UNIVERSITY OF HAWAIʻI SYSTEM
LEGISLATIVE TESTIMONY

UOH 100 University of Hawaiʻi at Mānoa

Testimony Presented Before the
Senate Committee on Education and the
House Committee on Higher Education

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by

Virginia Hinshaw
Chancellor
University of Hawaiʻi at Mānoa
In addition to the description of our budget request, which follows as our official testimony, the following is to respond to the request that we provide highlights on our achievements, challenges, and needs, our efforts to prevent violence and promote safety, and our efforts to address worker shortages.

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**Highlights of Achievements, Challenges, and Needs**

*The University of Hawaiʻi at Mānoa is a jewel in many ways, particularly intellectually, but it is badly tarnished physically.*

The facilities deterioration on Mānoa campus has happened over several decades, and is not something that has emerged overnight. We hope that we can all seize this moment and work together for the future and fulfill the potential of our University. The University offers the best return on investment you can provide for the state, and will serve the students and the future of Hawaiʻi well.

We wish for Mānoa to become:

- A destination of choice for students, faculty and staff, the citizens of Hawaiʻi and beyond;
- A leading, global research university performing at the highest levels and solving society’s problems; and
- A respectful, inclusive community that welcomes and nurtures diversity

We have made progress in these areas:

*A destination of choice for students, faculty and staff, the citizens of Hawaiʻi and beyond*

This our top priority and the biggest challenge – to attract world class students, faculty, staff, community members, coaches, and athletes to join our campus ohana and form a community. Facilities are key to that. Recently we have conducted a methodical review and has been methodical and has some chilling assessments:

- The current replacement value for our infrastructure is approximately $3 billion.
- Our deferred maintenance backlog has been chronically underestimated, our new estimate using business standard analyses indicate upwards of $400,000,000.
- Our current facilities workforce is only able to react to breakdowns on campus, about 950 work orders a come in a month, and we have a backlog of 4,607 work orders.
- Less than 5% of our efforts are expended on preventive maintenance, 25 buildings currently have major system breakdowns and 37 of them have leak issues.
- Costs are increasing – sewage up 82% in 6 months; construction costs 10% inflation rate, which makes delays vastly expensive.
We also have improvements we want to report in how we manage our facilities:
- Our electricity usage is down by 6 and ½ % from last year due to R&M upgrades, which saves us $1.3 million annually at current rates.
- Facilities is participating for the first time in a process which serves as a nation-wide benchmark for campus facilities performance and allows comparison with peer institutions.
- Facilities is changing its mode of operation to meet our needs.
- We have initiated a Design Review to determine the future of Edmondson and Snyder Halls.

Becoming a destination of choice also means we have to do more to attract people to our campus, and we have good news on that front as well:
- The Frear Hall project is on time and on budget as of this week. We expect to come to you this spring for approvals of contracts to move forward with the renovation of the four residential towers, to result in more dorm rooms that present an attractive experience for our students.
- Plans are moving forward for the renovation of the Campus Center. It will provide facilities for all students to study, relax, and exercise as a part of their student experience.
- Entering MBA students have raised the bar at the Shidler College of Business by breaking school records for the highest average score on the Graduate Management Admissions Test (GMAT: 632 out of 800), highest Grade Point Average (GPA: 3.4 out of 4.0) and the highest average years of professional work experience (5 years).
- UH Mānoa has seen an increase of 16% in the number of international students who attend our University since 2002, we host 1/3 of all the international students who study in Hawai‘i.
- We have increased participation of our students in Study Abroad and Exchange Programs by 30% since 2002.
- I have commissioned students to begin a signage project to give an identity of University of Hawaii at Manoa as an international place of learning, guide the visitors, students and faculty members to their destinations in the campus and develop consistent, uniform and harmonious signs while furthering a sense of Hawaiian place.

A leading, global research university performing at the highest levels and solving society’s problems

Our role is to also help the state of Hawai‘i and the world solve society’s problems and perform research that can spur economic development. This year we have much to report:
- We are becoming the first university in the world with the capability to design, build, launch, and control our own satellites. The Hawai‘i Space Flight Laboratory combines researchers from the College of Engineering and the School of Ocean and Earth Sciences and Technology with the goal of launching its first space mission by Fall 2009.
- The John A. Burns School of Medicine will be involved in the largest study of child and human health ever conducted in the United States. The National Children’s Study will track children and sample the air and chemicals around them for over two decades, from before birth until they turn 21. One thousand O‘ahu families will take part.
- Researchers at Manoa’s plant and environmental protection sciences department are producing and distributing tissue-cultured banana plants to help Hawai‘i banana growers fight banana bunchy top virus. Plants infected early with BBTV do not bare fruit, and fruits of later infected plants are typically stunted, unattractive and not saleable. The disease is transmitted by a small soft-bodied insect known as the banana aphid.
- The John A. Burns School of Medicine has been recognized as one of the country’s leading medical centers in diabetes research.
Technology developed by a UH Mānoa researcher to produce charcoal from green waste is generating revenue for UH and holds promise for wide commercial use. Not only does the charcoal carry potential use as a fuel, it also has applications in improving soil fertility. I’ll have a gift for you Wednesday of this charcoal being used to grow ornamental plants.

A UH Mānoa professor has been part of a team whose ‘ultrasound’ of the Earth’s crust reveals inner workings of a ‘tsunami factory’ and may help explain why part of the seafloor near the southwest coast of Japan is particularly good at generating devastating tsunamis. A University of Hawai‘i Sea Grant College Program funded researcher has been looking into ways to forecast tsunami impacts during the early stage of the event.

UH Mānoa has been awarded a grant to assess the potential risk to human health and the environment of an historic chemical warfare material disposal site about 5 miles south of the entrance to Pearl Harbor in waters greater than 1,000 feet deep. A full array of state-of-the-art technologies owned and operated by the School of Ocean Earth Science and Technology (SOEST) will be employed to assess the location and condition of the disposal site.

A School of Ocean and Earth Science and Technology professor is the lead author of a paper that reveals that Helium in lavas from ocean islands, such as Hawai‘i, may be derived from a part of the Earth’s mantle that has retained most of the gases originally incorporated into the Earth during its accretion, 4.5 billion years ago.

During a 4-week expedition to the Northern Hawaiian Islands aboard the UH research ship Kilo Moana, an international team of research scientists mapped a large area of the seafloor around the northern Hawaiian Islands and located and sampled numerous previously unknown volcanoes using the Jason2 robotic submarine.

A collaborative effort among the Curriculum Research and Development Group (CRDG) in the College of Education, the Hawai‘i Department of Education, and Texas Instruments, will investigate the use of formative assessment in a networked classroom as it affects middle school students’ learning of algebra concepts and will involve middle school teachers throughout Hawai‘i.

A senior professor of meteorology co-authored a study that introduces a new way of detecting lightning outbreaks within a hurricane over the ocean in real time from thousands of miles away, giving forecasters new insight into just how powerful an oncoming storm may be.

Researchers at the University of Hawai‘i and the Hawai‘i Agriculture Research Center have been working with a range of crops to determine the best-suited options and production methods for biodiesel crops for Hawai‘i farmers.

Two UH astronomers using the Hubble Space Telescope believe they have identified what makes at least some quasars shine: the black hole at the center of a massive galaxy with little gas of its own is gobbling up material from a colliding gas-rich galaxy.

UH researchers and geology students traveled to New Zealand to observe a unique volcanic mudflow event and document the effects when a volcanic mudflow broke through the banks of a volcanic lake.

A team of researchers in the College of Tropical Agriculture and Human Resources conducted research on fountain grass (Pennisetum setaceum), which is highly invasive in Hawai‘i and variably invasive in other parts of the world, and addressed whether genetic variation in the species allow it to adapt to new environments globally. The findings show that the species is pre-adapted to thrive under a broad range of ecological conditions and suggest important implications for management of fountain grass where it is invasive.

A respectful, inclusive community that welcomes and nurtures diversity
We have a duty to create a community and programs that are accessible to all those in need of the opportunity to better themselves, and your University has done that this year in many ways:

- The William S. Richardson School of Law’s ‘Ahahui ʻo Hawai‘i conducts outreach and efforts to increase the number of Native Hawaiians admitted to law school.
- The Center for Disability Studies (CDS) received the 2007 Multicultural Council Award for Leadership in Diversity from the Association of University Centers on Disabilities (AUCD). The award specifically honors CDS as the sponsor of the Pacific Rim Conference, an event that furthers cultural diversity.
- The Na‘au Pono Initiative at the William S. Richardson School of Law Center for Excellence in Native Hawaiian Law promotes education, scholarships, community outreach, and collaboration on issues of law, culture, and justice for Native Hawaiians and other Pacific and Indigenous peoples.
- The Kaʻiʻimi‘ike Program is engaged in an initiative to increase the number of Native Hawaiian and Pacific Islander undergraduate students in geoscience degree programs and careers.
- The Osher Reentry Scholars program funds adult students aged 25-50 who are either starting their college education or returning after more than 5 years to complete their college studies.
- UH Mānoa recently hosted a world conference on Filipino language.
- Of the 952 students at UH Mānoa’s College of Engineering, females now represent nearly 20 percent of the undergraduates, and 23 percent of graduate students. In 1975 it was 7 percent of undergraduates and 4 percent of graduate students.
- According to Dr. Lynnae Sauvage of JABSOM’s OB-GYN & Women’s Health department, women have begun to play a much more significant leadership role at the JABSOM over the past 15 years, and JABSOM may “have the most women chairs, department chair level of any medical school in the United States.”
- The John A. Burns School of Medicine will begin training primary-care physicians on islands other than Oahu. Its new three-year Neighbor Island residency program, scheduled to launch next year, is based on the theory that doctors trained in a certain community will tend to remain there.

### Preventing Violence and Promoting Safety

Last April’s mass shootings at Virginia Tech provided a tragic “wake-up call” for college campuses across the nation to step up their security policies. Crime statistics at the UH Mānoa campus reflect those of the community – ongoing petty theft problems but very low incidents of violent crime. UHM campus crime has been declining over the past 3 years: [http://www.hawaii.edu/security/crime_stats2.html](http://www.hawaii.edu/security/crime_stats2.html)

Among the security improvements this year (2007) are:

- UHM initiated the first campus bike patrols by certified security officers in Hawaii. The 24/7 patrols provide roving coverage in a student-friendly manner.
- Eight additional campus security officers have been added.
- Lighting is being upgraded and added throughout the 300-acre campus.
- A $500,000 project will be completed in February 2008; a second project costing $582,000 is to be awarded in January 2008 – both projects entail adding security lighting to walkways, parking lots and between buildings. Existing fixtures are being upgraded with energy-efficient and longer-lasting lamps.
- Incoming students are given a safety and security awareness briefing as part of New Student Orientation.
- Freshmen dormitory lobbies (the Hale Aholo complex) will be staffed 24/7 and Resident Assistants in the dormitories have been given additional safety and security training.
- Our Supplemental-Budget request includes $933,632 for additional security officers and personnel will address security staffing shortages and as such improve campus safety. Funds will also supply the additional resources and equipment (e.g., uniforms, radios, rain gear, etc.) necessary for the new officers to effectively perform their duties. Meanwhile, Mānoa is actively researching the best model for Campus Security’s future organizational structure, which might eventually include an on-campus HPD or Sheriff substation or the establishment of a Campus Police Force.

**Efforts to Address Worker Shortages**

We have worked diligently to improve access to all kinds of professions through UH Mānoa. Here are some examples from this year:

- Given Hawai‘i’s lack of enough baccalaureate graduates, UHM’s enrollment holding steady at 20,000 is cause for celebration for the state workforce.
- Enrollments for entering MSW and BSW in the School of Social Work are at an all-time high, with 130 MSW students and 30 BSW students. The BSW enrollments are twice what they were last year.
- With its newly established Master’s Entry Program in Nursing (MEPN), UH Mānoa has joined 60 leading national nursing programs in providing fast track entry to a nursing career. The MEPN was designed for adult learners with no prior nursing experience/education, who have a baccalaureate degree or beyond in another field, and are leadership-bound with a focus on advanced practice nursing.
- New scholarships are available for preparation to be Nurse Practitioners through the School of Nursing and Dental Hygiene.
- The William S. Richardson School of Law at the University of Hawai‘i at Mānoa is expected to offer a part-time program as early as next fall semester. The Law School has applied to the American Bar Association and the Association of American Law Schools for approval to begin a small evening law program with a target of 24 students in each entering class. The Law School expects to receive approval by accreditors in early spring.
- The College of Education offers the only nationally accredited teacher education, rehabilitation counseling, school counseling, community services counseling, and athletic training programs in Hawai‘i, and is nationally ranked among the top teacher education programs in U.S. News and World Report. The College of Education produces more teachers, school administrators, and school counselors than all other teacher education.
- Over 1,500 students, more than two-thirds of whom are graduate students, are enrolled in COE programs. Statewide cohort programs that specifically target neighbor island students enroll approximately two hundred fifty students. Over five hundred degrees are awarded annually, approximately 50 percent of which are graduate degrees.
- Approximately one hundred post-baccalaureate certificates in secondary and special education are awarded annually.
- programs in the state of Hawai‘i combined. One of our engineering students, Monte Watanabe, was identified as one of the three most outstanding electrical or computer engineering students in the nation.
- Nearly 900 students are in the College of Engineering pursuing B.S., M.S., and Ph.D.’s in three disciplines: Civil and Environmental Engineering, Electrical Engineering, and Mechanical Engineering. The school also has an all-time high enrollment of women.
I. Introduction

A. Summary of Program Objectives

The University of Hawai‘i at Mānoa is the flagship research institution of the University of Hawaii System with a tripartite mission of teaching, research, and service. Our faculty members are scholars who are expected to function at the cutting edge of their research disciplines. The students that we educate are being prepared for leadership roles in our society as they learn subject matter, critical thinking, objective reasoning, and communication skills.

The primary mission of the Mānoa Campus is instruction. UH Mānoa aims to deliver a modern, flexible, diverse and multicultural curriculum and in doing so provides enriching applied educational experiences for its students.

As a research university, Mānoa’s also places a significant emphasis on scholarship as well as undergraduate and graduate instruction. As such, the unique “value added” to the student experience is the opportunity to witness and participate in the creation of new knowledge in the form of original research and scholarship. An additional quantifiable return on the state’s investment in research at Mānoa is the $300-400 million in extramural grants and contracts generated each year. These dollars are primarily obtained from federal sources and are primarily added to the states economy in the form of faculty, staff and student support. UH-Mānoa’s joint focus on research and instruction distinguishes it from the other campuses of the University of Hawai‘i system, and makes it a productive economic engine for the State of Hawaii.

The UH Mānoa Community also provides support for the state through service. The most obvious of service to the state is the education of so many of our citizens in their chosen professions. For example, the majority of the medical doctors in Hawaii completed their degrees at our School of Medicine. UH Manoa faculty and staff (and sometimes students!) also provide subject matter expertise and participation on a myriad of organizations from legislative committees to neighborhood boards.

The University of Hawaii at Manoa is a comprehensive research university with a primary focus on education and service to the State of Hawaii.

B. Description of Program Objectives
UH Mānoa has the primary objectives of providing excellent instruction, innovative research, and supportive service to the state of Hawai‘i. In order to meet these objectives we formulated the seven core commitments of our 2002-2010 Strategic Plan. A brief summary of our continued progress on each is provided below.

Research
With extramural grants and contracts in excess of $300 million, Manoa is committed to research. Our unique geographic location facilitates advances in marine biology, oceanography, underwater robotics, astronomy, geology, geophysics, tropical agriculture, aquaculture and tropical medicine. Research dollars have translated into significant advances in all of these disciplines to the direct benefit of the state of Hawaii. Our heritage, our people and our close ties to the Asian and Pacific region also create a favorable environment for advanced scholarship in the arts, humanities, languages, intercultural relations, linguistics, religion and philosophy. In a number of instances our programs are independently judged as among the best in the world.

Educational Effectiveness
UH-Mānoa offers 86 Bachelor’s degrees, 86 Masters degrees, and 52 Doctoral Degrees, including law, medicine, and architecture. Our students, currently numbering over 20,000, have special opportunities for Asian, Pacific, and Hawaiian educational experiences and involvement in research, service learning, and co-curricular activities.

Social Justice
We strive to develop the Mānoa campus into a Hawaiian place of learning open to world culture, informed by principles of sustainability and respect for indigenous knowledge and practices. We are sensitive to the values of our host culture and seek to inculcate these values into all of our activities.

Place
UH-Manoa is a globally-connected Hawaiian place of learning. We are committed to creating an environment with modern facilities that foster learning and research on campus reflecting a Hawaiian sense of place. Specifically we seek to develop technologically advanced and sustainable facilities through improved landscaping, architectural design, and the creation of gathering spaces.

Economic Development
Whether it is biotechnology, engineering, or agribusiness-- the recognized geographic centers of expertise in these areas nationally and/or internationally all share origins with institutions of higher education. We nurture efforts in education, research, innovation, and entrepreneurship to develop greater and more diverse opportunities for the economy of the State of Hawai‘i.

Culture, Society and the Arts
Uniquely situated between the East and the West, the University of Hawai`i at Mānoa presents a rich array of cultural programs for education, entertainment, and the exchange of ideas. In particular, the Hawaiian, Asian, and Pacific cultures are of critical importance. Campus life is enhanced by artistic and cultural expressions in academic scholarship as well as creative performances and exhibitions.

Technology.
UH-Mānoa wishes to both serve as an innovator and a conduit for new technologies and their applications in society. Of critical necessity to our global educational community is our ability to effectively employ the most up-to-date information and communication technology to enhance instructional and research activities.

C. Meeting Program Objectives
UH-Mānoa has continued to plan and meet its program objectives in a manner consistent with the process utilized to create our Strategic Plan in 2002. Each year we now hold a campus-wide planning day, usually in October, in which faculty, staff, and students engage in constructive dialog that serves to address continued implementation the Strategic Plan, affirmation of the priorities, and reinforcement of the communal decision making and vetting processes in a fiscally responsible and transparent manner.

UH-Mānoa has also finalized its administrative structure, thereby greatly enhancing our ability to meet program objectives. Presently, the Chancellor and 3 of 4 Vice Chancellor positions are filled with permanent hires providing for appropriate oversight, planning, and stability for the administration of the campus.

II. Program Performance Results
A. Performance Results
Below we have outlined the details of our progress toward the core commitments of our Strategic Plan. Nonetheless, obvious measures that demonstrate our progress in meeting our three missions of teaching, research and service include:

- Student Enrollment has increased 21% since 2000, demonstrating the desirability of UH-Mānoa to students from Hawai`i and elsewhere.
- Extramural funding and productivity has soared in recent years and research capacity is quickly being reached as we utilize all available space on campus.
- UH-Mānoa faculty continue to provide vital services to the State of Hawai`i and the campus provides exclusive services by meeting workforce needs in critical areas to include but not limited to medicine, education and engineering.
B. Results as Related to Program Objectives

Since the establishment of Mānoa’s Core Commitments in 2002, the Mānoa administration, faculty, staff, and student groups have worked diligently to honor the spirit of the Strategic Plan and to implement its specific objectives. The following are recent samples of successes related to the various objectives. A full accounting of our progress is available at: http://www.manoa.hawai‘i.edu/vision/continuing_our_commitment/initiatives/#R

Research

- Stabilized the operation of the new John A. Burns School of Medicine facility at Kaka’ako and established extramurally competitive research programs.

- Received federal funding ($9M) from the NSF Experimental Program to Stimulate Competitive Research (EPSCoR) to build additional infrastructure and capacity for interdisciplinary research on biodiversity in an integrated island environment.

- Initiated an annual Undergraduate Research Symposium and accompanying programs to provide undergraduate research opportunities throughout the world.

- Established the Pacific Center for Emerging Infectious Diseases Research as part of the John A. Burns School of Medicine with $9.6M grant from the NIH Centers of Biomedical Research Excellence program.

- Redoubled and refocused efforts to develop competitive graduate education programs that attract and retain the best students for the state of Hawai‘i.

- Received a $20M grant from the NSF for the establishment of a Center for Microbial Oceanography Research and Education (CMORE).

- Maintained a consistent level of new patent activity leading to the continued licensing of UH discoveries (presently about $800K/year).

Educational Effectiveness

- Reorganized to bring enrollment management, undergraduate education, international and exchange programs, academic personnel, Native Hawaiian academic services, academic institutional research, and academic units (schools/colleges) under the Vice Chancellor for Academic Affairs.

- Maintained the enrollment gains of previous years, standing at 20,006 this Fall.
• UH Mānoa’s average SAT-1 verbal and math scores of first-time freshmen entering the fall semester exceed average scores of US test takers per MAPS Report ‘Scholastic Assessment Test I (SAT-I) Scores University of Hawai‘i at Manoa beginning in the Fall 2005.

• Enrollment Management improved with the Star Enrollment Management System. The online system pulls enrollment information in real time so that departments can better monitor enrollment in high demand classes and make timely adjustments as needed.

• New interdisciplinary certificates were established that respond to societal needs, including Agribusiness Management Certificate; Human Resources and Organizational Management; Language Acquisition, Human Language and Computers, Language and Cognition, Languages of Hawai‘i and the Pacific; Political Economy; Sustainable Tourism; Disability and Diversity Studies.

• We are building more student housing and improving residence life for students.

• Launched the MyUH Portal which is designed to provide the UH community with secure, personalized access to UH services and information such as registration and enrollment.

• Improved articulation between UH System campuses and UH Mānoa: Agreement between UHM, Honolulu Community College and Kapi‘olani Community College regarding procedures for articulation to UHM General Education Requirements.

Social Justice

• Created The School of Hawaiian Knowledge.

• New Masters of Arts programs in Hawaiian and Hawaiian Studies were approved by the Board of Regents.

• Created an Office of the Ombudsman that reports directly to the Chancellor and provides guidance, counseling, and advocacy for those (students, faculty, and staff) seeking redress through the sexual harassment, non-discrimination or academic grievance policies, or needing assistance with the navigation of administrative procedures.

• Created an Office of Native Hawaiian Academic Services within the Office of the Vice Chancellor for Academic Affairs to work closely with various units in undergraduate and graduate education to improve our recruitment, retention of undergraduate and graduate students of Native Hawaiian descent.

Place

• Established an Office of International Education and Exchange to support, develop, manage, and review international programs, students, faculty, and researchers.

• Established an Office of Sustainability that has refurbished the energy house and spearheaded a number of projects at UH-Mānoa. For example, the Kuykendall courtyard has been
transformed from a concrete, bland landscape to a gathering spot with plants, gardens, tables, benches and a variety of food choices.

- Established a Sustainability Council to coordinate sustainable and environmental conservation activities on campus and work to reduce the resources required to operate the UH-Mānoa Campus.
- Established an Environment Committee to develop strategies and plans for our outdoor spaces between buildings in a way that maximizes their use and enjoyment.

**Economic Development**

- The University of Hawai‘i is a $1.4 billion enterprise and represents a major economic force in Hawai‘i.
- The State of Hawaii benefits from large foreign investments in astronomy facilities and operations originating with UH-Mānoa programs on Mauna Kea and Haleakala. This directly translates into more technical jobs and influx of dollars into the State of Hawaii.
- The Pacific Asian Center for Entrepreneurship and e-Business at the Schidler College of Business mentors and assists entrepreneurs throughout Hawai‘i with its annual Business Plan Competition.
- The College of Engineering/Lockheed Martin Corp. is an example of one of UH-Mānoa’s many public/private partnerships. The College’s Industrial Affiliates program enables closer interaction between companies, faculty and students through sharing resources and joint participation in conferences and educational activities.
- UH-Mānoa has awarded three Accelerated Research Commercialization (ARC) grants, enabling faculty and local tech companies to conduct joint research with commercial potential. ARC grants were awarded for projects in biotechnology, alternative energy, and atmospheric science instrumentation.

**Culture, Society, and the Arts**

- The Academy for Creative Media continues to premier student work at International Film Festivals.
- The University brought an exhibit of 42 Rembrandt etchings to Hawaii. This was the largest exhibit of its kind to visit Hawaii and was directly viewed by 1,000 of individuals inside and outside the university community.

**Technology**
• We’ve launched a new Manoa Website that integrates the strategic plan, with sites for current students, prospective students, faculty, and staff, as well as a calendar of events.

• We launched the MyUH Portal, designed to provide the UH community with secure, personalized access to UH Services and Information such as registration and enrollment. MyUH encompasses a suite of services including calendaring, email, and new course tools, and provides enhanced academic support for faculty and students through course collaboration with calendar, message board, chat, and email. It also provides dynamic updates triggered events such as academic "holds" and it has improved accessibility to online services and access to the internet.

• Launched the STAR Enrollment Management system to provide real-time data on enrollment to deans and department chairs, allowing us to make timely adjustments in the course of scheduling to meet student demand.

• New UH electronic purchasing environment is called the most advanced public sector electronic purchasing environment in Hawaii. Solicitation/selection of quotations now online. Purchases can be made with P-Card (credit cards), or automatically transferred to the web-based purchasing system for generation of a purchase order.

C. Measuring Effectiveness

Program effectiveness of the instructional programs is measured in several different ways. In addition to tracking graduation rates and time to complete degrees, all UH Mānoa programs undergo periodic review on a seven-year cycle. Each program is required to prepare a self-study that includes detailed information on educational effectiveness. A three-member faculty team conducts a review of the program. The findings are presented and discussed with the Council on Program Reviews (for undergraduate programs) and the Graduate Council (for graduate degrees). Recommendations for improving the program or in some instances terminating or closing programs are implemented following this review. We regularly compare our success rates with national norms. For example, we recently learned that our graduation rate of Ph.D. students is within 1 percentage point of the national average.

Many programs also conduct their own reviews and accreditation procedures in which external reviewers are brought in to examine program missions, educational effectiveness, research, and other academic matters to ensure program quality. UH-Mānoa is also accredited by the Western Association of Schools and Colleges (WASC). In October of 2007 we successfully completed, as a part of our accreditation, a rigorous external review. The team of reviewers assessed the university’s progress towards meeting national standards for educational quality and effectiveness. UH-Mānoa is currently under full accreditation until 2010. In addition to the WASC Accreditation procedure, UH-Mānoa established a number of peer and benchmark institutions against which it compares itself. Program effectiveness is also directly related to faculty and staff performance. All faculty members are reviewed by several different
mechanisms: annual contract renewal (probationary faculty), through the tenure and promotion process, and by the post-tenure review procedure.

A very straightforward measure of the effectiveness of the research programs at UH-Mānoa is the amount of extramural funding received. The National Science Foundation reports that UH-Mānoa was 78th among U.S. universities in FY 2003 as measured by expenditures of federal research and development dollars. This past year UH ranked in the top 50 (top 30 for public universities). Moreover, a recent visit from the National Science Board (August 2007) revealed that last year UH-Mānoa was ranked #1 among all universities in the United States in the rate of growth of federal research dollars.

D. Improving Performance Results

UH Mānoa will continue our efforts to implement our Strategic Plan. Our supplemental budget request has been devised to provide for support in each of the core commitments.

III. Problems and Issues

A. Problems and Issues Encountered

Requests included in the Executive Budget

The executive budget includes two items for UHM:

- **Library: Maintain Library Collections & Services (FY’09: $2,500,000).** The University Library serves as the research library for students, faculty, and researchers on the Mānoa campus, statewide, and around the world. The library’s flat budget in the face of escalating collections expenses has resulted in a significant decline in purchasing power. At the same time, advances in technology, especially digitization, provide more efficient and cost effective ways to distribute information. This request would allow the library to keep pace with these changes, maintain strategic local collections, and expand access to all of the library’s collection.

- **Administration, Finance & Operations: Additional Campus Security Personnel (FY’09: $933,632).** Additional security officers and personnel will address security staffing shortages and as such improve campus safety. Funds will also supply the additional resources and equipment (e.g., uniforms, radios, rain gear, etc.) necessary for the new officers to effectively perform their duties. Meanwhile, Mānoa is actively researching the best model for Campus Security’s future organizational structure, which might eventually include an on-campus HPD or Sheriff substation or the establishment of a Campus Police Force.

- **Transfers of resources within the UH System** The Executive Budget also includes the transfer of OHR positions and ITS positions from the UH System to UHM, and also funds for the Quentin Burdick Rural Interdisciplinary Training Program from UHH to UHM.
Additionally, the Board of Regents approved many items which are critical to the maintenance of quality education and support for the deteriorating infrastructure of the Manoa Campus. We strongly advocate for the support to address our critical repairs and maintenance issues, address health, safety, and emergency preparedness, and retain students and improve education. What follows are descriptions of these important requests.

**CRITICAL REPAIRS AND MAINTENANCE**

Our escalating utility and sewer fees have cut deeply into our base budget for maintaining our infrastructure and building and grounds. Like the rest of Hawai’i, we have been severely impacted by the increased cost of operations in Hawai’i, nearly doubling from FY 1999 and now totaling over $18 million annually. This added expense, in addition to a chronic lack of funding for repairs and maintenance has left the Manoa campus with a significant backlog of deferred maintenance that is our top priority both here as well as a part of our Capital Improvements request.

Deferred Repairs and Maintenance is taking a toll on research and educational effectiveness at Mānoa. The need has grown substantially not only because of the backlog that has accumulated over the past decade, but also because the Repair and Maintenance budget was designated to pay.

The lack of infrastructure prevents faculty, staff and students from fully achieving their potential at UH Mānoa. Many buildings and facilities remain in their original state of construction with inadequate power supplies and laboratories inappropriate to the types of research conducted today. Also, the volume of research space has not kept pace with the volume of research. As a general rule of thumb, every $1 million of new research funding requires approximately 4000 square feet of laboratory and office space. The growth in funded research at Mānoa during the past few years has created a major shortage of space throughout the campus.
To support this request we are asking for:

- **Administration, Finance & Operations: Infrastructure Support for Maintaining Buildings & Grounds (FY’09: $650,000).** This request provides the resources required to: 1) support the operations of campus facilities due to on-going budgetary constraints and the magnitude of prior restrictions; 2) improve campus learning and work environments by outsourcing the maintenance and service of major mechanical systems; 3) establish and fund permanent positions to support the Office of Physical, Environmental, and Capital Planning and to address the critical need for an Energy Management Office to establish policies and procedures to reduce campus energy consumption and promote energy education and research.

- **SOEST: Center for Smart Building and Community Design—Energy Efficiency (FY’09: $150,000).** This request addresses two specific and increasingly urgent state needs: 1) preserving and enhancing the health of Hawai’i’s coastal communities against the pressures of expanding development; and 2) reducing fossil fuel dependence and improving renewable energy opportunities in Hawai’i, especially through improved building operations and design in state facilities. This support will allow the Center to continue to deliver information, research, and expertise to the community, meanwhile linking various campus curricula and connecting the lab and classroom with the community by encouraging students to participate in traditional and experiential learning. The work of this center has been critical in the support of energy conservation at the Manoa campus and elsewhere in the state, and their continued growth will allow the campus to continue to recapture expenditures on electricity for other purposes.

- **Athletics: Title IX Compliance—Addressing Gender Equity Issues (FY’09: $3,067,645).** Funds are requested to address the Title IX compliance initiatives documented in the Chancellor’s recently-approved 2007-2012 University of Hawai’i at Mānoa Gender Equity Plan “Believe it, Achieve It.” The request includes building and renovating athletic

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**Budget Allocation Compared with Gross Square Feet**

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<tr>
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<td>$13,026,943</td>
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</table>
faculties, creating five coaching positions for women’s teams, and providing grant-in-aid funds (scholarships) to support the equivalent of 107 women’s athletic grants-in-aid. The request also includes additional staff positions to more adequately address the daily maintenance needs on lower campus.

**HEALTH, SAFETY & EMERGENCY PREPAREDNESS**

The University of Hawaii at Manoa has a great obligation to the state to keep our students, staff, and faculty healthy and safe. The events at Virginia Tech during the last year caused us to reconsider our own needs in the area of safety and security, and we are always mindful of our need to plan for major emergencies and routine safety. To complete this obligation to the state we are requesting:

- **Student Affairs: Additional Clinical Psychologists for Student Support (FY’09: $240,000).** University counseling centers have indeed become crisis centers dealing with students with clinical depression and anxiety, emerging and chronic personality disorders, suicidal ideation and gestures, and disruptive and dangerous behaviors. The recommended ratio of full-time psychologist/counselor to student at university counseling centers is 1 per 1,000-1,200 students. This request for three psychologist positions will help address student needs by bringing UH Mānoa’s ratio to 1 per 2,333.

- **Administration, Finance & Operations: Establish Emergency Response Center and Office (FY’09: $3,480,968).** A permanent, centralized monitoring and dispatch center will allow Campus Security to function securely and efficiently during natural disasters, power outages, and other potential crises affecting the Mānoa campus. This central location will also allow Campus Security to monitor the proposed Integrated Security and other systems in a central location.

- **Administration, Finance & Operations: Parking Lot Lighting Improvements—Enhanced Security (FY’09: $500,000).** Repairs and additional lighting in the Bachman, Webster, Art/Miller, ROTC, Korean Studies, Student Health, and PBRC parking lots will enhance safety and security for faculty, staff, and students by increasing visibility at night.

- **Administration, Finance & Operations: Support Staff for Federal Compliance Mandates—EH&S (FY’09: $250,580).** The Office of Environmental Health & Safety is severely understaffed as a result of increased federal requirements for compliance following the passage of the Patriot Act in 2000 and the Agricultural Bioterrorism Protection Act in 2002. This request will fund three additional full-time employees, including a Compliance Specialist and administrative support in the Biological Safety Program and the Environmental Health & Safety Office.

- **Administration, Finance & Operations: Campus Security Student Patrol Program (FY’09: $75,000).** Expanding the Student Patrol Program will ensure a safer campus environment for students, faculty, and staff. Student Patrols will assist with escort services and patrolling, thereby freeing up full-time security officers to handle cases and respond to emergencies and other incidents across campus.
• **Waikīkī Aquarium: Health & Safety Compliance Issues (FY’09: $85,000)**. A recent compliance audit revealed several issues requiring urgent attention for the Aquarium to be in compliance with UFC, EPA, DOH, and OSHA regulations. This request covers replacement of the cover that conceals and prevents unauthorized entry into the well-water pump and provides funding for the installation of OSHA-approved service scaffolding and railings.

**RETAINING STUDENTS AND IMPROVING EDUCATION**

Mānoa’s student retention lags behind our peer institutions, and to provide the most effective use of our educational resources to the State we must improve our retention of students. Enrollment is up 21% since 2000; at the same time there have been significant cuts in the academic budgets. The educational enterprise will require additional resources if we are to continue to carry the load as the primary baccalaureate educator for the state, and retain students at the rate that would best serve the state.

The effect of an increased student enrollment and the steady development of new curriculum has also resulted in insufficient and outdated classroom facilities and equipment. The need to upgrade and modernize classrooms and classroom equipment, computers and information technology systems, research materials, laboratories, facilities, and personnel resources on campus is apparent and necessary.

To address the problems that our increased enrollment has caused, and to better serve the students of the state, we are making the following requests:

• **Research & Graduate Education: Additional Graduate Assistants and Cost of Living Adjustment (FY’09: $750,000)**. Graduate Assistants enhance learning in undergraduate classrooms through discussion sections, one-on-one learning, and general classroom support—and thus provide one of the greatest values in higher education. This request promotes educational effectiveness and student learning by addressing the need for additional and fairly-compensated Graduate Assistants across campus.

• **School of Hawaiian Knowledge: Hawaiian Language Positions (FY’09: $480,000)**. The conversion of several Hawaiian Language positions from temporary to permanent is essential for the success of the newly-establish School of Hawaiian Knowledge.

• **Academic Affairs: Upgrade Classroom Technology (FY’09: $800,000)**. Classrooms at Mānoa are generally not equipped with the standard technology utilized in classrooms across the country. This is a very important request to our students. In order to provide up-to-date equipment for nearly every classroom, we plan to match this request with tuition dollars.
• **School of Hawaiian Knowledge: Initiatives to Enhance Access for Hawaiians (FY’09: $840,000).** Mānoa’s Strategic Plan recognizes the importance of Hawaiian culture, language and place, and the recently-established Hawaiian School of Knowledge demonstrates and advances our commitment to becoming a truly Hawaiian place of learning. Further funding is needed to provide permanent full-time employees and academic and research support for the School. This request includes funds for those positions and for the Chancellor to support Hawaiian initiatives.

• **Chancellor’s Office: Community Outreach and University Advancement (FY’09: $260,000).** The Manoa campus has an need to do a better job reaching out to the community and promoting the opportunities available at Manoa to potential students at home and on the mainland. These positions are critical to improve the communication and understanding of the University within our community, and promoting the University on the mainland and abroad.

• **Academic Affairs: Accreditation, Assessment Initiatives for WASC (FY’09: $360,000).** This request provides the funding necessary to meet and implement the assessment of student learning and student learning initiatives. An institutional analyst will use timely data to help departments identify critical areas of need in student learning and help the VCAA present guidance and support seminars and workshops to enhance student assessment and learning. This funding will help ensure continued success in the areas of student learning, assessment, and accreditation.

• **Academic Affairs: Director for Enrollment Management (FY’09: $200,000).** The Office of Enrollment Management is charged with developing a plan to stabilize and steadily increase campus enrollment, meanwhile addressing state needs and diversity challenges. The revenues generated through increased enrollment will assist the Mānoa’s steady growth and allow us to continue to attract Hawai‘i’s students. A Director of Enrollment Management will guide these efforts and also take us one step further in the establishment of an infrastructure for the Office of the Assistant Vice Chancellor for Enrollment Management.

• **Academic Affairs: Honors Program Office (FY’09: $300,000).** This request moves us toward a four-year Honors curriculum that will attract and retain Hawai‘i’s brightest undergraduates.

• **Student Affairs: Children’s Center—Expand Child Care Capacity (FY’09: $120,000).** Providing access to convenient, quality childcare is part and parcel to supporting our students and staff. Due to budget and hiring constraints, our Center operates with a significant waiting list, and student-parents do not always receive the support services they need. This request includes three new full-time teaching positions to expand parent involvement and training activities, which ultimately support student-parents as they pursue their educational goals.

• **Student Affairs: Coordination of Student Services Through Kiosk Operations (FY’09: $90,000).** As student services become more centralized in the Queen Lili‘uokalani Center for Student Services (QLCSS), the front kiosk has the potential to be much more than just
an information booth. Indeed, with a full-time professional staff and additional resources, the kiosk could provide essential front-end services like help filling out applications, interpreting letters issued by student services units, etc. As such, the kiosk could be a permanent “go-to” resource for students and visitors alike, potentially reducing demand on other QLCSS offices and putting a full-time resource expert at the entrance of our student services building.

- **Office of Faculty Development & Support: Faculty Development (FY'09: $65,500).** The Year of the Student Survey highlighted several areas in which more faculty support could make a difference in how well our students learn. This item will provide more faculty mentoring, workshops on general education, and provide support to integrate technology into our teaching methods.

- **Academic Affairs: Office of International Students SEVIS Federal Compliance (FY’09: $113,910).** Student and Exchange Visitor Information System (SEVIS) monitoring and reporting requirements rely heavily on accurate and timely data entry and analysis of complex SEVIS requirements. Two full-time SEVIS support positions are critical to ensure that the University continues to comply with federal immigration compliance requirements.

- **Chancellor’s Office: Centennial Hires for Diversity and Excellence (FY’09: $500,000).** The University of Hawai‘i at Mānoa desires to have flexibility to attract scholars that will bring prestige and enhance the diversity of our faculty through five “Centennial Hires for Diversity or Excellence.” These funds would be used strategically to identify exceptional scholars who could be recruited to UH Mānoa. UH Mānoa does not currently have the flexibility to pursue individual opportunities as they surface. These seed hires would help to raise our profile and diversify the faculty.

- **Student Affairs: Student Organizations Resource Center for Excellence & Success (SORCES) (FY’09: $50,000).** Clubs and organizations make up a campus social network that promotes individual student pride and fosters a sense of belonging to the campus that ultimately contributes to student learning, retention, and success. This provides funds for a specialist position for the Student Organizations Resource Center for Excellence & Success (SORCES), as such initiating the establishment of a centralized resource service center for the more than 200 registered clubs and student organizations on campus.

- **Pacific Biosciences Research Center: Undergraduate Research Training Coordinator (FY’09: $45,000).** The PBRC administers six research training programs that provide undergraduates with research experiences and opportunities. A full-time Undergraduate Training Coordinator is needed to carry out administrative functions such as publicity, recruiting, selection and placement, assessment for this important program.

- **Law School: Law Library Accreditation (FY’09: $90,000).** This line item provides for enhanced infrastructure for the Law Library, which is currently significantly understaffed for a collection its size.

- **Travel Industry Management: Growth of Academic Programs to Meet Statewide Needs (FY’09: $360,000).** There is a clear unmet need for travel industry management
baccalaureate students, which is voiced by the industry. This budget includes new faculty to help expand our undergraduate offerings focusing on local residents of the State with the express purpose of ensuring that local students have an opportunity to gain management education in hospitality and tourism and assume leadership roles within the State.

IV. Expenditures for FY 2007-2008

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<th>Appropriation FY 2008</th>
<th>Collective Bargaining</th>
<th>Transfers In/Out</th>
<th>Restriction</th>
<th>Estimated Total Expenditures</th>
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<td>Current Expenses</td>
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<tr>
<td>Equipment</td>
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<tr>
<td>Motor Vehicles</td>
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<tr>
<td>Total</td>
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<td>2,672,590</td>
<td>259,406</td>
<td>522,106,403</td>
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By MOF:

| General Funds         | 237,907,514           | 2,394,897        | 259,406     | 240,561,817                |
|                       | 251.25                |                  |             | 251.25                     |
| Special Funds         | 200,523,383           |                  |             | 200,523,383                |
|                       | 78.06                 |                  |             | 78.06                      |
| Federal Funds         | 5,485,593             |                  |             | 5,485,593                  |
|                       | 134.25                |                  |             | 134.25                     |
| Revolving Funds       | 75,257,917            | 277,693          |             | 75,535,610                 |

A. Transfers within the Program I.D.
None

B. Transfers between Program I.D.
Transfers of 3.00 OHR positions and 184,034 from UOH 900 to UOH 100
Transfer of 3.00 ITS positions from UOH 900 to UOH 100
Transfer 2.00 Advancement positions and 75,372 from UOH 900 to UOH 100

These transfers follow the transfer of systemwide functions from UOH 900 to UH Manoa

C. Restrictions
None
V. Supplemental Budget Requests for FY 2008 - 2009:

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<th>Budget Request FY 2008-2009</th>
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<tr>
<td>Personnel Services</td>
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<td>Current Expenses</td>
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<td>Equipment</td>
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<td>Motor Vehicles</td>
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<td>Total</td>
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By MOF:

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<th>MOF Cost Category FY 2009</th>
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<tr>
<td>General Funds</td>
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<td>Special Funds</td>
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<tr>
<td>Federal Funds</td>
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A. Workload or program requests:

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<th>Item/Description</th>
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<td></td>
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<td>M. Motor Vehicles</td>
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Request is to provide additional security personnel to provide increased presence on campus.
Transfer Quentin Burdick from UH Hilo to UH Manoa

Request to transfer funds for the UH Manoa School of Nursing program which were appropriated to UH Hilo.

Transfer OHR positions from UOH 900 to UOH 100

Transfer ITS positions from UOH 900 to UOH 100

These transfers reflect the transfer of systemwide functions to UH Manoa.

Transfer UH Bond System from UOH 100 to UOH 900

The UH Bond System manages the bond system funds for the entire University system and the budget should be included as part of the system financial management program.

Increase user access to Library collections and services

Request is for funding to improve user access to the Library, including electronic data bases, additional digital resources and staff to maintain library collections.

VI. Program Restrictions:

None.

VII. and VIII. Capital Improvements Program Requests/Lapsing of CIP:

The CIP is discussed in a separate part of the University testimony.