

Contact: Joan Racki

FACILITIES GOVERNANCE REPORT

Actions Requested: Receive the report and consider recommending to the Board that it reaffirm its support for continued:

1. interinstitutional collaboration and coordination on facility issues, and
2. institutional correction of identified fire safety and deferred maintenance deficiencies within the limits of available resources.

Executive Summary: This, second annual Facilities Governance Report, which is required by the Regent Policy Manual, replaces the previous annual governance reports on energy conservation, fire and environmental safety, and deferred maintenance.

The report is intended to provide the Property and Facilities Committee and Board with a broad overview of the facilities at each of the Regent institutions and the condition of these facilities, consistent with the Board's focus on accountability and effective stewardship of existing resources, which is one of the four priorities of the Board's strategic plan. One of the Board's focus areas for 2005-2006 is to provide greater oversight and direction in property and facilities planning and management.

As discussed with the Property and Facilities Committee, at its November 2005 meeting, this years' report includes information on energy conservation and methods used to control energy costs, as well as additional information on deferred maintenance and fire safety deficiencies.

Along with its human resources and its intellectual, financial and equipment assets, facilities are one of the primary resources of a higher education institution. Quality facilities help ensure excellent academic programs, and the ability to attract and retain faculty, staff and students.

Regent Facilities: Academic/research/administrative (general fund) facilities at the Regent institutions total approximately 16 million gross square feet of the total 33 million gross square feet of Regent enterprise facilities. Categories of other facilities include University Hospitals and Clinics, residence systems, agricultural experiment station and self-supporting operations, including student unions, parking systems, etc.

As detailed later in this report, the Regent universities recently undertook a project to update the replacement value of their facilities. According to the methodology developed by the universities and then applied to the special schools, the replacement value of all Regent facilities is \$10.6 billion, of which \$5.5 billion is the replacement value for academic/research/administrative facilities. The Regent institutions have a total of 4,510 on-campus acres and 1,021 off-campus acres, excluding farm acreage.

Institutional Coordination/Cooperation:

In last year's report, the universities provided an extensive list of collaborative and coordinated efforts in facilities-related areas. This collaboration allows the universities to share best practices with each other and to pool resources to investigate and pursue innovative and cost saving approaches.

The universities reported a number of new initiatives this year including the sharing of information on reducing the cost of central chilled water production and distribution; a meeting of institutional interior design personnel to discuss purchasing policies, furniture contracts and carpet recycling; and an evaluation of the benefits and potential cost savings from bidding limestone supply and ash removal for the three universities.

A listing of the new initiatives provided by the institutions as well as a listing of on-going initiatives is included in Attachment A.

Energy Conservation:

As described in prior energy conservation governance reports to the Board, (this is no longer a separate report), each of the Regent institutions has undertaken major efforts to reduce energy usage beginning in the 1970's. As utility costs have recently risen dramatically, the universities have re-invigorated their efforts to reduce consumption and to minimize the impact of the heating fuel cost increases. Energy management strategies have included building system and utilities infrastructure improvements, energy purchasing/use strategies and expansion of energy awareness.

In Fall 2005, the institutions reported that budgeted FY 2006 funds for utilities may not be sufficient due to significant price increases which occurred after the budgets had been approved. The shortfall could total \$2.7 million.

Fire and Environmental Safety Deficiencies and Deferred Maintenance:

Fire safety deficiencies (identified by the State Fire Marshal or institutional personnel) and deferred maintenance (repair or replacement of all, or a part of, an existing capital asset that was not repaired or replaced at the appropriate time because of a lack of funds) can be corrected as individual projects, incorporated into major renovations or eliminated through the demolition of structures. The Board's FY 2007 capital request of \$25 million, as approved at its September 2005 meeting, focuses on funding for individual projects to correct fire safety deficiencies and deferred maintenance. The Governor's budget for FY 2007 includes the sum of \$10 million for the Regent institutions for these items.

The State Fire Marshal's Office has identified fire safety deficiencies in general fund facilities which the institutions have estimated would cost \$3.5 million to correct; this amount is significantly lower than the \$5.7 million reported in FY 2002 as the universities have continued to correct identified deficiencies. It is important to note potentially life-threatening fire safety deficiencies identified in inspections by the State Fire Marshal's Office or institutional personnel are promptly addressed and corrected, or facilities are closed until they can be made safe. Other needed fire safety corrections, which are based upon analyses by the State Fire Marshal or the university, are prioritized for correction. Progress in correcting fire safety deficiencies will continue to be challenged by new safety standards, aging buildings, and changes in building usage.

The Regent institutions are reporting a total of \$405.3 million in deferred maintenance in general fund facilities and utilities. This amount is significantly higher than the amounts listed in previous reports due primarily to improved campus efforts to identify deferred maintenance items. However, the operating budget reductions of recent years have negatively impacted the ability of the institutions to reduce fire and environmental safety deficiencies and correct deferred maintenance especially since operating budget building repair, general university funds provided approximately 50% of the total dollars (\$182.9 million) expended for fire safety improvements (excluding UIHC) and individual deferred maintenance projects that were completed from FY 1993 – FY 2005. (Expenditures for individual projects included \$27.3 million to correct fire safety deficiencies and \$155.6 million to correct deferred maintenance.)

Report Organization: The report includes the following attachments:

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BACKGROUND

Campus Facilities: Regent facilities total 33.3 million gross square feet; more than 22 percent of the square footage was constructed during the period 1961-1970; this construction “boom” was similar to the “boom” found among other higher education institutions in the United States.

The age of facilities is one of the factors contributing to the amount of deferred maintenance and the presence of fire safety deficiencies although the date of initial construction may only tell “part of the story as a “wet laboratory” constructed in 1985 may be out of date. The renovation of facilities provides a means to modernize campus facilities to meet current needs as well as to address deferred maintenance and fire safety deficiencies. The following table summarizes the Regent institutional total gross square footage (GSF) and academic/research/administrative (including Oakdale) total GSF by year of construction.

Years	Regent Total Square Footage		Academic/Research/ Administrative Square Footage*	
	GSF of Initial Construction	Percent of Total	GSF of Initial Construction	Percent of Total
Pre- 1930	5,171,058	15.54	3,752,973	22.51
1931-1950	1,832,376	5.51	1,108,817	6.11
1951-1960	2,080,295	6.25	879,538	5.27
1961-1970	7,617,490	22.90	2,828,603	16.96
1971-1980	5,681,765	17.08	3,426,463	20.55
1981-1990	3,830,932	11.52	1,664,297	9.98
1991-2000	4,543,779	13.66	1,937,010	11.63
2001 – present	2,509,920	7.54	1,166,010	6.99
Total	33,267,615	100.00	16,673,711	100.00
*Includes Oakdale				

The total square footage by institution, by function, is as follows:

	<u>SUI</u>	<u>ISU</u>	<u>UNI</u>	<u>ISD</u>	<u>IBSSS</u>	<u>Total</u>
Acad. / Res. / Admin.	6,477,769	6,555,595	2,535,489	381,500	191,507	16,141,860
UIHC	3,397,876					3,397,876
Residence System	2,238,830	3,408,206	1,487,371			7,134,407
Oakdale Campus	531,851					531,851
Agricultural Experiment Station		834,582				834,582
All Other	2,794,525	2,052,998	379,516			5,227,039
Total	15,440,851	12,851,381	4,402,376	381,500	191,507	33,267,615

Campus Acreage: The Regent institutions have, in total, 4,510 on-campus acres and 1,021 off-campus acres, excluding farm acreage. The following table summarizes the acreage by institution.

<u>Institution</u>	<u>On-Campus Acreage</u>	<u>Off-Campus Acreage</u>
SUI	1,983	449.0*
ISU	1,503	481.0**
UNI	934	7.5
ISD	35	68.0
IBSSS	<u>55</u>	<u>15.0</u>
Total	4,510	1,020.5

* Macbride Nature Center and Hills Observatory

** Applied Science Complex, Arboretum,
Southwest Athletic Complex, East of SE
Intramural Fields, and ISU Research Park

In 1996, Iowa State University prepared a Land Management Plan for the campus and Ames area agricultural properties. This plan, which was approved by the Board of Regents, has served as a guide to a program-driven land management approach in the Ames area, including land sales, acquisitions, and leasing arrangements.

Capital Expenditures: Since FY 2001 the Regent institutions have spent more than \$970 million for capital projects with project costs exceeding \$250,000.

The following table compares institutional expenditures for FY 2001 – FY 2005. The data are from status reports filed with the Board Office by the institutions.

Projects with Costs Exceeding \$250,000 – All Funds*											
(\$ in millions)											
	FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		
	#		#		#		#		#		
	Proj	Exp									
SUI	238	\$ 90.3	230	\$ 95.1	180	\$ 79.5	199	\$119.3	183	\$167.6	
ISU	84	61.5	69	54.8	74	75.3	58	82.3	60	45.7	
UNI	45	19.8	29	10.3	28	26.6	25	22.2	27	21.7	
Total	367	\$171.6	328	\$160.2	282	\$181.4	282	\$223.8	270	\$235.0	

* As submitted by the institutions on capital project status reports.

The expenditures are from all sources of funds including capital appropriations; building renewal (repair) funds; institutional road funds; gifts and grants; income from treasurer's temporary investments; proceeds of academic building, dormitory, telecommunications, and other revenue bond issues; and university hospitals building usage funds and revenue bonds.

Institutional Cooperation / Coordination: The Regent universities have, for a number of years, worked together and coordinated efforts related to facilities. This collaboration allows the universities to share with each other best practices and to pool resources to investigate and pursue innovative and cost saving approaches. Iowa State University Facilities Planning and

Management is responsible for the administration of capital projects at the two special schools and provides technical consultation as needed.

In last year's report, the universities provided an extensive list of collaborative and coordinated efforts in facilities-related areas. Some of the items included on the list were:

- The utilities departments of the three universities meet quarterly to share ideas/problems and to collaborate on all matters related to utilities.
- University project design and construction management staff and Board Office staff meet on a regular basis (usually every three months) to discuss design, general construction, and construction administration issues.
- One representative from each of the universities and the Board Office meet at least twice a year with the Master Builders of Iowa to discuss general construction issues.
- Design staff from the three universities and the Iowa Department of Natural Resources collaborated to assemble a resource document on sustainable design.
- The three universities share a boiler-water chemical treatment contract with NALCO Chemical Company and an environmental emissions testing services contract with Comprehensive Emissions Services; both contracts are administered by Iowa State University.
- The University of Iowa's fuels testing services contract with Standard Laboratories includes the option to add other Regent institutions at their discretion.
- The University of Iowa and Iowa State University are members of the Higher Education Facilities Management Association (HEFMA), which meets three times a year.
- Space planning personnel from the three universities consult throughout the year.
- Facilities managers and Human Resources staff from the three universities have collaborated to review and/or develop new and revised classifications that allow for staff development and career paths for facilities personnel.

Some of the new initiatives among the universities undertaken in the last year include:

- The Regents Code Review Team, with members from the three Regent universities and the Board Office, was formed; the "team" conducted extensive research in various building, fire and life safety codes and made a recommendation to the State Building Code Director in cooperation with the State Fire Marshal's Office; the recommendation was favorably received.
- The three universities plan to establish annual meetings, beginning in spring 2006, for personnel from custodial services, building maintenance, campus services and building access services; the three universities will share ideas, problems and best practices for these operations.

- The three universities collaborated and developed a new, uniform facilities replacement value methodology. These values which were used to determine the replacement values of facilities included in this report are as follows:

Level	Type	Description	Value
Level 1	Laboratory Intensive	more than 50% of space teaching and research activity requiring high end utilities and equipment	\$450/GSF
Level 2	Mixed Laboratory	less than 50% of space with teaching and research activity requiring high end utilities and equipment	\$350/GSF
Level 3	Administration/Office/ Classroom	dry space with large number of occupants/users	\$300/GSF
Level 4	Service and Support	production activities with small number of occupants/users	\$200/GSF
Level 5	Warehouse/Shop/Storage	limited services	\$100/GSF

- The facilities management departments and the Board Office coordinated the development of definitions pertaining to the total cost of facilities ownership; including capital renewal, operating costs, and facilities replacement value.
- Representatives from the University of Iowa visited Iowa State University to exchange information on reducing the cost of central chilled water production and distribution.
- The first meeting for Interior Design staff for the three universities was hosted by the University of Iowa to discuss purchasing policies, furniture contracts and carpet recycling.
- The three universities are evaluating the benefits and potential cost savings from bidding limestone supply and ash removal for all three institutions.
- The University of Northern Iowa is utilizing “Active Project” hosted by Iowa State University to facilitate collaboration and communication between team members on capital construction projects.

ENERGY CONSUMPTION AND CONSERVATION

The Regent institutions are aggressively pursuing methods to reduce energy consumption and energy costs. In April 2005, Governor Vilsack issued Executive Order #41 which directed, among other items, for all agencies to identify and implement energy efficiency measures and to reduce energy consumption per square foot per degree day in all conditioned facilities by an average of 15% by 2010, relative to 2000 levels. The Order also directs state agencies to obtain at least 10 percent of their electricity from renewable energy sources and to buy energy-efficient equipment.

The following is a very brief summary of the information provided by the institutions; further information is available in the university reports available from the Board Office.

University of Iowa

The University reports that it is undertaking an aggressive approach to reducing the amount of energy consumed in its facilities, including initiation of several energy management strategies: building system and utilities infrastructure improvements, energy purchasing/use strategies, and development of increased energy awareness. These activities contributed to a reduction in energy costs (from what would have been) of approximately \$400,000 in FY 2005. The University is currently estimating that FY 2006 utility costs may exceed the amounts budgeted by \$1.2 million, primarily due to increased costs for natural gas.

The campus-wide energy system improvements involve an examination of specific energy systems, such as lighting, chilled water and steam, and identifying both design standards and energy conservation measures that can be implemented on a campus-wide basis. The University initiated chilled water optimization projects in FY 2005 in both UIHC and general fund buildings to reduce energy consumption and to delay the need to build additional chilled water capacity. The lighting standards study, funded by the MidAmerican Energy Advantage Program, will provide lighting standards and specifications for new construction and retrofit projects; identify lighting efficiency projects for existing buildings, and provide commissioning guidelines to ensure correct lighting installation and energy efficient operation. A steam trap maintenance program was initiated in FY 2005 to correct improperly functioning steam traps that waste steam and overheat spaces.

Building energy audits focus on collecting information about energy usage and costs for each building, compiling an overview of the building energy systems and the capabilities of the building automation systems, and determining which buildings warrant more detailed studies.

Promoting energy awareness across campus was largely propelled by the Energy Conservation Advisory Council, which was formed to plan, develop, and review progress toward the energy conservation initiatives. Partnerships were developed with campus departments and service providers.

In FY 2003, the University partnered with Quaker Oats (Cedar Rapids plant) to use unprocessed oat hulls (the outer shell of an oat grain that remains after the soft, protein-containing core has been removed by milling the grain) in a circulating fluidized bed boiler. Since January 2003, this project has displaced 51,472 tons of coal with biomass. Fuel savings (compared to the equivalent cost of coal) since the beginning of the program total \$1.5 million, with \$609,000 of savings occurring in FY 2005.

More information can be obtained from the University's energy web site <http://energy.uiowa.edu/>.

Iowa State University

Iowa State University is in the fifth year of a comprehensive energy conservation initiative. Under this program, the University reports that it has saved approximately \$4.5 million in three years compared to the average cost of utilities in the three years prior to commencement of the energy initiative.

Under the energy conservation program, building specific energy plans were developed. These plans are posted on an energy web page <http://www.fpm.iastate.edu/utilities/energyefficiency/> with energy conservation suggestions, frequently asked questions, and progress benchmarks.

The initial building specific energy plans called for idling heating, ventilating and air conditioning (HVAC) equipment during off-hours, and revised temperature standards to 68 degrees during the day in winter and 78 degrees during the day in summer. An exemption process existed whereby sensitive research activities could request more restrictive environmental criteria to protect their activities.

The University reports that the exemptions have been accumulating and savings in FY 2005 fell below the goals. To re-invigorate the program, space temperature requirements are being "relaxed" to 70 degrees in the winter and 76 degrees in the summer; at the same time, all existing exemptions have been eliminated. The University believes that these actions will once again engage building occupants and encourage fuller participation in the University's energy conservation goals.

The University estimates that the FY 2006 potential shortfall in its utility budget (predicted costs compared to budget) is \$1.447 million. FY 2006 shortfalls will be absorbed by the utility enterprise and will become a factor in establishing FY 2007 budgets and rates.

University of Northern Iowa

The University reports that it continues to implement unoccupied energy cycle programs during evenings, weekends, and holidays to optimize energy use on campus. Load-shedding efforts typically take place in August/September each year to assist in controlling electrical peaks. Lights and equipment controlled by the campus building automation system have been turned off or slowed down during severe warm weather, which has been useful in avoiding new electrical peaks. Expanding load-shedding efforts that include campus involvement through the use of peak alert notifications via email is being pursued.

The University has been using petroleum coke in one of its boilers for a number of years. The FY 2005 cost savings from using petroleum coke compared to coal is estimated at \$212,000. The University is also investigating the possible use of wood pellet waste, sawdust and shredded railroad ties. The University also reports that it has contacted Cedar Falls Utilities to determine what partnering options exist for the use of alternative energy.

One of the goals of a University Committee for Sustainable Environment, which is being formed, will be to promote energy conservation on the campus.

Lighting audits and analyses are in progress to identify areas where newer lighting technologies are economically feasible.

Iowa School for the Deaf

The School reports that the price of natural gas is averaging approximately 75% more than in FY 2005. While the School has made significant efforts to reduce its consumption it reports that it will need to reallocate from unfilled staff positions and/or building repair and maintenance funds to cover any shortfalls in its FY 2006 utility budget.

A number of years ago the boilers in the School's Power Plant were replaced, with the new units being appropriately sized for the campus heating/cooling load as well as being more energy efficient. The School reduced its natural gas consumption in FY 2005 to 65% of the level of FY 2000.

Some of the initiatives to maintain and further reduce consumption include: major window replacements; changed design standards for roofing replacement projects; repair and replacement of thermal pipe insulation; installation of isolation valves, allowing for area shutdown; continuation of the installation of more efficient lighting bulbs and ballasts; installation of stand-alone kitchen equipment, alleviating the need to run the central boiler plant during temperate conditions; reduction of classroom and administration building temperatures during the winter heating season; and installation of occupancy sensors in restrooms.

The School also entered into a cooperative energy efficiency awareness program with MidAmerican Energy to foster a heightened level of awareness among School stakeholders.

Iowa Braille and Sight Saving School

The School reports that its recent efforts to reduce energy consumption through conservation and efficiency improvements continued during FY 2005. However, usage was up even though the heating and cooling loads were less than the prior year, demonstrating, according to the School, that its energy conservation efforts were probably not as intense as in the past.

One of the goals of the recently completed installation of the geothermal system in Rice Hall was to add central cooling to the building without adding to the overall campus energy usage. The School reports that its decision to install the geothermal system is paying off as natural gas prices have been increasing.

The School will continue to make every effort possible to conserve energy through operating practice improvements and energy efficiency upgrades. Energy improvements during the most recent fiscal year and those planned for the future include: unoccupied space energy conservation, steam trap maintenance, installation of a geothermal heat pump system in the Main building, lighting efficiency improvements, installation of heat pump in Rich Hall to heat domestic water using the existing geothermal loop, and planned installation of three geothermal heat pumps in the Natatorium.

FIRE AND ENVIRONMENTAL SAFETY AND DEFERRED MAINTENANCE

Background:

Fire and Environmental Safety

Fire and environmental safety standards are established by several agencies, including the State Fire Marshal, and federal and state governmental regulatory entities. The State Fire Marshal's Office identifies deficiencies during biennial campus inspections, or campus personnel note the deficiencies. Potentially life-threatening deficiencies are promptly addressed and corrected, or facilities are closed until they can be made safe.

Lesser risks are prioritized using multiple factors including hazard assessments and regulatory requirements. Corrective work is undertaken as funds are available or the fire safety improvements may be accomplished as part of a renovation project. Each year, there are subtractions to the list as work is accomplished. Additions to the list can result from the altered use of a space, which changes the applicable code requirements, or the new identification of a deficiency due to different interpretations of the code.

Each Regent institution cooperates with the State Fire Marshal in establishing fire safety priorities, and each institution has a systematic method for determining the priority of fire safety improvements to be undertaken. Citations from the State Fire Marshal can be classified as (1) user, (2) maintenance, or (3) other deficiencies.

1. User deficiencies are housekeeping or procedural items such as the use of a doorstep to prop open a door or storage of an item in a hall.
2. Maintenance items usually require no design and minimal expenses per item, such as door repairs. These are corrected utilizing physical plant / facility management personnel and funds.
3. Other deficiencies, the correction of which requires an outlay of funds beyond the capability of facility management maintenance funds, are prioritized.

In addition to fire safety deficiencies identified by the State Fire Marshal, environmental safety deficiencies are identified by campus personnel and regulatory entities. Environmental safety issues include asbestos, lead, underground storage tanks, spill prevention control and countermeasure plans, storm water pollution protection plans, polychlorinated biphenyl's (PCB's), mercury, the clean air act, and radioactive sites.

Deferred Maintenance

For a number of years, the institutions and Board Office have used the following common definition: Deferred maintenance is the repair or replacement of all, or a part of, an existing capital asset that was not repaired or replaced at the appropriate time because of a lack of funds.

Deferred maintenance is dependent upon time and is sometimes referred to as "capital renewal backlog". Replacement of a building or infrastructure system or component when it should be replaced is building renewal, not deferred maintenance. Deferred maintenance results from

inaction on normal maintenance, including planned and preventive maintenance; and renewal and replacement projects.

Adequate funding of regular maintenance can significantly extend the useful lives of facilities and their components. Adequate funding of building renewal is also needed to replace building components.

Deferred maintenance in higher education is a national problem and is partially the result of building booms that occurred during the 1960s and 1970s. The facilities built at that time have aged and many of their component systems have reached the end of their design lives or have become obsolete.

Funding Sources

The Regent institutions have made major efforts to correct fire and environmental safety issues and deferred maintenance over the last several years and have received significant state assistance.

The major funding sources for fire safety and deferred maintenance projects completed from FY 1993 through FY 2005 at the universities (excluding UIHC) and special schools are summarized below:

**Major Sources of Funding
FY 1993 – FY 2005**

<u>Fund Sources</u>	<u>Fire & Environ. Safety</u>	<u>Deferred Maintenance*</u>	<u>Total</u>
General Fund Operating Budget Building Renewal (Repair Funds)	\$13.2 million	\$ 79.0 million	\$ 92.2 million
Utility Renewal and Replacement Funds (restricted funds)	-----	33.7 million	33.7 million
Proceeds from Academic Building Revenue Bonds and Capital Appropriations, (restricted funds)	8.0 million	16.1 million	24.1 million
Income from Treasurer's Temporary Investments (restricted funds)	5.4 million	12.6 million	18.0 million
Other	0.7 million	14.2 million	14.9 million
Total	\$27.3 million	\$155.6 million	\$182.9 million

* Includes only individual deferred maintenance items and not those corrected as part of major renovations.

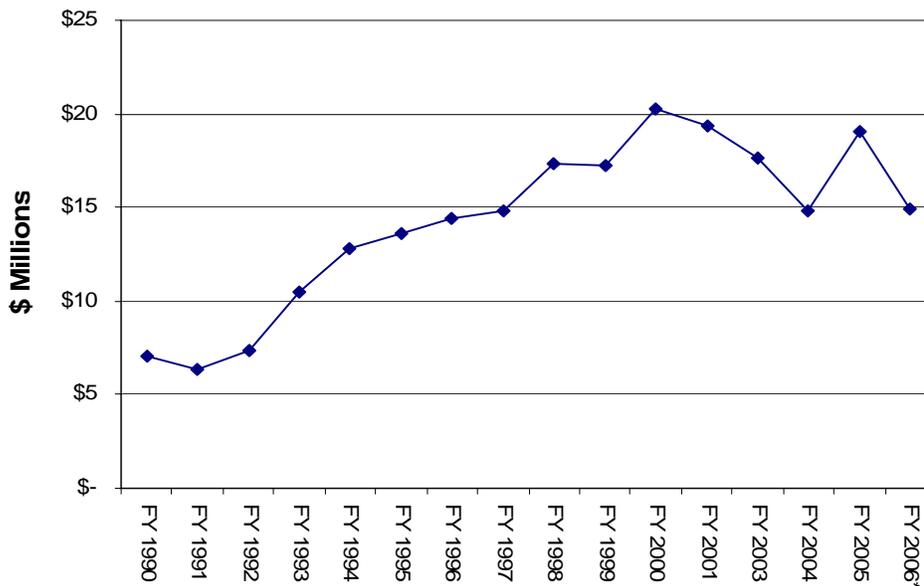
Building Repair Budgets

As summarized in the table above, operating budget building repair, general university funds provided approximately 50% of the total dollars expended for fire safety improvements and individual deferred maintenance projects completed from FY 1993 – FY 2005. Thus, adequate funding in the operating budgets for building renewal (repair) is a critical factor in reducing fire

and environmental safety deficiencies and current deferred maintenance, and minimizing future facility needs.

Due to significant budget reductions, Regent general education, operating budget building repair expenditures declined, in total, from a high of \$20.3 million in FY 2000 to a budgeted amount of \$14.9 million in FY 2006, as shown in the following graph. Adjusting for inflation, which in the construction industry has recently been significant, would reduce the \$14.9 million in FY 2006 to approximately \$12.5 million (based on a 2000 base).

**General Operating Fund Expenditures for Building Repairs
All Regent Institutions (excluding UIHC)
(current dollars)**



*FY 2006 budgeted amount as approved by Board in August 2005.

The FY 2006 budgeted amount represents approximately 0.27% of the estimated \$5.5 billion replacement value of the university and special school general educational facilities and utilities. According to national standards, this percentage should, at a minimum, be equal to 1% of the replacement value of the facilities to prevent their further deterioration.

Analysis:

The budget reductions of recent years have hindered the institutions' abilities to correct fire and environmental safety deficiencies and have resulted in increased deferred maintenance. Maintenance cycles and preventative maintenance activities have been delayed or eliminated, placing buildings and occupants more at-risk for unanticipated building system outages. The inability to make needed repairs/replacements of roofs, exterior building envelopes, windows, plumbing and electrical systems can cause further damage to the facilities, thus increasing the cost of future repairs.

Fire and Environmental Safety

From FY 1993 (the first year in which data were collected) through FY 2005, fire safety projects completed (excluding components of major renovations projects) totaled \$43.0 million in general fund facilities (an average of \$3.3 million per year). Projects planned for or continued in FY 2006 total \$5.0 million. Institutional data are shown on Table 1, Page17.

The institutions indicate that \$3.5 million are needed to correct fire safety deficiencies in general fund facilities identified in past inspections by the State Fire Marshal as shown on the following table.

FIRE SAFETY DEFICIENCIES	
Additional Funding Needed to Correct Fire Safety Deficiencies Identified by the State Fire Marshal¹ General Fund Facilities (\$ Thousands)	
	Fall 2005 (FY 2006)
SUI ²	\$1,815.6
ISU ³	1,359.9
UNI	360.0
ISD	0.0
IBSSS	<u>0.0</u>
Total	<u>\$3,535.5</u>

¹Excludes work to be included as part of major renovations, in buildings to be demolished, for which waivers from the State Fire Marshal are to be requested; and to be undertaken in FY 2006.

² Estimated cost for the University of Iowa to complete the fire safety program for all general fund and Oakdale buildings. No costs associated with work at UIHC are included.

³ Does not include additional fire and building safety items identified by institutional personnel.

While there are slight increases from Fall 2004 to Fall 2005 in the funds needed to address the deficiencies identified by the State Fire Marshal at the Iowa State University (+\$431,700) and the University of Northern Iowa (+\$100,000), the largest change is the \$1.35 million reduction in needs at the University of Iowa. The University developed, in consultation with the State Fire Marshal's Office, a plan that allowed it to continue to use the Communications Center, without a significant investment of funds, until a long-term decision is made whether to renovate or raze the facility.

During FY 2005 Iowa School for the Deaf received a Harkin fire safety grant (Iowa Demonstration Construction Program) in the amount of \$25,000 which was used to correct fire door deficiencies in the utilized areas of Giangreco Hall. The School reports that the only remaining citations from the most recent inspection conducted by the State Fire Marshal's Office (July, 2001) are in areas slated for major remodeling (old gymnasium/swimming pool area of the high school) or unused areas on the upper floors of Giangreco Hall.

Each Regent institution cooperates with the State Fire Marshal in establishing fire safety priorities, and each institution has a systematic method for determining the priority of fire safety improvements to be undertaken. Each year, there are subtractions to the list as work is accomplished. Additions to the list can result from new deficiencies identified in a subsequent inspection by the State Fire Marshal's Office or the altered use of a space, which changes the applicable code requirements. Thus, the amount needed to correct the deficiencies identified by the State Fire Marshal's Office does not necessarily decline by the amount that the institutions have expended since the previous inspection.

The institutions report that they are dealing appropriately with environmental safety issues, and have developed the necessary plans to address them.

Deferred Maintenance

Expenditures

From FY 1993 through FY 2005, deferred maintenance projects totaling \$155.6 million (an average of \$11.96 million per year) were completed by the Regent institutions in general fund buildings and utilities. Projects planned for or continued in FY 2006 total \$16.7 million. Institutional data are shown on Table 2, Page 18.

Deferred maintenance can also be corrected as part of a major renovation project. Completed, ongoing and funded university renovation academic projects which have/will correct a significant amount of deferred maintenance include:

SUI – Schaeffer Hall Renovation; Seamans Engineering Building Renovation; Biological Sciences – Phase II, Chemistry Building Renovation, Art Building Renovation

ISU – Catt Hall, Morrill Hall, and Pearson Hall Renovations, Gilman Hall Systems Upgrade, State Gym and Beardshear and Pearson Hall Renovations

UNI – Seerley, Wright, and Lang Halls, Instructional Teaching and Technology Center (East Gym Renovation), Science Buildings Renovation

Total Deferred Maintenance

The table on the following page summarizes the deferred maintenance reported by the institutions. (Dollar amounts for projects to be undertaken in FY 2006 and the deferred maintenance components of ongoing renovation projects are not included.) The amounts reported for the University of Iowa and Iowa State University are significantly larger than reported in the recent past.

The University of Iowa's current estimate of the amount of deferred maintenance is based upon a comprehensive facilities condition analysis of its major general education facilities by ISES Corporation. These inspections resulted in a detailed analysis and identification of specific deficiencies and corresponding scopes and costs for corrections and modifications. The University's prior deferred maintenance assessments were based upon what was known (usually due to building component failure) by the Facilities Management staff, and not upon a comprehensive systematic review.

Iowa State University reports that it has a comprehensive systematic process for identifying its deferred maintenance needs. The methodology involves assessing all general fund buildings in eight different categories. The assessment takes into account the replacement value of the building, the value of the sub-systems within the building, the age of the building and its systems, and the condition of those systems. The process was expanded during FY 2005 to also include building specific assessments to create project estimates for repair and replacement of building system components, such as an air handler, exterior building entrance steps etc.; the data are entered into the facilities management system which provides data base management.

In FY 2004, a team of University of Northern Iowa Facilities Services staff conducted an assessment of general fund buildings to update the deferred maintenance information. This year the compiled information from last year was reviewed by a team of managers and supervisors and updated.

**Total Deferred Maintenance
General Fund Facilities and Utilities
Fall 2005*
(\$ Thousands)**

	<u>SUI</u>	<u>ISU</u>	<u>UNI</u>	<u>ISD</u>	<u>IBSSS</u>	<u>Total</u>
Buildings**	\$160,876.1	\$152,154.4	\$50,777.1	\$1,440.0	\$565.0	\$365,812.6
Utilities	<u>3,635.0***</u>	<u>9,852.0</u>	<u>25,782.0</u>	<u>150.0</u>	<u>30.0</u>	<u>39,449.0</u>
Total	\$164,511.1	\$162,006.4	\$76,559.1	\$1,590.0	\$595.0	\$405,261.6

*Does not include dollar amounts for projects to be undertaken in FY 2006 and the deferred maintenance components of ongoing renovation projects.

** Includes site work.

*** The University reports that it will be conducting a facilities condition assessment of utilities this year.

UIHC has not reported any deferred maintenance.

TABLE 1
BOARD OF REGENTS, STATE OF IOWA
FIRE SAFETY PROJECTS*
GENERAL FUND FACILITIES
(\$ Thousands)

Projects:	<u>SUI**</u>	<u>UHC</u>	<u>ISU</u>	<u>UNI</u>	<u>ISD</u>	<u>IBSSS</u>	<u>Total</u>
Completed Projects:							
FY 1993	\$ 1,476.5	\$ 507.3	\$ 1,135.6	\$ 551.3		\$ 11.0	\$ 3,681.7
FY 1994	721.2	619.2	365.6	447.3	\$ 111.5	6.9	2,271.7
FY 1995	1,664.2	619.4	153.6	62.5	97.5	10.9	2,608.1
FY 1996	2,233.4	55.0	2,163.7	83.6	211.5	4.0	4,751.2
FY 1997	1,320.0	380.0	235.8	63.8	91.5	41.2	2,132.3
FY 1998	1,401.0	1,552.3	735.9	126.3	125.0	8.1	3,948.6
FY 1999	1,696.0	1,880.8	288.0	12.2	225.0	8.4	4,110.4
FY 2000	1,272.0	2,335.0	219.0	64.3	12.0	1.0	3,903.3
FY 2001	944.0	2,071.7	538.3	77.5	1.0	-	3,632.5
FY 2002	718.0	1,322.7	542.8	8.2	25.0	-	2,616.7
FY 2003	930.0	1,377.0	336.9	26.3	23.0	65.0	2,758.2
FY 2004	1,554.5	915.9	295.5	25.0	6.0	-	2,796.9
FY 2005	1,502.0	2,103.0	177.0	25.0	25.0	-	3,832.0
Subtotal	\$ 17,432.8	\$ 15,739.3	\$ 7,187.7	\$ 1,573.3	\$ 954.0	\$ 156.5	\$ 43,043.6
Projects Planned for or Continued in FY 2006	\$ 1,560.0	\$ 2,395.0	\$ 1,039.0	\$ 25.0	\$ -	\$ 16.5	\$ 5,035.5
Total	\$ 18,992.8	\$ 18,134.3	\$ 8,226.7	\$ 1,598.3	\$ 954.0	\$ 173.0	\$ 48,079.1
By Source of Funds:							
Building Renewal/ General University	\$ 9,075.2		\$ 3,426.2	\$ 596.2	\$ 516.0	\$ 173.0	\$ 13,786.6
Income from Treasurer's Temporary Investments	5,766.0		542.8	174.8	-	-	6,483.6
Academic Building Revenue Bonds	2,587.6		3,206.7	826.0			6,620.3
Special and Capital Appropriations	1,000.0		1,000.0		385.0	-	2,385.0
University Hospital Building Usage Funds		\$ 18,134.3					18,134.3
Other	564.0		51.0	1.3	53.0	-	669.3
Total	\$ 18,992.8	\$ 18,134.3	\$ 8,226.7	\$ 1,598.3	\$ 954.0	\$ 173.0	\$ 48,079.1

* Does not include fire safety components of major renovation projects but does include fire safety improvements in Old Capitol - Fire Restoration and Building Improvements project.

**SUI - Excludes UHC; includes projects approved and funded for FY 93 - FY 03; for FY 1993 also includes projects completed with Academic Building Revenue Bonds, 1991.

TABLE 2
BOARD OF REGENTS, STATE OF IOWA FY 1993 - FY 2006
GENERAL FUND BUILDING AND UTILITY DEFERRED MAINTENANCE PROJECTS AND
RENOVATION PROJECTS WHICH INCLUDE CORRECTION OF DEFERRED MAINTENANCE
(\$ thousands)

	SUJ	ISU	UNI	ISD	IBSSS	Total
Deferred Maintenance Projects: Completed Projects:**						
FY 1993	\$ 6,591.9	\$ 970.2	\$ 1,593.4	\$ 45.0	\$ 16.1	\$ 9,216.6
FY 1994	2,881.6	1,881.1	1,459.6	543.5	75.9	6,841.7
FY 1995	4,922.1	7,805.3	1,703.1	148.0	24.8	14,603.3
FY 1996	6,571.3	6,944.4	2,581.3	173.0	207.8	16,477.8
FY 1997	3,262.6	2,953.8	2,286.7	133.1	95.6	8,701.8
FY 1998	3,053.0	3,495.3	1,677.7	282.5	172.5	8,681.0
FY 1999	2,928.8	3,492.2	3,435.2	470.0	36.8	10,363.0
FY 2000	6,375.4	5,522.2	3,859.1	758.0	595.1	17,109.8
FY 2001	3,798.2	6,104.2	858.7	485.0	49.1	11,295.2
FY 2002	2,598.9	2,463.9	3,442.6	660.0	1,159.8	10,325.2
FY 2003	7,377.6	4,194.8	439.4	165.0	69.3	12,246.1
FY 2004	7,154.0	4,187.5	761.5	596.3	56.0	12,755.3
FY 2005	9,695.8 **	5,253.1	1,400.0	625.0	53.0	17,026.9
Subtotal	\$ 67,211.2	\$ 55,268.0	\$ 25,468.3	\$ 5,084.4	\$ 2,611.8	\$ 155,643.7
Projects Planned for or Continued in FY 2006	\$ 8,273.5 **	\$ 6,807.1	\$ 516.0	\$ 665.0	\$ 440.7	\$ 16,702.3
Total	\$ 75,484.7	\$ 62,075.1	\$ 25,984.3	\$ 5,749.4	\$ 3,052.5	\$ 172,346.0
FY 1993 - FY 2005 Renovation Projects Which Include Correction of Significant Amounts of Deferred Maintenance***	\$ 56,237.6	\$ 31,369.1	\$ 34,851.0			\$ 122,457.7
Renovation Projects Planned or Continued for FY 2006 with Correction of Significant Amounts of Deferred Maintenance****	\$ 52,122.0	\$ 17,989.4	\$ 37,000.0			\$ 107,111.4
GRAND TOTAL	\$ 183,844.3	\$ 111,433.6	\$ 97,835.3	\$ 5,749.4	\$ 3,052.5	\$ 401,915.1
Total - By Source of Funds						
Building Renewal/Building Maintenance/General University	\$ 34,565.5	\$ 39,892.5	\$ 20,100.0	\$ 1,938.1	\$ 1,370.8	\$ 97,866.9
Building Renewal/Academic Building Revenue Bonds	33,040.0		83.5			33,123.5
Income from Treasurer's Temporary Investments (TTI)	12,193.1	11,353.7	805.7			24,352.5
Gifts, Grants	2,690.7	9,128.6				11,709.3
Utility Renewal and Replacement and Revenue Bonds	29,547.5	9,751.0				39,298.5
Academic Building Revenue Bonds; Project Notes	19,513.3	11,962.2	28,898.6			60,274.1
Capital and Special Appropriations	25,990.0	13,005.5	45,602.7			88,739.0
Agriculture Experiment Station & Cooperative Extension		895.2		2,730.0	1,410.8	895.2
Facilities Overhead Use Allowance	1,679.0	982.5				2,661.5
College of Medicine Gifts / Treasurer's Temporary Investments	2,468.4					2,468.4
College of Medicine Earnings and Gifts	1,645.9					1,645.9
College of Medicine Earnings, Gifts / Treasurer's Temp. Investment	4,114.3					4,114.3
Other (includes unspecified combination of above fund sources)	20,620.9	14,552.4	2,344.8	1,081.3	270.9	38,880.3
GRAND TOTAL - INDIVIDUAL DEFERRED MAINTENANCE ITEMS AND RENOVATION COSTS	\$ 183,844.3	\$ 111,433.6	\$ 97,835.3	\$ 5,749.4	\$ 3,052.5	\$ 401,915.1

Notes:
* SUJ - includes projects approved and funded for FY 93 - FY 96; for FY 1993 also includes projects completed with Academic Building Revenue Bonds.
** Includes Oakdale campus.
*** Renovation projects include SUJ - Gilmore Hall, Schaeffer Hall, Phillips Hall, Bowen Science Building Microbiology, Medical Education Building, Hancher Auditorium, Engineering Building, Biological Sciences - Phase 2, and Hydraulics Laboratory Modernization; ISU - Catt Hall, Laboratory of Mechanics, Gilman Hall, State Gym, Beardshear Hall, and Hamilton Hall Renovations. UNI - Seerley, Wright and Lang Halls, and Commons Renovations, Steam Distribution System Replacement - Phase 1
**** Includes projects under construction or for which funding has been provided; includes SUJ - Old Capitol, Art Building and Chemistry Renovations; ISU - Pearson Hall Ren., and Gilman Hall Systems Upgrade; UNI - Innovative Teaching and Technology Center, Science Buildings Renovation, Phase 1; and Russell Hall Renovation.