STATE OF MONTANA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURE AND ENGINEERING DIVISION
1520 East Sixth Avenue • P.O. Box 200103 • Helena MT 59620-0103
Phone: 406 444-3104 • Fax: 406 444-3399

Report on High-Performance Program

To: Energy & Telecommunications Interim Committee

From: Russ Katherman, Administrator

Date: September 10, 2024

Re: High-Performance Building Program for Existing Buildings, Operations & Maintenance

---

BACKGROUND:

- §17-2-214 MCA (HB 464 of 64th legislature) required the A&E Division to develop a voluntary Program to encourage state agencies to implement high-performance operations and maintenance practices to save energy and reduce costs.
- To incentivize O&M improvements, the Legislature allowed participating agencies to transfer up to 75% of remaining HB 2 appropriated building operations/maintenance state funds to DOA, per §17-7-215 MCA.
- Funds are restricted to being used for energy-savings or deferred maintenance projects for that agency's existing facilities only.
- The program automatically terminates June 30, 2029.

GOALS:

- Encourage continuous efficiency improvements and energy usage reductions.
- Reduce agency urgency of expending end-of-FY funds.
- Make the process straightforward & functional.

PROCESS:

- Voluntary on a per-fiscal year basis via a participation agreement form.
- Fiscal commitment form with amount determined after FY-end balance (i.e. approx. August 15th) so as to comply with the no-more-than 75% limitation.

ATTACHMENTS:

- High-Performance Building Program for Existing Buildings, Operations & Maintenance
- Agency Voluntary Program Participation Per-FY Form
- Agency Program Funding Commitment Form

PARTICIPATION:

- Agencies Volunteering to Participate
  - FY21 – DOC, MSDB, DOJ, DMA, DPHHS
  - FY22 – DOC, DOJ
  - FY23 – DOC, DMA

    - FY24 – DMA, DLI Job Services
- Agencies Transferring Funds (after fiscal year-end balance confirmation)
    - FY21, MSDB $8,926
    - FY22, none
    - FY23, none
    - FY24, DLI Job Services, $461,000 (transfer pending)

[END OF REPORT]

STATE OF MONTANA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURE AND ENGINEERING DIVISION
1520 East Sixth Avenue • P.O. Box 200103 • Helena MT 59620-0103
Phone: 406 444-3104 • Fax: 406 444-3399

HIGH-PERFORMANCE BUILDING PROGRAM FOR OPERATIONS & MAINTENANCE OF EXISTING BUILDINGS (HPBP for O&M-EB)

HPBP for O&M-EB GOALS:

In accordance with §17-7-214 and §17-7-215 MCA, the Department of Administration (through its Architecture & Engineering Division) establishes the High-Performance Building Program for Operations & Maintenance of Existing Buildings (HPBP for O&M-EB). The voluntary HPBP for O&M-EB has been developed in collaboration with the Montana University System and other state agencies in order to improve the capacity of agencies to address operations, repairs, maintenance, and utility usage of existing state-owned facilities.

The overall goal of the HPBP for O&M-EB is to support existing state-owned buildings in meeting or exceeding operational standards that are cost-effective and enable progress toward sustainability in the following areas that form the basis of this HPBP:

1. Optimizing energy performance
2. Enhancing indoor environmental quality
3. Conserving natural resources
4. Improving productivity
5. Reducing deferred maintenance backlogs
6. Consistent/continual improvements to building functionality, durability, utilization, and maintenance

HPBP for O&M-EB PROGRAM:

1. GENERAL

    1.1. The HPBP for O&M-EB is promulgated to implement the concepts of HB 464 of the 64th Legislative Session as codified in §17-7-214 and §17-7-215 MCA.

    1.2. The HPBP for O&M-EB is established in consensus with the Montana University System and other state agencies on June 10, 2016, as meeting the requirements of §17-7-214 and §17-7-215 MCA, and are otherwise referred to in this document as the HPBP.

2. DEFINITIONS

    2.1. “Agency” participating in the HPBP for O&M-EB program has the meaning provided in §17-7-102(2) MCA: “. . . offices, departments, boards, commissions, institutions, universities, colleges, and any other person or any other administrative unit of state government that spends or encumbers public money by virtue of an appropriation from the legislature under 17-8-101.”

    2.2. “Budgeted utility funds” means an Agency’s operating funds as appropriated typically in HB 2 by the Montana Legislature and signed into law by the Governor.

2.3. “Budgeted operating expenses for building maintenance” means an Agency’s operating funds as appropriated typically in HB 2 by the Montana Legislature and signed into law by the Governor.

2.4. “Building operations and maintenance” refers to all services and functions required to assure facilities function as designed, constructed, and for their current intended purposes.

2.5. “Cost Effectiveness” means coordination and reconciliation of budget and project scope to meet the HPBP with consideration of the project’s life-cycle, productivity, deferred maintenance, and operations.

2.6. “Department” means the State of Montana, Department of Administration, Architecture & Engineering Division.

2.7. “Effective Date” shall be the date which defines the most current version of the HPBP.

2.8. “Enhance indoor environmental quality, IEQ” refers to the quality of a building’s environment in relation to the health and well-being of those who occupy space. IEQ is determined by many factors including lighting, air quality, thermal comfort, and other conditions.

2.9. “Estimated or Actual Savings” means that enhancements and efficiency improvements can be assessed through engineering/accounting estimates or actual savings by measurement.

2.10. “Facility Condition Assessment, FCA” means measuring the condition and functionality factors that make both the building and its infrastructure of adequate condition and appropriate for intended current functions. Specific objectives of the comprehensive assessment methodology include determining needs for renewal or replacement of building and infrastructure subsystems, and guiding the analysis of good decision options for the renovation or modernization of capital project planning.

2.11. “Facility Condition Inventory, FCI” means the periodic evaluation of the condition of an institution’s physical assets, typically on a 2-year cycle. Specific objectives are to inform proactive maintenance management programs, provide data and information to those making budget/resource allocation decisions, provide a common groundwork for evaluation by the executive and legislative branches.

2.12. “GBI“ refers to the current version of the Green Building Initiative’s Green Globes Certification. The most pertinent GBI rating system for this Program is the most current version of GBI GPC Existing Building.

2.13. “High-Performance Building Program (HPBP for O&M-EB)” means those standards, requirements and exemptions appropriate for existing buildings adopted by the Department in collaboration with the Montana University system and other state agencies.

2.14. “Integrated Design” means a collaborative method for designing buildings which emphasizes viewing the building as an interconnected and interdependent whole rather than an accumulation of its separate components.

2.15. ”Integrated Design Process” means multidisciplinary collaboration, including key stakeholders and design/construction professionals, from conception to completion.

2.16. “International Energy Conservation Code” means the current version of the IECC adopted by the State of Montana.

2.17. “LEED” refers to the current version of the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design green building rating standard. The most relevant LEED rating system for this Program is the most current version of LEED for Building Operations & Maintenance.

2.18. “Life-cycle cost analysis” refers to the total cost of ownership over the life of an asset. Typical areas of expenditure which are included in calculating the life-cycle cost include, planning, design, construction and acquisition, operations, maintenance, renewal and rehabilitation, depreciation and cost of finance and replacement, deconstruction, and/or disposal.

2.19. “Natural Resources of the State” shall generally be defined to include, but not limited to, the forests, surface and subsurface water, energy sources, minerals, land, and air of the State of Montana.

2.20. “New Building” means any newly constructed and occupied building that is authorized under the State of Montana Long-Range Building Program and is built in accordance with the adopted High Performance Building Standards.

2.21. “Optimize Energy Performance” shall be defined as achieving increasing levels of energy performance to reduce environmental and economic impacts associated with excessive energy use.

2.22. “Preventive Maintenance Program” means a systematic plan for 1) the care and servicing by personnel for the purpose of maintaining equipment and facilities in satisfactory operating condition by providing for systematic inspection, detection, and correction of emerging failures either before they occur or before they develop into major defects; 2) follow planned guidelines and O&M manuals to prevent equipment and systems breakdowns; and, 3) is planned maintenance, including tests, check-ups, measurements, adjustments, cleaning, and parts replacements performed specifically to prevent faults from occurring.

2.23. Reliability-Centered Maintenance (RCM) means the process of determining the most effective maintenance approach using employs Preventive Maintenance (PM), Predictive Maintenance (PdM), Real-time Monitoring (RTM1), Run-to-Failure (RTF, also called reactive maintenance), and Proactive Maintenance techniques in an integrated manner to increase the probability that a machine or component will function in the required manner over its design life cycle with a minimum of maintenance

2.24. “State Building Energy Conservation Program, SBECP” means an established revolving fund program within the Department of Environmental Quality used to provide supplementary funds for energy improvement projects that are repaid by agencies through annual utility savings.

2.25. “State funds” means funding appropriated by the Legislature.

2.26. “State Projects” means all new construction, renovation, alteration and equipping and furnishing during construction, repair and maintenance, renovation or alteration funded under §17-7-202 MCA.

2.27. “State Special Revenue Account” for HPBP for O&M-EB means an account of the state special revenue fund type as defined in §17-2-102(1)(b)(i) MCA established at the Department for the purposes of carrying continuing appropriations and used for project expenditures on agency projects.

2.28. “Statutory Appropriation” has the meaning provided in §17-7-502(1) MCA; an appropriation made by permanent law that authorizes spending by a state agency without the need for a biennial legislative appropriation or budget amendment.

2.29. “Termination Date” means the cessation of the HPBP for O&M-EB and the ability for agencies to transfer funds into a state special revenue account.

2.30. “University Plant Subfunds” for HPBP for O&M-EB means higher education funds as defined in §17-2-102(4) MCA.

2.31. “Utility” means electric, fuels, water, cooling, heating, sewer, waste management, communication/data, or similar.

2.32. “Utility Cost Reduction” means reduction in utility expenses.

3. REQUIREMENTS

3.1. Volunteering to participate in the HPBP. Agencies may elect to participate in the HPBP for O&M-EB to improve the cost effectiveness of existing buildings. Prior to the end of the fiscal year, participating Agencies must notify the A&E division of intent to participate in the Program. Agencies may opt in or out from year to year (or biennium to biennium) and are not obligated to participate in future fiscal years (or biennia).

3.2. Completing the HPBP for O&M Program Participation form. Notice of participation shall be by completion of the Program Participation form and submitting it (via email, direct link, online, or hardcopy) for each fiscal year (or biennium).

3.3. Participation may be on a per fiscal year (or biennium) basis, as indicated on the form. Volunteering to participate in the Program does not obligate an Agency to transfer any funding to the Department.

3.4. Funding transfer activities

3.4.1. Agencies will transfer funds after closure of fiscal year end but prior to August 15. Agencies will transfer funds to the Department (i.e. A&E Division) using an inter-unit journal and account 68123 journal line coding. The Department will utilize 582858 journal line coding.

3.4.2. Agencies will limit transfers to 75% of their ending balance of budgeted operating expenses for building maintenance and, if requested, be responsible for verifying their budgeted operating expenses through reasonable accounting means. Funds transferred are designated for the purpose of financing high-performance operations and maintenance projects in order to achieve utility cost reductions.

3.4.3. Agencies are limited to expend state funds only. Agencies may only transfer remaining funds from state general fund, state special revenue, and one time only appropriations. State funds could also include certain proprietary funds and trust funds. Federal or private funds received by Agencies cannot be transferred.

3.4.4. Department will create a state special revenue account dedicated to receive Agency funds and to administer the account on behalf of the participating Agency. Funding shall be used on projects for the participating Agency.

3.4.5. Funds transferred into the account and short-term investment pool interest earnings may accrue to the benefit of the Agency, are statutorily appropriated to the Department, and are continuing appropriations. The funds do not expire at the end of any particular fiscal year and additional legislative authority is not required for use on Agency projects per §18-2-102 MCA.

3.4.6. Prior to September 1 of each year, the Department will provide participating agencies a report of accrued funds available for projects.

3.5. Reporting to the Legislature's Energy & Telecommunications Interim Committee

3.5.1. Prior to September 1 of each even-numbered year, the Department, in collaboration with the Montana University System, shall update the Legislature's Energy and Telecommunications Interim Committee on the HPBP for O&M-EB program.

3.5.2. The report must include, at a minimum, an overview of the Agencies participating in the program and estimated or actual saving in operations and maintenance per Agency. Savings must directly result from participation in the program and projects completed through program participation. Reports will be compiled and presented by the A&E Division.

3.5.3. For the purposes of the report, participating Agencies agree to provide facilities information as requested by the Department for those buildings and activities that are part of the program (e.g. # of buildings, square footage of each, utility usage data, related operations and maintenance expenses, estimated or actual savings in operations and maintenance, efficiency/conservation measures implemented, etc.).

4. PROGRAM ELEMENTS

The following elements of the HPBP for O&M-EB are designed to be utilized in the form of a continuous improvement process in order to advance cost savings, energy usage reductions, best practices, and higher-performance in the areas of operations, repairs, maintenance, deferred maintenance, and utility usage of existing state-owned facilities.

4.1. Agencies are eligible to transfer funds beginning by completing the voluntary HPBP for O&M-EB Participation form and any of the following:

4.1.1. Perform Facilities Condition Assessment (FCA) and establish a Facilities Condition Inventory (FCI) as an initial step to implementing HPBP, if not previously completed, OR update an existing FCI if not updated within the last two fiscal years. Performance of an FCA and establishment/updating of an FCI shall consist of:

4.1.1.1. Developing/updating a database of Building Information (# of buildings; square footage of each; usage/type of building; utility/resource usage data; related operations and maintenance expenses; etc.); and,
4.1.1.2. Utilizing the:
4.1.1.2.1. A&E Division's ARCHIBUS platform;
4.1.1.2.2. Montana State University's Facilities Condition Inventory Application; or,
4.1.1.2.3. BUILDER (Dept. of Military Affairs only).
4.1.1.3. All FCA/FCI data must be entered into the A&E's Divisions ARCHIBUS platform for use in statewide deficiency and deferred maintenance backlog reporting.

4.1.2. Operations & Maintenance and Facilities Improvements (e.g. preventive maintenance program, addressing deferred maintenance):

4.1.2.1. Develop/Update Preventive Maintenance Program;
4.1.2.2. Documented Preventive Maintenance Program Implementation;
4.1.2.3. Implemented and documented a successful utility-savings project within the prior three (3) fiscal years and/or,
4.1.2.4. Address deferred maintenance (e.g. replacement of mechanical equipment, roofing systems, etc.).

4.1.3. Utilization of the State Building Energy Conservation Program:

4.1.3.1. Utilize SBECP funding for an energy conservation project within the prior three (3) fiscal years or,
4.1.3.2. Coordinate with SBECP for assistance in identifying, recommending, and planning building energy conservation improvements and monitoring/verification of energy saved. Assistance provided could be at any level of Agency participation noted in Paragraph 3.4. Utilization of SBECP funding for improvements is not required.

4.1.4. Utilization of an Energy Performance Contract (EPC):

4.1.4.1. Utilize an energy performance contract as provided in 90-4-11 MCA for an energy conservation project within the prior three (3) fiscal years; and,
4.1.4.2. Coordinate with SBECP for assistance in identifying, recommending, and planning building energy conservation improvements and monitoring/verification of energy saved. Assistance provided could be at any level of Agency participation noted in Paragraph 3.4. Utilization of SBECP funding or an EPC for improvements is not required.

4.1.5. Implementation and Utilization of a 3rd-Party O&M-EB Certification Program:

4.1.5.1. Implement, utilize, and earn certification from a recognized 3rd-party O&M-EB Program at the time of participation in HPBP such as, but not limited to:
4.1.5.1.1. LEED for Building Operations & Maintenance;
4.1.5.1.2. Green Building Initiative's Green Globes for Existing Buildings; or,
4.1.5.1.3. Energy Star for Existing Buildings with the goal of obtaining a >75 rating and energy star certification.

4.1.6. Utility Efficiency Measures:

4.1.6.1. Develop building utility efficiency improvement plans chosen for participation in the HPBP for O&M-EB. The plans would include project schedules for building improvements for each building.

4.1.6.2. Possible Utility Efficiency Improvements plans could include, but not limited to:

4.1.6.2.1. Lighting Upgrades;
4.1.6.2.2. Variable frequency drive installations on constant speed motors;
4.1.6.2.3. Temperature controls upgrades;
4.1.6.2.4. Water heater and boiler upgrades;
4.1.6.2.5. Water conservation measures; and/or
4.1.6.2.6. Building envelope improvements.

4.1.6.3. To be included in the Improvement plans is the development of operation and maintenance procedures for affected systems for incorporation into the Preventive Maintenance Program.

4.1.7. Metering & Sub-metering of Utility Systems:

4.1.7.1. Domestic water;
4.1.7.2. Electrical service;
4.1.7.3. Gas service;
4.1.7.4. Propane;
4.1.7.5. And/Or,
4.1.7.5.1. Sub-metering can include individual buildings of all utilities, irrigation systems, heating system make-up water, steam/condensate, cooling towers, geothermal system;
4.1.7.5.2. Develop and implement procedures for collection and reporting of meter data if not done automatically through a utility provider

4.2. Employee Utility and O&M Reduction Awareness or Incentive Efforts (planning and/or implementation). Provide information, incentives, training, and/or policies in the following areas:

4.2.1. Waste Reductions Program, Training, or Policies;

4.2.2. Recycling Program, Training, or Policies;

4.2.3. Feedback Dashboards/Monitoring of Utility Use;

4.2.4. Occupant Surveys or Building Training or

4.2.5. Utility Use Reduction, Training, or Policies.

5. DOCUMENTATION

5.1. Prior to September 1 of each even-numbered year, the Department (in collaboration with the Montana University System), must update the Legislature's energy and telecommunications interim committee on the status of HPBP for O&M-EB.

5.2. The report must include an overview of the state agencies and educational units participating in the Program and an estimate of savings or actual savings in operations and maintenance resulting from participation in the Program.

5.3. In order to fulfill this reporting requirement, prior to the end of each fiscal year participating Agencies shall provide such facilities information as requested by the Department for those buildings and/or activities identified above that are part of the Program (e.g. # of buildings, square footage of each, utility usage data, related operations and maintenance expenses, estimated or actual savings in operations and maintenance, etc.).

5.4. The Department will provide the amounts of any transfers and account balances along with any projects in planning, construction, or completed with the funding. The Department will assist Agencies in the determination of estimated or actual savings in operations and maintenance resulting from participation in the Program or with any projects completed on behalf of the Agency.

5.5. Prior to September 1 of each year, the Department will provide participating agencies a report of accrued funds available for projects.

6. ONGOING REVIEW

6.1. The HPBP for O&M-EB shall be reviewed by the Department annually in collaboration with Montana university system and other state agencies. Applicable updates and revisions enacted will be incorporated into the current version which will be identified with a current Effective Date so that Users can confirm that they are working with the governing version.

6.2. As provided in 17-7-214 MCA, the HPBP automatically terminates on June 30, 2029, unless amended by the Legislature.

[END OF HPBP for O&M-EB]

STATE OF MONTANA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURE AND ENGINEERING DIVISION
1520 East Sixth Avenue • P.O. Box 200103 • Helena MT 59620-0103
Phone: 406 444-3104 • Fax: 406 444-3399

PARTICIPATION IN HIGH-PERFORMANCE BUILDING PROGRAM FOR OPERATIONS & MAINTENANCE OF EXISTING BUILDINGS (HPBP for O&M-EB)

In accordance with §17-7-214 and §17-7-215 MCA, the Agency identified below has elected to participate in the voluntary high-performance building program for the operation and maintenance of existing buildings, as developed by the Department of Administration (Department) in collaboration with the Montana University System (MUS) and other state agencies.

The Agency agrees it is voluntarily participating in the program for FY(s) _____.

The Agency anticipates engaging in one or more of the following activities defined in the program (check all that apply):

- ☐ Facilities Condition Assessment and Facilities Condition Inventory (implementation and/or biennial updating)
- ☐ Operations & Maintenance and Facilities Improvements
- ☐ Utilize the State Building Energy Conservation Program
- ☐ Utilize an Energy Performance Contract
- ☐ Implement and Utilize a 3rd-Party O&M-EB Program
- ☐ Energy/Water Efficiency Measures (planning and/or implementation)
- ☐ Metering & Sub-metering of Energy/Water Systems
- ☐ Employee Energy and O&M Reduction Awareness or Incentive Efforts (planning and/or implementation)

The Agency agrees to provide such facilities information as requested by the Department for those buildings and activities identified above that are part of the program (e.g. # of buildings, square footage of each, utility usage data, related operations and maintenance expenses, estimated or actual savings in operations and maintenance, efficiency/conservation measures implemented, etc.).

The Department agrees to establish a State Special Revenue account for receipt of up to 75% of any remaining state-only fiscal year budgeted operating expenses for building maintenance. Funds in the account shall be used on Agency high-performance operations and maintenance and utility cost reduction projects or components of projects on the basis identified above and as agreed upon between the Agency and the Department.

The Agency understands that the transfer must occur after closure of the fiscal year but prior to August 15, must not exceed 75% of the ending balance of operating expenses for building maintenance, and must be state funds only. The Agency understands that it is solely responsible for compliance with the above.

Agency	By	Date

Received:
State of Montana Department of Administration,
Architecture and Engineering Division

Russ Katherman, Administrator	By	Date

STATE OF MONTANA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURE AND ENGINEERING DIVISION
1520 East Sixth Avenue • P.O. Box 200103 • Helena MT 59620-0103
Phone: 406 444-3104 • Fax: 406 444-3399

COMMITMENT OF FUNDS IN HIGH-PERFORMANCE BUILDING PROGRAM FOR OPERATIONS & MAINTENANCE OF EXISTING BUILDINGS (HPBP for O&M-EB)

In accordance with §17-7-214 and §17-7-215 MCA, the Agency identified below has elected to participate in the voluntary high-performance building program for the operation and maintenance of existing buildings, as developed by the Department of Administration (Department) in collaboration with the Montana University System (MUS) and other state agencies.

The Agency has agreed to voluntarily participating in the program and the Department has an OM Program Participation Form on file for FY _____.

The Agency certifies that $_____ remains in reverted FY _____ O&M authority that is designated for deferred maintenance. Of this amount, the Agency is committing $_____to HPBP (committed amount cannot be more than 75% of remaining reverted amount). The reverted authority is in agency fund _____ and subclass _____.

The Department agrees to establish statutory authority in a State Special Revenue account for receipt of up to 75% of any remaining state-only fiscal year budgeted operating expenses for building maintenance. Funds in the account shall be used on Agency high-performance operations and maintenance and utility cost reduction projects or components of projects on the basis identified above and as agreed upon between the Agency and the Department.

The Agency understands that commitment of funds must occur after closure of the fiscal year, the commitment must not exceed 75% of the ending balance of operating expenses for building maintenance, calculation can only be determined on remaining state funds, and any carryforward calculation on state funds shall not include reverted authority included in HPBP calculation. The Agency understands that it is solely responsible for compliance with the above.

The Agency will transfer the committed cash with an Interunit journal and will use account 68123 “High Perf Bldg Program LRBP” and the Department will use account 582858 “HPBP Transfer to LRBP” for the operating transfer.

Agency	By	Date

Received:
State of Montana Department of Administration,
Architecture and Engineering Division

Russ Katherman, Administrator	By	Date