

COMMITTEE MEMORANDUM

TO: Property and Facilities Committee Members
Board of Regents, State of Iowa

FROM: Joan Racki

DATE: June 1, 2005 *GSN*

SUBJ: Board Responsibilities for Property and Facilities

Recommended Action:

Review the Board of Regents responsibilities for property and facilities.

Executive Summary:

Board responsibilities for property and facilities are included in Iowa Code, Iowa Administrative Code and the Board's Policy Manual.

Specific statutory responsibilities related to property include acquiring, disposing and managing real estate; leasing of properties and facilities; and granting of easements.

The Board is also responsible for capital projects and repairs of the buildings or grounds at the Regent institutions and has been granted statutory authority to finance capital projects.

Requirements for bid security on Regent construction projects are included in Iowa Administrative Code.

Consistent with its statutory responsibilities, the Board has developed policies and procedures related to property and facilities. These are included in Chapter 9 of the Board's Policy Manual and include development of campus master plans and multi-year building programs, as well as specific policies for capital projects.

Background and Analysis:

Iowa Code, Iowa Administrative Code, and the Board's Policy Manual detail the Board's responsibilities for property and facilities.

IOWA CODE

Property

Under Chapter 262 of the Iowa Code, the Board is responsible for a number of items related to property; all actions of the Board relating to the management, purchase, disposition, or use of lands and other property of the institutions are by roll call vote (§262.11).

Specific responsibilities of the Board include:

- Managing and controlling real and personal property belonging to the institutions (§262.9[4]);
- Acquiring and disposing of real estate belonging to the institutions with the approval of the Executive Council (§262.9[7]), (§262.10);
- Leasing of properties and facilities, either as lessor or lessee for the use and benefit of the institutions (§262.9[14]); and
- Granting of easements with approval of the Executive Council (§262.67).

The standings bill (HF 882) approved by the 2005 General Assembly includes language which would remove the requirement for Executive Council approval of Regents' purchases and sales of real estate and easements. The bill is awaiting action by the Governor.

Construction

The Board is responsible under §262.34 for the construction, repairs or improvements of buildings or grounds at the institutions governed by the Board. Because of this statutory responsibility, the Board has approved a number of policies related to construction projects which are detailed in the Chapter 9 of the Board's Policy Manual.

Financing

The Board has been granted statutory authority to finance capital projects in a number of ways. The issuance of Academic Building Revenue Bonds (Chapter 262A) and Hospital Revenue Bonds (Chapter 263A) require authorization of the General Assembly and approval by the Governor. Authorization for the sale of bonds or notes for dormitories and other self-liquidating facilities is found in Chapter 262.

IOWA ADMIN.
CODE

Iowa Administrative Code (§681-8.6[2]) includes the requirements for bid security on Regent construction projects.

REGENTS
POLICIES

Consistent with its statutory responsibilities, the Board has developed policies and procedures related to property and facilities. These are included in Chapter 9 of the Board's Policy Manual and include the development of campus master plans, five-year building programs, capital appropriation requests and annual capital plans, as well as policies related to the approval of capital projects.

Board policy has expanded the five-year building program for state-funded capital requests, which has been required by Iowa Code, to include projects funded by all sources of funds.

The Board's 2004-2005 work plan included consideration of longer-term planning than the current five-year plan.

The annual capital plans, in conjunction with the operating budgets, provide an overview of institutional plans and priorities for the upcoming fiscal year.

In June 2003, the Board approved new policies, which have been incorporated into the Board's Policy Manual, for major capital projects including the adoption of project evaluation criteria. The project evaluation criteria are included as Attachment A.

At its June 2004 meeting, the Board instructed the Board Office to review the Board's capital policies and procedures, in consultation with the institutions, and consider ways to streamline the capital project approval process while maintaining appropriate Board oversight.

The Board also requested a review of the dollar levels of existing capital approval thresholds, with a focus on maintaining Board authority for strategic policy decisions and follow-up monitoring.

As a result of this review, the Board, in the fall of 2004, revised its policies related to capital projects to provide a more efficient capital approval process and to incorporate new approval thresholds. The revised policies reduced the number of items requiring Board approval, with other items being delegated to the institutions and Board Office, while maintaining institutional accountability and providing the necessary reporting to the Board in accordance with Board's strategic plan.

Attachment B details the changes in Board policy that were adopted in November 2004 related to thresholds for approval of capital projects.

The Committee proposed work plan, included in P&F 3 includes a status report in February 2006 on implementation of these policy changes, after approximately one year of operation.

Attachment C to this memorandum includes a summary of Board procedures for capital projects.

FACILITIES
GOVERNANCE
REPORT

In February 2005, the Board received its first annual Facilities Governance Report, which replaced previous governance reports on energy conservation, fire and environmental safety, and deferred maintenance. This combined, more comprehensive report provides a means to discuss, in total, Regent facilities.

A copy of this report, which includes background information on campus facilities, a section on institutional cooperation, and three Attachments – University Master Plans and Planning Processes; Facilities Organizations and Operations; and Fire and Environmental Safety and Deferred Maintenance – is Attachment D to this memorandum.

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ATTACHMENT A
CAPITAL PROJECT EVALUATION CRITERIA

Evaluation Criteria The institutions submit information to address the Board's capital project evaluation criteria for major capital projects as defined in the Board's Policy Manual when Permission to Proceed with Project Planning is requested and when approval of the schematic design and project description are requested. The criteria are outlined below:

1. How does this project help fulfill the institution's mission and strategic plan in the following areas:
 - Faculty needs in areas strategic to the university?
 - Program accreditation?
 - Student demand?
 - Other strategic plan-related criteria?
 - Environmental health and safety?
2. What other alternatives were explored to meet the needs identified in number 1 above, why were they rejected and why is the proposed project the best way to meet the identified need?
3. When this project is completed, what facilities and total square footage will be abandoned, transferred or demolished and how does this compare to the new or renovated square footage?
4. What financial resources are available to build/remodel/renovate the proposed capital project including:
 - Source(s) of funding?
 - Availability of funds as it relates to cash flow requirements?
 - Income stream to provide debt service on bonds, if they are to be issued?
 - Calculation of financial return on investment, when applicable?
5. What resources are available to operate and maintain (O&M) the proposed capital project without compromising current programs and operations:
 - Source of O&M funds, e.g., general fund, self-supporting, endowment, etc.?
 - Effect on existing programs/operations if O&M support comes from general fund?
6. Identification of any compelling external forces that justify approval of this capital project:
 - Federal and/or state mandate?
 - Compliance with health/safety/welfare laws?
 - Federal/foundation grant or other external funding opportunities?
 - State policy direction consistent with institutional mission?

ATTACHMENT B
 PROPOSED THRESHOLD REVISIONS (approved November 2004)
 BOARD OF REGENTS POLICY MANUAL CHAPTER 9

	PROJECT BUDGET AMOUNT			
	\$250,000 - \$499,999	\$500,000 - \$999,999	\$1 Million - \$2 Million	\$2 Million or More
Permission to Proceed				
2003 Policy	Approved by Board			
November 2004 Policy		Not Required	Approved by Board	
Program Statement				
2003 Policy	Approved by Board for New Buildings and Renovation			
November 2004 Policy	Approved by Board Office for New Buildings Only but may be forwarded for Board action at Board Office discretion		Approved by Board Office for New Buildings, Major Additions and Remodeling Projects but may be forwarded for Board action at Board Office discretion	
(Note: The proposed policy would establish different thresholds for new buildings and renovation with a lower threshold for new construction)				
Schematic Design				
2003 Policy	Approved by Board for New Construction and Renovation			
November 2004 Policy	Approved by Board for New Buildings Only; schematic design to reflect program statement approved by Board Office or Board		Approved by Board for New Buildings, Major Additions and Remodeling Projects; schematic design to reflect program statement approved by Board Office or Board	
Project Description and Budget				
2003 Policy	Approved by Board			
November 2004 Policy	Approved by Board Office	Approved by Board for New Buildings Only All Others Approved by Board Office		Approved by Board
Revised Project Budgets				
2003 Policy	If increase less than \$100,000, approved by Institution If increase \$100,000 or more, approved by Board Office	Approved by Board Office	Approved by Board	
November 2004 Policy	Approved by Institution To be reported semi-annually to Board Office	Approved by Board Office , but may be referred for Board action at Board Office discretion	Approved by Board	

ATTACHMENT B
 PROPOSED THRESHOLD REVISIONS (approved November 2004)
 BOARD OF REGENTS POLICY MANUAL CHAPTER 9

	PROJECT BUDGET AMOUNT			
	\$250,000 - \$499,999	\$500,000 - \$999,999	\$1 Million - \$2 Million	\$2 Million or More
Architect/Engineer Agreements				
2003 Policy	If fee is less than \$50,000, approved by Institution If fee is \$50,000 or more, approved by Board Office	Approved by Board Office	Approved by Board	
November 2004 Policy	Approved by Institution To be reported semi-annually to Board Office	Selection and agreement approved by Board Office , but may be referred for Board action at Board Office discretion	Selection approved by Board , agreement approved by Board Office , but agreement may be referred for Board action at Board Office discretion	
Construction Contract Awards				
2003 Policy	Awarded by the Institution unless unusual circumstances, then referred to Board Office	Awarded by Board Office		
November 2004 Policy	Awarded by the Institution unless unusual circumstances or bid irregularities, then referred to Board Office	Awarded by Board Office but may be referred for Board action at Board Office discretion, or if required by bidding irregularities or other unusual circumstances		
Architect/Engineer Amendments				
2003 Policy	If single amendment exceeds \$25,000 or 20 percent of agreement (whichever is more), approved by Board Office All others approved by Institution	If single amendment exceeds \$50,000 or 20 percent of agreement (whichever is less), approved by Board Office If single amendment exceeds \$100,000 or 50 percent of agreement (whichever is less), approved by Board All others approved by Institution		
November 2004 Policy	Approved by Institution To be reported semi-annually to Board Office	Approved by Institution , unless a single amendment exceeds \$50,000 and/or cumulative amendments exceed 20 percent of contract, then approved by Board Office , but may be referred for Board action at Board Office discretion To be reported to Board as needed		
Construction Change Orders (Amounts apply to both add and deduct change orders (+ or -))				
2003 Policy	If single change order totals \$50,000 or more (+ or -), approved by Board Office All others approved by Institution	If single change order between \$50,000 and \$99,999 (+ or -), approved by Board Office If single change order of \$100,000 or more (+ or -), approved by Board All others approved by Institution		
November 2004 Policy	Approved by Institution To be reported semi-annually to Board Office	Approved by Institution , unless a single change order exceeds \$50,000 and/or cumulative change orders exceed 20 percent of contract, then approved by Board Office , but may be referred for Board action at Board Office discretion To be reported to Board as needed		

ATTACHMENT C BOARD PROCEDURES FOR CAPITAL PROJECTS

The following procedures include Board key actions for capital projects, as approved by the Board in November 2004. Other actions are delegated to the institutions and the Board Office, based upon the project budget amount, as reflected in the attached table.

PERMISSION TO PROCEED WITH PROJECT PLANNING

Institutional exhibit includes a justification and identification of the program to be accommodated by the project, and alternatives to the proposed course of action. Capital evaluation criteria are submitted. The estimated cost of the project and the probable source of funds are included.

Approval by Board: All projects estimated to cost \$2 million or more.

ARCHITECT / ENGINEER SELECTION

Approval by Board: Architect/engineer selection for all projects estimated to cost \$2 million or more.

SCHEMATIC DESIGN DOCUMENT

The schematic design is developed from the building program (no specific Board action is required on this item unless referred by Board Office) which describes the programs or activities, functions, relationships and space needs of a new or renovated facility. The schematic design reflects the general functional characteristics and architectural requirements of the project. Included are the proposed layouts of spaces within the building and proposed building elevations. Capital evaluation criteria are presented.

Approval by Board: New building projects estimated to cost between \$1 million or more, and remodeling projects estimated to cost \$2 million or more.

PROJECT DESCRIPTION AND BUDGET (including revised budgets)

The project description and budget includes a brief history of the project, a description of the scope of the project, and a preliminary budget. Changes in project budgets are also brought forward for Board approval.

Approval by Board: New building projects with budgets of \$1 million or more, and all projects with budgets of \$2 million or more.

ATTACHMENT D

MEMORANDUM

To: Board of Regents
From: Board Office
Subject: Facilities Governance Report
Date: January 19, 2005

Recommended Actions:

1. Receive the report.
 2. Encourage continued interinstitutional collaboration and coordination on facility issues.
 3. Encourage the institutions to continue to correct identified fire safety and deferred maintenance deficiencies within the limits of available resources.
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Executive Summary:

This, first annual Facilities Governance Report, which is required by the Regent Policy Manual, replaces the previous governance reports on energy conservation, fire and environmental safety, and deferred maintenance. This combined, more comprehensive report provides a means to discuss, in total, Regent facilities. Along with its human resources and its intellectual, financial and equipment assets, facilities are one of the primary resources of an educational institution.

Quality facilities are an integral part of the academic enterprise; they are needed to:

- Compete for faculty and staff;
- Improve the research productivity of the faculty; and
- Compete for students.

This report is intended to provide the Board with a broad overview of the facilities of each of the Regent institutions and the condition of those facilities, consistent with its focus on accountability and effective stewardship of existing resources, which is one of the four priorities of the Board's strategic plan.

Representatives from each of the universities will provide a brief overview of their campus plans / campus planning processes.

Facilities Summary Regent facilities total more than 33 million gross square feet. This amount represents approximately 63% of the 52.7 million gross square feet of state buildings. Academic / research / administrative (general fund) facilities total approximately 16 million gross square feet, slightly less than one-half of the university and special school total gross square footage of 33 million. The 16 million square feet represent approximately 30% of the state total gross square footage. Categories of other facilities include University Hospitals and Clinics, residence systems, self-supporting operations, agricultural experiment station and including student unions, parking systems, etc.

The replacement value of Regent facilities, using a conservative methodology developed by the state in the late 1980's, totals more than \$6.5 billion. The Regent institutions have a total of 4,510 on-campus acres and 1,021 off-campus acres, excluding farm acreage.

Report
Organization

The report is organized into the following sections and attachments:

<u>Section</u>	<u>Page</u>
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Institutional Cooperation	9
Attachment A (University Master Plans and Planning Processes)	14
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Strategic Plans:

One of the priorities of the Board's 2004 – 2009 Strategic Plan is the demonstration of public accountability and effective stewardship of resources. With the estimated replacement value of facilities and utilities exceeding \$6.5 billion, effective stewardship of this resource is critical to the future of the Regent enterprise.

The institutional strategic plans address the need for the institutions to be responsible stewards of their physical facilities. The following summarizes institutional references to facilities in their respective strategic plans:

SUI One of the fundamental principles of the University of Iowa Strategic Plan (2000-2005) is to ‘be responsible stewards of physical facilities, equipment and information technologies.’ The University of Iowa Facilities Management provides the physical facilities that promote university excellence.

ISU Iowa State University’s 2005-2010 draft Strategic Plan addresses facility and service issues.

Goals include:

- Improve facilities and support services for research;
- Promote the wise use of Iowa’s resources and build a sustainable future; and
- Provide a rich array of out-of-class opportunities to learn, lead, and enjoy; promote a “green” university that conserves resources and enhances environmental quality; and maintain the attractiveness of campus and improve the quality of its facilities.

UNI Objectives of the University of Northern Iowa’s 2001-2006 Strategic Plan related to facilities include:

- Maintain safe environments, conditions and equipment; and enhance technologically appropriate teaching and learning facilities and equipment.

The draft 2004-2009 Strategic Plan “Focusing on Excellence” also has objectives related to facilities; these include:

- Maintain a safe and supportive working and living environment characterized by services and programs that promote individual well-being and organizational effectiveness; and upgrade, construct and maintain buildings, grounds and equipment in accord with the University’s Campus Master Plan.

ISD The Iowa School for the Deaf’s 2001-2006 Strategic Plan includes a goal to provide a safe, healthy learning environment by maintaining facilities, equipment and operating budgets that are sufficiently funded. Objectives include updating the deferred maintenance list annually and delineating strategies and priorities to reduce the backlog, and developing plans to remove and abate facility health hazards as they are identified.

Iowa Braille and Sight Saving School reports that facilities are not specifically addressed in the School’s current strategic plan. However, to meet the goals, which are educational in nature, facilities are required to be in sound condition, clean, safe, and functional.

Background:

Annual Reports

Annual fire and environmental safety and deferred maintenance reports were presented to the Board from 1988 through 2002. In 2003, these reports were combined into one report. This year the reports have been expanded into a Facilities Governance Report which is more comprehensive than the prior reports.

This report includes data on campus facilities and operations; an update on the campus master plans, which were last presented to the Board in 2000; and information on institutional energy conservation efforts, which were previously the subject of a separate governance report. Fire and environmental safety and deferred maintenance are also addressed in the report.

Campus Facilities

Regent facilities total 33.2 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. The following table summarizes the Regent institutional total square footage by year of construction.

Years	Gross Square Feet of Initial Construction	Percent of Total
Pre- 1930	5,488,609	16.51
1931-1950	1,877,097	5.65
1951-1960	2,020,941	6.08
1961-1970	7,447,481	22.41
1971-1980	5,625,124	16.92
1981-1990	3,854,814	11.60
1991-2000	4,671,402	14.05
2001 – present	2,251,900	6.78
Total	33,237,368	100.00

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.	6,376,610	6,574,391	2,535,489	381,500	191,507	16,059,497
UIHC	3,401,416					3,401,416
Residence System	2,238,830	3,403,539	1,487,371			7,129,740
Oakdale Campus	578,375					578,375
Agricultural Experiment Station		958,458				958,458
All Other	2,727,199	2,047,436	335,247			5,109,882
Total	15,322,430	12,983,824	4,358,107	381,500	191,507	33,237,368

Renovation of Older Space Renovation of older buildings provides a means to modernize campus facilities to meet current needs as well as to address deferred maintenance and fire safety deficiencies. The universities report the following information regarding the major renovation (more than 50% of the gross square feet of a building) of campus facilities.

SUI The University of Iowa has provided a listing of facilities in which major renovations have occurred. Among recently completed renovations are:

<u>Building</u>	<u>Year of Construction</u>	<u>Approximate Year of Major Renovation</u>
Old Capitol	1840	1976, 2005
Schaeffer Hall	1899	1997
Biology Building	1902	2004
Biology Sciences Library	1902	2002
Seamans Center (Eng)	1905	2003
Hydraulics Laboratory	1919	2004
Pharmacy Building	1961	1999
Museum of Art	1969	2004

To plan better for future renovations and modernization of space, the University of Iowa reports that it engaged ISES Corporation of Stone Mountain, Georgia, to conduct a facilities condition assessment.

The University of Iowa reports that the date of initial construction may only tell "part of the story" as a laboratory constructed in 1985 may be out of date.

ISU

Iowa State University reports that major renovations of almost 1 million of the University's 13 million gross square feet of campus facilities have occurred. The following table summarizes these renovations by the year of initial construction of the facilities.

Years	Gross Square Feet (GSF) of Initial Construction	Gross Square Feet (GSF) of Major Renovation	Renovation as % of Total GSF
Pre- 1930	2,185,831	511,854	23.42%
1931-1950	789,117	99,436	12.60%
1951-1960	632,147	103,587	16.39%
1961-1970	3,015,349	283,330	9.40%
1971-1980	2,375,993		
1981-1990	1,345,743		
1991-2000	1,542,117		
2001 – present	<u>1,097,527</u>		
Total	12,983,824	998,207	7.69%

UNI

The University of Northern Iowa reports that 15.37% (669,813 GSF) of the University's total 4.4 million gross square feet have undergone major renovation. The following table summarizes this information by year of original construction:

Years	Gross Square Feet (GSF) of Initial Construction	Gross Square Feet (GSF) of Major Renovation	Renovation as % of Total GSF
Pre- 1930	528,895	321,783	60.84%
1931-1950	317,446	58,120	18.31%
1951-1960	329,728	3,583	1.09%
1961-1970	1,394,181	286,327	20.54%
1971-1980	903,721		
1981-1990	207,369		
1991-2000	575,441		
2001 – present	<u>101,326</u>		
Total	4,358,107	669,813	15.37%

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	1,021.0

* 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 2000 the Regent institutions have spent more than \$900 million for capital projects with project costs exceeding \$250,000.

The following table compares institutional expenditures for FY 2000 – FY 2004. The data are from status reports filed with the Board Office by the institutions.

Projects with Costs Exceeding \$250,000 – All Funds*											
(\$ in millions)											
	<u>FY 2000</u>		<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>		<u>FY 2004</u>		
	<u>#</u>		<u>#</u>		<u>#</u>		<u>#</u>		<u>#</u>		
	<u>Proj</u>	<u>Exp</u>									
SUI	214	\$ 95.4	238	\$ 90.3	230	\$ 95.1	180	\$ 9.5	199	\$119.3	
ISU	77	59.3	84	61.5	69	54.8	74	75.3	58	82.3	
UNI	<u>45</u>	<u>20.7</u>	<u>45</u>	<u>19.8</u>	<u>29</u>	<u>10.3</u>	<u>28</u>	<u>26.6</u>	<u>25</u>	<u>22.2</u>	
Total	336	\$175.4	367	\$171.6	328	\$160.2	282	\$181.4	282	\$223.8	

* 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.

Board Statutory
Responsibility

Under Chapter 262, Iowa Code, the Board of Regents is given authority to manage and control the real and personal property of the Regent institutions; the Board is also responsible for all construction activity on its campuses.

The Board has delegated much of the authority for the day-to-day facilities operations and capital project administration to the respective universities as discussed with the Board and as included as part of the recently adopted revisions to the Regent Policy Manual.

The Board has delegated other capital approval processes to the Board Office.

Capital improvement actions requiring approval of the Board are presented by the institutions as part of the Register of Capital Improvement Business Transactions, which are Board meeting agenda items.

Analysis:

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 best practices with each other and to pool resources to investigate and pursue innovative and cost saving approaches.

Iowa State University is responsible for the administration of capital projects at the two special schools, Iowa School for the Deaf and Iowa Braille and Sight Saving School.

Universities

The universities have provided the following 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 utilities departments of the three universities meet quarterly to share ideas/problems and to collaborate on all matters related to utilities.
- University of Iowa Utilities loaned a portable steam-blow muffler to Iowa State University, avoiding a duplicate purchase of expensive equipment.
- The three universities developed a plan to address concerns from the Board on welding quality control at the University of Northern Iowa.
- The three universities share a boiler-water chemical treatment contract with NALCO Chemical Company that is administered by Iowa State University.
- An environmental emissions testing services contract with Comprehensive Emissions Services, administered by Iowa State University, is shared by the three universities.
- The University of Iowa recently let a 5-year fuels testing services contract to Standard Laboratories that includes the option to add other Regent institutions at their discretion.
- The universities have examined the possibility of combining coal purchase contracts. Due to different material specifications, resulting from the differences in existing equipment, and environmental permit requirements, which are specific to each location, the universities have determined that combining the contracts is not practical at this time.

- University project design and construction management staff and Board Office staff meet on a regular basis (usually every two 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; these meetings are 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 universities share a common boilerplate construction contract and comply with the same approval procedures for capital projects.
- 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.

Special Schools

Iowa State University Facilities Planning and Management, consistent with Board policies, is responsible for the administration of capital projects at the Iowa School for the Deaf and Iowa Braille and Sight Saving School. Department staff provide technical consultation to the special schools.

Facilities management personnel at the special schools have visited one another's schools and shared methods. More interaction between the facilities staffs of the two special schools is being pursued.

University Master
Plans and Planning
Processes

Attachment A to this memorandum (beginning on page 14) includes information on the university campus master plans and planning processes.

The Regent Policy Manual requires that university campus master plans be presented to the Board at least once every four years. The last presentations were in 1998 for the University of Iowa and in 2000 for Iowa State University and the University of Northern Iowa.

The University of Iowa reports that it is engaged in a "more robust approach" to campus planning than it has utilized in the past. The University has engaged the services of two national planning consultants and is currently updating the Campus Planning Framework (the campus master plan last updated in 1998).

Iowa State University's 1991 Campus Master Plan was intended to guide the physical growth of the campus, projected at 2.9 million square feet of new space, during the following twenty-five years. Supplemental Progress Reports were reviewed by the Board in 1995 and 2000.

Current campus planning activities at the University of Northern Iowa are based on the "Comprehensive Campus Master Plan" prepared in 1968 by Caudell Rowlett Scott of Houston, Texas. The basis of the plan is a scheme of five concentric land use zones with the library and student union in a center vehicle-free zone surrounded by a zone of academic colleges and the central administration.

Each of the universities will make a brief presentation to the Board on its master plan and planning process.

The universities' presentations are included as appendices to Attachment A.

Facilities
Organizations and
Operations

Attachment B to this memorandum (beginning on page 77) includes a discussion of the institutional facilities organizations and operations.

All facility operations at each of the universities are consolidated into one organizational structure; this structure provides a maximum amount of coordination and collaboration on campus and reduces redundant and unnecessary processes.

The budget shortfalls of recent years have had their effect on facilities. These include changes in custodial services, increased energy conservation initiatives as well as an increase in deferred maintenance.

Fire and
Environmental
Safety and
Deferred
Maintenance

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.

The total dollar amount needed to correct fire safety deficiencies identified by the State Fire Marshal's Office has declined by approximately \$400,000 to \$4.4 million from Fall 2003 to Fall 2004.

Progress in correcting fire safety deficiencies will continue to be challenged by new safety standards, aging buildings, limited budgets, and changes in building usage.

In total, the Regent institutions are reporting an increase of \$79.2 million in deferred maintenance from the data reported in Fall 2003 to a total of \$220.4 million in general fund facilities and utilities.

Building Repair
Budgets

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, the institutions chose to reduce their operating budget building repair budgets; expenditures declined, in total, from a high of \$20.3 million in FY 2000 to a budgeted amount of \$13.4 million in FY 2005.
 - The FY 2005 budgeted amount represents approximately 0.4% of the estimated \$3.6 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. This is an issue the Board may wish to consider in future budget discussions.
- Operating budget building repair, general university funds provided approximately one-half of the total dollars expended for fire safety improvements and individual deferred maintenance projects completed from FY 1993 – FY 2004.

While a portion of the total increase in deferred maintenance is due to improved campus efforts to identify deferred maintenance items, the operating budget reductions of recent years have negatively impacted the ability of the institutions to reduce fire and environmental safety deficiencies and current deferred maintenance, and minimize future facility needs.

Maintenance cycles and preventative maintenance activities have been delayed or eliminated, placing buildings and occupants more at-risk for unanticipated building system outages.

The Board approved State-Funded Five-Year Capital Plan (FY 2006 – FY 2010) focuses on stewardship of existing resources through correction of deferred maintenance and fire safety deficiencies, and renovations and infrastructure improvements needed to meet the priorities of the Board's 2004-2009 Strategic Plan.

The state funds, as requested in the Five-Year Capital Plan, would drive internal institutional budget reallocations to further increase building repair budgets.

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Attachment A University Master Plans and Planning Processes

Background and Analysis:

The Regent Policy Manual requires that university campus master plans be presented to the Board at least once every four years. The last presentations to the Board of these plans were in 1998 for the University of Iowa and in 2000 for Iowa State University and the University of Northern Iowa.

Each of the universities will provide a brief report on its campus master plan and planning processes. Copies of the presentations are included as appendices to this attachment.

University of Iowa

Campus Planning The University of Iowa reports that it is engaged in a “more robust approach” to campus planning than it has utilized in the past. Campus planning at the University is approached as a process, rather than a product. The restructured Campus Planning Committee is more actively involved in providing guidance and advice on issues of near- and long-term importance related to the visual and functional attributes of the campus.

The University has engaged the services of two national planning consultants who are stimulating and expanding campus views, perspectives and dialog surrounding the University’s future facility needs and how they will be accommodated.

The University is currently updating the Campus Planning Framework (the campus master plan last updated in 1998). The current update, developed after consultation with administration, faculty, staff and community constituents, will include pedestrian, auto and other transportation needs; buildings, utilities, and green spaces; articulations with the adjoining neighborhoods; and growth opportunities. Completion of the plan is expected in Fall 2005.

Since proposed physical initiatives can have far-reaching implications on the future of the campus, Facilities Management examined the current decision-making process for evaluating projects and initiatives. This review resulted in the creation of Campus & Facilities Planning, a unit dedicated to campus planning, and space planning and utilization.

- This unit integrates the existing campus planning, space planning, and project planning units under one umbrella. Campus & Facilities Planning provides institutional oversight and promotes campus involvement in the facilities planning process.

In addition, the Campus Planning Committee restructured itself and formed subcommittees to better support the facilities planning process. The Campus Planning Committee is an eleven-person committee of faculty, staff, and students charged with advising the University President on issues concerning the physical campus: its facilities, its uses and its continued development. Two-thirds of the full committee now sit on each of three subcommittees: Land Use, Campus Environment and Design Review.

- The Land Use Subcommittee actively engages in the physical campus master planning efforts, including providing advice on matters of land use, building sites, expansion of campus boundaries, and preservation of open space.
- The Campus Environment Subcommittee provides advice and guidance on issues that have significant impact on the visual appeal and function of the campus, including landscaping, public art, pedestrian and vehicular circulation, bicycle paths, signage, environmental policy, accessibility, lighting, bicycle parking, and site amenities.
- The Design Review Subcommittee reviews project designs for their aesthetic impact on the campus, providing advice and guidance on the architecture, scale, massing, setback and build-to lines, materials, colors, textures, contextual design, transparency and other visual matters related to new and renovated building projects.

Capital Project Processes

University facility needs are determined and compiled from several sources. Deans and department heads develop their long-term space needs through the Provost's Office. Other facilities needs, such as for utilities, maintenance and deferred maintenance, parking, and fire safety, are assessed and included in the overall list of University needs. Support service needs derive from academic, auxiliary and health care delivery needs.

The University reports that it has implemented a more formal process for evaluating facilities needs. For example, to define the scope of the Seashore Hall renovation project, the University is utilizing the services of three consultants:

- Joe Hibbard of Sasaki and Associates is leading a master planning study of the block encompassing Seashore Hall, with consideration given to the surrounding city and neighborhood environment, parking and circulation, historic value of the existing structures and alternative build-out scenarios;

- ISES Corporation is conducting a comprehensive facilities conditions assessment of the building; with the detailed analysis University planners will be better able to evaluate replacement versus renovation alternatives; and
- Ira Fink, a space planning consultant, will conduct a thorough analysis of the space needs of the departments under consideration to occupy this portion of the campus.

The list of facility needs developed as part of the University processes is reviewed by the University administration in the context of overall University needs and the University's Strategic Plan. The list is then prioritized for state requests and the budgeting of other resources.

Future Needs

As a result of the on-going master planning process, Facilities Management is compiling information on the needs and plans for colleges, departments and units on campus.

The University reports that, in the future, more opportunities for facility development and a framework for planning growth on the Oakdale Campus will be integrated with campus planning.

The University's report also notes that the College of Liberal Arts and Sciences, an anchor for the University and the largest college, has "pressing" space needs. Many programs of the College are housed in outdated facilities and University studies indicate that shortages in modern, functional space will become a more critical issue in coming years.

The University's presentation to the Board on its campus planning framework and planning processes is included as Appendix A (beginning on page 21).

Iowa State University

Campus Planning

Iowa State University's 1991 Campus Master Plan was intended to guide the physical growth of the campus during the following twenty-five years while being flexible in its ability to accommodate planned and future growth. The plan accommodates projected growth for approximately 2.9 million square feet of new space for instruction, research, and support (approximately a 40 percent increase) within the established physical fabric of campus. (The University reports that approximately 2.4 million gross square feet of on-campus space have been constructed during and after 1991 and almost 500,000 gross square feet of on-campus space have been razed, resulting in a net increase of slightly less than 2.0 million gross square feet.) The realization of the plan depends upon actual program development and growth, and a partnership in funding, including state and external non-state funds to support expanded space needs.

The plan establishes the long-term facilities capacity and spatial organization of the campus core area south of the railroad, and provides a diagram for eventual growth to the north. The plan also reaffirms a 130-year-old philosophy to "create an extensive natural landscape on the College grounds."

The plan anticipates the expansion and improvement of the campus environment by defining patterns of land use for future building locations, circulation systems, parking areas, open space structure, and landscape character while making wise use of limited land resources.

The final plan was accepted on campus and presented to the Board of Regents, State of Iowa in June 1991. Supplemental Progress Reports were reviewed by the Board in 1995 and 2000.

The University reports that the framework of the Campus Master Plan has well served the University. The goals, objectives and recommendations continue to provide the planning principles by which on-going campus development decisions are made. These principles include:

- Use Organization and Facilities Accommodation – Maintenance of the historic pattern of land uses and locations of the colleges with new research facilities to be located at the perimeter of the core area;
- Circulation and Parking – Maintenance of the existing pattern of streets and pedestrian paths with modifications to enhance pedestrian movement and safety, with parking to be located at the perimeter of the core campus; and

Open Space – Central lawn area be maintained as a park-like open space, with it being linked to surrounding campus areas by a series of pedestrian corridors planted with trees and shrubs.

Capital Project Processes

Iowa State University has provided the following information regarding its current processes for determining needs, and prioritizing projects.

The University routinely evaluates the adequacy of both the quantity and quality of facilities available to support its mission. The facilities assessment model is used to compare an estimate of space needed to support programs with the existing inventory of available space. The quality of space is evaluated with comprehensive audits of department facilities with the goal of identifying functional obsolescence that limits facility use. When either the quantity or the quality results in facility problems, a capital project is often the only solution to providing the needed improvements.

Planning for capital projects, both new construction and renovation, occurs continuously with the goal of having information available and approvals secured in sufficient time to submit them to those with the potential to provide resources. Thus, the capital planning process intersects with those processes that:

- Establish the Strategic Plan;
- Establish institutional priorities for state capital fund requests;
- Establish priorities for fund raising;
- Seek to secure funds from various granting agencies; and
- Manage and commit operating funds.

Planning occurs in four phases, which are sequential as well as fluid.

- Phase One -- Problem Identification;
- Phase Two -- Preliminary Planning;
- Phase Three A -- Architectural Feasibility Study;
- Phase Three B -- Preliminary Funding Feasibility Study; and
- Phase Four -- Funding Feasibility Study

Future Needs

Future facility needs are driven by the University's aspirations. The same evaluations of quantity and quality used to address concerns of existing program support are also used to estimate the University's ability to respond to future needs.

The University has provided as part of its report a list of anticipated needs beyond those identified in the current five-year timeframe.

The University's presentation to the Board on its campus planning framework and planning processes is included as Appendix B, beginning on page 35.

University of Northern Iowa

Campus Planning

Current campus planning activities at the University of Northern Iowa are based on the "Comprehensive Campus Master Plan" prepared in 1968 by Caudell Rowlett Scott of Houston, Texas. The basis of the plan is a scheme of five concentric land use zones with the library and student union in a center vehicle-free zone surrounded by a zone of academic colleges and the central administration. Subsequent zones contain student housing, parking, physical education and support facilities.

In 1984, the report of a select committee on University planning addressed the "physical campus" with a request to emphasize the aesthetics of the campus and its buildings, preserve the center of the campus for pedestrians, develop a main campus entrance and develop parking at the perimeter of the campus. Based on this report, the Facilities Planning office studied existing conditions and developed individual long-term concepts for potential building locations, pedestrian sidewalks, streets, parking, utilities, landscaping and a recommended pallet of appropriate materials for campus facilities.

The University's presentation will provide an update to the report provided to the Board in 2000.

The individual concepts are updated and elaborated upon on a bi-annual basis. Any major changes to conceptual plans are presented to the University Facilities Planning Advisory Committee for consideration and recommendation and then forwarded to the University President's Cabinet.

The University reports that there is a strong commitment that the built environment needs to support the institution's mission, values and strategic plan.

Capital Project Processes

The Facilities Planning Advisory Committee, which is a standing committee of the University, receives and makes recommendations to the President's Cabinet regarding facility needs, capital project priorities, space reallocations, parking and institutional road priorities and campus land use and planning activities.

The fifteen member committee is chaired by the Associate Vice President for Facilities Management and has representation from the Academic Dean's Council, the council of Department Heads, the Faculty Senate, the Student Government, the Student Services Division, the Administration and Finance Division, and the Advancement Division.

Each year the Committee invites Division Vice Presidents to present their priority facility needs for consideration in developing the institution capital priorities. The current Five-Year Capital Program and Institutional Roads Program are reviewed and any changes are recommended to the Cabinet.

Future Needs

The University reports that beyond 2010, it will have a need for a number

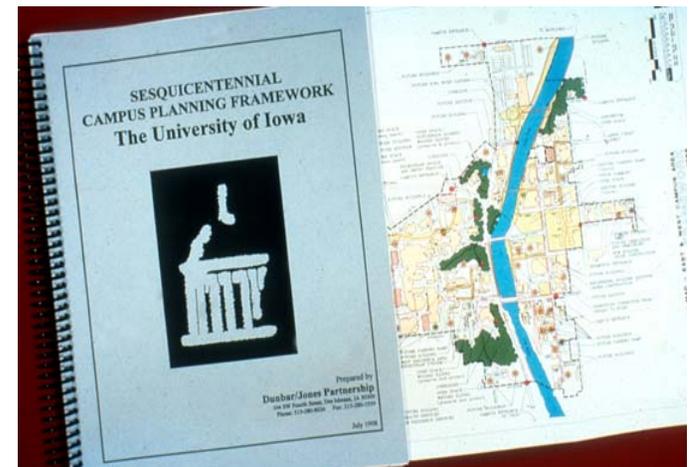
of major renovation projects.

The University's presentation to the Board on its campus planning framework and planning processes is included as Appendix C, beginning on page 45.



1998 Master Planning Framework

- Defined existing campus conditions
- Established a land use framework
- Outlined planning guidelines and principles
- Identified available building sites



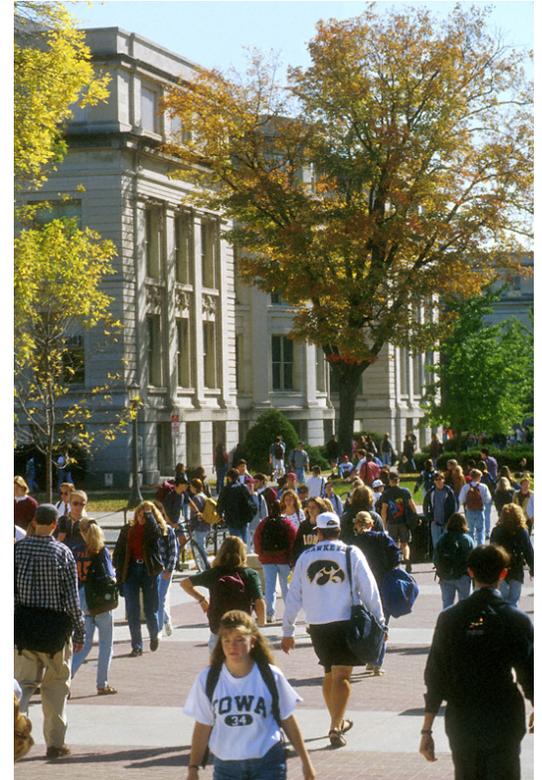
Developments Since 1998

- 1999 creation of the College of Public Health
- One thousand more students enrolled
- Expansion of outdoor recreation opportunities
- Increased student demands for privacy & amenities
- 54% increase in sponsored research
- 140,000 additional annual UIHC patient visits (24% increase)
- Completion of UIHC site build-out



Master Planning Process Outline

- Respond to UI Strategic Plan
- Create Campus Identity
- National Consulting Assistance
- Program-driven Planning
- Active Participation
- Comprehensive Approach
- Project Planning Framework



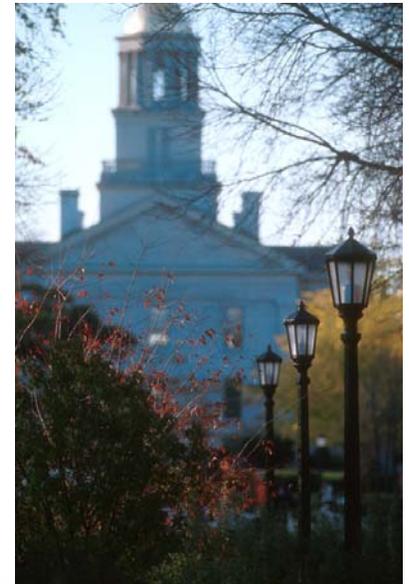
Respond to UI Strategic Plan

- UI Strategic Plan to be completed March 2005
- Strategic plan will provide vision and guidance for campus master plan
- Campus appearance and function supports strategic plan



Create Campus Identity

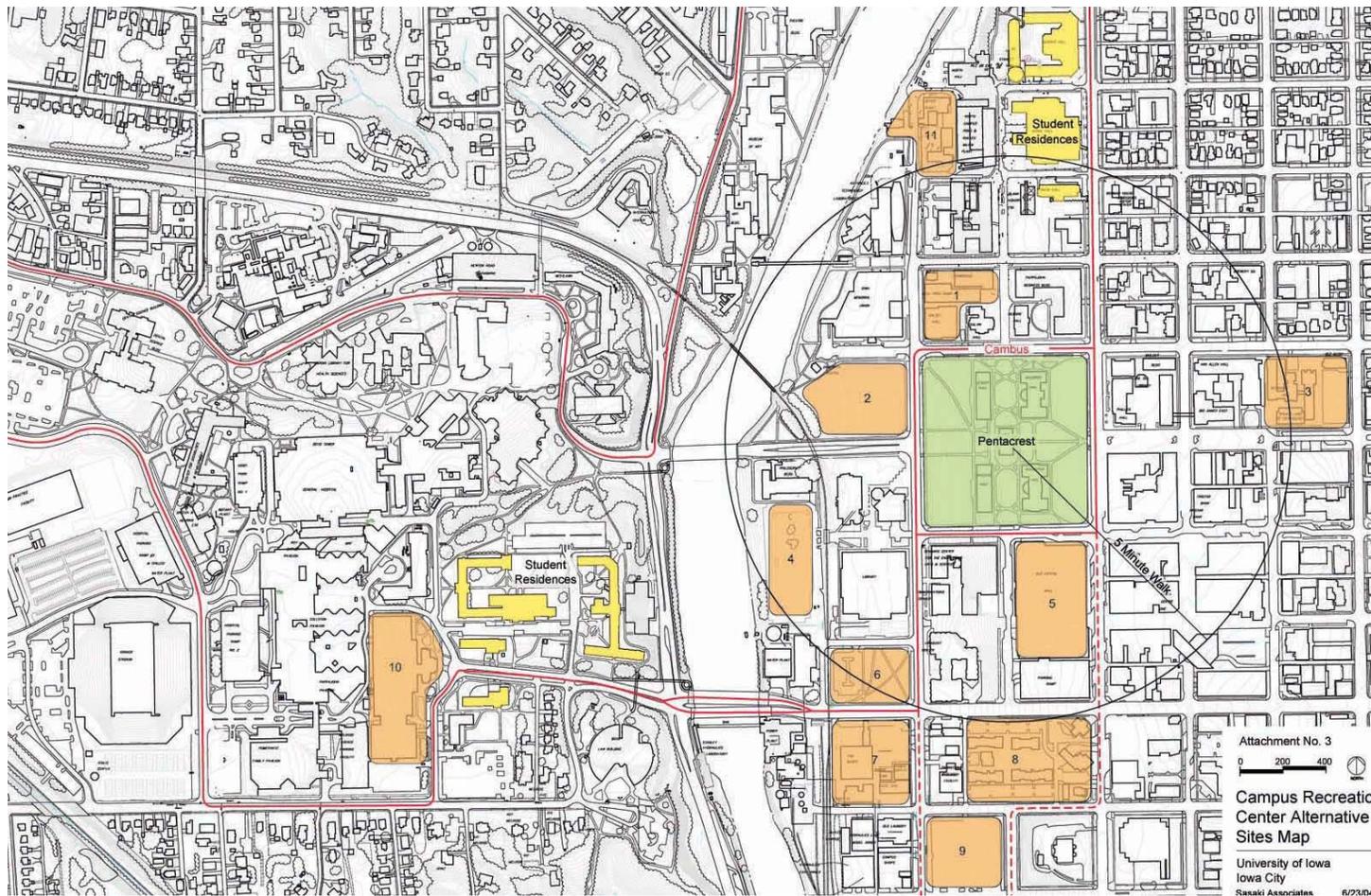
- Reflect institutional excellence and pride
- Respect for architectural and natural heritage
- Foster a sense of University community
- Responsive to students and visitors
- Promote a pedestrian environment
- Partner with surrounding communities
- Celebrate the Iowa River



National Consulting Assistance

- Joe Hibbard (Sasaki) hired in February 2004
- Extensive national and Big Ten experience
- Long-term relationship with regular visits
- Identifies planning issues
- Guides and stimulates campus decision making
- Performs studies of land use alternatives





Recreation Center Site Selection Map

Program-driven Planning

- Assessment of potential long-term issues
- Review of program adjacencies and collaborations
- Analysis of functional requirements



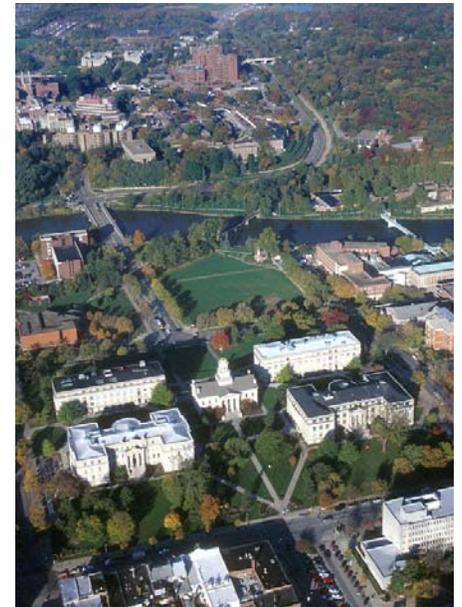
Active Participation

- Academic deans involved in the planning process
- Other campus leaders involved
- Campus Planning Committee restructured to increase its contribution
- Partnerships with city planners
- Campus and community focus groups



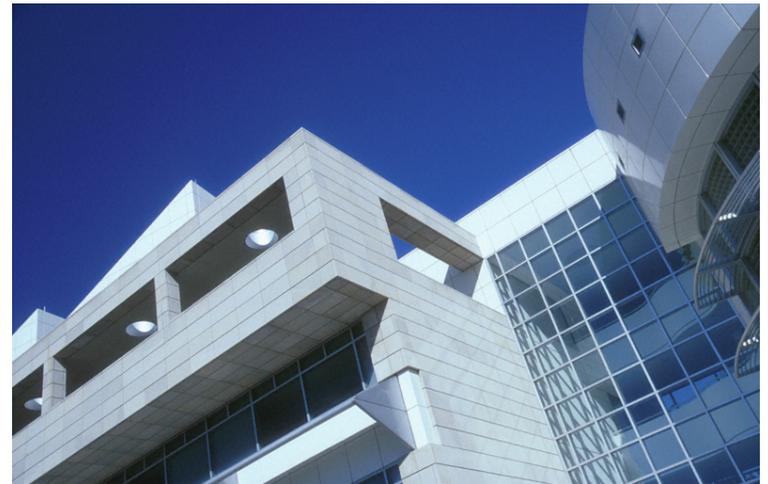
Comprehensive Approach

- Land use plan (zoning and optimization)
- Campus in-fill and expansion growth opportunities
- Parking and circulation analysis
- Integrated open space planning
- Utilities master planning
- Coordinated with UIHC facilities planning
- Facilitate student access to learning, services, recreation and activities



Project Planning Framework

- Repair or replace (facilities condition audits)
- Assessment of program need (space needs studies)
- Placement of new facilities
- Off-campus solutions
- Integrated with financial analysis



Current Project Planning

- East Campus Recreation Center
- College of Public Health
- Parking and transportation management
- Investments in maintaining existing facilities
- Utility system demand and capacity



Timeline

- UI Strategic Plan completed March 2005
- UIHC Strategic Plan completed May 2005
- UIHC Facilities Plan completed September 2005
- UI Campus Master Plan completed December 2005





Iowa State University

Campus Master Plan

January 2005

1991 Campus Master Plan



□ Planning Framework

- Accommodate potential building expansion of 2.9M GSF
- 25 to 30 year plan
- Guide for anticipated expansion and improvement of campus environment, by defining and organizing:
 - land use/program locations
 - transportation systems
 - open space structure
- The framework of the campus master plan continues serve the university well

Campus Master Plan



□ Goals

- Create an environment that supports the mission of the university and its programs in learning, discovery and engagement consistent with the university's strategic plan.
- Establish an appropriate image for an institution of regional, national and international importance.
- Accommodate the projected growth within the established physical context of the campus, that reinforces and improves existing patterns and makes wise use of resources.

Plan Organization

- ❑ Land Use - historic patterns of land uses, organized by colleges and programmatic relationships, proximities and clustering.

- Academic and Student services expansion in core.
- Research facilities to perimeter of core.
- Administrative and services north of Rail Road.
- Public event facilities south of Lincoln Way.



Plan Organization

- ❑ Transportation - maintain existing patterns in general, with modifications to enhance pedestrian movement and safety.
 - Expand daytime street closures.
 - Reduce traffic on targeted sections of streets.
 - Clarification of entrance route.
 - Parking guidelines.



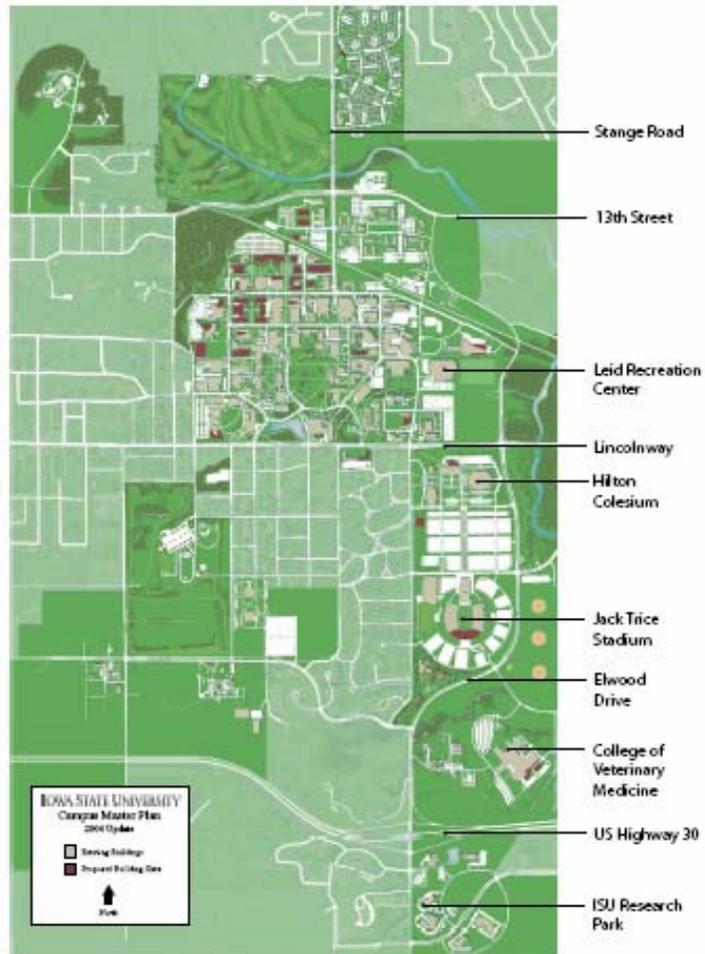
Plan Organization

- ❑ Open Space - Maintain Central Lawn as open-park-like space and link to surrounding campus areas.
 - Connecting pedestrian corridors.
 - New north quadrangle.
 - New courtyards.
 - Tree and shrub replacement program.
 - Landscape and building design principles.



Campus Master Plan

(Highway 30 to 24th Street)



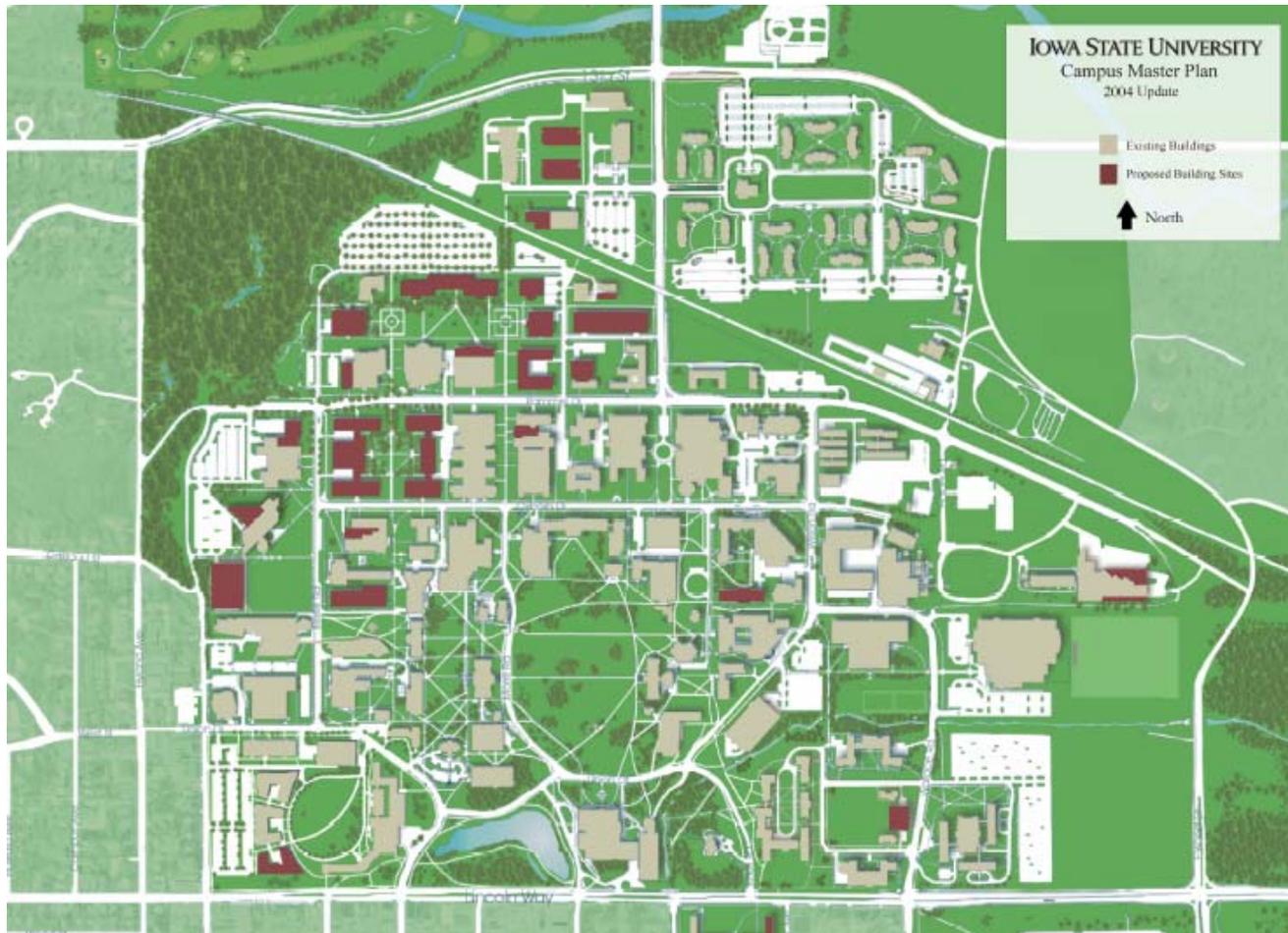
January
2005

Iowa State University - Campus Master Plan - 2004 Supplemental Progress Report

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Campus Master Plan

(Lincoln Way to 13th Street – Central Campus)

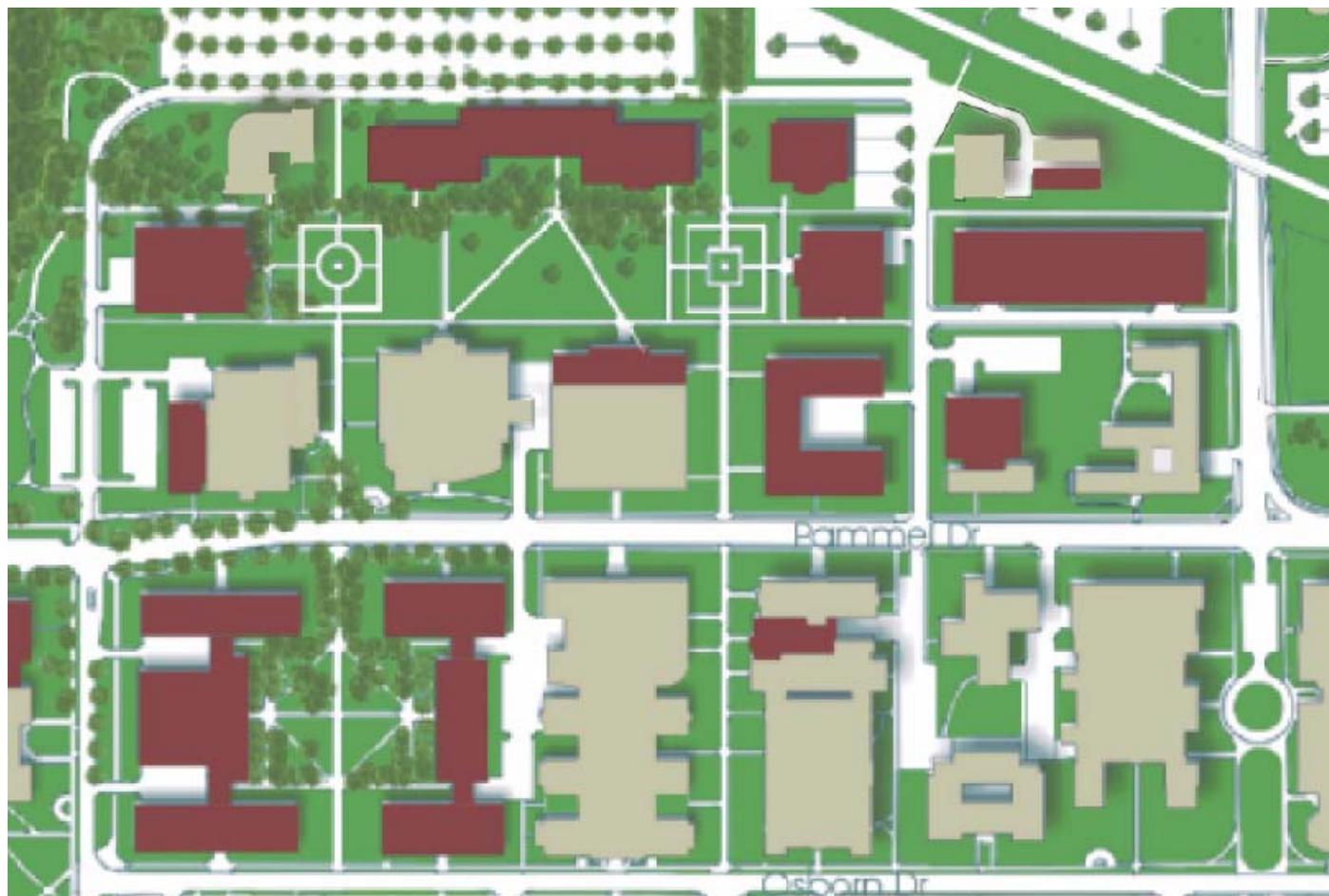


January
2005

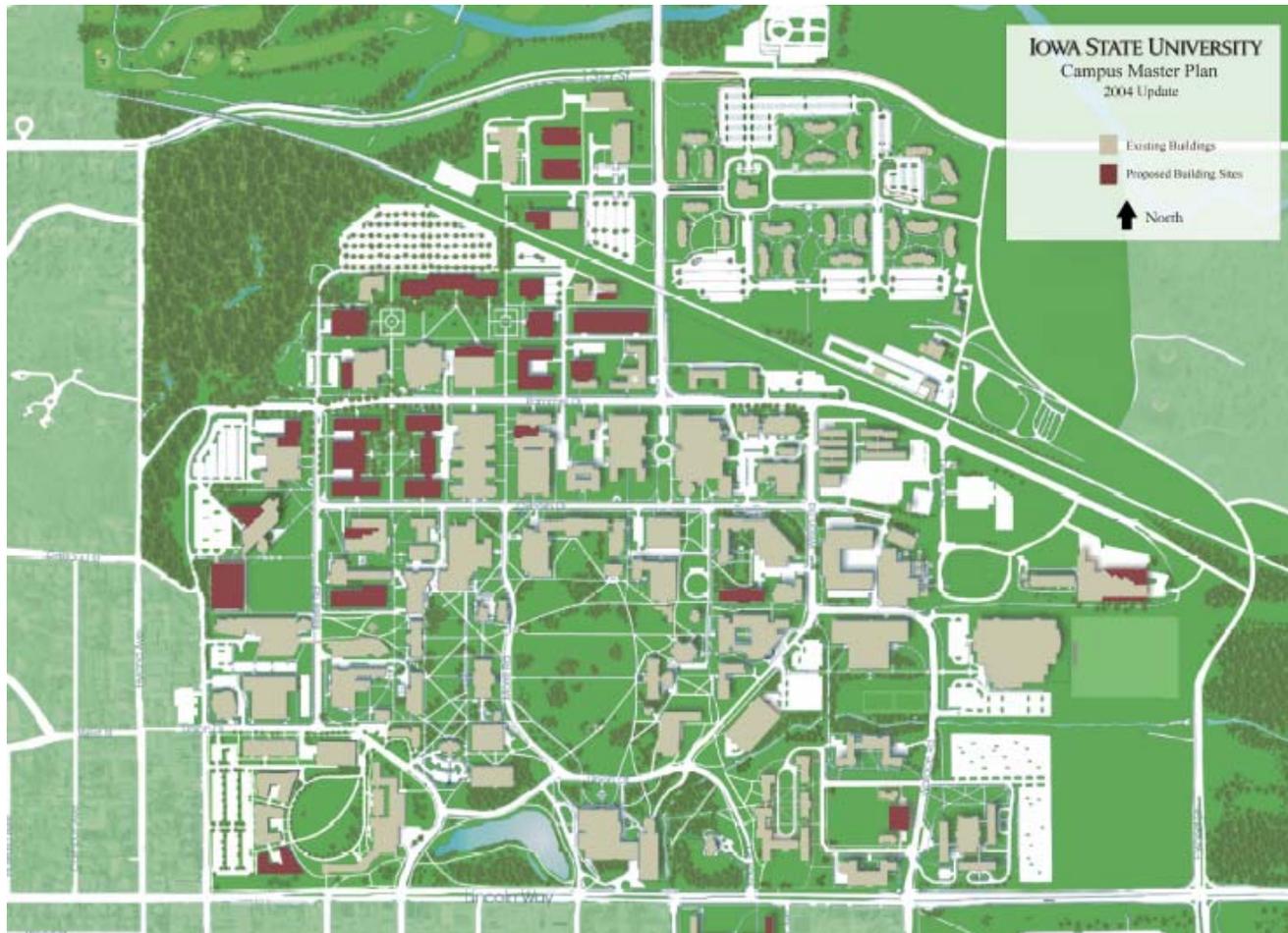
Iowa State University - Campus Master Plan - 2004 Supplemental Progress Report

8

North Quadrangle and Courtyard



Campus Master Plan



January
2005

Iowa State University - Campus Master Plan - 2004 Supplemental Progress Report

10



University of Northern Iowa



Strategic Plan



Capital Plan

Campus Plan

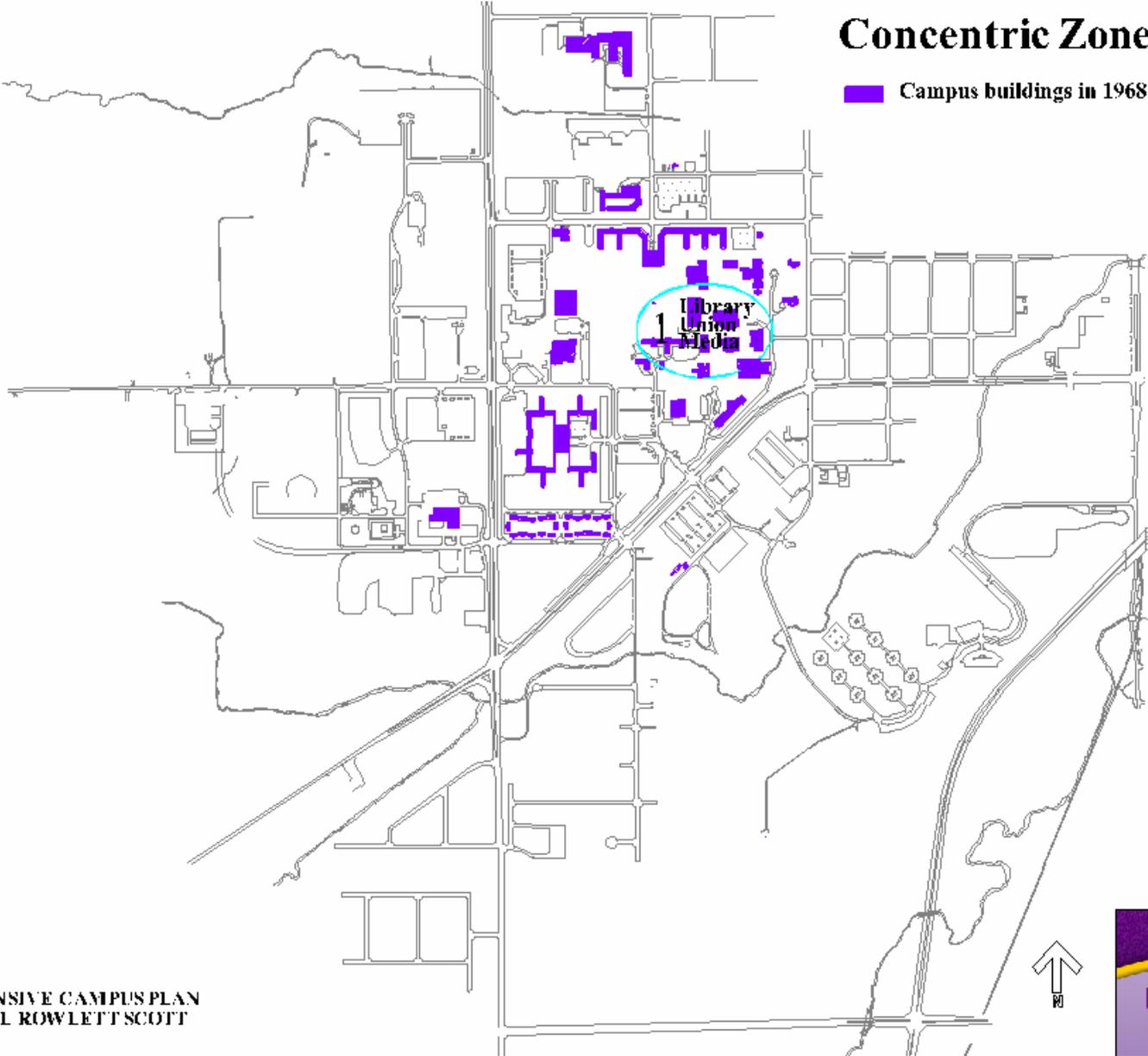
Strategic Goals Supported

- Foster a supportive living, learning and working environment with services and programs that promote individual well being and organizational effectiveness.
 - Maintain safe environments, conditions and equipment.
- Continue to improve capital, physical and informational resources at the University.
 - Enhance technologically appropriate teaching and learning facilities and equipment.
- Promote a university culture characterized by diversity, collegiality, mutual respect, organizational effectiveness and shared responsibility.
 - Maintain a safe and supportive working and living environment characterized by services and programs that promote individual well-being and organizational effectiveness.
- Provide and maintain appropriate resources for effective and efficient University operations.
 - Upgrade, construct and maintain buildings grounds and equipment.

Comprehensive Campus Plan University of Northern Iowa

Concentric Zones

 Campus buildings in 1968

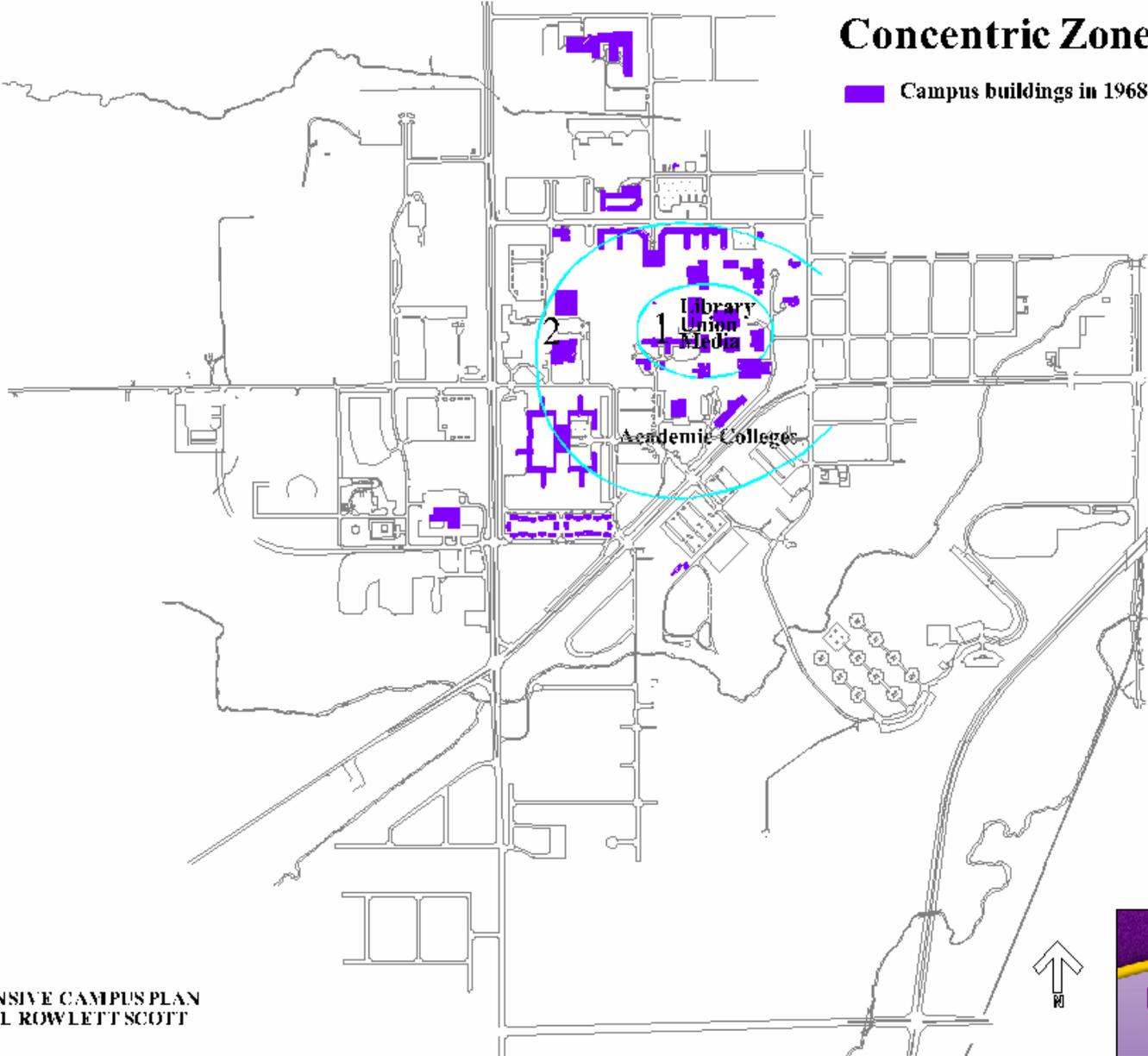


COMPREHENSIVE CAMPUS PLAN
1968 CAUDILL ROWLETT SCOTT



Concentric Zones

■ Campus buildings in 1968

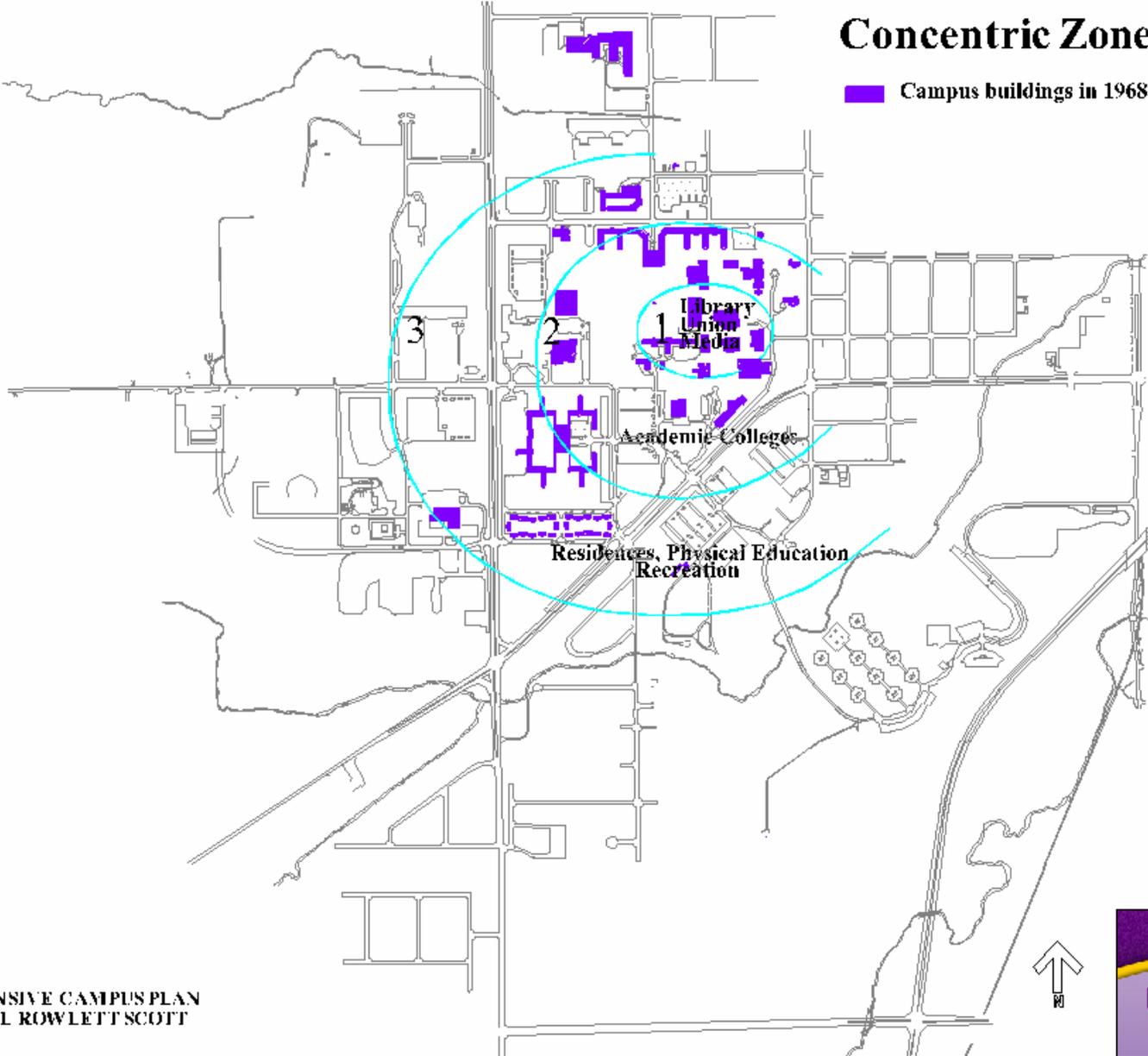


COMPREHENSIVE CAMPUS PLAN
1968 CAUDILL ROWLETT SCOTT



Concentric Zones

■ Campus buildings in 1968

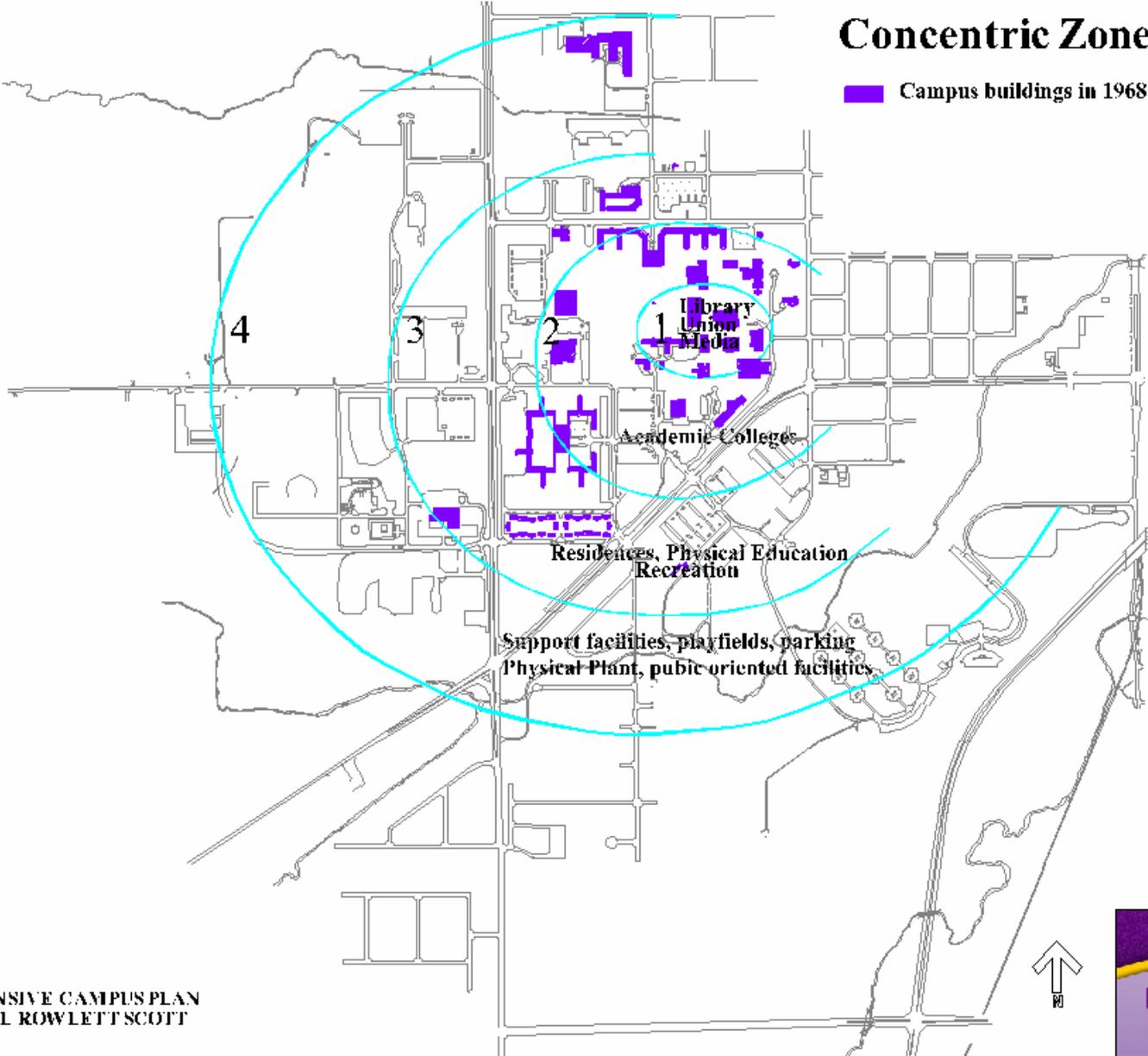


COMPREHENSIVE CAMPUS PLAN
1968 CAUDILL ROWLETT SCOTT



Concentric Zones

■ Campus buildings in 1968

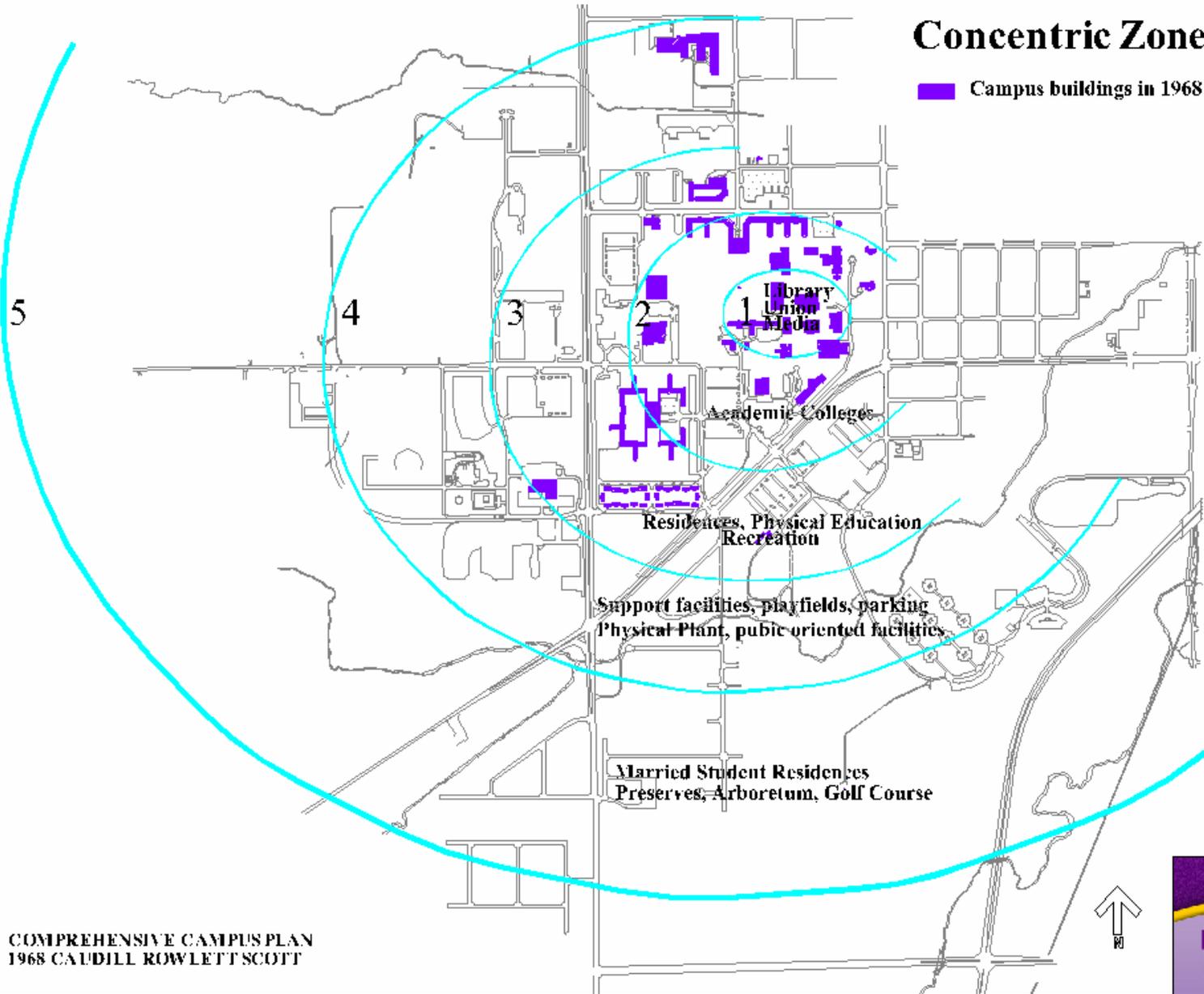


COMPREHENSIVE CAMPUS PLAN
1968 CAUDILL ROWLETT SCOTT



Concentric Zones

■ Campus buildings in 1968

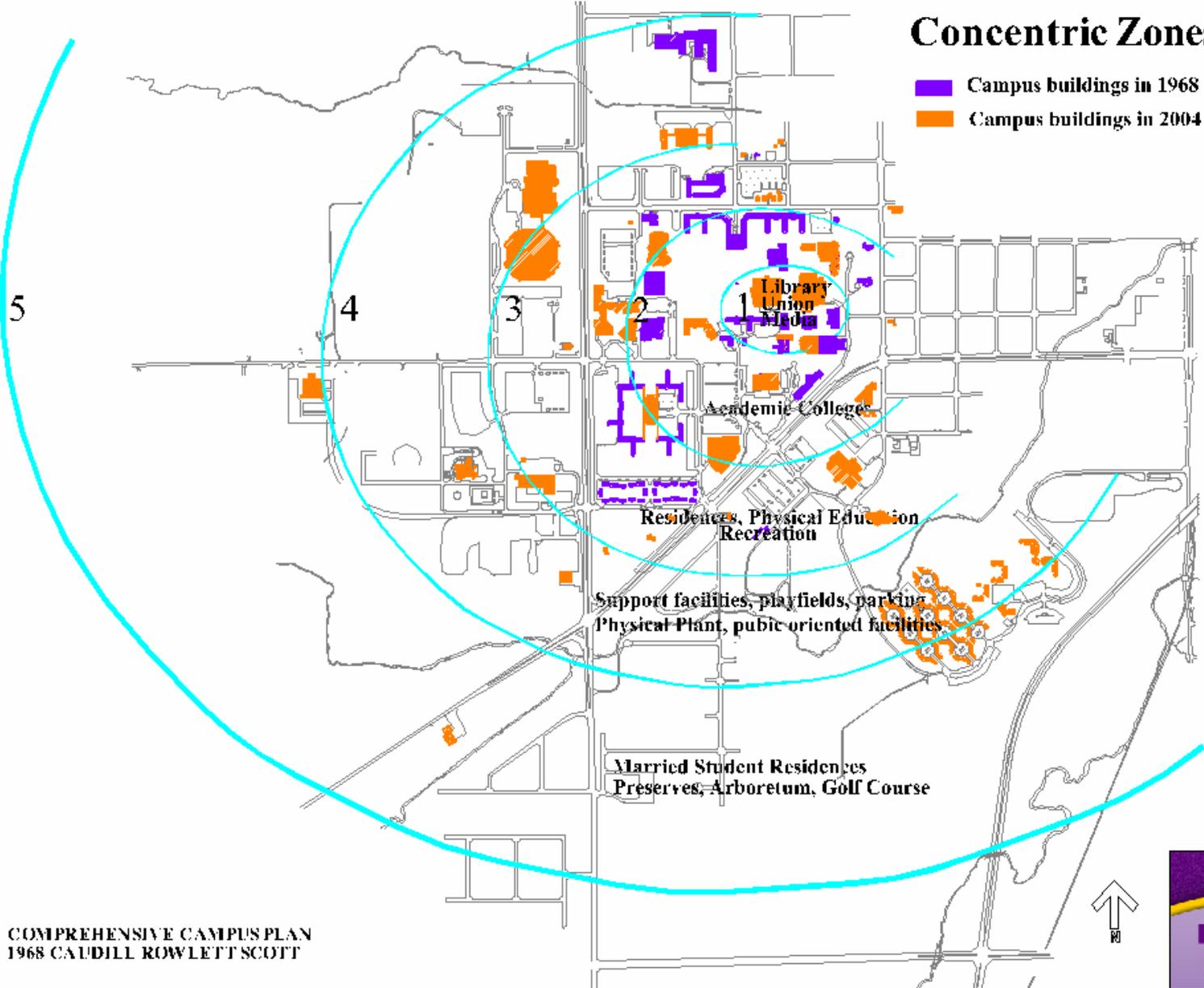


COMPREHENSIVE CAMPUS PLAN
1968 CAUDILL ROWLETT SCOTT



Concentric Zones

-  Campus buildings in 1968
-  Campus buildings in 2004



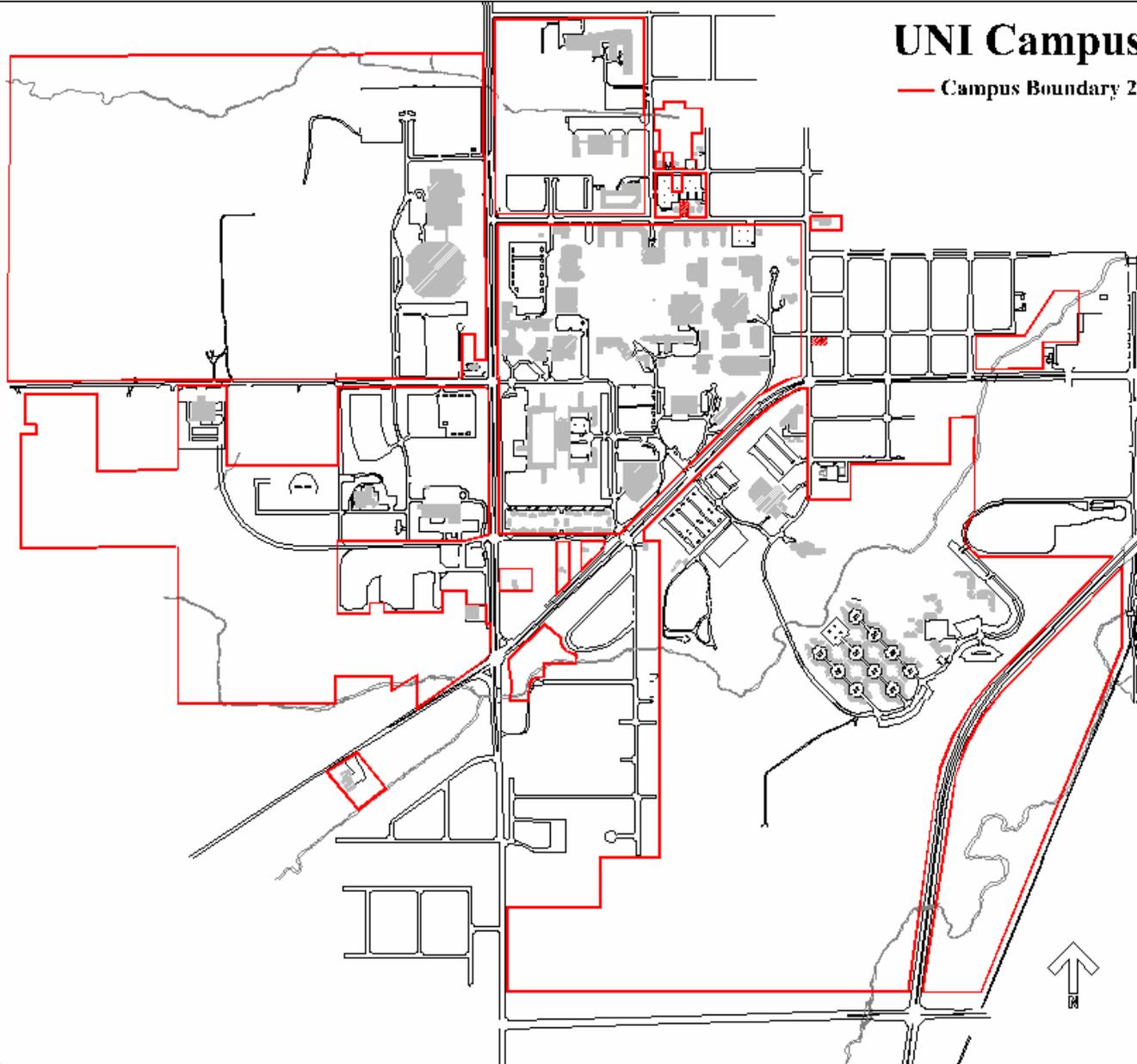
COMPREHENSIVE CAMPUS PLAN
1968 CAUDILL ROWLETT SCOTT

UNI Campus Boundary

- Campus Boundary
- Land of Interest to Institution
- Land Purchased or Sold

UNI Campus Boundary

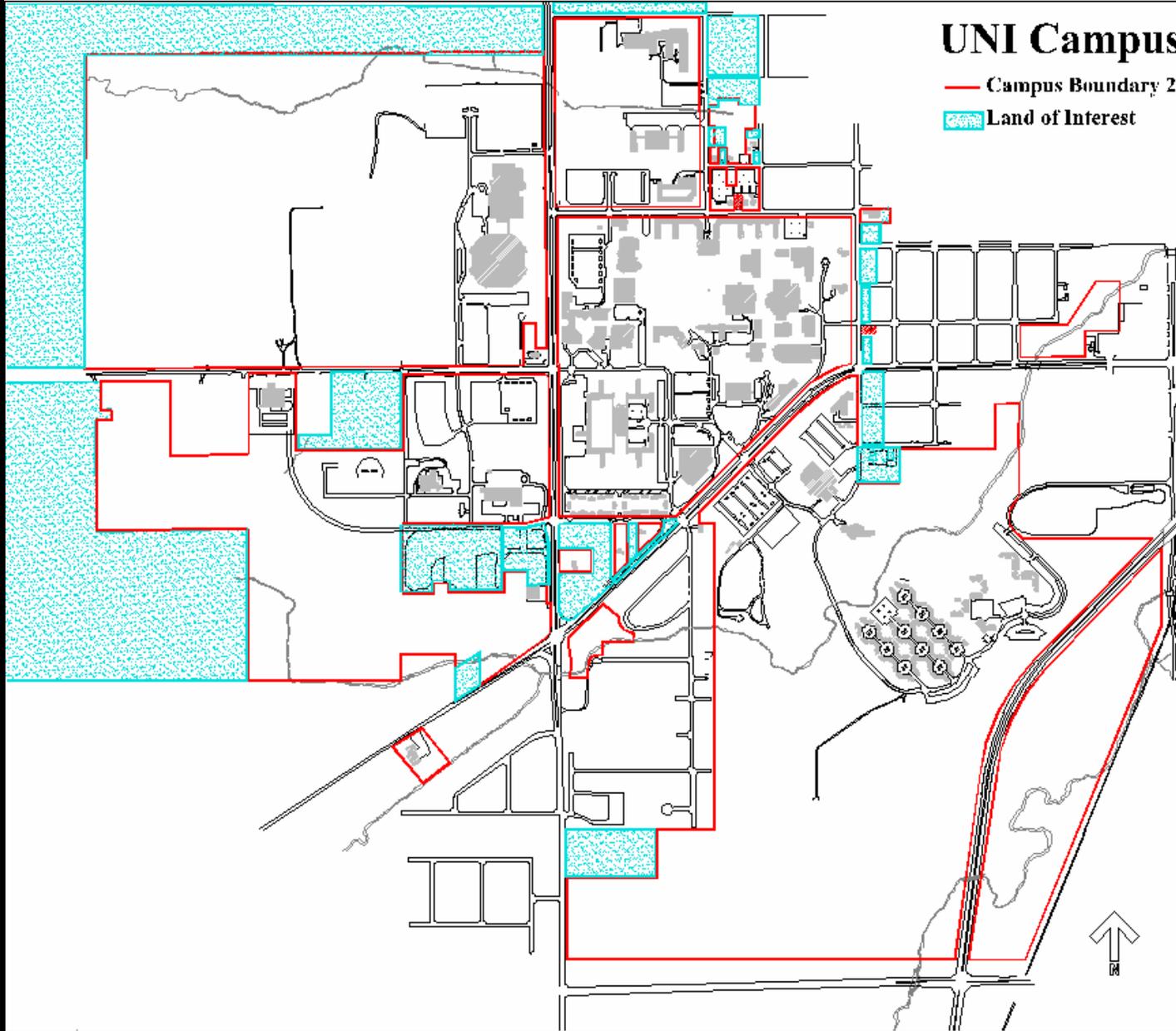
— Campus Boundary 2004 (934 Acres)

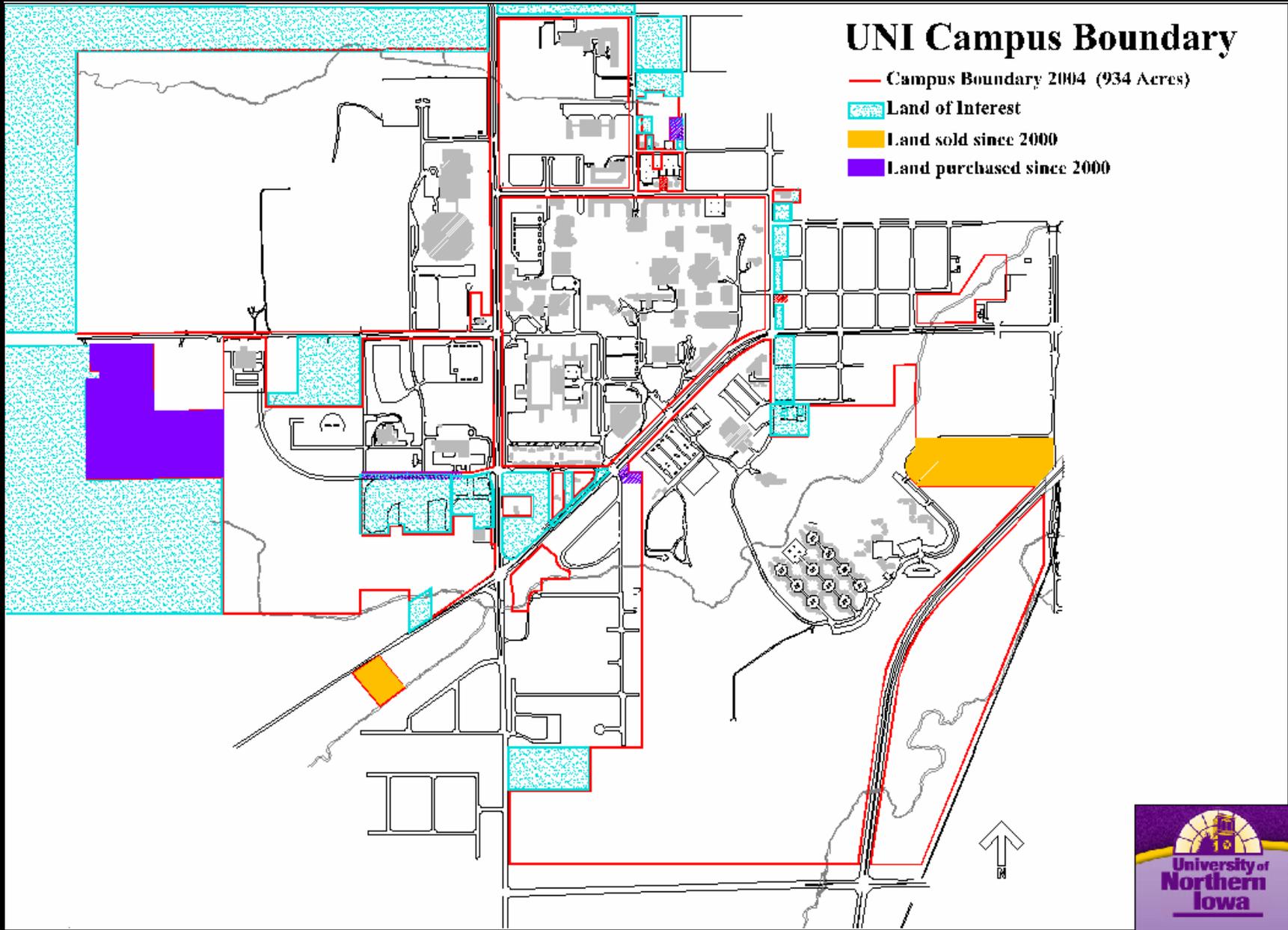


UNI Campus Boundary

— Campus Boundary 2004 (934 Acres)

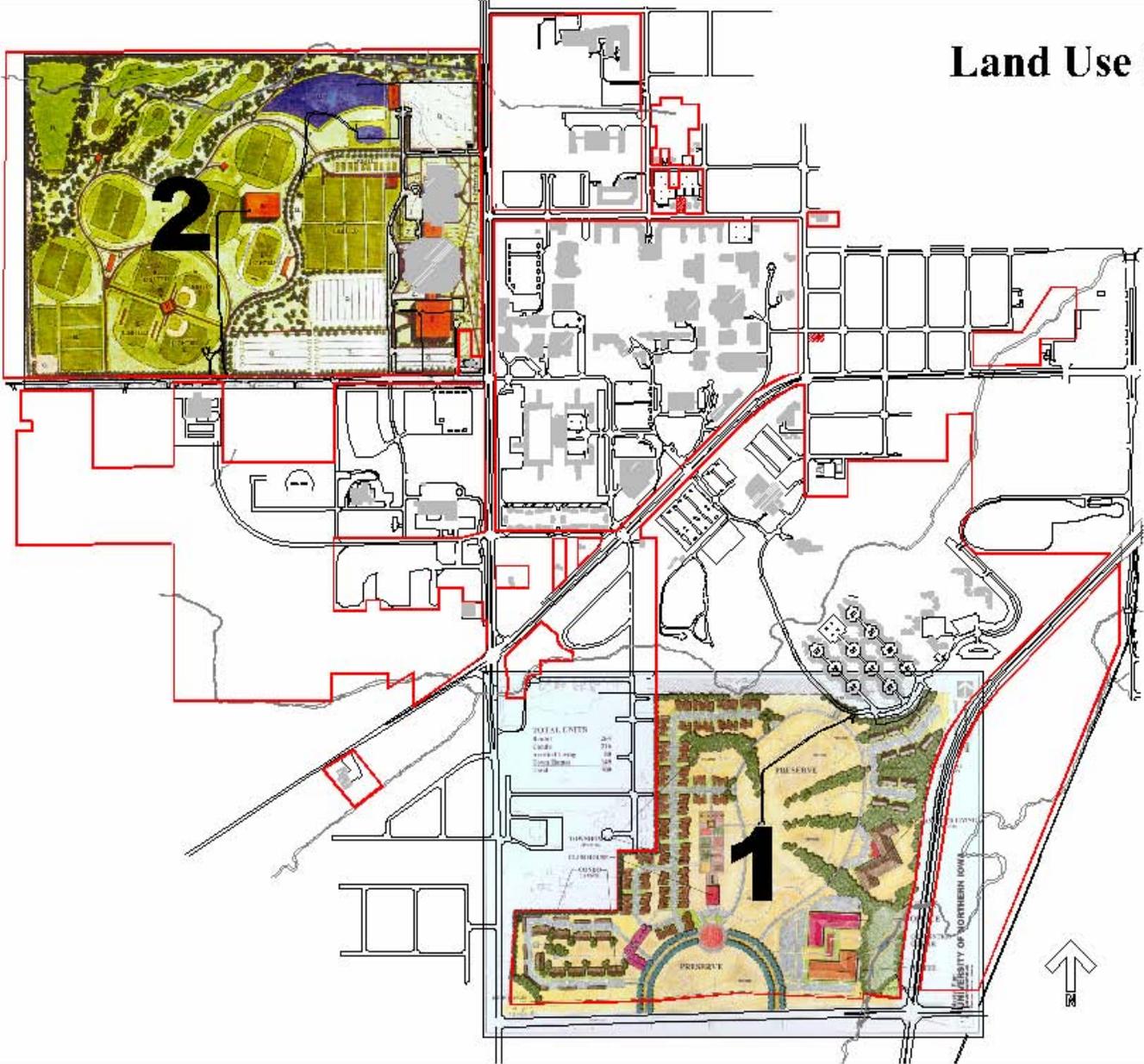
Land of Interest

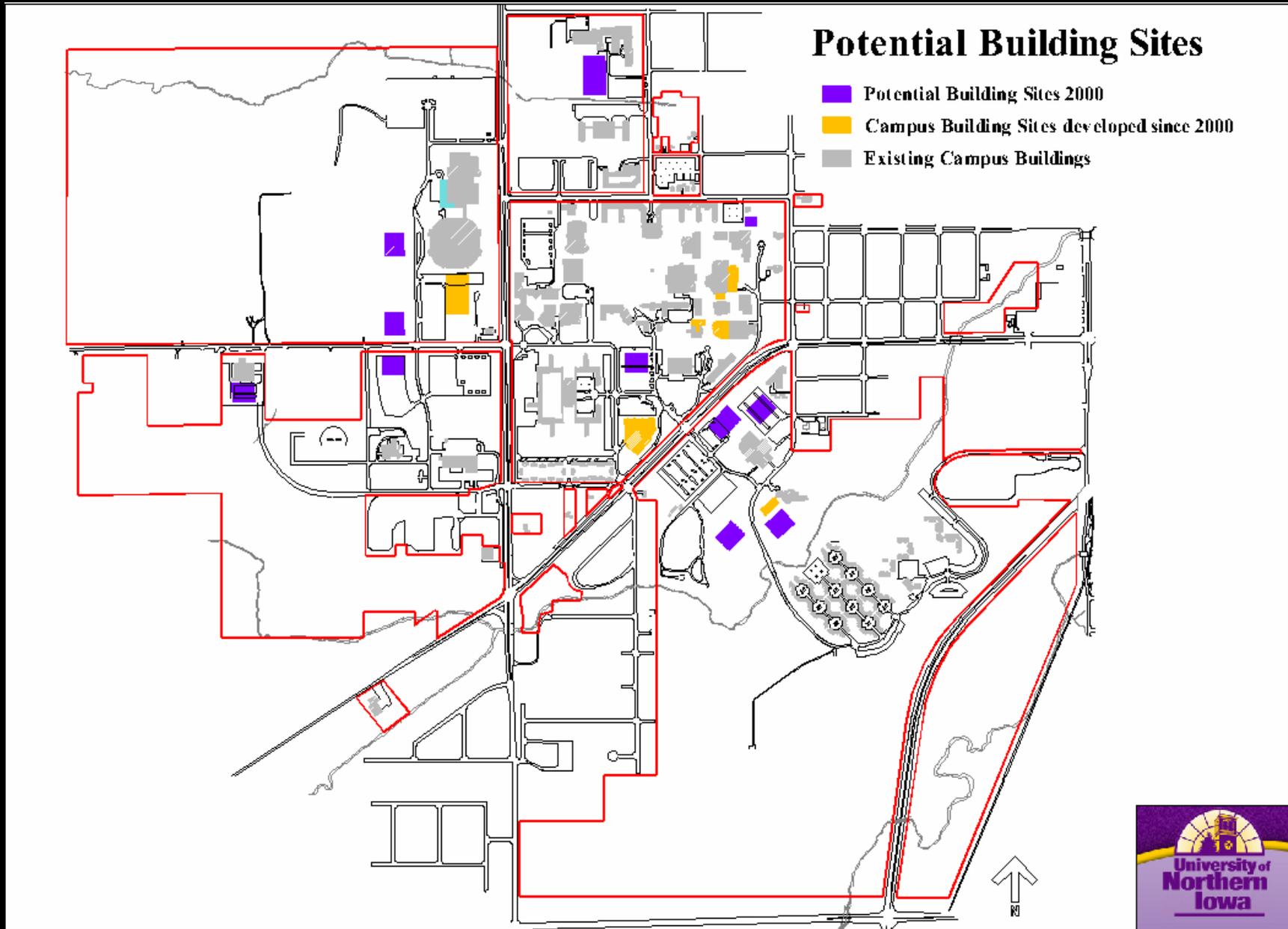




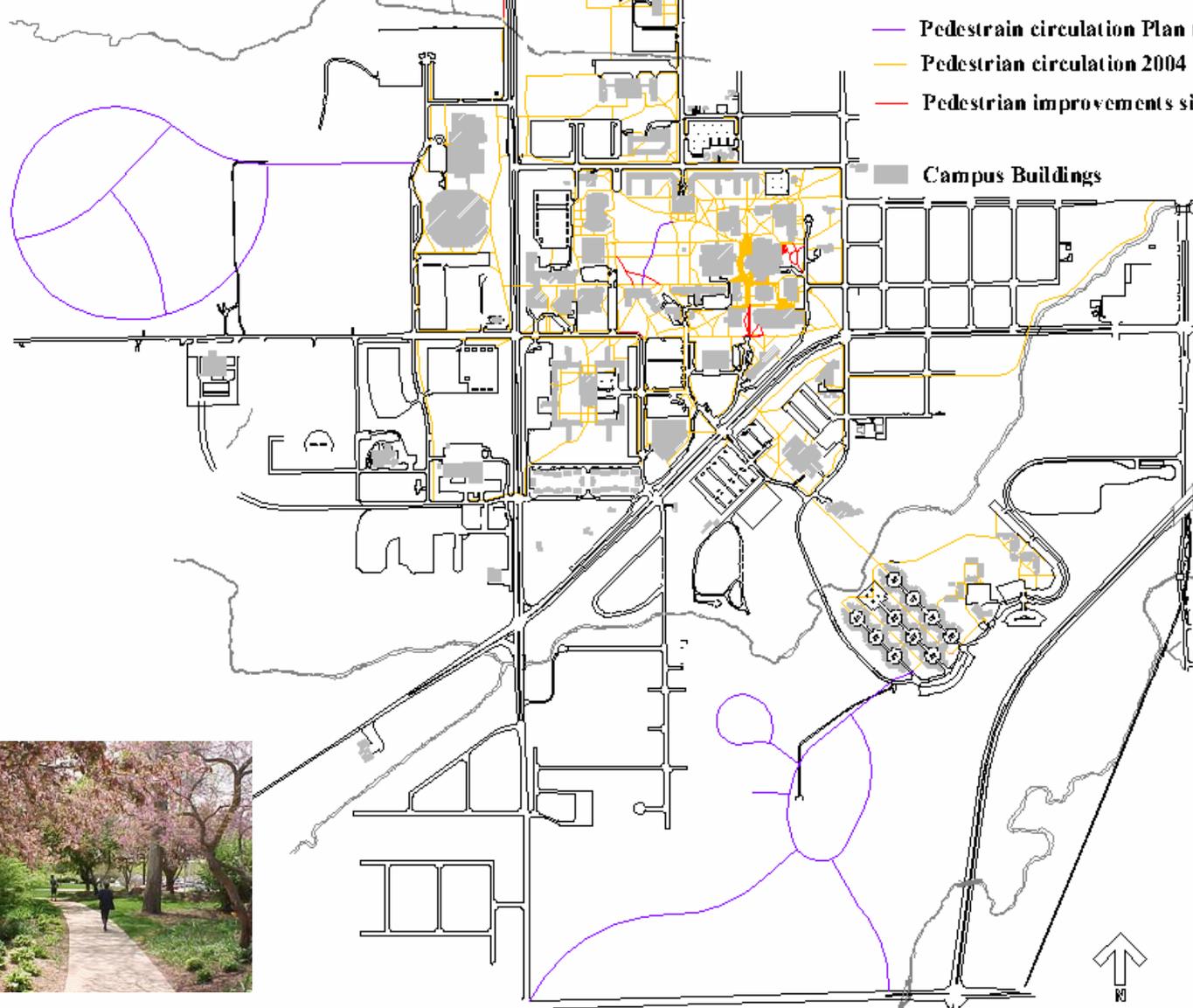
Land Use Studies

Land Use Studies



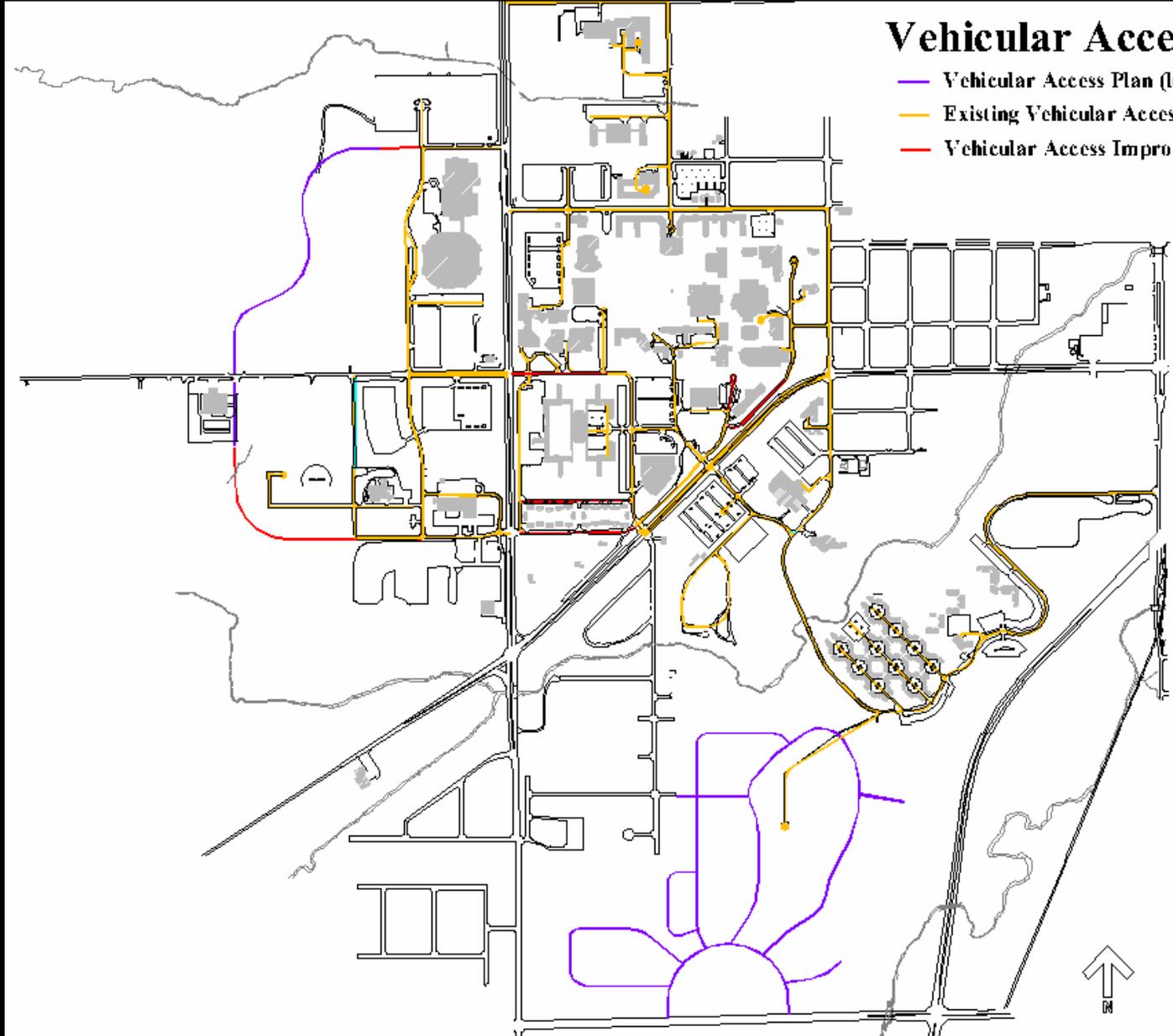


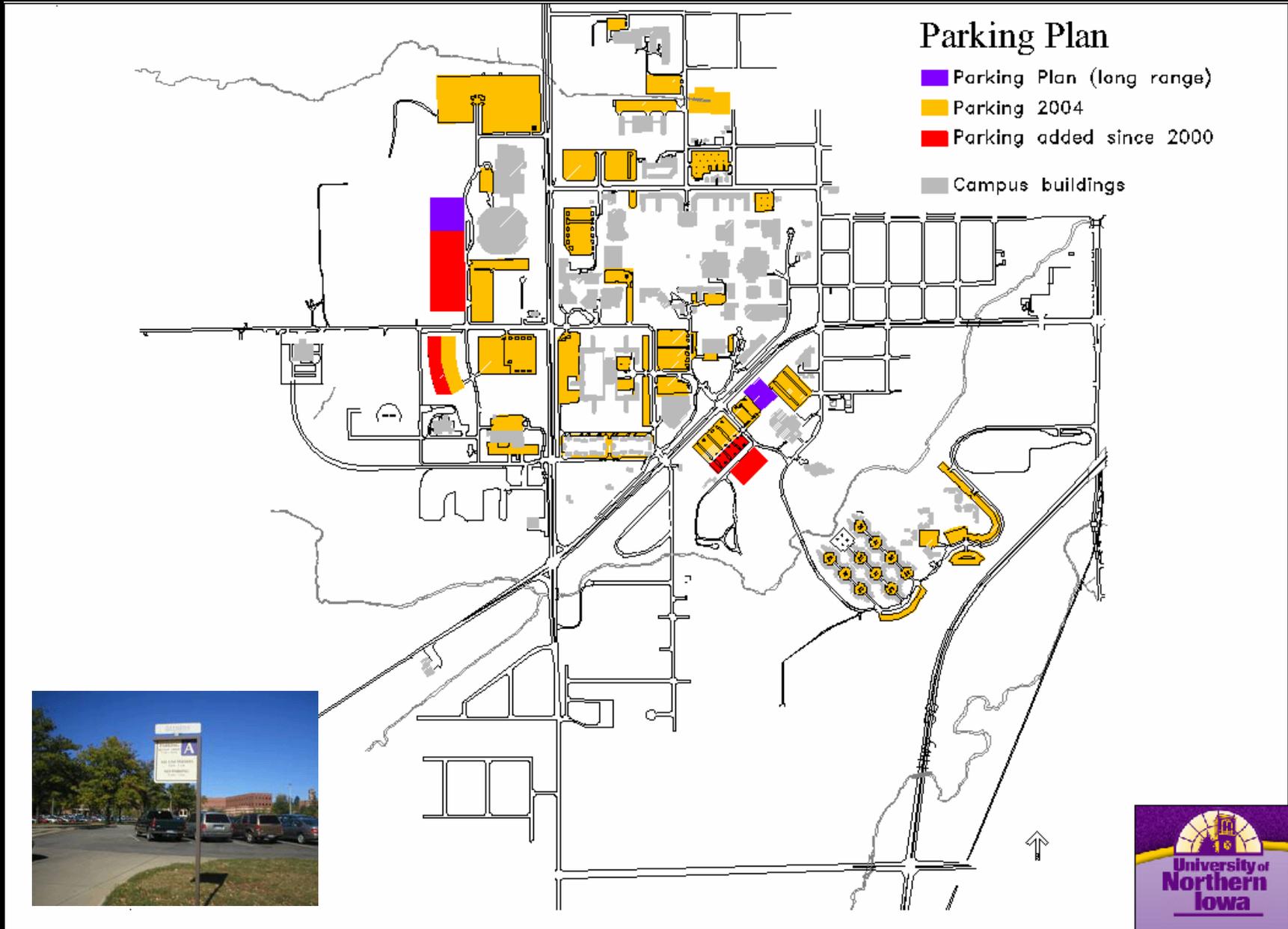
Pedestrian circulation Plan



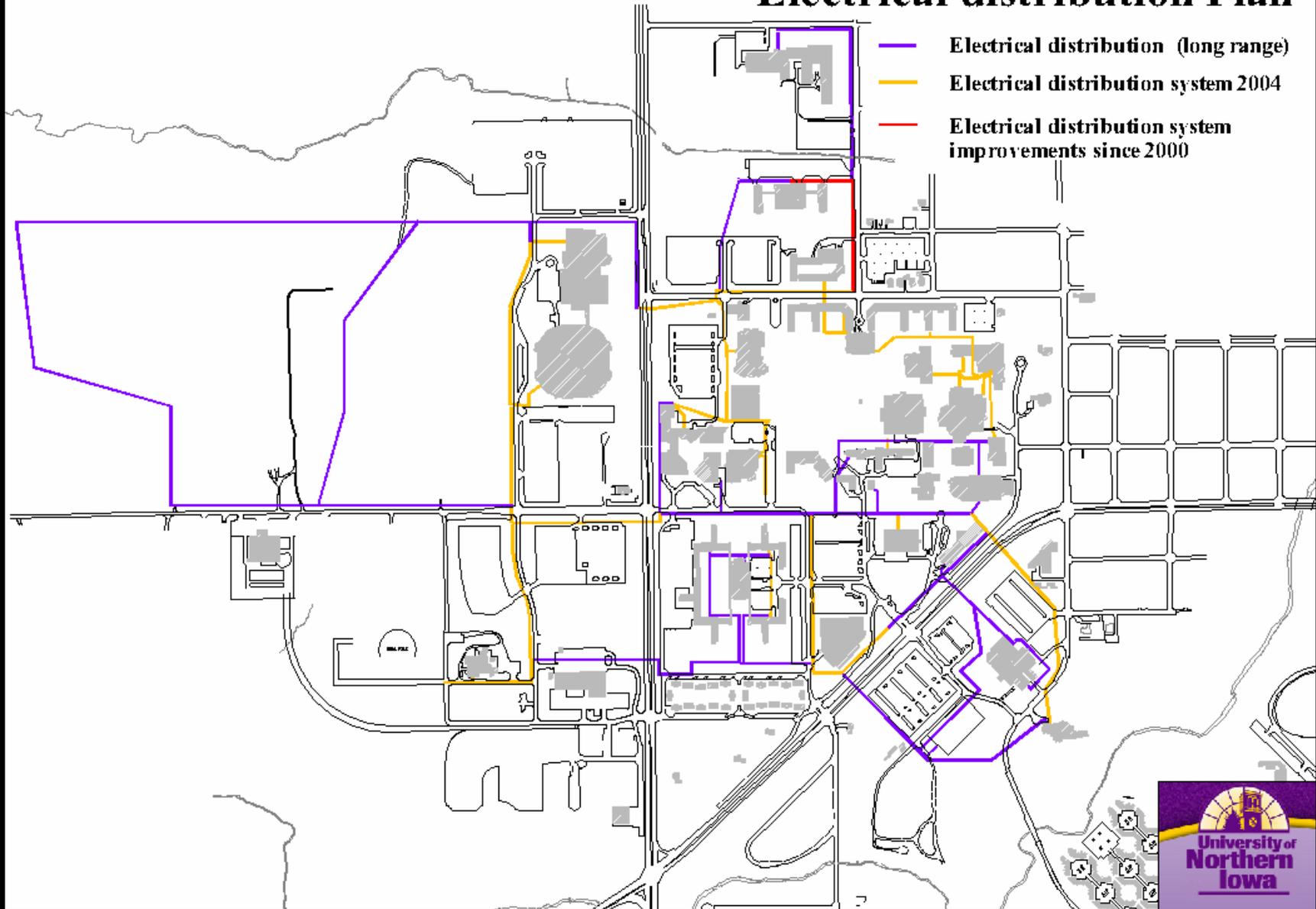
Vehicular Access Plan

- Vehicular Access Plan (long range)
- Existing Vehicular Access 2004
- Vehicular Access Improvements Since 2000



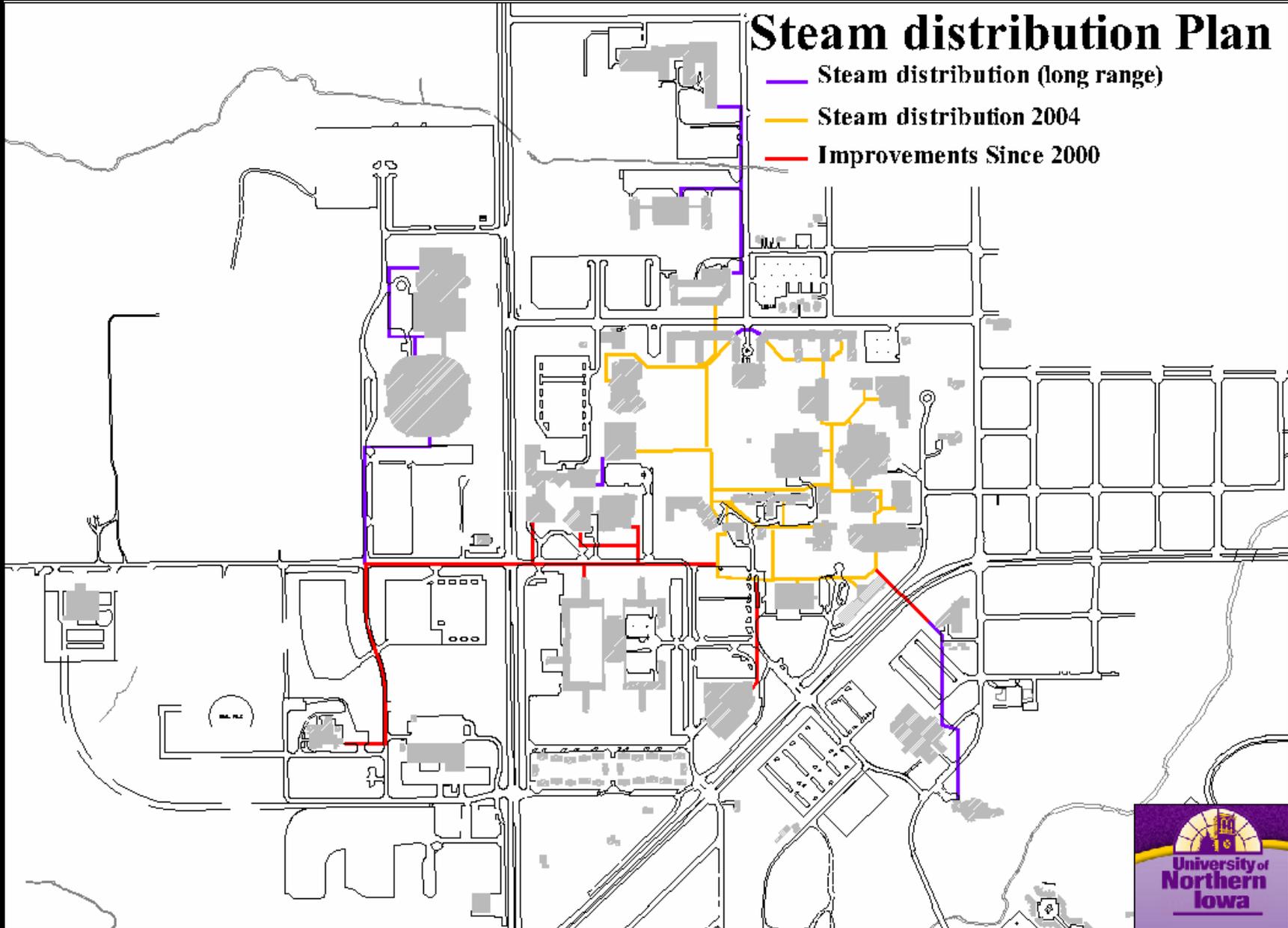


Electrical distribution Plan



Steam distribution Plan

- Steam distribution (long range)
- Steam distribution 2004
- Improvements Since 2000

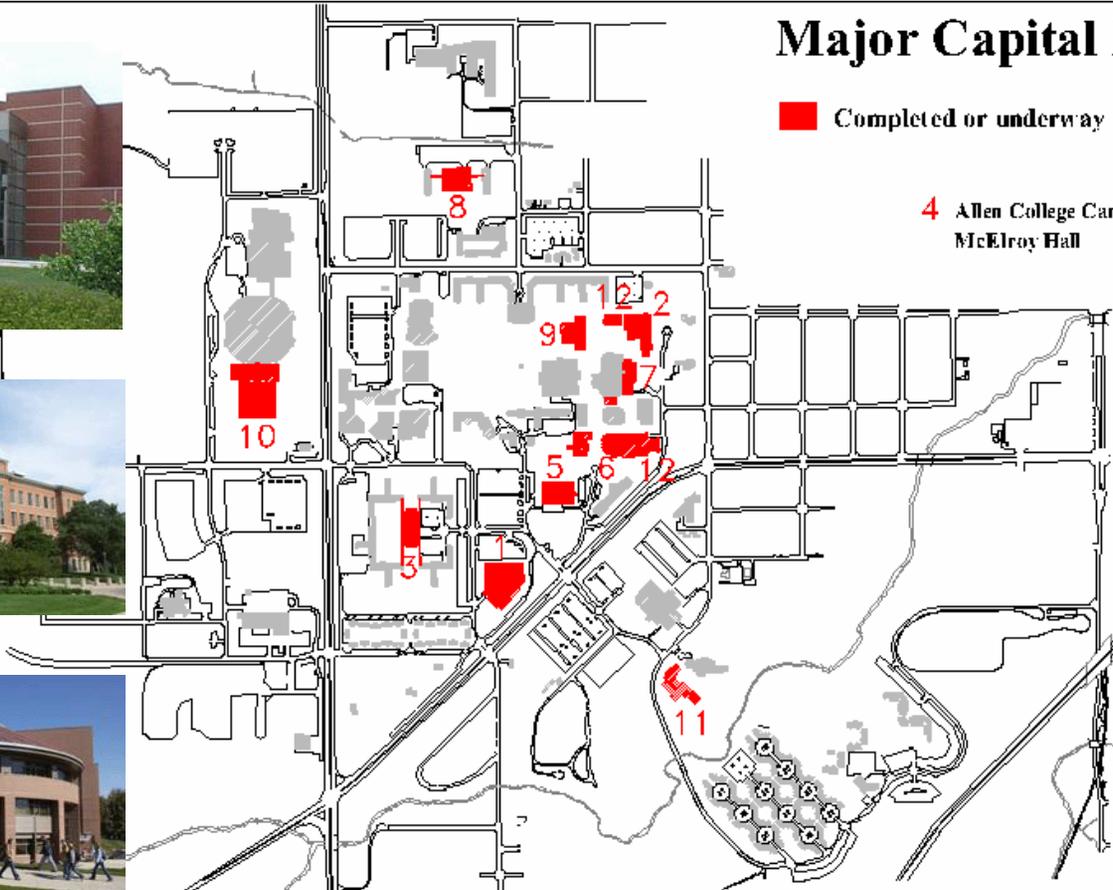


Major Capital Projects

Major Capital Projects

■ Completed or underway since 2000

4 Allen College Campus
McElroy Hall



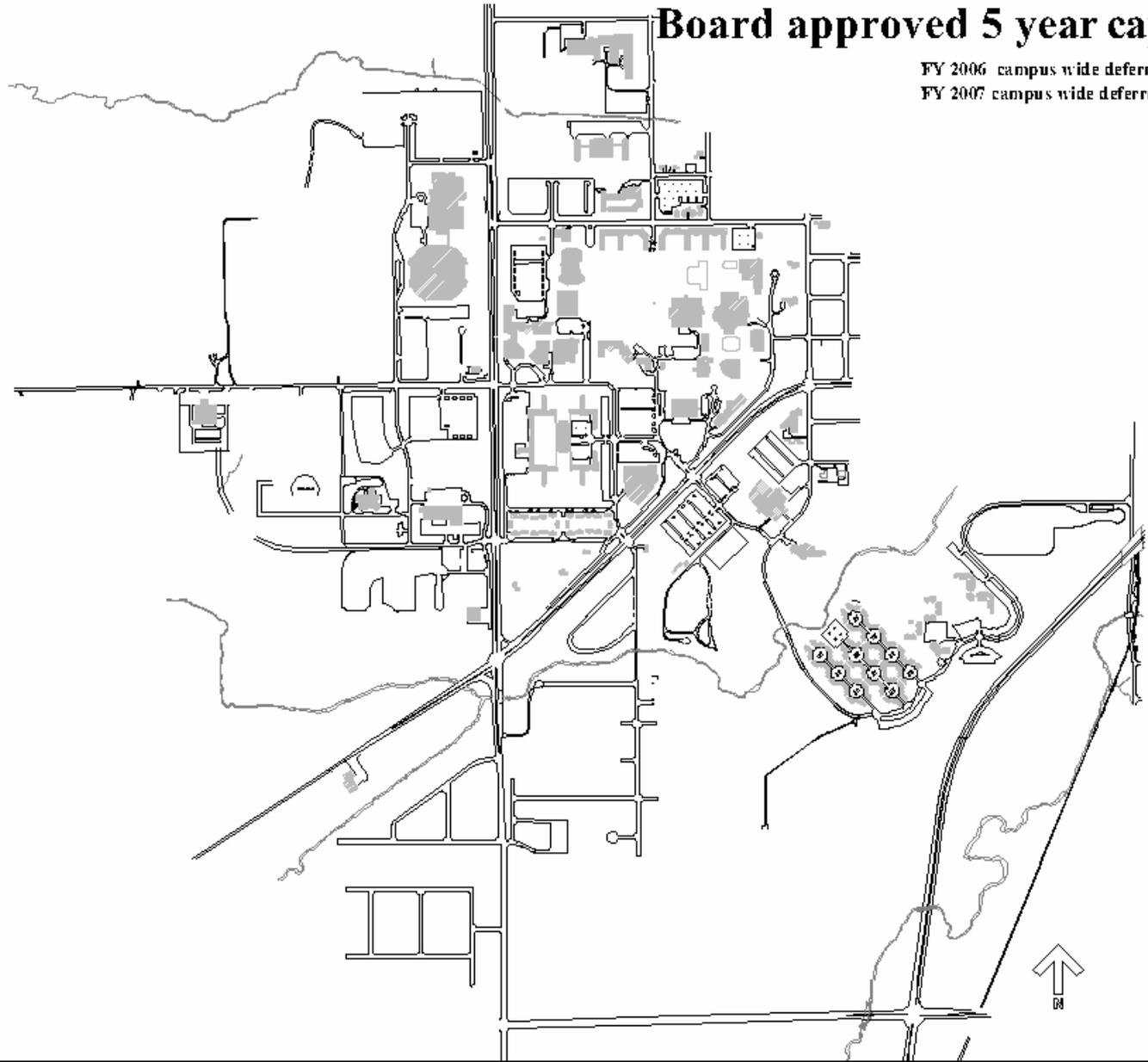
- | | |
|---|--|
| 1 School of Music Classroom Building
Performing Arts Center (2000) | 7 Maucker Union Renovation (2004) |
| 2 Lang Hall Renovation (2001) | 8 Towers Dining Center (2004) |
| 3 Redeker Dining Center
Improvements (2004) | 9 ITTC (under construction) 2006 |
| 4 Early Childhood Development
Center (2004) | 10 McLeod Center (under construction) |
| 5 ISSC Gilchrist Hall (2004) | 11 Business and Community Services
Building |
| 6 McCollum Science Hall
Addition (2004) | 12 Science building Renovations |



Board Approved 5 year Capital Plan

Board approved 5 year capital plan

FY 2006 campus wide deferred maintenance
FY 2007 campus wide deferred maintenance



Board approved 5 year capital plan

FY 2006 campus wide deferred maintenance

FY 2007 campus wide deferred maintenance

■ FY 2008 campus wide deferred maintenance and Sabin Hall Renovation

① Sabin Hall Renovation



Board approved 5 year capital plan



- ① Sabin Hall Renovation
- ② Commons Renovation
- ③ Baker Hall Renovation



- FY 2006 campus wide deferred maintenance
- FY 2007 campus wide deferred maintenance
- FY 2008 campus wide deferred maintenance and Sabin Hall Renovation
- FY 2009 campus wide deferred maintenance Baker Hall renovation and Commons renovation





Board approved 5 year capital plan

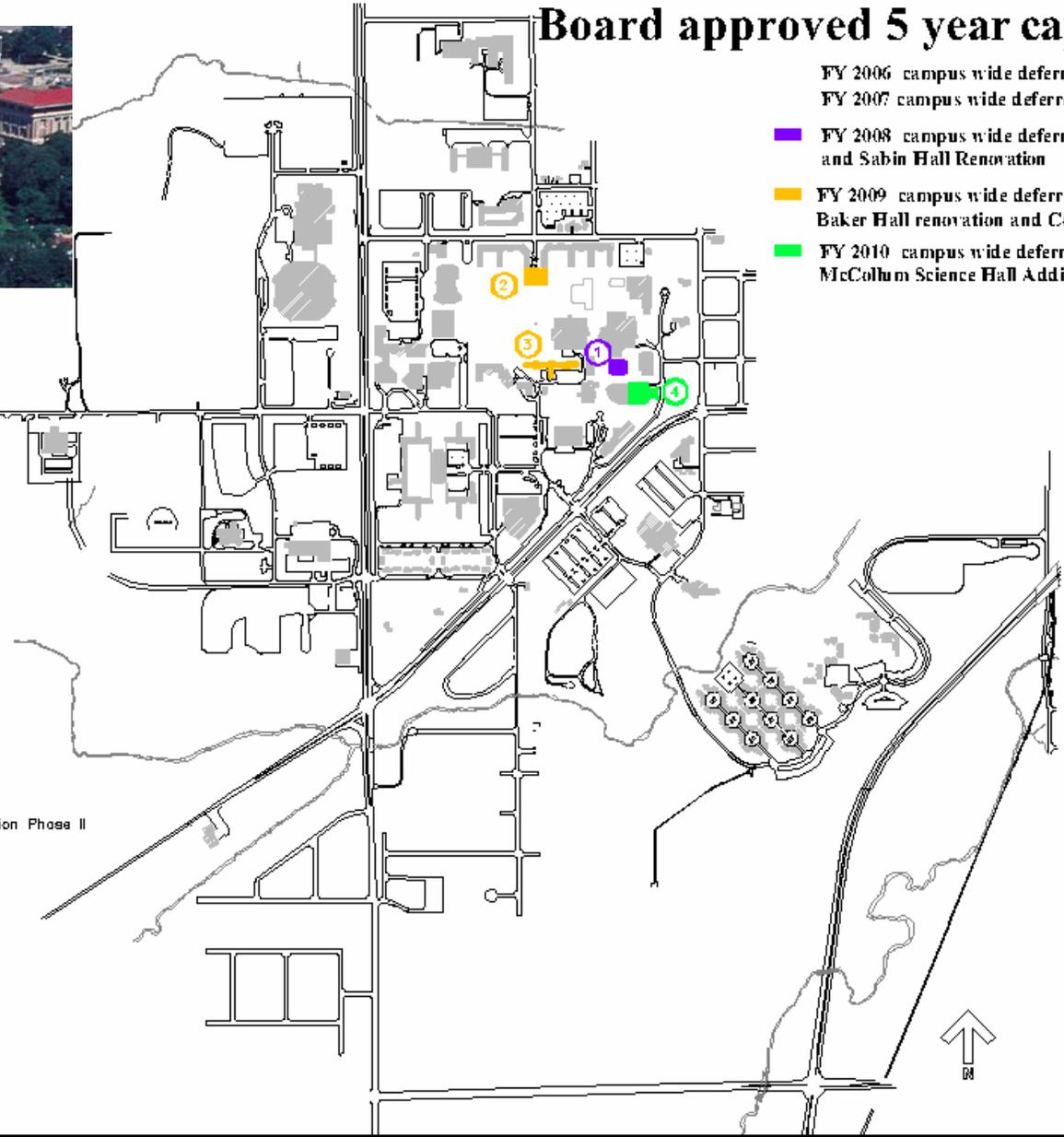
FY 2006 campus wide deferred maintenance
FY 2007 campus wide deferred maintenance

1 FY 2008 campus wide deferred maintenance
and Sabin Hall Renovation

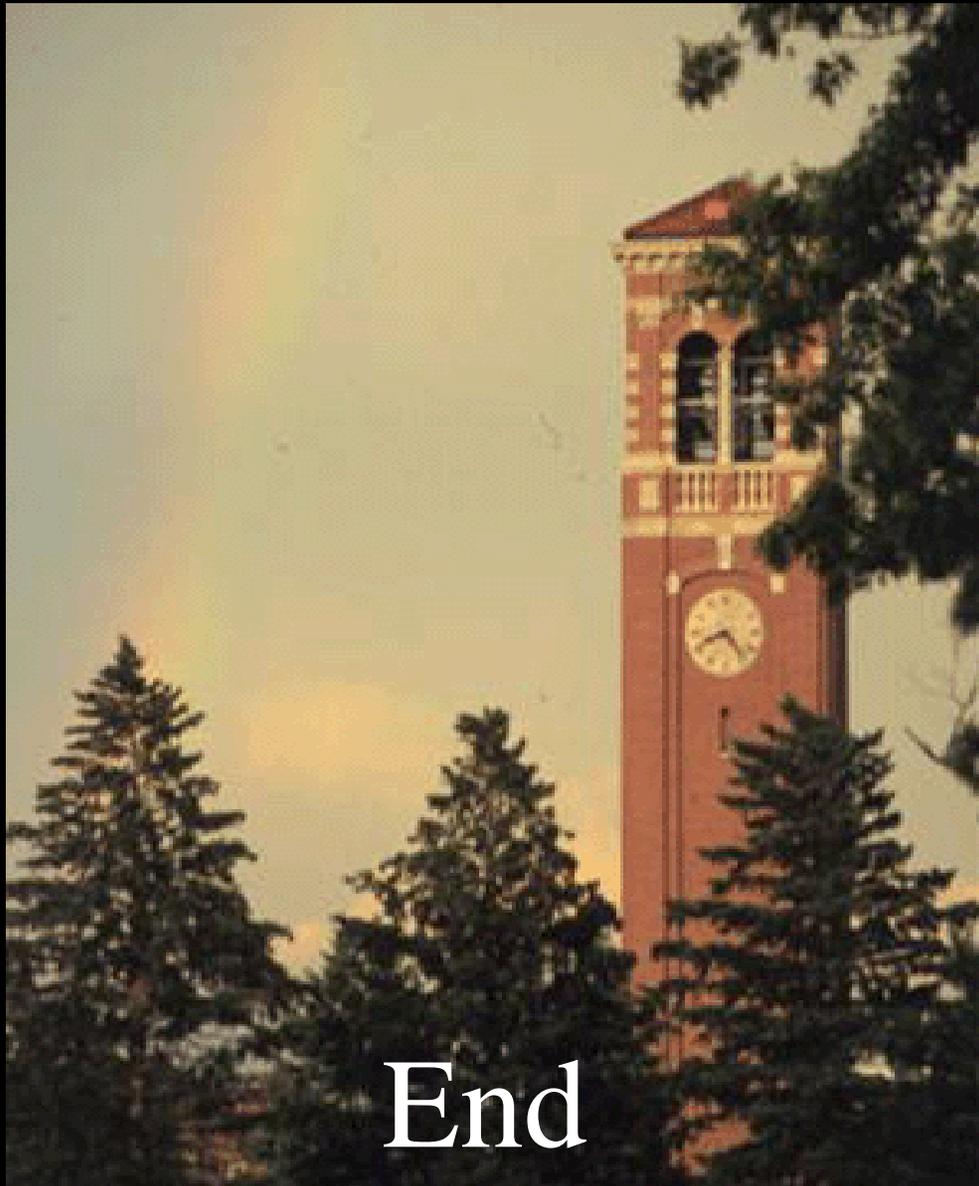
2 FY 2009 campus wide deferred maintenance
Baker Hall renovation and Commons renovation

3 FY 2010 campus wide deferred maintenance
McCollum Science Hall Addition

- 1** Sabin Hall Renovation
- 2** Commons Renovation
- 3** Baker Hall Renovation
- 4** McCollum Science Hall Renovation Phase II







Attachment B Facilities Organizations and Operations

Background and Analysis:

Facilities Organizational Structures

All facility operations are consolidated into one organizational structure at each university. The University of Northern Iowa was the last university to reorganize these services; this reorganization occurred in April, 2004.

Prior to the reorganizations, facilities planning and physical plant operations were two different entities at all three universities.

The reorganizations have provided considerable coordination and collaboration among the units and reduced redundant and unnecessary processes.

Each of the facilities management operations reports to the financial vice president.

However, since the facilities management organizations are responsible for the physical environment on each campus, there is close and essential collaboration with the offices of the provost and the vice presidents for student affairs and their respective units, as well as other campus entities.

SUI

Facilities Management, with a reporting line through the Vice President for Finance & Operations, is responsible for the physical environment of the campus. This requires close and essential collaboration with the Office of the Provost, the University of Iowa Hospitals and Clinics, Intercollegiate Athletics, Vice President for Research, and various student service units (e.g. Residence Services).

Like the rest of the University, Facilities Management is currently engaged in strategic planning; this includes aligning the organization around a culture of facilities stewardship that balances the needs of the institution, the customers and the stakeholders, and makes decisions and takes action from a long-term perspective.

Facilities Management has five major units:

- Campus & Facilities Planning is responsible for campus master planning, space planning and utilization, and classroom equipment services (14 full time equivalent (FTE), 4 student, part-time (S/PT) employees);
- Design & Construction Services manages the design and construction of new campus facilities and renovations (48 FTE, 13 S/PT employees);
- Operations & Maintenance provides grounds, custodial, maintenance

and building management services for general education fund facilities (411 FTE, 18 S/PT employees);

- Utilities & Energy Management provides campus steam, power, chilled water and water services, and manages conservation efforts (113 FTE, 29 S/PT employees); and
 - Administrative Services provides general business support through accounting, human resources and information technology to Facilities Management (31 FTE, 2 S/PT employees).
-

ISU

Iowa State University Facilities Planning and Management completed a strategic planning process in FY 2004. The Department contributes to the University's strategic plan through appropriate asset stewardship to allow the students, staff and faculty to be successful and to have a positive experience.

Facilities Planning and Management is organized into four major functional divisions (effective with the reorganization which occurred on July 1, 2004) and several supporting work units:

- Business Services – 43 FTE (including accounting services, knowledge management, computer support services, auxiliary operations [flight services, postal and parcel services, Veenker Memorial Golf Course], and contract administration / purchasing);
- Planning Services – 10 FTE (including campus planning, landscape design, space management, facilities inventories and studies; and instructional facilities classroom scheduling);
- Facilities Operations – 391 FTE (including design & construction services, facilities services, and utilities services); and
- University Architect – 3 FTE (including design and quality standards, and conceptual planning and design).

Supporting work units include Administration, Safety and Training, and Human Resources.

UNI

In April of 2004, Facilities Planning and Physical Plant operations at the University of Northern Iowa were reorganized into one operation, Facilities Services. The University reports that considerable coordination and collaboration among units have been realized. Continued evaluation is underway to improve the services provided, while reducing redundant and unnecessary processes.

The University of Northern Iowa Facilities Services organization includes 216 FTE (full-time equivalent) positions (prior to budget reductions there were 239.8 FTE positions.) Major functional divisions include: Planning and Construction Services (15 FTE), Physical Plant Services (191 FTE) and Business Services (10 FTE).

The University reports the following benefits from this reorganization:

- Considerable coordination and collaboration among units have been realized; architectural and engineering planning functions have been organized with more direct ties to maintenance and repair services to enhance the quality of work and promote a better end product;
- Campus planning and landscape design have been organized directly with grounds operations to further achieve development of the campus physical environment;
- A facilities coordination center was established to receive all services and planning requests and to provide overall scheduling and coordination activities for all affected services;
- Construction administration and maintenance service operations have been organized to foster increased collaboration during construction activities,
- Business accounting and contract administration functions are being consolidated; and
- Increased emphasis is being placed on collaborative efforts in the areas of safety, environment, energy use and recycling.

ISD

The Director of Facilities at the Iowa School for the Deaf reports to the Superintendent. Areas of responsibility include housekeeping (8 staff), grounds (2 staff), facilities (5 staff) and the recreation utilization coordinator.

IBSSS

The Facilities Team maintains the campus buildings and grounds. A Facilities Manager oversees a staff of nine full and part-time employees, consisting of a Facilities Mechanic III, a Facilities Mechanic II, a Carpenter, a Painter, a Groundskeeper I, a one-fifth time Automotive Mechanic, and two and one-half Custodian I's. In addition, temporary staff are employed as needed for summer groundskeeping, spring and fall cleaning, and special maintenance and improvement projects.

One-half Custodian I position was reduced in the past year to reduce costs in response to lower building space occupancy and budget constraints. The School reports that facilities staffing is approximately one-half of what it was fifteen years ago.

Recent Budget Shortfalls - Operations

The budget shortfalls of recent years have had their effect on facilities. These include reduced custodial service levels, increased energy conservation initiatives, as well as a negative impact on the condition of the facilities through reduced maintenance activities and an increase in deferred maintenance.

SUI

In FY 2005, the University of Iowa made changes in custodial service levels, to reduce operating expenses to the general education fund by \$300,000. Custodial service levels to office space were standardized so that offices are only cleaned once every other week. In addition, external window washing has been eliminated.

The University of Iowa Facilities Management reports that it remains committed to providing a clean and welcoming environment that supports the academic mission. The reductions in custodial service levels have been accomplished with no changes in the cleaning practices or schedules for laboratories and public spaces, which include entrances, hallways, restrooms, and classrooms.

ISU

To accommodate decreased budgets, the University's Department of Facilities Planning and Management (FP&M) has been "rightsizing" its services to match the available resources. Cleaning frequencies have been lowered and thorough project cleaning is being done much less often. In addition, departments are being billed if they wish additional services above the level provided as the FP&M standard.

To gain operational efficiencies, FP&M now operates custodial services, area mechanics, mechanical distribution, and the project control center as self-directed teams.

The University reports that maintenance cycles and preventative maintenance activities have been delayed or eliminated, placing buildings and occupants more at-risk for unanticipated building system outages. Projects that do not immediately affect faculty/staff/student activities are being deferred, and in some cases departments are being asked to contribute toward necessary repairs/improvements so that their projects can proceed.

UNI

Recent budget reductions at the University of Northern Iowa have impacted Facility Services through a reduction in funding for 23.8 FTE staff positions and cutbacks in: a) student employment which have reduced experiential learning opportunities and increased work load for University employees, b) building repair funding which have impacted efforts to maintain facilities, and c) supply and service budgets which have reduced operating efficiency and have impacted efforts to maintain equipment.

The cutbacks have had both an immediate and long-term impact on facilities as custodial, repairs and maintenance activities have all reduced operations and services. The University has indicated that if staffing and supplies can return to the levels prior to the cutbacks, and if allocations of personnel and supplies can be made for new or renovated facilities that have come on line, the long-term facility effects should be minimized.

Facility Operating Costs

Operating costs for university space vary by type of space; new space is more expensive to maintain due to the increased complexity of building systems and increased automation. However, research buildings can be less expensive to clean because many laboratories cannot be routinely cleaned due to the activities and potentially hazardous materials in those spaces.

Energy prices continue to rise and these increases significantly affect the cost to operate the facilities; the price of coal, which is burned in each of the university power plants, has risen almost 50 percent in the past 10 years, with much of the price increase occurring in the last six years. The price for purchased electricity has also risen significantly over the last five years.

SUI

The University of Iowa reports that the annual cost of building maintenance, custodial services and utilities varies from \$4.25 to \$6.65 per gross square foot for general academic space. Annual costs for research and laboratory space are significantly higher, with annual costs ranging from \$9.80 to \$12.25 per gross square foot.

ISU

Iowa State University reports that maintenance, custodial and utility costs for a typical non-research area would range from \$2.40 to \$3.40 per gross square foot, while the same costs for typical research space would range from \$6.40 to \$9.40 per gross square foot.

UNI

The University of Northern Iowa reports a FY 2004 average cost for maintenance, custodial services and utilities of \$2.57 per gross square foot of space.

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.

SUI

The University of Iowa has on-going efforts to reduce energy costs. Burning oat hulls, purchased from Quaker Oats in Cedar Rapids, in place of approximately 30,000 tons of coal, will allow the University to reduce greenhouse gas emissions, utilize a renewable waste product as a resource for Iowa, and save the University approximately \$500,000 per year in coal costs.

In addition, the University routinely designs above the code requirements to receive lower life-cycle costs and take advantage of energy rebates from Mid-American Energy, the local commercial supplier of electricity.

Fluctuations in weather and fuel pricing can have a significant impact on the annual utilities budget, most recently driving costs markedly upward. In April, the stoker coal price was \$73.38 per ton as determined by competitive bidding, which represented an approximate 62% increase, or \$1.6 million, over last year's contract.

To gain greater flexibility and competitiveness in coal contracting, the University's Power Plant completed a test burn on coal with different specifications, allowing a wider range of coals to be bid. The University reported favorable results from this bidding approach. Environmental permits affect the range of coals which can be bid, and the University will need to work with the State to stay within emission limits.

To lead the effort to reduce energy costs by \$1.5 million after adjustments are made for growth, weather variability and fuel pricing, Facilities Management has developed a two-phase energy conservation program that will promote awareness in the University community and target building system improvements with attractive paybacks to achieve reductions in energy demand.

- The first phase of the program is geared toward instituting energy use awareness and is budgeted to reduce energy costs by \$250,000.
- The second phase would remove an additional \$1.25 million from the budget by the end of FY 2007 through investments in systems, technologies and operational practices.

ISU

Iowa State University is in the fourth 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 along with energy conservation suggestions, frequently asked questions, and progress benchmarks. The building specific energy plans call for idling heating, ventilating and air conditioning (HVAC) equipment during off-hours, and revising temperature standards to 68 degrees during the day in winter and 78 degrees during the day in summer.

An exemption process exists whereby sensitive research activities can request more restrictive environmental criteria to protect their activities. These exemptions must be approved, in writing, by the appropriate dean or vice president.

UNI

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 have taken 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.

All new building and remodeling designs are reviewed for energy conserving design. University personnel work closely with consultants during the design process to assure compatibility with existing and planned energy management practices. Life Cycle Cost Analyses are completed for projects as required by Code of Iowa Chapter 470. New building designs and renovations incorporate energy efficient technologies for the heating, ventilating and air conditioning (HVAC) and lighting systems. Where economically feasible, variable air volume (VAV) systems with variable frequencies drives are used.

Although a number of additional energy conservation measures have been accomplished, the University reports that no formal energy audits have been completed since 1989 due to funding constraints. An effort to audit buildings which will not be remodeled in the near future will be evaluated for lighting opportunities by internal staff as time permits.

ISD

Iowa School for the Deaf reports that the School continues to pursue methods to reduce the cost and consumption of purchased utilities. Recent projects include the installation of new control valves in the Administration Building and new windows in the Girls Residence. Some of the windows in the Power Plant have been replaced and the School plans to finish the replacement this fiscal year.

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. Work on the installation of new steam mains and returns, along with new thermal pipe insulation, is proceeding. The School also continues to review and improve its operating and maintenance procedures to reduce energy consumption.

IBSSS

Iowa Braille and Sight Saving School reports that the efforts of recent years to reduce energy consumption through conservation and efficiency improvements continued during FY 2004.

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.

At its December 2004 meeting, the Board approved a project description and budget for the Old Main Building – Heating, Ventilating and Air Conditioning (HVAC) Improvements project which will install a geothermal heat pump system to upgrade the heating and cooling systems for the Old Main Building.

The School reports that it will continue to make every effort possible to conserve energy through operating practice improvements and energy efficiency upgrades.

Attachment C
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.

Deficiencies

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.

Prioritization of Fire Safety Deficiencies

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 doorstop 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.

Environmental Safety Issues

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:

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.

Deferred Maintenance as National Problem

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 lives or have become obsolete.

Deferred maintenance in higher education is a national problem and is partially the result of the 1960s and 1970s building boom.

A 1995 study by the Association of Higher Education Facilities Officers, the National Association of College and University Business Officers, and Sallie Mae, which was reported in A Foundation to Uphold, estimated \$26 billion in total costs to eliminate accumulated deferred maintenance in American higher education.

- Urgent needs (conditions which, if not attended to in the next year,

will further deteriorate and become more costly to remedy in the future) were estimated at \$5.7 billion.

- At the time the study was completed, the average public research university spent \$2.3 million annually on deferred maintenance against a deferred maintenance backlog of approximately \$64 million.

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.

Prior State Support

The history of prior state support in correcting fire and environmental safety deficiencies and deferred maintenance is summarized below:

1990 General Assembly — \$6 million in Academic Building Revenue Bonds for the Regent universities for fire and environmental safety projects.

1991 General Assembly — \$20 million in Academic Building Revenue Bonds for deferred maintenance, fire and environmental safety, equipment and utility projects at the universities.

1994 General Assembly — \$2 million in Academic Building Revenue Bonds for fire and environmental safety and deferred maintenance at the universities.

1995 General Assembly — \$5 million capital appropriation from the Rebuild Iowa Infrastructure Fund for fire and environmental safety, renovation and deferred maintenance at the universities.

1995, 1997 and 1998 General Assemblies – Appropriated Rebuild Iowa Infrastructure Funds for fire safety improvements and installation of the visual alert system at the Iowa School for the Deaf.

1996, 1997, 2000 and 2002 General Assemblies – Appropriated capital funds for major renovations; fire safety issues and deferred maintenance were and are being addressed as part of the following renovations:

- SUI – Biological Sciences Phases I and 2, Seaman Centers for the Engineering Arts projects;
- ISU – Gilman Hall Systems Upgrade; and
- UNI – Lang Hall Renovation, and Integrated Teaching and Technology Center (East Gym Renovation).

2004 General Assembly authorized \$120 million in bonding authorization including the following projects which will correct significant amounts of deferred maintenance and fire safety deficiencies:

- SUI – Chemistry and Art, Phase II Renovations;
- ISU – Veterinary Medicine and Coover Hall projects; and
- UNI – Science Buildings and Russell Hall Renovations

The major funding sources for fire safety and deferred maintenance projects completed from FY 1993 through FY 2004 at the universities (excluding UIHC) and special schools are summarized below:

**Major Sources of Funding
FY 1993 – FY 2004**

<u>Fund Sources</u>	<u>Fire & Environ. Safety</u>	<u>Deferred Maintenance*</u>	<u>Total</u>
General Fund Operating Budget Building Renewal (Repair Funds)	\$12.5 million	\$ 70.5 million	\$ 83.0 million
Utility Renewal and Replacement Funds (restricted funds)	-----	28.2 million	28.2 million
Proceeds from Academic Building Revenue Bonds and Capital Appropriations, (restricted funds)	7.0 million	15.0 million	22.0 million
Income from Treasurer's Temporary Investments (restricted funds)	5.4 million	10.4 million	15.8 million
Other	0.6 million	15.0 million	
Total	\$25.5 million	\$138.6 million	\$164.1 million
* Includes only individual deferred maintenance items and not those corrected as part of major renovations.			

Building Repair Budgets

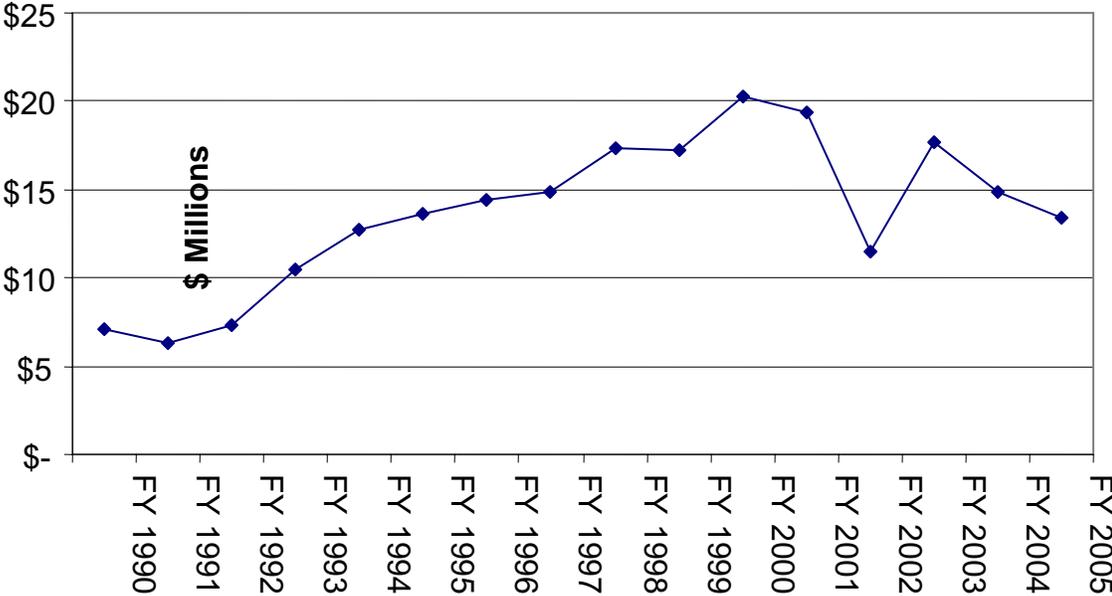
As summarized in the table above, operating budget building repair, general university funds provided approximately 50% of the total dollars expended for fire safety improvements and individual deferred maintenance projects completed from FY 1993 – FY 2004.

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 \$13.4 million in FY 2005.

The following graph illustrates the operating budget, general fund building repair expenditures since 1990.

General Operating Fund Expenditures for Building Repairs*
All Regent Institutions



*FY 2005 budgeted amount, as approved by Board in June 2004.

The FY 2005 budgeted amount represents approximately 0.4% of the estimated \$3.6 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 increased deferred maintenance and have hindered the institutions' abilities to correct fire and environmental safety deficiencies. 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 Safety

Expenditures

From FY 1993 (the first year in which data were collected) through FY 2004, fire safety projects (excluding components of major renovations projects) totaled \$39.2 million in general fund facilities (an average of \$3.27 million per year) as summarized below:

	<u>Total</u>
University of Iowa	\$15.9 million
University of Iowa Hospital and Clinics	13.6 million
Iowa State University	7.0 million
University of Northern Iowa	1.5 million
Iowa School for the Deaf	0.9 million
Iowa Braille and Sight Saving School	<u>0.2 million</u>
Total	\$39.2 million

Projects planned for or continued in FY 2005 total \$4.3 million. (See Table 1, page 97.)

Institutions indicate that \$4.4 million are needed to correct fire safety deficiencies in general fund facilities identified in past inspections by the State Fire Marshal. (This amount excludes FY 2005 planned work and work to be accomplished as part of major renovations.)

The following table provides a summary from Fall 2000 through Fall 2004 of the institutional estimates of additional funds 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 Marshal¹
General Fund Facilities

(\$ Thousands)

	Fall 2000 (FY 2001)	Fall 2001 (FY 2002)	Fall 2002 (FY 2003)	Fall 2003 (FY 2004)	Fall 2004 (FY 2005)
SUI ²	\$3,208.1	\$3,610.8	\$3,263.0	\$3,261.3	\$3,168.7
ISU ³	524.7	2,033.6	1,733.9	1,541.7	1,047.3
UNI	0.0	0.0	0.0	0.0	200.0
ISD	0.0	85.0	60.0	54.0	25.0
IBSSS	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Total	<u>\$3,732.8</u>	<u>\$5,729.4</u>	<u>\$5,056.9</u>	<u>\$4,857.0</u>	<u>\$4,441.0</u>

¹Excludes work: to be included as part of major renovations in the Board's Five-Year Capital Program, in buildings to be demolished, for which waivers from the State Fire Marshal are to be requested; and to be undertaken in each of the respective years.

² Estimated cost for the University of Iowa to complete the fire safety program for all general fund and Oakdale buildings (also includes city of Iowa City identified items). No costs associated with work at UIHC are included as the corrective action has not been identified by the State Fire Marshal.

³ Does not include additional fire and building safety items identified by institutional personnel or improvements needed to address deficiencies at the Chemical Waste Handling Facility. A new Regulated Materials Facility is currently under construction.

The University of Iowa, Iowa State University and the Iowa School for the Deaf each reported this year a small decline in funds needed to correct deficiencies identified by the State Fire Marshal's Office. The University of Northern Iowa reports an increase in funds needed to correct the deficiencies.

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.

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.

The Board Office has applied on behalf of the Iowa School for the Deaf for funding from the Iowa Demonstration Construction Grant Program – Fire (Life) Safety Grant. These grants will fund projects to remedy fire (life) safety defects. The Board was allocated \$25,000 for the program for the special schools. Awards are scheduled to be announced no later than March 14, 2005.

Iowa School for the Deaf will be able to address with these funds the remaining citations from the most recent inspection by the State Fire Marshal's Office.

Environmental Safety

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 2004, deferred maintenance projects totaling \$138.6 million (an average of \$11.55 million per year) were completed by the Regent institutions in general fund buildings and utilities as outlined in the following table:

	<u>Total</u>
University of Iowa	\$ 57.5 million
Iowa State University	50.0 million
University of Northern Iowa	24.0 million
Iowa School for the Deaf	4.5 million
Iowa Braille and Sight Saving School	<u>2.6 million</u>
Total	\$138.6 million

Projects planned for or continued in FY 2005 total \$34.4 million. (See Table 2, page 98.)

Deferred maintenance can also be corrected as part of a major renovation project. Completed university renovation projects which have corrected a significant amount of deferred maintenance include:

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

ISU – Catt Hall Renovation, Gilman Hall Systems Upgrade, State Gym and Beardshear Hall Renovations; and

UNI – Seerley, Wright and Lang Halls Renovations.

Renovations The FY 2004 bonding authorization of \$120 million for the following projects will correct a significant amount of deferred maintenance:

- SUI Chemistry Building Renovation
- SUI Art Building, Phase II
- ISU Veterinary Teaching Hospital / Diagnostic Lab
- ISU Coover Hall, Information Science
- UNI Science Buildings Renovations

Total Deferred Maintenance The following table summarizes the deferred maintenance reported by the institutions. Individual projects and components of major projects on the Board's Five-Year State-Funded Capital Plan (FY 2006 – FY 2010) are shown separately. (Dollar amounts for projects to be undertaken in FY 2005 and the deferred maintenance components of ongoing 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. (The University of Iowa reports that estimates provided previously understated the amount of deferred maintenance. The University has embarked on a comprehensive facilities condition assessment auditing process.)

Total Deferred Maintenance
Fall 2004*
(\$ Thousands)

	<u>SUI</u>	<u>ISU</u>	<u>UNI</u>	<u>ISD</u>	<u>IBSSS</u>	<u>Total</u>
<u>Individual Projects:</u>						
Buildings**	\$ 18,299.9	\$ 98,510.7	\$ 35,546.3	\$ 1,470.0	\$ 770.0	\$154,596.9
Utilities	<u>3,577.7</u>	<u>9,841.0</u>	<u>23,835.0</u>	<u>145.0</u>	<u>50.0</u>	<u>37,448.7</u>
Total	\$ 21,877.6	\$108,351.6	\$ 59,381.3	\$ 1,615.0	\$ 820.0	\$192,045.6
<u>Incorporated into Major Renovation Projects, Board's Five-Year Plan for State Funding:</u>						
Buildings**	\$ 12,345.8	\$ 4,040.4	\$ 11,901.0	\$ 0.0	\$ 0.0	\$ 28,287.2
Utilities	<u>0.0</u>	<u>0.0</u>	<u>42.9</u>	<u>0.0</u>	<u>0.0</u>	<u>42.9</u>
Total	\$ 12,345.8	\$ 4,040.4	\$ 11,944.9	\$ 0.0	\$ 0.0	\$ 28,330.2
<u>Grand Total:</u>						
Buildings**	\$ 30,645.7	\$102,551.1	\$ 47,447.4	\$ 1,470.0	\$ 770.0	\$182,884.2
Utilities	<u>3,577.7</u>	<u>9,841.0</u>	<u>23,877.9</u>	<u>145.0</u>	<u>50.0</u>	<u>37,491.6</u>
Total	\$ 34,223.4	\$112,392.1	\$ 71,325.3	\$ 1,615.0	\$ 820.0	\$220,375.8
*Does not include dollar amounts for projects to be undertaken in FY 2005 and the deferred maintenance components of ongoing renovation projects.						
** Includes site work.						

UIHC has not reported deferred maintenance. The UIHC Capital Budget

Guidance Team, which is responsible for reviewing all requests for capital construction projects, equipment, software, furniture and infrastructure, develops the recommended capital budget for UIHC by selecting those items that best meet UIHC's mission. In addition to developing a recommended capital budget for FY 2005-06, the Team will develop a listing of items that meets the definition of "deferred maintenance" as outlined in this memorandum.

Comparisons

The following table compares the total deferred maintenance reported from Fall 2000 (FY 2001) through Fall 2004 (FY 2005) as part of the annual governance reports. Items to be undertaken during the current year and ongoing renovation (major) projects are excluded.

	<u>Fall 2000</u> <u>(FY 2001)</u>	<u>Fall 2001</u> <u>(FY 2002)</u>	<u>Fall 2002</u> <u>(FY 2003)</u>	<u>Fall 2003</u> <u>(FY 2004)</u>	<u>Fall 2004</u> <u>(FY 2005)</u>
	(\$ in 000's)				
SUI					
Buildings	\$ 28,136.0	\$ 29,236.1	\$ 30,879.9	\$ 30,296.4	\$ 30,645.7
Utilities	<u>8,104.0</u>	<u>4,284.1</u>	<u>3,040.0</u>	<u>2,577.7</u>	<u>3,577.7</u>
SUI Total	\$ 36,240.0	\$ 33,520.2	\$ 33,919.9	\$ 32,874.1	\$ 34,223.4
ISU					
Buildings	\$ 45,777.3	\$ 47,275.2	\$ 46,039.3	\$ 49,041.4	\$102,551.1
Utilities	<u>12,168.0</u>	<u>11,990.0</u>	<u>11,552.0</u>	<u>11,228.0</u>	<u>9,841.0</u>
ISU Total	\$ 57,945.3	\$ 59,265.2	\$ 57,591.3	\$ 60,269.4	\$112,392.1
UNI					
Buildings	\$ 23,829.0	\$ 24,871.0	\$ 24,724.0	\$ 24,437.0	\$ 47,447.4
Utilities	<u>32,605.0</u>	<u>26,099.0</u>	<u>27,483.0</u>	<u>27,997.0</u>	<u>23,877.9</u>
UNI Total	\$ 56,434.0	\$ 50,970.0	\$ 52,207.0	\$ 52,434.0	\$ 71,325.3
ISD					
Buildings	\$ 1,485.0	\$ 1,195.0	\$ 1,180.0	\$ 1,110.0	\$ 1,470.0
Utilities	<u>340.0</u>	<u>145.0</u>	<u>125.0</u>	<u>125.0</u>	<u>145.0</u>
ISD Total	\$ 1,825.0	\$ 1,340.0	\$ 1,305.0	\$ 1,235.0	\$ 1,615.0
IBSSS					
Buildings	\$ 1,085.0	\$ 800.0	\$ 670.0	\$ 669.0	\$ 770.0
Utilities	<u>50.0</u>	<u>30.0</u>	<u>20.0</u>	<u>30.4</u>	<u>50.0</u>
IBSSS Total	\$ 1,135.0	\$ 820.0	\$ 690.0	\$ 699.4	\$ 820.0
Totals					
Buildings	\$100,312.3	\$103,377.3	\$103,493.2	\$105,553.8	\$184,884.2
Utilities	<u>53,267.0</u>	<u>42,548.1</u>	<u>42,220.0</u>	<u>41,958.1</u>	<u>37,491.6</u>
Grand Total	\$153,579.3	\$145,925.4	\$145,713.2	\$147,511.9	\$220,375.8
Excludes work planned to be undertaken during identified year and work in ongoing renovation projects.					

Totals The institutions, in total, report a significant increase in deferred maintenance in fall 2004 compared to fall 2000 through fall 2003.

The institutions have indicated that the operating budget reductions of recent years have negatively impacted their ability to adequately maintain their facilities, to mitigate deferred maintenance, and to correct identified deferred maintenance items.

In addition to the effect of the budget reductions, the institutions have provided the following explanations for the changes reported in fall 2004.

SUI As noted above, the University of Iowa Department of Facilities Management suspects that past estimates of the magnitude of the deferred maintenance backlog may have been understated. It has, therefore, embarked on a comprehensive facilities condition assessment auditing process; the assessment of general fund buildings is scheduled to be completed by the end of the fiscal year.

This assessment will review and amend as necessary the existing backlog of maintenance and deficient conditions, including deferred maintenance, capital renewal and plant adaptation (code compliance, regulatory changes, facility use changes). The consulting firm hired by the University to undertake the assessment is also recalculating and updating the replacement values of the University's facilities.

The University believes that this initiative, with its resultant detailed database of building information, will enable Facilities Management to optimize its maintenance and operational efforts and more clearly define funding levels necessary to maintain campus buildings.

ISU Iowa State University reports that its 2004 report is based upon a comprehensive, systematic process for identifying the deferred maintenance needs, in eight different categories, of the University's general fund buildings.

This 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, who performs routine operations and maintenance on building systems and equipment, provides the condition assessment of each building system.

The University attributes its significant increase in the amount of building deferred maintenance in the Fall of 2004 to a more thorough review of the campus deferred maintenance by staff and updated information on needed elevator repairs.

UNI The University reports that the budget reductions of recent years have severely reduced the amount of funds that historically have been used to mitigate potential deferred maintenance projects; operations and maintenance personnel focus their resources on maintenance needs utilizing a system that addresses in priority order: safety issues, support to educational functions, repair of facilities and mechanical equipment where it will lengthen the useful life of assets, and support to general facility upgrades.

During the past year, the University of Northern Iowa put together a team of Facilities Services staff to conduct a comprehensive review of the University's facilities. Detailed inspections focused on the age and conditions of the facilities and updated cost estimates were developed based upon recent capital project cost information. This assessment resulted in the increased amount of deferred maintenance reported this year.

ISD Subsequent to the report to the Board in Fall 2003, Iowa School for the Deaf personnel undertook a more comprehensive assessment of the School's deferred maintenance. This assessment resulted in an increase in the amount of deferred maintenance. However, the School plans to undertake a number of projects in FY 2005 which will reduce the amount of outstanding deferred maintenance to the amount shown in the table above.

IBSSS Iowa Braille and Sight Saving School reports a slight increase in the amount of deferred maintenance in Fall 2004.

The School reports that, as much as possible, every attempt is made to repair or replace capital assets at the appropriate time to avoid creation of deferred maintenance. Proper on-going maintenance and repairs are strongly emphasized, with the greatest amount of effort being put into maintaining and improving the infrastructure of the facilities (including roofs, exteriors, and heating/cooling systems.) A long-term approach to infrastructure work is taken by looking at life cycle costs rather than initial costs.