

MEMORANDUM

To: Board of Regents
From: Board Office
Subject: Governance Report on Fire and Environmental Safety
Date: November 9, 1998

Recommended Actions:

1. Receive the governance report on fire and environmental safety.
2. Encourage the institutions to continue to correct identified deficiencies as expeditiously as possible within the limits of available funding.

Executive Summary:

The annual governance report on fire and environmental safety is required by the Board's *Procedural Guide* to be presented to the Board in November of each year. The institutional reports are to include the results of the State Fire Marshal's latest inspection and should detail programs completed or underway to correct outstanding deficiencies.

The report helps ensure that the Board provides good stewardship of facilities in accordance with its Strategic Plan (Key Result Area 4.0.0.0). Fire and environmental safety standards are set by several agencies, including the State Fire Marshal and governmental regulatory entities. Recommendations regarding the standards and actions to respond to them are institutional and Board decisions. (Action Step 4.3.1.3)

In recent years, the institutions have made major efforts to correct fire safety deficiencies identified by the State Fire Marshal's office and campus personnel. From FY 1993 through FY 1998, fire safety projects totaling \$19.3 million (Table 1) were completed in general fund facilities, including \$8.8 million at the University of Iowa, \$3.6 million at the University of Iowa Hospitals and Clinics, \$4.8 million at Iowa State University, and \$1.3 million at the University of Northern Iowa. These sums do not include fire safety projects addressed as components of major renovation projects. Fire safety projects totaling \$9 million are planned or will continue for FY 1999.

While substantial progress has been and is being made to correct deficiencies, continuing commitments for fire and environmental safety are required. Future progress will be challenged due to changing safety standards, aging buildings and changes in building usage. Identified deficiencies which are potentially life threatening 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.

Additional funding needed to correct deficiencies identified by the State Fire Marshal is \$3.6 million, excluding major projects and work planned for FY 1999.

Highlights:

- Fire safety deficiencies at the Regent institutions are identified by the State Fire Marshal's office during biennial campus inspections or by campus personnel.
- In recent years, major efforts have been made to correct the identified deficiencies; the institutions are committed to further improvements.
- From FY 1993 through FY 1998, fire safety items totaling \$19.3 million were completed in general fund facilities (Table 1); this sum does not include fire safety components of major renovation projects.
 - As detailed on Table 1, a variety of fund sources, including proceeds from the sale of Academic Building Revenue Bonds, building renewal (repair) funds, capital appropriations and other sources, have provided the funds for the corrective actions.
- Projects totaling \$9.0 million (Table 1) are planned or will continue for FY 1999 in general fund facilities.
- Building repair funds, capital appropriations, income from treasurer's temporary investments, and UIHC building usage funds will fund FY 1999 projects.

Identification of Fire Safety Deficiencies

- Changing safety standards, aging buildings and changes in building usage will require continuing commitments for fire and environmental safety.

- The following tables provide a comparison between Fall 1997 and Fall 1998 of the institutional estimates of costs needed to correct the fire safety deficiencies in general fund buildings as identified by the State Fire Marshal's office.

FIRE SAFETY DEFICIENCIES					
Additional Funding Needed to Correct Fire Safety Deficiencies					
Identified by the State Fire Marshal*					
General Fund Facilities					
(as reported in November 1997)					
(excludes work to be undertaken during FY 1998)					
(\$ Thousands)					
<u>SUI</u>	<u>ISU</u>	<u>UNI</u>	<u>ISD</u>	<u>IBSSS</u>	<u>Total</u>
\$3,033.0	\$876.0**	\$53.0***	\$165.0	\$0.0	\$4,127.0
*Excludes work to be included as part of major renovations in the Board's Five-Year Capital Program, in buildings to be demolished, and for which waivers from the State Fire Marshal are to be requested.					
** Does not include additional \$8 million in fire and building safety items identified by institutional personnel.					
*** Does not include estimate for the museum storage sprinklers.					

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General Fund Facilities					
(as reported in November 1998)					
(excludes work to be undertaken during FY 1999)					
(\$ Thousands)					
<u>SUI</u>	<u>ISU</u>	<u>UNI</u>	<u>ISD</u>	<u>IBSSS</u>	<u>Total</u>
\$3,114.5**	\$397.0***	\$0.0	\$100.0	\$0.0	\$3,611.5
*Excludes work to be included as part of major renovations in the Board's Five-Year Capital Program, in buildings to be demolished, and for which waivers from the State Fire Marshal are to be requested.					
**Estimated cost for the University of Iowa is the current estimate to complete the fire safety program for all general fund and Oakdale buildings.					
*** Does not include additional \$6 million in fire and building safety items identified by institutional personnel or the Waste Chemical Facility identified by the State Fire Marshal; the latter would be a separate capital project.					

- Funds needed to correct deficiencies identified by the State Fire Marshal have declined slightly from Fall 1997 to Fall 1998 due to planned FY 1999 projects, better cost estimates and the incorporation of fire safety improvements into renovation projects, including those at Iowa State University.

University of Iowa

- The State Fire Marshal's office conducted its most recent survey of academic buildings at the University of Iowa during the summer of 1998; a report of this visit is forthcoming.
- The University of Iowa reports a slight increase in additional funding (\$81,500) needed to complete the fire safety program although \$1.7 million is programmed to be expended in FY 1999.
 - The university attributes the increased cost to the following:
 - Better knowledge of needed work and costs;
 - Addition of work in the Communications Center and International Center to the estimate since these projects are no longer included on the Board's Five-Year Capital Plan; and
 - Higher than anticipated costs for the sprinkler installation in Macbride Hall resulting in the deferral to FY 2000 of previously programmed projects.
- The University of Iowa estimates that by the end of FY 1999, 76% of general fund campus space will be in general structural compliance with fire safety codes; last year the university reported that by the end of FY 1998, 72% of the space would be in structural compliance.
 - General structural compliance is defined as the absence of fundamental building deficiencies, such as inadequate exiting, the lack of proper corridor separation, or the absence of a fire alarm system.
- The above total for the University of Iowa does not include costs for the University of Iowa Hospitals and Clinics; life safety code and fire safety inspections are deferred by the State Fire Marshal to the Joint Commission on Accreditations of Healthcare Organizations (JCAHO) site survey.
 - A JCAHO site survey was completed from October 26 – October 30, 1998; a report will be forthcoming no later than mid-December, 1998.

Iowa State University

- The State Fire Marshal's office conducted its last inspection of Iowa State University academic facilities in 1995.
- The State Fire Marshal has issued 3 citations for the chemical storage facility; the university reports that although the existing facility has been cited, it is in a remote location with relatively low exposure to populated areas or other facilities.
- The estimated cost to construct a new facility to meet EPA, OSHA and state building code requirements is \$3.6 million; the new facility appeared on the university's FY 1998 and FY 1999 capital plans (presented to the Board in June 1997 and June 1998, respectively).
- The university reports that it is continuing to identify funding sources for the construction of a new storage facility as well as to address the needs of the College of Veterinary Medicine's hazardous chemical handling and storage.
- The university hopes to finance the facility from the facility component of indirect cost reimbursements in cooperation with the College of Veterinary Medicine; the College has been reviewing the project and attempting to identify financial sources of support.
- Another alternative is to close the current facility and ship the materials to other processors or commercial facilities.
- The university hopes to reach a decision within the next year.

University of Northern Iowa

- The State Fire Marshal's inspection at the University of Northern Iowa in 1997 identified 123 items in 39 academic buildings; 74 deficiencies were corrected by October 14, 1998 and the university anticipates correcting the remaining 49 citations, which are maintenance items, by July 1, 1999.

Iowa School for the Deaf

- The most recent fire safety inspection at the Iowa School for the Deaf took place in 1995.
- This inspection, which was much more thorough than previous inspections, resulted in 240 citations.

- At the conclusion of FY 1997, approximately 166 citations had been resolved with an additional 20 citations addressed during FY 1998; additional citations will be addressed during FY 1999.

Iowa Braille and Sight Saving School

- The State Fire Marshal's office conducted its most recent inspection at the Iowa Braille and Sight Saving School in September 1997.
- Of the 7 citations, 5 were corrected by November 30, 1997; the other two citations relate to the recently-installed fire doors in Rice and Palmer Halls which did not have the proper fire rating for their proximity to the fire escapes.
- Additional fire alarm sensors were installed in the affected areas for added safety and a variance is being sought to allow the school to continue to use the doors.

Prioritization of Fire Safety Projects

- 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.
- User deficiencies are housekeeping or procedural items such as the use of a doorstop to prop open a door or storage of an item in a hall.
- Maintenance items usually require no design and minimal expenses per item, such as door repairs; these are corrected utilizing physical plant forces and funds.
- Other deficiencies, the correction of which requires an outlay of funds beyond the capability of physical plant maintenance funds, are prioritized.

University of Iowa

- The University of Iowa is utilizing, for some buildings, an approach (the National Fire Protection Association's Fire Safety Evaluation System - [FSES]) that prioritizes projects in terms of each building's overall fire safety rather than on the basis of each individual deficiency within each building.
- This approach is proactive, identifying comprehensive building fire safety issues, rather than reactive, responding to specific violations.

- Under this approach, fire safety in existing buildings is assessed to determine the best way to provide protection equivalent to current code requirements (an equivalent level of life safety).

Iowa State University

- As the result of a revision in its method of prioritization, Iowa State University now ranks at the top of its list fire safety deficiencies noted by the State Fire Marshal; remaining projects are ranked according to a risk rating priority method developed by the Department of Environmental Health and Safety and accepted by the State Fire Marshal.

University of Northern Iowa

- The University of Northern Iowa prioritizes those items where the potential risk to human life is the greatest.
- The Board Office and the institutions continue to work with the State Fire Marshal to identify and prioritize necessary facility modifications to ensure that buildings are made as safe as possible in a cost effective manner.

Environmental Safety Issues

- In addition to fire safety deficiencies identified by the State Fire Marshal, funding is needed for projects identified by campus personnel for environmental safety deficiencies.
- Environmental safety issues addressed in the institutional reports include asbestos, lead, underground storage tanks, polychlorinated biphenyl's (PCB's), the clean air act, and radioactive sites.
- In August 1994, the Occupational Safety and Health Administration (OSHA) promulgated new regulations covering asbestos abatement activities.
 - The new standard took effect October 1, 1995, and increased the restrictions on construction activities and abatement actions, and requires identification signage on asbestos-containing building materials.
- In May 1993, OSHA issued new lead safety standards addressing workplace activities and practices that involve potential employee exposure to lead.
 - Many renovation projects of older buildings may involve lead paint removal; these will require compliance with new OSHA lead abatement regulations.

- The Iowa Department of Natural Resources has finalized its new rules for managing leaking underground storage tanks; the new Risk Based Corrective Action (RBCA) rules were adopted to streamline compliance activities for underground storage tank owners.
- Underground storage tanks used for heating oil are exempt from registration requirements; tanks storing gasoline and diesel fuel must be upgraded or removed from service prior to December 22, 1998; tank removals are underway at the University of Iowa and Iowa State University in order to meet this deadline.

Financing Fire and Environmental Safety Projects

- Current operating budget resources available to correct items are limited because of the demand for funds among fire safety, deferred maintenance, and building renewal.
- The Governor and General Assembly have been supportive of institutional efforts to correct fire and environmental safety deficiencies.
- The 1990 General Assembly authorized \$6 million in Academic Building Revenue Bonds to complete fire and environmental safety projects at the three universities.
- The 1991 General Assembly provided \$20 million in bonding authorization for the universities' FY 1992 capital program for deferred maintenance, fire and environmental safety, equipment and utility projects.
- The 1994 General Assembly provided \$2 million in bonding authorization for the universities for fire and environmental safety and deferred maintenance.
- The 1995 General Assembly appropriated funds for fire and environmental safety, renovation or deferred maintenance.
 - The University of Iowa and Iowa State University each allocated \$1 million of each institution's \$2 million appropriation to fire and environmental safety projects; these funds were used to help complete the FY 1996 projects included in Table 1.
 - The Iowa School for the Deaf used its \$50,000 appropriation to continue installation of a campus-wide visual alert system.
- The Iowa School for the Deaf received appropriations of \$110,000 for FY 1998 and \$100,000 for FY 1999 for the visual alert system; a \$50,000 FY 1999 appropriation will be used to address citations of the State Fire Marshal's office.

- The Board's operating appropriations request includes \$1.6 million in FY 2000 and \$1.9 million in FY 2001 in building repair funds to help avoid adding to the list of deferred maintenance requirements and ensure steady progress in the removal of fire and other environmental safety deficiencies.
- Capital appropriations are also requested from the State to fund improvements that are beyond the capability of the institutional operating budgets.
- The Board's Five-Year Capital Plan (FY 2000 – FY 2004) includes \$8 million in funds to specifically address the deficiencies.
- In addition, major remodeling projects included in the Board's Five-Year Capital Plan will correct fire safety deficiencies.

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Table 1
BOARD OF REGENTS
FIRE SAFETY PROJECTS
GENERAL FUND FACILITIES
COMPLETED FY 1993 - FY 1998
PLANNED FOR OR CONTINUED IN FY 1999
(\$ Thousands)

	<u>SUI*</u>	<u>UIHC</u>	<u>ISU</u>	<u>UNI</u>	<u>ISD</u>	<u>IBSSS</u>	<u>Total</u>
Projects:							
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	1,460.0	735.9	126.4	125.0	8.1	3,856.4
Subtotal	<u>\$ 8,816.3</u>	<u>\$ 3,640.9</u>	<u>\$ 4,780.2</u>	<u>\$ 1,334.9</u>	<u>\$ 637.0</u>	<u>\$ 82.1</u>	<u>\$ 19,301.4</u>
Projects Planned for or Continued in FY 1999	\$ 1,696.0	\$ 6,791.0	\$ 340.1	\$ 36.9	\$ 150.0	\$ 10.3	\$ 9,024.3
Total	\$10,512.3	\$10,431.9	\$5,130.3	\$1,371.8	\$ 787.0	\$ 92.4	\$28,325.7
By Source of Funds:							
Building Renewal / General University	\$ 5,648.7		\$ 1,923.6	\$ 330.6	\$ 402.0	\$ 92.4	\$ 8,397.3
Income from Treasurer's Temporary Investments	2,276.0			174.8			2,450.8
Academic Building Revenue Bonds	1,587.6		2,208.7	826.5			4,622.8
Special and Capital Appropriations	1,000.0		1,000.0		385.0		2,385.0
University Hospital Building Usage Funds		\$ 10,431.9					10,431.9
Other				39.9			39.9
Total	<u>\$10,512.3</u>	<u>\$10,431.9</u>	<u>\$5,130.3</u>	<u>\$1,371.8</u>	<u>\$ 787.0</u>	<u>\$ 92.4</u>	<u>\$28,325.7</u>

*SUI - Excludes UIHC; includes projects approved and funded for FY 93 - FY 98; for FY 1993 also includes projects completed with Academic Building Revenue Bonds, 1991.