MEMORANDUM

To: Board of Regents

From: Board Office

Subject: Governance Report on Deferred Maintenance

Date: November 5, 2001

Recommended Actions:

1. Receive the governance report on deferred maintenance.
2. Encourage the institutions to continue to correct identified deficiencies within the limits of available resources.

Executive Summary:

The Regent Procedural Guide (§9.15) requires an annual governance report on deferred maintenance to be submitted to the Board in November of each year.

This report includes information on the deferred maintenance backlog and expenditures which are a performance indicator (#36) that the Board has selected to measure progress toward its strategic plan.

Amount of Deferred Maintenance

Reduction of deferred maintenance has been a high priority of the Board of Regents for a number of years.

The estimated amount of deferred maintenance in general fund facilities and utilities, as identified by the institutions but not through a complete facilities audit, is $146.4 million. This amount:

- Includes individual projects ($88.1 million) and deferred maintenance components of major projects on the Board's Five-Year Capital Plan ($58.3 million).
- Does not include deferred maintenance to be corrected by FY 2002 projects or the deferred maintenance components of on-going renovation projects.

During recent years, the institutions have made major efforts to correct deferred maintenance.

- From FY 1993 through FY 2001, deferred maintenance projects totaling $103.3 million were completed by the Regent institutions in general fund buildings and utilities.
    - This amount includes projects totaling $11.3 million completed in FY 2001.
    - During the same period of time, renovation projects have corrected significant amounts of deferred maintenance, as outlined on Table 1 (page 12).

Building Repair Budgets

Deferred maintenance continues even though significant sums of money have been expended to reduce it. Adequate funding in the operating budgets for building renewal is a critical factor in reducing current deferred maintenance and minimizing future deferred maintenance.

As noted in G.D. 11 – Revised Budgets for FY 2002, the institutions are generally planning to accomplish the 4.3% deappropriation through one-time adjustments. This approach will allow time for thoughtful decisions of the best approach for making the reductions permanent in FY 2003, while continuing to strive for quality.

- As part of this one-time adjustment, the institutions reduced the amounts budgeted for building repair by $7.1 million from the budgets approved by the Board in July 2001 (a total of $16.0 million to a total of $8.9 million).

- FY 2002 revised general fund building repair budgets now range from .06% to .45% of the replacement value of the facilities; as a minimum building repair budgets should equal 1% of the replacement value.

- The institutions will fall further behind in correcting deferred maintenance if building repair operating funds are not restored.

- While the institutions identified that projects planned or continuing into FY 2002 would total $12.3 million, this information was provided prior to preparation of the revised budgets. Based upon the significant reduction in building repair funds, the FY 2002 projects to correct deferred maintenance are likely to be curtailed.

Strategic Plan:

Key Result Area 4.0.0.0 of the Board's Strategic Plan: Meet the objectives of the Board and institutional strategic plans and provide effective stewardship of the institutions' state, federal and private resources.

> Objective 4.3.0.0: Maintain and acquire physical facilities and equipment to meet stewardship responsibilities and changing institutional needs resulting from annual goal-setting and monitoring.

Correction of deferred maintenance is also addressed directly or indirectly in each institution's strategic plan.

Background:

The first deferred maintenance report was presented to the Board at its December 1988 meeting. Reports have been made on an annual basis since that time.

Common Definition

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

Causes

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.

Focus of Report

This report focuses on the correction of deferred maintenance items in general fund facilities and utility systems. Deferred maintenance in the university residence systems is addressed in that governance report presented to the Board in March of each year.

National Problem in Higher Education

The largest percentage of higher education infrastructure (buildings, utility systems, roads, sidewalks etc.) in the United States, as well as Iowa, was built during the 1960s and 1970s. These facilities are aging and many of their component systems have reached the end of their design life or have become obsolete.

Deferred maintenance in higher education is a national problem and is partially the result of that building boom. A 1997 study by the Association of Higher Education Facilities Officers, the National Association of College and University Business Officers, and Sallie Mae estimated $26 billion in total costs to eliminate accumulated deferred maintenance in American higher education. Urgent needs were estimated at $5.7 billion.

Institutional Efforts

The Regent institutions have made major efforts to correct deferred maintenance over the last several years and have received significant state assistance, with funding from proceeds of the sales of Academic Building Revenue Bonds, operating budget building renewal (repair) funds, capital appropriations, and other funds. Table 1 provides a summary of the funding sources.

Since data were collected beginning with FY 1993, deferred maintenance projects totaling $103.3 million have been completed at the Regent institutions. During the same period of time, renovation projects totaling more than $65.9 million corrected significant amounts of deferred maintenance.

The institutions reported that, in addition to ongoing renovation projects, $12.3 million in deferred maintenance projects are planned or will continue in FY 2002. However, this information was provided prior to the preparation of the revised budgets, which include significantly reduced funds for building repair. It is likely that the total funds for FY 2002 deferred maintenance projects will be significantly less.

Analysis:

Reporting Mechanism

This report represents the second year that the universities used a consistent format to present deferred maintenance.

The reporting mechanism is designed to take the prior year listing of projects, deduct those accomplished during the prior year, and add newly identified ones; the adjusted list forms the base for the current fiscal year.

Deferred maintenance is categorized into work to be accomplished in the current year, work included in on-going renovation projects, and deferred maintenance projects which would be incorporated into the major renovation projects included on the Board approved Five-Year Capital Plan (FY 2003 - FY 2007) for state funding.

This reporting mechanism will provide a systematic method for reporting deferred maintenance projects and will permit progress to be tracked from year to year.

Identification and Prioritization

The institutions have in place processes for identifying and prioritizing deferred maintenance items. A summary of the information provided on the processes is included in Appendix A.

Individual Projects

The following table summarizes institutional estimates of deferred maintenance in general fund buildings and utility systems as of Fall 2001; work to be undertaken in FY 2002 or as part of major renovations is not included in the estimates:

Deferred Maintenance*
Fall 2001
(Individual Projects)
($ Thousands)

	SUI	ISU	UNI	ISD	IBSSS	Total
Buildings**	$17,840.7	$35,523.2	$9,780.0	$1,195.0	$1,250.0	$65,588.9
Utilities	4,284.0	11,990.0	6,054.0	145.0	30.0	22,503.0
Total	$22,124.7	$47,513.2	$15,834.0	$1,340.0	$1,280.0	$88,091.9

*Does not include deferred maintenance projects planned for FY 2002, projects incorporated into major renovation projects included in the Board's Five-Year Capital Program, FY 2003 - FY 2007, or on-going renovation projects.

**Includes site work.

Components of Major Projects

For the third year, the institutions have reported the deferred maintenance projects which would be incorporated into the renovation projects included in the Board's Five-Year Capital Program (FY 2003 – FY 2007) for state appropriations. The following table summarizes the reported information:

Deferred Maintenance
(Incorporated into Major Projects in Board's Five-Year Program)*
Fall 2001
($ Thousands)

	SUI	ISU***	UNI	ISD	IBSSS	Total
Buildings**	$11,395.4	$11,752.0	$15,091.0	$0.0	$0.0	$38,238.4
Utilities	0.0	0.0	20,045.0	0.0	0.0	20,045.0
Total	$11,395.4	$11,752.0	$35,136.0	$0.0	$0.0	$58,283.4

*Five-Year Capital Program for State Funding, FY 2003 – FY 2007.

**Includes site work.

***The University has excluded Morrill Hall from its report due to its unique situation. The building is in such a state of disrepair that it cannot be occupied. Due to its condition and the historical nature of the building, the replacement costs for the building far exceed any deferred maintenance assessment that might be made.

Major Projects

Some of the renovation projects on the Board's Five-Year Plan with significant amounts of deferred maintenance included within them are:

Institution	Project
SUI	Art Building, Phase 2
SUI	Chemistry Building – Renovation
SUI	Seashore Hall Remodeling
SUI	Pentacrest Renewal and HVAC Modernization
ISU	Coover Hall
ISU	Veterinary Teaching / Diagnostic Lab
ISU	Snedecor Hall Addition and Remodeling
ISU	Gilman Hall – Phase IV
UNI	Innovative Teaching Center (East Gym Renovation)
UNI	Electrical Distribution Loop System / Load Break
UNI	Science Buildings Renovations
UNI	Commons Renovation

Total Deferred Maintenance

The following table summarizes the total deferred maintenance reported by the institutions, including individual projects and components of major projects on the Board's Five-Year Capital Program. (Dollar amounts for projects to be undertaken in FY 2002 and the deferred maintenance components of on-going renovation projects are not included.)

These dollar amounts are institutional estimates and were not developed through a detailed, comprehensive facilities audit. Accordingly, caution is advised in making comparisons from one institution to another regarding the amount of deferred maintenance.

Total Deferred Maintenance
Fall 2001
($ Thousands)

	SUI	ISU	UNI	ISD	IBSSS	Total
Buildings*	$29,236.1	$47,275.2	$24,871.0	$1,195.0	$1,250.0	$103,827.3
Utilities	4,284.1	11,990.0	26,099.0	145.0	30.0	42,548.1
Total	$33,520.2	$59,265.2	$50,970.0	$1,340.0	$1,280.0	$146,375.4

*Includes site work.

Comparisons

The following table compares the total deferred maintenance reported in Fall 2000 with the amount reported this Fall. Items to be undertaken during the current year are excluded and ongoing renovation (major) projects are excluded.

Buildings and Utilities*
Fall 2000 Compared to Fall 2001
($ Thousands)

	Fall 2000 (FY 2001)	Fall 2001 (FY 2002)	Difference
SUI	$36,240.0	$33,520.2	$(2,719.8)
ISU	57,945.3	59,265.2	1,319.9
UNI	56,434.0	50,970.0	(5,464.0)
ISD	1,825.0	1,340.0	(485.0)
IBSSS	1,135.0	1,280.0	145.0
Total	$153,579.3	$146,375.4	$(7,203.9)

*Excludes work planned to be undertaken during identified year and work in on-going renovation (major) projects.

Since there are significant differences in the amount of deferred maintenance reported for the utility systems, the following table compares only the deferred maintenance associated with buildings over the same two year period.

Total Building Deferred Maintenance*
Fall 2000 Compared to Fall 2001
($ Thousands)

	Fall 2000 (FY 2001)	Fall 2001 (FY 2002)	Difference
SUI	$28,136.0	$29,236.1	$ 1,100.1
ISU	45,777.3	47,275.2	1,497.9
UNI	23,829.0	24,871.0	1,042.0
ISD	1,485.0	1,195.0	(290.0)
IBSSS	1,085.0	1,250.0	165.0
Total	$100,312.3	$103,827.3	$ 3,515.0

*Excludes work planned to be undertaken during identified year and work in on-going renovation projects.

While the total amount of deferred maintenance has declined from Fall 2000 to Fall 2001, the amount of deferred maintenance in buildings has increased for all institutions except the Iowa School for the Deaf. The reductions have occurred in the utility systems, which have seen a reduction in deferred maintenance from $53.3 million to $42.5 million.

- While the University of Northern Iowa received a $12.7 million capital appropriation for an upgrade of the steam distribution system, which will correct many deferred maintenance items, it also added additional steam distribution work to its deferred maintenance list.

- The utility enterprise systems at the University of Iowa and Iowa State University have completed projects, which have been funded internally or through self-supporting revenue bonds.

Other changes in the amount of deferred maintenance from Fall 2000 to Fall 2001 include the following:

- The University of Iowa has shown a slight increase ($1.1 million) in the amount of building deferred maintenance. While work has been completed and is ongoing, additional items have been added due to the continuing age of the facilities and the refinement of internal building assessments which are carried out on an ongoing basis.

    - Two of the more significant items added this year are: International Center Windows ($800,000) and Old Capitol – Building Envelope ($700,000). Work is underway on the latter project.

- Iowa State University reports that its increase is due primarily to the continuing aging of building systems, on-going assessment of building systems and the increased replacement value of the building systems.

- The increase for the University of Northern Iowa includes inflationary adjustments to previously identified, but not yet completed, projects as well as the addition of some projects.

    - Additions to the list include approximately $500,000 for various deferred maintenance items at the Schindler Education Center, and work in Warehouse #1, in addition to smaller items.

- Iowa School for the Deaf reports a slight decrease in the amount of deferred maintenance.

    - A number of projects on prior lists have been accomplished or are in the process of being undertaken, including tuckpointing of Giangreco Hall and Long Hall utility system replacement, both of which were funded by FY 2002 capital appropriations.

- There has been little change in the amount of deferred maintenance at the Iowa Braille and Sight Saving School during the last year.

Comparisons of dollar amounts sometimes obscure progress that is being made in addressing deferred maintenance on the campuses.

- The University of Iowa Health Sciences Campus Master Plan will provide new research and teaching facilities and will eliminate or remove substantial deferred maintenance problems in the Steindler Building, Bowen Science Building, Medical Education Building and Westlawn. The University estimates these benefits at $940,000.

Type of Building Deferred Maintenance

Table 2 (page 13) summarizes Fall 2001 deferred maintenance by type of project.

As reported by institutional officials, heating, ventilating and air conditioning (HVAC) work is the largest single need.

- Excluding work to be undertaken in FY 2001, the institutions have estimated that HVAC modifications should be undertaken in 136 buildings (Iowa State University counts each building addition as a separate building) at an estimated cost of $23.7 million.

- This amount compares to the $21.2 million reported for fall 2000.

- This reporting of needed expenditures for HVAC work is consistent with expectations since the systems included in buildings constructed in the late 1960's and early 1970's have or are reaching the end of their useful lives.

Corrective action to building roofs and envelopes helps ensure the integrity of the buildings and helps minimize damage to the interiors.

- The number of buildings with building envelopes needing work is estimated at 138 at a cost of $16.1 million (slightly less than fall 2000).

- The estimated cost of roof work is $9.9 million.

- The amount needed for roofs is less than work needed for windows ($14.2 million), electrical ($15.0 million) and interior ($15.5 million).

Comparisons with building fall 2000 data are included in Appendix B.

Current and Future Funding

The amount of deferred maintenance would have grown at a much more rapid rate if the institutions had not increased their building repair expenditures over the last few years, consistent with the Board's emphasis in making this area a priority.

- General fund building repair expenditures increased from $10.5 million in FY 1993 to $20.3 million in FY 2000, an increase of $9.8 million or 94%. (See Table 3, page 14.)

    - Internal reallocations provided a significant portion of the increased funds and appropriations added $1.2 million between FY 1995 and FY 2000.

Expenditures were slightly lower in FY 2001 ($19.3 million), but will drop significantly in FY 2002 as the revised budgets included in G.D. 11 include only $8.9 million in building repair funds, a decline of $11.4 million (56.2% from FY 2000).

Building Repairs and Routine Maintenance

It is important that building repair budgets be returned to their prior levels as quickly as possible. Adequate annual funding of building repair and routine maintenance is needed to avoid further deterioration of buildings and to continue the reduction in the backlog of identified projects.

According to studies published by the Society for College and University Planning, the National Association of College and University Business Officers and the Association of Higher Education Facilities Officers, building repair funds should equal, at a minimum, 1% of the replacement value of campus facilities.

The revised FY 2002 Regent building repair budgets range from .06% to .45% of the replacement value of the campus' general education facilities.

As noted in prior deferred maintenance governance reports, capital asset renewal is one of the greatest challenges facing American higher education because facilities help ensure quality academic programs and the ability to attract and retain faculty and students.

The institutions will fall further behind in correcting deferred maintenance if additional funding is not provided. The Board's FY 2003 capital budget request includes $6.9 million for deferred maintenance as follows:

SUI	$2,000,000
ISU	2,000,000
UNI	2,000,000
ISD	435,000
IBSSS	450,000
Total	$6,885,000

- Each of the institutions has a list of "Top 25" deferred maintenance projects, all or a portion of which would be funded by the appropriations request.

- The institutions are knowledgeable in determining their most pressing needs and how these needs relate to other campus capital projects.

The Board's Five-Year Capital Program (FY 2003 – FY 2007) for state funds includes a total of $32.0 million in requested funds for correction of deferred maintenance.

As detailed earlier in this report, the correction of deferred maintenance items totaling approximately $58.3 million will be incorporated into major renovation and utility projects included in the Regent approved Five-Year Program (FY 2003 – FY 2007) if state funding is received.

While the focus of the above discussion has been on building repair (renewal funds) which are used to replace building components as well as deferred maintenance and fire safety projects, adequate funding of regular maintenance is also needed as it can significantly extend the useful lives of facilities and their components.

If routine maintenance is not properly funded, the useful life of a component is shortened and the need for capital renewal funding is even greater. If capital renewal funding is not available, the lack of replacement can cause further damage; i.e. a leaking, beyond repair roof can cause damage to the interior. However, no level of maintenance can indefinitely extend the life of roofs, windows, mechanical systems and other building and utility systems.

Joan Racki

Joan Racki

Approved: Robert J. Barak

Robert J. Barak

H:\BF\2001\01novdoc\novgd13.doc

TABLE 1
BOARD OF REGENTS, STATE OF IOWA FY 1993 - FY 2002
GENERAL FUND BUILDING AND UTILITY DEFERRED MAINTENANCE PROJECTS AND
RENOVATION PROJECTS WHICH INCLUDE CORRECTION OF DEFERRED MAINTENANCE
($ thousands)

Deferred Maintenance Projects:	**SUI**	**ISU**	**UNI**	**ISD**	**IBSSS**	**Total**
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	2,256.7	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
Subtotal	$ 40,384.9	$ 39,168.7	$ 19,424.8	$ 3,038.1	$ 1,273.7	$ 103,290.2
Projects Planned for or Continued in FY 2002**	$ 2,389.0	$ 5,066.8	$ 3,907.0	$ 535.0	$ 430.0	$ 12,327.8
Total	**$ 42,773.9**	**$ 44,235.5**	**$ 23,331.8**	**$ 3,573.1**	**$ 1,703.7**	**$ 115,618.0**
FY 1993 - FY 2001 Renovation Projects Which Include Correction of Significant Amounts of Deferred Maintenance* **	**$ 23,091.6**	**$ 20,695.1**	**$ 22,151.0**			**$ 65,937.7**
Renovation Projects Planned or Continued for FY 2002 with Correction of Significant Amounts of Deferred Maintenance* **	**$ 31,790.0**	**$ 21,027.8**	**$ 12,700.0**			**$ 65,517.8**
GRAND TOTAL	**$ 97,655.5**	**$ 85,958.4**	**$ 58,182.8**	**$ 3,573.1**	**$ 1,703.7**	**$ 247,073.5**
Total - By Source of Funds						
Building Renewal/Building Maintenance/General University	$ 21,643.9	$ 27,000.0	$ 17,591.6	$ 1,533.1	$ 859.2	$ 68,627.8
Building Renewal/Academic Building Revenue Bonds	340.0		83.5			423.5
Income from Treasurer's Temporary Investments (TTI)	9,765.3	9,140.0	896.1			19,801.4
Gifts, Grants	2,580.7	8,658.4				11,239.1
Utility Renewal and Replacement	12,186.1	8,192.7				20,378.8
Academic Building Revenue Bonds; Project Notes	11,346.3	11,862.2	9,998.6			33,207.1
Capital and Special Appropriations	25,640.0	13,005.5	27,502.7	1,385.0	596.7	68,129.9
TTI, FY 96 Capital Appropriation, Utility Enterprise R & R	1,000.0					1,000.0
FY 96 Capital Appropriation, Utility Enterprise R & R	450.0					450.0
Agriculture Experiment Station & Cooperative Extension		895.2				895.2
Facilities Overhead Use Allowance	1,679.0	982.5				2,661.5
Building Repair / Treasurer's Temporary Investments	237.8					237.8
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
Other (includes unspecified combination of above fund sources	8,359.9	6,221.9	2,110.3	655.0	247.8	17,594.9
GRAND TOTAL - INDIVIDUAL DEFERRED MAINTENANCE ITEMS AND RENOVATION COSTS	**$ 97,655.5**	**$ 85,958.4**	**$ 58,182.8**	**$ 3,573.1**	**$ 1,703.7**	**$ 247,073.5**

Notes:
*SUI - includes projects approved and funded for FY 93 - FY 96; for FY 1993 also includes projects completed with Academic Building Revenue Bonds.
**Planned projects may be delayed or postponed due to mid-year budget reductions.
***Renovation projects include SUI - Gilmore Hall, Schaeffer Hall, Phillips Hall, Bowen Science Building Microbiology, Medical Education Building, Hancher Auditorium, Engineering Building, Biological Sciences, Phase 2, Hydraulics Laboratory Modernization; ISU - Catt Hall, Laboratory of Mechanics, Gilman Hall and Gilman Hall Systems Upgrade, State Gym, Beardshear Hall, and

Table 2
BOARD OF REGENTS, STATE OF IOWA
CATEGORIZATION OF GENERAL FUND BUILDING DEFERRED MAINTENANCE BY TYPE OF PROJECT*
As of Fall, 2001
($ thousands)

	SUI		ISU		UNI		ISD		IBSSS		Total	
Category	# Blgs	$	# Blgs**	$	# Blgs	$	# Blgs	$	# Blgs	$	# Blgs	$
Building Envelope	13	$ 4,534.6	100	$ 8,171.3	13	$ 2,853.1	4	$ 200.0	8	$ 360.0	138	$ 16,119.0
HVAC	14	6,843.4	95	7,668.0	15	8,201.0	6	730.0	6	260.0	136	23,702.4
Roofs	9	1,719.8	88	6,984.3	5	1,112.0	1	45.0	1	30.0	104	9,891.1
Site Work				909.1	5	1,142.5		40.0		190.0	5	2,281.6
Windows	14	5,398.8	95	7,574.5	2	1,178.0			1	10.0	112	14,161.3
Plumbing	14	1,450.3	83	2,692.7	5	281.0			3	45.0	105	4,469.0
Electrical	16	2,896.9	97	6,181.7	10	5,695.0		120.0	5	65.0	128	14,958.6
Interior	18	4,081.9	100	7,093.6	10	3,946.4	1	60.0	6	290.0	135	15,471.9
Elevator	4	375.4									4	375.4
Exterior Accessories	7	670.7									7	670.7
Controls & Safety	13	1,264.3			5	462.0					18	1,726.3
Total		**$ 29,236.1**		**$ 47,275.2**		**$ 24,871.0**		**$ 1,195.0**		**$ 1,250.0**		**$ 103,827.3**

* Excludes projects in process or projects scheduled to begin during FY 2002, including major renovations.
Includes deferred maintenance to be incorporated into major renovations included in the Board's Five-Year Capital Program, FY 2003 - FY 2007.

** Each building addition listed as a separate building.

TABLE 3
BOARD OF REGENTS, STATE OF IOWA

OPERATING BUDGET GENERAL FUND BUILDING REPAIR EXPENDITURES

General University	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996
SUI	$ 2,609,724	$ 1,765,221	$ 2,296,461	$ 3,356,426	$ 3,902,015	$ 4,579,894	$ 5,200,910
ISU	2,060,158	2,614,546	3,206,425	5,458,582	4,991,869	6,159,403	6,120,634
UNI	2,030,674	1,592,040	1,473,058	1,315,056	3,473,110	2,473,399	2,563,818
ISD	311,657	318,759	343,125	286,814	332,161	307,219	412,919
IBSSS	93,124	55,409	28,093	34,682	72,001	71,707	104,880
Total	**$7,105,337**	**$ 6,345,975**	**$ 7,347,162**	**$ 10,451,560**	**$ 12,771,156**	**$ 13,591,622**	**$ 14,403,161**

General University	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002[1]	FY 2002[2]
SUI	$ 5,302,914	$ 6,467,637	$ 7,646,032	$ 8,369,604	$ 6,527,988	$ 6,545,135	$ 4,873,899
ISU	6,762,871	6,923,336	6,690,286	9,328,081	9,420,081	7,144,432	3,357,647
UNI	2,249,963	3,432,210	2,282,012	1,819,021	2,236,707	2,000,000	350,000
ISD	415,959	450,899	362,190	639,727	741,221	250,000	202,838
IBSSS	82,404	45,712	227,818	154,926	417,608	110,257	110,257
Total	**$ 14,814,111**	**$ 17,319,794**	**$ 17,208,338**	**$ 20,311,359**	**$ 19,343,605**	**$ 16,049,824**	**$ 8,894,641**

[1] Budgeted as approved by Board in July 2001.

[2] Revised budget presented for Board approval in November 2001.

Appendix A
Identification and Prioritization of Deferred Maintenance

SUI

The University refines the internal building assessment being carried out on a continuing basis.

The Facilities Condition Auditing system identifies deficient conditions, places a cost on the project necessary to eliminate the deficiency and prioritizes projects based on the severity of the deficiency.

Operations and Maintenance personnel familiar with building conditions are the primary resources in the audit process.

Projects are estimated on a cost per square foot basis using an established facilities maintenance estimating tool.

Deficiencies are classified by the following priorities:

Priority 1 - critical, life safety (accomplish immediately)
Priority 2 – potentially critical (accomplish in 1 year)
Priority 3 – necessary, not yet critical (accomplish in 2-5 years)
Priority 4 – recommended

The University's goal over the next 12 months is to complete audits of a number of campus buildings with serious maintenance problems (Seashore Hall, International Center, North Hall, Old Music Building, Communication Center).

The University reports that these assessments will permit the University to evaluate better the cost of bringing these older facilities up to current standards and will aid in sound and cost effective decision making in the expenditure of maintenance funds.

ISU

The University's report is based upon a comprehensive systematic process for identifying the deferred maintenance needs of the campus buildings.

General fund buildings are assessed in eight different categories: envelope, HVAC, roofs, site work, windows, plumbing, electrical and interior.

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 area mechanic assigned to each building provides a condition assessment of each building system. This area mechanic is the same individual who performs routine operations and maintenance on building systems and equipment and is the individual best in a position to assess his/her assigned building.

Projects are prioritized by the Maintenance and Improvement Committee by the negative impact on teaching/research/outreach, situations that significantly compromise safety, or the ability of the University to continue to provide services.

UNI

There is a continual monitoring of buildings and building systems by physical plant and facilities planning staff in addition to a preventative maintenance program to maintain or extend building infrastructure to the extent possible.

A committee of staff engineers, architects and operations personnel with input from physical plant, users, planning, administration and academic units review on a recurring basis the working list of deferred maintenance items.

The committee screens items to determine how they may impact other needs, such as fire safety, Americans with Disabilities Act, programmatic renovations, utilities distribution, energy conservation and if there is a consistency with the campus Master Plan.

Deferred maintenance items that can be coordinated with or show a high degree of association with other requirements and available funding sources receive top priority. Unless there is a failure, imminent failure or accelerating deterioration in an area or item, the deferred maintenance items that satisfy the most needs receive the highest priority.

ISD

Any issues that deal with student safety are always dealt with first. Other deferred maintenance issues are discussed at weekly meetings

IBSSS

Deferred maintenance items are identified by noting items that need attention or replacement during ongoing inspections. If the resources to correct the items are not immediately available, they are added to the deferred maintenance list.

Highest priority is given to those projects that can accelerate into much larger problems if timely, corrective action is not taken.

Appendix B
Table A
CATEGORIZATION OF GENERAL FUND BUILDING DEFERRED MAINTENANCE BY TYPE OF PROJECT*
A Comparison of Fall, 2000 and Fall, 2001
($ thousands)

Category	As of Fall 2000 (FY 2001) # Bldgs	As of Fall 2000 (FY 2001) $	As of Fall 2001 (FY 2002) # Bldgs	As of Fall 2001 (FY 2002) $	Difference # Bldgs	Difference $
Building Envelope	140	$ 16,671.6	138	$ 16,119.0	-2	$ (552.6)
HVAC	147	21,170.2	136	23,702.4	-11	2,532.2
Roofs	108	10,683.5	104	9,891.1	-4	(792.4)
Site Work		2,191.9		2,281.6		89.7
Windows	111	14,390.5	112	14,161.3	1	(229.2)
Plumbing	105	4,259.4	105	4,469.0		209.6
Electrical	130	14,158.1	128	14,958.6	-2	800.5
Interior	138	14,099.0	135	15,471.9	-3	1,372.9
Elevator	4	361.0	4	375.4		14.4
Exterior Accessories	7	631.3	7	670.7		39.4
Controls & Safety	20	1,695.8	18	1,726.3	-2	30.5
Total		**$ 100,312.3**		**$ 103,827.3**		**$ 3,515.0**

*Exclude projects in process or projects scheduled to begin during FY 2002, including major renovations. Includes deferred maintenance to be incorporated into major renovations and utility projects in the Board's Five-Year Capital Program, FY 2003 - FY 2007.

Appendix B
Table B
University of Iowa
Deferred Maintenance*

Category	As of Fall, 2000 (FY 01) # Bldgs	As of Fall, 2000 (FY 01) $ (000's)	As of Fall, 2001 (FY 02) # Bldgs	As of Fall, 2001 (FY 02) $ (000's)	Difference # Bldgs	Difference $ (000's)
Building Envelope	10	$ 4,298.2	13	$ 4,534.6	3	$ 236.4
HVAC	15	6,766.9	14	6,843.4	-1	76.5
Roofs	10	2,000.6	9	1,719.8	-1	(280.8)
Elevator	4	361.0	4	375.4	0	14.4
Exterior Accessories	7	631.3	7	670.7	0	39.4
Windows	12	4,740.5	14	5,398.8	2	658.3
Plumbing	14	1,469.0	14	1,450.3	0	(18.7)
Electrical	16	2,804.7	16	2,896.9	0	92.2
Interior	17	3,933.0	18	4,081.9	1	148.9
Controls & Safety	13	1,130.8	13	1,264.3	0	133.5
Total		**$ 28,136.0**		**$ 29,236.1**		**$ 1,100.1**

* Excludes work planned to be undertaken during identified fiscal year.
Includes work incorporated into major renovations included in the Board's approved Five-Year Plan

Appendix B
Table C
Iowa State University
Deferred Maintenance*

Category	As of Fall, 2000 (FY 01) # Blgs	As of Fall, 2000 (FY 01) $ (000's)	As of Fall, 2001 (FY 02) # Blgs	As of Fall, 2001 (FY 02) $ (000's)	Difference # Blgs	Difference $ (000's)
Building Envelope	100	$ 8,746.4	110	$ 8,171.3	10	$ (575.1)
HVAC	95	6,064.3	104	7,668.0	9	1,603.7
Roofs	88	7,174.9	96	6,984.3	8	(190.6)
Site Work		614.9		909.1		294.2
Windows	95	8,512.0	104	7,574.5	9	(937.5)
Plumbing	83	2,473.4	93	2,692.7	10	219.3
Electrical	97	5,627.4	106	6,181.7	9	554.3
Interior	100	6,564.0	108	7,093.6	8	529.6
Controls & Safety						-
Total		**$ 45,777.3**		**$ 47,275.2**		**$ 1,497.9**

* Excludes work planned to be undertaken during identified fiscal year.
Includes work to be incorporated into renovations included in the Board approved Five-Year Capital Plan.

Appendix B
Table D
University of Northern Iowa
Deferred Maintenance*

Category	As of Fall, 2000 (FY 01) # Bldgs	As of Fall, 2000 (FY 01) $ (000's)	As of Fall, 2001 (FY 02) # Bldgs	As of Fall, 2001 (FY 02) $ (000's)	Difference # Bldgs	Difference $ (000's)
Building Envelope	18	$ 3,067.0	13	$ 2,853.1		$ (213.9)
HVAC	25	7,369.0	15	8,201.0	-10	832.0
Roofs	7	1,398.0	5	1,112.0		(286.0)
Site Work	10	1,302.0	5	1,142.5	-5	(159.5)
Windows	3	1,133.0	2	1,178.0		45.0
Plumbing	5	272.0	5	281.0		9.0
Electrical	12	5,476.0	10	5,695.0		219.0
Interior	14	3,247.0	10	3,946.4	-4	699.4
Controls & Safety	7	565.0	4	462.0		(103.0)
Total		**$ 23,829.0**		**$ 24,871.0**		**$ 1,042.0**

* Excludes work planned to be undertaken during identified fiscal year.
Includes work incorporated into major renovations included in the Board's approved Five-Year Capital Plan, FY 2003 - FY 2007.

Appendix B
Table E
Iowa School for the Deaf
Deferred Maintenance*

Category	As of Fall, 2000 (FY 01) # Blgs	As of Fall, 2000 (FY 01) $ (000's)	As of Fall, 2001 (FY 02) # Blgs	As of Fall, 2001 (FY 02) $ (000's)	Difference # Blgs	Difference $ (000's)
Building Envelope	4	$ 385.0	4	$ 200.0		$ (185.0)
HVAC	6	760.0	6	730.0		(30.0)
Roofs	2	80.0	1	45.0		(35.0)
Site Work / Campus		40.0		40.0		
Windows						
Plumbing						
Electrical		160.0		120.0		(40.0)
Interior	1	60.0	1	60.0		
Controls & Safety						
Total		**$ 1,485.0**		**$ 1,195.0**		**$ (290.0)**

* Excludes work planned to be undertaken in identified fiscal year.

Appendix B
Table F
Iowa Braille and Sight Saving School
Deferred Maintenance*

Category	As of Fall, 2000 (FY 01) # Blgs	As of Fall, 2000 (FY 01) $ (000's)	As of Fall, 2001 (FY 02) # Blgs	As of Fall, 2001 (FY 02) $ (000's)	Difference # Blgs	Difference $ (000's)
Building Envelope	9	$ 175.0	8	$ 360.0	-1	$ 185.0
HVAC	5	210.0	6	260.0	1	50.0
Roofs	1	30.0	1	30.0		
Site Work / Campus		235.0		190.0		(45.0)
Windows	1	5.0	1	10.0		5.0
Plumbing	3	45.0	3	45.0		
Electrical	4	90.0	3	65.0	-1	(25.0)
Interior	6	295.0	5	290.0		(5.0)
Controls & Safety						
Total		**$ 1,085.0**		**$ 1,250.0**		**$ 165.0**

* Excludes work planned to be undertaken during identified fiscal year.