have been aired in previous meetings of the Committee about the difficulty of making accurate predictions of construction costs. He cited a recent example of a building which came in at 40 percent over budget. High fees had been paid to a consultant, with no recourse for what turned out to be erroneous figures. He asked what steps had been taken in this request for \$5 million in preliminary planning funds to avoid the problem of underestimating costs. Assistant Vice Chancellor Hellmann responded that the campus is extremely concerned about construction costs. Part of the task in the preliminary phase is to develop a scheme for accurate costing. The challenge is that the construction market has been difficult to predict. The services of cost estimators will be sought, and every attempt will be made to control costs going forward. No definitive decision has been made as to how the project will be delivered. Some methods may offer opportunities to shift costs to other entities.

Committee Chair Hopkinson believed that even if the design fees include preliminary plans for a second phase, they would amount to 5 percent per project, which seemed excessive. She asked whether the project was in the campus' five-year capital plan and Long Range Development Plan. Mr. Hellmann indicated that the project is in both plans. He explained that the \$5 million is not only for fees; it will take the project through the environmental documentation process, the schematic design, and the design development. The schematic design portion will cover the full build out of the project. Those fees will include the cost estimating, potentially the construction management, and the University oversight. Mr. Hellmann could not provide an estimate for total fees because the scope of the project is not yet known. Approval is being sought in terms of a range of between \$56 million and \$66 million for the first phase. He reported that the preliminary plans phase for UC State-funded projects is typically budgeted for 4.5 percent to 5 percent of the project.

Regent Juline asked whether the first phase would address the displaced parking and other parking issues associated with the project. Mr. Hellmann responded that the campus' transportation parking plan incorporates this project. The campus is in the process of building a 1,400-space parking garage that will in large part replace the parking spaces lost to the housing project.

In response to a further question asked by Regent Juline, Chancellor Fox confirmed that debt service payments account for over half of the cost incurred to operate the campus housing program. Vice Chancellor Watson noted that because it is growing, the San Diego campus has built many student housing facilities in the past few years. Inflation has pushed up the cost of construction and caused the campus to move into a period of phased construction.

[For speakers' comments, refer to the minutes of the January 17 Committee of the Whole.]

[At this point, Regent Hopkinson assumed the Chair.]

3. **AMENDMENT OF THE BUDGET FOR CAPITAL IMPROVEMENTS AND THE CAPITAL IMPROVEMENT PROGRAM AND APPROVAL OF EXTERNAL FINANCING FOR UCSD MEDICAL CENTER CARDIOVASCULAR CENTER AND THORNTON HOSPITAL EXPANSION, SAN DIEGO CAMPUS**

The President recommended that:

- A. The 2005-06 Budget for Capital Improvements and the Capital Improvement Program be amended to include the following project:

San Diego Campus: UCSD Medical Center Cardiovascular Center and Thornton Hospital Expansion – preliminary plans, working drawings, construction, and equipment – \$136,476,000 to be funded from external financing (\$65,000,000), gifts (\$30,000,000), and hospital reserves (\$41,476,000).

- B. The President be authorized to obtain external financing not to exceed \$65,000,000 to finance the project listed in A. above, subject to the following conditions:
 - (1) Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.
 - (2) Repayment of the debt shall be from gross revenues of the UC San Diego Medical Center funds.
 - (3) The general credit of The Regents shall not be pledged.
- C. The Officers of The Regents be authorized to provide certification to the lender that interest paid by The Regents is excluded from gross income for purposes of federal income taxation under existing law.
- D. The Officers of The Regents be authorized to execute all documents necessary in connection with the above.

It was recalled that the San Diego campus proposes expansion of the John M. and Sally B. Thornton Hospital (Thornton Hospital) and the construction of a consolidated Cardiovascular Center (CVC). The addition will be approximately 75,180 asf, with 34 percent of the building initially shelled. In May 2004, The Regents approved preliminary plans of \$3,500,000 for the proposed project at an estimated total project cost of \$90,000,000 to \$100,000,000. Due to inflation in the construction market and continuing refinement of clinical market share and volume projections, the estimated project cost has increased by 40 percent.

The expansion is necessary to:

- Relieve pressing space limitations and create capacity for future volume growth at Thornton Hospital; allow UCSD's health system to meet the medical needs of San Diego's rapidly growing population, including an increasing number of complex cases as San Diego's over-65 population expands; provide for expanded cardiovascular (CV) services, with elective CV procedures centralized at Thornton Hospital;
- Position UCSD's health system to maintain market share and a favorable payor mix and remain competitive into the future; and
- Support the teaching and research missions of UCSD Health Sciences programs.

The clinical delivery system supporting UCSD's School of Medicine and the Skaggs School of Pharmacy and Pharmaceutical Sciences is based primarily in two distinct regions: Hillcrest, about 13 miles south of the UCSD campus in La Jolla, and on UCSD's east campus, contiguous with the main campus.

UCSD Medical Center-Hillcrest has served as UCSD's main hospital since the University assumed operation and in 1966 purchased the facility from the County of San Diego. Originally built as a county hospital, the facility has undergone substantial renovation since it was acquired. Since 2001, a total of \$72.2 million has been allocated to repair and maintain the aging infrastructure and to address immediate seismic safety requirements. This facility is inadequate to support the level of patient care, clinical research, and teaching activities appropriate for one of the nation's leading university medical centers. The main hospital in Hillcrest is licensed to operate 386 beds but currently maintains only 352 beds due to deficient space conditions.

The 119-bed Thornton Hospital was opened on the east campus in 1993, with the goal of improving access to UCSD's health system for San Diego's growing North City and North County population. Since its opening, patient volume has steadily increased, and the infusion of new patients has led to a more favorable payor mix and a positive margin for the system, which is critical for UCSD to continue serving a disproportionate share of the region's under-insured and uninsured. In FY2005, Thornton Hospital accounted for 25 percent of the system's discharges but contributed nearly 80 percent of the system's excess revenue over expenses.

Over the past decade, Thornton Hospital has evolved from a general medical-surgical hospital to become a true university hospital supporting all of the missions of the UCSD Health Sciences program. It is the anchor for the UCSD medical complex in La Jolla which includes the Perlman Ambulatory Care Center, the Shiley Eye Center, and the Rebecca and John Moores UCSD Cancer Center. It is the center for a number of highly specialized clinical programs, including oncology and bone marrow transplantation, and pulmonary thromboendarterectomy. Given its proximity to UCSD research laboratories on the main campus and the biotechnology-research corridor surrounding the campus, Thornton Hospital has emerged as a regional center for clinical research and translational medicine. Expansion is essential for the campus to extend its clinical research activities and maintain and increase its share of the patient market as the population grows. The project is compatible with long-range replacement or expansion scenarios for UCSD's hospitals and is key to the system's continued success.

Cardiovascular Program

The project also entails consolidation of UCSD's comprehensive cardiovascular services that are currently fragmented across several sites. Supported by philanthropy and named the Sulpizio Family Cardiovascular Center in recognition of a leadership gift by Richard and Maria Sulpizio, the new state-of-the-art facility would centralize patient care, clinical research, and training activities in heart and vascular disease and stroke management. With completion of this project, emergency cardiovascular services would continue to be provided at the Hillcrest Medical Center.

UCSD's cardiovascular program includes the following specialties: cardiology, cardiothoracic surgery, pulmonary thromboendarterectomy, electrophysiology, vascular surgery, heart transplant, lung transplant, and stroke treatment. The cardiovascular program is a leader in clinical research and in several clinical services:

- The pulmonary thromboendarterectomy program is the world's largest;
- The electrophysiology program, which includes ablation therapy, is the region's largest; and
- The stroke treatment program was ranked second in the nation by the University Health System Consortium and recently achieved Joint Commission on Accreditation of Healthcare Organizations Stroke Center Certification status.

Cardiovascular diseases and stroke are the leading causes of death and disability in the United States. In 2002, 16.5 percent of total discharges in San Diego County were related to CV disease. This would increase to 18.4 percent of total discharges by 2012 due to the aging population.

Due to various factors, including program fragmentation and a need for more clinicians, whose recruitment is under way, several of UCSD's cardiovascular services have not been able to grow to maintain market share. Completion of the proposed project will establish the necessary conditions for this program to meet patient needs and demands, concurrent with population growth and market projections.

The project meets the University's goal of locating on the UCSD campus multidisciplinary institutes dedicated to prevention and improved treatment of major diseases. Successful examples of this model are the Shiley Eye Center and UCSD's National Cancer Institute-designated Comprehensive Cancer Center, the Rebecca and John Moores Cancer Center, which opened earlier this year on the east campus. Programs in patient care, research, and community education are located in a dedicated facility, with Thornton Hospital providing highly specialized medical services supporting the programs, and researchers engaged in collaborative projects with colleagues on campus and the surrounding biotech and pharmaceutical communities. By bringing together researchers and clinicians in close proximity to the scientific and educational resources of the UCSD campus and surrounding community, the resulting synergies will improve care delivery, accelerate the development of new diagnostic and treatment technologies, and optimally support the training of translational scientists and clinical specialists to provide patient care and carry out research into the future.

Population Growth/Demographic Changes

As noted previously, the population of the North City Metropolitan Statistical Area surrounding Thornton Hospital is projected to increase by 100,000 adults by 2010; moreover, through 2007, 30 percent of San Diego's new households are expected to be established in this area. Further, the demographic profile of the new residents in this area is projected to be increasingly and heavily skewed toward the over-65 population. Growth in the population of senior citizens will result in increased demand for services provided by Thornton Hospital, including emergency and scheduled cardiovascular services. Roughly 50 percent of Thornton's cardiovascular-related admissions come through the Emergency Department. Expansion of facilities will be necessary for Thornton Hospital to attract and properly serve the medical needs of this growing population.

In addition, for UCSD Medical Center to maintain its ability to serve the San Diego region as a major provider of health care for underinsured and indigent patients, it is essential that the San Diego system maintain a sound and solvent financial position. Though UCSD Medical Center cares for about 8 percent of the San Diego inpatient market, it cares for 36 percent of the region's uninsured. Given the likelihood of continuing reductions in publicly funded health care service programs, it is essential that the system continue to serve patients from all economic strata and maintain its share of insured and Medicare patients to maintain financial stability. It has become increasingly difficult to meet current clinical demands and pursue opportunities for program and volume growth at Thornton Hospital; hospital discharges have reached a plateau due to capacity limitations.

- Occupancy of Thornton Hospital's intensive care unit (ICU) beds is consistently high, with current supply precluding the growth of critical care programs that require ICU support. ICU beds exceeded 80 percent occupancy 40 percent of the days during the past year and reached or exceeded 100 percent occupancy almost 10 percent of the time. Thornton Hospital has only 12 ICU beds, just 10 percent

of its total general medical-surgical bed capacity; this is well below the 20-25 percent standard range that typifies current academic medical centers.

- The existing seven operating rooms are insufficient to accommodate the projected growth in demand for cardiovascular surgeries and the types of specialized procedures and equipment needed to provide those services. Surgical cases are expected to grow from 4,025 in FY2005 to 5,540 in FY2014. The projected growth of operating room hours – a 6,100 hour increase by 2008-09 alone – will necessitate two additional ORs.
- Thornton Hospital’s emergency department currently accommodates 20,598 annual visits in 11 treatment stations. Based on these volumes and levels of patient acuteness, a total of 14 emergency department stations is justified. Projections assuming moderate growth of activity in Thornton’s emergency department indicate the need for a total of 16 stations plus observation beds to meet demand through 2014.
- Diagnostic and therapeutic services, including radiology, laboratory, and cardiac catheterization laboratories, must also expand to support projected growth. Thornton Hospital has two catheterization laboratories which had 1,135 cases in FY 2005. This volume is projected to grow to 4,325 cases by FY 2014 and will require the development of at least two additional catheterization laboratories at Thornton Hospital.

Project Description

The proposed expansion will total 75,180 asf, including 46,850 asf of built-out space consisting of:

- 4,900 asf for the cardiovascular outpatient clinic, including ten examination rooms, diagnostic and treatment services;
- 3,060 asf for the non-invasive cardiology suite;
- 7,340 asf for the emergency department, including additional treatment stations, observation beds, and a larger waiting room;
- 770 asf for the radiology department;
- 2,140 asf for two additional operating rooms;
- 5,210 asf for two additional cardiac catheterization laboratories;
- 5,020 asf for the pre- and post-cardiac procedure unit, including 12 daybeds;
- 11,660 asf for 18 additional inpatient beds (ICU and IMU);
- 1,150 asf for a satellite pharmacy;
- 4,510 asf for 15 academic offices; and
- 1,090 asf of lobby-public space.

Due to budget constraints, approximately 34 percent of the building will be shelled and built out in the future when additional funds are available. Subsequent actions will complete additional exam rooms for the cardiovascular outpatient clinic, additional

procedural spaces that can be used either as operating rooms or cardiac catheterization laboratories, additional intermediate medical unit beds, additional exam and treatment rooms for the emergency department, and additional academic offices. At initial build out, 18 licensed beds will be added to the existing 119 beds and an additional 12 “daybeds” will be added for pre- and post-surgery procedures.

Construction is expected to begin in December 2007, with completion in December 2009. The expansion will be located to the north of the existing Thornton Hospital.

Green Building Design and Clean Energy Standards

While the University’s Policy for Green Building Design and Clean Energy Standards does not apply to acute care facilities such as the proposed project, the project will incorporate principles of energy efficiency and sustainability to the extent possible, consistent with budgetary constraints and regulatory and programmatic requirements.

CEQA Classification

In accordance with the University of California guidelines for the implementation of the California Environmental Quality Act (CEQA), a Tiered Initial Study-Mitigated Negative Declaration will be prepared for consideration by The Regents in conjunction with the project design review and approval at a future meeting.

Financial Feasibility

The total project cost of \$136,476,000 will be funded from external financing (\$65,000,000), gift funds (\$30,000,000) and hospital reserves (\$41,476,000).

As of November 2005 the status of gifts for the Cardiovascular Center project is as follows:

Gifts in Hand	\$ 8,800,000
Gifts Pledged	18,100,000
Gifts to Be Raised	<u>3,100,000</u>
Total Gifts	\$ 30,000,000

Of the total gift funds, it is anticipated that \$15,000,000 will be in hand at the time of construction bidding. If all of the gift funds are not in hand at the time of construction bidding, the Medical Center will provide hospital reserves necessary to comply with Regental policy regarding bid and award so that the project may proceed, and will fund any shortfall of the gift collections during the construction period. Assuming 30-year financing of \$65,000,000 at 6.125 percent interest, the average annual debt service for the project will be \$4,785,500. Payment of the debt service would be from gross revenues of the UCSD Medical Center funds.

Projected Financial Performance

Financial projections are based on assumptions from the Office of the President, local assumptions for years beyond 2005, and the opening of the proposed project by the end of FY 2010. The local assumptions are based on a review of (1) UCSD's recent service mix and financial performance; (2) the occupancy and outpatient volume levels experienced in the past few years; (3) projections of continued revenue-program enhancements, including those provided by the project; and (4) projections of increased patient volume growth due to population growth in the area based on data provided by the San Diego Association of Governments. It is anticipated that the Medical Center would maintain its overall market share during the forecast period.

Average inpatient daily census will increase from 349 in 2005 to 399 in 2013 as a result of continued program enhancements, including those provided as a result of the project and projected population growth in UCSD's service area. Ambulatory clinic and emergency room visits will increase from 542,000 in 2005 to over 668,000 by 2013 as a result of population growth, the opening in early 2006 of the Moores UCSD Cancer Center, and the continued trend toward outpatient treatment. In addition, emergency room visits will increase at Thornton Hospital as the project provides additional emergency room treatment stations.

Total revenue will increase from \$544 million in 2005 to \$861 million in 2013 as a result of projected patient volume growth, some changes in payor mix due to the aging of the population, and ongoing strategies to optimize reimbursement through improved revenue capture and contracting efforts. In addition, management has estimated the impact of Medi-Cal financing reform, including the amount of funds available under the Disproportionate Share Hospital/Safety Net Care Fund and conservative projections regarding growth in Certified Public Expenditures-based reimbursement.

Projected operating expenses will increase from \$487 million in 2005 to \$798 million in 2013 due to increases in patient volumes and the impact of inflation. Projected salary and benefit expenses will increase and average 5 percent to 6 percent annually, except for some larger increases anticipated in 2006 and 2007 as a result of nursing labor negotiations. Costs for medical and other supplies, as well as pharmaceuticals and blood products, are projected to increase from 4 percent to 6 percent annually. Depreciation and interest expense projections incorporate the proposed financing and building costs for the project.

The projections include assumptions of employer contributions to the retirement system beginning FY 2008.

Net income is projected to increase from \$32 million in 2006 (5.9 percent margin) to \$44 million (6.2 percent margin) in 2010, the year before the opening of the project. Net income will decline slightly to \$43 (5.7 percent margin) million in 2011 with the opening of the project, when additional depreciation and interest expense are incurred.

Throughout the projection period, the Medical Center's key financial ratios remain strong. The level of days of cash on hand is projected to decline to 61 days in 2010 as a result of funding the project but will grow to 76 days by 2013.

Sensitivity analyses were performed to evaluate the impact on income and other key financial indicators of selected changes in revenues and expenses. The analyses indicate that a reduction in projected commercial contract rate increases and an increase in the assumed rate of labor inflation in 2007 will result in a deterioration of the key ratios during the forecast period; however, these ratios are still strong. Total margin will remain above 4 percent during the forecast period and improve to 5.6 percent in 2013; days of cash on hand will decline to 50 in 2010 but reach 60 by 2013.

In all of the financial projections, the costs and benefits of future capital projects included in the Medical Center's capital plans, including the cost of medical equipment, are factored into the calculations. The plan includes projects which have not yet been approved, and which would be regularly reevaluated as to need, scope, and cost. Future projects will be deferred or eliminated as appropriate and necessary to ensure the Medical Center's financial viability.

Vice Chancellor Holmes and Medical Center Chief Executive Officer Liekweg showed slides illustrating the project.

Regent Juline asked how the decision to undertake this project relates to the Hillcrest facility. Vice Chancellor Holmes explained that this is a stand-alone project that does not affect future decisions about Hillcrest. Regent Juline asked whether this decision was also independent of the matter of indigent care in San Diego County. Mr. Holmes responded that the Medical Center will remain committed to caring for the patients it always has, including a sizeable portion of the under- and uninsured. This project will enhance the revenues of the Thornton Hospital, which contributes about \$45 million a year to the Hillcrest campus. UCSD Medical Center is projected to provide 8.5 percent of the overall market share and approximately 35 percent of the inpatient care for those individuals in the community who do not have the ability to pay.

Regent Juline asked about the advisability of building the larger structure and shelling a portion. Mr. Liekweg confirmed that eventually the building will be used fully. It is scaled to accommodate patient volumes projected beyond the opening in 2010.

Regent Juline noted two public comments involving closing the trauma center or emergency room at Hillcrest. Mr. Holmes reiterated that this project is independent of any long-range planning for Hillcrest. The University continues to work closely with the County to assess the needs of the entire region. Any decision about the trauma center at Hillcrest is at least a decade away.

In response to a final question from Regent Juline, Assistant Vice Chancellor Hellmann reported that if the space were being built out fully at the start, the construction cost would be approximately \$750 per gross square foot, depending upon the complexity of

the needs that would be determined for the shelled portion. When the project is submitted for design approval, the cost for comparable spaces will be provided for comparison.

Committee Chair Hopkinson commented that the background material that had been provided was thorough, complete, and understandable. She believed that in the current market it would be important for the Committee to hear in future about the rationale behind whatever construction process is chosen for the project and about the management structure and controls that will be put in place, which must be sufficiently strong to address the kinds of challenges often posed by new medical buildings. She suggested that the positive and negative experiences of other campuses be used for reference.

Committee Chair Hopkinson asked what would account for the substantial increase in net patient revenues over the projected period to 2013. Chief Financial Officer Sakai explained that projected patient volume growth, the impact of Medi-Cal reform including the level of funds available to disproportionate share hospitals, Medicaid reimbursements, and supplemental funding rates will contribute to increased revenues.

In response to a question asked by Regent Ruiz, Committee Chair Hopkinson confirmed that the scope of the Committee had expanded to include responsibility for approving external financing for construction projects.

Faculty Representative Oakley commented on the significance of the difference between discharge rates proportionately between Hillcrest and Thornton and revenues generated, noting the great extent to which Thornton Hospital's revenues subsidize indigent care at Hillcrest. He emphasized the contributions of all of the University's medical centers in providing to the state this vital community service of indigent care.

[For speakers' comments, refer to the January 17 minutes of the Committee of the Whole.]

4. **PRELIMINARY REVIEW OF DESIGN, UCSD MEDICAL CENTER CARDIOVASCULAR CENTER AND THORNTON HOSPITAL EXPANSION, SAN DIEGO CAMPUS**

Assistant Vice Chancellor Hellmann presented slides to show the Thornton Hospital project in the process of design. The site for the expansion is the northern part of the diagnostic and treatment facility at the hospital. Slides of the recently completed Moores Cancer Center and the Shiley Eye Center were shown to provide design context. The existing hospital has an exterior epoxy-finish insulation system which it is hoped may be improved upon in the expansion by using precast panel or stone, budget permitting. The new building is a glazed rectangle supported on a strong base that incorporates a breeze soleil on the south and east facades. The north side of the project has a curtain wall glazing system.

Regent Ruiz asked about the time frame for the project. Mr. Hellmann reported that schematic design approval, which will include environmental documentation, will be

requested at the Committee’s March meeting. Building occupancy is projected for spring 2010. He noted that the obtaining the required approval from the Office of Statewide Health Planning and Development is a lengthy and arduous process.

Committee Chair Hopkinson emphasized the importance of the horizontal shading devices and the landscaping plan. She advised making the ground floor appear solid but not forbidding on the north side.

5. **AMENDMENT OF THE BUDGET FOR CAPITAL IMPROVEMENTS AND THE CAPITAL IMPROVEMENT PROGRAM AND APPROVAL OF EXTERNAL FINANCING FOR SOCIAL AND BEHAVIORAL SCIENCES BUILDING, IRVINE CAMPUS**

The President recommended that:

- A. The 2005-06 Budget for Capital Improvements and the Capital Improvement Program be amended as follows:

Deletions shown by strike out, additions by underscore

Irvine: Social and Behavioral Sciences Building – preliminary plans, working drawings, construction, and equipment – ~~\$45,992,000~~ \$55,992,000 to be funded from State funds (\$43,212,000), ~~and~~ campus funds (\$2,780,000), and external financing (\$10,000,000).

- B. The President be authorized to obtain external financing not to exceed \$10,000,000 to finance the Social and Behavioral Sciences project, subject to the following conditions:
 - (1) Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.
 - (2) Repayment of the debt shall be from the Irvine campus’ share of the University Opportunity Fund. If these funds are deemed insufficient, the campus pledges a portion of ground lease revenues from the Research Park.
 - (3) The general credit of The Regents shall not be pledged.
- C. The Officers of The Regents be authorized to provide certification to the lender that interest paid by The Regents is excluded from gross income for purposes of federal income taxation under existing law.
- D. The Officers of The Regents be authorized to execute all documents necessary in connection with the above.

Vice Chancellor Dormaier recalled that the Irvine campus proposes a scope and budget increase of \$10,000,000 to the Social and Behavioral Sciences Building project to be funded from external financing. The project, which has a budget of \$45,992,000 to be funded from a combination of State funds (\$43,212,000) and an increment of campus funds for equipment (\$2,780,000), was planned originally to provide 64,100 asf of new instruction, research, and office space for the Schools of Social Sciences and Social Ecology. Approval is sought to increase the project cost by \$10,000,000 to construct an additional 14,750 asf of campus-funded office and dry laboratory space to help consolidate School of Social Ecology activities and release space on campus for reassignment to units currently in leased space or for other campus priorities.

In November 2004, The Regents approved the 2005-06 Budget for Capital Improvements, which included the Social and Behavioral Sciences Building project at a sum of \$43,400,000, comprised of preliminary plans (\$2,280,000), working drawings (\$570,000), construction (\$35,150,000), and equipment (\$2,700,000 from State funding and \$2,700,000 from campus funds). The 2005 State Budget Act included funds for preliminary plans and working drawings. The 2006-07 Budget for Capital Improvements, approved by The Regents at the November 2005 meeting, includes an inflationary adjustment for the construction and equipment phases of the Social and Behavioral Sciences Building project, increasing the C phase to \$37,582,000, the State-funded and campus-funded E phases each to \$2,780,000, and the total project budget to \$45,992,000. Construction funds are requested in 2006-07.

The project as it was originally approved was intended to meet the highest-priority needs of UCI's Schools of Social Sciences and Social Ecology. Construction of this 64,100 asf facility will provide instructional laboratories, research laboratory and support space, and faculty and administrative offices.

The Irvine campus proposes to build an additional 14,750 asf using non-State capital funds. The amended project is proposed as a cost-effective way to help address campus priorities for providing the space necessary to support its long-term facility needs.

Between 2004-05 and 2010-11, the Irvine campus is projected to add over 6,400 additional student FTE and more than 340 new faculty. Growth at UCI is resulting in high-priority needs throughout the campus, and even with completion of the approved projects in UCI's capital program, the campus will be facing significant space deficits in coming years. One recent strategy for addressing current facility needs has been the transfer of a number of administrative units off campus in order to provide expansion space for academic growth within the campus core. UCI leases more than 70,000 asf of administrative space at a significant annual cost. Providing adequate and appropriate facilities in the campus core to cope with the growing demand for all types of space is a high priority.

Project Description

The expanded Social and Behavioral Sciences Building project will total 78,850 asf. Of this, 64,100 asf will be for the Schools of Social Sciences and Social Ecology (instructional laboratories, research laboratories, academic and administrative offices); the proposed 14,750 asf of campus-funded space will provide flexible office and dry laboratory space to replace the School of Social Ecology's assignment in the Multipurpose Academic and Administrative Building (MPAAB), a campus-funded surge building completed in 2002. Relocating this space to the Social and Behavioral Sciences Building will help consolidate Social Ecology activities and release approximately 12,000 asf in MPAAB for reassignment either to units located in leased space or to other campus priorities.

The proposed project site is in the Social Sciences Quad on Parking Lot 3, adjacent to the Social Sciences Plaza building. This site is in conformance with the campus' revised Long Range Development Plan. The construction contract for the project will be awarded in January 2007, with completion in the spring of 2009.

CEQA Classification

In accordance with University of California guidelines for the implementation of the California Environmental Quality Act, environmental documentation will be prepared for consideration in conjunction with the project design review.

Financial Feasibility

The total cost for the Social and Behavioral Sciences project is estimated at \$55,992,000. Based on long-term debt of \$10,000,000 amortized over 30 years at 6.125 percent interest, the estimated average annual debt service will be \$736,000. Repayment for the Social and Behavioral Sciences project debt will be from campus Opportunity Funds. In the event that Opportunity Funds are deemed insufficient, ground lease income from the Research Park will be pledged for debt repayment. Opportunity Funds are a portion of the indirect cost recovery generated by federal contracts and grants. By University policy, up to 65 percent of the campus' total Opportunity Funds may be pledged for debt service, but only up to 33 percent of actual debt service may be paid from Opportunity Funds. In fiscal year 2010-11, the second full year of occupancy and first full year of principal and interest for the project, 63.4 percent of Opportunity Funds are pledged for debt service. Inclusive of this amount for the external financing, the campus is within the prescribed Opportunity Fund pledge and payment limits.

[At this point, Regent Preuss joined the meeting.]

Committee Chair Hopkinson recalled a previous request that the ratio of assignable to gross square feet be consistent with Building Owners and Managers Association standards. Assistant Vice President Bocchicchio commented that the University has been reporting it with the BOMA standard as well as the higher education standard and will incorporate that calculation in future items.

Regent Juline noted that repayment of the debt will be from University Opportunity Funds and that the general credit of The Regents will not be pledged. He asked for an explanation of the distinction between the two. Senior Vice President Mullinix stated that the Opportunity Funds are a specific fund source and not the overall credit of the University. Opportunity funds are principally from the recovery of overhead.

6. **AMENDMENT OF THE BUDGET FOR CAPITAL IMPROVEMENTS AND THE CAPITAL IMPROVEMENT PROGRAM AND AMENDMENT OF EXTERNAL FINANCING FOR SAN CLEMENTE STUDENT HOUSING, SANTA BARBARA CAMPUS**

The President recommended that:

- A. The 2005-06 Budget for Capital Improvements and the Capital Improvement Program be amended as follows:

Deletions shown by strike out, additions by underscore

Santa Barbara: San Clemente Student Housing – preliminary plans, working drawings, construction, and equipment – ~~\$116,702,000~~ \$153,805,000 to be funded from external financing (~~\$114,702,000~~) (\$151,805,000) and Santa Barbara campus UCHS Net Revenues (\$2,000,000).

- B. The President be authorized to obtain external financing not to exceed ~~\$114,702,000~~ \$151,805,000 to finance the San Clemente Student Housing project, subject to the following conditions:
 - (1) Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.
 - (2) As long as this is outstanding, University of California Housing System fees for the Santa Barbara campus shall be established at levels sufficient to provide excess net revenues to pay the debt service and to meet related requirements of the proposed financing.
 - (3) The general credit of The Regents shall not be pledged.
- C. The Officers of The Regents be authorized to provide certification to the lender that interest paid by The Regents is excluded from gross income for purposes of federal income taxation under existing law.
- D. The Officers of The Regents be authorized to execute all documents necessary in connection with the above.

Chancellor Yang, Acting Vice Chancellor Carpenter, and Associate Vice Chancellor Fisher presented the item.

It was recalled that in May 2002, The Regents amended the Budget for Capital Improvements and Capital Improvement to include preliminary plans for the San Clemente Student Housing project, to be funded from external financing (\$114,702,000) and Santa Barbara campus UCHS Net Revenues (\$2,000,000). The project was submitted for preliminary design review in June 2003 and was sent back to the campus for complete redesign. The Regents approved the project's revised design in May 2004.

In September 2005, the campus went out to bid using a combination of multi-prime for the housing and support facilities and general contractor bid for the parking structure. Bids were received between October 2005 and November 2005. As a result of the bids, approval is requested to augment the existing budget by \$37,103,000 from external financing in order to accommodate recent dramatic increases in construction costs and market conditions that were unanticipated at the time the project was originally budgeted.

Status and Need for Augmentation

Upon the rejection of the preliminary schematic design in June 2003, the campus considered all of the issues raised in conjunction with project objectives and instructed the Executive Architect to develop a new design that reflected the issues raised and one that would increase design efficiencies, cost-reduction opportunities, and constructability improvements. The design architect associated with the Executive Architect was not employed for the redesign, which began in the summer of 2003. The result is a project that will have a more efficient and logical internal circulation plan and space layout and be more straightforward in terms of architectural, structural, and mechanical systems. In addition, changing the parking spaces from a podium design to a free-standing parking structure will enable a more efficient and cost-effective solution both for parking and the housing units. The project will also conform more to the evolving architectural theme of the campus. This completion of the design effort took the campus approximately 11 months.

The project was submitted to the Coastal Commission in May 2004, which did not approve it until July 2005. As the project was ready for bid in December 2004, the Coastal Commission review process delayed the project by approximately six months.

While the revised design was estimated to be within the budget following extensive value engineering, there was significant concern that funding would not be sufficient to cover increased costs due to escalation as a result of the 17 months of delay associated with redesign and obtaining Coastal Commission approval.

The campus first began a bid process to pre-qualify general contractors but could not get any to participate. Feedback pinned the lack of interest of larger contractors who would normally bid to the abnormally high amount of competing work in the construction market. It was decided to select a pre-qualified construction management firm and bid

subcontract packages in a multiple-prime format. The construction manager was selected in July 2005 and authorized for pre-construction services, and an additional pre-construction value engineering and constructability workshop and effort was undertaken. Once Coastal Commission approval was received, the housing project was advertised as a multiple prime trade contract delivery method. The parking structure was bid to a slate of pre-qualified general contractors.

The housing bid packages were divided into several “all-blocks” trades such as grading, primary site utilities, and roofing, with the majority of the project divided into packages that resulted in prime trade bids per each of three separate blocks, to minimize bonding-capacity issues for prime trade contractors.

The bids were received over a two-month period ending in November 2005. A number of packages, including earthwork, site concrete, windows, HVAC, flashing, sheetmetal, and fire sprinklers were rebid in an effort to tighten up the overall cost. The total of the bids received for the parking structure and housing components was \$33,684,000 over available funding. With the addition of \$1,714,000 for construction contingency to maintain a minimum contingency during construction, and \$1,705,000 corresponding increase in fees and expenses, the total overage is \$37,103,000. The present total development cost for the project would be \$153,805,000.

The increase in project cost is the combined result of a significant change in the construction cost environment, cost escalation during the redesign period, reluctance from the private sector of contractors to engage the work, and increased project soft costs related to redesign and bidding.

At project approval, the \$116,702,000 budget was indexed at CCCI 4274, based upon an April 2002 mid-point of construction. At bid opening in October 2005, the CCCI was 4554. This represents a 6.55 percent increase, if adjusted, and would have brought the approved project budget to \$124,346,000.

While the campus was successful in reducing costs to accommodate redesign costs, it was not possible to offset the unanticipated dramatic escalation factors that occurred during the redesign and delay associated with obtaining the Coastal Commission approval.

Nearly all of the construction cost increase is due to extraordinary shifts in the national and regional construction markets that occurred in mid-2004. These shifts reflected a significant change in the construction market context at time of bid. Among the factors related to this market dislocation are the declining relative value of the U.S. dollar, increased worldwide demand for commodities such as oil, steel, and cement, and intense statewide and regional competition for construction services, notably in the hospital, institutional, residential, and infrastructure sectors. The cost of oil per barrel is up 123 percent since October 2003, and since Hurricane Katrina, there have been increases of 15 percent in asphalt, 40 percent in PVC, 12 percent in lumber and 30 percent in plywood, and there are shortages in materials such as insulation and roofing.

Over 85 percent of the bid overage is in major and minor subcontracts in almost all the construction trade divisions, including 350 percent overage in windows and glass, 300 percent overage in site concrete, and 150-200 percent overages in structural steel, waterproofing, flashing and sheet metal, fire sprinkler systems, rough carpentry-framing and HVAC systems. One subcontract, rough carpentry and framing, accounts for 33 percent of the total overage in dollars.

Construction costs in the Santa Barbara area have historically been 5 percent to 10 percent higher than California averages, based in part on available labor pool and subsistence factors. Additionally, private market housing construction costs in the Santa Barbara area have seen recent inflation figures averaging 10 percent per year from 2003, with a 20 percent rise last year.

Construction is scheduled to begin in February 2006, with completion in August 2008.

Green Building Design and Clean Energy Standards

This project complies with the University of California Policy on Green Building Design and Clean Energy Standards. As required by this policy, the project will adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements.

Change in Program Scope

The original project approval was for 976 beds, consisting of 328,145 asf (381,904 gsf) and 976 parking spaces. The number of parking spaces was reduced by administrative approval to 842. At the time of design approval, the project consisted of 279,337 asf (386,436 gsf) and 842 parking spaces. The decrease in assignable square feet will be the result of changing the mix of units, replacing studio units with two- and four-bedroom units and decreasing the amount of ancillary and support square feet from 17,500 asf to 13,321 asf in order to keep the project within the approved budget. The number of studio units will decrease from 178 to 10 (5 studio beds will be non-revenue beds occupied by staff). The number of bed spaces, 976, remained the same. The increase in gross square feet will be the result of replacing uncovered walkways to covered walkways to respond to concerns of water intrusion and architectural design.

CEQA Classification

In May 2004, the Regents certified the San Clemente Student Housing Project Environmental Impact Report in accordance with the California Environmental Quality Act (CEQA) that analyzed this project and other planned developments in the North Campus and adopted Findings. At the same time, the Regents approved an amendment to the campus' Long Range Development Plan and approved the project's design.

Financial Feasibility

The total project cost of \$153,805,000 at CCCI 4554 will be funded from a combination of external financing (\$151,805,000) and UCHS Net Revenues (\$2,000,000). Based on a debt of \$151,805,000 at 6.125 percent interest amortized over 30 years, the average annual debt service is estimated at \$11,176,378. Repayment of the debt will be from student rents generated by the proposed addition, and from existing UCSB's campus-controlled bed spaces.

The housing and related programmatic facilities of this project, consisting of approximately 972 student bed spaces and approximately 17,500 asf of common area, will be added to the University of California Housing System.

In 2010-11, the first year of full principal and interest payments, the projected San Clemente Student Housing rates will be \$953 per month per student for the four-bedroom apartment unit, \$1,053 per month per student for the two-bedroom apartment unit, and \$1,207 per month per student for studios. These projected rates will be inclusive of utilities, including high-speed access to the campus communication infrastructure, presently valued at approximately \$93 per month per student. Further, parking will be provided and units will be fully furnished. Currently in the Santa Barbara community, the cost of a two-bedroom apartment averages \$2,077 per month. Given local market rent escalation, the cost of a two-bedroom apartment may be assumed to be \$2,408 per month, plus \$93 per month per student for campus equivalent amenities, resulting in \$1,297 per student per month versus the \$1,053 on-campus cost. With the San Clemente project, the

campus plans to provide both affordable as well as obtainable housing to graduate and upper-division undergraduate students.

Certain non-quantifiable benefits accrue to campus housing, substantially improving the quality of student life. Such benefits include proximity to the main campus and Storke Field recreational area, on-site parking, campus police and security, and night proctors.

The impact of this project on the existing Santa Barbara campus University of California Housing System facilities will be an estimated rate increase of \$583 per student per year. The campus plans to mitigate the impact of this increase by spreading the project costs over four years by increasing rates by 2.95 percent in 2005-06 and 2.95 percent for each of the following three years through 2008-09 for all campus housing rates. In addition, the housing plan anticipates an annual increase of 3 percent per year through 2010-11 for general cost increases.

The costs associated with the recreational and parking replacement are separated from the housing and parking costs. These replacement costs, which include tennis and volleyball courts, a golf putting green, bicycle and pedestrian paths, and the 400-space parking lot, are considered unique to this project and for comparison purposes are accounted for separately.

Regent Ruiz asked whether, given the dramatic escalation in costs, processes other than conventional bidding could be tested. Senior Vice President Mullinix reported that there is legislation pending that would allow the University slightly more flexibility in awarding contracts. Although alternative bidding practices and ways to induce more competition had been discussed previously, for this project the conclusion was that the delay such tactics would cause would be significant. Given the bidding climate of the past several years, it is doubtful that any change could produce the desired results. The strategy would be relatively risky and would result in occupancy of the units being deferred. Mr. Fisher reported that the project had been broken into separate bid packages with a construction manager acting as the general contractor. The attempt first to bid the project with general contractors produced no interest. Committee Chair Hopkinson commended this approach.

Regent Juline asked whether there is a queue of projects waiting to be submitted to The Regents that have significant cost escalation. Senior Vice President Mullinix responded that there are a substantial number that are over budget. Each has been reexamined and often reduced in scope to try to reduce expenses. There has been a substantial increase in unit cost and a serious reduction in competitiveness. Regent Juline asked about the overall feasibility of being able to complete the projects that have already been approved and the status of obtaining adequate financing for new projects. Mr. Mullinix responded that specific projects would likely be delayed and opportunities lost in the long term. In this case, the debt target for the Santa Barbara campus had to be adjusted earlier than usual. The campuses are encouraged to reassess the cost estimates for their ongoing projects. Vice President Hershman added that for State projects, where there is a limited

amount of money committed from bond funds, the University is struggling with every project to find solutions for staying within the available funding.

Regent Juline noted that the project will increase student housing fees by \$583 per year for every housed student. Acting Vice Chancellor Carpenter acknowledged this but noted that despite the increase in the cost of the project, the projected fee to students would not be increased.

Regent Juline asked whether students are charged separately for parking. Ms. Carpenter responded that it was originally planned to do that, but the Coastal Commission required that it be included in the rate for San Clemente housing residents.

7. **ADOPTION OF MITIGATED NEGATIVE DECLARATION AND APPROVAL OF DESIGN, MATERIALS SCIENCE AND ENGINEERING BUILDING, RIVERSIDE CAMPUS**

The President recommended that, upon review and consideration of the environmental consequences of the proposed project as indicated in the Mitigated Negative Declaration, the Committee:

- A. Adopt the Initial Study/Mitigated Negative Declaration.
- B. Adopt the Findings and Mitigated Monitoring Program.
- C. Approve the design of the Materials Science and Engineering Building, Riverside campus.

Chancellor Córdova, Vice Chancellor Diaz, Assistant Vice Chancellor Miller, Assistant Vice Chancellor Johnson, and Associate Director Chiu presented the item, with the aid of slides.

It was recalled that in November 2003, The Regents approved the inclusion of the Materials Science and Engineering Building, Riverside campus, in the 2004-2005 Budget for Capital Improvements and the 2004-2009 Capital Improvements Program at a total project cost of \$55,969,000 at CCCI 4100. In November 2004, due to an increase in the CCCI, the budget was amended, for a total project cost of \$58,668,000 at CCCI 4328. Current estimates indicate a total project cost of \$65,568,000, due primarily to increased inflation in the construction market. Campus funds of \$6,900,000 have been reserved to offset this potential overage, and upon determination of the final cost based on bids, the campus will request appropriate approval for an increased total project budget. The campus has worked steadily at reducing the estimated budget overage during the schematic design phase. In September 2005, a value engineering session was conducted and cost-reducing strategies were identified, including a redesign to achieve lower costs that would bring the project closer to the original budget. While efforts continue during the development of the bidding documents to align the costs with the original budget, it

is unlikely that delivering the approved scope will be possible without some increase in cost.

In September 2004, the Office of the President approved the appointment of Bohlin Cywinski & Jackson as executive architect for the project.

Project Site

The site for the facility runs east-west along North Campus Drive with the eastern end starting at the corner of Aberdeen Drive and North Campus Drive. A new below-grade storm water management pipe system runs along the southern edge of the site, and the northern edge faces the future Arroyo Quad, which will run east-west in the center of where the existing fields are located. The site and use are consistent with the campus Long Range Development Plan land use designation.

Project Description

The Materials Science and Engineering Building will be approximately 76,940 assignable square feet (asf) within 134,000 total gross square feet (gsf) and will accommodate the interdisciplinary instructional and research needs of the Bourns College of Engineering (BCOE) and the College of Natural and Agricultural Sciences (CNAS) joint programs in nanotechnology, materials science, and bioengineering along with approximately 13,400 asf of general assignment classrooms. The building is composed of two rectilinear wings connected by a central open lobby and vertical circulation element. The four-story east wing will contain the classrooms, lecture halls, computation laboratories, and offices. The classroom components of the program will be located on the first floor and lower level and will be accessible directly from the street-level pedestrian sidewalks via bridges to the first floor and from grade on the north to the lecture halls on the lower level. The west wing will be three stories high and will contain the wet laboratories and nano-fabrication facilities.

Different structural systems will be used for the two wings. The east wing, where interior flexibility and long spans are necessary, will have a structural-steel-braced frame, and the west wing, where the laboratories and nano-fabrication facility are located, will be a reinforced concrete structure with seismic shear walls to resist and dampen vibration.

The exterior materials of the wings will include glazed curtain walls, exposed concrete, plaster, and UCR blend brick. These materials are used in the adjacent buildings and are in accordance with UCR's standards.

Although the budget for this project was approved before The Regents' sustainability policy took effect, the project will comply with the University of California Policy on Green Building Design and Clean Energy Standards as well as with the Presidential Policy for Green Building Design and Clean Energy Standards. HVAC and lighting systems are designed for optimal energy performance and will exceed California Energy Code Title 24 energy conservation requirements. The building is also being designed

using sustainability guidelines and design practices: it is situated to maximize natural light efficiency; the brick used for the exterior is a local resource; interior materials contain recycled content or have a low embodied energy factor; an integrated design approach uses of proven technologies to reduce energy consumption environmental impacts; specification of recycled and renewal materials and selection of interior finishes will improve indoor environmental quality; and the site-related design will incorporate erosion and sediment control and low maintenance landscape material. At this point in the development of design, the project will achieve 26-33 points and a LEED equivalent rating of Certified.

The design of the project has been reviewed in accordance with University policy. Independent cost consultation and seismic review have been conducted. The Office of Design and Construction staff will manage this project under the supervision of the Vice Chancellor for Administration.

Environmental Impact Summary

Pursuant to State law and University procedures for implementation of the California Environmental Quality Act (CEQA), the Final Initial Study was prepared for the proposed Materials Science and Engineering Building to determine any potential environmental effects associated with the project. The Initial Study was tiered from the 1990 LRDP Environmental Impact Report (EIR) (July 1990). It considers only project and site-specific impacts. Cumulative impacts and mitigation measures for all campus development proposed in the 1990 LRDP are addressed in the 1990 LRDP EIR. A draft Initial Study was prepared and circulated to the public, responsible and trustee agencies, and the State Clearinghouse for a 30-day review period from November 10, 2005 to December 9, 2005.

Based on the impact assessment in the Final Initial Study, it has been determined that the proposed project as mitigated will not by itself result in significant impacts and that the cumulative impacts of the campus growth identified in the 1990 LRDP will be mitigated by the 1990 LRDP EIR mitigations.

In accordance with CEQA's mitigation monitoring requirements, measures to reduce or avoid significant impacts identified in the 1990 LRDP EIR are monitored under the 1990 LRDP Mitigation Monitoring Program. New project-specific impacts and mitigation measures were identified in the following areas: Hazards/Hazardous Materials and Hydrology/Water Quality (potential construction-related storm runoff impacts), and Transportation/Traffic (short-term increases in construction-related traffic and short-term disruptions to traffic operations and pedestrian-cyclist safety during construction). These mitigation measures will be monitored in accordance with the attached Materials Science and Engineering Building Mitigation Monitoring Program.

Findings

The Findings discuss the project’s environmental review process, project impacts, and mitigation measures addressed in the Materials Science and Engineering Building Final Initial Study/Mitigated Negative Declaration in conformance with CEQA.

Regent-designate Coombs noted that the location was on the site of current playing fields. He asked whether the 134,000 square feet of open space enjoyed by students would be relocated and whether solar energy technology would be used in the project. Mr. Johnson responded that the playing field will be relocated to the northern part of the campus where it is in joint use with the city. He reported that every project is assessed for its suitability for photovoltaic and solar energy use. For this project, such use is cost prohibitive. Mr. Miller added that the campus is developing a program that would add photovoltaic cells to the physical plant and parking services .

Committee Chair Hopkinson commented that the building design was first rate. She took exception, however, to the scale of the portion that housed the large classrooms. Mr. Miller believed that the rendering did not do justice to the design, which includes vertical bands of brick and stepped-out areas of wall that provide dimension. Regent Hopkinson also suggested reexamining the roofing material.

8. **AMENDMENT OF THE BUDGET FOR CAPITAL IMPROVEMENTS AND THE CAPITAL IMPROVEMENT PROGRAM AND APPROVAL OF EXTERNAL FINANCING FOR DOE LIBRARY SEISMIC AND PROGRAM IMPROVEMENTS, STEP 4, BERKELEY CAMPUS**

The President recommended that:

- A. The 2005-06 Budget for Capital Improvements and the Capital Improvement Program be amended as follows:

Deletions shown by strike out, additions by underscore

Berkeley: Doe Library Seismic and Program Improvements, Step 4 – preliminary plans, working drawings, construction, and equipment – ~~\$44,020,000~~ \$55,205,000, to be funded from the State through General Obligation bond funds (\$31,920,000), and through gifts (~~\$12,100,000~~) (\$23,285,000).

- B. The President be authorized to obtain standby financing not to exceed \$7,054,000 and interim financing not to exceed \$4,589,000, for a total of \$11,643,000, prior to awarding a construction contract for any gift funds not received by that time and subject to the following conditions:

- (1) Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.

- (2) Repayment of any financing shall be from gift funds and, in the event such gift funds are insufficient, from the Berkeley campus' share of the University Opportunity Fund.
- (3) The general credit of The Regents shall not be pledged.
- C. The Officers of The Regents be authorized to provide certification to the lender that interest paid by The Regents is excluded from gross income for purposes of federal income taxation under existing law.
- D. The Officers of The Regents be authorized to execute all documents necessary in connection with the above.

It was recalled that approval is being requested to augment the existing budget of \$44,020,000 by \$11,185,000 and to obtain standby and interim financing of \$11,643,000 for the project. In November 2004, The Regents amended the Budget for Capital Improvements and Capital Improvement Program to include the Doe Library Seismic and Program Improvement project at a total budget of \$44,020,000, to be funded from the State through General Obligation bond funds (\$31,920,000), and through gifts (\$12,100,000).

Status and Need for Augmentation

The plan to improve Doe Annex was originally conceived of as a two-phase project with the first phase being State-funded seismic safety and mandatory code improvements and the second being a gift-funded project to provide security and environmental controls commensurate with the value and curatorial needs of the Bancroft Library collections housed in the Annex and to improve programmatic functions to meet the needs of a modern research library. As planning proceeded, it became apparent that it would be far more costly and disruptive to build the two projects separately. At the same time, the campus was making substantial progress in raising gift funds for the second phase program improvements project. In November 2004, The Regents approved a revised project that combined State-funded and non-State-funded work into one project with a total cost of \$44,020,000.

Since that time, the planning and design for the combined project have progressed. The project cost estimate, \$55,205,000, is \$11,185,000 greater than previously projected, however. The following are among the most significant factors behind this cost increase:

- During the design process, the architects and consultants, in consultation with the Library's staff, worked with other rare book and special collection specialists to ascertain the proper curatorial requirements of the library's valuable and often irreplaceable holdings. Because of the wide variety of materials in the collection and the stringent design parameters needed to protect them, the sophisticated mechanical system, environmental controls, commissioning requirements, and security measures for the project turned out to be substantially more complicated

and costly than originally anticipated. The campus has made extensive efforts to perfect the building's internal configuration as well as the systems' designs in order to minimize the cost of the protective measures.

- There are special construction considerations, including a requirement to provide more extensive purging of building materials during the construction process in order to prevent construction contaminants from soaking into the new materials and being emitted later to harm the collections, as well as hazardous material abatement in the existing building.
- Revisions to the telecommunications system are estimated to cost more than previous projections.
- The approved project budget of \$44,020,000 was based on cost estimates that did not fully account for the dramatic construction cost increases experienced in mid-2004 and thereafter. Among the factors driving those market effects are strong worldwide and regional demand for construction materials, dramatically higher petroleum prices which influence construction costs in the form of increased material manufacturing costs and transportation costs, large actual and anticipated increases in negotiated labor rates, and a regional and statewide construction market that continues to be robust, allowing contractors to be very selective in their bidding.
- There are additional soft costs, including architectural and consultant fees and interest during construction based on the new interim financing for gifts.
- Moveable equipment and furniture were not included in the previous budget.
- Construction experience both within the University and in the general market indicates that extensive seismic improvements and renovations of existing buildings present significant risks. The project contingency has been adjusted to 7 percent of the estimated construction cost to provide a prudent degree of risk protection.

The increase will be funded from additional gifts. The project is planned to go to bid in March 2006, with construction to begin June 2006 and to be complete January 2008.

Green Building Policy and Clean Energy Standard

This project will comply with the University of California Policy on Green Building Design and Clean Energy Standards dated June 16, 2004. As required by this policy, the project will adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements.

CEQA Classification

This project has been classified categorically exempt in accordance with the California Environmental Quality Act (CEQA) and the University of California Procedures for the Implementation of CEQA.

Financial Feasibility

The total project cost of \$55,205,000 will be funded from the State, through General Obligation bond funds (\$31,920,000), and from gifts (\$23,285,000).

As of November 30, 2005, the receipt of gifts was as follows:

Gifts In Hand	\$ 8,296,000
Pledges Received	10,400,000
Gifts to Be Raised	<u>4,589,000</u>
Total	\$23,285,000

The campus requests approval of standby financing of \$7,054,000 and interim financing of \$4,589,000. If all of the gift funds are not in hand at the time of construction bidding, the campus will provide the funds necessary to comply with Regental policy regarding bid and award, so that the project may proceed. To the extent gifts are received prior to completion of the project, the amount of the standby and interim financing will be reduced and outstanding balances will be repaid. Gifts to be raised include verbal pledges and pledges with contingent language. The campus anticipates that it will be able to raise the total amount of gifts, but in the event the collection is insufficient, the campus has pledged the Berkeley campus Opportunity Fund as a source of repayment. Opportunity Funds are a portion of the indirect costs recovered from federal contracts and grants. Should the campus be unable to raise the additional gifts, up to \$4,589,000 of interim financing may have to be repaid over 30 years at 6.125 percent, for potential annual debt service of \$338,000. Should it prove necessary, the campus will return to The Regents at the end of construction to request the conversion of any remaining portion of the interim financing to external financing.

The University Opportunity Fund Debt Repayment Policy requires that campuses meet two financial tests: (1) that the amount pledged for debt payments shall not exceed 65 percent of the campus' total Opportunity Funds allocated each year, and (2) that no more than 33 percent of the campus' total Opportunity Funds allocated each year are used for debt service payment. The Berkeley campus meets both tests. In fiscal year 2009-10, the second full year of occupancy and first full year of principal and interest for the project, 56 percent of the campus' total Opportunity Funds allocated will be pledged for debt service.

In compliance with Regents' policy, all funds necessary to complete construction will be in hand prior to issuing the project for bid.

Vice Chancellor Denton and Assistant Vice Chancellor Gayle presented slides of the project.

Committee Chair Hopkinson expressed appreciation for what in her view was a beautiful design.

9. **PRELIMINARY REVIEW OF SOUTHEAST CAMPUS INTEGRATED PROJECTS, BERKELEY CAMPUS**

Chancellor Emeritus Pister, Senior Associate of the Chancellor for the Southeast Campus Integrated Project (SCIP), and Mr. Bob Deliso, Vice President of URS Corporation, the program manager, discussed a proposed conceptual master plan that will provide for the design and construction of the seven projects that comprise the plan. These projects, which are proposed in accordance with the UC Berkeley 2020 Long Range Development Plan, will support academic and athletic excellence, strengthen interdisciplinary opportunity, preserve and enhance the image of the UC Berkeley campus and its historic legacy of landscape and architecture, and address deficient seismic and life-safety conditions.

The following seven projects comprise the SCIP program:

- California Memorial Stadium Seismic Corrections and Program Improvements
- Law and Business Connection Building (LBC)
- Parking Structure under Maxwell Field
- Southeast Campus and Piedmont Avenue Landscape Improvements
- Boalt Hall Program Improvements
- Haas Business School Program Improvements
- Renovation and Restoration of the Piedmont Avenue Houses

Feasibility analysis and concept planning have been completed for Memorial Stadium, for the new Law and Business building, and for renovations to Boalt Hall and Haas Business School. Preliminary design has begun for Memorial Stadium and the LBC. The first phases of these projects are scheduled to be submitted to The Regents for budget and design approval later in the year. Feasibility planning is under way for the parking structure at Maxwell Field. A tiered, focused environmental impact report (EIR) will be prepared for all SCIP components. The EIR with the proposed design of the first phase for Memorial Stadium is scheduled for review and consideration by The Regents in November 2006.

The multi-phased California Memorial Stadium Seismic Corrections and Program Improvements project will retrofit the seismically poor, historically significant stadium and provide improved program space. The project will include a new building adjacent to the stadium, the Student Athlete High Performance Center (SAHPC). This building, the first phase of the project, will allow the campus immediately to address life-safety issues for daily use programs and occupants

Concept plans for the SAHPC show it as a two-story building set into the landscape west of the stadium. Its roof will be at the current west grade level and will serve as a plaza and gathering space during games.

The Law and Business Connection Building will link collaborative programs of the Haas School of Business and the Boalt Hall Law School. It will house faculty research offices, classrooms, an auditorium, and a multilevel forum to provide expanded opportunities for Law and Business communities both to interact informally and to sponsor special events. The project will include the demolition of Calvin Hall and two houses, one of which is vacant.

A proposed parking structure under Maxwell Field will consolidate parking in the southeast campus area. At its completion, SCIP will displace 545 parking spaces to accommodate landscape and program improvements. The new facility will replace these spaces and expand the southeast campus parking supply in accordance with the 2002 LRDP. The sports field will be replaced on the roof.

Other SCIP projects listed above will be brought forward when concept plans are developed.

Regent Ruiz asked whether the renovation and expansion of Boalt Hall and the Haas School of Business will enable them to accommodate more students. Associate Provost Koshland reported that both schools anticipate being able to increase faculty size and, as a consequence, student enrollment. The Berkeley campus is limited, however, by the enrollment projections in its Long Range Development Plan. An increase in the number of graduate students could mean a net reduction in undergraduates. Mr. Pister added that among 180 law schools accredited by the American Bar Association, Berkeley ranks 128th in terms of student-faculty ratio. Dean Edley has received the authority to increase Boalt Hall faculty over time by 40 percent to try to raise its standing among peer institutions.

Committee Chair Hopkinson noted that, although the direction that design has taken at the Berkeley campus over the years has been a matter of concern to the Committee, the Committee has applauded the positive movement in some of the recent design work. She observed, however, that some of the plans related to SCIP varied significantly from the overall campus approach that has been implemented with respect to materials, colors, context, and theme. She believed that the Committee may resist too much divergence from the set course.

Regent-designate Coombs emphasized the importance of the SCIP project to the campus. He supported Regent Hopkinson's sentiments concerning the design standards issue, in particular regarding the link building for the Haas and Boalt schools. He was hopeful that the building would bring more design unity to the area rather than more disparity. He asked whether the link building, which is projected to be six stories tall, could have subterranean floors enhanced by some mechanism to allow natural light in so that the mass of the structure could be reduced. He asked also about plans for the parking lot between the north tunnel of the stadium and Maxwell Field. Mr. Deliso responded that

the area between the stadium and the field will become a plaza incorporated into a new grand entrance on Piedmont Avenue leading to the north arch of the stadium.

Mr. Pister reported that underground parking was investigated initially to replace the present surface parking site. The idea was dropped because of groundwater problems. The possibility of lowering the height of the building was discussed also, but the campus design review committee seemed comfortable with the massing of the building as envisioned.

Committee Chair Hopkinson asked that the next presentation of the project show the pedestrian sight lines and perspective to illustrate the impact of the link building on the Memorial Stadium area.

10. **ANNUAL REPORT ON GREEN BUILDING, CLEAN ENERGY, AND SUSTAINABLE TRANSPORTATION POLICY**

It was recalled that at the Committee’s December 2002 meeting, the Regents requested that the President undertake a feasibility study for the adoption of a Green Building Policy and Clean Energy Standard for all new capital projects. In July 2003, The Regents approved “as University policy for all capital projects, the principles of energy efficiency and sustainability in the planning, financing, design, construction, renewal, maintenance, operation, space management, facilities utilization, decommissioning of facilities and infrastructure to the fullest extent possible consistent with budgetary constraints, and regulatory and programmatic requirements.” In June 2004, the President formally issued the Presidential Policy on Green Building Design and Clean Energy Standards (the Policy).

Assistant Vice President Bocchicchio reported that the development of the Policy was informed by a committee made up of State government officials from the California Energy Commission and the State Consumer Services Agency, faculty members with expertise in these disciplines, and administrators from each of the ten campuses and the Office of the President. The committee met at five separate, all-day meetings, with numerous subgroups and ad hoc meetings meetings to complete the work within a five-month time frame. In late February 2003, student representatives from each campus that had passed a resolution requesting that the University develop policies for integrating sustainability into its energy purchasing practices and building guidelines met with the committee to share information and provide input about the draft sustainability policy.

The final feasibility studies and policy recommendations of the committee were presented to the Committee on Grounds and Buildings in June 2003 and to the full Board in July 2003, where they were passed unanimously.

One of the policy items dealt with energy saving in fossil fuel usage related to transportation service. At the September 22, 2005, meeting, The Regents directed that this policy be expanded and authorized the President to adopt the policy guidelines to include sustainable transportation efforts throughout the University of California. The

Policy and Policy Guidelines governing the Green Building Policy and Clean Energy Standards have been amended to incorporate the transportation elements in draft form.

This item is the second Annual Report and will describe the progress achieved toward implementation of the Policy in calendar year 2005. The following section highlights the major implementation achievements of the past year.

Highlights of 2005 Accomplishments

Campus Green Building Baselines Approved

Using numerous sources and criteria, campus Green Building Baselines have been developed to streamline the administration of the green building certification process, while being primarily based on the U.S. Green Building Council’s standards. The University enhanced the standards to address the unique character of its campus communities. These baselines allow each campus the opportunity to recognize the past efforts towards sustainable development such as storm water drainage systems, energy generation efforts, and sustainable land use planning, as well as commit to future efforts for every new construction project. All baselines include the mandatory energy efficiency requirements which are a unique feature of the UC Green Building Policy Guidelines.

Green Building Baselines for six campuses have been approved by the Office of the President. Baseline point totals for each campus range from 20 to 33 points. In addition to the mandatory energy efficiency measures, the Policy mandates that individual projects be designed and built to a minimum standard equivalent to a LEED Certified rating, meaning a minimum of 26 points. The Davis campus provided an outstanding example of commitment to green design by establishing a campus baseline of 33 points, which is equivalent to a LEED Silver rating.

In addition to complying with all prerequisites and other UC mandatory measures, 100 percent of the campuses committed to points for optimizing energy use, diversion of 50 percent of construction waste, use of low-emitting materials, and inclusion of a LEED-accredited professional on the design team. In addition, 89 percent committed to the point for thermal comfort (ASHRAE 55-1992) and 78 percent committed to points for reduced site disturbance, light pollution reduction, water- efficient landscaping, and 20 percent use of materials manufactured regionally. Campuses also committed to design innovation credits including Energy Supply Efficiency (UCLA, UCDCM), Waste Heat Recovery (UCDCM), Campus Sustainability Assessment (UCB, UCI), and an Energy Load Leveling Program (UCI).

The Merced, Santa Barbara, and Irvine campuses did not develop Green Building baselines because they have committed to the policy option of submitting all projects to the US Green Building Council (USGBC) for third-party LEED certification.

Green Building Projects

Projects approved for inclusion in the University's capital improvement program beginning July 1, 2004, must meet the Policy's requirements. The Policy requirements currently apply to 25 projects ranging in cost from \$5 million to over \$100 million and building types including laboratories, classrooms, housing, student centers, research buildings, and a childcare center. Of these 25 projects, one has a proposed LEED or equivalent rating of gold, nine of silver, and the remaining fifteen will be at the certified level.

In addition, 53 projects with budgets approved before 2004-05 have incorporated sustainable features which meet many of the requirements of the new policy.

Savings by Design Program

All projects implemented under the Policy are required to register with the Savings by Design Program. This program, offered by California's four investor-owned utility companies, provides design assistance, energy analysis, and financial incentives for individual building projects. Financial incentives can be used to offset increased costs associated with more energy efficient buildings. To date, 98 University projects totaling 11.9 million square feet of building space have been registered with the program. By the time these projects are completed, the program is anticipated to provide \$4.1 million in incentive payments to these projects and allow the University to avoid an additional \$5 million per annum in energy costs.

Energy Efficiency in New and Existing Buildings

The partnership program with the investor-owned utilities and the California State University, which provided \$15 million towards energy efficiency projects in both systems, was completed in December 2005. The program funded over \$6 million worth of energy retrofits and commissioning projects at all UC campuses. This is projected to result in an annual system-wide energy cost avoidance of \$1.8 million. In addition to funding energy efficiency retrofits, the program also provided extensive training to UC staff in project management, facilities, and other related campus units. Due to the success of this program, a new three-year joint program with the CSU and the utilities has been approved that will provide an additional \$38 million in project and program funding. This new program should add to the \$1.8 million in annual cost avoidance from the 2004-2005 projects by a projected \$5.8 million, for a total of at least \$7.6 million in annual cost savings by 2008.

A second grant from the California Public Utilities Commission funded the nonprofit organization Alliance to Save Energy to pilot student energy conservation programs on the Berkeley, Santa Barbara, San Diego, and Irvine campuses. The Green Campus program provides opportunities for students to get directly involved in saving energy on campuses through programs such as light bulb exchanges and residence hall energy competitions.

Finally, UC and CSU are midway through a third program funded by the California Energy Commission to install 13 pilot projects demonstrating new emerging energy efficiency technologies. The data from these pilot projects will be used to help evaluate and prioritize future UC investments in cost effective, cutting-edge energy technologies.

Onsite Generation and Procurement of Renewable Energy

While lowering the University's energy consumption, the University has also made progress in greening the electricity that it still consumes. The share of certified renewable energy in UC's direct access portfolio increased from zero percent two years ago to 16 percent today. According to the Environmental Protection Agency's Green Power Partnership, UC's combined purchase with the CSU ranks as the eighth largest institutional purchase of green power in the country.

Only slight progress has been made in the past year in the area of on-site renewable energy generation, as the cost of solar generating equipment remains high. In late 2005, federal energy legislation passed which offers tax incentives for private investment in solar photovoltaics. The University has begun work on a program to bring third-party owned and operated solar projects to the campuses. This is expected to improve the near-term progress in meeting the ten megawatts of campus-based renewable energy generation required by the Policy.

Staff, Faculty, and Student Participation in Sustainability Activities

To provide coordinated sustainability efforts that include all campus stakeholders, chancellor- or vice chancellor-level advisory committees on sustainability have been or are being established on all ten campuses. These committees will meet regularly and provide for organized involvement of staff, faculty, and students from all departments in pursuing campus sustainability initiatives. Taking the Berkeley campus as an example, some of the committee's 2005 activities included organizing an annual Chancellor's Sustainability Summit, presenting the Chancellor's Sustainability Awards to exemplary staff, faculty, and students, creating a Chancellor's Green Development Fund to provide small grants for innovative projects to improve campus sustainability, and publishing the most comprehensive Campus Sustainability Assessment of any university in the country. All of these were achieved through collaboration among faculty, staff, and students and connected campus operations to academic curriculum and research.

Faculty and students have also supported implementation of the Policy through other ties to the University's educational mission. Faculty involved in the Sustainability Committee at the Berkeley campus have launched the nation's first Green Building Research Center (<http://greenbuildings.berkeley.edu/>). Students also created their own course called the "Education for Sustainable Living Program" that reaches more than 400 students each spring on five campuses to expose them to leading thinkers on sustainable living topics and to organize active involvement in improving campus sustainability practices. This student-run course was recently chosen first from among student initiatives around the

world for an international prize for student entrepreneurship in higher education from the Oikos Foundation in Switzerland.

Partnerships with Government and Nonprofit Organizations

Partnerships with government agencies and nonprofit organizations continue to leverage additional resources to assist the University in implementing the Policy. The Alameda County Waste Management Authority provided a grant to conduct a pilot “LEED for Existing Buildings” project, contributing to the development of guidelines for sustainable operations and maintenance practices. The San Francisco Environment Department and the Environmental Protection Agency are providing technical and other assistance for the University’s sustainability procurement initiatives. The University continues to work with the U.S. Green Building Council to assist UC campuses going through the LEED certification process and to comment on green building standards under development. The University also actively participates in the California State Green Building Task Force, the California State Energy Policy Advisory Committee, and the California State Environmentally Preferable Purchasing Task Force.

Training

The University continues to promote effective implementation of the Policy through training, with the following successful programs as examples. The fourth annual UC Sustainability Conference, hosted by UC Santa Cruz in June 2005, attracted over 400 attendees from the UC and CSU systems. This conference highlighted and shared best practices in energy efficiency, green buildings, and sustainability on UC and CSU campuses. The first annual Higher Education Energy Efficiency Partnership Best Practice Awards were presented to exemplary UC and CSU energy efficient projects at a special ceremony during the conference.

The UC Project Management Institute also continued its ambitious series of trainings sponsored by the CPUC grant mentioned above. Since July 2004, some 780 staff participants attended more than 51 training offerings. Most staff members attended multiple training sessions, which also included CSU and community college participants. The training program provided energy efficiency and green building courses for the operation and maintenance of existing buildings as well as for the design, construction, and commissioning of new buildings.

Procurement

The University is committed to incorporating sustainable purchasing practices in the development of its systemwide bid proposals and contracts. In the past year, the University’s strategic sourcing initiative has required all bidders to submit information regarding their company’s sustainable business practices in addition to submitting information regarding their product offerings in recycled goods, re-manufactured goods, post-consumer content products, and energy efficient products. The Strategic Sourcing Office has worked closely with Facilities Administration, the Sustainability Staff group,

and the California Student Sustainability Coalition and is committed to including green purchasing representation on each systemwide commodity team.

Some recent successes include an increase in recycled content office product purchases from 11 percent in FY2004-2005 to 14 percent in the first quarter of FY2005-2006. Strategic Sourcing has instituted a requirement that all new equipment purchases through the new office equipment contracts awarded for copiers, printers, and fax machines be ENERGY-STAR® models. In addition, in association with the bottled water contract award, replacement of bottled water dispensers with ENERGY-STAR® models was a requirement for bidders to participate in the systemwide contract. These efforts have been assisted by the hiring at the Santa Barbara campus of a Sustainable Procurement Coordinator who collaborates on systemwide commodity teams and helped develop a training module on sustainable purchasing practices.

Sustainable Transportation Practices

The sustainable transportation practices incorporated into the Presidential Policy and Policy Guidelines were drafted in coordination with campus administration, faculty, students (MoveUC and the California Student Sustainability Coalition), Office of the President staff, and other stakeholders.

The Sustainable Transportation Policy Initiative was established in response to the challenge by the California Student Sustainability Coalition and former Student Regent Murray. The goal was to deliver for Regents' approval a sustainable transportation policy setting out Presidential Policy Guidelines to advance sustainable transportation practices at our UC campuses.

The Policy Guidelines outline goals on metrics and monitoring of greenhouse gas emissions, average daily trips to and from campuses, and increasing transportation demand management options. Transportation demand management programs have improved the sustainability of transportation practices on University campuses. The campuses use an array of these programs, and each serves to improve specific aspects of a transportation infrastructure. The effectiveness of each program depends on the unique environment of the campus on which it is implemented.

External Recognition for UC

One measure of the success of the policy is the continuing public recognition which The Regents and the University receive for green building, clean energy, and other sustainability efforts. The Berkeley campus was selected as one of three recipients in the "best overall" category of the 2005 Flex Your Power Awards for energy efficiency in the State of California. The Los Angeles campus was also given honorable mention for its demand response program, and the San Diego campus given honorable mention for education and leadership in energy efficiency. Newspaper and magazine articles on the growing green building and campus sustainability movements have chronicled the University's leadership in these areas, especially at the new Merced campus. University

staff also continue to be invited to give keynote speeches and other presentations on the Policy at regional and national conferences.

Regent-designate Ledesma commended everyone who had worked on instituting and developing the green building and energy policy, and she pointed out the tremendous student effort involved. She was hopeful that students would continue to be involved in future steering committees, that information about the University's progress would be posted on the internet to lead the way for others, and that the University would work toward achieving more than the minimum LEED standards for its buildings.

Regent Ruiz asked about the cost of meeting green building program standards. Mr. Bocchicchio responded that it is thought to be between 1 and 3 percent. He reported that good architects can make significant progress in green building design for little cost. The Savings by Design program allows for modeling buildings that are the most cost effective both initially and for the long term.

Regent Ruiz encouraged continued focus on the development and implementation of cogeneration and solar energy.

Regent-designate Coombs noted the importance of the sustainability efforts. He believed that not only students but also UC alumni working in fields related to environmental conservation, energy policy, and architectural environmental design could be helpful in supporting the University's efforts in these areas. He believed that the University should make an effort to distribute information about its sustainability programs beyond the expected environmental and higher education publications in order to make sure that people on the state, federal, governmental, and corporate level be made aware of the important work that is being done.

Committee Chair Hopkinson noted the extensive progress on sustainability that had been made in a relatively short time.

In response to an inquiry from Regent Juline, Assistant Vice President Bocchicchio stated that at an upcoming meeting a report would be presented that would disclose how the campuses determine their allocations for administrative budgets for their projects.

Regent Ruiz asked whether progress was being made in implementing the recommendations of industry consultants related to improving the University's construction processes to make them more efficient and faster. At the request of Committee Chair Hopkinson, who noted that substantial progress had been made on implementing the recommendations, Assistant Vice President Bocchicchio agreed to present a report at the Committee's March or May meeting.

[For speakers' comments, refer to the January 17 minutes of the Committee of the Whole.]

The Committee recessed at 2:25 p.m.

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The Committee reconvened on January 18, 2006 at 11:25 a.m. with Committee Chair Hopkinson presiding.

Members present: Regents Dynes, Hopkinson, Johnson, Juline, Parsky, Ruiz, and Schilling; Advisory members Coombs and Ledesma

In attendance: Regents Bustamante, Gould, Island, Lansing, Lee, Lozano, Pattiz, Preuss, Rominger, Rosenthal, Sayles, and Wachter, Regent-designate Schreiner, Secretary Trivette, General Counsel Holst, Interim Treasurer Berggren, Senior Vice Presidents Darling and Mullinix, Acting Provost Hume, Vice Presidents Broome, Foley, Gomes, Gurtner, and Hershman, Chancellors Bishop, Carnesale, Córdova, Denton, Drake, Fox, Tomlinson-Keasey, Vanderhoef, and Yang, Vice Chancellor Burnside representing Chancellor Birgeneau, Acting Laboratory Director Kuckuck, Auditor Reed, and Recording Secretary Bryan

Having reached a quorum, upon motion duly made and seconded, the Committee approved the minutes of the previous meetings as recommended in paragraph 1 and the President's recommendation with respect to paragraph 7 above, and approved the President's recommendations with respect to paragraphs 2, 3, 5, 6, and 8 above and voted to present them to the Board.

The meeting adjourned at 11:26 a.m.

Attest:

Secretary