

STANDARD VIII

Physical Resources

Physical Resources Task Force:

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PHYSICAL RESOURCES

DESCRIPTION

The University of New Hampshire's physical resources consist of some 4.2 million square feet of building space, approximately 260 acres of central campus, and another 2,100 acres of fields, farms, and woodlands. 2.4 million square feet of building space is dedicated to academic and administrative use and 1.8 million square feet to residence, student services, and auxiliary enterprise space. The University also leases facilities in Durham, Manchester, Nashua, the Pease International Tradeport, and in other locations in New Hampshire.

Since the University's last accreditation in 1983, new construction and major renovation projects, as well as systematic planning efforts, have improved facilities and increased accommodations for teaching, research, service, and student activities and housing. However, there remains a pressing need for continued action in this area. A careful strategy for both short and long range use, expansion, and deferred maintenance has been developed and is currently underway to meet the University's substantial needs.

The Durham Campus

The main campus of the University is located in Durham which is one of the oldest towns in northern New England. The rural landscape and the area's colonial heritage lend a distinctive character to the setting. The campus comprises one-hundred and fifty-six buildings. Ninety eight are used for teaching, research, and service, and fifty eight serve as residence halls. Many of the original University buildings are still in use today and have significant architectural features which bring a sense of historical continuity to the present day campus. Several of these buildings are situated on the south side of Durham's Main Street and have sloping lawns forming their front yards. Newer facilities stretch out from the central campus into wooded areas and are surrounded by fields and farmland. This careful arrangement gives the University of New Hampshire campus its cherished

"New England College" atmosphere and plays an important role in shaping the image of the University.

Over the course of the last decade, the University has built or renovated approximately 825,00 square feet of space. Approximately three-quarters of these efforts have been in new construction. New construction represents approximately 15% of the total building stock. Improvement and construction projects described in the *Fifth Year Report* to the Commission included the construction of Morse Hall (a new science and engineering research building), Student Health Services Center, and the Woodside Undergraduate Apartment Complex, the expansion of the Kellogg New England Center Conference Center and Field House; the complete renovation of the University's two oldest buildings Thompson Hall and Conant Hall, and substantial modernization of the Fire Station, Physics Library, and Sculpture Facility.

Since 1988, Smith Hall has been rehabilitated and expanded, Hood House has been remodeled, the Gables (a major new undergraduate apartment complex), Dairy and Research Center, new Child and Development Center, and new library storage facility have been built, and extensive renovations have been made to the Memorial Union Building which incorporated an interactive television studio. Hewitt Hall, which dates back to 1893, is presently being restored, rebuilt, and expanded and is scheduled for completion in January of 1994.

The University wishes to retain the historic character of the campus as it modernizes and expands its facilities. It has had to balance scarce resources to provide for both growth and the costs of maintenance that was deferred in the past. Many of the University's oldest buildings have significant maintenance requirements as well as costly needs for the improvement of handicapped access. More recent facilities, built in the 1960s and 1970s, are in good general condition but require additional laboratory space, updating of electrical systems to accommodate modern computer technology, and renovations and new cooling systems for appropriate laboratory equipment. Space needs in virtually all areas of the university's mission continue to exist.

The University Library. The existing Dimond Library defines the center of campus. It has a need for significantly more space as well as improvements and renovations to its existing space. The Library is the

subject of a recent library expansion study described in detail under Standard Seven of this report.

Instructional Facilities. The conditions of the thirty-two buildings that house classrooms cover a wide range. The new science and engineering facility, Morse Hall, which opened in 1990 is fully equipped to serve the Institute of Earth, Oceans, and Space. McConnell Hall (which houses programs in business and administration) and the Horton Social Sciences Building are fully equipped to meet modern instructional needs and are in excellent repair. Barton Hall (Thompson School) and Kendall Hall (animal and nutritional sciences) are in good overall condition, meet modern codes, and are accessible to persons with disabilities. Kingsbury, Parsons, and Spaulding Halls (science, mathematics, and engineering) are in need of modernization and improvements in laboratory space. Some of the oldest facilities on campus are scheduled for substantial renovation and repair.

Paul Creative Arts Center Originally constructed in 1960, Paul Creative Arts now fails to accommodate its intended use comfortably. The main theater is too large for recitals and too small for large productions. The lack of nearby parking is an important issue for a facility which holds major performing and visual arts events. The arrangements of the spaces on multiple levels make its use difficult for the disabled, although the Johnson Theater is now accessible.

Athletic Facilities. New Hampshire Hall, built in 1906 as an athletic facility, is now, after several remodelings, primarily an academic facility. The building is in fair condition, but lacks air-conditioning, is in need of repairs, and has poor provisions for the disabled. The Field House, the main athletic facility, was originally constructed in 1937. Additions and renovations were made in 1966 and again in 1988. The newer portions of the building are in good condition and provide some state-of-the-art amenities, but older areas of the building are in poor condition. The newest major athletic facility is Snively Arena, a hockey arena, built in 1965. Major exterior repairs to the building were completed in 1992. Further renovations are planned for 1994.

Student Affairs Facilities and Residence Halls. The 58 buildings controlled by the Division of Student Affairs consist of 27 student residence halls, 23 student apartment buildings, 2 community buildings, 3 dining halls, the food services warehouse, a student union building, and the health

services facility. As with classroom buildings, the condition of student living space is varied. The first student residence at UNH was Smith Hall, completed in 1908. Because of its historic and architectural value to the campus it was fully revitalized and renovated in 1992. Other student residences built in the early years include Scott and Congreve, which completed the first grouping in the North Cluster. Fairchild, Hetzel, and Huddleston were the first grouping of the East Cluster. Huddleston, which serves as a central dining facility will be completely renovated and restructured in the spring of 1994. These other older buildings need to be substantially modernized. The last decade has brought modern and attractive student apartments to the UNH campus with the six building Woodside Apartment complex and The Gables, a three-building complex, completed in fall of 1991. Another new 600-bed facility is in the planning stages.

The University of New Hampshire at Manchester

UNH Manchester was opened in a restored mill building in the former mill district of the city in 1985. UNHM now has two major facilities: the University Center whose restored mill provides an attractive space for administrative, instructional, and student activities, and French Hall, located on a property known as Hackett Hill on the northern edge of the city. The University Center is leased, while French Hall is owned by the University.

Both facilities at the University of New Hampshire at Manchester are overcrowded. Library, laboratories, and computer science spaces are inadequate. These conditions seriously impair the institution's academic mission and restrict its ability to respond to the growing demand for higher education in the Manchester area. The University is evaluating plans to acquire the University Center Building and increase classroom and office space over the next five years.

The Office of Facilities Services

Maintenance of UNH facilities is the responsibility of Facilities Services, under the direction of the Associate Vice President for Facilities who reports to the Vice President for Finance and Administration. Facilities Services is subdivided into the Departments of Transportation, Plant Maintenance,

Housekeeping, Environmental Health and Safety, Engineering Services, and Financial Operations.

Transportation is responsible for the operation of an inter-community transit system, on-campus shuttle service, handicapped transportation, charter service, central stores, parking and vehicle maintenance.

Plant Maintenance is responsible for buildings and grounds maintenance. A professional staff of over 90 responds to the daily maintenance needs of campus customers. A modern Maintenance Management System allows for the timely dispatch of personnel, recording of time and materials used on jobs, and scheduling of preventive maintenance.

Housekeeping Services have been severely reduced over the last three biennia. Offices which were once cleaned on a daily basis are now cleaned once a week. Recent freezes in filling personnel vacancies and increased building space have further reduced effectiveness.

Environmental Health and Safety is responsible for code compliance, administration of the Fire Department contract with the Town of Durham, compliance with air and water quality laws and regulations, hazardous materials and radioactive materials. This office is adequately staffed to assure compliance with all of the State and Federal laws governing an institution of such complexity.

Engineering Services is responsible for the maintenance and operation of campus energy systems and utilities, and for the management of smaller repair, construction and renovation projects. Energy conservation and recycling are major emphases of this department. Through the efforts of this unit, UNH has been able to keep energy use under control, resulting in considerable savings.

Financial Operations is responsible for payroll, accounts payable, budget preparation and control, MIS operation, and contract administration. This unit provides data on building operation and maintenance costs, utility costs, and prepares billings for Student Services and other auxiliary enterprises for building operation and maintenance costs.

The Office of Campus Planning

The Office of Campus Planning is responsible for architecture, master planning, building planning and design, landscape planning and design, capital budget planning, capital construction, existing building alterations and restorations, buildings and grounds modifications, space allocation and records, purchase and sale of real property, and the leasing of real property. The Office of Campus Planning also provides a variety of professional services to ensure the quality of design and the perpetuation of the University's architectural heritage. It is administered by the Associate Vice President for Planning and reports to the Vice President for Finance and Administration.

Access, Health, and Safety

During the recent comprehensive master planning process (discussed in detail below), all departments were asked to evaluate the suitability and condition of each space they currently manage. Comments generated by this survey, as well as Facilities Services and Campus Planning assessments of facilities, lead to the following overall conclusions:

Access. Due to the age of some classroom and office facilities, such as James, DeMerritt, Murkland, Pettee, and New Hampshire Halls, improvements need to be made to comply with the Americans with Disabilities Act (ADA). These buildings are slated for major renovations in the next three biennia. Newer facilities such as Morse Hall and The Gables, and recently renovated facilities such as Smith Hall, Thompson Hall, and Conant Hall, are essentially in compliance with ADA, although some refinements, such as signage and elevator controls need updating to meet recent ADA requirements and code changes. A campus ACCESS office works with Facilities Services and Campus Planning to address the needs of students and others, by relocating classes, or performing emergency renovations to provide reasonable accommodation to persons who must have access to noncomplying facilities. An Access/ADA Task Force is responsible for setting priorities for renovations of existing facilities.

The Transportation Department provides paratransit services to students and staff who are mobility impaired, and who request such service. Lift-equipped vans are available to transport people from their residence to campus and within the campus. Parking spaces for ACCESS are provided

as required by ADA. A public transit system is operated by the University for COAST, a local public transit agency. All COAST buses are equipped with lifts and stations for the mobility impaired.

Health and Safety. Life safety systems, such as fire alarms, emergency lighting, exterior lighting, emergency power systems, and sprinkler systems, are well maintained and adequate. Environmental Health and Safety conducts periodic inspections of the fire safety of each building. Once each year, outdoor lighting surveys are performed to assure nighttime safety of pedestrians. Safety phones have been strategically placed in most buildings, at bus stops, in most residential areas, and in remote parking areas. Recently, phones have been placed at the entrance to dormitories so students can gain entry after the dormitories have been locked up for the night. Adequate police, security, and fire protection services are provided by the University for the safety of the students, faculty, staff, and visitors. For many buildings, lack of air conditioning, lack of sufficient electrical power, and inadequate parking, were cited frequently by staff as common problems.

Security. The University Police and Security Department is responsible for the enforcement of all local, state, and federal laws, as well as the University's safety policies and regulations. The Department is composed of three divisions. The Communications Center provides emergency dispatching services on a twenty-four hour daily basis. The Division of Police Services provides police response and coverage services, conducts criminal investigations, patrols campus property, and conducts crime prevention programs. The Division of Security Services is staffed by full-time security officers who patrol campus buildings and properties and provide escort services.

The Planning Process

The facilities planning process at the University of New Hampshire begins with the Space Allocation and Repair/Renovation Committee (SARRC). This committee, comprised of the Vice Presidents, with staff support by the Associate Vice President for Facilities and the Associate Vice President for Campus Planning, oversees space allocation, use of repair/renovation funds, and is responsible for setting priorities for the

capital budget. The Committee is chaired by the Vice President for Finance and Administration.

Space planning at UNH occurs on a continuous basis. Requests for space, change in use of space, or expansions/renovations are sent to the SARRC on a biweekly basis. These requests are reviewed by the committee, with assistance from Facilities Services and Campus Planning. SARRC consults with principal parties, makes decisions about the use of space, allocates funds for renovations if required, and notifies the requesting department in writing of the committee's decision. There have been some problems with this process because the committee does not always know what space is available, or how it is presently used. Unauthorized moves or change in use frequently take place. A comprehensive data base on space utilization does not yet exist. A CAD computer-graphics data base is currently being prepared by Campus Planning to improve the process.

The Comprehensive Master Plan

Although planning studies were done in the mid 1970s and the early 1980s, it has been more than 25 years since a comprehensive, program-based-plan for physical resources was completed for UNH. During this 25-year period, enrollments have almost doubled, new research and academic programs have been started, support services have grown, traffic and parking have increased, buildings have been added, and the backlog of deferred maintenance has increased.

Because of these changes, and wishing to maintain and enhance the aesthetic qualities of the campus as well as plan for the allocation of capital funds, the University retained Sasaki Associates, Incorporated, Planners and Architects, and Robert P. Owen Associates, Educational Planning Consultants, to work with the Office of Campus Planning to prepare a physical resources plan for the year 2010. The *Comprehensive Master Plan* that has been developed from these efforts includes an analysis of existing buildings, grounds, land use, instructional and support programs, and use of scheduled instructional space. It also defines space needs for the present and for the year 2010 and provides a plan for the future use and physical development of campus lands and buildings.

During the two years prior to commencing master planning on physical resources, the University engaged in a planning process, described

in detail under Standard Two. The *Academic Plan*, by articulating program priorities and direction and also by identifying the physical resource needs for the University's academic mission, guided the master planning process.

In addition, Facilities Services conducted a space evaluation and room inventory, and an extensive data gathering process was completed by gathering detailed assessments of program goals, staffing needs, existing facilities, existing and projected research activities, and space needs from all departments within the University. Demographic and credit and contact hour data were obtained from the Office of Institutional Research, and staffing information was obtained from the Personnel Office. The data resulting from these efforts were reviewed and summarized in the Office of Campus Planning's *Educational Program Analysis and Planning Assumptions* which assesses the University's current operating patterns and identifies current and future physical resource needs.

The *Comprehensive Master Plan* which is now being finalized, was presented in summary form at an open campus forum in May 1993. The next step will be to design a Six Year Capital Plan, identifying and projecting the needs and costs of each specific building and capital project to be undertaken in the next three biennia. Since program changes can never be entirely foreseen over even this short period, Six Year Plans will continue to be updated biennially and presented to the Trustees as the next implementation phase of the *Comprehensive Master Plan*.

The University's *Biennial Capital Appropriation Request for Fiscal Years 1994 and 1995* was forwarded to the Governor and state Legislature in October 1993. It included requests of \$15,000,000 for the Dimond Library Expansion and \$4,000,000 for the renovation of Murkland Hall.

Other projects to be funded through student fees or other revenue sources are in design and scheduled for construction. These include: an addition to the Memorial Union (\$6,500,000), a new student recreational sports facility and new sports arena (\$18,000,000), and renovation of Huddleston Hall (\$5,500,000). Projects presently underway or in design include the renovation of Hewitt Hall (\$4,100,000), and a new Biological Science Building (\$31,100,000).

Deferred Maintenance

A 1988 audit of academic space indicated a plant renewal backlog of 26% of the replacement value of the existing physical plant, or \$54.3 million. This amount increases annually by the amount of inflation, plus an amount equal to the underfunding of plant renewal. FY93 was an unusually good year for reducing deferred maintenance. In addition to the \$2.165 million in University operating funds budgeted for repair and renovation, the New Hampshire legislature provided \$3.6 million for infrastructure, ADA requirements, and other building improvements. In response to recent planning recommendations, about half the total spent in FY93 was dedicated to improving instructional facilities. Out of the total \$5.765 million, \$5.015 million was spent on deferred maintenance and other physical plant improvements, and \$750 thousand was spent on upgrading furnishings for instructional spaces or on instructional technology.

APPRAISAL

The University of New Hampshire has a well developed planning process that has resulted in a Master Plan for the construction, renovation and maintenance of facilities that is consistent with the goals and priorities articulated in Academic Plan. While budgetary constraints exist, the University has continued to target deferred maintenance as well as renovations to improve campus safety and handicapped access.

Residential space has been expanded and improved through the construction of new dormitories and the remodeling of older dormitories. Instructional, extracurricular, and research space will be expanded with the construction of a new Biological Sciences Center, a new student recreational facility, multipurpose arena, a major Library addition, and an expansion of facilities at the University Center at Manchester.

Facilities Services and Campus Planning offices are well managed and their staff are dedicated, reliable, and contribute to the University's mission. Evaluation of services to plan for improvement and responsiveness to campus needs characterize their operations.

Institutional quality and vitality depends on meeting increased needs for laboratory, library, and office space, new and differently configured residential, cocurricular, and recreational facilities, and renovation. Deferred maintenance and escalating costs for renovation, construction, and equipment have hindered the institution's ability to maintain all campus facilities at an optimum level. Renovation has been further complicated by the age and design of the older central campus buildings.

Coopers and Lybrand recommends that the minimum annual funding level for college and university plant renewal should be 1.5% of plant replacement cost, which for UNH academic buildings would be \$3.13 million. While this amount was exceeded in FY93, that was an exceptional year due to a special state appropriation, and only \$2.36 million is budgeted for FY94. Thus significant catch up maintenance funds are needed over a short term period to bring facilities into full operating condition. The cost of present deferred maintenance, based on a facilities audit, is now in excess of 50 million dollars. Continued deferral will only increase these costs. While funding has been increased, it remains insufficient to move beyond a policy of deferred maintenance to one of regular maintenance, prevention, and renewal. The major weakness then, and one which has existed for some time, is the inability to obtain sufficient funding for the deferred maintenance needs of the campus.

Since UNH's reaccreditation report in 1983, there have been substantial and continuing improvements in the University's physical resources. Management and planning and have continued to become more effective. The Trustees have recognized the importance of maintaining the University's facilities and recently put more money into renewal projects, increasing the R&R budget by 9% for FY94. However, securing adequate funding of all the University's physical resource needs remains a challenge.

PROJECTION

Over the course of the next year, the detailed recommendations of the University's *Comprehensive Master Plan* for physical facilities and resources will be evaluated and implemented. In addition, in order to preserve the value of its academic and administrative buildings, the University will

continue to work with the Board of Trustees to secure sufficient plant renewal, plant adaptation funds and catchup maintenance funds over a short-term period. The current Six-Year Plan will request \$37 million from the legislature. The magnitude of funding required however, will require exploring alternative sources of funding from the State Capital Budget, the University of New Hampshire Foundation, and other New Hampshire and regional constituencies.

During the next five years, UNHM may purchase the University Center, thereby adding, potentially, 35,000 square feet of space. Eight thousand additional square feet will be leased for Fall Semester 1993. Development of the Hackett Hill site as an educational/industrial research center could provide resources for the expansion of the UNHM campus. This long-range development will, however, depend on economic conditions and demand for industrial space.

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