

**MONTANA UNIVERSITY SYSTEM
MUS Long Range Building Program
2013 BIENNIUM
DRAFT PRIORITY PROPOSAL**

March 4-5, 2010

Priority	Deferred Maintenance Projects	MSU Amount	UM Amount	Grand Total
1	Code/Deferred Maintenance/Roofs	\$ 3,200,000	\$ 3,200,000	\$ 6,400,000
2	Fine Arts Building/Art Annex/Schreiber Renovations -UM		3,500,000	3,500,000
3	Cooley Lab & HVAC Renovations - Bozeman	1,500,000		1,500,000
4	Energy Conservation Projects	2,000,000		2,000,000
5	Renovate Library Phase 1 - MT Tech		3,700,000	3,700,000
6	Renovate Library - Billings	1,620,000		1,620,000
7	Hagener Science Center - Northern	2,100,000		2,100,000
8	Main Hall Phase 3 Renovation - Western		4,450,000	4,450,000
9	AES Stations	1,500,000		1,500,000
10	Classroom Renovations - Bozeman	2,480,000		2,480,000
11	Roof Replacement Phase 1 - Great Falls COT	600,000		600,000
12	Donaldson - Classroom/Lab Renovations - Helena COT		150,000	150,000
	TOTAL	<u>\$ 15,000,000</u>	<u>\$ 15,000,000</u>	<u>\$ 30,000,000</u>

Priority	Major Construction Projects	MSU Amount	UM Amount	Grand Total
1	Missoula COT - Phase 1		\$ 32,500,000	\$ 32,500,000
2	Sci & Inst. Tech Center - Billings	\$ 14,750,000		14,750,000
3	Auto Tech Center - Northern	7,350,000		7,350,000
4	Reid Hall Adaptive Renovation - Bozeman	25,000,000		25,000,000
5	AES Stations	2,900,000		2,900,000
6	Library Renovation Phase 2 - MT Tech		1,300,000	1,300,000
7	Main Hall Phase 4 - Western		2,200,000	2,200,000
8	Missoula COT - Phase 2		14,000,000	14,000,000
	TOTAL	<u>\$ 50,000,000</u>	<u>\$ 50,000,000</u>	<u>\$ 100,000,000</u>

Authority Only	MSU Amount	UM Amount	Total
General Spending Authority		\$ 9,000,000	\$ 9,000,000
Cooley Lab Renovation - Bozeman	\$ 16,500,000		16,500,000
Research Support Facility - Missoula		10,000,000	10,000,000
Regional Workforce Training Facility - Billings	7,000,000		7,000,000
Alumni/Foundation Facility - Missoula		13,500,000	13,500,000

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DEFERRED MAINTENANCE PROJECTS

Priority 1

Code Deferred/Roof Maintenance.....\$3,200,000

All MSU Campuses -- (Code Compliance/Energy Conservation/Operational Efficiency Savings)

State funding is needed to address life safety, code and accessibility problems, and roof maintenance/replacements that have been identified through Facilities Condition Inventory, Capital Project Plan, inspections performed at each campus, and by various state and city agencies. These projects are necessary to meet requirements of the International Building Code, Americans with Disabilities Act, ANSI Guidelines, Fire Code, Life Safety Code, citations from OSHA, citations from the Department of Labor and Industry, etc. They include items such as fire alarms, fire sprinklers, fire doors and separation assemblies, stair enclosures, guardrails, emergency lighting, egress lighting, ventilation systems, and other noted deficiencies.

Roof Replacements - All UM Campuses.....\$3,200,000

(Deferred Maintenance)

The roofing projects listed below have exceeded their useful life. The replacement systems chosen will provide maximum protection with minimum maintenance. Additionally, where historical structures are involved, preference has been given to maintaining the historical nature of the roofing system. Finally, all roofing systems will incorporate current energy standards.

Priority 2

Arts Building/Art Annex Renovations – UMM\$3,500,000

(Deferred Maintenance/Code/Life Safety/Energy)

The art program is currently housed in three of the campus buildings; Fine Arts, Art Annex and Schreiber Gym. These facilities are not suitable for the kinds of instructional activities that are being offered by the program. Renovation will provide a safe, ADA compliant environment for study, learning and research.

Priority 3

Cooley Lab Energy Projects.....\$1,500,000

MSU Bozeman (Code Compliance/Energy Conservation/Operational Efficiency Savings)

Originally constructed in 1960, Cooley Laboratories consists of four floors and a basement that are highly inefficient. The project will provide new windows in the exterior envelope for increased energy efficiency, upgrade HVAC systems, and modernize building components as well as provide supplement contingency funds necessary to complete the Cooley Lab Renovation Project anticipated to be funded via a National Institutes of Health (NIH) grant request. The Energy Projects will be performed in conjunction with the Cooley Lab Renovation Project utilizing NIH ARRA Funds in the amount of \$15M.

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Priority 4

Energy Projects – Various\$2,000,000

All MSU Campuses - (Code Compliance/Energy Conservation/Operational Efficiency Savings)

Specific projects are determined by priority from project lists, which are established from data including FCI, Capital Projects Plan, inspections, and synchronizing energy conservation components with other construction projects.

Priority 5

Renovate and Expand Library Phase I – MTECH.....\$3,700,000

(Adaptive Renovation/Deferred Maintenance/Code/Life Safety)

The structure is in critical need of safety, code, accessibility and deferred maintenance upgrades. Renovation will provide a safe, ADA compliant environment for study, learning and research.

Priority 6

Library Renovation Project\$1,620,000

MSU Billings Campus - (Code/Life Safety/Operational Efficiency Savings)

This three story 80,000sf facility provides the central support for the Campus. This building has seen only minor maintenance other than a new boiler since it was constructed a half century ago. This project includes:

Classroom Upgrades.....	\$450K
Elevator Modernization.....	\$150K
Fire Sprinklers & Alarms	\$385K
Asbestos	\$20K
Window Replacement	\$375K
ADA modifications.....	\$230K

Priority 7

Hagener Science Center – Laboratory Renovation\$2,100,000

MSUN Campus - (Adaptive Renovation/Major Maintenance/Code/Life Safety)

Hagener Science Center, 41,971sf, was constructed in 1969 to house the chemistry and other related science departments. Since the original construction, there has been limited renovation to the science laboratories. This project would renovate the current laboratories to provide for a modern teaching environment and code upgrades to accommodate updated life safety standards including renovation of the chemical storage rooms. This past year, MSU-Northern dealt with a \$43,000 chemical hazardous materials clean-up to address improperly inventoried and stored chemicals. This project will also replace the boiler/heating system and cooling system; and redesign the air handling system so that ventilation from the chemical storage area is code compliant. Lighting control upgrades would also be addressed. A new chiller condensing unit was installed this year with deferred maintenance funds and tied into the existing closed interior cooling loop, but the majority of the cooling system still needs replacement.

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Priority 8

Main Hall Phase III Renovation – UMW.....\$4,450,000

(Deferred Maintenance/Code/Life Safety/Energy)

This project is Phase III of the first major upgrade to historic Main Hall. Phases I and II were funded by the 60th and 61st Legislatures. Main Hall is the major classroom facility on the UMW campus. This phase would concentrate on the 1924 and 1951 sections of the building and would complete updating the most urgent mechanical, electrical, seismic, plumbing system, ADA and energy conservation needs.

Priority 9

MAES Stations – various projects\$1,500,000

All Stations - (Deferred Maint/Code/Life Safety/ Operational Efficiency Savings)

Specific projects are determined by priority from project lists created by MAES Director/College of Agriculture Dean, Station Manager, FPDC inspections, and by combining project types for economy of scale. This appropriation will help address a variety of code and deferred maintenance issues at the ag stations, including but not limited to roof repairs and replacements; plumbing and electrical work; building envelope repairs such as siding, insulation, windows, doors, etc; water/sewer system maintenance; interior renovation/upgrade work; fencing & corral maintenance; and, building system/equipment replacement.

Priority 10

Classroom Renovations – various projects\$2,480,000

Bozeman Campus - (Renovation/Deferred Maint/Code/Life Safety)

The project will renovate and modernize classrooms as determined by recommendation from the UFPB Classroom Committee and based on deficiency audits of Registrar-controlled classrooms (i.e. badly outmoded and dysfunctional in terms of configuration, accessibility, electrical and audio/visual capabilities, finishes and lighting). A classroom renovation project will change configuration of some classrooms for current teaching methods and code compliance, make alterations for ADA accessibility, provide additional electrical outlets, upgrade data access, upgrade writing surfaces, upgrade finishes, update HVAC components and replace lighting with energy-efficient fixtures with variable level capabilities.

Priority 11

Campus - Roof Replacement Priority #1\$600,000

MSU COT Great Falls- (Deferred Maintenance/Operational Energy Efficiency and Savings)

This project, completed in four phases, would replace the deteriorating flat roof membrane with a new standing seam metal roof to be replaced in four phases. The new metal roofing would have a 50 year+ life span as opposed to a 15 year membrane life. This project also includes R-40 minimum roof insulation, mechanical equipment relocation, including exterior gutters and downspouts with a perimeter subsurface collection system to drain into an on- site retention pond. As part of Priority #1, the project would consist of a roof/frame mounted solar panel system. The application would include a monitoring/display system, electrical room modifications (tied into our existing electrical system) with no battery backup. Total system production would be approximately 11.5 KW. The original \$160,000 cost could possibly be offset by a Northwestern Energy credit.

Priority #1 23,260 sf. \$584,500

11.5 KW Photo Voltaic System \$160,000

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Priority 12

Donaldson Building Classroom/Lab Renovations – UMH\$150,000
(Adaptive Renovations)

During the remodel project of the Donaldson Campus in 2006 several areas of the campus were remodeled but funding did not exist to remodel all the areas needing renovation. This project will complete the remaining work not completed in the first project.

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MAJOR CONSTRUCTION PROJECTS

Priority 1

New MCOT Facilities on South Campus Phase I- UMM \$32,500,000
(New Construction)

The University of Montana requests funding to build Phase I of the new MCOT facility on the South Campus. The new facility would be the first academic facility on the University's South Campus site. The new facility would not only address space issues but would address all of the other issues related to outdated building design and systems from a 1960's facility.

Priority 2

Science & Instructional Technology Center \$14,750,000
MSU Billings Campus - (Renovation/New Construction)

As one of the earliest structures on this the third largest University within the state, the 1947 Science building is in dire need of updating to meet the demands of today's curriculum. The renovation of the 49,000sf facility will accommodate appropriately sized classrooms, research labs, and student support areas while addressing our single largest deferred maintenance issue with an FCI of 18.6%. A 20,000 square foot addition will provide a new safe environment capable of supporting the demands placed on today's learning labs. Hazardous and radioactive materials demand the latest environmental safeguards to insure our students' health and safety. Additionally, this project will allow us to co-locate our IT resources in one modern, central location with the next generation high speed bandwidth infrastructure to support the sciences and their research; and provide walk-in technology support for students, faculty and staff. The scope of this project includes code/ADA compliant general-purpose classrooms, space for adaptive learning, integrated technology learning, multi-media center, replacement facilities for the central computing area within McMullen Hall, wet and dry science laboratories including a cadaver lab to be used in conjunction with our neighboring medical complex.

Priority 3

Auto Tech Center – Renovation \$7,350,000
MSUN Campus - (New Const/Major Maintenance//Deferred Maint/Code/Life Safety)

In 2007 the Legislature appropriated \$800,000 for planning and design of this facility. The Automotive Technology building represents one of the largest remaining concentrations of serious deferred maintenance in academic buildings on the MSU-Northern campus. The Automotive Technology Building was built in 1952, with the Davey Pioneer Lab added in 1978.

The 27,240sf building has old, inadequate, and inefficient heating, ventilation, electrical and lighting systems, much of which is home-built or modified; poor or no insulation and single-pane windows. There are numerous building and fire code issues. Egress from a frame addition to Automotive Mechanics is inadequate. No dedicated ventilation or explosion protection for paint storage and mixing. Restrooms are not ADA compliant. Fire alarms are not currently code-compliant or addressable. There is no sprinkler protection for this facility. Lift equipment outdated and dangerous.

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Priority 4

Reid Hall – Renovation \$25,000,000

Bozeman Campus - (Deferred Maint/Code/Life Safety)

Originally constructed in 1957, Reid Hall houses the College of Business and the College of Education/Health & Human Development as well as several of the largest and most heavily used registrar-scheduled classrooms and lecture halls on campus. The renovation includes replacing the building elevator and altering the restrooms to comply with the Americans with Disabilities Act, installing a fire suppression system and fire alarm system, upgrading the secondary electrical system (including branch panels and select circuits) to handle required current load and expansion capability, replacing the building heating and ventilation system, providing building cooling, addressing code deficiencies and deferred maintenance as well as modernizing building finishes and improving space utilization.

Priority 5

MAES Stations \$2,900,000

MSU MAES - (Renovation /New Construction)

Specific projects determined the highest priority from project lists created by MAES Director/College of Agriculture Dean, Station Manager, FPDC inspections, and by combining project types for economy of scale. This appropriation will help address a variety of renovation and new construction issues at the ag stations, including facility updates, modernizations, and improving space utilization and functionality.

Priority 6

Renovate and Expand Library Phase II – MTECH \$1,300,000

(Adaptive Renovation/Deferred Maintenance/Code/Life Safety)

This project will complete the remaining work not completed in the first phase of the project. This completed renovation will also bring the building into ADA compliance, enhance energy efficiencies and promote state conservation goals.

Priority 7

Main Hall Phase IV Renovation – UMW \$2,200,000

(Deferred Maintenance/Code/Life Safety/Energy)

This project will complete the remaining work not completed in the first three phases of the project. This completed renovation will also bring the building into ADA compliance, enhance energy efficiencies and promote state conservation goals.

Priority 8

New MCOT Facilities on South Campus Phase II- UMM \$14,000,000

(New Construction)

The University of Montana requests funding to build Phase I of the new MCOT facility on the South Campus. This project will complete the culinary wing of the facility and the remaining work not completed in the first three phases of the project.

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AUTHORITY ONLY

General Spending Authority - All Campuses \$9,000,000

This request grants spending authority to The University of Montana and its affiliated campuses to address pressing needs, which exceed \$150,000 and the State is unable to fund or which develop between Legislative sessions and need to be addressed before the next Legislative opportunity. The funding could be from various sources (Federal Special Revenue, Donations, Grants, State Funds, Higher Education Funds) and the projects will not require O&M funding from the State. With the granting of this new authority all previous general spending authority granted to The University of Montana and unused will be reverted.

Cooley Lab Renovation Authority \$16,500,000

MSU Bozeman Campus - (Authority Only – Renovation)

The Cooley Laboratories were originally designed in 1953 and constructed in 1960 as the first building on the campus to be funded by the National Institutes of Health and is currently the center of research activity for the Department of Microbiology. The laboratories consist of a basement and four floors, with offices and laboratories (31,415 GSF/ 18,245 NASF). The laboratories are a critical component of both undergraduate and graduate training in microbiology. Little to no remodeling has taken place in this facility since its construction and the amount of deferred maintenance is significant. The single elevator is too small to meet current ADA standards; the bathroom facilities are grossly inadequate, with only two separate units for the entire building. The building is highly inefficient, with no air supply, centralized cooling, vacuum, or distilled/RO water. Occupants are often cited for infrastructure and fire/life safety violations. Along with a complete overhaul of structure and mechanical systems, each floor will be customized to meet the programmatic needs of the academic/research groups housed within the facility.

ARRA funds from the NIH in the amount of \$15M for a full building renovation program are anticipated. This project is planned to be LEED certified at a Silver level and has been registered with USGBC.

New Research Support Facility- UMM \$10,000,000

(Authority Only)

This request grants spending authority to The University of Montana to construct a new Research Support Facility. The funding could be from various sources (Federal Special Revenue, Donations, Grants, State Funds, Higher Education Funds) and this project will not require O&M funding from the State.

Regional Workforce Training Facility..... \$7,000,000

MSU Billings Campus - (Authority Only – New Construction)

The 30,000sf regional training facility will provide technology-enhanced educational training opportunities for high-demand technical and occupational programs, a one-stop job center where multiple job training and educational services will be available to Billings and Eastern Montana, as well as business development services to aid small business owners.

Alumni/Foundation Facility- UMM \$13,500,000

(Authority Only)

This request seeks to obtain spending authority to construct an Alumni/Foundation Building on campus. There is a vision for an accessible multi-purpose facility that is available to the public and the University community. The University of Montana proposes constructing a 27,700 gsf facility which would include office space, meeting rooms, and provide a basement for storage.