

## STANDARD EIGHT: PHYSICAL AND TECHNOLOGICAL RESOURCES

The institution has sufficient and appropriate physical and technological resources necessary for the achievement of its purposes. It manages and maintains these resources in a manner to sustain and enhance the realization of institutional purposes.

### DESCRIPTION OF PHYSICAL AND TECHNOLOGICAL RESOURCES

The University of Rhode Island is presently comprised of four campuses: the 1,300-acre Kingston Campus, principal location for the University's undergraduate and graduate educational, research, residential and athletic programs, as well as central administration; the 190-acre Narragansett Bay Campus, home of the Graduate School of Oceanography in Narragansett, Rhode Island; the W. Alton Jones Campus, home of the Whispering Pines Conference Center and the Environmental Education Center, located on 2,300 acres of forested land in West Greenwich, Rhode Island; and the Feinstein Providence Campus, home of the College of Continuing Education, located in Rhode Island's capital city of Providence. In addition, the University leases 19,644 sq. ft. of space from the Independence Square Foundation, a partnership which allows for the sharing of space and resources among cooperating state and nonprofit agencies, for several of its programs including the Speech and Hearing Clinic and Physical Therapy Program.

**Operation and Management.** The University's physical resources consist of over 4.2 million sq. ft. of building space. A total of 2.7 million sq. ft. is dedicated to academic and administrative use. Residence halls and auxiliary and enterprise operations occupy another 1.6 million sq. ft. Responsibility for the management and operation of University facilities, including 300 buildings and municipal-scale infrastructure and utility systems, rests with a number of different organizational units. Responsibility for the management and security of University electronic information and systems rests with various units within the department of Information and Instructional Technology Services.

Campus	Serviceable Bldgs	Net sq. ft.	Maintenance & Repair
Kingston:			
General/Athletics/Farms	144	2,228,173	Facility Services
Housing/University Village	45	1,193,275	Facility Services
Auxiliary Enterprises	5	249,794	Auxiliary Enterprises
Narragansett Bay	44	255,788	Facility Services
W. Alton Jones	59	74,379	Administration
Feinstein/CCE Providence	1	187,780	Facility Services
Total	298	4,189,189	

Facilities Services reports to the Assistant Vice President for Business Services and is responsible for the maintenance, operation, and cleaning of the Kingston Campus's academic, administrative and athletic facilities and grounds. It is also responsible for an extensive utility infrastructure, including a central steam plant and distribution system, as well as a high voltage electrical distribution system. In addition, Facilities Services provides for utilities management and major maintenance projects on all four campuses. This department also maintains the University-operated, well supplied, municipal-scale water system to serve the water requirements of the Kingston Campus in accordance with the mandates imposed upon such systems by the Rhode Island Health Department, including a regular program of water quality testing ( <http://www.health.ri.gov/environment/dwq/annualreport2005.pdf>).

In Business Services, the Capital Planning and Design department is responsible for guiding campus development and improvement in relationship to the elements of the Campus Master Plan. It is also responsible for influencing the design

of new construction and major rehabilitation projects and the management of space planning and assignments. Also within Business Services is Capital Projects which is charged with managing the University's construction program, from construction documents through construction completion, for all campuses, including new construction, major rehabilitation, and larger scale asset protection projects affecting buildings and infrastructure. Another department that reports to the Assistant Vice President for Business Services is Safety and Risk Management. This office conducts regular inspections of University facilities and responds to calls for possible health or safety concerns. Safety and Risk manages and maintains fire detection and alarm systems and security alarm systems and is responsible for institutional compliance with fire codes, occupational safety regulations, and hazardous materials regulations on all campuses. In addition, it records the tracking and removal of potentially hazardous substances used in laboratory settings and general operations. Safety and Risk also handles all insurance matters.

The Office of Housing and Residential Life reports to the Vice President for Student Affairs and is responsible for the operation of 20 residence halls and 10 apartment buildings with a capacity of housing 6,000 graduate and undergraduate students on the Kingston Campus. The Department of Facilities and Operations provides maintenance and repair services to student residential facilities. The University also leases four auxiliary or grant-funded residences: North Village Apartments; Rainbow Diversity House; Women in Science and Technology House; and the International Engineering Program (IEP) House. These four leased properties account for 161 undergraduate bed spaces. An additional IEP House of 35 bed spaces is scheduled to be opened by fall 2007. Property management for these leased facilities are provided by the Fraternity Managers Association, a nonprofit support corporation originally established to maintain fraternity and sorority houses on the Kingston Campus. Also reporting to the Vice President for Student Affairs are the operations of Memorial Union, Dining Services, and Health Services. These units are responsible for the maintenance, operation, and cleaning of their respective facilities on the Kingston Campus.

The Dean of the Graduate School of Oceanography has responsibility for the Narragansett Bay Campus facilities and provides direct management oversight for 45 buildings and the grounds, as well as the oceanfront pier and research vessel operations at the Narragansett Bay Campus. The Vice Provost for Urban Programs, in conjunction with Facilities and Operations, is responsible for the maintenance, operation, and cleaning of the Feinstein Providence Campus facilities.

The Vice President for Administration oversees the maintenance, operation, and cleaning of W. Alton Jones Campus facilities. This includes 61 buildings, roads, grounds, and utility systems serving the Whispering Pines Conference Center, Environmental Education Center, and demonstration farm complex at the campus. In addition, the Vice President for Administration oversees the Ryan Center and Boss Arena that are maintained jointly by Facilities Services and Global Spectrum, the University's sports and entertainment partner.

Information Technology Services is responsible for the management and security of electronic information and systems. Several policies covering information technology use, security, and services are published on the University web site. Additionally, departments within ITS, as well as external departments, maintain policies and procedures that focus on internal use, storage, and disclosure of sensitive and protected information (<http://www.uri.edu/ois/irc/bylaw.html>).

The security of core University electronic data is managed through several layers of protective policies and technical controls. These layers facilitate adherence to applicable state and federal laws including Family Education Rights and Privacy (FERPA), Health Insurance Information Portability and Accountability Act (HIPAA), Electronic and Communications Privacy Acts (ECPA), and the Children's Online Privacy Protection Act (COPPA). Technical controls implemented within the University provide data protection from unauthorized access and modification and enforce written policies (<http://www.uri.edu/es/forms/pdf/faculty/ferpa.pdf>) and (<http://www.uri.edu/security/i.php?i=policies>).

**Planning and Oversight.** The Board of Governors is the state's legal entity for public higher education in Rhode Island and is empowered to develop and coordinate capital improvement and development programs, including planning,

financing, and the general supervision of projects (<http://www.ribghe.org/power.htm>). The Facilities and Finance and Management subcommittees augment the Board's oversight of URI's Five-Year Capital Improvement Plan (CIP) (<http://www.ribghe.org/cip2008.pdf>). The CIP is primarily supported by general obligation bonds: institution-sponsored revenue bonds, state general revenues, and federal and/or private resources.

Program space requirements identified by the academic colleges and administrative departments and overall facility conditions are considered in the annual process of updating the CIP. Priorities are set at the University before being forwarded to the Board's subcommittees and, in turn, the full Board. Agreement at both the Executive and Legislative levels is necessary for most projects. General Revenue bonded projects must also receive voter approval prior to issuance. In addition, the Board of Governors retains revenue bonding authority for auxiliary and enterprise endeavors.

The University also participates in the Asset Protection Program, a widely regarded plan which serves as an essential investment target to preserve the condition and function of the University's general fund supported facilities. Annual appropriations are sought as part of the CIP submission with funding derived from the state-supported Rhode Island Capital Fund (<http://www.rilin.state.ri.us/Statutes/TITLE35/35-4/35-4-23.HTM>). The University's auxiliary enterprises are responsible for similar capital investments in their respective facilities with funding derived from their relevant student fee-supported budget resources. These funding commitments have permitted improved progress against asset protection needs in our academic, general business, and auxiliary enterprise buildings.

Priorities for asset protection and capital planning are established by those responsible for the management of University facilities in consultation with academic deans, other administrative units, the Joint Strategic Planning Committee ([http://www.uri.edu/pspd/ps\\_jspc.php](http://www.uri.edu/pspd/ps_jspc.php)), the Campus Master Plan Review Team ([http://www.uri.edu/pspd/ps\\_mprt.php](http://www.uri.edu/pspd/ps_mprt.php)), the Asset Protection Committee and the Space, Enhancement, Design, and Allocation Committee (SEDA) ([http://www.uri.edu/pspd/ps\\_seda.php](http://www.uri.edu/pspd/ps_seda.php)) as required. SEDA, with broad representation from the University community, examines space requirements and utilization. It makes recommendations to the Vice President for Administration regarding changes in the allocation of University building space. The University Space Planner, within Capital Planning and Design, provides staff support to the Committee's efforts. Among the University departments that provide technical support to SEDA is the University Property and Inventory Office which maintains a CAD computer graphics comprehensive database on space utilization and associated floor plans.

**Developments.** Ten years ago, classrooms at the University offered blackboards, whiteboards and overhead projectors. Now, all University classrooms have Internet access—with a minimum of one but often multiple connections—both wireless and wired in some classrooms. A majority of general assignment classrooms—60 out of 105 on the Kingston Campus—have installed LCD projectors, and many have installed CPUs and other source media. The Feinstein Providence Campus, since it is comprised of only one building, uses media carts to bring projectors and laptops to the classrooms. The Narragansett Bay Campus has installed media in two learning spaces (an auditorium and classroom) and a media loan program for the other classrooms. A complete database of installed media in all classrooms is available at (<http://www.uri.edu/ois/classroom/>). In addition, the Office of Information Services provides a guide to faculty and students wishing to utilize the available classroom equipment and media at (<http://www.uri.edu/ois/iits/itms/class.media.html>).

In the past five years, the University has developed a classroom taxonomy, which lists all design requirements for its classrooms. The URI Standard Classroom is a baseline standard of minimal requirements for acoustics, lighting, Internet connectivity, placement of electrical outlets, window-treatments, floors and ceilings, installed media, furniture, room shape, storage, sight-lines, whiteboards, projection screens, access control (card swipe doors), "smart box" controls for faculty, and podiums. Building committees, architects, contractors and the Office of Capital Projects all start with this baseline set of requirements, and then add or modify for specific disciplinary needs.

This baseline set of design requirements has been adopted through a new \$5.8 million state-funded, four-year technology enhancement project. This project, called NOMAD (New-Order, Multi-modal, Advanced-Design learning spaces), will add 33 more technology-enhanced learning spaces at the University over the next four years in 10 buildings on the three academic campuses. As Lippitt Hall is renovated and the new Center for Biotechnology and Life Sciences is built, the number of classrooms will increase. Independence Hall, the University's largest classroom building, was reopened in September 2006 after extensive renovation. All rooms in Independence have installed technology and follow the baseline set of classroom requirements.

The main goal behind the design of the URI Standard Classroom is flexibility. With so many opportunities for collaboration, for display of knowledge, and for connections to resources at a distance, classrooms today must be "light on their feet"—able to change from one grouping to another without strain or delay. Yet, the room must also support traditional lecture as part of the mix. Overall, there is no one teaching method in the general assignment classroom of 50 seats or less that is obviously favored.

Ten years ago, the University did not have a consistent policy to guide it in making long-term physical development decisions. The University now has detailed plans for its Kingston and Narragansett Bay Campuses and is finalizing plans for its North District (<http://www.uri.edu/pspd/>). The Campus Master Plan provides benchmarks for land use, density, and adequacy of development, traffic circulation, parking systems, open space, landscaping, and linkages with the community. The objectives highlighted in the plan govern all major capital decisions related to the physical development of the University. Since the plan was completed in 2000, the University has constructed 14 new buildings, built additions onto two buildings, completed major rehabilitation on eight others, added over 2,250 parking spaces and instituted an integrated parking and transportation system. Construction plans are underway for a new library and underwater exploration center at the Narragansett Bay Campus and for the Center for Biotechnology and Life Sciences in the North District. The University has also launched an array of initiatives to upgrade, refurbish and/or renovate 13 additional buildings, including installation of state-of-the-art fire safety devices and systems. Improvements to its utilities infrastructure, as well as landscape and paving improvements, are also scheduled. The Campus Master Plan Review Team meets monthly to ensure the Plan is kept in the forefront of new construction projects and to ensure that those projects meet the major philosophical guiding principles for the future physical development of the campus. Highlights of completed projects include:

- Construction of the Multicultural Center, a 9,950-sq.-ft. administrative and education facility to meet the needs of various multicultural student organizations, services, and special programs;
- Construction of an addition to the Social Sciences Research Center in support of expanding sponsored research activity;
- Construction of the Coastal Institute on Narragansett Bay and Kingston Campus Building and Aquaculture Facility. The 46,000-sq.-ft. Kingston facility houses the Department of Environmental and Natural Resource Economics, a high-technology satellite conferencing center, policy simulation lab and a 10,250-sq.-ft. aquiculture lab facility sited at the Narragansett Bay Campus;
- Rehabilitation of Green Hall, a 28,400-sq.-ft. building which serves as a "one stop" student services center for Admission, Student Financial Aid, Registrar, and Bursar operations.
- Rehabilitation and expansion of Ballentine Hall, a 44,244-sq.-ft. building serving the College of Business. This project resulted in a state-of-the-art business education facility that boasts a trading room comparable to those found on the floor of any major stock exchange;

- Investment in new telecommunications infrastructure between buildings and campuses and within buildings as well as purchase of equipment necessary to bring the newest video and data technology into the computer laboratories, classrooms and offices at the University's campuses;
- Renovation and refurbishment of 13 of the University's 19 student residence halls, including creation of a "Freshman Village." Renovations included new building envelopes, fire and life safety code upgrades, accessibility improvements and general systems modernization;
- Construction of the Thomas Ryan Center, a 7,700-seat convocation and sports center and the Boss Arena, a competition-sized ice rink with seating for 2,500 spectators;
- Construction of a two-story, 31,700-sq.-ft. brick building housing a dining hall, café and convenience store with 15,300-sq.-ft. of storage space and a receiving area;
- Construction of two new apartment-style residences with 508 bedroom units and a suite-style dormitory containing 292 bedroom units all targeted toward the University's upper-division student population; and
- Complete rehabilitation of Independence Hall, a 51,824-sq.-ft. three-story masonry classroom and office building on the Kingston Campus. The facility, which serves the departments of English and Languages, is a high traffic structure with faculty and department offices, URI Standard Classroom designed general assignment classrooms, a large lecture hall, a multimedia screening room and language laboratory facilities.

## APPRAISAL OF PHYSICAL RESOURCES

**Strategic Plan Initiatives.** Many of the University's achievements originated as initiatives set forth in prior three-year strategic plans. The 2003–2006 Plan (<http://www.uri.edu/pspd/>) called for an increase in the number of general-purpose classrooms as an action step towards achieving the President's goal of expanding enrollment by 1,000 students. In FY 2004, the planning firm of Rickes Associates of Boston studied the University's classroom complement and concluded that existing classrooms were not being utilized efficiently and that some of the rooms were too large for enrollment ([http://www.uri.edu/pspd/planserv/URI\\_Classroom\\_October.pdf](http://www.uri.edu/pspd/planserv/URI_Classroom_October.pdf)). It further stated that a total of 96 right-sized rooms, distributed evenly over each day and week, would be sufficient to support URI's current course selection. If the planned enrollment growth necessitated an increase in section sizes, a total of 106 right-sized classrooms would be required.

The University is presently developing space policy and allocation guidelines to advance more efficient use of classroom facilities, including URI Standard Classroom design as well as incorporating technology upgrades where feasible. In addition, requests for space are monitored to maximize use of general-purpose classrooms across the entire teaching day. It is expected that similar policies and guidelines will evolve as the University gains experience in central classroom management.

Strategic initiatives linked to research have resulted in the funding of several new facilities. When completed, they will promote declared goals for a stronger Rhode Island economy, more numerous economic partnerships and greater success in attracting and retaining dynamic research faculty.

In 2008, construction of the Pell Marine Library/Oceanographic Exploration Research Center will be complete. The Library will house the Graduate School of Oceanography's specialized collections and foster the gathering of faculty, staff and students to encourage crucial interdisciplinary communications. The Oceanographic Center will provide space for the development of new research initiatives, including the Inner Space satellite downlink center. This NASA-style mission command center with large-scale monitoring capabilities will allow engineers and scientists to remotely control and monitor research activities (<http://www.gso.uri.edu/pell/pellplan.pdf>).

Another research-linked facility is the Center for Biotechnology and Life Sciences, set for completion in fiscal year 2009. The Center will be home to a state-of-the-art research and teaching facility which is expected to produce top flight graduates, retain and attract exceptional staff, and support current and future local biotechnology industries. The University's College of Environment and Life Sciences has partnered with Amgen, a leading human therapeutics company based in West Greenwich, Rhode Island, for several years. Future academic and research collaboration between the two organizations will be further enhanced as a result of Amgen's \$1 million donation to support construction of the center (<http://cels.uri.edu/news/newsAmgen.html>).

**Accreditation Self-Study Reports.** Individual department accreditation reviews are another tool used by the University to manage its physical assets. In preparation for a recent accreditation review by the National Association of Music (NASM), the Department of Music prepared a self-study report, which detailed physical shortcomings at the Fine Arts Center. Resources dedicated to sustain the 41-year-old building's unique architectural design, exterior construction, and HVAC systems have not kept pace with its maintenance and asset protection needs. Major sections of the facility have fallen into disrepair or have become obsolete. The plan to address the deficiencies identified in the department's self-study report is to expand and thoroughly renovate the Center using \$42.8 million in general obligation bond proceeds. The University has received all necessary approvals to place this item before the voters on the November 2008 ballot. In the interim, the University is advancing selected projects to address the facility's most urgent requirements, including a roof replacement.

In 2003, the Accreditation Council on Pharmacy Education found the home of the College of Pharmacy, Fogarty Hall, to be obsolete and to have outgrown the needs of the College. In response, the College and University proposed that a 150,000-sq.-ft. facility be constructed in the North District near the new Center for Biotechnology and Life Sciences. In 2006, Rhode Island voters overwhelmingly approved a \$65.0 million general obligation bond to fund this project (<http://www.uri.edu/pharmacy/newbuilding/index.shtml>).

Facilities Services and the Office of Capital Projects participate in all aspects of individual department accreditation reviews to ensure effectiveness and incorporation of accreditation commission review findings, including those currently facing the Graduate School of Library and Information Studies.

**Real Estate Development.** In December 2006, the University executed one of the largest strategic land acquisition transactions in its history with the purchase of 114 acres of undeveloped land immediately north of the present development limits of the Kingston Campus. The purchased parcel is surrounded by undeveloped and agricultural land already held by the University, bringing the contiguous land holdings of the University north of the developed Campus to over 410 acres. At this time, studies are underway to delineate wetland and other natural features as well as the prospective configuration of building development sites, roadways and parking facilities that respect the woodland environment, integrate effectively with the campus roadways and complement buildings to the south.

The University is regularly investigating alternative methods to attract and keep the highest caliber faculty and research complement while simultaneously devising imaginative means to generate new monetary resources. To that end, it is exploring the most effective use of the undeveloped real estate north of, and several parcels within, the main Kingston Campus.

In 2006, the consulting firm of George, Henry, George (GHG) was engaged by the University to advance development of the research and technology park. GHG is presently evaluating faculty and their relationships with corporate tenants as well as determining market feasibility of potential ventures. The North District, which is being developed as the health and environmental sciences hub of the Kingston Campus is located immediately south of the proposed research and technology park. Ultimately, the park will include incubator and research space, and start-up companies. It is also



intended that it house more established companies which will capitalize on the University's premier programs including biomanufacturing, pharmaceuticals, marine science and nanotechnology.

Additionally, the University has appointed Economics Research Associates (ERA) to evaluate the potential of remaining undeveloped real estate for suitability as home sites, rental units, a campus inn and/or a golf learning center. It is expected that more efficient use of University property will provide not only financial returns, but address affordable housing issues currently facing graduate students and new faculty members. The team will examine economic models, determine applicability of models to local conditions and recommend the best business plan to develop the proposed projects. Development deemed economically feasible and satisfactory to University and local constituencies will move forward.

**Student Housing.** In 1998, a feasibility study for a residence hall facilities upgrade was conducted using the consulting firm of Biddison Hier, Ltd. The consultant team worked closely with administrators and conducted student focus groups to determine the most prudent student housing upgrade and improvement options for the University. The resulting Student Housing Upgrade Study report (available in the workroom) recommended three primary objectives as appropriate: renovate and upgrade all existing student residences; construct new student housing to support more independent living; and liquidate/tear down any student housing facilities that cannot be cost effectively retrofitted.

Implementation of these objectives has resulted in completion of a \$64 million student housing facilities upgrade initiative that has focused on modernizing traditional corridor style housing that is now targeted to first-year students. The successful creation of this Freshman Village has become a recruitment and marketing asset for the University and a very popular living arrangement for first-year resident students. Additionally, the University has constructed a \$70 million housing project that includes 800 single bed spaces in apartment and suite-style configurations that are targeted to upperclassmen. Students were actively involved in the planning and design of both of these projects. Currently, renovation options and/or the possible demolition of the Roger Williams cluster of student housing units are being examined to determine the best course of action for these 1,100 remaining un-renovated upperclassman student bed spaces.

**Parking and Transportation System.** A component of the Campus Master Plan includes recommendations to improve the Kingston Campus Parking and Transportation System. The Master Plan recommends improvements in pedestrian safety and traffic circulation; parking supply and its management; and alternative transit systems (<http://www.uri.edu/pspd/kingston/transportation.htm#Parking%20Management%20and%20Transportation%20Policies>). Progress towards implementation of these recommendations began in fiscal year 2003 after the issuance of a \$7.8 million revenue bond. Parking Services, the enterprise created to administer the parking management plan, has overseen the installation of card-activated control gates that limit traffic on service roads through the central campus and reduce the potential for pedestrian/vehicular conflicts. The gates automatically open for emergency and service vehicles, including shuttle buses that support the Kingston Connection campus transit system. Additional traffic signs have been erected. More security cameras have been installed and elevated, and high visibility crosswalks have been constructed.

The availability of parking has increased by 2,250 parking slots and has shifted to the Kingston Campus's periphery. The University Capital Improvement Plan for fiscal years 2008–2012 requests authorization to issue a second revenue bond totaling \$4 million which would allow for the extension of Flagg Road and expansion of the Plains Road parking lot. The extension will provide better traffic flow to and from perimeter parking lots as well as for the Plains Road entrance to campus. The 550-space lot expansion will support demand resulting from the increase in on-campus housing and the number of commuter students registering vehicles. Parking Services is continually reviewing its policies and procedures in an effort to institutionalize the Kingston Campus traffic and parking system such that the system increases in quality and user satisfaction (<http://www.uri.edu/parking>).

**Campus Security and Safety.** In June 2002, a task force comprised of Faculty Senate and other members of the University community completed a review of the departments of Safety and Risk, Police and Security, and Parking Services

([http://www.uri.edu/facsen/Security\\_Task\\_Force\\_Final.html](http://www.uri.edu/facsen/Security_Task_Force_Final.html)). The group found that, in comparison with similar universities or towns of approximately the same size, the University is a relatively safe environment. Despite this benchmark, the committee determined that the University had too few campus police officers and that those in the ranks were in need of more education and training. It also found that building security would be greatly enhanced with the installation of emergency phone systems, remote cameras, and central alarm and building access systems. Another of its noteworthy recommendations included creation of an emergency management guide to assist the community in emergency preparedness. The guide has been distributed to the community and is also available on the web at (<http://www.uri.edu/safety/EmergGuideOnline.pdf>).

Since the release of the study, blue light emergency phone systems have been installed throughout the Kingston Campus, including exterior parking lots. Additional security cameras have also been added, including in interiors of recently renovated residence halls. Card access systems at residence hall main entrance points and critical laboratory and classroom facilities are now in place. The shift from traditional key entry to this method will continue across campus as resources permit.

Addressing the task force's concerns regarding officers, the Police and Security complement has increased from 17 to 25 positions. Of greater significance is the move in fiscal year 2005 to create a rank structure that corresponds to those commonly seen in municipal police forces. All new campus police hires are now required to graduate from a police academy and have earned at least an associate's degree, preferably in police science or other related curriculum. These higher standards, while benefiting the population in the present, are also designed to promote the University's goal of achieving accreditation by the Commission on Accreditation for Law Enforcement Agencies (CALEA).

**Chemical Safety and Biohazard Waste Management.** State and federal statutes impose strict requirements governing all aspects of hazardous waste management. The University has established a coordinated program that interprets these provisions and establishes policies and procedures for the management of hazardous waste in laboratories used for teaching and research. Departments are responsible for handling waste in accordance with this program (<http://www.uri.edu/safety>).

The Department of Safety and Risk Management conducts annual training for faculty, staff and students on safety and waste management with both initial and refresher courses. It performs weekly inspections of designated accumulation areas for wastes that are pending transport to EPA-permitted disposal facilities. These state-of-the-art holding facilities were opened in 2004. It also conducts annual reviews of laboratories for compliance with the Chemical Hygiene Plan.

Safety and Risk Management has also initiated mercury reduction programs and is implementing waste minimization-pollution prevention programs. These include mercury thermometer swaps, just-in-time purchasing, and adoption of newer technologies such as digital photography. In addition, the Chemistry Department has advanced principles of Green Chemistry into its activities to facilitate reductions in chemical waste during the course of laboratory teaching and research.

**Fire Safety.** Recognizing its responsibility to provide a safe environment for all those who live, work, study, or visit its several campuses, the University has reinforced its infrastructure protection with a fire safety commitment which includes regular and frequent fire inspections, fire safety lectures, drills and testing of its alarm, detection, and suppression devices. The Capital Projects Unit is dedicated to continuously enhancing fire protection capabilities as new buildings are built and older buildings are renovated. Presently, all occupied buildings are equipped with fire detection and alarm systems maintained by dedicated full-time technicians. The University hosts and supports a well equipped volunteer fire department on its Kingston Campus that provides prompt response to alarms originating within the campus or the adjacent community. The majority of the University's buildings are of fire resistant steel and masonry construction. All were built and modified over the last century with strict adherence to applicable fire and building codes.



The University's aggressive capital investment in major renovation and new construction, particularly during the last decade, has further enhanced fire safety systems serving the building inventory. These include infrastructure improvements to the water supply systems in Kingston and Narragansett which have vastly improved fire fighting and fire suppression capabilities on the two campuses and have the additional advantage of having the capacity to serve the expansion of sprinkler systems in all buildings.

While the University has made considerable progress through its ongoing capital investments in fire safety improvements, the University's present Capital Improvement Program includes a fire protection project identifying the capital investment that would be required over the next five years to address significant changes in the Rhode Island Fire Code regarding older buildings. With the assistance of our fire safety engineering firm, Hughes Associates of Warwick, Rhode Island, the University has defined and prioritized the improvements required and funding sources are being sought through the Capital Improvement Program at the state level.

**Technology Security Measures.** Information Technology Services is regularly audited under the direction of the Rhode Island Board of Governors for Higher Education. Additionally the University conducts external IT audits of critical infrastructure. In 2003, an external audit provided the pathway for strengthening the University's security posture. Technologies added since that time include enterprise firewalls, computer intrusion detection and various logging and monitoring systems.

## APPRAISAL OF TECHNOLOGICAL RESOURCES

The University's Classroom Management Team (CMT) (<http://www.uri.edu/ois/Janie/cmt.html>), created ten years ago, has proven to be a highly effective vehicle for classroom planning, maintenance, renovation, and new construction. The CMT consists of a representative from Information Technology Services, Capital Projects, Enrollment Services, and Facilities Services. The CMT meets bi-weekly. A directory of classrooms and general assignment classrooms scheduled by Enrollment Services may be viewed online (<http://www.uri.edu/es/faculty/roomDirAlpha.html>). The Champlin Foundations in Rhode Island (<http://www.foundationcenter.org/grantmaker/champlin/>) has provided funding for classroom prototyping twice in the past ten years, in Independence Hall and in Chafee Hall, which resulted in the NOMAD baseline set of design requirements. The University leveraged this seed funding in 210 Flagg Road and in Independence Hall, and now in the 33 rooms in 10 buildings affected by the NOMAD project. Ballentine Hall was also renovated in the last ten years and reflects the NOMAD concept as well. Seminar rooms, lecture halls, auditoria and science labs also follow the sections of the University's classroom taxonomy appropriate to those specialized learning spaces. Having a baseline set of classroom requirements allows the University to identify precisely how older classrooms are below standard, making planning and cost estimating easier.

Some of these older buildings need renovation and no short-term plans address these needs. As the contrast between the new bond-funded buildings and these older buildings becomes starker, the need for renovation becomes ever more apparent. In addition, maintenance of classrooms is not as uniformly accomplished as it should be. The number of facilities maintenance personnel has been declining.

Based on an analysis of the state of information technology holdings and administration as compared to the EDUCAUSE Core Data Survey from 2005 (the latest available), the University is within the national norms on most metrics and above the norms on some (EDUCAUSE Core Data Service Fiscal Year 2005 Summary Report, 60 pp., with summary graphs (<http://www.educause.edu/apps/coredata/reports/2005/>)).

<b>Technology Resources: Comparisons to National Trends in Higher Education</b> (EDUCAUSE 2005) Trent Batson, David Porter, Garry Bozylinsky					
		National	Metric	URI	Notes
Administration	plus	CIO on Cbnet	54% yes	yes	Provides greater advocacy for IT on campus
Staffing	minus	183	numbers: median	90	URI less than half nat. median number of staff
Dist Support	minus	208.7	% Cent to Dist IT	300	URI, short on cent IT staff, also short on dist staff
Student IT support	minus	20	% student IT: staff IT	250	URI has 2.5 times student IT to staff IT
Budget and Fees	minus	\$26.6M	Tot Cent IT Funding	\$11.0M	Allocation; does not include other revenues
Desktop Computers	minus	8,000	Total number	5,000	University-owned desktop computers
Help Desk	minus	20	% student staff	76	URI relies more on student staff at Help Desk
Classrooms	plus	53	% LCD proj install	85	After current NOMAD proj done; only GAC rooms
Faculty Support	plus	84	% Design Instruc Tech	yes	Disc-spec IT support entirely distributed
Student computers	plus	39.6	% Require PC	yes	Refers to some students are required
Course Mgt System	plus	63	% Single Platform	yes	Blackboard/WebCT
Network	minus	60	% who have 135 Mbps	no	URI is below avg for avail bandwidth
Video-conferencing	minus	6	median no. sites	3	Sites from which orig V-conferencing
Voice Over IP	plus	33.5	% deployed	yes	Ahead of the curve in VOIP implementation
Video Over IP	plus	56%	% deployed	yes	In step with digital video transition
Web Services Technology	plus	76.4	% deployed	yes	Web content mgt system
Security	plus	75	% all categ deployed	yes	URI higher level security than most
ERP	plus	90	% deployed	yes	URI in step with higher ed
Information Systems	plus	84	% all categ deployed	100	URI excels in this category
SIS		100		yes	
Financials		100		yes	
Human Resources		99		yes	
Development System		90		yes	
Library Info System		90		yes	
Course Mgt System		99		yes	
Grants Mgt System		84		yes	
Alumni Mgt System		not in survey		yes	Sunguard BSR; all above in PS

## PROJECTION ON PHYSICAL RESOURCES

For the fiscal years 2008 through 2012, the University has authorization to proceed with 10 construction and renovation projects totaling approximately \$182.6 million. Over the same period, the University has submitted for consideration by the Rhode Island Board of Governors for Higher Education and the Rhode Island Executive and

Legislative branches, 17 additional projects totaling \$210.7 million. The following are examples of funded capital construction projects that are approved to proceed through construction:

**International Engineering –Chi Phi Purchase.** The University has purchased the only remaining fraternity house on Upper College Road to allow expansion of the International Engineering Program (IEP). The expansion will permit the IEP program to meet the growing demand for the combined residential/academic program experience that it has successfully promoted and managed. To support the fraternity who had previously occupied the house, the University has provided a building site at 11 Fraternity Circle with assistance for site improvements necessary to make the site buildable. Total Project Cost: \$1.8 million.

**West Kingston Superfund Site Remediation II.** The University is conducting remediation of an EPA designated Superfund site at the West Kingston Municipal Landfill and URI Disposal Area. The University has contributed \$3.2 million toward the design and construction of a cap that now covers the site. Phase II involves monitoring the site and treating the soil and groundwater to accelerate remediation of residual chemicals. Total Project Cost: \$1.0 million.

**Tyler Hall Rehabilitation.** The University is renovating Tyler Hall to address the long-term space requirements anticipated for the Information Technology Services Department. This will, for the first time, centralize the University's core computer center serving its primary administrative and academic functions. Total Project Cost: \$3.3 million.

**Lippitt Hall Rehabilitation.** This project involves rehabilitation of one of the University's oldest granite buildings on the Quadrangle. Lippitt Hall, a 36,852-sq.-ft. granite block, three-story building with a slate roof, was built in 1897 as a dining hall and gymnasium facility. A fully renovated and restored Lippitt Hall will house the Honors Program and the Math Department. Total Project Cost: \$8.5 million.

**Energy Conservation/Performance Contracting.** The University of Rhode Island entered into an energy performance contract with an energy service company to purchase energy-saving improvements in buildings and infrastructure, where the basis for payments is the performance level guaranteed in the contract. Energy Management Services (EMS) is an arrangement structured so that the cost of implementing the Energy Conservation Measures (ECM) is recovered from cost avoidance achieved by the performance of those measures. Equipment purchased and installed using EMS may include any cost-effective equipment or system upgrade designed to conserve energy or water, including improvements to existing equipment. What distinguishes these contracts is the provision of a guarantee on energy savings from the installed retrofit measures, and the provision of investment-grade energy audit evaluations, design, installation and maintenance services. Depending on the nature of the improvement, the contract period for particular ECMs can range from 5 to 10 years, with limited cases up to 18 years. Total Project Cost: not to exceed \$18.1 million.

**Center for Biotechnology and Life Sciences.** This project involves construction of a 93,000-sq.-ft. building and demolition of the existing Biological Sciences Building to address the needs of the University's Environmental Biotechnology and Life Sciences communities, including teaching and research facilities. The project will provide classrooms, laboratory facilities, animal care holding facilities and office space. The structure is just one piece of a larger plan designed to turn the North District of campus into a major hub for education, research, and economic development in the health sciences. Over the next six years, it is envisioned that the Center for Biotechnology and Life Sciences will be linked to new buildings for the Colleges of Nursing and Pharmacy, the Department of Chemistry, and the Center for Integrative Learning and Technology to form a health sciences quadrangle adjacent to Flagg Road. Total Project Cost: \$55.5 million.

**Pell Marine Library/Oceanographic Exploration and Research Center.** This project involves replacement of the existing 14,048-sq.-ft. Pell Marine Science Library, a two-level masonry building constructed in 1968 on the Narragansett Bay

Campus, with a new 38,000-sq.-ft. multi-purpose facility which will integrate library and educational functions, administration, research, and social activity into a state-of-the-art facility. Total Project Cost: \$15.1 million.

**College of Pharmacy Building.** This project involves design and construction of a 150,000-sq.-ft. building to house the College of Pharmacy. The facility will accommodate college teaching laboratories and classrooms, research laboratories, faculty and administrative offices and outreach programs. The structure will be located near the new Center for Biotechnology and Life Sciences, the proposed Chemistry and Nursing buildings, the Center for Integrative Learning and Technology and the Kingston Coastal Institute, promoting a synergy of activities to enhance the health and environmental sciences focus of the area. Total Project Cost: \$75.2 million.

### PROJECTION ON TECHNOLOGICAL RESOURCES

The University will continue to add current advanced-design classrooms with excellent technology and connectivity at a rapid rate over the next 10 years. State investment in University classrooms compares well with other state universities in New England. The current NOMAD project, combined with bond funding for Lippitt Hall, the Center for Biotechnology and Life Sciences, the Inner Space Center, the new Pharmacy building and others in the planning stage will place the University in the forefront in terms of quality of classroom stock among research universities.

### INSTITUTIONAL EFFECTIVENESS

The information presented above describes a broad variety of offices, committees, and procedures that the University uses to plan and manage its physical and technological resources. Judging the effectiveness of these offices, committees, and procedures is integral to the University's planning and management processes themselves. Supervised, coordinated, and reviewed by the Joint Strategic Planning Committee, the University will endeavor to make these activities even more efficient and useful.