STANDARD EIGHT: PHYSICAL RESOURCES

TABLE OF CONTENTS

Profile: The University of Montana
Organization and Management of Facilities Services
Administration5
Administrative Services and Fiscal Operations7
Planning and Construction8
Campus Maintenance10
Custodial, Grounds and Labor10
Utilities and Engineering11
Sustainability and Recycling12
Health, Safety, and Accessibility13
Tangents to the Oval
8.A: Instructional and Support Facilities
Facilities Improvements Since 200016
Technology Infrastructure Improvements Since 200016
8.B: Equipment and Materials
Status of Classrooms, Laboratories, and Instructional Equipment20
Handling and Disposition of Hazardous Material21
8.C: Physical Resource Planning
Campus Master Planning22
Long Range Building Program (LRBP)
Transportation and Parking23
Access

Physical Resource Planning Committees	25
Websites Referenced	28

STANDARD EIGHT: PHYSICAL RESOURCES

PROFILE: THE UNIVERSITY OF MONTANA

On February 17, 1893 the Montana Legislature chartered what is now The University of Montana-Missoula and charged it with providing a liberal education. The classes were first held in the old South Side School. The initial campus consisted of 40 acres of "excellent land on the south side of the Missoula River." The first building, University Hall, had its cornerstone laid June 1, 1898, and was accepted and put into use on February 18, 1899. This building still serves today as home of the University's central administrative offices.

In 1994, the Montana University System reorganized into two separate universities, each comprising four campuses. The flagship campus of The University of Montana is located in Missoula, while the flagship campus of Montana State University is in Bozeman. The combined enrollment of the eight institutions in the system was approximately 39,000 students in the Autumn 2009 Semester.

The University of Montana includes four campuses:

- 1. The University of Montana in Missoula, in the County of Missoula;
- 2. Montana Tech of The University of Montana in Butte, in the County of Silver Bow;
- 3. Western Montana College of The University of Montana in Dillon, in the County of Beaverhead; and
- 4. Helena College of Technology of The University of Montana in Helena, in the County of Lewis and Clark.

For orientation purposes, site maps of the various campuses of The University of Montana and individual inventory of site facilities are provided in Exhibit RD 8-01.

The University of Montana (Missoula campus, unless specifically stated otherwise) has a current enrollment of 14,207 students, which includes 12,196 undergraduate and 2,011 graduate students. UM employs 1,689 faculty and staff members.

The University of Montana consists of 12 sites, not counting the Montana Island Lodge property, which is owned by the UM Foundation and leased to the University, or the O'Conner Center for the Rocky Mountain West, which leases space from the Boone and Crockett Club in Missoula. The dimensional statistics for The University of Montana property and land are: 408 buildings totaling 4,347,283 gross square feet (GSF) and \$788,150,631 in replacement value, located on 33,634 acres. Table 8-01 on the following page provides additional details for the breakdown of these statistics.

Since the last full scale re-accreditation in 2000, The University of Montana has seen an unprecedented period of investment in renovation and new construction of facilities. The majority of the expenditures were funded by donations, revenue bonds, and other selffunding mechanisms. In ten years, The University of Montana has completed new construction, renovations, and deferred maintenance projects totaling approximately \$164,314,336 and resulting in 555,066 GSF of new space. A detailed description of these projects can be found in Exhibit RE 8-05.

		5	State	<u>Auxiliary</u>	/Self Funded	<u>Acreage</u>
Site	<u>Number</u> <u>of</u> <u>Buildings</u>	<u>GSF</u>	Replacement Value	<u>GSF</u>	Replacement Value	
Main Campus	67	1,960,717	\$447,401,362	1,208,949	\$204,752,355	156.28
South Campus – Facilities	133	6,010	\$466,726	694,341	\$68,919,745	179.90
Fort Missoula	9	51,632	\$9,690,608	29,032	1,387,381	150.64
Missoula COT	10	141,432	\$22,992,099			20.54
Biological Station	69	36,270	\$6,863,938	23,568	\$2,851,724	166.76
Lubrecht Forest	40	43,023	\$4,727,457			28,850.20
Bandy Ranch	17	34,033	\$2,370,775			3,443.30
Residential Properties	29			85,404	\$9,555,112	3.73
Miscellaneous Facilities*	23	1,029	\$98,701			79.67
Mount Sentinel**						526.07
Polich Property**						7.20
Daly Mansion	11			31,843	\$6,072,648	50.00
Totals	408	2,274,146	\$494,611,666	2,073,137	\$293,538,965	33,634.29
 Site maps not available for all buildings on list. Sites are designated on Main Campus map. 						

Table 8-01 – UM Real Property Dimension

Real property acquisitions since the last accreditation visit include the purchase of three houses in our property acquisition zone, bounded by 5th and 6th Streets, Arthur, and Van Buren; the acquisition of 2.2 acres of property adjacent to the Flathead Lake Biological Station; and the Daly Mansion Historical Museum and 50 acres of adjacent property in Hamilton, Montana. The Daly Mansion has a special relationship with the University. While it is owned by the University, it has its own Board of Trustees and is responsible for its own operational costs.

In addition to several centers and institutes, The University of Montana consists of the following colleges and schools:

- College of Arts and Sciences
- School of Business Administration
- College of Education and Human Sciences
- College of Forestry and Conservation
- Davidson Honors College

- School of Journalism
- School of Law
- College of Health Professions and Biomedical Sciences
- College of Technology
- College of Visual and Performing Arts

The University also has an active outreach program through its Continuing Education division. The University's Carnegie Foundation Classification is Public Research University with a high level of research activity, and the University houses one of the region's principal research libraries.

ORGANIZATION AND MANAGEMENT OF FACILITIES SERVICES

The office of Facilities Services' charge relative to The University of Montana's mission is:

The mission of Facilities Services is to operate and maintain the University's Physical Plant and assist in the development of the campus in support of the University's mission.

The Office of Facilities Services has been organized to support the mission of The University of Montana with respect to facilities operations, maintenance, and development, and is primarily responsible for the State funded fixed assets. Below is a high-level organizational chart for Facilities Services, Figure 8-01. Exhibit OSM 8-02 contains a detailed organizational chart and the 2008 Annual Report, which includes organizational metrics as well as other operational reporting data. Contained in this document are brief descriptions of the organization, responsibilities, and staffing of the various offices within Facilities Services. Additionally, each office's description includes information on significant organizational changes or program enhancements that have taken place since the 2000 accreditation visit.

Administration

The Director of Facilities Services is responsible, under the direction of the vice president for Administration and Finance, for planning, organizing, staffing, and reviewing programs to ensure compliance with the facilities aspects of The University of Montana's mission. The Director provides administrative leadership for the following offices:

- Fiscal Operations for Facilities Services
- Planning and Construction
- Maintenance
- Custodial
- Grounds and Labor
- Utilities and Engineering
- Sustainability and Recycling.

Additional functional duties of the Director are to advise the vice president for Administration and Finance on facilities policy issues and operations, ensure compliance

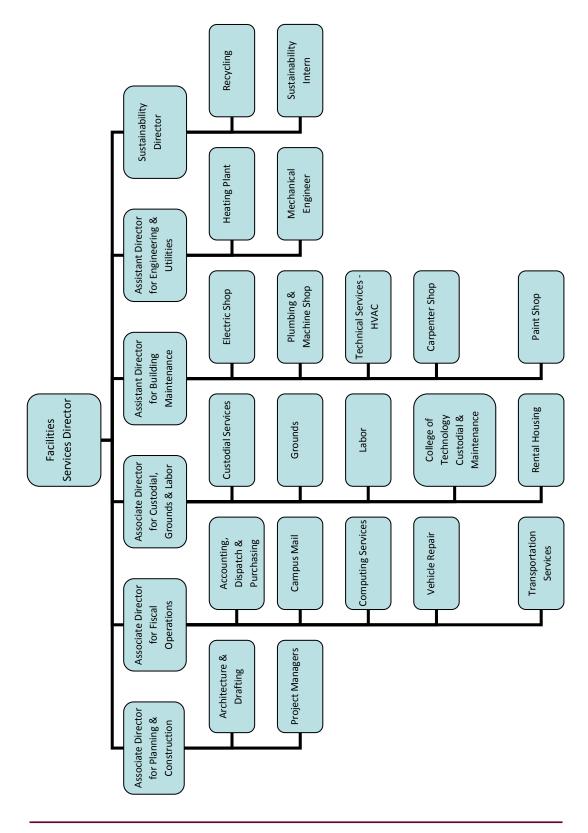


Figure 8-01 – Facilities Services Organizational Chart

with the office's budgets, advocate for resources to address mission and directives, and interpret policy and directives. The director is also responsible for labor relations between Facilities Services and the seven craft and employee unions represented within Facilities Services, communications with the media and state agencies, providing managerial accounting information to assistant and associate directors, and evaluating the delivery of services and attainment of the office's mission.

Since the 2000 Accreditation visit, Facilities Servicesⁱ has developed its own web presence. This website provides policy and procedure information for accessing services from the various offices within Facilities Services. This site also contains current information on topics of interest to the campus such as the status of construction projects, and provides an online presence for the work order system, mail services, transportation rentals, and all related accounting and billing information. The Office of Sustainabilityⁱⁱ has recently launched a website which provides information to faculty, staff, and students on the University's sustainability and initiatives.

Reporting to the director are:

1.0 FTE	Administrative Associate
1.0 FTE	Associate Director for Planning and Construction
1.0 FTE	Assistant Director for Maintenance
1.0 FTE	Associate Director for Custodial, Grounds and Labor
1.0 FTE	Associate Director of Fiscal Operations
1.0 FTE	Assistant Director for Utilities and Engineering
1.0 FTE	Sustainability Coordinator for The University of Montana

The total employment of the office as of April 1, 2009, is 220 employees (170.75 FTE).

Administrative Services and Fiscal Operations

The Associate Director of Fiscal Operations is responsible, under the Director of Facilities Services, for providing administrative leadership for Facilities Services' fiscal operations including accounting and budgeting, and financial and personnel records management. Other areas of responsibility include Campus Stores, Work Order Desk, Facilities Services' Computing Services, Campus Mail, Vehicle Repair Center, and Transportation Services.

The accounting and computing functions of this office are subordinate to and compliant with the policies and procedures of UM Business Services and Information Technology (IT).

The Accounting, Dispatch, and Purchasing staff provide support to the larger Facilities Services operation, and work in concert with the centralized accounting and purchasing staff located in Business Services. Similarly, the computing staff maintains a number of custom software packages, databases, web pages, and personal computer support in accordance with the policies and procedures established by the campus office of Information Technology. Improvements to data security are currently underway with the construction of a spillover cluster system to improve backup and redundancy of the file, print, and Structured Query Language (SQL) servers. Future plans include establishing a similar cluster system for the Oracle databases used by the work order and inventory systems.

In FY 2009, a project accountant was hired to work with the Facilities Services and State of Montana Architecture and Engineering Division project managers. This individual works with the project managers on both large and mid-sized projects to ensure that budgets are carefully developed, construction authority is clearly identified, and revenue and expenditure transactions are accurately accounted for. The project accountant also coordinates project financial and budget activity between Facilities Services, UM Foundation, the state of Montana Architecture and Engineering Division, UM Research Office, and academic units within the University.

The Vehicle Repair Center maintains Facilities Services' maintenance vehicles, lawn and snow removal equipment, generators, and the University's rental fleet (Transportation Services). The rental fleet consists of approximately 40 vehicles which are available for official campus trips. In an effort to improve the fuel efficiency of the fleet, a number of hybrid vehicles have been purchased, and compact sedans are replacing the mid-sized sedans used in the past. The fleet currently includes hybrid sedans, hybrid sport utility vehicles, mid-sized and compact sedans, minivans, 15 passenger vans, an Americans with Disabilities Act (ADA)-accessible van, and a small pickup truck.

Campus Mail staff collect, sort and process over 1.4 million pieces of mail each year. In addition to processing inter-campus, U.S. Postal Service, United Parcel Service, and Federal Express mailings, Campus Mail also provides bulk mail services. In order to secure significant savings on bulk mailings, the unit has purchased a Direct Address Printing System that manages address lists. It can print addresses with barcodes, return addresses, ancillary service endorsements, and permit indicia, thus reducing the effort and costs departments expend processing large mailings. Tabbing equipment, purchased in FY 2009, will give departments a cost effective way to comply with U.S. Postal Service regulations and achieve greater automation rate savings.

Reporting to the Office of the Associate Director for Fiscal Operations are:

1.0 FTE Project Accountant	
7.0 FTE Facilities Services Support (Record Keeping, Campus S	tores)
2.0 FTE Computer Maintenance	
3.0 FTE Vehicle Repair	
1.0 FTE Transportation Services	
5.85 FTE Campus Mail	

The total employment of this office, including the Associate Director, as of April 1, 2009, is 24 employees (20.85 FTE).

Planning and Construction

The Associate Director for Planning and Construction, under the Director of Facilities Services, provides administrative leadership for architectural and construction services for all offices and academic departments of The University of Montana-Missoula. This charge includes providing services to the other campuses of The University of Montana upon request or direction.

The primary functions of the Office for Planning and Construction are as follows: advise the Director of Facilities Services on matters of architectural and engineering services, perform administrative and supervisory duties in directing the sole source for construction and planning activities, and provide architectural and engineering design services and construction management services for all delegated renovation and construction projects. The Associate Director also is charged with maintaining and developing all Facilities' Services inventories of buildings, including inventories of renovation and construction needs, and providing documentation services to campus and record management services for all maps, drawings, and construction documents. Moreover, the Associate Director provides and enforces code compliance and coordination of the Long Range Building Program requests, provides estimates for minor renovations, and is solely responsible for obtaining and securing professional services for construction acts on behalf of the Director of Facilities Services in the latter's absence.



Skaggs Building Addition

Since the 2000 accreditation visit, Planning and Construction has instituted new construction standards for projects performed on The University of Montana campus (Exhibit OSM 8-03) and has put in place the Montana University System Facilities Condition Inventory System (Exhibit SM 8-02). Finally, since the last accreditation visit, the engineering services and heating plant operations have been reorganized outside of Planning and Construction under a separate assistant Director position to narrow the utilities and engineering focus within the group, and address new utility challenges and projections, and focus on energy conservation of mechanical systems.

Reporting to the Office of the Associate Director for Planning and Construction are:

4.0 FTE	Professional staff
5.0 FTE	Support staff

The total departmental staffing, including the Associate Director, as of April 1, 2009, is 9 employees (9.0 FTE).

Campus Maintenance

The Office of the Assistant Director of Maintenance is responsible for providing administrative leadership for state building maintenance activities, as well as smaller, inhouse renovation work. The same services are provided for the auxiliary buildings and other self-supporting organizations of The University of Montana on a recharge basis. The Facilities Services Maintenance operation employs skilled journeyman-level workers to provide the wide array of services required to maintain the campus facilities. They include state licensed plumbers, electricians, machinists, carpenters, painters, technical service mechanics that perform heating and refrigeration duties, and filter and lube personnel who also provide asbestos abatement in smaller venues. Facilities Services Maintenance personnel also perform preventative maintenance on state buildings, as well as emergency and after-hours repair services in support of Facilities Services' asset preservation responsibilities.

Since the 2000 accreditation visit, Transportation Services and Vehicle Repair has been moved from Maintenance to the Office of the Associate Director for Fiscal Operations. This reorganization was enacted to allow the Assistant Director of Maintenance to concentrate efforts on delivering maintenance and renovation services to state facilities because of the expansion of facilities and the complexity of building mechanical systems. During this period the Maintenance operation has acquired certifications for various craft personnel to perform work on backflow prevention and National Institute for Certification in Engineering Technologies (NICET) registration for fire alarm and fire sprinkler renovations and installations. Facilities Services also has master electricians and plumbers who are able to obtain the required construction permits for all renovation work performed on campus.

Reporting directly to the Assistant Director for Maintenance are:

1.0 FTE	Supervisor for the Plumbing and Machine Shop
1.0 FTE	Electrician Foreman
1.0 FTE	Technical Services Supervisor
1.0 FTE	Carpenter Foreman
1.0 FTE	Painting Foreman
25.75 FTE	Craft personnel

The total employment for this office, as of April 1, 2009, including the Assistant Director, is 31 employees (30.75 FTE).

Custodial, Grounds and Labor

The Associate Director for Custodial, Grounds, and Labor, under the Director of Facilities Services, is responsible for providing the administrative leadership for a wide variety of services for state facilities including custodial services, grounds maintenance, and landscaping for both the main campus, plus the College of Technology. To provide these services, the office employs members of the Montana Public Employees Association, Montana District Council of Laborers, and the International Union of Operating Engineers. This office also employs skilled staff in heavy equipment operation including snow removal, concrete repairs, and installation. Grounds maintenance involves all levels of turf and arboretum care and installation of new turf and landscapes.

Custodial maintenance includes wood floor refinishing, carpet cleaning, floor refinishing and general custodial duties performed by the custodial staff. This office also employs part-time and student staff for custodial and grounds duties. The Office of the Associate Director manages the operation of the rental housing units that The University of Montana owns next to campus. This office also maintains the leases of on-campus rental areas, and is responsible for all parking lot maintenance.

Since the 2000 accreditation visit, the Office of Custodial, Grounds, and Labor has taken on the responsibility for all parking lot and roadway maintenance and renovations. Associated with this new responsibility is a complete inventory of all paved surfaces and maintenance needs. Additionally, custodial cleaning procedures and time standards have been computerized for all state facilities to assist in operations and training new employees. In 2009, Facilities Services' custodial operation participated with Human Resource Services and other custodial operations on campus to develop new custodial position descriptions and classifications in support of a new pay matrix to remediate the living wage issue related to custodial pay.

This Office of Custodial, Grounds, and Labor supervises:

- 1.0 FTE Supervisor of Grounds and Landscape
- 1.0 FTE Maintenance Supervisor of The University College of Technology
- 1.0 FTE Labor Department Supervisor

Including the rental housing operation personnel, the total department staffing as of April 1, 2009, is 135 employees (95.20 FTE).

Utilities and Engineering

The Assistant Director for Utilities and Engineering, under the Director of Facilities Services, is responsible for providing the administrative leadership for the operation of the heating plant and providing engineering services to the campus.

The primary functions of the Office of Utilities and Engineering are categorized into two major areas. The first is utility production and distribution, and the second is the delivery of engineering services to campus and other campuses of The University of Montana on request. The utility responsibility includes the operation and maintenance of the heating plant which produces steam for the main campus and distributes it to buildings throughout campus via the utility tunnel system. The Office of Utilities and Engineering is also responsible for the purchase, distribution, and monitoring of natural gas, electrical energy, water, sewer services, water rights administration, and the safety of the ground water geothermal cooling systems.

Engineering services responsibilities include utility consumption, cost projections, and general engineering services to campus departments, including Facilities Services. These services include construction and renovation design, plan review, mechanical project management, commissioning, and reliability planning for all utility systems. In addition to these basic services, this office provides trouble-shooting assistance to Facilities Services' departments and energy conservation design, installation, and monitoring.

Since the 2000 accreditation visit, this office was created to address the technical complexities of utility production, purchases, construction, operations, and the corresponding expertise associated with engineering and utility operations. Since the last accreditation visit, this office has provided consulting services for over 500,000 GSF of new campus facilities, including a major renovation and expansion of our steam and utility tunnel distribution system, created a computerized utility projection system, completed a review and reauthorization of our water rights and has taken the lead in the University's energy conservation efforts in support of the University's climate action commitment and economic needs.

This Office of Utilities and Engineering supervises:

1.0 FTE	Mechanical Engineer
1.0 FTE	Heating Plant Foreman
5.0 FTE	Heating Plant Operators

The total department staffing as of April 1, 2009, is 8 employees (8.0 FTE).

Sustainability and Recycling

The Office of Sustainability is responsible, under the Director of Facilities Services, for providing administrative leadership of the coordination and advancement of sustainability on The University of Montana campus and the operation of its recycling operation. The duties and responsibilities include implementing the recycling program, managing the solid waste stream, and coordinating a variety of efforts in support of overall campus sustainability. Sustainability-related activities include energy efficiency and conservation in facilities, promoting alternative transportation, farm-to-college food services, and education about the environment and climate change. The Office of Sustainability networks with the local community and provides services to affiliate campuses upon request.

The Office of Sustainability is charged with developing and maintaining a Greenhouse Gas Inventory and a Climate Action Plan for the University. The plan will document, analyze and prioritize strategies to reduce and neutralize campus emissions of greenhouse gases. The Office of Sustainability maintains a website and is responsible for communicating sustainability efforts.

Since the 2000 accreditation visit, higher education has become very involved and has taken a leadership role in sustainability. The University of Montana has for a number of years implemented and advanced various sustainability initiatives including the creation of the Sustainable Campus Committeeⁱⁱⁱ. The University has committed to formalizing and accelerating sustainability efforts with the ultimate goal of being carbon neutral. This commitment has motivated the University to adopt LEED Silver Building Standards. Additionally, the University realized that a separate office was needed to coordinate campus efforts toward its climate and sustainability goals and Facilities Services acquired four professional staff with LEED accreditation. A permanent, full-time Sustainability Coordinator position was created within Facilities Services. The campus recycling operation was also reorganized under this position, and a half-time sustainability intern was funded to accomplish the University's sustainability goals.

The Office of Sustainability and Recycling supervises:

1.0 FTE	Recycling Coordinator,
7.0 FTE	Student Recycling Employees
2.0 FTE	Student Interns

The total departmental staffing as of April 1, 2009, is 11 employees (4.95 FTE).

Health, Safety, and Accessibility

Health, safety, and accessibility responsibilities for campus are split between two cooperating offices, one in Facilities Services, and the other in Environmental Health and Risk Management under the Vice President for Research and Development.

The Office of Planning and Construction within Facilities Services has the responsibility of assuring that all renovations, new construction, and planning meet health, safety, and ADA requirements. This is accomplished by adhering to the applicable building codes, and employing architects registered with the American Institute of Architects (AIA) and other professional staff within Planning and Construction to design and manage these projects. When outside consultants are required, only consultants with the required registrations are retained. Additionally, all renovation and new construction on campus require city building permits. The State of Montana has delegated this responsibility to the City of Missoula, which retains an extensive staff to review plans and inspect construction for compliance.

Planning and Construction is also charged with meeting all federal ADA accessibility requirements for new construction and renovations. This charge includes implementing the University's own "Universal Access Policy" which requires 100% accessibility for all new construction. A copy of this policy, the latest Office of Civil Rights (OCR) ADA settlement agreement, and a copy of each of the transition plans are included in Exhibit RE 8-01. Additional processes and safeguards have been implemented to increase the assurance of meeting these access policies. The standing ADA Team reviews all new construction plans and every building committee includes at least one representative from Disability Services.

In maintaining health, safety, and access to facilities and programs, The University of Montana employs journeyman-level craftsmen with appropriate certifications. In instances where in-house personnel do not hold certifications, such as elevator maintenance and hazardous material abatement, Facilities Services contracts with firms holding the appropriate certifications. Facilities Services also provides training opportunities for workers to maintain and obtain certifications for health and safety issues such as fire alarm maintenance, back flow prevention, chlorofluorocarbon disposal, and asbestos maintenance.

The Office of the Executive Director for Environmental Health and Risk Management (EHRM), under the Vice President for Research and Development, is responsible for campus-wide environmental health, safety, and risk management. Specific activities include: ensuring safe use, disposal and regulatory compliance, and emergency response for all hazardous, radioactive, and bio-hazardous materials at The University of Montana; industrial hygiene including indoor air quality issues and safety hazards analysis; food

service regulation and safety inspections; oversight of indoor pest control; general environmental consultation; Montana Environmental Policy Act compliance; Occupational Safety and Health Administration compliance and training; workers' compensation program management; loss control; accident investigation; claims management; ergonomics evaluations; and management of Chemistry Stores, a sales and service operation.

EHRM is connected to campus by four standing committees. The Campus Safety Committee's^{iv} charge is to develop and sustain a program that is conducive to employee safety and has as a minimum the following basic objectives:

- 1. Ensure a safe working environment;
- 2. Protect the general public;
- 3. Promote employee wellness programs;
- 4. Reduce costs associated with accidental losses; and
- 5. Provide a grass-roots program with easy access for employee comments that can be evaluated by a reduction of injuries and accidents within the campus community.

The Campus Safety Committee is co-chaired by the Executive Director for EHRM and the Campus Risk Manager with representation from faculty, staff, and students appointed by the Vice President for Administration and Finance.

The Radiation Safety Committee is charged with compliance with Nuclear Regulatory Commission regulations and reports to the Vice President for Research and Development. The committee is chaired by a faculty member.

The Institutional Bio-Safety Committee is charged with oversight and compliance with external regulations pertaining to the use of hazardous biological agents, toxins, human cell lines, and recombinant DNA. Members are appointed by the Vice President for Research and Development. The committee is chaired by a faculty member.

The Integrated Plant Management Committee is charged with reviewing resource management programs that deal with weed management and making recommendations to the President regarding budget and policy decisions. Members are appointed by the President and the committee is chaired by the Executive Director for EHRM.

TANGENTS TO THE OVAL...

ADA HELPED BRING THE MATHEMATICS BUILDING UP TO DATE



Women's Hall, 1903

The University's Mathematics Building on the Oval was constructed in 1903 as the Women's Hall, one of the first four buildings on campus and the first dormitory. The building was designed by the famous architect A.J. Gibson. It was converted into a classroom building for mathematics and physics in the 1920s.

Early in this decade, plans were designed for an addition to the building that would help comply with the Americans with Disabilities Act. The addition with an elevator, new restrooms, and office space was completed in 2007. By matching the new addition with Gibson's original architecture the project received the 2008 Historic Preservation Award.

Condensed article from June 08 Main Hall to Main Street



Mathematics Building with Elevator, 2008

8.A: INSTRUCTIONAL AND SUPPORT FACILITIES

Facilities Improvements Since 2000

The University of Montana has continued the investment in facilities cited in the last accreditation. In the last ten years, UM has invested more than \$164,000,000 in facility renovation and new construction (Exhibit RE 8-05).

The University is making a concerted effort to grow its research program by investing in new facilities that will attract the nation's top scientists. During the past ten years the Skaggs Building has been renovated and expanded twice. The primary sources of funding for these projects were National Institutes of Health (NIH) grants, bonds, and private donations. The sum of the additions total 97,401 square feet of new space costing \$25,696,000. The University also self-funded two new research facilities, the 61,509 square foot Interdisciplinary Science Building and the 10,000 square foot Bio Research Building. These will dramatically improve the University's research capabilities by providing state-of-the-art laboratories and other research space. The Chemistry Building has been renovated; the \$7,191,126 project also included a 6,400 square foot addition to the building. A new 4,725 square foot Health and Human Performance Lab was constructed using Air Force grant funds and University funds.

On the academic side, some of the major facilities include a new School of Journalism Building (57,500 GSF - \$12,844,000), an addition to the College of Education and Human Sciences Building (40,728 GSF - \$13,251,400), an addition to the School of Law (45,968 GSF - \$13,822,900), a new Native American Center (20,000 GSF - \$9,960,660), and an addition to the Math Building (3,338 GSF - \$1,365,655).

A new apartment style housing complex, the Lewis and Clark Village, was built to house upper level students on the South Campus. This \$16,000,000 village-style complex includes 66 three-bedroom apartments and 132 two-bedroom apartments. In all, the complex features 462 beds.

A major three-phase \$10,000,000 steam tunnel project is to a large extent complete. This project replaced most of the buried steam lines on campus, removed the asbestos in the tunnels, and provided bi-directional steam delivery to portions of campus that were not previously looped.

Technology Infrastructure Improvements Since 2000

Intangibles: Leadership, Organization, Staff, Budget, and General Support

Since the 2000 accreditation visit, the Information Technology operation has been reorganized under a new Chief Information Technology Officer (CITO). Effective levels of middle management have been created and balanced under three associate/assistant information officers, focused on: enterprise system implementation (BANNER); system and network operation; and instructional technology support, Web facilities, and client services. Staff has been added in each of these areas, with a particular focus on the creation of effective subgroups focused on the new technologies related to central

directory services and Web support. In addition, an entirely new group has been created and led by an IT Security Officer, reporting directly to the CITO.

IT staff, previously in six locations, have been consolidated into three locations; Brantly Hall 4th floor, Social Science Building 1st floor, and Liberal Arts Building basement. Four previously separate support offices, each with clerical staff responsible for aspects of budget, personnel management, and purchasing, have been merged into one office. Staff in the central office have as their primary focus the support of a specific group, but are cross-trained to accommodate vacations, staff turnover, or times when a particular group's workload is high.

The IT budget has been completely revised. Although it still draws funding from a variety of direct, charge-back, and fee sources, four key changes have been implemented: an IT Utilities account was created to encapsulate externally set expenses (i.e., so that IT is not forced to sacrifice staff to pay inflationary increases in the software that the staff support); a capital expense account was created with a management plan updated annually to routinely address major equipment updating; a personnel budget was created that clearly identifies and isolates staff costs, ties staff directly to particular IT functions; and an overall revenue/cost flow plan was developed and is updated annually that ties all IT sources of funding and costs together.

Computer Facilities and Resources

The central physical facilities that house UM computational and network resources in the basements of Social Science and Liberal Arts have both been overhauled to provide better electrical power, air handling, overall environmental conditions, and access control. A reliable emergency power generator has been added to the Social Science facility to provide emergency power for UM's core telephone, network, and enterprise systems.

New computer systems based on smaller, denser blade technology have been implemented to support UM's enterprise system and email system, and are gradually being expanded to also incorporate other systems and replace individual servers. In order to provide better tolerance to hardware faults, the blade systems have been implemented with redundant components and on-the-fly adjustments that adapt to component failures, including processors, disks, disk controllers, and power supplies. In order to provide better tolerance to external failures involving power and air handling, these systems are each physically split into two parts, with one part running in the Liberal Arts facility and one part running in the Social Science facility.

A modern hosting facility has been added to the Liberal Arts Building to extend enhanced power, air handling, environmental, and access control to other units that have been using existing building systems/servers in space carved out of what were previously offices, classrooms, or labs.

Network Facilities and Resources

As noted above, the Social Science Building, containing the campus core networking systems, including those components related to the campus edge, firewall, and similar elements, has been dramatically upgraded. The other core campus facility in the Clapp

Building was moved to a better location, from the basement in the middle of other electro-mechanical components to a new isolated and environmentally controlled location on the 1st floor.

Equipment in each of the two campus core sites has been upgraded to support a campus backbone network with multiple 10 gigabyte (GB) links. Fiber connecting the two sites has been upgraded to implement physically diverse paths between the two sites. UM is currently in the process of selectively upgrading individual building feeds from 1 GB to 10 GB, where the increased capability is needed.

A process has been established to upgrade network facilities within UM's individual buildings, on a priority schedule established by the University. The first priority is to standardize and secure network facilities, and provide an appropriate base level infrastructure in all buildings. The University is moving from the original 10 megabyte (MB) shared networks to 100 MB/1 GB switched networks. Each upgrade ensures that standard, dedicated, and secure network closets are available by upgrading or remodeling original facilities. The upgrades also ensure that standard vertical runs are established between building floors, vertical cabling is up to standard, and appropriate wall and other connectors are up to standard. This process has been completed for all buildings except those with "extraordinary" circumstances, typically those buildings involving major remodeling and/or asbestos abatement prior to remodeling or reconstruction.

The University's network links to other campuses and the State of Montana were upgraded during 2009 as part of a major upgrade to the state-wide network. UM's links to regional and national networks were dramatically upgraded during 2009 with the completion of the Northern Tier Project, which provides UM an initial 10 gigabit (Gb) link to the national research and education networks (Internet2, NLR) plus additional 10 Gb links as needed, at incremental cost.

The University has also implemented an extensive 802.11b/g frequency wireless network consisting of over 100 wireless access points placed around the campus. All normal connections are secure and authenticated, available to any and all campus users based on standard campus credentials. UM generally does not support "open wireless" or "open visitor" connections. Special provisions are available for short term visitors and special events.

Software Systems

The primary enterprise system, BANNER, has undergone multiple software upgrades to keep it current. The next such upgrade is now underway, with UM's implementation of BANNER 8 scheduled to go live in March 2010. Numerous additional small systems are operated on the interface with BANNER to provide additional or specialized functionality. These BANNER edge systems have grown in sophistication and importance, and have been instrumental in allowing various UM business units to streamline their business practices to provide better service at lower cost.

Learning management courseware, provided by the Blackboard product, has emerged as a new enterprise-class system. Beginning in 2000 as a system supporting a few distance education classes, this system now supports an extensive array of distance learning courses and provides supplementary support for the majority of UM's traditional courses. Current estimates are that about 90-95% of current UM students have at least one course supported by the Blackboard learning management system (LMS). UM has upgraded the hardware and software several times to support the extraordinary growth of the LMS. In 2009, UM initiated an evaluation of next-generation options for a true enterprise support-level system. Those options include possible new software systems, new hardware, and externally hosted solutions.

Like all institutions, UM has experienced growth in all aspects of email, including the volume of email, email "spam" and email-carried problems like viruses and phishing attacks. UM has continuously upgraded its entire email operation, from email servers to filtering capability. In 2009 UM committed to outsource its student email, to an "email plus" service provided by Microsoft. That process was completed at the end of 2009. Concurrently, UM has committed to implement an email archival and retrieval system for UM staff, as required to meet and facilitate obligations under e-discovery and freedom of information requests. The archival/retrieval system is expected to become operational during 2010.

Also like all institutions, UM has also experienced substantial growth in its commitments to support Web facilities, from a UM home page to various unit home pages to a wide variety of online services. UM's BANNER system makes full and extensive use of BANNER's online capabilities, locally labeled as *CyberBear*. UM has also implemented an extensive set of local online services, collected in a portal locally labeled as *OneStop*. Included in this, but mostly invisible to users, are background directory services that provide central authentication and authorization for a variety of central and campus systems. Users can sign on to an ever increasing number of campus systems using a single account. In 2008 UM implemented a content management system to help reduce the cost of maintaining Web content, as well as to assist UM in standardizing various look and feel aspects of its websites.

Finally, UM recently implemented an Emergency Notification System (ENS) to allow designated campus personnel to send email, portal-based instant messages, and on a voluntary "opt in" basis, mobile phone text messages to the entire campus or selected portions of the campus. UM's ENS is locally developed based on its campus portal, and tied into the broader mobile phone infrastructure through a standard mobile phone vendor interface.

Telephone System

In response to rapidly changing telephone technology and end-user preferences, UM has dramatically overhauled its telephone system and the organization used to support that system. The emergence of mobile phones has had a significant impact. UM Business Services has approved two "umbrella" mobile phone service contracts, and any individual's service is managed directly by his/her department and the vendor, but IT has no responsibilities related to employee mobile phones. Wired telephones in UM's residence halls became optional instead of mandatory, and as a result essentially disappeared. This caused the telephone system to be downsized by about one-third. The revenue streams associated with brokering long distance and 800-call trunking also disappeared. Dispatching functions that originally grew out of telephone switchboard operations grew and evolved into an extension of campus security, and as a result were

moved from IT into the Campus Security Office. Long haul telecommunication evolved to the point where IP networks carry both voice and data traffic. A similar evolution occurred as inexpensive IP transport became available for UM metro sites, and voice over IP has been implemented in selective cases on campus. With the retirement of the former Director of Telephone Services in 2008, IT downsized the original telephone group and merged the remaining members into a new network group responsible for both voice and data networks.

Classroom and Instructional Technology Support

In 1999 responsibility for classrooms and instructional technology support was divided among several units. That responsibility is now (generally) centralized in a unit within IT. Until recently, although UM invested heavily in new instructional technology for new buildings, and individual schools and colleges invested in facilities in rooms they controlled, UM had no systematic plan to place and replace technology in its general classrooms. That changed in 2009 with the initiation of a project that over a period of five to seven years will upgrade virtually all UM's classrooms to include technology appropriate to the size and purpose of the room. Further, this program is ongoing, and includes both maintenance of current equipment and its systematic replacement on a standard schedule.

8.B: EQUIPMENT AND MATERIALS

Status of Classrooms, Laboratories, and Instructional Equipment

Facilities Services is responsible for maintaining the fixed assets of the state's facilities and the movable furnishings for classroom and teaching laboratories, less the electronic instructional equipment. Presentation Technology Services is responsible for providing audio-visual and other movable media instructional equipment and the maintenance of the multimedia equipment in the high tech multimedia classrooms. Generally, computer laboratory equipment is the responsibility of Presentation Technology Services and/or the individual units in which they are located. Exhibit RE 8-02 includes Property Management's listing of all movable equipment and furnishings which have been capitalized.

With respect to classroom furniture, Facilities Services maintains an inventory to use as replacements as needed. This inventory consists primarily of tables and chairs: approximately 230 metal and wood tablet arm chairs; 100 wooden chairs; 1,092 folding chairs; 200 folding tables; and 35 chairs and 25 tables for mobility impaired students. The rental equipment, folding tables and chairs, has been significantly reduced because the Adams Center now handles its own setups for events and has an inventory of 620 folding chairs, 80 folding tables, and 12 six-foot round tables.

The maintenance of the movable furnishings in classrooms is accomplished through the normal work order system utilizing in-house staff. Requests for replacement equipment and new additions, such as requests for ADA-specific problems, are funding from normal maintenance accounts. Furnishings which could have a rental associated with them are replaced and upgraded through a repair and replacement account funded through user

charges. Instructional equipment, such as projectors, cameras, TVs, and computer control consoles, is maintained by Presentation Technology Services.

Since the 2000 accreditation visit, the campus has invested approximately \$6,200,000 in projects to renovate classrooms, with state funding totaling approximately \$1,400,000. During the same period, the campus has funded \$88,400,000 in new construction of academic facilities which included new class/lab space. Of this total the state funded approximately \$10,500,000. This new construction increased the total inventory of class/lab space by approximately 7%. The School of Law addition and the College of Education and Human Sciences Building addition were completed during the Autumn 2009 Semester, and the Native American Center is scheduled to be completed in January of 2010. These new facilities will add approximately 20,600 GSF to the classroom inventory, or another 4%, totaling 11% for the accreditation period. The space inventory for the class/lab category has grown to 517,513 GSF, or 55 additional spaces allocated to classrooms and laboratories. The campus, through the Office of the Provost, has initiated a program starting the summer of 2009 to fund approximately \$500,000 per year for the next five to seven years for Classroom Instructional Equipment Improvements. This program is intended to upgrade and maintain all of UM's classrooms with modern instructional equipment.



Phyllis J. Washington Education Center

Handling and Disposition of Hazardous Material

Facilities Services is responsible for handling and disposing of universal waste (spent fluorescent lamps and electronic waste), used oil disposal and lead acid recycling. Maintenance projects involving asbestos abatement are accomplished with in-house personnel for maintenance level abatement (less than 3 linear feet). Abatement projects larger than maintenance level are contracted out and all asbestos abatement work complies with The University of Montana Asbestos Operations and Maintenance Plan^v.

Environmental Health and Risk Management is responsible for all bio-hazardous, radioactive, and hazardous material handling, waste, and ultimate disposal and complies with Hazardous Materials Management Plan for The University of Montana^{vi}.

8.C: PHYSICAL RESOURCE PLANNING

Campus Master Planning

In the last accreditation of 2000, the report recommended that The University of Montana develop new master planning documents to help the University effectively deal with the coming challenges and opportunities. The University embarked on a coordinated effort to revise, update, and develop new master plans. These efforts resulted in three master planning documents (Exhibit RE 8-03). The first to be completed was the master plan for The University of Montana main campus. The second was the master plan for Fort Missoula, and third was the South Campus master plan. The University has started the process to develop a master plan for the Flathead Lake Biological Station.

Long Range Building Program (LRBP)

Any expansions, major renovations, or repairs to state facilities require Legislative or Governor's authorization as described in Montana Code Annotated (MCA) 18-2-102^{vii}. The LRBP is the vehicle for obtaining authorization, as well as capital and operational funds from the state for these purposes. State statute dictates the format and the schedule for the biennial request. The format includes a section which identifies the cost estimates for the construction or renovation of facilities and the increased operational costs associated with the project. If the state grants spending authority and/or construction funds, the Legislature also identifies the extent of the operational funding the state will support. Exhibits RE 8-04 and RE 8-05 contain a copy of the 2010/2011 Biennium LRBP request, provided to illustrate the format for the request. Also included is a copy of the spreadsheet listing all authorizations and funding received by The University of Montana from the 2000/01 through 2010/11 biennia. The recent Legislative budget allocations from 2010 to 2011 are highlighted in blue.

In the last accreditation period the Legislature struggled with controlling and limiting operational costs for state facilities for which they could become liable. This concern was strategically addressed in the 2006-07 Legislature wherein the Legislature passed a bill that charged the Governor's administration with developing a process to identify and memorialize an allocation of responsibility for Operations and Management costs for projects brought to the Legislature for authorization. That form is called the New Building/New Space Request – Montana University System (Exhibit OSM 8-05).

In the last six biennia from 2000 through 2011, The University of Montana has received \$24,106,978 in funding for new construction, deferred maintenance, and planning from the Legislature. This funding is equivalent to approximately \$2,009,000 per year in capital renewal investment. Comparing this funding to a replacement cost of approximately \$502,000,000 for The University of Montana State facilities is approximately .3% per year of the replacement costs. What has kept UM's Strategic Assessment Model (SAM) ratios for Facilities Condition Index (FCI) and our needs index from significantly growing has been the local funds expended during this period for renovations, new construction, and deferred maintenance.

Transportation and Parking

Since the 2000 accreditation visit, parking and transportation have changed significantly at The University of Montana. Enrollment has risen from 11,289 to 14,207 in the last ten years. Students from the College of Technology are attending more classes on the Mountain campus, and event venues and attendance have expanded. Additional Park-N-Ride lots and bicycle parking have been added for a total of 4,500 bicycle and 4,713 vehicle spaces. This increase has occurred despite losing parking on the Mountain campus as a result of new construction. A transportation system dedicated to the UM community has been developed to meet the challenges of additional people coming to campus. In 2001 the students, through ASUM, stepped forward to help in the goal of providing convenient access to campus, preserving green space, and minimizing the environmental impact of motorized vehicles by starting and funding ASUM Transportation. This organization grew from one bus moving students around University properties to seven buses and the development of three off-site Park-N-Ride lots. This year ASUM Transportation will have provided in excess of 320,000 rides transporting students, faculty, and staff between the Park-N-Ride lots, the Mountain campus, and COT campuses. Use of the contracted services of the Mountain Line bus system has grown as The University of Montana looks for alternatives to single-vehicle commuters. The University of Montana accounts for over 27% of all the ridership on the Mountain Line bus system, and this year will exceed 800,000 rides. Exhibit OSM 8-04 contains various ridership reports, ASUM Transportation annual report plus other Transportation Services pamphlets and a parking lot maintenance survey.

There have been numerous parking and transportation studies over the years. Some recommendations have been put in place, others have been abandoned, and others are waiting for action and/or funding opportunities.

The following list identifies issues remaining to be resolved from these studies:

- Review of accessible spaces (number and location).
- Spread out class periods to reduce demand in the middle of the day (may be in opposition to energy-saving efforts).
- Traffic calming, improved signage at locations of vehicle/bike/pedestrian conflict.
- Review the COT East location parking designation, enforcement, and transportation to the Mountain Campus.
- Install Griz card readers on Mountain Line buses capable of determining valid Griz Card holders and obtain ridership numbers based on use of valid Griz Cards
- Develop improved bus routes and Park-N-Ride service.
- Create a visitor program providing visitors information and parking options to avoid conflict due to unfamiliarity with campus parking.
- Explore off-campus parking for dorm students including the possibility of a night parking pass for students who have a critical need to store their cars on campus overnight because of employment or other issues.
- Study the effect on recruitment/retention efforts.
- Review parking fees for department owned vehicles that take a space normally available to the campus community.

- Improve communication to include the Parking Appeals and Review Committee, web information, and expansion of successful Event Parking staff member.
- Seek opportunities to expand parking such as adding a layer to existing parking lots, expansion of East Broadway lot, etc.

In summary, The University of Montana campus consists of approximately 14,200 students, 1,689 faculty and staff, and on any day numerous visitors who make it to campus without solely depending on motorized personal vehicles. The campus has utilized transportation demand management techniques to provide convenient, timely and environmentally benign access through various systems and programs such as the following:

- On campus paved motor vehicle parking.
- Commuter car and van pool programs.
- Green car parking discounts.
- Free Mountain Line passes to any Griz Card holder.
- ASUM Transportation shuttle service and educational programs.
- Promotion of healthy bike and walk programs including bicycle rental and financing services.
- Partnering and support of Missoula Ravalli Transportation Management Association
- Promotion and infrastructure construction supporting bicycle and foot traffic access.



Students Riding Bikes on Campus

Access

The issues and responsibilities related to enhancing disability access are also discussed in the Health, Safety, and Accessibility section, and are shared between the Office of Planning and Construction, the standing ADA Team, and the Office of Equal Opportunity and Affirmative Action. These groups utilize federal regulations contained in the American with Disabilities Act and Accessibility Guidelines (ADAAG), the 2006 International Building Code adopted by the City of Missoula, American National Standards Institute Standard A117.1 and the President's Universal Access Policy. The plans for these projects are presented to the University's ADA Committee for review and comment to verify compliance with the Universal Access Policy.

Planning and Construction is also charged with assisting maintenance personnel with accessibility issues surrounding in-house projects, as well as all site, parking, and sidewalk accessibility on the Missoula and other University of Montana campuses.

The U.S. Office of Civil Rights (OCR) conducted an accessibility compliance audit of the University's facilities a year ago. The University has corrected some of the stated deficiencies and will seek state and other funding sources to correct the remaining items. A copy of the OCR-ADA settlement agreement; a copy of the President's Universal Access Policy, a copy of each of the transition plans; and a copy of the ADA project list for 2000-2010 are included in Exhibit RE 8-01.

Since 2001 the University has undertaken about \$116.5 million worth of new construction and major renovation projects and \$627,000 of ADA specific projects that have improved accessibility to facilities on campus. A copy of this projects list is also included in Exhibit RE 8-05. Planning and Construction also issued Campus Design Standards in 2005, a copy of which is given to consultants who design projects on campus. These standards outline the University's accessibility requirements for all new construction and major renovation projects (Exhibit OSM 8-03).

Physical Resource Planning Committees

The University of Montana utilizes various committees to assist Facilities Services and advise the President on operations, development, and budgeting for Physical Plant operations. The following is a brief description of each of the committees. Exhibit OSM 8-01 includes each committee's charge and membership.

Committee on Campus and Facilities

The Committee on Campus and Facilities is a standing committee appointed by the President from campus constituents to advise the administration on issues which could change the exterior appearance of campus. This encompasses a broad spectrum of facilities planning issues. The committee uses existing campus master plans and its collective understanding of campus history and direction in making its recommendations. The Committee on Campus and Facilities also populates the Long Range Building Program on an *ad hoc* basis, and makes recommendations to the President on the University's Long Range Building Request to the state.

Strategic and Budget Planning Committee

The Strategic and Budget Planning Committee is charged with implementing the University's long range plan developed by the Executive Planning Council and approved by the Executive Planning Council and the President. As the executive officer who has oversight for the committee, the Vice President for Administration and Finance ensures that Facilities Services' financial needs are communicated to the Strategic and Budget Planning Council, and the President.

Budget allocations made to Facilities Services are usually related to inflationary increases, pay plan, or new building operation, maintenance, and utility costs. Operation and maintenance costs associated with new buildings are either funded through a Legislative allocation or a campus allocation. Costs are calculated primarily using historical custodial and building maintenance costs, and projected utility usage and rates per gross square foot. A small adjustment has also recently been included to increase the level of custodial and building maintenance service for these new buildings.

Arboretum Subcommittee

In 1990 The University of Montana was named by the Montana Legislature as the State Arboretum. The Arboretum Subcommittee was instated to plan the placement and development of species on campus for inclusion in an arboretum that meets the educational intent of the Legislation. The Committee also makes recommendations through the Vice President of Administration for Finance regarding grounds operations.

Sustainable Campus Committee

The Sustainable Campus Committee was created due to the urging of the campus community for a group to recommend actions that the University should take to reduce its environmental impact. This Committee has now been formally charged to recommend to the Vice President for Administration and Finance actions and planning that will bring the University in line with the commitments made under the Talloires Declaration and the President's Climate Commitment.

Recycling Oversight Committee

Recycling operations on the Missoula campus have been ongoing on a formal basis for the last 19 years. Approximately nine years ago, ASUM voted to impose a recycling fee on the student body. This fee generates approximately 95% of the recycling operational funds. The Recycling Oversight Committee is heavily populated by students and other campus stakeholders thus allowing student input into the operations and direction taken by Facilities Services. Additionally, there is very high interest on the students' part to get involved and to expand recycling.

Integrated Plant Management Committee

The Integrated Plant Management Committee was created by the Office of the President in 1991 in response to on- and off-campus concerns about the use of pesticides to control weeds and insects on the grounds. The committee's primary purpose was to review pest management practices on campus with the goal of utilizing the least toxic methods to accomplish the turf and arboretum goals. The committee reports to the President on its findings as to the appropriateness of the turf and arboretum practices, and makes recommendations on related budget and policy decisions. Approximately five years ago the committee changed its name to the Integrated Plant Management Committee from the Integrated Pest Management Committee to focus on weed management.

ADA Team

The Americans with Disability Act Team was created to help the University comply with the Americans with Disability Act. The ADA Team deals with issues involving a wide variety of existing deficits to access of the University's activities and programs. The team provides staff review and due diligence efforts in investigating and identifying resolutions to disability barriers, both physical and communication, as they arise.

The University of Montana LRBP Committee

The Long Range Building Program for the Montana University System is managed and voted upon by the Legislature on a biennial basis. As the System prepares to present its request to the Legislature, three levels of meetings must occur. First, each campus prioritizes the needs specific to that campus. These needs span all types of physical facility requirements, from routine repair and maintenance to renovation to new construction. Second, after each campus has identified its internal needs, the University hosts a conference to review and prioritize the needs of its four campuses. The last phase of this process is the integration of the project lists from The University of Montana and Montana State University into one list for the entire System. This list is presented to the Board of Regents for their approval, and is forwarded to the Governor's Office for inclusion in the Executive Budget. Because of the biennial nature of the Legislative cycle and the time that is required to solicit projects from the eight campuses of the Montana University System, the LRBP process is continuously active analyzing needs, designing projects, prioritizing projects, or getting ready to submit the integrated project list to the governor and the Legislature.

Missoula Historical Commission

The State Antiquities Act, identified in MCA 22-3-421 through 22-3-442^{viii} requires the University to utilize procedures for notification and resolution when a facility or property meets the antiquity definition and is designated for renovation or demolition. The University is obligated to communicate with the Montana State Historical Society as part of this procedure. Most of the time, as a practical matter, the Montana State Historical Society delegates this responsibility to the Missoula Historical Commission. The Commission meets each month.

WEBSITES REFERENCED

ⁱ Facilities Services: <u>http://www.facs.umt.edu/</u>

ⁱⁱ Office of Sustainability: <u>http://www.umt.edu/greeningum/</u>

ⁱⁱⁱ Sustainable Campus Committee: <u>http://www.umt.edu/committees/sustaincomm.aspx</u>

^{iv} Campus Safety Committee <u>http://www.umt.edu/committees/campussafety.aspx</u>

^vUM Asbestos Operations Maintenance Plan:

www.facs.umt.edu/BuildingMaint/Asbestos/Documents/Asbestos_Operations_&_Mainte

nance Plan 08102004.pdf

^{vi} UM Hazardous Materials Management Plan: <u>http://www.umt.edu/research/eh/hazmat.aspx</u>

^{vii} Montana Code Annotated, 18-2- 102, Authority to construct buildings:

http://data.opi.state.mt.us/bills/mca/18/2/18-2-102.htm

viii Montana Code Annotated, 22- 3- 4, Antiquities:

http://data.opi.state.mt.us/bills/mca_toc/22_3_4.htm