

The Regents of the University of California

COMMITTEE ON GROUNDS AND BUILDINGS

December 13, 2002

The Committee on Grounds and Buildings met on the above date at 1000 Broadway, Suite 109, Oakland.

Members present: Regents Hopkinson, Johnson, Kozberg, Ligot-Gordon, Marcus, and Sainick; Advisory members Bodine, Murray, Seigler, and Pitts

In attendance: Secretary Trivette, General Counsel Holst, Senior Vice President Mullinix, and Recording Secretary Bryan

The meeting convened at 10:45 a.m. with Committee Chair Marcus presiding.

1. REQUEST FOR A FEASIBILITY STUDY AND POLICY RECOMMENDATION FOR A SYSTEMWIDE GREEN BUILDINGS POLICY AND CLEAN ENERGY STANDARD

Regent Ligot-Gordon recommended that the Office of the President shall:

- A. Develop a feasibility study, for presentation at the May 2003 Regents meeting, for the adoption of a Green Building policy and Clean Energy standard for all new and renovated buildings. The feasibility study should consider:
 - A policy that all renovated and newly constructed buildings be designed and constructed using the Leadership in Energy and Environmental Design (LEED) building rating system developed by the U.S. Green Building Council (USGBC), and be certified at the LEED Silver level or higher.
 - A policy that all renovated and newly constructed buildings shall be powered by 50 percent clean energy, 25 percent of which will be generated on site.
- B. Recommend a Green Building policy and Clean Energy standard for approval by The Regents at its May 2003 meeting. This recommendation shall include input from and coordination with students, faculty, staff, government agencies, other higher education systems, as well as non-governmental organizations.

The Committee was informed that the University maintains over 90 million square feet of building space to support nearly 400,000 students, faculty, and administrative staff. The new UC Merced campus will bring thousands of new students and many new buildings into the UC system. With the passage of the school bond and the

UC System's projected growth, it is anticipated that the system will soon become the single largest source of demand for new construction in the state of California.

Regent Ligot-Gordon observed that the continued increase in the UC student population and the ongoing campus expansions will also magnify the ecological footprint of the UC system. By implementing a clean energy standard and green building policy, the University has the opportunity to lead the state and country toward a more responsible future of cleaner air; healthier buildings; increased energy, water, and resource efficiency; and improved levels of climate protection.

The need to establish a clean energy standard and green building policy for the University is rooted in the significant environmental impacts that buildings and the infrastructures that support them represent. Traditional buildings consume over 33 percent of the energy and 66 percent of the electricity generated in the United States. They also produce over 25 percent of greenhouse gas emissions, generate about 30 percent of the state's solid waste materials, and affect the health, comfort, and productivity of building occupants, particularly when indoor contaminants compromise indoor environmental quality.

Use of "clean" or renewable energy sources, such as geothermal, wind, and small hydroelectric power, as well as on-site distributed generation sources such as solar or fuel cells to power buildings, will decrease greenhouse gas emissions and reduce global climate change impacts. Sustainable buildings make much more efficient use of energy, water, and other valuable natural resources. They incorporate design and material selection strategies that promote the use of natural light and cleaner air, resulting in healthier and more productive offices, classrooms, and laboratories.

The U.S. Green Building Council developed the Leadership in Energy and Environmental Design building rating system as a tool to promote the economic, resource, and social benefits of sustainable buildings. The LEED building rating system focuses on site selection, water efficiency, energy and atmosphere, indoor environmental quality, materials and resources, and innovative design strategies. Buildings that receive LEED certification maximize environmental, human resource, and fiscal benefits.

California State government owns and operates over 189 million square feet of space and operates an additional 21 million square feet of leased space, including laboratories, warehouses, office buildings, and maintenance stations. Governor Davis issued two Executive Orders to address the siting and building of state facilities: Executive Order D-16-00 and Executive Order D-46-01. Executive Order D-16-00 establishes the Governor's sustainable building goal: "...to site, design, deconstruct, construct, renovate, operate, and maintain State buildings that are models of energy, water and materials efficiency; while providing healthy, productive and comfortable indoor environment and long-term benefits to Californians." Executive Order D-16 also directs the State and Consumer Services Agency to recommend strategies for incorporating sustainable building practices into the development of State facilities,

including leased property. Executive Order D-46-01 establishes the criteria the State must use to locate and lease space, including such considerations as proximity to public transit and affordable housing, preservation of historic and architecturally significant structures, economic renewal opportunities, and integration of the community into the process.

Assistant Vice President Bocchicchio provided a brief update on the University's progress concerning energy efficiency. He reported that the broad concept of sustainability has become state-of-the-art in architectural practice and has entered into the designs of many of its facilities. The University has made progress particularly in the area of energy efficiency. Most campuses have a strategic energy plan to guide them and have implemented thermal energy storage projects, lighting efficiency upgrades, air compressor efficiency upgrades, and energy-efficient traffic lights. Other examples are the use of energy management control systems within buildings and heating/ventilating/air conditioning system upgrades. In line with the campus strategic energy plans, more projects will be implemented over the next several years. He observed that the University had adopted a formal approach toward the concept of sustainability and continues to develop it. On the specific issue of green buildings, he reported that the Bren Center on the Santa Barbara campus was the first laboratory in the country to receive the highest possible rating from the Green Building Council's LEED program. UC Merced is on track to receive LEED certifications for its first three buildings. Implementing the University's huge capital program will require important policy decisions in the near future with respect to sustainability.

Committee Chair Marcus invited Ms. Aileen Adams, the Secretary of the State and Consumer Services, who oversees the Department of General Services and all State building projects, to address the Committee. Ms. Adams reported that, to comply with the Executive Orders, the State and Consumer Services Agency had convened an inter-agency Sustainable Building Task Force of representatives from over 40 State agencies. In December 2001, the Task Force released *Building Better Buildings: A Blueprint for Sustainable State Facilities*, a 10-point plan for successfully incorporating sustainable building practices into the State government capital outlay process. Secretary Adams expressed her appreciation for the leadership shown by the students who had made energy sustainability their particular cause. She believed that sustainable building provides a situation that enhances the environment, saves the taxpayers money, and makes buildings more pleasant and healthful places in which to work and learn. She commented that she looked forward to working with the University and sharing the information assembled by the task force. The Governor's executive order on sustainable building directs State agencies to construct in a cost-effective manner State buildings that are models of energy, water, and materials efficiency and provide healthful, productive, and comfortable indoor environments. She reported that the most recently built Department of Education building is expected to attain a Gold LEED and that the concept of sustainability is rapidly being embraced throughout the state. She voiced support for the recommendation being presented by Regent Ligot-Gordon.

Regent Kozberg believed that in order for the feasibility study that was being recommended to be groundbreaking, it should be expanded to include a cost-benefit analysis of the hard and soft costs involved and analyses of how new policies would be integrated with the campus strategic energy plans and with the cost of ongoing building maintenance. She suggested deleting the second bullet in the recommendation concerning the feasibility study in that it preempts whatever conclusions stem from the study.

Regent Hopkinson advised taking a broad view and not confining the individual campuses by adopting policies that do not take into account their differences. She expressed concern also that the suggested May 2003 deadline would not give staff sufficient time to conduct the necessary analysis. She was also concerned about the wording of the proposal, which she believed was too specific and restrictive.

Regent Ligot-Gordon noted that a staff steering committee has been formed that will have the creative control over the feasibility study's direction. The committee has determined that the broad policy framework under which the University should be operating could be ready by the end of March. He emphasized that his recommendation initiates a process and a time line only.

Regent-designate Bodine noted that the feasibility study was designed to result in the adoption of a policy that would affect renovated and newly constructed buildings and not retrofiting. She asked when the clock would start for new construction. Committee Chair Marcus responded that he believed that projects being recommended currently would not be affected by any policy that is adopted.

Committee Chair Marcus commented that inherent in the initiation of a feasibility study is the presumption that it will analyze every aspect of sustainable buildings and energy conservation. He suggested that elimination of the two bullet points in the first paragraph would have the advantage of giving the study a broad area that the committee can define more clearly as necessary. Regent Hopkinson agreed but suggested amending the recommendation by adding the following paragraph: "The study shall consider the economic impacts, including capital and maintenance expenses, of all sustainability policies and standards."

Upon motion duly made and seconded, the Committee approved the recommendation as amended and voted to present it to the Board.

[For speakers' comments, refer to the minutes of the December 13 meeting of the Committee of the Whole.]

2. **CAMPUS DESIGN PRESENTATION, SAN DIEGO CAMPUS**

It was recalled that the Committee had asked each campus to present its vision for development with a view toward ensuring the future excellence of the physical environment. Vice Chancellor Woods introduced the presentation with remarks written by Chancellor Dynes, following which he discussed the macro-level plans guiding development. He observed that the campus' academic and public service programs had influenced its planning vision. The development of the campus stemmed from the imagination of Roger Revelle, a director of Scripps Institution of Oceanography, which became a university research center before World War I. In the late 1950s, he led the initiative to locate UCSD adjacent to Scripps on 900 acres that had been earmarked by the government for transfer to the University. His vision was to combine the resources of a research university with the qualities of small liberal arts colleges. His early recruits to the campus were distinguished senior faculty, and he led the creation of a system of small, separate colleges. This academic model poses a challenge to creating a cohesive campus.

Mr. Woods stated that the University's public service mission also influenced the development of the campus. The Birch Aquarium, which opened in 1992, attracts over 350,000 visitors per year, about 75,000 of whom are children from local schools who take part in educational programs there. Interaction also takes place in the theater and dance department, which collaborates with the La Jolla Playhouse. This affiliation has enabled UCSD's program in theater training to be ranked third in the nation and first in the west. Another central public service is UCSD's involvement in K-12 programs. A key element in the K-12 strategy is the Preuss School, which enrolls about 700 middle and high school students whose test scores on standardized examinations are among the highest in the region. Lastly, the Stewart Collection of outdoor sculpture draws the public and energizes the campus' outdoor spaces.

Mr. Woods presented slides of the campus to show its physical dimensions and attributes. He recalled that UCSD encompasses 8 million gross square feet, almost 1.7 million of which are under construction or in active planning. It is expected that the final campus will cover 20 million gross square feet.

Mr. Woods discussed the specific planning process that is guiding development. The two key documents are the Long Range Development Plan and the UCSD Master Plan. The LRDP was approved by The Regents in 1989 and is expected to be revised within the next few years. It is a generic land-use document that fosters a broad understanding of the kind of spaces that the campus needs, its total space, and a best estimate of the impacts the creation of that space will have on the campus and its surrounding community. The key study that guides the physical development building by building is the Master Plan, which was also completed in 1989. It envisioned that four key elements would provide a strong direction for the campus: the central park, the University Center, neighborhoods that radiate from the park, and the connections that allow for movement around the campus. The park is 300 acres of varying kinds of spaces, some of it forest, some chaparral, and some permanent open space. Its

eucalyptus groves flow through the heart of the campus. The campus intends to reforest some areas of the park and to continue to add trees around the campus perimeter. The University Center is the geographical, academic, and social heart of the campus. It is the site of the library, the Price Center, and some classroom buildings. As the campus has no adjacent set of commercial services, it is planned to establish core functions in the quadrangle area in order to create a village center that will serve faculty and staff. The campus neighborhoods that radiate from the University Center are the homes of six undergraduate colleges. These sites include both academic and residential facilities. Vehicular access on campus is planned to keep cars off of surrounding city streets. Cars are mostly limited to the campus periphery so that a pedestrian center can be maintained. The campus is bisected by Interstate 5, separating the east and west campuses. One vehicular crossing exists, and a second is planned for construction within the next few years. Although campus bicycle patterns do exist, the campus does not have good bicycle collector routes from surrounding areas and therefore does not have the bicycle population of some other UC campuses. The campus pedestrian routes are both direct and meandering. The old east-west highway route that runs through the campus is now a pedestrian way. The other major route is Library Walk, which connects the library to the School of Medicine campus.

Mr. Woods discussed briefly the building approval process, which begins with the Master Plan and the LRDP. Proposals, whether State-funded or non-State funded, must be included in the campus' five-year capital plan. Once financing is assured, the Chancellor creates a building advisory committee, members of which are concerned not just with the building but also with how it will fit into the campus environment. As the process continues, an Academic Senate administrative oversight committee assures that the selected building site is appropriate. The design review board, which includes outside architects, faculty, and administrators, provides design advice. The building advisory committee and Academic Senate committee include student representatives. All the committees are advisory to the Chancellor, who has the ultimate authority on the campus.

Assistant Vice Chancellor Hellman, Campus Architect, showed how the planning process is producing appropriate spaces on the campus. His presentations focused on various campus projects that are bringing the development vision to reality. He noted that the campus is relatively young and is only mid-way in its development. The goal is to create a consolidated sense of place.

Mr. Hellman recalled that, although the Master Plan creates a basic framework for campus development, the next level of study elaborates on neighborhood planning. Neighborhood planning studies describe such things as building facades, building heights, types of fenestration, setback, pathways, and campus lighting. There are a color palette and a set of construction materials for each neighborhood. He described the changes that made Library Walk, Warren College mall, and other areas into more attractive and useful entities. He noted that Scripps Institution has provided a particular challenge in that it has nearly 300 feet of elevation change within its area.

The Master Plan envisioned providing access to it by building stairs and pathways up the side of the hill. The many levels of change in elevation are integrated within the design of the Institute for Geophysics and Planetary physics. Coupled with that, the Scripps Institution hillside neighborhood plan envisioned Scripps Crossing, a path of travel from the ocean level to the Scripps campus that provides beautiful views. As the oldest part of the campus, Scripps has been the focus of many improvements. A landscape plan created a new green and eliminated industrial-looking buildings in order to build a new gateway at the south entrance. A new conference center is expected to open within the next few years.

Mr. Hellman reported that as the University proceeds with its development, it is anticipated that infill projects will begin. For instance, the new School of Medicine research facility replaced a parking lot, as parking is being relegated to the campus perimeter. The new building provides a new sunny outdoor quad space. He noted that green building techniques are being employed in new construction.

Mr. Hellman commented that the campus architecture is a strong, distinct feature that expresses contemporary form. Most of the buildings are modern and comfortable to be around, with beautiful architecture and good details. As the campus grows, however, there is a need for more space. Although occasionally it becomes necessary to install temporary and modular buildings, eventually these will be replaced. Campus identification and way finding have been improved through a comprehensive signage program that has been well received, and memorable campus spaces are being developed in line with the overall campus vision. Spaces such as the Sun God sculpture reinforce University traditions. The campus fabric is what makes the diversity of the campus become unified. The landscape and setting are so strong, with the eucalyptus groves and the park, that the buildings become subservient to them. This is further taken advantage of by locating artworks in the park. In conclusion, he emphasized that UCSD has a plan, a vision, and an excellent Master Plan, the founding principles of which will not change. As the neighborhood planning studies continue, the Master Plan principles will be applied to the development of the campus and result in a consistent implementation of its physical facilities.

Regent-designate Bodine asked how architects and donors are handled who have ideas that are contrary to the campus vision. Vice Chancellor Woods responded that the campus has never had an issue with a donor. As to the architects, the campus design review board protects the campus from accepting ideas that do not fit with the campus vision.

Faculty Representative Pitts asked whether there would be any attempt to use more California native plants in the campus landscaping. Mr. Hellman responded that the campus is making an effort to use native species that are drought-tolerant. Mr. Woods noted that eucalyptus trees have become a campus theme and there is no thought of reducing their numbers.

Regent Sainick complimented the plan to use perimeter parking but questioned its practicality in that two-thirds of the students do not live on campus. He expressed concern about students who must travel back and forth to jobs. Mr. Woods commented that many students live in the immediate, surrounding area. There are extensive campus shuttles, and a shuttle that makes an off-campus loop is transporting about 3,500 riders a day. He believed that perimeter parking is being well received by campus constituents. Mr. Hellman added that commuters are welcome to use lounges at designated locations that provide services and the use of computers.

Regent Ligot-Gordon asked whether students were encouraged to become both part of their individual college communities as well as of the campus community as a whole. Mr. Woods responded that, although student services tend to be located in the heart of the campus, each college has its own dining facility. There are also dining facilities not connected to a college. Meal plans allow students to eat wherever they may be during the day.

Regent Ligot-Gordon then asked whether each college has its own design. Mr. Hellman responded that the Master Plan outlined the idea that each neighborhood and college would have a distinct character. Revelle has many wide open spaces, with mid-rise buildings on the perimeter. Muir College is more intimate but denser, with more high-rise buildings. Marshall College has the lowest density.

Regent Kozberg asked how the campus vocabulary around the older buildings is upgraded as the campus is built out. Mr. Hellman responded that neighborhood planning studies provide direction concerning components such as height, fenestration, and mass of new buildings in established areas. The architects are provided with philosophical guidelines for their projects. Mr. Woods pointed out that the main school of medicine building is an example of the massive concrete architecture popular in the 1960s. The new school of medicine research building will provide an attractive counterpoint that will help to diminish the visual impact of the older building.

Regent Hopkinson commented that the campus vision presentation was evidence of a thoughtful planning process that began long ago and had been successful.

3. **ADOPTION OF MITIGATED NEGATIVE DECLARATION AND APPROVAL OF DESIGN, BIOMEDICAL LIBRARY RENOVATION AND ADDITION, SAN DIEGO CAMPUS**

The President recommended that upon review and consideration of the environmental consequences of the proposed project, the Committee:

- A. Adopt the Initial Study/Mitigated Negative Declaration.
- B. Adopt the Mitigation Monitoring Report and Findings.

- C. Approve the design of the Biomedical Library Renovation and Addition, San Diego campus.

[The Initial Study/Mitigated Negative Declaration, Mitigation Monitoring Report, and Findings were mailed to the Committee members in advance of the meeting, and copies are on file in the Office of the Secretary.]

It was recalled that preliminary plans for the project were considered for State funding in 1994-95, and Hardy Holzman Pfeiffer Associates LLP, Architects were hired in 1993. The project was subsequently suspended due to State funding constraints. In July 2001, the Chairman of the Board and the President approved the Biomedical Library Renovation and Addition, San Diego campus, for inclusion in the 2002-03 Budget for Capital Improvements and the 2002-07 Capital Improvements Program at a total project cost of \$17,774,000. The total project cost will be funded from State funds (\$17,003,000) and campus funds (\$771,000).

Project Site

The addition will be located on the south side of the Biomedical Library, within the School of Medicine neighborhood at the southern end of UCSD's west campus. The expansion site is bounded by the existing Library to the north, Library Walk to the west, Osler Lane to the south, and the Basic Science Building service yard to the east. The project site is consistent with the 1989 Long Range Development Plan land use designation.

Project Design

The Biomedical Library Addition and Renovation project will provide approximately 23,334 asf of new construction and renovate the existing library, bringing the total area to approximately 51,098 asf. The combined program includes user seating and carrels, staff and processing areas, and collections.

The addition aligns with the two-story library and includes a partial basement. The collections are housed on the second floor and the user and staff areas are located on the first floor. The utility services are in the basement. A north/south pedestrian breezeway connects the School of Medicine neighborhood to the north and the future campus expansion to the south.

Horizontal sun screens and window glazing on the addition will be composed of a combination of clear and ceramic coated glass and will wrap around the south and west sides of the addition. The east façade will be composed of precast concrete panels and wood framed windows. The structure will be a combination of steel moment resisting and braced frames.

The campus design review board has reviewed the design of the project in accordance with University policy, and an independent cost estimate and value engineering

session have been completed. The Offices of Facilities Design and Construction will manage the project, using independent testing agencies as necessary. The Assistant Vice Chancellor for Facilities Design and Construction and the Campus Architect will perform project oversight.

Environmental Impact Summary

Pursuant to State law and University procedures for implementation of the California Environmental Quality Act, an Initial Study/Mitigated Negative Declaration (MND) was prepared for the Biomedical Library Renovation and Addition. The proposed MND was prepared and circulated to responsible agencies and to the State Clearinghouse for public review. One comment letter was received from the Department of Toxic Substance Control, which provided information about its regulations. The MND is tiered from the 1989 LRDP Environmental Impact Report. Based on the Tiered Initial Study, the University concluded that, although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions to the project have been made or mitigating measures have been agreed to by the University. On the basis of the Tiered Initial Study/MND and implementation of LRDP EIR mitigation measures in combination with project-specific mitigation measures for geology and noise, there is no substantial evidence that the project as mitigated may have a significant effect on the environment.

Findings

The Findings discuss the project's impacts and associated mitigation measures.

Campus Architect Hellman presented slides of the project.

Regent Hopkinson commented that she liked the way in which the existing buildings had been opened up, and she liked the materials and the sun shade treatment. She did not like the roof massing, which reminded her of the 1950s. Her solution would have been to move the façade out to the edge of the existing structure.

Regent Kozberg was of the opinion that the design, as seen in context, integrated the styles well. Mr. Hellman acknowledged that the strong lines of the building were very difficult to update without making major changes and that the project posed a difficult architectural problem.

Regent-designate Murray asked about the glass that was being used. Mr. Hellman reported that high-performance glass with a low-energy coating was being used, combined with a fretted glass that cuts down on direct sunlight.

There was disagreement as to the effectiveness of the design in integrating the old and new parts of the design. Committee Chair Marcus commented that the original building was extremely dated architecturally. He was surprised that more effort had

not been put into integrating the addition, and he viewed the final product as not very attractive. He was not comfortable with allowing the project to proceed as planned, and he expressed the hope that in future projects would come before the Committee at an earlier stage in their planning. Regent Hopkinson agreed. She suggested that the campus come back to the Committee with some alternative designs. Senior Vice President Mullinix advised that the design of the roof was critical to the rest of the design and might not be able to be changed sufficiently to satisfy all Committee members.

Regent Kozberg asked how critical the timing of the Committee's approval was. Mr. Hellman responded that the design must be approved in order for the campus to meet the submission requirements of the Department of Finance concerning project funding.

In conjunction with these observations, Regent Kozberg agreed that the process for approving designs might benefit from earlier review by the Committee. Committee Chair Marcus noted that to assure maximum input the Committee may have to meet more often.

Upon motion duly made and seconded, the Committee approved the recommendation provisionally, with the understanding that the campus would give attention to the concerns expressed by the Committee and present the design again at the February meeting.

4. **CERTIFICATION OF ADDENDUM TO ENVIRONMENTAL IMPACT REPORT AND APPROVAL OF DESIGN, MISSION BAY BLOCK 20 HOUSING PROJECT, SAN FRANCISCO CAMPUS**

The President recommended that upon review and consideration of the environmental consequences of the proposed project as indicated in Addendum No. 4 to the 1996 Long Range Development Plan Final Environmental Impact Report (LRDP FEIR), the Committee:

- A. Certify Addendum No. 4 to the 1996 LRDP FEIR.
- B. Adopt the Findings.
- C. Approve the design of the Mission Bay Block 20 Housing Project, San Francisco campus.

[Addendum No. 4 to the 1996 LRDP FEIR and Findings were mailed to the Committee members in advance of the meeting, and copies are on file in the Office of the Secretary.]

It was recalled that in November 2002, The Regents approved the inclusion of the Mission Bay Block 20 Housing Project, San Francisco campus in the 2002-03 Budget

for Capital Improvements and the 2002-05 Capital Improvement Program at a total project cost of \$112,816,000. The cost will be funded from a combination of external financing (\$82,000,000), gift funds (\$30,000,000), and funds available to the campus (\$816,000). The financing for a parking structure on the east side of Block 23 that will provide 380 parking spaces for the housing project tenants, as well as additional parking for other campus groups, will be presented to The Regents for approval in early 2003.

In November 2002, the appointment of Skidmore, Owings and Merrill of San Francisco as executive architect for this project was approved within the Office of the President.

Project Site

The site, which is located between 3rd and 4th Streets and future 13th Street and Plaza at the new Mission Bay campus, was chosen in accordance with the 1996 Long Range Development Plan Amendment and the Supplemental EIR that was approved and certified at the January 2002 meeting.

Project Design

The design contains 298,800 residential and 11,855 retail assignable square feet, with a variety of apartments for single and family students and postdoctoral scholars and retail space at the ground level to serve the new campus population.

The project is divided into two high-rise and two mid-rise apartment buildings above ground surrounding a slightly elevated landscaped courtyard. In response to significant community concern when the project was initially presented, the heights of the four buildings were revised, the tallest being 155 feet. The buildings will be concrete and steel with buff-colored cement plaster exterior walls, metal panel fasciae and corrugated aluminum panels, glazed curtain walls, floor-to-floor glazing systems, operable windows, tipped steel-framed roofs, and mechanical screen walls and louvers.

Project Statistics

The project has been reviewed in accordance with University policy by Avalon Bay Communities, Pankow, Turner Construction, LEM, and the SOM value engineering team. Independent structural review has been conducted by Degenkolb Engineers and independent seismic review by Comartin-Reis. UCSF Capital Projects and Facilities Management will manage the project, with the help of outside consultants and testing agencies as necessary. The Associate Vice Chancellor and Campus Architect will perform project oversight.

Environmental Impact Summary

Pursuant to State law and University procedures for implementation of the California Environmental Quality Act, Addendum No. 4 to the 1996 LRDP EIR was prepared for the proposed Block 20 Housing and Retail Project to consider any potential new significant impacts of the project not previously considered in the LRDP EIR as supplemented by the LRDP Amendment No. 1 SEIR, approved by The Regents in 2002, that established housing use at the Mission Bay site and confirmed the boundary of the site to include 43 acres.

Addendum No. 4 determined that project specific effects would not alter the conclusions of significance of the LRDP FEIR and LRDP Amendment No. 1 SEIR. Addendum No. 4 also concludes that the project is in furtherance of the Mission Bay South (Redevelopment) Plan as described in Public Resources Code 21090, which establishes streamlined environmental review procedures for such projects. Addendum No. 4, together with the LRDP FEIR and LRDP Amendment No. 1 SEIR, constitute final environmental review of the Mission Bay Housing Project. In conformance with the 1996 LRDP and LRDP Amendment No. 1 Mitigation Monitoring Program, mitigation measures to reduce the project's contributions to significant effects have been incorporated into the project.

Findings

The Findings discuss the project's impacts, mitigation measures, and conclusions regarding approval of the design and certification of the EIR for this project in conformance with CEQA.

Vice Chancellor Barclay and Campus Architect Wiesenthal presented the design.

Regent Ligot-Gordon noted that the design was impressive. He observed that 4th Street goes through the campus and asked whether non-campus pedestrian or vehicular traffic was expected to use it. Mr. Wiesenthal responded that most of the traffic coming into the campus would be from 3rd Street.

Regent Hopkinson also complimented the design. She noted that the construction costs seemed low. Mr. Wiesenthal explained that the project had envisioned incorporating parking underground. Although when that was removed to become a separate project, the cost per square foot went down, containing costs was a goal from the start.

Regent-designate Siegler asked about provisions for children. Mr. Wiesenthal responded that a child care center will open shortly after the housing project and will accommodate up to 75 children as the next phase of the campus is developed and demand is analyzed further. In the short-term, the campus has a contract with a child-care provider nearby for the children of those on site.

Upon motion duly made and seconded, the Committee approved the recommendation.

5. **SEISMIC POLICY UPDATE**

The Committee was informed that this item had been deferred until the next meeting.

6. **MAJOR CAPITAL PROJECTS IMPLEMENTATION REPORT**

The Committee was informed that the Major Capital Projects Implementation Report measures project delivery performance and identifies trends. It describes the aggregate status of major capital projects under way at the end of fiscal year 2001-02 and summarizes management initiatives and market conditions affecting project implementation.

The University's ability successfully to implement its capital program depends on numerous factors. Factors within University control include project management and delivery strategies, academic program changes, and budgeting/funding strategies. Factors beyond University control include the construction industry bid climate and market conditions, code changes, requirements of State and other funding sources, and weather delays.

Because a mix of factors affects project delivery, simple indicators do not fully represent the complexity of factors affecting project implementation. Nonetheless, to assess the general condition of the program, to identify trends, and to develop initiatives to improve project delivery, two indicators are monitored: project budget changes and project schedule changes.

Status of the Capital Program

Active projects at fiscal year end 2001-02 numbered 362 and had a budget of \$6,933,913,000, which reflects a 2.8 percent increase over the original budget. From fiscal year 2000-01 to fiscal year 2001-02, the number of active projects increased by 51. During this time, 75 projects with budgets totaling \$436,809,150 filed Notices of Completion, while the total value of projects in design and construction increased from \$5.311 billion to \$6.933 billion. Projects related to enrollment growth, including housing, are reflected in the number of new projects in the program. Seismic improvements and renovation projects continue to represent a major component of the capital program.

The eleven-year trend in the percentage of net project budget augmentations had an overall reduction from 6 percent in fiscal year 1990-91 to 2.8 percent in fiscal year 2001-02. From fiscal year 2000-01 to fiscal year 2001-02 the percentage of net project budget augmentations decreased from 3.3 percent to 2.8 percent; 64 projects received budget increases and 25 projects received budget decreases. The percentage of projects with schedule changes decreased to 41 percent from 54 percent between 2000-01 and 2001-02.

Conditions in the Construction Market place

Nationally, at the end of the third quarter 2002 Engineering News-Record (ENR) reported year-to-date declines in construction value of 44 percent for office buildings, 29 percent for hotels, 25 percent for commercial buildings, and 17 percent for the already depressed industrial market. During the same period, public markets experienced year-to-date increases in construction value of 24 percent for hospitals and 16 percent for schools, while highway, water, and sewer work remained strong. In addition, low interest rates continued to keep the housing market growing. Furthermore, ENR reported that the gap between the general building cost indices, which measure the production cost of labor and materials to the contractor, and contractor selling cost indices, which measure the amount that contractors are paid for completed buildings, has widened, indicating continued pressure on contractor margins.

In 2001-02, growth in the California economy moderated again in comparison to the previous year, and non-housing construction costs leveled off or declined in some local markets after several years of rising costs and spiking phenomena. Housing construction remains strong, however, driven by pent-up demand and declining mortgage interest rates. Valuation of new housing construction held steady at or near record levels in 2001-02, while valuation of non-residential construction contracted by 22 percent year-on-year. In general, cost pressures on UC projects moderated somewhat, although they continue to affect construction of student housing in some locations.

Initiatives Related to Cost Management and Project Delivery

The growing scale of the University's capital program and projected student enrollment increases continue to challenge the University to improve short- and long-range planning and implementation processes.

The Berkeley and Davis campuses initiated a planned series of presentations to the Committee by all campuses of their visions for long-term campus physical development and will be followed by other campuses in turn through fall 2003. Specific areas to be addressed include the following:

- The vision guiding the development of the character of the built environment on each campus.
- Dedication of financial and human resources to achieve this vision.
- How the campus is organized to ensure that this vision is addressed across all administrative activities and levels.
- How the various physical planning elements are coordinated to support the vision, including Long-Range Development Plans, landscape and urban design concepts, Master Plans, precinct or neighborhood plans, and design guidelines.
- Continuity of land use, infrastructure, and natural environment.
- Integration of sustainability and life-cycle cost concerns in project development.

In addition, during 2001-02 the University continued to do the following:

- Work on a new cycle of updates to campus Long Range Development Plans to accommodate projected enrollment growth.
- Respond to the ongoing effects of the energy crisis with initiatives to conserve energy, including participation in a statewide demand reduction program, bringing a large cogeneration project on line at San Diego, and planning for cogeneration capacity at additional campuses, including Irvine and Davis. A new thermal energy storage (TES) system was completed at Davis, and new TES projects were initiated at Los Angeles and Riverside. Berkeley and Santa Cruz have begun studies of the costs and benefits of photovoltaic arrays.
- Address a shortage of student housing through expansion of bed count, adding approximately 600 beds by fall 2001 and anticipating approximately 3,000 additional beds by fall 2002.
- Aggressively implement a new campus in Merced, scheduled to begin classes in fall 2004.
- Support the development of campus project management capabilities by expanding the range, scope, and frequency of training programs and courses for campus personnel through the UC Project Management Institute. The range of topics has expanded to include invitational forums on specific building types.
- Increase application of new UC project delivery methods such as CM @ Risk and Design/Build during FY 2001-02, with CM @ Risk being used to contract for over \$1 billion worth of new construction, primarily sophisticated laboratory buildings and hospital projects.

Summary

The University's dollar value of active projects increased during 2001-02 by a net of \$1.622 billion. Between 1994-95 and 1999-2000, the percentage of projects with schedule changes remained relatively constant with a declining trend for the past two years. The percentage of net budget augmentations has decreased from 6 percent in 1990-91 to 2.8 percent this past year.

During the 2001-02 fiscal year, the University began to experience relief from rising construction costs in some markets. While the construction industry remains strong in some sectors, including housing and institutional construction, flat economic growth continues to moderate increases in construction costs.

Campus financial and staff resources continue to be challenged by the growth of the capital program to the unprecedented scale of \$6.933 billion. Meeting this challenge will require further development of the University's project management capability to remain effective in this economic environment.

Committee Chair Marcus announced that the item would be reopened for discussion at the Committee's next meeting.

7. **NORTHWEST STUDENT HOUSING INFILL AND LONG RANGE DEVELOPMENT PLAN, LOS ANGELES CAMPUS**

Vice Chancellor Blackman discussed the role and architectural challenges of the design for the Northwest student housing project, which will provide 550,000 square feet and 2,000 beds on the northwest campus. UCLA has been engaged for many years in the shift from a commuter campus to a residential campus that houses 90 percent of its incoming freshmen. This project is an undergraduate complex that, coupled with 2,000 units under construction for graduate students, will complete the renewed housing master plan. Through these projects and privately owned housing in the neighborhood, the campus will be able to house about 60 percent of its students within easy walking distance of campus or in campus-owned housing. The additional units are driven not solely by enrollment growth but also by increasing demand. The additional inventory also provides an opportunity to relieve some of the density found in existing student housing. Mr. Blackman explained that the presentation was in anticipation of requesting design approval at the Committee's February meeting. It is critical to keep to the campus vision while producing 2,000 units in an already dense component of the campus. Much of the existing campus housing is in high rise buildings dating from the 1960s that are still functional and seismically fit.

Mr. Blackman showed slides to illustrate conceptional directions for the project. He noted that in order to integrate the new construction with the old, ground-level detailing must be taken advantage of as a way of providing cohesion.

Campus Architect Fisher used virtual reality to describe the project and what its effect will be on the Northwest quadrant of the campus. Because it was felt that open space should be protected, parking lots were considered as potential construction sites for the project. It was determined that those sites were sufficient to fit the 2,000 beds and would provide an attractive living environment and a sense of community. Each building has faculty apartments and public functions on its ground floor. The upper floors house four-student and single rooms. Bruin Walk, which extends through the housing complex, will be doubled in width using brick and colored concrete. The design of the additions and their surrounding areas emphasizes detail on the lowest floors. The Dykstra parking structure that will replace parking lost in the surface lots is recessed into the hillside. He reiterated that the project focuses on integrating the existing architecture with the new architecture to make the complex read as a whole.

Regent-designate Murray commented that he was unable to differentiate between the old and new buildings. Mr. Blackman responded that, although the style of the old buildings was unfortunate, it dictated what the style of the new buildings should be in order for the project to form an integral whole. He believed that by energizing the ground plane, the less attractive features of the original buildings would recede into the background. Mr. Fisher noted that the ground floors of the old buildings, which housed the public functions, were being renovated to be raised to the same standard as the new buildings. The upper floors of the residence halls have been renovated already.

Regent Hopkinson offered her views on the project. She believed the new buildings were in correct locations and that the paving, arbors, and walks worked well. She was less enthusiastic about the façades of the buildings and hoped that they could be made to look less like those of the original buildings. She admired the plan for the garage, but she was concerned that the view of its top from upper stories of the residence halls would be unsatisfactory. Concerning the landscape plan, she objected to the use of pine trees, which she believed were not lush enough to soften the looks of the buildings. The entrances also seemed inhospitable and institutional to her. She believed that it was a mistake to use the old context as a base for the new design. Mr. Blackman commented that the new buildings have many elements not seen in the old buildings that he believed enhanced their appearance. He observed that the density dictates the use of particular forms which then must be made to fit a cost model.

Regent Kozberg liked the design but hoped that more warmth could be added, possibly with the use of more brick. She thought the space was well-designed. Mr. Fisher noted that the architecture is driven not just by the need to be integrated with an existing type of design but also by the need to have the structure of the building allow for the design of efficient residential spaces.

Committee Chair Marcus commented that he admired the harmony and integration of the design. He believed, however, that factors such as light, shadow, and wind could become issues. Coupled with the hardscape, the overall environment may not be pleasant. He advised considering those factors further.

Regent Sainick agreed with Regent Marcus's comments. He was also concerned about the lack of sufficient landscaping to balance the amount of hardscape.

Regent Ligot-Gordon asked whether the plaza areas had been purposely left in full sun. Mr. Fisher responded that the plazas had to be multifunctional, for example, to accommodate both fire trucks and pedestrians, in a dense development. Trees have been placed where they will be of maximum benefit.

Regent Kozberg and Committee Chair Marcus complimented the entire campus design team for the way in which the look of the campus has been developing.

8. **CERTIFICATION OF ENVIRONMENTAL IMPACT REPORT AND APPROVAL OF DESIGN, MATHEMATICAL SCIENCES BUILDING, DAVIS CAMPUS**

The President recommended that upon review and consideration of the environmental consequences of the proposed project as indicated in the Environmental Impact Report, the Committee:

- A. Certify the Environmental Impact Report.
- B. Adopt the Findings and Statement of Overriding Consideration and Mitigation Monitoring Program.
- C. Approve the design of the Mathematical Sciences Building, Davis campus.

[The Environmental Impact Report, Findings, Statement of Overriding Consideration, and Mitigation Monitoring Program were mailed to Committee members in advance of the meeting, and copies are on file in the Office of the Secretary.]

It was recalled that in January 2002, the Mathematical Sciences Building at the Davis campus was approved for inclusion in the 2001-02 Budget for Capital Improvements and the 2001-04 Capital Improvement Program at a total project cost of \$22,036,000. The project will be funded from a combination of external financing (\$21,936,000) and campus funds (\$100,000). In May 2002, the appointment of AC Martin Partners, Inc. of Sacramento, California, as executive architect for the project was approved within the Office of the President.

Project Site

The site for the Mathematical Sciences Building is in the central core of the UC Davis campus on California Avenue between the Academic Surge and Crocker Nuclear Laboratory buildings, a location designated for academic and administrative high-density uses in the 1994 Davis Campus Long Range Development Plan. The site is occupied by the vacant Hog Barn, which was built in 1913 and is considered to meet criteria for inclusion on the California Register of Historic Places. The Hog Barn will be moved to a site located southwest of the Silo student services complex on the core campus and will be renovated to accommodate administrative offices and activity areas.

Project Design

The 38,000-assignable-square-foot building will contain offices, office support facilities, office-based research space, conference, computer laboratories and classroom space serving the departments of mathematics, statistics, and a new campus initiative in computational science and engineering. The building will be four stories high using steel frame construction with a pre-cast concrete exterior finish.

The design of the Mathematical Sciences Building has been reviewed in accordance with University policy by an independent design consultant and value engineering teams. UC Davis Architects & Engineers Department will manage the project, with assistance from the executive design professional's project team and outside consultants and testing agencies as necessary. The Campus Architect will perform project oversight.

Environmental Impact Summary

Pursuant to State law and University procedures for implementation of the California Environmental Quality Act, a Focused Tiered EIR was prepared for the proposed Mathematical Sciences Building project. The Notice of Preparation and Tiered Initial Study for the project and the project's Draft EIR were prepared and circulated to responsible agencies and to the State Clearinghouse for review. One comment letter was received during the review period that favored relocation of the Hog Barn over the demolition option. No members of the public attended a public hearing for the Draft EIR. The comment letter received during the public review period, an acknowledgement letter from the State Clearinghouse, and the record of the public hearing are included in the Final EIR.

The EIR identified potential environmental impacts of the project in the areas of cultural resources and aesthetics, including the potential for relocation and renovation of the Hog Barn, which is a valued element of the central campus' visual landscape. The Hog Barn was a component of the original farm that became UC Davis. The proposed mitigation measure of relocating the Barn to the Silo complex on campus requires an architectural historian to advise the campus on the relocation and

renovation. The impact to the Hog Barn by its relocation will remain significant and unavoidable, and a Statement of Overriding Considerations is recommended. The other significant unavoidable impacts are the project's contribution to cumulative impacts previously evaluated in the 1994 LRDP EIR.

The final EIR is accompanied by a Mitigation Monitoring Program to assure that all mitigation measures are implemented in accordance with CEQA.

Findings

The Findings discuss the project's impacts, mitigation measures, and conclusions regarding certification of the EIR for the project in conformance with CEQA.

Campus Architect Strand presented slides of the project.

Upon motion duly made and seconded, the Committee approved the President's recommendation.

9. **CERTIFICATION OF ENVIRONMENTAL IMPACT REPORT, AMENDMENT OF LONG RANGE DEVELOPMENT PLAN, AND APPROVAL OF DESIGN, SURGERY AND EMERGENCY SERVICES PAVILION, MEDICAL CENTER, DAVIS CAMPUS**

The President recommended that upon review and consideration of the environmental consequences of the proposed project as indicated in the Environmental Impact Report, the Committee recommend:

- A. Certification of the Environmental Impact Report.
- B. Adoption of the Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan.
- C. Approval of the amendment of the UCDMC Long Range Development Plan to revise the land use designation to Hospital Zone for the project site.
- D. Approval of the design of the UC Davis Surgery and Emergency Services Pavilion, Medical Center, Davis campus.

[The Environmental Impact Report, Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan were mailed to all Regents in advance of the meeting, and copies are on file in the Office of the Secretary.]

It was recalled that at the January 2001 meeting, the Regents discussed the capital improvements needed at the medical center to satisfy SB 1953 requirements, including the construction of a new addition, the Surgery and Emergency Services Pavilion. In

March 2002, The Regents authorized the expenditure of up to \$5,250,000 of hospital reserves to fund preliminary planning costs related to the Surgery and Emergency Services Pavilion. In November 2002, The Regents approved the inclusion of the project in the 2002-03 Budget for Capital Improvements and the 2002-05 Capital Improvement Program at a total project cost of \$281,277,000. The total project cost is to be funded from a combination of hospital reserves (\$138,687,000), State lease revenue bonds (\$102,590,000), and capitalized leases (\$40,000,000).

In March 2002, the Office of the President approved the appointment of Gordon H. Chong & Partners of Sacramento, California as the Executive Design Professional for this project.

Project Site

The building site is in the north-central portion of the medical center east of Stockton Boulevard and is bounded by X Street, 45th Street, and V Street. Surrounding land includes a residential neighborhood to the north, the cancer center and surface parking lots to the east, the Shriners Hospital to the south, and Davis Tower, formerly called Tower II, to the west. The site is designated as an ambulatory services zone in the 1989 Medical Center Long Range Development Plan. An amendment to the LRDP is proposed to redesignate the project site as a hospital zone, as analyzed in the EIR for the project.

Project Design

The 208,131-assignable-square-foot Surgery and Emergency Services Pavilion will be a three-story addition with a basement and mechanical penthouse. The building will connect to the Davis Tower on the east and south sides. It will provide replacement space for several acute care functions now located in the seismically deficient north and south hospital wings and additional space to meet current code and programmatic requirements.

Replacement functions will include a new entry lobby serving the entire hospital, a Level I trauma and emergency service, radiology imaging, a 24-suite operating theatre, cardiology services, central processing, a 20-bed intensive care unit, clinical laboratory, food and nutrition services, outpatient neurosciences, pulmonary and apheresis services, and a pharmacy. Administrative functions will include patient care and lifeflight services, pharmacy operations, patient escort, interns and residents sleep and support, physician referral, access services, cashier, trauma program, and telemedicine.

Site development will include extension of campus utilities, a new pedestrian and vehicular entry with a covered drop-off area, and new surface parking and landscaping. The building exterior will be a combination of precast concrete, glazing, and metal panels compatible with the existing Davis Tower.

Eight vacant and seismically deficient buildings will be demolished within the next two years to clear the site for the Pavilion project. The north and south wings will be demolished once all occupants have relocated into the new Pavilion building.

The design of the Surgery and Emergency Services Pavilion has been reviewed in accordance with University policy by an independent design review team. Independent cost estimating has been completed by Swinerton Builders.

UCDMC's Facilities Design and Construction will manage the project, with assistance from the Executive Design Professional's project team. Outside consultants and testing agencies will be used as necessary. The medical center's Associate Director for Planning, Design and Construction will perform project oversight.

Environmental Impact Summary

The environmental review for the project has been completed pursuant to the California Environmental Quality Act and State and University guidelines for implementation of CEQA. A Focused Tiered Environmental Impact Report was prepared for the Surgery and Emergency Services Pavilion. The proposed EIR was circulated to responsible agencies and to the State Clearinghouse for review. The proposed Focused Tiered Environmental Impact Report is tiered from the 1989 Long Range Development Plan Environmental Impact Report. Based on the EIR, the University concluded that the proposed project will have significant unavoidable effects in the areas of traffic, cultural resources, and aesthetics due to loss of existing mature trees, for which a Statement of Overriding Considerations is proposed. Public comments on the EIR focused on the perceived potential of the project to affect neighborhood streets to the north. Because the campus is relocating the emergency room and ambulance entrance from V Street to 45th Avenue, the EIR concludes the project will not significantly affect these local streets.

Findings

The Findings discuss the project's impacts and associated mitigation measures.

Associate Director Boyd and Manager Rush described the project.

Mr. Rush reported that the materials used on Tower II were grey pre-cast concrete, blue-green glass, and light buff metal panels. Those materials will be extended into the new Pavilion. In response to concerns expressed by Regent Hopkinson, he indicated that closer to the ground a warmer treatment may be used.

Regent Kozberg recalled that there had been past cost overruns on hospital projects. She was assured that the process is being monitored with the help of a professional estimating firm. Independent of that, the general contractor will produce estimates based on schematics and design development plans. Also, an independent cost manager will assure quality and cost control.

Upon motion duly made and seconded, the Committee approved the President's recommendation and voted to present it to the Board.

10. **CERTIFICATION OF ENVIRONMENTAL IMPACT REPORT AND APPROVAL OF LONG RANGE DEVELOPMENT PLAN, MEDICAL CENTER, IRVINE CAMPUS**

The President recommended that, upon review and consideration of the Environmental Impact Report, the Committee recommend:

- A. Certification of the Environmental Impact Report for the 2003 Irvine Medical Center Long Range Development Plan.
- B. Approval of the Mitigation Monitoring Program for the EIR.
- C. Adoption of the Findings and the Statement of Overriding Considerations.
- D. Approval of the 2003 Long Range Development Plan, Irvine Medical Center.

[The Environmental Impact Report, Mitigation Monitoring Program, Findings, and Statement of Overriding Considerations were mailed to all Regents in advance of the meeting, and copies are on file in the Office of the Secretary.]

The Committee was informed that the 2003 Long Range Development Plan will guide the physical development of the UCI Medical Center through the horizon year 2020. The LRDP is not a commitment to a specific project, construction schedule, or capital funding request; instead it is a framework to accommodate new development on site in the event it is both programmatically and financially viable.

The following factors support the need for the preparation of the 2003 LRDP:

- Providing the UCI Medical Center and College of Medicine with a sound planning framework reflective of current strategic planning and mission-related goals.
- Guiding redevelopment activities at the UCI Medical Center including seismically deficient facilities.
- Guiding the planning and implementation of the replacement hospital project and related infrastructure.
- Providing The Regents with a comprehensive plan for the medical center campus in accordance with Regents' policy.

The UCI Medical Center LRDP, referred to as the Redevelopment Master Plan, was adopted in 1977 following the purchase of the UCI Medical Center from Orange

County. The 1977 LRDP identified a development program of approximately 800,000 gross square feet and established a planning framework for redevelopment of the site as an academic medical center. Many of its concepts have been implemented in the 25 years since its adoption. While some of these concepts remain valid, many of the factors and premises that guided the 1977 LRDP have changed. These changes include updated strategic plans, new program needs, seismic safety requirements, code-driven increases in space requirements for existing uses, and changes in the local community.

An evaluation was performed to determine the seismic performance rating and overall structural condition of all buildings at the UCI Medical Center. The facility evaluation took into consideration consistency with Senate Bill 1953, the University Seismic Safety Policy, and six other factors. The results of this evaluation indicated that a majority of the buildings at the medical center are beyond their useful lives, with several other buildings reaching this stage within the next several years.

Summary of the 2003 LRDP

The 2003 LRDP identifies planning objectives, a development program, a physical planning framework to organize the site, planning zones to guide the siting of facilities, and general design principles to guide the design of future facilities.

LRDP Objectives

The primary mission of the UCI Medical Center is to provide high-quality patient care in a manner that supports the education and research programs of the UCI College of Medicine. This mission and the strategic goals of the UCI Medical Center and the College of Medicine form the guiding principles for the 2003 LRDP. The 2003 LRDP identifies a series of planning objectives to serve this mission:

- Update the LRDP to best meet the medical center's planning goals and current regulatory requirements.
- Serve as the framework for physical development of the medical center to provide adequate facilities in support of its strategic mission.
- Establish a physical plan that represents the best possible relationship between the medical center's teaching and research goals, patient care needs, site character, and integration with the surrounding community.
- Provide a high-quality physical environment for patients and their families, faculty, students, staff, and visitors.
- Meet the seismic retrofit and replacement needs of the medical center required by Senate Bill 1953 and the Office of Statewide Health Planning and Development (OSHPD) at the medical center.

- Provide for the efficient staging of seismic retrofit projects and the economic use of existing facilities.
- Provide a critical mass of facilities necessary to support future operational and research space needs of the UCI Medical Center.
- Provide adequate parking for both Phase 1 and full LRDP implementation.
- Accommodate new construction in order to provide the most flexible space for the highest priority functions.
- Accommodate the increasing need for medical services to the growing population of Orange County.

LRDP Development Program

The LRDP will allow for the phased reuse of the site with an intensification of facilities. The LRDP identifies building space, circulation, parking, and infrastructure sufficient to support the patient care, teaching, and research mission of the UCI Medical Center and UCI College of Medicine.

The proposed intensification of development at the UCI Medical Center will result in approximately 1,900,000 gsf of onsite facilities and 4,200 parking spaces. The LRDP assumes the provision of 527 hospital beds, an increase of 136 over the beds currently in use.

LRDP Planning Concepts

The 2003 LRDP integrates certain planning concepts of the 1977 LRDP that remain valid with new concepts identified to meet current planning objectives. Concepts adopted in the 1977 LRDP that will be continued in the 2003 LRDP include:

- Providing a flexible physical framework to accommodate appropriate building siting, circulation, and infrastructure.
- Continuing to group common services together into defined zones.
- Reducing intensity of use of oldest buildings by constructing new flexible space.
- Regrouping fragmented services to provide appropriate relationships and use.
- Retaining a loop road concept with parking at site perimeter.

New concepts identified in 2003 LRDP that will build on the framework established in the 1977 LRDP include:

- Enhancing the environmental character of the campus as an academic medical center through the use of formal building relationships, landscaped quadrangles, and pedestrian elements.
- Increasing site density to an urban scale to provide needed expansion, increasing public open space, and improving circulation.
- Creating opportunity sites for future facilities by removing outdated buildings. Whenever feasible, coordinating new building projects with demolition to reduce interim relocations and fragmentation of operations.
- Strategically locating service facilities and distribution paths so that utility systems are provided in an efficient yet flexible manner.
- Creating a network of defined pedestrian paths to unify the campus and provide human scale.

Major Plan Elements

The LRDP Physical Planning Framework will help to ensure the cohesive redevelopment of the site and a high-quality physical environment on campus. This framework identifies primary entries, primary public open spaces, landscape framework, edge buffers, circulation and parking, and building opportunity sites.

The LRDP establishes planning zones to guide the siting of future facilities, manage land use density, and plan for long-term infrastructure needs. The site is divided into north, south, and east planning zones. Permitted uses and land-use intensities are identified for each sector.

2003 LRDP Design Principles

Key design elements are identified to guide physical development within the LRDP. These elements, which promote a cohesive physical environment conducive to a leading academic medical center, include a common architectural theme; a common palette of materials, colors, and finish palettes for buildings; formal building relationships; campus quadrangles within each sector; exterior courtyards; consistent landscaping; consistent signage; and landscaped pedestrian ways.

Environmental Impact Summary

An Environmental Impact Report was prepared in accordance with the requirements of the California Environmental Quality Act to analyze the environmental effects of the LRDP, including project-level review of Phase 1 development. The Draft EIR was reviewed by various State and local agencies, as well as interested groups and individuals. A public hearing was held to receive verbal comments. Transcripts of the public hearing, letters, and responses to all comments are included in the Final EIR.

The EIR evaluated the effects of the LRDP as a whole, as well as the Phase 1 Replacement Hospital, related infrastructure, and demolition of 15 buildings. Some environmental impacts will be significant but can be reduced to less-than-significant levels by incorporation of mitigation measures identified in the EIR, and some impacts associated with both the LRDP and cumulative development in the surrounding community are significant but can be reduced to less-than-significant levels. Construction-related air quality emissions and increases in long term air quality emissions will be significant and unavoidable even after the incorporation of mitigation measures.

In addition to the proposed LRDP project, the EIR analyzed six project alternatives: a no project alternative, a no development alternative, an in-kind replacement alternative, a Senate Bill 1953 alternative, an off-site location alternative, and an off-site parking alternative. The no project alternative and the no development alternative were found to be environmentally superior to the proposed project.

Findings and Statement of Overriding Considerations

The Findings discuss the project's environmental impacts, mitigation measures, monitoring program and project alternatives. The Findings also set forth overriding considerations for approval of the project in view of its unavoidable significant effects in the area of air quality.

Vice Chancellor Brase, Medical Center Director Cygan, Planning Director Reynolds, and Director Demerjian discussed the recommendation briefly, using slides for illustration.

Upon motion duly made and seconded, the Committee approved the President's recommendation and voted to present it to the Board.

11. **ADOPTION OF FINDINGS AND APPROVAL OF DESIGN, UCI MEDICAL CENTER REPLACEMENT HOSPITAL, IRVINE CAMPUS**

The President recommended that subject to approval of the Long Range Development Plan for the UCI Medical Center and certification of the associated Environmental Impact Report, the Committee recommend:

- A. Adoption of the Findings and Statement of Overriding Considerations pursuant to the California Environmental Quality Act.
- B. Approval of the design of the UCI Medical Center Replacement Hospital, Irvine campus.

[The Findings and Statement of Overriding Considerations were mailed to all Regents in advance of the meeting, and copies are on file in the Office of the Secretary.]

It was recalled that in March 2002 The Regents approved amendment of the 2002-03 Budget for Capital Improvements and the 2002-05 Capital Improvements Program to include preliminary plans for the UCI Medical Center Hospital Replacement project at a cost of \$14,538,000, to be funded from hospital reserves and in January 2003 approved amendment of the budget for the working drawings phase of the Replacement Hospital project. Approval of the current recommendation will permit the campus to prepare bid packages, with the understanding that it will request full budget and financing approval prior to going out to bid. In addition, Regental approval of design will allow the campus to complete the bid packages as proposed and still meet critical agency filing dates.

In July 2002, the appointment of NBBJ as executive architect for this project was approved within the Office of the President.

Formerly a county hospital, UCIMC became a part of the University in 1976. Since that time, it has become a significant public health resource in Orange County, providing a substantial portion of the county's specialized medical care while also caring for under-served and Medi-Cal populations. As the county's only level 1 trauma center, UCIMC is vital to the area's disaster response and must remain fully operational and capable of meeting emergency medical needs in the event of an earthquake.

The medical center site contains over 40 structures of varying size, age, and structural integrity. It has 391 beds of its licensed 453 currently in service in three inpatient facilities. Building 1, the main hospital building, was completed in 1960. Building 1A and Building 3 were completed in 1981 and 1993, respectively. These facilities house UCIMC's acute care functions, including intensive care, surgical units, pediatrics and obstetrics, nuclear medicine, pharmacy, pathology, and emergency.

Structural evaluation of the UCI Medical Center's acute-care facilities for compliance with SB 1953 determined that Building 1 has serious structural deficiencies and must be seismically upgraded by 2008 or replaced. The costs associated with renovating Building 1 were estimated to be at least comparable to that of building a new hospital and would result in protracted operational disruption that would ultimately yield an inflexible building with fragmented services and little potential for increased operational efficiency. Consequently, the decision was made to construct a new facility that will provide a state-of-the-art hospital with long-term flexibility to change over time and life cycle cost benefits that will make it operationally much more cost effective.

Project Site

The project site is within the medical center campus in the city of Orange, 13 miles from the general campus in Irvine. The medical center campus is bounded by Chapman Avenue, Dawn Way, Interstate 5, and The City Drive. The site for the new hospital building is directly north of existing Buildings 1 and 1A. This location

currently accommodates a number of buildings, including two seismically poor structures – Building 2, a hospital support facility completed in 1959, and a parking structure completed in 1978 – and several small buildings that will be demolished as part of this project. The activities in these buildings will be relocated to modular buildings that are being provided as a separate project. Replacement parking will be provided on a surface lot to be constructed across Chapman Avenue, north of the medical center site, as a separate project. This site is in conformance with the 2003 UCI Medical Center – Long Range Development Plan (LRDP).

Project Design

The proposed UCI Medical Center Replacement Hospital project consists of three main elements: construction of the proposed new hospital; renovation and non-structural SB 1953 bracing in Building 1A; and construction of a new chiller/emergency generator plant and required upgrades to other central plant facilities, as well as structural and/or non-structural improvements mandated by SB 1953 legislation in the steam plant, the primary electrical facility, and the medical center’s utility tunnel.

The Replacement Hospital: The new hospital will replace Building 1, which currently has a total of 205 available beds, and will provide 189,297 assignable square feet to accommodate 191 beds and 13 operating rooms, other diagnostic and treatment facilities, administrative and support services, and other acute care functions. An additional 25,000 square feet of unfinished shell space will provide another 30-bed medical/surgical unit when funding becomes available, for a total of 221 beds. It will embody classical architecture, which consists of a base, middle, and top. The exterior cladding will include stone panels at the base, pre-cast concrete and metal panels with projected punched windows at the middle, and a metal cornice. The structural system uses a concentric braced frame founded on drilled caissons.

The project scope includes significant site work, including demolition of Building 1 and Building 10, which is connected to Building 1 and is rated seismically poor, and redevelopment of their sites after completion of the new hospital. Multiple phased road realignments will be required to provide continued access to the medical center site as the project progresses. The site of the demolished Building 1 will provide a central garden with an auto circulation loop for patient drop-off at the new hospital. In addition, site work immediately around the new hospital will include landscaping and an outdoor seating area that will tie into the central garden. Finally, a service road will be constructed along the back of the hospital site and access to the medical center from Chapman Avenue will be relocated.

Building 1A Renovation: Building 1A provides an integral component of the medical center’s acute-care functions, housing inpatient obstetrics and medical/surgical units as well as the hospital’s emergency and imaging departments. These essential diagnostic and treatment services will continue in this building following completion of the new hospital. As a result, renovation of Building 1A must include the

construction of a physical connection with the new facility. This connection will be provided at the second level and will include installation of two trauma elevators and a service elevator, as well as extension of the new facility's pneumatic tube system to selected locations. Provision of this connection also requires relocation and reconfiguration of the emergency reception area as well as the relocation of the emergency department's ambulance entrance and pedestrian access. The project scope will include modest non-structural seismic corrections in Building 1A for compliance with SB 1953.

Central Plant Improvements: Existing utilities must be modified to accommodate the new hospital building, so steam lines will be upgraded and electrical capacity added. Cooling and emergency power requirements for the new hospital will require additional chillers. A central plant facility totaling 8,000 square feet will be constructed to house this equipment. Structural and non-structural seismic corrections in the steam plant, primary electrical facility, and utility tunnel are also required for SB 1953 compliance.

The design of UCI Medical Center Replacement Hospital has been reviewed in accordance with University policy by independent design consultants, seismic/structural consultants, and cost estimators. The project cost of the replacement hospital and associated work is anticipated to be \$340 million.

The project will be managed by the campus Office of Design and Construction Services, with the use of outside consultants and testing agencies as necessary. The Associate Vice Chancellor–Design and Construction Service, will perform project oversight. The project will be designed and constructed using a modified design/build delivery system. It will be bid to a group of pre-qualified contract/architect teams based on a bid package representing 25 percent to 30 percent of a standard set of drawings and specifications. Construction of the replacement hospital facility, Building 1A, and the Central Plant improvements is expected to begin in late 2003, with occupancy in late 2007. Subsequent demolition of Building 1 and other site work is expected to be completed in December 2009.

Environmental Impact Summary

Approval of the design of this project is contingent upon approval of the UCI Medical Center Long Range Development Plan and review and consideration of the accompanying Environmental Impact Report that also evaluates the environmental consequences of the UCI Medical Center Replacement Hospital.

Findings

The Findings incorporate, by reference, the UCI Medical Center Long Range Development Plan Environmental Impact Report Findings as well as set forth Overriding Considerations for approval of this project, in view of its unavoidable significant effect.

Vice Chancellor Brase recalled that at the Committee's previous meeting some members had expressed concerns about the design. He reported that, while the main improvements to the medical center will be functional, there are also some things being done to help change its image.

Campus Architect Gladson described the overall orientation and design briefly, with the aid of slides and a video. She discussed the issues raised at the last meeting: keeping the architecture simple and changing the axial orientation and symmetry of the building icon. She recalled that the majority of the Committee had supported an asymmetric design. She noted that, although hospitals do not fall under Title XXIV guidelines concerning sustainability, the campus incorporated into the design its own principles regarding energy efficiency. She reported that the floor plan had been discussed with Regent-designate Seigler, who had been concerned about the distance between the emergency and operating rooms, and had received his approval. She described in detail the materials to be used for the exterior features of the building, which included stone and metal cladding and treated copper window framing. On the advice of Regent Hopkinson, she agreed to investigate alternate, less expensive window framing material.

Regent-designate Murray asked for more detail about the icon feature. Ms. Gladson recalled that concern had been expressed about the transparency of the icon. She explained that it would be comprised of three crystal sections of differing textures of glass set in steel. The goal would be to find types of glass that have a solid appearance and would not disappear into the city's often hazy atmosphere. Committee Chair Marcus expressed the hope that the three sections of the icon would be harmonious in appearance.

Faculty Representative Pitts noted that the wide road behind the hospital would probably be noisy. Ms. Gladson responded that the hospital windows would be either double- or triple-paned in order to shut out street and freeway noise.

Upon motion duly made and seconded, the Committee approved the President's recommendation and voted to present it to the Board.

The meeting adjourned at 3:00 p.m.

Attest:

Secretary