PRIORITY SUP MR-06

INFLATIONARY ADJUSTMENT SEWER TREATMENT PLANT

FLATHEAD LAKE BIOLOGICAL STATION
$1,100,000

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

This project will replace the existing sewer treatment facility at the Flathead Lake Biological Station.

The sewer treatment facility is critical to the operation of the biological station and also serves the rest rooms at the neighboring state park. The system is far beyond its life expectancy and has deteriorated to the point that the redundancy originally designed into the plant is no longer available, making system failure highly likely. If the plant fails, the station will have to rely on pumping the collection tank daily.

Maintaining campus buildings and utility systems in perpetuity requires periodic replacement of major systems prior to complete failure.

INFLATIONARY ADJUSTMENT INFO

Replacing the existing treatment facility was approved in Section 2, Chapter 461, Laws of 2021 for $1,750,000.

The situation described in the original project info continues to worsen and the project is unable to be issued for bids and corrective action due to the significant and unprecedented recent cost escalation within the construction industry that have necessitated this request for an additional $1,100,000 to complete the project.

FUNDING		
Original Appropriation	LRBP Cash	$1,750,000
Inflationary Adjustment	***LRBP Cash***	***$1,100,000***
TOTAL		**$2,850,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$1,575,000
Inflationary Construction Costs	***$1,100,000***
Consultant Services	$175,000
TOTAL	**$2,850,000**

PRIORITY SUP MR-07

INFLATIONARY ADJUSTMENT
MANSFIELD LIBRARY ROOF REPLACEMENT

UNIVERSITY OF MONTANA
$500,000

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

This project will replace the ballasted EPDM roofing membrane that was installed in 1990.

The Mansfield Library roof is approximately one acre in size. The existing roof membrane has exceeded its life expectancy by at least 15 years. Costly damage to structure and contents could result if any of the proposed work is deferred again.

The roof is at risk of a major failure that could damage the library holdings. A new roof membrane could be ballasted with the new solar panels that are part of an energy conservation project. The cost of the solar panel project is not part of this request.

The roof has been well maintained over the years but has deteriorated to a point where it can no longer be effectively repaired. Continued patching and repairing may temporarily delay further deterioration and damage but will require higher replacement costs later.

INFLATIONARY ADJUSTMENT INFO

Replacing the existing roof was approved in Section 2, Chapter 461, Laws of 2021 for $1,200,000.

Due to the significant and unprecedented recent cost escalation within the construction industry, the scope of the project was scaled back to replace a large portion of the roof in differing sections. This request for an additional $500,000 is to complete the full scope of the project as originally proposed.

FUNDING		
Original Appropriation	LRBP Cash	$1,200,000
Inflationary Adjustment	***LRBP Cash***	***$500,000***
TOTAL		**$1,700,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$1,080,000
Inflationary Construction Costs	***$500,000***
Consultant Services	$120,000
TOTAL	**$1,700,000**

PRIORITY SUP MR-08

INFLATIONARY ADJUSTMENT
VANDE BOGART LIBRARY ROOF REPLACEMENT

MONTANA STATE UNIVERSITY - NORTHERN
$675,000

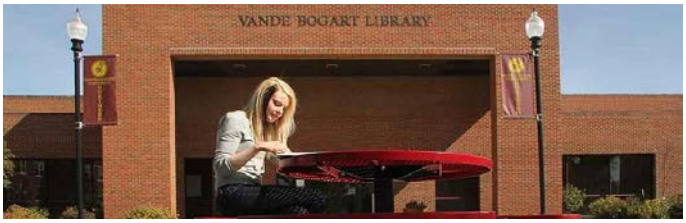
ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

This project replaces the failing roof membrane and insulation components of the Vande Bogart Library's built-up roof (BUR) system.

The Vande Bogart Library's roof membrane has many blisters and has begun pulling away from the parapet wall. This project replaces the roof membrane and insulation components which are beyond their useful life spans.

The Vande Bogart Library, constructed in 1982, is a 33,593 square-foot facility that provides not only an incredible educational resource for MSU-Northern's student body and surrounding community, but also houses a federal government depository, extensive collection of historic photographs, and the North Montana Plains Indian Museum collection.

Significant roof improvements are required to protect and guarantee the safety and integrity of these valuable stored archival materials for future generations. By replacing the aging roof membrane, the university would also be relieved of extensive deferred maintenance costs from an already strained plant maintenance budget.



INFLATIONARY ADJUSTMENT INFO

Replacing the existing roof was approved in Section 2, Chapter 461, Laws of 2021 for $325,000.

The original estimate has proven to be woefully inadequate due to the nature and extent of work required to remove the existing built-up system.

Combined with the significant and unprecedented recent cost escalation within the construction industry, the roofing system cannot be replaced without realization of this request for an additional $675,000.

FUNDING		
Original Appropriation	LRBP Cash	$325,000
Inflationary Adjustment	***LRBP Cash***	***$675,000***
TOTAL		**$1,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$292,500
Inflationary Construction Costs	***$675,000***
Consultant Services	$32,500
TOTAL	**$1,000,000**

PRIORITY SUP MR-10

INFLATIONARY ADJUSTMENT
REID HALL FIRE SYSTEM UPGRADES

MONTANA STATE UNIVERSITY
$1,000,000

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

Reid Hall is the most heavily occupied academic teaching facility on Montana State University's campus. This project proposes the construction of a fire suppression and alarm system to improve the life safety and code compliance of Reid Hall, protect property from damage and/or loss, and most importantly, protect building occupants from harm.

Fire suppression and alarm systems increase the protection of the building occupants from harm and property damage and loss. This project brings the state building, heavily utilized for academic operations, into compliance with current building codes.

Reid Hall, constructed in 1959, is a 93,262 square-foot academic facility that is heavily occupied by students, faculty and staff. It is one of Montana State University's largest classroom facilities, housing over 1,600 instructional seats at any given hour. The building also provides space for the College of Education, Health & Human Development (EHHD), computer labs, and several other academic spaces.

From a fire code violation and life safety perspective, Reid Hall's fire code violations pose a significant threat to life and property loss in the event of a fire.

Montana State University already allocated $300,000 (2019) towards the consultant services to design a fire suppression and alarm system installation in Reid Hall. This $300,000 is not included in the total LRBP funding request.

INFLATIONARY ADJUSTMENT INFO

The original fire protection systems upgrade was approved in Section 2, Chapter 461, Laws of 2021 for $1,700,000.

Due to the significant and unprecedented recent cost escalation within the construction industry, the scope of the project cannot be completed without this additional $1,000,000 requested.

FUNDING		
Original Appropriation	LRBP Cash	$1,700,000
Inflationary Adjustment	***LRBP Cash***	***$1,000,000***
TOTAL		**$2,700,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$1,530,000
Inflationary Construction Costs	***$1,000,000***
Consultant Services	$170,000
TOTAL	**$2,700,000**

PRIORITY SUP MR-11

INFLATIONARY ADJUSTMENT
BROCKMANN CENTER HVAC & ENERGY UPGRADES

MONTANA STATE UNIVERSITY - NORTHERN
$1,907,320

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

This project will upgrade the Brockmann Center's mechanical equipment and envelope to retire deferred maintenance and improve energy efficiency.

The Brockmann Center's exterior windows and doors, and HVAC system are deficient and require replacement and upgrades to improve energy efficiency and improve occupant comfort.

The 53,195 square foot Brockmann Center was constructed in 1970 as a multi-discipline academic building. Since the original construction, there has been limited renovation. This project replaces deteriorated original window and door systems with energy efficient models and addresses inadequate ADA egress issues.

This project also upgrades and recommissions the building's HVAC system components to achieve designed efficiency and current High-Performance Building Standards. The current mechanical system has trouble maintaining space temperatures with all the additional lab occupancy and equipment that now is in the classroom spaces. Brockmann Center is presently the most utilized academic building on MSU-Northern's campus.

INFLATIONARY ADJUSTMENT INFO

The original HVAC & energy upgrade was approved in Section 2, Chapter 461, Laws of 2021 for $855,000.

The original estimate was roughly half of what was required. A recent assessment shows the Brockmann Center has a facility condition index (FCI) of 16.9%, which means it is in poor overall condition. The extent of replacing these systems is a more substantial effort than originally anticipated. Combining this with the tremendous inflationary impacts has necessitated this large increase in the project budget. The project will retire a significant amount of deferred maintenance and improve energy efficiency.

Due to the significant and unprecedented recent cost escalation within the construction industry the project cannot be completed without this additional $1,907,320 requested.

FUNDING		
Original Appropriation	LRBP Cash	$855,000
Inflationary Adjustment	***LRBP Cash***	***$1,907,320***
TOTAL		**$2,762,320**

ESTIMATED PROJECT COSTS	
Construction Costs	$769,500
Inflationary Construction Costs	***$1,907,320***
Consultant Services	$85,500
TOTAL	**$2,762,320**

PRIORITY SUP MR-12

INFLATIONARY ADJUSTMENT
CLAPP BUILDING ELEVATOR MODERNIZATION

UNIVERSITY OF MONTANA
$500,000

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

This project will upgrade and modernize the main elevator in the Clapp Building.

The existing elevator is original to the building and is currently out of compliance with the state elevator code. Parts for repair are hard to find. This elevator needs a total upgrade to meet current codes.

This elevator has been well maintained over the years, but it has deteriorated to a point where it can no longer be effectively repaired. We are at risk of a major failure that could render the upper floors and the basement inaccessible.

Continued repairing may temporarily delay further deterioration and damage but will require higher replacement costs later. The elevator is no longer reliable and is not currently certified by the state inspector.

INFLATIONARY ADJUSTMENT INFO

The elevator repair, upgrade, and modernization was approved in Section 2, Chapter 461, Laws of 2021 for $300,000.

Due to the significant and unprecedented recent cost escalation within the construction industry, the scope of the project cannot be completed without this additional $500,000 requested.

FUNDING		
Original Appropriation	LRBP Cash	$300,000
Inflationary Adjustment	***LRBP Cash***	***$500,000***
TOTAL		**$800,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$270,000
Inflationary Construction Costs	***$500,000***
Consultant Services	$30,000
TOTAL	**$800,000**

PRIORITY SUP MR-13

INFLATIONARY ADJUSTMENT
STONE HALL ROOF REPLACEMENT

UNIVERSITY OF MONTANA
$800,000

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

Replace existing sloped roofing and attic insulation of Stone Hall (formerly the Journalism Building). This building was built in 1936. This project will replace the worn-out roof, abate existing vermiculite insulation, and replace with new attic insulation.

The existing sloped roof shingles are beyond their life expectancy and wearing thin. The vermiculite attic insulation must be abated and replaced with new insulation. This project would replace the roof with new historic looking, long lasting shingles similar to Main Hall and Rankin Hall. The existing shingle roof has exceeded its life expectancy by at least 20 years. Costly damage to structure and contents could result if any of the proposed work is deferred again.
The roof has been well maintained over the years but has deteriorated to a point where it can no longer be effectively repaired. We are at risk of a major failure that could damage the building contents. Continued patching and repairing may temporarily delay further deterioration and damage but will require higher replacement costs later. Finally, the new roofing system will incorporate current energy standards.

INFLATIONARY ADJUSTMENT INFO

Replacing the existing roof was approved in Section 2, Chapter 461, Laws of 2021 for $400,000.

Due to the significant and unprecedented recent cost escalation within the construction industry, the scope of the project cannot be completed without this additional request of $800,000.

FUNDING		
Original Appropriation	LRBP Cash	$400,000
Inflationary Adjustment	***LRBP Cash***	***$800,000***
TOTAL		**$1,200,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$360,000
Inflationary Construction Costs	***$800,000***
Consultant Services	$40,000
TOTAL	**$1,200,000**

PRIORITY SUP CD-01A

INFLATIONARY ADJUSTMENT
AG ANALYTICAL LAB (COMBINED LABS)

DEPARTMENT OF AGRICULTURE
$3,858,000

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

NOTE: In the 67th Legislative Session this request included construction of a new Ag Analytical laboratory for the Department of Agriculture in association with the Veterinary Diagnostic Lab. The new Ag Analytical lab will be constructed as part of the combined lab facility at MSU Bozeman. The combined lab includes the Veterinary Diagnostic Lab, Ag Analytical Lab, and the Wool lab.

in concurrence with the Legislative interim study (HB 661, 2017) and in cooperation with the Department of Livestock and Montana State University, the Department of Agriculture submitted a proposal to construct a new laboratory to provide agricultural chemistry testing services for feed, fertilizer, pesticide, and chemical groundwater protection. The Ag Analytical Laboratory will vacate its current location in McCall Hall on the MSU campus.

INFLATIONARY ADJUSTMENT INFO

The Ag Analytical Lab was approved in Section 1, Chapter 468, Laws of 2021 jointly with the VDL for $9,850,000 of LRBP capital development funds.

Due to increased construction costs, supply chain issues, and lack of qualified labor forces facing the construction industry following the pandemic, the cost to construct the Ag Analytical Lab has increased. Without an inflationary adjustment, the Ag Analytical Lab cannot be constructed as programmed. Authorization of the Inflationary Adjustment will ensure the Ag Analytical Lab construction will be completed as programmed in conjunction with the Veterinary Diagnostic Lab and Wool Lab.

FUNDING		
Original Appropriation	LRBP Cash	$9,850,000
Inflationary Adjustment	***LRBP Cash***	***$3,858,000***
TOTAL		**$13,708,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$8,865,000
Inflationary Construction Costs	***$3,858,000***
Consultant Services	$985,000
TOTAL	**$13,708,000**

PRIORITY SUP CD-01B

INFLATIONARY ADJUSTMENT
WOOL LAB (COMBINED LABS)

MONTANA STATE UNIVERSITY
$4,700,000

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

NOTE: In the 67th Legislative Session this request was part of the request to construct five new Chemistry and Instrumentation Labs at Montana Ag Experiment Stations (MAES). The new Wool Lab will now be constructed as part of the combined lab facility at MSU Bozeman. The combined lab includes the Veterinary Diagnostic Lab, Ag Analytical Lab, and the Wool lab.

Construction of a new comprehensive wool research laboratory will continue to provide outreach and education for Montana's wool growers. The new wool lab will permit the state of Montana to launch new collaborative research and become a global leader in wool production. This facility is unique due to the various services and research it currently conducts. The current lab has an analytical lab and a wet lab to analyze the quality of wool fibers for growers around the country. Increased profits and yields for growers has been the result of over 75 years of research by the labs. The construction of up-to-date, newer labs and greater research opportunities will elevate this facility to be a center of excellence as a global leader of the wool industry now and into the future. The facility provides research on ecology cover crops, genetics, government contracts for uniforms, textile cold weather research, lanolin medicinal uses and advanced textile development.

INFLATIONARY ADJUSTMENT INFO

The Wool Lab was approved in Section 1, Chapter 468, Laws of 2021 for $5 million LRBP capital development funds and $1 million of authority for fund-raising.

Due to increased construction costs, supply chain issues, and lack of qualified labor forces facing the construction industry following the pandemic, the cost to construct the Comprehensive Wool Research lab has increased. Without an inflationary adjustment, the amount of lab space programmed cannot be constructed as planned. Authorization of the Inflationary Adjustment will permit the complete construction of the Wool Labs as programmed as part of the combined state lab facility at MSU Bozeman.

FUNDING		
Original Appropriation	LRBP Cash	$5,000,000
	Authority	$1,000,000
Inflationary Adjustment	***LRBP Cash***	***$4,700,000***
TOTAL		**$10,700,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$5,400,000
Inflationary Construction Costs	***$4,700,000***
Consultant Services	$600,000
TOTAL	**$10,700,000**

PRIORITY SUP CD-01C

INFLATIONARY ADJUSTMENT
VET DIAGNOSTIC LAB (COMBINED LABS)

DEPARTMENT OF LIVESTOCK
$2,200,000

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

NOTE: In the 67th Legislative session the new Wool Lab was included with the five MAES Chemistry and Instrumentation Research Laboratories. It is being constructed as part of the combined lab facility at MSU Bozeman. The combined lab includes the Veterinary Diagnostic Lab, Ag Analytical Lab, and the Wool lab.

This request constructs a modern Montana Veterinarian Diagnostic Laboratory (MVDL) adjacent to the old Marsh Laboratory Complex (1961) on the MSU Bozeman's campus. The Department of Livestock, in concurrence with the Legislative interim study (HB 661, 2017) Montana State Laboratories, submitting a new construction proposal to build a modern Veterinary Diagnostic Laboratory adjacent to the old Marsh Laboratory Complex (1961) on MSU Bozeman's campus. This new facility is in response to failing accreditation requirements for inadequate infrastructure including the current workspace footprint, design, and ventilation. The new lab will feature enhanced biosecurity and accommodate future growth and testing capabilities to help ensure Montana maintains a disease-free economic landscape. Without a comprehensive upgrade to the facilities the State should seek to close the Lab in the next six years. Loss of industry accreditation, federal cooperation and national funding are being threatened. Mechanical systems cannot be suitably upgraded without extensive modernization. Other State Labs are currently in a better technologically positioned to service Montanans' daily business.

INFLATIONARY ADJUSTMENT INFO

The VDL was approved in Section 1, Chapter 468, Laws of 2021 jointly with the Ag Analytical Lab for $26,200,000 of LRBP capital development funds in the event ARPA dollars were not approved by the US Dept. of Treasury. Treasury did not approve the use of ARPA funds for the project.

Due to increased construction costs, supply chain issues, and lack of qualified labor forces facing the construction industry following the pandemic, the cost to construct the new Veterinary Diagnostic Lab facility has increased since the initial cost estimate. The project currently being designed, and estimated costs of construction evaluated. Without an inflationary adjustment, the amount of lab space per the program requirements cannot be constructed as planned. Authorization of the Inflationary Adjustment will permit the complete construction of the VDL as programmed and as part of the combined state lab facility at MSU Bozeman.

FUNDING		
Original Appropriation	LRBP Cash	$26,200,000
Inflationary Adjustment	***LRBP Cash***	***$2,200,000***
TOTAL		**$28,400,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$23,580,000
Inflationary Construction Costs	***$2,200,000***
Consultant Services	$2,620,000
TOTAL	**$28,400,000**

PRIORITY SUP CD-05

INFLATIONARY ADJUSTMENT
HEATING SYSTEMS UPGRADE

MONTANA TECHNOLOGICAL UNIVERSITY
$2,750,000

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

PHASE 1: This project will replace a portion of Montana Technological University's failed steam distribution system.

This project upgrades existing tunnels where needed for safety and maintenance and replaces failed direct buried piping with new tunnel sections. Steam tunnels run under older buildings on the Montana Tech campus. Some of these tunnels are still open for walking from one building to another. Little or no repair work has been done on the tunnels and need to be repaired or closed off from the public. The ceilings are lower than normal with steam lines and other utility pipes running below the ceiling. Adding tunnels to the remainder of the campus will protect infrastructure that is direct burial. This will allow better maintenance and inspection procedures to be used. The steam distribution system is a combination of tunnels and direct buried lines. The system is 80-100 years old and is near the end of its useful life and in need of repair to allow for current usage. The direct buried piping is leaking and is inadequately insulated. Sections of the tunnel used for public access between building need to be repaired for safe passage.

PHASE 2: This project will continue replacement of Montana Technological University's failed steam distribution system.

This project upgrades existing tunnels where needed for safety and maintenance and replaces failed direct buried piping with new tunnel sections. Steam tunnels run under older buildings on the Montana Tech campus. Some of these tunnels are still open for walking from one building to another. Little or no repair work has been done on the tunnels and at some point, they will need to be repaired or at a minimum closed off from the public. The ceilings are lower than normal with steam lines and other utility pipes running below the ceiling. Adding tunnels to the remainder of the campus will protect infrastructure that is direct burial. This will allow better maintenance and inspection procedures to be used.

INFLATIONARY ADJUSTMENT INFO

The heating system approved in Sections 2 & 3, Chapter 461, Laws of 2021 for an aggregate of $6,000,000. Phase 1 is in construction.

Due to the significant and unprecedented recent cost escalation within the construction industry, this request for an additional $2,750,000 is to complete the full scope of the project as originally proposed.

FUNDING		
Original Appropriation	LRBP Cash	$6,000,000
Inflationary Adjustment	***LRBP Cash***	***$2,750,000***
TOTAL		**$8,750,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$5,400,000
Inflationary Construction Costs	***$2,750,000***
Consultant Services	$600,000
TOTAL	**$8,750,000**

PRIORITY SUP CD-06

INFLATIONARY ADJUSTMENT BLOCK HALL RENOVATION

UNIVERSITY OF MONTANA - WESTERN

$3,600,000

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

The scope of the proposed Block Hall project would include the renovation and asbestos abatement of the entire building. The renovation will update obsolete classroom and laboratory facilities, including aging natural gas valves, lab plumbing fixtures, and fixed tables and seating that are no longer acceptable in a modern learning space. This project will also include an effective ventilation system that will provide students with a safe learning environment where lab accidents cannot contaminate the entire building.

The Block Hall renovation is required to accommodate the growing science programs and bring the building up to modern life safety and air quality codes. Upon completion, the building will be reprogrammed and offer the updated classroom and lab facilities to all University of Montana Western students for both general studies and specialized science programs

Block Hall is the only laboratory facility on campus and houses all of UM Western's science and math facilities. All other majors offered at UM Western also attend required math and science classes in Block Hall. There are six wet labs in use, with three on the third floor and three on the second floor. Some of these lab spaces contain fume hoods that are operational, but the lab's ventilation is part of the entire building's air circulation system. This antiquated system pulls air from every office, classroom, and lab and redistributes it throughout the building. In the event of a spill or accident, this would result in contaminated air from the labs quickly being dispersed to all areas of the building. The labs almost entirely contain original equipment from the building's construction in 1969 and are in desperate need of upgrades.

The funding of the request is the most cost-effective approach. Partially funding this project would extend the renovation schedule and increase the costs because of inefficient or multiple projects on various building systems. Also, construction cost inflation will only increase the cost of any work deferred until a later date.

INFLATIONARY ADJUSTMENT INFO

The renovation was approved in Section1, Chapter 468, Laws of 2021 for $12,000,000.

Due to the significant and unprecedented recent cost escalation within the construction industry, this request for an additional $3,600,000 is to complete the full scope of the project as originally proposed.

FUNDING		
Original Appropriation	LRBP Cash	$12,000,000
Inflationary Adjustment	***LRBP Cash***	***$3,600,000***
TOTAL		**$15,600,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$10,800,000
Inflationary Construction Costs	***$3,600,000***
Consultant Services	$1,200,000
TOTAL	**$15,600,000**

PRIORITY SUP CD-09

INFLATIONARY ADJUSTMENT RESEARCH LABS

MONTANA AG EXPERIMENT STATIONS
$1,604,050

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

NOTE: In the 67th Legislative Session this request included the construction of a new comprehensive wool research laboratory. The new wool lab will now be constructed as part of the combined lab facility at MSU Bozeman. The combined lab includes the Veterinary Diagnostic Lab, Ag Analytical Lab, and the Wool lab.

Construct five Chemistry and Instrumentation Research Laboratories at CARC, NARC, NWARC, SARC and WTARC, one Horticulture Research and Teaching Building at WARC to support the Montana Agricultural Experiment Stations' (MAES) Lab-To-Field Development Plan.

The requested facilities would address three highest-priority objectives for MAES capital development. The facilities will:

1. replace outdated facilities that limit the speed and degree of innovation with which research can be conducted
2. ensure that modern safety standards are fully met, and that state-of-the-art research can be conducted to cost-effectively address unique, Montana-specific issues, especially those falling within the grand challenge areas, and
3. leverage state-of-the-art facilities to recruit the best faculty and graduate students and enable new and existing scientists to be significantly more competitive for regional and federal-level grants and partnerships, further increasing the return on Montana's investment in MAES. The research infrastructure development requests reflect the integrated investment strategy of the Montana Agricultural Experiment Station.

INFLATIONARY ADJUSTMENT INFO

The Labs were approved in Section 1, Chapter 468, Laws of 2021 for $6,000,000 of LRBP capital development funds and $300,000 of authority for fund raising.

Due to increased construction costs, supply chain issues, and lack of qualified labor forces facing the construction industry following the pandemic, the cost to construct the MAES Research labs has increased. Without an inflationary adjustment, research labs cannot be constructed at all five MAES locations as planned. Authorization of the Inflationary Adjustment will permit construction of the Chemistry and Instrument Research Labs at all five Montana Agricultural Experiment Stations.

FUNDING		
Original Appropriation, 67th	LRBP Cash	$6,000,000
	Authority	$300,000
Inflationary Adjustment	***LRBP Cash***	***$1,604,050***
TOTAL		**$7,904,050**

ESTIMATED PROJECT COSTS	
Construction Costs	$5,670,000
Inflationary Construction Costs	***$1,604,050***
Consultant Services	$630,000
TOTAL	**$7,904,050**

PRIORITY SUP CD-12

INFLATIONARY ADJUSTMENT
HAYNES HALL VENTILATION UPGRADES

MONTANA STATE UNIVERSITY
$3,400,000

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

This project will upgrade mechanical ventilation system in Haynes Hall for occupant safety and code compliance. This project specifically addresses needed HVAC upgrades in the painting, ceramic, welding, and sculpture areas.

The original ventilation system is less than adequate to contain or arrest contaminants and to provide acceptable long-term indoor air quality for the current instructional activities. Without improvements to the existing system instructional activities may be limited due to inadequate teaching spaces. Improvements to the mechanical ventilation system increase occupant safety and provide code compliant spaces and systems.

Haynes Hall, constructed in 1974, is one of three buildings that forms the Creative Arts Complex (combined 135,000 square feet) and currently houses the School of Art. With few exceptions, all the existing major mechanical equipment is original and has been in service for approximately 40 years. The original ventilation system is less than ideal in its ability to contain or arrest all contaminants and to provide acceptable long-term indoor air quality for the current instructional activities. This project upgrades the mechanical systems to provide code required minimum ventilation and recommended local exhaust ventilation for specialized space uses including ceramics, welding, printmaking, and metalsmithing. The current cost for this work, including design and construction, is based on a schematic design performed by GDP, PC in 2014.

INFLATIONARY ADJUSTMENT INFO

Originally authorized at $1,600,000 in Section 2, Chapter 461, Laws of 2021, the project is short funding to complete the essential scope.

Due to the significant and unprecedented recent cost escalation within the construction industry, this request for an additional $3,400,000 is needed to complete all upgrades.

FUNDING		
Original Appropriation	LRBP Cash	$1,600,000
Inflationary Adjustment	***LRBP Cash***	***$3,400,000***
TOTAL		**$5,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$1,440,000
Inflationary Construction Costs	***$3,400,000***
Consultant Services	$160,000
TOTAL	**$5,000,000**

PRIORITY SUP AO-01

INFLATIONARY ADJUSTMENT
MSU FACILITIES YARD RELOCATION

MONTANA STATE UNIVERSITY
$8,000,000

ORIGINAL PROJECT INFO
66TH LEGISLATIVE SESSION

In order to provide for more focused and direct development of the campus core to better support MSU's academic mission, this project will continue the long-term process of implementing the Campus Master Plan by replacing and relocating existing Facilities Services functions into one facility on the eastern edge of campus.

The purpose of the relocation is to free up strategic University property on the west and near 7th Avenue which is in close proximity to academic, athletic, and other campus core activities. This relocation would allow for future development of high priority academic, revenue producing, and community interface facilities that directly support the University mission as a land grant institution for the State of Montana.

The project consists of consolidating the many existing and outdated facility yard structures located along and near 7th Avenue into a new central facility to be located on the eastern edge of campus. The purpose of the relocation is to free up strategic university property on the west and near 7th Avenue which is in close proximity to academic, athletic, and other campus core activities. This relocation would allow for future development of high priority academic, revenue producing, and community interface facilities that directly support the University mission as a land grant institution for the State of Montana. Funding sources may include donations, grants, higher education funds and private sector in-kind contributions consisting of materials and/or labor.

INFLATIONARY ADJUSTMENT INFO

The original project was approved in Section 2, Chapter 422, Laws of 2019 for $9,000,000 of authority only.

Due to alterations in scope and the significant and unprecedented recent cost escalation within the construction industry, this request for an additional authorization of $8,000,000 is to complete the revised scope of work to fully relocate the Facilities Services Yard and associated infrastructure.

FUNDING		
Original Appropriation	Authority	$9,000,000
Inflationary Adjustment	***Authority***	***$8,000,000***
TOTAL		**$17,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$8,100,000
Inflationary Construction Costs	***$8,000,000***
Consultant Services	$900,000
TOTAL	**$17,000,000**

PRIORITY SUP AO-02

INFLATIONARY ADJUSTMENT
MANSFIELD LIBRARY REMODEL

UNIVERSITY OF MONTANA
$4,000,000

ORIGINAL PROJECT INFO
67TH LEGISLATIVE SESSION

This spending authority request will cover up to six million in private funds for the remodeling of the existing facility which would address the necessary renovations to repurpose the existing stack space for journals into beneficial instructional space. In addition, the project will address life safety, deferred maintenance work and modernization to meet current use, building codes and ADA standards.

The Mansfield Library was built in the early 1970's and has not had any major improvements or modernization work done. This request would provide the necessary spending authority to cover the private gifts that will fund the renovations.

Remodel areas of Level Four of the Mansfield Library to provide space for the Defense Critical Language and Culture Program (DCLCP). Bringing this program to campus will enhance these student's integrations with the rest of UM's students, faculty and programs. The GLI program is also proposed to be relocated from the UC to Level 4 of the Mansfield Library. To make space for the above programs on Level 4, bookstacks will have to be relocated to other floors in the Library along with the installation of high-density compact shelving. Climate Control of the Special Collections and Archives on Level 4 is also proposed.

DCLCP is a UM program focused on teaching defense-critical languages. It reports to the Mansfield Center, which is also housed on Level Four of the Mansfield Library. The Global Leadership Institute (GLI) is also proposed

to be relocated to Level Four as part of this remodel effort. GLI supports and encourages UM students to gain a wider, global perspective in their UM education, so there is some synergy with GLI being located close to the Mansfield Center and within the Mansfield Library.

INFLATIONARY ADJUSTMENT INFO

The original project was approved in Section 3, Chapter 422, Laws of 2019 for $6,000,000 of authority only.

This request for an additional authorization of $4,000,000 is to address any inflationary concerns that arise should additional funding become available.

FUNDING		
Original Appropriation	Authority	$6,000,000
Inflationary Adjustment	***Authority***	***$4,000,000***
TOTAL		**$10,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$5,400,000
Inflationary Construction Costs	***4,000,000***
Consultant Services	$600,000
TOTAL	**$10,000,000**

PRIORITY SUP AO-03

INFLATIONARY ADJUSTMENT
VISUAL COMMUNICATION BUILDING PBS ADDITION

MONTANA STATE UNIVERSITY
$4,000,000

ORIGINAL PROJECT INFO
66TH LEGISLATIVE SESSION

This is an expansion of Montana PBS' operation in Bozeman to meet existing and future needs. Montana PBS has outgrown the space it was provided in 1984. This would be an addition to its current facility.

The addition to the Visual Communications Building would provide a more space for Montana PBS functions to operate and separate the Montana PBS and MSU academic functions. Montana PBS has enjoyed sharing the Visual Communication Building with MSU for over 25 years with the added advantage for students to learn and experience quality television production and public media. However, the first problem addressed is a result of having a shared facility with student population. The second problem addressed is that the PBS facility is in need of a secure space. The project would be designed to clearly separate the functions of Montana PBS from the academic functions of MSU. The second problem addressed is lack of space due to a 20% increase in staff and spaces to accommodate visitors and public outreach. No improvements are planned for the studio and production spaces.

The project is an expansion of Montana PBS' operation in Bozeman to meet existing and future needs. Montana PBS has outgrown the space it was provided in 1984. The project will be an addition to its current facility.

INFLATIONARY ADJUSTMENT INFO

The original project was approved in Section 2, Chapter 422, Laws of 2019 for $12,000,000 of authority only. The project is in fund-raising status.

Due to the significant and unprecedented recent cost escalation within the construction industry, this request for an additional authorization of $4,000,000 is to complete the full scope of the project as originally proposed.

FUNDING		
Original Appropriation	Authority	$12,000,000
Inflationary Adjustment	***Authority***	***$4,000,000***
TOTAL		**$16,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$10,800,000
Inflationary Construction Costs	***4,000,000***
Consultant Services	$1,200,000
TOTAL	**$16,000,000**

PRIORITY MR-05

FIRE SUPPRESSION SYSTEM UPGRADES

GREAT FALLS COLLEGE
$500,000

This project will update fire suppression system to address code-related deficiencies that were discovered during the construction of the Dental Clinic Addition.

Great Falls College MSU's main facility is made up of classrooms and instructional lab spaces, a library and student support spaces, as well as office spaces. Since the original construction in 1976, there have been several building renovations and additions which now make up a facility that is nearly 200,000 square feet. During the construction of the Great Falls College Dental Clinic addition, it discovered that the current design of the fire sprinkler system, which has been adapted and retrofitted over various building renovations and additions, no longer meets the required fire flows to adequately protect the building and occupants.

The required upgrades will meet fire code by removing and replacing undersized piping and/or sprinkler heads which serve several areas of the existing 1976 constructed building.

The City of Great Falls Fire Marshal requires the system deficiencies be remedied to meet current fire codes. Consultant, Clayton Design, was hired to identify building-wide fire sprinkler deficiencies to be addressed and develop a project cost estimate.

FUNDING	
LRBP Cash	$500,000
TOTAL	**$500,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$450,000
Consultant Services	$50,000
TOTAL	**$500,000**

PRIORITY MR-13

BARNARD HALL COOLING SYSTEM COOLING SYSTEM REPAIR & IMPROVEMENTS

MONTANA STATE UNIVERSITY
$1,750,000

This project includes replacement of the chiller along with related cooling system components such as pumps, remote cooling tower sump and storage.

Barnard Hall (210,573 square feet) supports several research and instructional programs across campus including Chemistry, Engineering, and the Gianforte School of Computing. The building has undergone significant renovations and alterations since its original construction date in 1997, including Barnard Hall's Lobby Renovation completed in 2016.

In August 2022, the chiller serving Barnard Hall failed. Many research programs in Barnard Hall heavily rely on controlled environments. Without cooling, several research programs had to relocate their sensitive equipment, labs, and samples. In many cases, equipment could not be relocated and was required to be shutdown to avoid damage. It is expected that impacted research will be interrupted for a duration of 4 weeks because building temperatures exceeded 90F. Until the chiller is replaced, MSU will utilize a temporary rental chiller costing $75k for delivery and installation plus $35k/month rental fees.

This project proposes the replacement of the failed chiller and related cooling system components. MSU attempted to repair the failed components on the existing chiller during fall 2022 and these were not successful. A temporary chiller will be utilized until the failed components are replaced. MSU is requesting the State of Montana fund $1.75M total project cost to accelerate the replacement of the chiller, along with related cooling system components such as pumps, remote cooling tower sump and storage. This will reduce the overall costs to the university and disruption to research.

The chiller is at the age where replacements parts are hard to get which increases chiller down time and reduces cooling reliability. The chiller is 25 years old which is the standard life of the equipment and cooling system.

FUNDING	
LRBP Cash	$1,750,000
TOTAL	**$1,750,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$1,575,000
Consultant Services	$175,000
TOTAL	**$1,750,000**

PRIORITY MR-18

PRIORITY 1 ROOF REPLACEMENTS

UNIVERSITY OF MONTANA
$2,425,000

This project will replace 5 roofs:

Math Building
Area: 5,500 sq ft
Roof Type:
Cedar shakes
Age: 38 years

Alexander Blewett III School of Law
Area: 20,800 sq ft
Roof Type:
EPDM
Age: 38 years

Music Building
Area: 18,300 sq ft
Roof Type:
Built-up Asphalt
Age: 39 years

Fine Arts Building
Area: 22,200 sq ft
Roof Type:
Hypalon and TPO
Age: 21 years

Biology Research Building
Area: 4,800 sq ft
Roof Type:
TPO
Age: 18 years

These roofs have exceeded their useful life. The replacement systems will be chosen to 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.

These roofs have been well maintained over the years but have deteriorated to a point where they can no longer be effectively repaired. New roofs will extend building life, protect assets, and improve conditions in the facilities.

FUNDING	
LRBP Cash	$2,425,000
TOTAL	**$2,425,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$2,182,500
Consultant Services	$242,500
TOTAL	**$2,425,000**

PRIORITY MR-20

PE BUILDING ROOF REPLACEMENT

MONTANA STATE UNIVERSITY - BILLINGS
$2,400,000

This project will replace the roof on the P.E. Building at MSU-Billings.

The P.E. Building was originally constructed in 1961 and now houses the Health and Human Performance department and athletic facilities. The entire building is approximately 105,395 square-feet.

The roof was last replaced in 1992 and is well past its expected useful life. Repairs of approximately $50,000 and annual maintenance of $15,000 will extend the life of the roof until 2023. The roof is leaking, causing internal damage to the P.E. Building. RMTD will no longer cover internal damage as it is caused from deterioration and not a destructive event. All sections of the curve and flat roof are due for replacement.

The roof has been well maintained but has deteriorated to a point where it can no longer be effectively repaired. A new roof will extend building's life, protect assets, improve conditions in the facility and reinstate full insurance through RMTD.

FUNDING	
LRBP Cash	$2,400,000
TOTAL	**$2,400,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$2,160,000
Consultant Services	$240,000
TOTAL	**$2,400,000**

PRIORITY MR-21

REPAIR / REPLACE SEWER MAINS

UNIVERSITY OF MONTANA - WESTERN
$425,000

This project will excavate, remove, and replace sections of the clay sewer main lines. The lines vary from 8 to 10 inches in diameter. An estimated 250 feet of sewer line will be replaced with industry standard PVC piping.

The section of sewer main connects to the Jordan, Davis, and Centennial residence halls that house approximately 200 students.

Roots in the sewer main have been an ongoing issue for the past 10 years. Campus Facilities continues to take preventative action, and the City of Dillon flushes the sewer mains on a yearly basis to remove accumulated tree roots. Trees have been removed in proximity to the problem areas, but root encroachment remains on ongoing issue.

Sections of clay pipe sewer mains within the campus boundary are exhibiting significant deterioration. An inspection by the City of Dillon has verified root encroachment which is compromising piping integrity. Catastrophic failure of these clay pipe sections of the sewer main is a real possibility.

Replacement of the clay sections of the sewer system will prevent interruptions in service, reduce maintenance costs and prevent damage to buildings.

FUNDING	
LRBP Cash	$425,000
TOTAL	**$425,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$382,500
Consultant Services	$42,500
TOTAL	**$425,000**

PRIORITY MR-22

REPLACE ELEVATORS

UNIVERSITY OF MONTANA
$2,498,650

This project will upgrade and modernize the elevators and equipment in 4 buildings: Mansfield Library, Health Sciences Building, Fine Arts Building, and the Alexander Blewett III School of Law.

Mansfield Library
2 passenger and 1 freight elevator
Age: 51 years

Health Sciences Building
1 passenger elevator
Age: 61 years

Fine Arts Building
1 passenger elevator
Age: 66 years

Law School Building
1 passenger elevator
Age: 41 years

The existing elevators are original to the buildings and are currently out of compliance with the state elevator code. Parts for repair are hard to find. These elevators need a total upgrade to meet current codes.

The elevators have been well maintained over the years but have aged and deteriorated to a point where they can no longer be effectively repaired. The elevators are no longer reliable and are not currently certified by the state inspector.

This project will replace vital components, including hoist machinery, drive motors, signal controls, motion controls, and cab enclosures. Continued problems and repairs will result in higher-than-normal service costs and create accessibility barriers for staff and visitors and a failure would render the upper floors and the basements inaccessible.

FUNDING	
LRBP Cash	$2,498,650
TOTAL	**$2,498,650**

ESTIMATED PROJECT COSTS	
Construction Costs	$2,248,785
Consultant Services	$249,865
TOTAL	**$2,498,650**

PRIORITY MR-23

ROOF REPLACEMENTS

FLATHEAD LAKE BIOLOGICAL STATION
$262,000

This project will replace roofs on three buildings: Elrod, Zoology, and Lakeside Buildings.

Elrod Building
Area: 12,780 square feet
Roof Type: Membrane
Age: 25+ years

Zoology Building
Area: 1,700 square feet
Roof Type: Metal Seam
Age: 25+ years

Lakeside Building
Area: 5,900 square feet
Roof Type: Metal Seam
Age: 25+ years

These roofs have exceeded their useful life. The replacement systems will be chosen to 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.

These roofs have been well maintained over the years but have deteriorated to a point where they can no longer be effectively repaired. New roofs will extend building life, protect assets, and improve conditions in the facilities.

FUNDING	
LRBP Cash	$262,000
TOTAL	**$262,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$235,800
Consultant Services	$26,200
TOTAL	**$262,000**

PRIORITY MR-26

ELECTRICAL DISTRIBUTION MULTIPLE BUILDINGS

MONTANA TECHNOLOGICAL UNIVERSITY
$650,000

This project will upgrade electrical systems including electrical panels and wiring in the Museum Building, Engineering Hall, and the Science & Engineering Building to meet increased technology loads for classrooms.

Museum Building has 28,194 square feet and was built in 1940.

Engineering Hall has 13,727 square feet and was built in 1923.

Science & Engineering Building has 35,094 square feet and was built in 1925.

All three buildings are used as classrooms, laboratories, and office spaces.

Upgrading classrooms with new technology requires upgrades to the electrical distribution systems in older buildings and is necessary based on the ever-increasing demand for power with the increased use of technology in the classroom, such as digital whiteboards, web cams, AV equipment, wired student desks to power laptops, etc. Existing electrical panels can no longer be maintained due to age and lack of available spare parts. Electrical code deficiencies will be addressed and the buildings will be brought up to current electrical code requirements.

Upgrading the electrical panels and re-allocating the distribution of power throughout the buildings supports the ever-changing technology needs of classrooms and labs and will also bring up the systems up to current electrical codes.

FUNDING	
LRBP Cash	$650,000
TOTAL	**$650,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$585,000
Consultant Services	$65,000
TOTAL	**$650,000**

PRIORITY MR-27

CAMPUS WATER DISTRIBUTION UPGRADES

MONTANA STATE UNIVERSITY - BILLINGS
$2,400,000

This project will repair and replace campus wide water plumbing system to upgrade the system from the original failing pipes.

The campus water line is fed from one City of Billings water main access point and the campus water main pipe loops around campus and feeds each building. The water main is approximately 6,000 linear feet with nearly half buried under concrete or parking lots. The system is original to campus and the underground pipes are at risk of failure. The existing campus water system is cast iron pipe that has a life expectancy of 50-65 years under normal conditions, and most of the pipe is over 60 years old.

The current water main loop system connects all main campus buildings and when a break occurs, the city main must be shut off resulting in loss of water at every building. The water pipes are beginning to fail causing damage to buildings and infrastructure. In 2020, a pinhole sized pipe failure outside McMullen Hall caused $35,000 of damage. A pipe failure in September 2021

near Virginia Lane caused water to shut off to campus for seven hours. Each time the water is shut off to campus it must be tested, and water is not allowed for consumption for 3 days while awaiting testing results. MSUB must provide bottled drinking water to the entire campus during this time.

Making the necessary repairs and replacements to the failing sections of pipe is the only option to retire deferred maintenance, improve system reliability and avoid costly failures.

FUNDING	
LRBP Cash	$2,000,000
Authority	$400,000
TOTAL	**$2,400,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$2,160,000
Consultant Services	$240,000
TOTAL	**$2,400,000**

PRIORITY MR-28

LEWIS HALL ADA UPGRADES

MONTANA STATE UNIVERSITY
$2,400,000

This project will construct necessary upgrades, like an elevator, to improve the overall ADA compliant access throughout Lewis Hall.

Lewis Hall, constructed in 1922, is approximately 46,233 square feet in size. In 1960, the ground floor on the west side of Lewis Hall was extended to connect with Cooley Laboratory. An enclosed, elevated walkway also connects the two buildings on the second story. In 1985, Tietz Hall was constructed immediately behind Lewis Hall which is connected to the basement of Lewis Hall.

Lewis Hall contains classrooms and labs that support several instructional programs including Ecology, Microbiology and Cell Biology, and Veterinarian Medicine. Additional rooms include offices occupied by several departments including Ecology, Microbiology and Cell Biology, and Veterinarian Medicine. There are also offices and conference room on each level.

Lewis Hall does not have an elevator and all levels of the building are not ADA accessible. Accessibility barriers are problematic for students, faculty, and staff who need ADA-compliant access to classrooms, labs, and offices throughout Lewis Hall. MSU is regularly required to move course sections because a student or staff is unable to safely access all levels of the building. Changing the location of these courses is nearly impossible given the limited space across campus. Furthermore, relocating lab sections to another location across campus is challenging because faculty are then required to move irreplaceable specimens and expensive lab equipment outdoors to another building. While MSU does their best to accommodate ADA requests as they arise given the current resources available, Lewis Hall's non-compliance with ADA design standards is one of MSU's Office of Disability Services' largest barriers to being able to provide access for students with disabilities.
Constructing an elevator in Lewis Hall and other

modifications as required would greatly improve the accessibility of classrooms, labs and faculty offices for students with disabilities and prevent colleges from having to move instructional lab, course sections, and respective lab equipment mid-semester to accommodate ADA requests.

FUNDING	
LRBP Cash	$2,400,000
TOTAL	**$2,400,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$2,160,000
Consultant Services	$240,000
TOTAL	**$2,400,000**

PRIORITY MR-29

REPLACE FIRE ALARMS - CLAPP BUILDING

UNIVERSITY OF MONTANA
$780,000

This project will replace outdated fire alarm control panels in multiple buildings on campus, with the Clapp Science Complex as the most immediate need. Replacement is necessary to provide adequate protection to occupants and assets. Fire alarm panels and alarm notification are not code compliant.

The Clapp Science Complex, constructed in 1969, is approximately 104,662 square feet, has five floors and houses various science departments in this five-story facility. The building consists of two square blocks sharing an exterior center walkway.

There are two fire alarm panels at Clapp: One newer panel (10+ years old) for third and fourth floors, and an older panel for the basement, first and second floors. The two existing fire alarm panels are tied together but the older panel serving the basement, 1st & 2nd is no longer reporting signals. Failed smoke detection for the lower 3 floors is an immediate concern.

This project will replace the existing panels with one central panel serving the entire building.

Upgrades to other fire alarm panels in the following buildings will be completed as funds allow.

- McGill Hall: Alarm panel is at capacity
- Adams Center: Outdated alarm panel
- West Campus TT-1 and TT-2 buildings. Outdated panels and fire alarm devices.
- Chemical Stores: Outdated panel
- Brantley/ Corbin: Outdated panel
- Mansfield Library: Outdated panel
- Upgrade the Bosch system, which calls into dispatch for the fire alarms

FUNDING	
LRBP Cash	$780,000
TOTAL	**$780,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$702,000
Consultant Services	$78,000
TOTAL	**$780,000**

PRIORITY MR-30

TIETZ HALL ROOF REPLACEMENT

MONTANA STATE UNIVERSITY
$1,300,000

This project will replace Tietz Hall's roof which is original to the facility, beyond its expected useful life, and showing signs of failure.

Tietz Hall, constructed in 1985, is approximately 20,471 square feet in size. It is attached to the rear (north) elevation of Lewis Hall and the southwest corner of the adjacent Cooley Laboratory. Tietz Hall is made up of labs and offices that are currently used by the Animal Resource Center.

Tietz Hall has a single ply, ballasted roof that is original to the facility and well beyond its expected useful life. The roof protects expensive mechanical equipment that researchers rely on for the continuity of their work. Failure of the roof system causing damage to the mechanical equipment and disruption of controlled environments has the potential to cause significant damage to Animal Resource Center research operations.

Replacement of the Tietz Hall roof will improve reliability of the system and mitigate adverse impacts to research operations if the roof were to fail.

FUNDING	
LRBP Cash	$1,300,000
TOTAL	**$1,300,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$1,170,000
Consultant Services	$130,000
TOTAL	**$1,300,000**

PRIORITY MR-36

COBLEIGH HALL PARAPET STRUCTURAL REPAIR

MONTANA STATE UNIVERSITY
$2,400,000

This project will repair deficient brick veneer and parapets, add more control joints, and repair/replace failing window eyebrows.

Cobleigh Hall, constructed in 1970, is approximately 99,099 square feet in size. Cobleigh Hall is connected to Roberts Hall with a 28' x 36' annex near the western end of the north elevation. It is also connected to the EPS Building on the west end of its south elevation. Cobleigh Hall is currently made up of classrooms and labs that support several instructional programs including Civil Engineering, Chemical and Biological Engineering, Electrical Engineering, and Land Resources & Environmental Science. Additional rooms include offices and conference rooms on each level.

Cobleigh Hall's brick veneer and parapet are pulling away from the building due to a lack of control joints. There are numerous cracks in the brick veneer, which generally start at the corner of window openings. Additionally, the window eyebrows are showing sign of deterioration which risk eventual failure and risk to life-safety if not addressed. Some of the precast concrete window covers shows sign of deterioration and, in some cases, the extent of reinforcing steel is exposed.

This project addresses failing components of the building envelope by reinforcing the brick veneer and parapet as well as repairing/replacing the failing window eyebrows, which are a major safety concern.

Addressing both the brick veneer and parapet, as well as the failing window eyebrows in one project is recommended because it immediately addresses the failing building envelope and safety concerns, and results in significant savings in both scaffolding and labor costs by addressing both the eyebrows and control joints at the same time.

FUNDING	
LRBP Cash	$2,400,000
TOTAL	**$2,400,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$2,160,000
Consultant Services	$240,000
TOTAL	**$2,400,000**

PRIORITY MR-37

RESTROOM RENOVATIONS

MONTANA TECHNOLOGICAL UNIVERSITY
$1,200,000

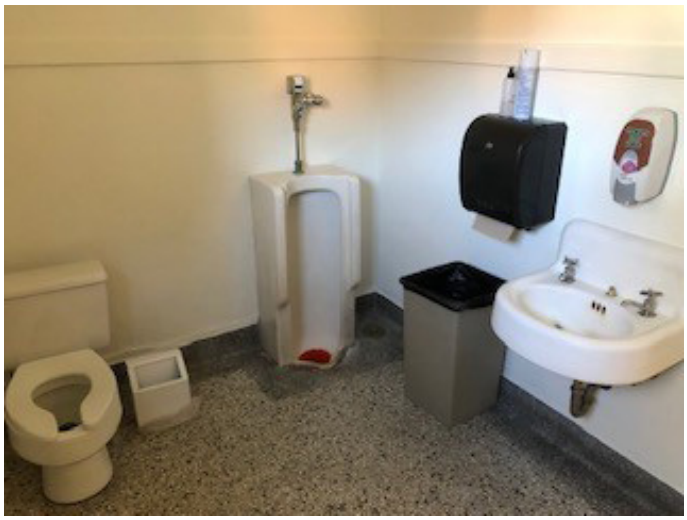
This project will completely renovate 15 restrooms in 4 buildings, Main Hall, Museum Building, Engineering Building, and Science & Engineering Building

Main Hall
Built: 1896
Area: 37,794 square feet
Use: Classrooms, laboratories, and office space.

Museum Building
Built: 1940
Area: 28,194 square feet
Use: Classrooms and office space.

Engineering Building
Built: 1923
Area: 13,727 square feet
Use: Classrooms, laboratories, and office space.

Science & Engineering Building
Built: 1925
Area: 35,094 square feet
Use: Classrooms, laboratories, and office space.



The restrooms are small, outdated and not ADA accessible. Many have not had significant improvements since the buildings were constructed. A complete renovation will remove everything down to the structure. Where possible, restrooms will be expanded and made accessible. New plumbing, fixtures, flooring, partitions, and lighting will be installed.

The renovated restrooms will be brought up to modern standards, creating functional, easily maintained, accessible restroom facilities.

FUNDING	
LRBP Cash	$1,200,000
TOTAL	**$1,200,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$1,080,000
Consultant Services	$120,000
TOTAL	**$1,200,000**

PRIORITY MR-38

CAMPUS HEATING PLANT BOILER CONTROLS UPGRADE

MONTANA STATE UNIVERSITY
$2,400,000

This project will replace and upgrade major components of the campus Heating Plant infrastructure, including boiler controls systems, which are well beyond their expected useful life and at risk of failure.

The Heating Plant, constructed in 1922, consists of approximately 11,057 square feet and is located at MSU Bozeman. The general use of the building is to provide steam to MSU Bozeman's core university buildings.

Critical equipment in the campus central Heating Plant has reached the end of its expected life and should be replaced. The boiler control systems, for example, provide critical heating plant functions including operation of three boilers and monitoring of the key system parameters to meet DEQ air quality permit requirements. The existing control systems are antiquated and failing. In some cases, parts are obsolete and making repairs to the system is challenging. Without replacement, the reliability of the Campus Heating Plant will be limited.

The existing heating plant controls are over 25 years old for most of the plant and are in need of an upgrade. This project will improve overall reliability of the Heat Plant by addressing components that have failed or are likely to fail in the coming years.

ESTIMATED PROJECT COSTS	
LRBP Cash	$1,600,000
Authority	$800,000
TOTAL	**$2,400,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$2,160,000
Consultant Services	$240,000
TOTAL	**$2,400,000**

PRIORITY MR-39

EMERGENCY WATER SYSTEM & FIXTURE UPGRADES

MONTANA STATE UNIVERSITY
$2,400,000

This project will upgrade the existing emergency fixtures and associated water system in Barnard, Gaines and Leon Johnson Halls.

Safety protocols and codes require separating the existing emergency fixtures from the existing reverse osmosis (RO) or domestic cold water system (varies by building) and installing a dedicated tempered water system.

Gaines Hall (96,868 square feet), Barnard Hall (210,573 square feet), and Leon Johnson Hall (117,142 square feet) are currently made up of classroom and labs that support several instructional programs across campus including Earth Sciences, Biology, Chemistry, Engineering, and the existing Gianforte School of Computing.

Emergency fixtures (eye washes/showers) in several buildings were originally designed to connect to building domestic cold water or RO systems. Current plumbing code requires that emergency eye wash stations have a temperature actuated mixing valve to regulate temperature of water temperature. The problem with this design is the hot water gets cold over time and the shower water temperature is hard to regulate. The preferred solution is a tempered water loop that is designed to maintain the water temperature at the desired temperature at the eye wash stations.

An upgrade of the existing emergency fixtures and associated water system in Barnard, Gaines and Leon Johnson Halls requires separating the existing emergency fixtures from the existing RO or domestic cold-water system and install a dedicated tempered water system.

FUNDING	
LRBP Cash	$2,400,000
TOTAL	**$2,400,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$2,160,000
Consultant Services	$240,000
TOTAL	**$2,400,000**

PRIORITY MR-40

MASONRY REPAIRS - PLASTER, TUCKPOINTING, FLAT

MONTANA TECHNOLOGICAL UNIVERSITY
$455,000

This project will repair plaster and tuckpointing mortar on Engineering Hall, Main Hall, The Science and Engineering Building, The Mining & Geology Building, the Chemistry & Biology Building, and the Museum Building.

- Engineering Hall built 1923
- Main Hall built 1896
- Science and Engineering Building built 1925
- Mining & Geology Building built 1972
- Chemistry & Biology Building built 1921
- Museum Building built 1940

Decayed finish plaster and missing mortar at stone and brick joints has compromised the exterior envelope of these buildings. Deferred maintenance funds have been utilized to address the problem but the high number of issues across multiple buildings must be addressed in one project to protect the structural and aesthetic integrity of the buildings.

Addressing these issues in one project is more cost effective than trying to remedy the issues one building at a time over multiple years. Correcting water infiltration will prevent more expensive problems in the future and prevent safety issues from deteriorating envelopes.

FUNDING	
LRBP Cash	$455,000
TOTAL	**$455,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$409,000
Consultant Services	$45,500
TOTAL	**$455,000**

PRIORITY MR-42

ELEVATOR REPAIR / REPLACEMENT

UNIVERSITY OF MONTANA - WESTERN
$325,000

This project will modernize elevators in the Library and Main Hall and replace two wheelchair lifts in Main Hall.

The Library was built in 1969 and the elevator is original equipment. The Main Hall elevator was installed in the 1970s. Main Hall is home to classrooms, theaters, and offices and is on the National Register of Historical Buildings. ADA accessibility in these buildings is imperative.

The elevators and lifts have been well maintained but the age of the equipment requires additional service calls above what the standard quarterly service provides. Elevator technicians can take hours to arrive, leaving much of the building without ADA accessibility. Parts can be difficult to obtain, and the two wheelchair lifts have been out of service for over a year waiting on parts. The elevators are highest priority for replacement due to the high probability of major failure. Reconditioning and replacement of key components will ensure these elevators and lifts will provide reliable service and reduce maintenance costs.

FUNDING	
LRBP Cash	$325,000
TOTAL	**$325,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$292,500
Consultant Services	$32,500
TOTAL	**$325,000**

PRIORITY MR-43

SHOP RENOVATION & SAFETY UPGRADES

WESTERN AG RESEARCH CENTER
$600,000

This project will renovate the WARC machine shop to address life-safety concerns and improve the overall utility of space as a machine shop.

The WARC Machine Shop, built in 1935, is undersized and does not provide the clearance nor the space to store and work on equipment indoors safely. The shop's age and condition also present safety hazards. The current shop does not have an isolated welding or fabricating area.

The renovation will address immediate life-safety hazards including structural repairs, compressed air piping upgrades, and reconfiguration of space for safer use. The renovation will also address water infiltration and improve occupant working conditions.

FUNDING	
LRBP Cash	$600,000
TOTAL	**$600,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$540,000
Consultant Services	$60,000
TOTAL	**$600,000**

PRIORITY MR-45

CAMPUS EMS BUILDING CONTROLS UPGRADE

MONTANA STATE UNIVERSITY - NORTHERN
$400,000

This campus-wide project will upgrade and modernize campus existing front end Energy Management System (EMS) control packages.

The existing EMS controls are antiquated and beyond their useful lifespan. Serious issues maintaining programming causes large maintenance service costs and results in reduced efficiency and comfort. This problem is now causing significant maintenance service costs to the campus.

Upgrading older campus energy management system (EMS) controls will provide reliable building control, increase energy efficiency, reduce maintenance costs, and improve functional use and space comfort for students and staff.

FUNDING	
LRBP Cash	$400,000
TOTAL	**$400,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$360,000
Consultant Services	$40,000
TOTAL	**$400,000**

PRIORITY MR-46

CAMPUS BUILDING ENVELOPE REPAIRS

UNIVERSITY OF MONTANA - WESTERN
$415,000

This project will make repairs and upgrades to 5 buildings: Main Hall, Engineer's House, Business & Technology Building and Roe House.

Main Hall
Built: 1896
Area: 88,000 square feet
Project: Repair mortar joints to rock and concrete foundations.

Engineers House
Built: 1925
Area: 1,560 square feet
Project: Replace windows and doors.

Business and Technology Building
Built: 1924
Area: 33,000 square feet
Project: Replace windows and re-roof a portion of the roof that was not replaced in 2018.

Roe House
Project: New shingle roof

FUNDING	
LRBP Cash	$415,000
TOTAL	**$415,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$375,500
Consultant Services	$41,500
TOTAL	**$415,000**

PRIORITY MR-47

REPLACE ELECTRICAL EQUIPMENT

UNIVERSITY OF MONTANA
$325,000

This project will replace a 200-amp elbow at the Anderson Hall electrical transformer with the campus standard 600-amp elbow.

Currently the UM campus medium voltage (12,470V) system has a pinch point at the Anderson Hall transformer. That transformer has 200-amp elbows on the medium voltage loop. UM campus standard is to have 600-amp elbows on the medium voltage loop. This creates a pinch point. This project will install medium voltage switch gear at Anderson Hall with 600-amp elbows on the medium voltage loop and then feed the existing transformer feeding Anderson Hall.

An electrical distribution study was completed by HDR and most of the recommendations from the study have been implemented except this item. The project will improve the ability of UM to provide power to the campus at all times.

With LRBP funding, the electrical switching problem can be fixed to campus standards and provide a safe electrical distribution system. The impediment is lack of funds.

FUNDING	
LRBP Cash	$325,000
TOTAL	**$325,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$292,500
Consultant Services	$32,500
TOTAL	**$325,000**

PRIORITY MR-48

ELECTRONICS TECH HVAC & LIGHTING UPGRADE

MONTANA STATE UNIVERSITY - NORTHERN
$800,000

This project will upgrade and recommission the heating terminal units and controls, address new energy efficient lighting and controls, and provide a DX cooling system for the Electronics Technology Building.

Built in 1968, Electronics Technology (14,577 square feet) originally provided space to teach the electronics technology and industrial technology disciplines. Mechanical and electrical improvements to this facility are now needed; as the building now provides instructional and office space for the electrical technology and civil engineering programs, as well as the National Coalition of Certification Center (NC3) for industry partners such as Snap-On Inc. and Trane Company. Furthermore, it provides classroom space for the National Academy of Railroad Sciences (NARS) Lab. Improvements are now vital to support and guaranteed success of these important industry sponsored programs.

This project will replace seriously inadequate heating terminal units, provide a cooling system to the classroom spaces, and provide energy savings with new lighting and building controls. The HVAC and lighting systems are dated and well beyond their expected useful life. Repairs and upgrades are required to improve system efficiency and reliability. This project addresses much needed improvements to the existing heating system, provides some classroom cooling for summer classes, and increased energy savings with new lighting and HVAC controls.

FUNDING	
LRBP Cash	$800,000
TOTAL	**$800,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$720,000
Consultant Services	$80,000
TOTAL	**$800,000**

PRIORITY MR-49

LAMBING BARN RENOVATION & SAFETY UPGRADES

AG EXPERIMENT STATION - RED BLUFF RANCH
$2,000,000

This project will renovate Red Bluff's Lambing Barn and address life-safety deficiencies in both the Lambing Barn and Mixing Barn.

The 10,803-acre Red Bluff Ranch is located near Norris in Madison County, Montana, along the west side of the Madison River and is used for both teaching and research. Most of this ranch is rangeland with cattle and sheep, maintained year round, as well as limited hay meadows along the valley bottoms. Elevations range from 4,600 feet to 6,200 feet above the Madison River canyon. The Red Bluff Lambing Barn (8,000 sq ft) was constructed in 1983 and provides indoor pens and working facilities for lambing and sheering. Additionally, the Mixing Barns (8,600 sq ft total) provide sheep shelter from the elements.
Both the Lambing Barn and Mixing Barns and respective site amenities have reached the condition where significant repairs and upgrades are needed to prolong the life of the facility and address safety concerns from obsolete and worn-out systems. The lambing barn needs envelope and roof repair/replacement, ventilation improvements, upgrades to the electrical system and improved access by upgrading sliding doors to overhead garage doors. The old mixing barn needs repairs to the building envelope as well, wiring upgrades, and structural repairs. The newer mixing barn needs electrical outlets and lighting as well as access to water on the south end. Degraded electrical service and issues it does present a potential fire hazard. Degraded electrical services present a potential fire hazard. All buildings will benefit from regrading to prevent water infiltration into the covered areas.

Renovations and improvements will address nearly all life-safety and deferred maintenance and provide opportunity for improved operations.

FUNDING	
LRBP Cash	$2,000,000
TOTAL	**$2,000,000**

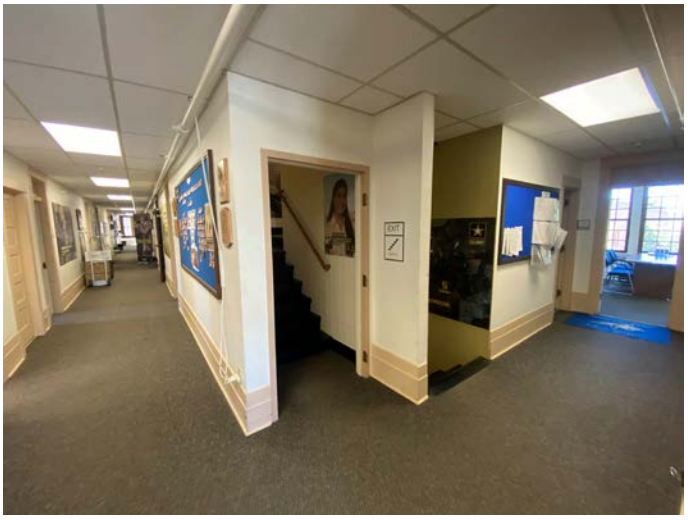
ESTIMATED PROJECT COSTS	
Construction Costs	$1,800,000
Consultant Services	$200,000
TOTAL	**$2,000,000**

PRIORITY MR-50

HAMILTON HALL LIFE LIFE-SAFETY SYSTEM IMPROVEMENTS

MONTANA STATE UNIVERSITY
$2,400,000

This project will address code and egress requirements for the upper levels of Hamilton Hall.



Hamilton Hall, constructed in 1910, is approximately 28,012 square feet in size. The first two levels of Hamilton Hall were renovated in 2009 to return the facility to good condition and preserve the historical character of the building. The upper levels remain untouched and in need of renovations. Hamilton Hall is currently made up of office and computer lab spaces which are used by Gallatin College Academic Support, Developmental Math, Interior Design, Developmental Humanities, and the Military Science Army (ROTC).

The upper levels of Hamilton Hall are in poor condition and need renovations to retire life-safety, code and deferred maintenance issues. Changing stairwell configurations and extending the fire suppression system, serving the upper levels of Hamilton Hall, will improve health and life-safety of building occupants.

FUNDING	
LRBP Cash	$2,400,000
TOTAL	**$2,400,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$2,160,000
Consultant Services	$240,000
TOTAL	**$2,400,000**

PRIORITY MR-51

PERSHING HALL RENOVATION

MONTANA STATE UNIVERSITY - NORTHERN
$2,400,000

This project will repair/replace selected mechanical and electrical systems and renovate interior instructional and building support spaces, and add an elevator.

Pershing Hall, constructed in 1933, is 14,360 square feet and provides instructional space for art, music, and graphic design programs. It occupies the center of the campus, and with the adjacent Donaldson Hall, forms the historic core of MSU-Northern. Pershing Hall is a dated facility with systems that are well beyond their expected useful life, and the building is not up current codes.

Renovations are required to retire deferred maintenance, modernize instructional spaces, and address building code deficiencies.

FUNDING	
LRBP Cash	$2,400,000
TOTAL	**$2,400,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$2,160,000
Consultant Services	$240,000
TOTAL	**$2,400,000**

PRIORITY MR-52

METALS TECHNOLOGY BUILDING ROOF PROJECT

MONTANA STATE UNIVERSITY - NORTHERN
$400,000

This project will replace the roof membrane, which is beyond its useful lifespan, improve roof structure new support components, and provide new insulation for energy savings.

The Metals Technology Building was constructed in 1944 and is approximately 11,211 square feet. Lack of adequate attic insulation results in poor energy efficiency and increased utility costs. Roof truss support structures are showing signs of lateral stress. The roof membrane has blistering, wrinkles, and differential shrinkage which is causing leaking around the roof drains and flashing.

This project will resolve structural issues, improve energy efficiency and user comfort, and prevent further water penetration and damage inside the building.

FUNDING	
LRBP Cash	$400,000
TOTAL	**$400,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$360,000
Consultant Services	$40,000
TOTAL	**$400,000**

PRIORITY MR-53

BART DEMOLITION PROJECT

BOZEMAN AG RESEARCH AND TEACHING FARM
$450,000

This project will demolish the BART Feed Mill and Hay Sheds which are currently not in use due to physical conditions that present life-safety concerns.

The BART Farm Feed Mill was constructed in 1975 and has sat vacant for the last decade due to its physical condition and is no longer producing grain. The feed mill is made up of an enclosed building (2,750 sq ft), auger, elevators, machinery, bins, and other equipment. The BART Farm once used the feed mill to produce their own grain mixtures on site for first calf heifers. It has long outlived its useful life and the physical condition presents a major safety hazard at the BART Farm.

The BART Farm Hay Shed Building #455 is also no longer in use due to its physical condition and will be demolished. In addition, structural deficiencies in Hay Shed Building #456 will be addressed to remedy immediate life-safety concerns. If not addressed, common conditions like high winds or snow loads could cause the buildings to collapse.

FUNDING	
LRBP Cash	$450,000
TOTAL	**$450,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$405,000
Consultant Services	$45,000
TOTAL	**$450,000**

PRIORITY MR-56

ART INSTRUCTION RENOVATION

HELENA COLLEGE
$162,500

This project will renovate an unused building to be used for the art instruction program.

This 1,500 square foot modular home was built in the late 1970's and set on a basement foundation. Helena College purchased the property about 10 years ago to use as a rental property, but it is currently vacant and uninhabitable. The cost to restore the building as a residential rental is cost prohibitive.

By changing the occupancy and renovating the building to accommodate the art instruction function, Helena College will be able to utilize the building as instructional space and free up space in the Donaldson Building for other programs.

FUNDING	
LRBP Cash	$162,500
TOTAL	**$162,500**

ESTIMATED PROJECT COSTS	
Construction Costs	$146,250
Consultant Services	$16,250
TOTAL	**$162,500**

PRIORITY MUS AO MR-01

COSMETOLOGY PROGRAM RENOVATION

HELENA COLLEGE
$2,495,000

To provide an opportunity for students to have a public educational opportunity in Montana, Helena College seeks approval to complete the planning, design, and construction to convert the Fire Bay (DON 105) at the Donaldson Campus to a Cosmetology salon and classroom area.

The project will remodel space currently designed and equipped to support the Fire/Rescue program. Remodel of the space will provide classrooms, faculty workspace, and a salon space that will serve as practical instructional space for the cosmetology program.

The renovation will:

- Upgrade the electrical system with a dedicated sub-panel to provide power to workstations, administrative support, and a new ADA lift.
- Reconfigure plumbing to service the workstations with both supply water, drains, and venting.
- Remove the overhead door to create an additional entrance which will serve as a store front for the salon.
- Update the HVAC to provide adequate exhaust and supply air.

- Level the existing concrete floor as it is currently sloped to a slot drain.
- Finish two mezzanine areas and add catwalk to connect them.

FUNDING	
Authority	$2,495,000
TOTAL	**$2,495,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$2,245,500
Consultant Services	$249,500
TOTAL	**$2,495,000**

PRIORITY CD-13

WATER & SEWER SYSTEMS

FLATHEAD LAKE BIOLOGICAL STATION
$2,500,000

This project would install a new water supply and purification system and replace lift pumps and sewer piping to and from the waste treatment plant.

FLBS's water supply system is at least 70 years old, and its origin predates anyone's memory. The water system originates from a spring on the grounds, travels through steel pipes to a cistern, then to a large steel pressure tank inside the workshop building from where it is distributed to individual buildings. The wastewater treatment plant and associated delivery systems (sewage influent and treated water effluent) were constructed in 1976. The treatment plant is scheduled to be replaced but the sewer lines to and from the plant are original.

The existing water supply system is at the end of its useful life and needs to be upgraded to meet current environmental and engineering standards. Also, the existing wastewater piping and infrastructure to the new wastewater plant is at the end of its useful life and needs upgrading. The water system pumps are starting to fail, and the old steel components (including the large steel pressure tank) are corroding and at risk of failure. The sewage treatment plant is scheduled to be replaced, however lift pumps are regularly failing and there is evidence of cracked underground pipes and tree roots compromising sewer flow, regularly causing backups in several buildings.

To assure safety of our drinking and laboratory water supply, the 70+ year old water supply infrastructure needs to be replaced and the filtration upgraded to a UV purification system.

The sewer lines to and from the treatment plant need to be replaced to reduce the risk of a sewage spill and environmental contamination to the lake.

FUNDING	
LRBP Cash	$2,500,000
TOTAL	**$2,500,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$2,250,000
Consultant Services	$250,000
TOTAL	**$2,500,000**

PRIORITY CD-23

ACQUIRE & RENOVATE AIRPORT HANGAR

HELENA COLLEGE
$3,600,000

This project will purchase an existing 10,000 square foot hangar and renovate it for Helena College's aviation program.

Helena College cannot expand the aviation program due to lack of facilities or space to build a new facility. The aviation program is poised to expand dramatically to include avionics and possibly flight instruction to satisfy an ever-increasing need in those industries. Space for this expansion is critical.

This project will purchase an existing 1980s hangar. It consists of a 10,000 square foot building, 27,000 square feet of cargo ramp and parking space. The building will be renovated to house Helena College's aviation technology program as well as the developing avionics program.

The acquisition and renovation of this property will allow Helena College to satisfy a need for skilled people in this growing industry. It will also allow us to expand our program into many areas of the aviation industry that we currently do not have available facilities.

FUNDING	
LRBP Cash	$3,600,000
TOTAL	**$3,600,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$3,240,000
Consultant Services	$360,000
TOTAL	**$3,600,000**

PRIORITY CD-25

CLAPP BUILDING RENOVATION

UNIVERSITY OF MONTANA
$37,000,000

This project will extensively renovate the Clapp Building including mechanical, electrical, and plumbing upgrades, asbestos abatement, chiller replacement, elevator upgrade, interior upgrades and envelope upgrades.

The Clapp Science Complex, constructed in 1969, is approximately 104,662 square feet, has five floors and houses various science departments in this five-story facility. The building consists of two square blocks sharing an exterior center walkway. Clapp remains a heavily used science building, teaching classes in Physics, Astronomy, Geology, Biology, Forestry, Conservation, and Climate Science. It also houses research and office space.

There have been some projects in the Clapp Building in recent years such as asbestos abatement and HVAC repairs on 3rd and 4th floors. In addition, the roof was replaced 2012. This project will complete upgrades on the entire building, abating the remaining asbestos, upgrading HVAC systems, lighting upgrades. Interior finishes and casework will be replaced, rand new student lounges constructed. Finally, the exterior transite panels will be removed and new windows & curtain wall system installed.

This major renovation will provide modern, inviting learning spaces for students, faculty, and guests. The elevator upgrade will ensure the entire building remains ADA accessible. HVAC Upgrades and an energy efficient window system will increase overall efficiency and reduce operating costs.

FUNDING	
LRBP Cash	$27,000,000
Authority	$10,000,000
TOTAL	**$37,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$33,300,000
Consultant Services	$3,700,000
TOTAL	**$37,000,000**

PRIORITY CD-26

LEWIS HALL CODE & INSTRUCTIONAL RENOVATIONS

MONTANA STATE UNIVERSITY
$31,500,000

This project will address improvements to modernize Lewis Hall, improve ADA accessibility, retire significant building deferred maintenance, and correct life-safety and code violations.

Lewis Hall, constructed in 1922, is approximately 43,845 square feet in size. In 1960, the ground floor on the west side of Lewis Hall was extended to connect with Cooley Laboratory. An enclosed, elevated walkway also connects the two buildings on the second story. In 1985, Tietz Hall was constructed immediately behind Lewis Hall which is connected to the basement. Lewis Hall contains classrooms and labs that support several instructional programs including Ecology, Microbiology and Cell Biology, and Veterinarian Medicine. Additional rooms include offices occupied by several departments including Ecology, Microbiology and Cell Biology, and Veterinarian Medicine. There are also offices and conference room on each level.

Lewis Hall's physical condition and lack of compliance with modern building codes is unacceptable for the instructional research and academic services that occupy the facility. Faculty avoid scheduling classes and lab sections in Lewis Hall because the building is not ADA accessible, and the instructional spaces no longer support modern teaching and learning. Lewis Hall requires comprehensive upgrades to life-safety and MEP systems, and the addition of an elevator to improve occupant safety and accessibility. Renovations to instructional labs and classrooms are not possible without having to address the critical life-safety, code, and deferred maintenance first. The building does not have an adequate fire suppression and alarm system, and major MEP systems are inefficient, at risk of failure, and cannot support additional capacity. The current conditions of Lewis Hall, altogether, do not fulfill the university's need for accessible and modern instructional lab and classroom space on campus.

Necessary life-safety, code and instructional renovations will transform Lewis Hall into a modern facility equipped with the necessary infrastructure to MSU programs well into the future. Renovations have the potential to nearly double the average credit hours delivered per This project will address improvements to modernize Lewis Hall, improve ADA accessibility, retire significant building deferred maintenance, and correct life-safety and code violations.

The proposed renovation will strategically address the necessary upgrades to Lewis Hall and improve MSU's ability to deliver quality education and research opportunities by renovating spaces suitable for modern instruction and research while also retiring significant building life-safety, code, and deferred maintenance.

FUNDING	
LRBP Cash	$23,500,000
Authority	$8,000,000
TOTAL	**$31,500,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$28,350,000
Consultant Services	$3,150,000
TOTAL	**$31,500,000**

PRIORITY CD-28

ENGINEERING HALL FULL INTERIOR RENOVATIONS

MONTANA TECHNOLOGICAL UNIVERSITY
$8,000,000

The project will renovate, modernize, and make all spaces code compliant, including addressing major life-safety issues, and improve the overall functionality and utilization of the entire building.

Engineering Hall, constructed in 1923, is 13,727 square feet and houses classrooms, computer labs and faculty offices that are core to the mission and heritage of Montana Tech. The building is dated with systems that are well beyond their expected useful life and does not meet current codes. There have not been extensive renovations or substantial upgrades since its construction in 1923.

An extensive renovation of this building will allow Montana Tech to address the issues of accessibility, allowing all students, faculty, and staff to access the features and offices of the 2nd floor. Computer lab space will be expanded for the benefit of all students. Restrooms will be enlarged to meet ADA requirements and updated with new fixtures and finishes. The addition of an elevator will make the entire building ADA compliant.

This project will support our campus space use and analysis plan developed by consultant NAC Architecture. To facilitate the plan, Engineering Hall needs a thorough renovation and restructuring to make it accessible, update instructional and lab space and to accommodate the changing academic needs of the institution to comply with current codes and yet maintain the historic nature of this building.

FUNDING	
LRBP Cash	$8,000,000
TOTAL	**$8,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$7,200,000
Consultant Services	$800,000
TOTAL	**$8,000,000**

PRIORITY CD-29

MAIN HALL REMODEL & RENOVATION

MONTANA TECHNOLOGICAL UNIVERSITY
$30,000,000

The project will renovate and modernize Main Hall, making all spaces code compliant, address major life-safety issues, and improve the overall functionality and utilization the building.

Main Hall, built in 1896, has 37,794 square feet and is Montana Tech's oldest building containing 6 classrooms, faculty offices, and specialty laboratories. It is the crown jewel of the center of campus and is part of the Butte National Historic Landmark and Montana Heritage Properties. Its historical significance and structurally sound condition make it a good candidate for a major upgrade. The building is not ADA accessible, has outdated and inadequate mechanical and electrical systems, and has a floor plan that is not conducive to modern learning.

The renovation will sensitively reinforce the building's historic character and be designed for classroom and instructional use, while eliminating deficiencies in the building's HVAC, plumbing and electrical systems, and address life-safety issues, including fire and accessibility compliance. This project will completely renovate the interior of Main Hall. Most of the interior will be demolished allowing the floor plan to be reconfigured for accessibility and to modernize all fixtures and finishes. An elevator will be installed, and mechanical, plumbing, and electrical systems will be brought up to current codes. In addition, seismic upgrades will be made.
We are seeking funding so that a thorough restructuring and significant gutting of existing interior spaces can occur. We would like to bring this building up to current accessibility and construction codes, while maintaining the historical exterior façade and building appearance.

Main Hall is the first building constructed on campus after the founding of the University. This building should be maintained as a highly prized and valued building and maintained at a high level to recognize its importance to Montana Tech. This major renovation will provide modern, inviting learning spaces for students, faculty, and guests. The addition of an elevator will make the entire building ADA accessible further increasing the building's usefulness.

FUNDING	
LRBP Cash	$30,000,000
TOTAL	**$30,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$27,000,000
Consultant Services	$3,000,000
TOTAL	**$30,000,000**

PRIORITY CD-30

BOZEMAN AG RESEARCH AND TEACHING FARM LIFE-SAFETY & PROGRAMMATIC IMPROVEMENTS

MONTANA AG EXPERIMENT STATION
$10,000,000

This project will construct a new Seed, Plant & Soil Processing facility. This project also addresses both immediate life-safety and programmatic improvements by demolishing and repairing BART's unsafe structures, addressing sanitary and sewer deficiencies, and constructing a public restroom at BART's Horticulture Farm.

The Bozeman Agricultural Research and Teaching Farm (BART Farm) is located west of the main MSU campus off 19th Avenue. The farm is dedicated to the service and support of research, teaching, and extension activities. Nearly 80% of MAES scientists are in Bozeman. Much of the research supported by the BART facility is eventually adopted by Montana Producers and is the primary training ground for future scientists who can continue to the rich tradition of impactful agricultural research to benefit Montana.

MAES' cereal crop breeders, soil scientists, and other MAES scientists currently utilize undersized, antiquated, and crowded spaces available across MSU Bozeman's campus. Dust and dirt generation common to seed cleaning, milling, and processing of soil and plant material is not compatible with modern molecular research now conducted in most plant science research labs. Current facilities do not allow for the efficient processing of plant and soil material and are not competitive with peer institutions.

The new Seed, Plant, & Soil Processing Facility will allow MAES to vacate spaces on MSU's campus and enable converting approximately 1,500 square feet in Leon Johnson Hall for other campus needs. The new facility will accommodate soil and plant dryers, soil and plant milling machines, seed cleaning, seed sorting, root washing, and plant sorting, while also containing an air-handling, heating, and cooling systems for a safe work environment. In addition, the BART farm requires sanitary sewer and water infrastructure upgrades to improve water quality and reduce risk of water contamination. Finally, the BART Horticulture farm needs a public restroom for students, faculty, and researchers on site.

Construction of a new facility will address critical life-safety issues, improving the safety for all MAES' BART Farm visitors conducting research, teaching, and learning at the BART Farm. Altogether, the proposed project dramatically improves BART Farm site's life-safety and advances MAES' mission, provides programmatic improvements creating a new state-of the art facility equipped with infrastructure and technology suitable for modern research.

FUNDING	
LRBP Cash	$10,000,000
TOTAL	**$10,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$9,000,000
Consultant Services	$1,000,000
TOTAL	**$10,000,000**

PRIORITY CD-32

CAMPUS STORAGE / WAREHOUSE BUILDING

UNIVERSITY OF MONTANA - WESTERN
$1,250,000

This project will construct a 7,200 square foot storage/warehouse building to centrally locate all of the campus storage needs.

Currently, UM Western lacks storage and must utilize 3,500 square feet in the basement of Block Hall, which houses UMWs science, math, and laboratory facilities. The Block Hall renovation project initiated this year will repurpose the basement into additional research and educational lab space requiring alternate space for campus storage. No appropriately sized area of campus is available to meet campus storage needs.

Constructing a new building will consolidate storage areas currently scattered across the campus and free up space in Block Hall for academic use. Consumables, electrical stores, carpentry, and mechanical stores will be housed in one central location.

FUNDING	
LRBP Cash	$1,250,000
TOTAL	**$1,250,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$1,125,000
Consultant Services	$125,000
TOTAL	**$1,250,000**

PRIORITY AO CD-01

MARK & ROBYN JONES MSU COLLEGE OF NURSING

MONTANA STATE UNIVERSITY
$92,000,000

This project will construct new or upgraded facilities at each of the MSU College of Nursing's five campuses in Bozeman, Billings, Great Falls, Kalispell and Missoula. Equipped with modern classrooms and state-of-the-art simulation labs, nursing students will hone their critical thinking and practice their skills in these new facilities.

In 2021, Montana State University announced a $101 million philanthropic gift from Mark & Robyn Jones, the founders of Goosehead Insurance. The gift, the largest in U.S. history to a college of nursing, will address the critical need to improve access to health care throughout Montana. In its entirety, the Jones' gift will fund the construction of new facilities dedicated to the MSU nursing programs, establish five endowed faculty professorships, develop an endowed scholarship that will allow the then MSU College of Nursing to keep the cost of nursing education affordable for all students, and create Montana's only certified nurse midwifery program. With Jones' gift and additional space to grow its enrollment, MSU estimates it will be able to meet the state's projected nursing shortage by 2030.

Access to healthcare, particularly for rural and frontier communities, is a critical issue across the state of Montana. Tight labor markets and nursing worker shortages continue to persist, with 52 of Montana's 56 counties classified as medically under served and health professional shortage areas by the U.S. Department of Health and Human Services. There are many counties in Montana lacking even one primary care, mental health or maternal care provider. MSU currently lacks the facilities to meet the State of Montana's current and projected health care industry demands for nurses.

The Montana Department of Labor & Industry's November 2021 Nursing Report describes how recruitment and training of nurses will continue to be essential in the next several years to address the State of Montana's current and projected nursing shortage. The Mark & Robyn Jones MSU College of Nursing is committed to producing the needed workforce and now, with this gift, MSU could more than double the number of family nurse practitioners and psychiatric-mental health nurse practitioners graduating from MSU. These health practitioners are educated to address the key health challenges facing Montana, including an aging population, mental health, and substance abuse. The construction and upgrade of five facilities located across the State of Montana will increase the overall access to nursing education. In fact, with the Jones' gift MSU estimates it will be able to meet the state's projected nursing shortage by 2030.

FUNDING	
Authority	$92,000,000
TOTAL	**$92,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$82,800,000
Consultant Services	$9,200,000
TOTAL	**$92,000,000**

PRIORITY AO CD-02

GIANFORTE HALL MSU COMPUTING BUILDING

MONTANA STATE UNIVERSITY
$50,000,000

This project will construct a new computing building to house the MSU Gianforte School of Computing. The building will house programming for computer science and computing-related fields such as cybersecurity, optics and photonics, electrical engineering, and creative industries.

In February of 2022, MSU announced a $50 million gift from the Gianforte Family foundation for the construction of a new building to house the Gianforte School of Computing and computing-related fields such as cyber security, optics and photonics, electrical and computer engineering, and creative industries such as film, photography, and music technologies.

Computer science graduates are in high demand both in Montana and nationally. The U.S. Bureau of Labor Statistics reports that employment of computer and information research scientists is projected to grow 22 percent from 2020 to 2030, much faster than the average for all occupations. A 2021 report by the Bureau of Business and Economic Research at the University of Montana found that members of the Montana High Tech Business Alliance expected to add 1,500 jobs in 2021 and that "growth projected in member and nonmember high tech businesses significantly exceeds average statewide economic growth."

The Gianforte School of Computing offers a variety of computing-related credentials for students wishing to pursue a career in the computer science fields. However, the school's faculty and staff are dispersed across five separate buildings, most of which do not have adequate space or building infrastructure to expand upon programs that will support Montana and National demand for computer science professionals.

A new building will bring MSU students modern classrooms, computer labs, research facilities, and innovative collaborative spaces in one location. A new building will also improve opportunities for dual enrollment computer science courses for Montana high school students. The new building will help MSU students be more successful. According to the National Association of Colleges and Employers, for example, average national salaries of computer science graduates jumped 7.1% last year to $72,000. Altogether, a new building dedicated to the Gianforte School of Computing will allow for MSU to attract more students to study an array successful discipline involving computing technologies, which provide ample opportunities for employment, especially for those wishing to live and work in Montana.

A dedicated facility is necessary for MSU to respond to industry needs by providing a centralized facility equipped with ample space and state-of-the art infrastructure which will support the delivery of high-quality educational opportunities in the computer science fields.

FUNDING	
Authority	$50,000,000
TOTAL	**$50,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$45,000,000
Consultant Services	$5,000,000
TOTAL	**$50,000,000**

PRIORITY AO CD-03

ADAMS CENTER - STUDENT ATHLETE LOCKER ROOMS

UNIVERSITY OF MONTANA
$6,000,000

A master plan of student athlete locker rooms and support spaces has been done and the first phases of work already implemented. Authority is required to continue work on the phases of remodel work for student athlete locker rooms.

The Adams Center was acquired in 1953. A major remodel occurred in 1999 but relatively little since then. Modernizing the student athlete locker rooms is part of keeping up with ever-changing world of athletics support spaces for coaches and student athletes in order to provide the best equipment, space & technology for success. The focus of this phase will provide renovated team support spaces for women's sports, including locker rooms, equipment, and laundry.

Authority is requested for the next phases of work to be completed using private funds.

FUNDING	
Authority	$6,000,000
TOTAL	**$6,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$5,400,000
Consultant Services	$600,000
TOTAL	**$6,000,000**

PRIORITY AO CD-04

CAMPUS WIDE CLASSROOM UPGRADE

UNIVERSITY OF MONTANA
$6,000,000

Authority is requested for continuing phases of remodel work at UM fixed seating and other classrooms across campus. About $3.2M of UM Bond funds were used to modernize classrooms for enhanced student classroom experience last year and continuing into next year. Buildings in which classrooms will be remodeled are as follows: Jeanette Rankin Hall, Natural Sciences, Fine Arts, Stone Hall, Music, McGill Hall, Health Science, Gallagher and Skaggs.

About 11 auditoriums across campus have been identified for modernization using UM Bond funds. These comprised the first-tier priority as the classrooms are heavily used by students and in the worst conditions. A second tier of classrooms can be identified for future modernization if private/UM funds are made available in the future.

Authority required for any private/UM funds available for future modernization work.

FUNDING	
Authority	$6,000,000
TOTAL	**$6,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$5,400,000
Consultant Services	$600,000
TOTAL	**$6,000,000**

PRIORITY AO CD-05

LIBERAL ARTS BUILDING / ECK HALL

UNIVERSITY OF MONTANA
$4,000,000

Authority is requested for continuing phases of remodel work at Eck Hall. To date, 6 phases of work have occurred over the past several years leading to about 80% of Eck Hall now being fully remodeled.

The Liberal Arts Building was constructed in 1953 and has 100,700 SF, used for teaching humanities classes and faculty offices along with the Dean's office. The main classroom wing of LA Building has been selectively remodeled in phases over summer break for the past several years, largely by private funding, to the point that about 80% of the wing is completely modernized with new windows, HVAC, room finishes, furniture, and IT equipment. Of the previous $6M authority only granted in HB 5 of the 65th Legislature, approximately $2.5 million remains and additional authority only is required for anyfuture phases of work.

Authority required for any private/UM funds available for future modernization work.

FUNDING	
Remaining Authority, 65th	$2,500,000
Authority	$4,000,000
TOTAL	**$6,500,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$5,850,000
Consultant Services	$650,000
TOTAL	**$6,500,000**

PRIORITY AO CD-06

MSU INDOOR PRACTICE FACILITY

MONTANA STATE UNIVERSITY
$15,000,000

This is a legislative Authority Only request for the construction of the Bobcat Indoor Performance Center. The facility will accommodate competition and training space for Bobcat Athletics, including year-round training for all outdoor sports, and will impact all student-athletes during their time at Montana State.

Pursuant to the collaborative work to develop the Athletics Facilities Facility Master Plan in September 2017, MSU leadership, facilities management, the Department of Intercollegiate Athletics, and student athletes identified the need for an indoor performance facility to improve the safety and continuity of practice and operations for all MSU athletic programs.

Identified in the recent Bobcat Athletics Masterplan, MSU lacks the indoor practice space needed to maintain safety and continuity of practice and operations during harsh Montana weather events. Weather such as smoke from regional wildfires or sub-zero temperatures limit the practice seasons for MSU Bobcat Athletics' Programs. Existing indoor practice areas such as the Brick Breeden Fieldhouse are already heavily utilized for other Bobcat Athletic and MSU events. Moreover, increased contraction and expansion causes additional wear on the arena floor.

Construction of the facility will expand the training season for several sports and will provide needed relief for the Brick Breeden Fieldhouse. Creating an Indoor Performance Facility will minimize wear and tear on the track itself due to heavy use of other operations and the movement of bleachers currently in the Fieldhouse that will not occur in the new facility. The new Bobcat Indoor Performance Facility will allow for more flexibility within valuable areas of the Fieldhouse.

FUNDING	
Authority	$15,000,000
TOTAL	**$15,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$13,500,000
Consultant Services	$1,500,000
TOTAL	**$15,000,000**

PRIORITY AO CD-07

GENERAL SPENDING AUTHORITY

MONTANA UNIVERSITY SYSTEM
$20,000,000

General Spending Authorization is needed to address pressing issues and funding that becomes available between legislative sessions. As defined in House Bill 5, sources may include federal special revenue, donations, grants, university funds, and other non-state funds. The Office of the Commissioner of Higher Education is responsible for monitoring and allocating this authorization among the units of the system in accordance with BOR approval and priorities.

The purpose of this authorization is to receive legislative consent for projects that will exceed the limitation on construction found in §18-2-102 MCA, up to a maximum of $2.5 million per project. Projects that exceed this limit are intended to be presented and requested for authorization on an individual basis at the next legislative session.

All project requests to OCHE and the Board of Regents to use this authority are needed by the University System to address programmatic needs, which in large part cannot be funded by the state but for which consent is needed from the legislature. The University System is pursuing gifts, grants, in-kind donations, and identification of university and/or non-state funds to fund these projects and will require State-level authority to accept and expend. Project types could be major maintenance, new construction, renovations, ADA, and code compliance upgrades or other elements necessary to complete the projects.

Projects that utilize this authorization do not require support of additional programs or increased operations and maintenance costs to the State. Any programmatic or O&M costs shall be the responsibility of the University System.

FUNDING	
Authority	$20,000,000
TOTAL	**$20,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$18,000,000
Consultant Services	$2,000,000
TOTAL	**$20,000,000**

PRIORITY AO CD-09

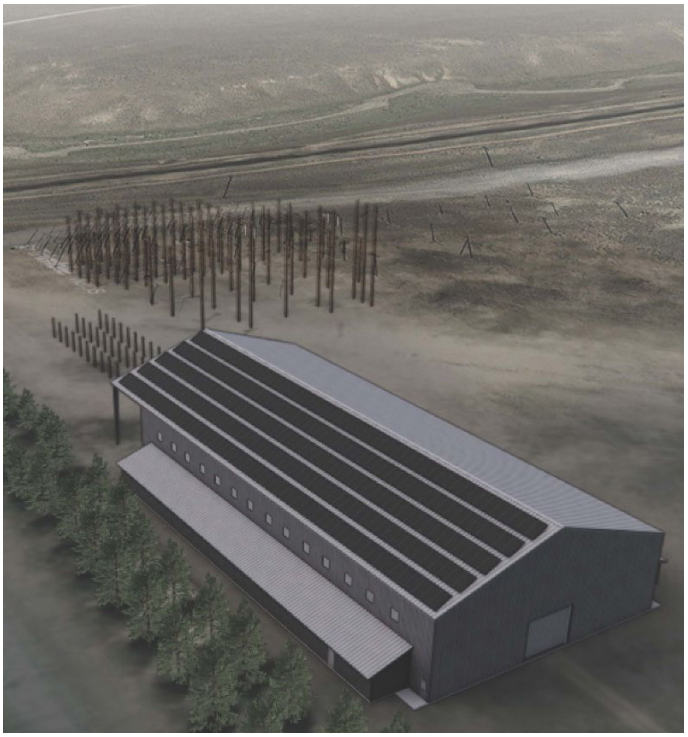
HIGHLANDS COLLEGE INDOOR POLE BARN

HIGHLANDS COLLEGE
$2,000,000

As a part of Montana Tech's long-term institutional growth plan, Highlands College is proposing to build a $2,000,000 indoor pole barn for our Pre-Apprentice Line Program.

The pre-apprentice line program is Highlands College most popular program with a lengthy wait list. This one-semester high-demand, high-skill, high-wage certificate program prepares students for groundsman and apprentice positions within the line trade. The addition of an indoor pole barn we will allow us to immediately double our current enrollment to 60 students each term with the potential for future growth.

The proposed pole barn will be 23,000 square feet - 200' L X 100' W X 40' H with additional 30' on the side which will serve as storage for equipment and tools. The indoor pole barn will have the ability to generate its own power by being equipped with large area solar panels on the roof. The solar panels will not only provide power for the entire pole barn, but excess power can be used to generate power to the main campus building and reduce utility charges.



FUNDING	
Authority	$2,000,000
TOTAL	**$2,000,000**

ESTIMATED PROJECT COSTS	
Construction Costs	$1,800,000
Consultant Services	$200,000
TOTAL	**$2,000,000**