

Department of Corrections



R.E.P.A.I.R.
Program



Oregon

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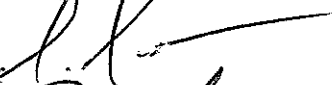
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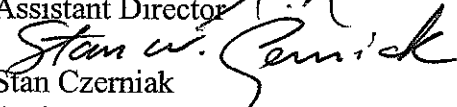
November 7, 2005



TO: Superintendents
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FROM: Max Williams
Director 

Mitch Morrow
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SUBJECT: R.E.P.A.I.R. Program

The enclosed manual describes the Report & Evaluate Planned Annual Institution Repairs (R.E.P.A.I.R.) program that is used by the Department of Corrections for evaluating the needs of the Department's facilities. R.E.P.A.I.R. explains guidelines for managing and maintaining our facilities, and authorizes the use of the Computerized Maintenance Management System (CMMS) as a method of maintaining comparative information about the condition of our facilities.

Facilities Services coordinates and maintains the consolidated information necessary for periodic reporting.

We have reviewed this program with changes, and it is being forwarded for implementation and use upon receipt by all institutions.



**GUIDELINES FOR THE
REPAIR PROGRAM**

(Report & Evaluate Planned Annual Institution Repairs)

Prepared by:

State of Oregon
Department of Corrections
Facilities Services

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SECTION 1

INTRODUCTION

The Department of Corrections is responsible for a network of publicly owned facilities constituting some of the State's most valuable assets. As the stewards of these assets, we continually face underfunded maintenance and repair of these buildings. It is often difficult to discern the consequences of a reduction in maintenance and repair as the physical effects are not immediately visible and several years may pass before the effects can be observed. As facility managers, it is difficult to describe in physical terms, the consequences of underfunding, and even more difficult is providing the evidence needed to defend and support budget requests. Capital repair and deferred maintenance are important issues due to the size and complexity of our institutions and the mission the institutions play in our society. This plan will address four distinct aspects of facilities management, which are defined later in this report.

The purpose of this report is to propose to executive staff a program to support a long-term asset management strategy. Currently, there is no effective mechanism in place to reconcile disparate institution level budget requests or capital repair project prioritization. This has occurred in part because maintenance budget requests may not have been reliable, and baselines for informative budget justifications have not been established. Whatever the reason, the current process does not lend itself to realistic budgeting for department-wide maintenance operation needs. Facilities Services needs to take a proactive role in coordinating and assisting the institutions in developing standardized, department-wide maintenance planning and programming procedures. The Department needs to develop a more effective needs-driven budgeting process that will provide realistic and reliable data to properly inform decision makers about the importance of preserving the value of our institutions' plant assets. Facilities Services recommends adopting this plan and set of philosophies to develop the following long-term asset management strategies:

1. Project predictable capital repair costs;
2. Update the Facility Condition Evaluation Survey;
3. Implementation of the adopted computerized maintenance management system (CMMS) at all institutions;
4. The formulation of a Project Advisory Committee to review all projects;
5. Assist and support the institutions' regular maintenance efforts;
6. Implement a six-year maintenance plan as required by the Central Facilities Plan that addresses projects in terms of deferability and severity.

In implementing this plan, a model will begin to develop that will be more predictive of capital repair needs, enabling the Department to optimize funds for maintenance and to avoid the high cost of emergency repairs.

Background

Historically, maintenance budgets for the Department's public assets have been constantly under funded. Decisions to under fund maintenance have been made, in part, because of our failure to fully communicate the implications of such under funding. The decisions to under fund the maintenance and repair of our infrastructures have far-reaching adverse impacts on life, health and safety, productivity of our employees, long-term value of the properties, and potentially public safety. The decision to under fund maintenance violates public trust, and although it may be done with good intentions, it nevertheless has an extremely adverse impact causing interruptions in services and

expensive repair and replacement costs. It is often difficult to discern the consequences of a reduction in maintenance and repair. The physical evidence is usually not immediately visible, and several years may pass before the true effects are observed. In an effort to keep the Department's facilities functional for their original anticipated useful life, Facilities Services and the institutions both fund ongoing maintenance and special repair projects. However, Facilities Services believes the appropriate criteria to identify department-wide under funding and to develop department-wide maintenance and repair budgets are not in place. This will be discussed in more detail later.

Senate Bill 28

The implementation of Senate Bill 28, passed by the 97-99 Legislature, recognizes that providing and operating state facilities is a significant capital investment in public infrastructure. The bill requires that a statewide process be established that evaluates the needs of the State's facilities. It requires that a system be established to provide comparative information on the condition of facilities, and establishes guidelines and standards for acquiring, managing and maintaining state facilities. Senate Bill 28 also establishes a public review process for proposed capital projects for all state agencies. Once established, the review process will specifically examine:

1. The effectiveness of maintenance and repair and other asset protection activities;
2. Space utilization, including an inventory of occupied and unoccupied building space;
3. Use of appropriate technology;
4. The agency's mission and long-range facilities plans
5. The ability of the agency to maintain and operate all of the agency's facilities in a cost-effective manner.

Senate Bill 28 requires the Department to evaluate whether facility budgeting and planning will continue decentralized or evolve into a program that supports centralized repair budgeting, planning and maintenance reporting while maintaining local autonomy in institution matters. Improperly implemented, the Department could run the risk of paralysis through moving towards centralization, even though this is the most cost-effective alternative currently available. Another decision is whether Facilities Services should begin standardization. Generally, standardization and cost-effectiveness go hand-in-hand. Facilities Services recommends moving towards standardization as common equipment and parts are identified through the CMMS database.

Finally, Senate Bill 28 requires the Department to establish and implement a long-range maintenance and management plan for our facilities. This plan must ensure that department facilities are maintained in good repair and that the useful lives of the facilities are maximized. This proposal supports implementing the requirements of Senate Bill 28 and the resulting Central Facilities Plan. It will require the complete and total support of executive staff, superintendents, and physical plant staff to be implemented smoothly.

Rethinking the Department's Approach to Deferred Maintenance

As the infrastructure at most of our institutions continues to age, component and system deterioration will increase in frequency. Increased breakdowns will tax the ability of the physical plant maintenance staff to keep up with routine maintenance, let alone deferred maintenance and repairs. It is highly likely that over the next six years, both deferred maintenance and infrastructure deterioration will increase significantly. This will result in increasingly higher repair/renovation costs. If the legislature does not act now to fund

dollars to decrease the Department's deferred maintenance/capital repair liabilities, we can expect to see our current liabilities increase, not including any new deferred maintenance projects that inevitably will be added to the list. This plan is written to present justification for the need to support our institutions by centrally planning and implementing a deferred maintenance/capital repair program teamed with a computerized maintenance management system (CMMS).

Due to Senate Bill 28 and the resulting Central Facilities Plan, deferred maintenance/capital repair is now a major topic in the biennial planning and budget preparations of the Department. Currently, nearly all institutions rely heavily on breakdown maintenance to keep facilities and systems operational. Because of the lack of a standard department-wide maintenance management program, the Department's maintenance planning/programming efforts are best characterized as reactionary rather than anticipatory. This is inefficient as it focuses only on short-term reaction to problems rather than a long-term reduction in occurrences of problems. There is little, if any, long-term reduction of maintenance costs, equipment life expectancies are drastically shortened, and deferred maintenance/capital repair costs escalate significantly. The establishment of standardized and systematic processes would establish a baseline for calculating and subsequently reporting the amount of needed maintenance, and the cost of bringing assets up to a minimally acceptable condition.

The Department's current method of funding ongoing routine maintenance and deferred maintenance creates counterproductive fiscal incentives that may seem to encourage the Department's institutions to defer needed maintenance. Facilities Services has taken specific steps that, if funded, will ensure the Department resolves our existing liability in deferred maintenance/capital repair and the underfunding of regular/routine maintenance. To prepare a comprehensive package for presentation to the 2001 Legislature, Facilities Services requested the institutions to use the Central Facilities Plan provided by DAS, and conduct a review of the facility to determine if changes had occurred since the Facilities Condition Evaluation Survey was completed in 1996. This survey served as a baseline, and helped the institutions in reporting:

1. Assessment of conditions
2. Identification of minimally acceptable conditions
3. Estimated costs to bring assets up to an acceptable levels
4. Projections of the future added cost due to deferrals
5. Estimation of the extent to which the effects of deferrals on service, quality, health, and safety are systematically examined and reported.

Deferred Maintenance: Save Now, Pay More Later

When ongoing maintenance is not sustained at an appropriate level and when special repair projects are not accomplished as needed, the result is a backlog of projects termed "deferred maintenance." If repairs to key building and infrastructure components are constantly deferred, facilities can eventually require more expensive investments, such as emergency repairs (when systems break down), capital improvements, or replacement (such as major rehabilitation). Generally, deferral of maintenance projects reduces the useful life of facilities and thus increases future capital outlay needs. The following are specific impacts associated with the underfunding of maintenance and repairs:

1. Code failures/violations
2. Structural failures
3. Health failures

4. Excessive costs:
 - a) Excessive replacement
 - b) Minor failures leading to major failures
 - c) Treating the symptoms, not the cause
 - d) Increased consumption of utilities
5. Lower productivity
6. Service failures
 - a) Power
 - b) Heating, ventilating and air conditioning equipment (HVAC)
 - c) Leakage and intrusion
7. Premature loss
8. Loss of contents
9. Social costs
 - a) Poor aesthetics
 - b) Poor morale
 - c) Inability to attract best employees
 - d) Increased pollution
 - e) Loss of readiness
 - f) Absenteeism and turnover

Deferred Maintenance Backlogs Are Huge

Over the years, the Department has been in a state of constant maintenance deferral. As a result, the Facilities Services estimates that its deferred maintenance backlog exceeds \$52 million, of which approximately \$39 million is critical to 1 year deferred. Critical to 1 year deferred maintenance projects are those requiring immediate action to return a facility to normal operation, stop accelerated deterioration, or correct a cited safety hazard. These figures represent a facilities condition evaluation team's evaluation of "need" that existed in 1996. Working closely with each institution's physical plant staff during each on-site inspection, it was determined that the specific magnitude of the problem is uncertain for three reasons:

1. The project list for each of the institutions was not up-to-date.
2. Some of the specific projects the institutions had planned for were renovations, not deferred maintenance.
3. The estimated project costs have been independently developed and reviewed; however, these estimates are "conservative" in terms of total cost. These deficiencies are based upon visual inspections, and total aspects of a deficiency cannot be ascertained until such time the repair is actually undertaken due to hidden elements.

It is important to note here that there were deficiencies identified totaling \$12 million to \$18 million that required additional study to assess the potential total liability of corrective costs.

Problems with the Department's Current Approach to Maintenance

The Department's current approach treats deferred maintenance as an ongoing "program." The existence of deferred maintenance, however, really represents a maintenance program failure. A deferred maintenance project is one that should have been addressed in a prior year under a properly functioning regular maintenance program. One reason for the failure of the Department's regular maintenance programs is simple; regular, ongoing maintenance has been under funded due to the lack of a standardized department-wide system to report maintenance accomplished and required. Separate funding for deferred maintenance may actually have created a fiscal incentive for institutions to defer projects rather than utilizing routine maintenance funding and to deal with them in a timelier manner.

The lack of a standardized, department-wide, maintenance program contributes to inconsistent maintenance, repair planning, programming, and budgeting because there is no real baseline against which to evaluate the current condition of facilities and equipment. Thus, the benefit realized for the dollars invested is difficult to define, resulting in budget requests remaining suspect among funding decision-makers.

Under funding of regular maintenance has occurred in part because the Department redirects funds budgeted for routine maintenance to other activities. This redirection of funds is, in part, due to general under funding of operating budgets by the Legislature. The logical conclusion is that we, as a Department, have failed to properly identify, prioritize, and explain our maintenance budget requests. There is also no framework under which the Department holds itself accountable for the outcome of maintenance programs.

The Legislature has the primary responsibility for funding maintenance for the Department. It has little control, however, for determining ongoing maintenance spending in each agency. The Department has not been accountable to a periodic review of maintenance and repair-related issues, thus creating serious shortfalls in maintenance programs. For example, there are no maintenance standards adopted to support a systematic review of where actual maintenance spending levels stand in comparison to the standards. As a result, this oversight has a significant impact on the level of maintenance activity that actually occurs at each institution. Similarly, funds are allocated to the institutions on the basis of maintenance and operation need, but the institutions have virtually unlimited discretion in determining what kinds of maintenance these funds support.

Fiscal incentive to defer makes a bad situation worse. The Department's current method of funding deferred maintenance actually provides an incentive for the institutions to defer projects. This is because the Department has addressed the maintenance problem primarily by requesting dollars for deferred maintenance over and above the regular operating budget of the institutions. As a result, the current funding arrangement rewards the system of maintenance deferrals by providing a higher level of funding for deferred maintenance.

Facilities Services recommends the institutions develop maintenance standards for review and adoption by the Project Advisory Committee to establish a consistent baseline for facility maintenance and repair across all institutions. This would allow for a better analysis or return on maintenance/repair dollars invested since it would be easier to define tangible benefits of maintenance/repair actions.

New Departmental Approach Needed

Facilities Services recommends that the Department adopt the following principles and recommendations for reform:

1. Adequately fund regular, ongoing maintenance and hold the institutions accountable for improving regular maintenance efforts;
2. Shift fiscal incentives to discourage deferral of projects;
3. Require all funds budgeted for maintenance to be spent for that purpose;
4. Prohibit the addition of any new projects to existing deferred maintenance backlogs;
5. Start a process to focus on the existing backlog of critical/deferred maintenance as a priority;
6. Implement a six-year maintenance plan that addresses projects in order of deferability and severity;
7. Require that the multi-year plan be the basis for future maintenance/repair budget requests;
8. Require funding requests be sustainable via the CMMS and the Central Facilities Plan.

Need to Provide Adequate Maintenance Funding

The first step in correcting the deferred maintenance problem is ensuring the institutions are adequately funded for ongoing/routine maintenance. It is a given that the Department and the institutions are currently under funded relative to their needs. To overcome this shortfall, the Department needs to support clear, justifiable maintenance accountability and budgeting. Facilities Services recommends it be tasked with the following specific actions to restore Department maintenance funding to adequate levels:

1. Assist and coordinate the development and implementation of uniform department-wide maintenance standards;
2. Assist and coordinate the implementation of a department-wide computerized maintenance management system (CMMS), including the development of work management and preventive management systems;
3. Assist the institutions in developing their biennial maintenance operation budgets through impartial reviews and advice on project development and prioritization;
4. Assist and coordinate the development of department-wide maintenance management policies and procedures to provide for standardized, program-level maintenance management guidance for all institutions;
5. Form a Project Advisory Committee to review all deferred maintenance/capital repair projects.
6. Coordinate and develop department-wide capital repair/maintenance budget;

Conclusions

In planning for future budgets, the Department and the institutions should take further steps to bring ongoing maintenance funding fully up to the standard. This can be accomplished through:

1. **Accountability.** The Department should use all funding budgeted for maintenance -- solely for the purpose of maintenance. The Department should define "maintenance" in this regard as efforts to maintain facilities and infrastructure, as opposed to janitorial services and groundskeeping. While the latter are important, they have no major effect on the length of facilities' useful life.

2. Capping the Deferred Maintenance Backlog at Its Current Level: The second step in correcting the deferred maintenance problem is to hold the institutions responsible for accomplishing maintenance when required to minimize deferred maintenance costs in the future. Given increased funding for regular maintenance, the institutions should commit to the proper maintenance of all existing facilities. The Department should make it clear that it will not fund projects that are deferred past our six-year plan. This means the Department needs to review the current list of deferred projects and request funding using the procedures outlined in the Central Facilities Plan. Institutions should have an opportunity to participate in the review of the projects with Facilities Services to determine whether they are appropriately classified as deferred maintenance (as opposed to capital renovation, for example).
3. Developing a Plan to Eliminate the Existing Deferred Maintenance Backlog: The third step in resolving the deferred maintenance problem is to develop a way to fund the existing deferred maintenance backlog. Facilities Services has prepared a plan for presentation to the Legislature that, if approved and funded will eliminate the current backlog of deferred maintenance projects. The amounts submitted are based on a consolidation of all like projects department-wide.

A long-run strategy to address maintenance failures within the Department's institutions is essential to protect the State's investment in the buildings and infrastructure entrusted to our care. Unless the Department acts now to bring maintenance spending to adequate levels and to assist the institutions in addressing their ongoing regular maintenance needs, maintenance will continue to be deferred. As a result, the State will face higher future costs of renovating and replacing prematurely worn out facilities. Facilities Services believes, however, that this plan will appropriately address the Department's needs.

SECTION 2

REPAIR PROGRAM

Program Overview:

The maintenance of facilities and utilities, health and safety of employees and facility users, protection of the environment, conservation of energy, accommodations for disabled persons, and improvements needed to support changes in program requirements are primary concerns in the management of the Department of Corrections (DOC) owned facilities. Facilities Services has developed a program to report and evaluate planned annual institution repairs or the **REPAIR** Program.

Facilities Services is tasked with primary responsibility for administering the **REPAIR** Program to assist the institutions in maintaining our facilities. Facilities Services staff, in conjunction with the **REPAIR** Project Review Advisory Committee, will work directly with all institutions to identify needed projects and to provide assistance in implementation. Urgent maintenance and code compliance needs and other special maintenance initiatives can be implemented under procedures described under "Special Needs Projects."

Facilities Services shall be responsible to report **REPAIR** Program progress and to prepare departmental **REPAIR** Program funding requests and funding allocations to continue the program from one biennium to another. Institutions shall use the **REPAIR** Program to implement deferred maintenance, special needs projects, and repair and renovation projects, using **REPAIR** program funding or other department funding resources.

Facilities Services will make changes to the **REPAIR** Program in response to need, direction from the Executive Staff, or Legislative changes. Any changes will be promptly transmitted to all institutions to promote efficiency and effective communications in administration of the program.

The **REPAIR** Program is structured on the premise that routine preventative maintenance is performed at the institution level and that all capital repair/replacement, deferred maintenance, and special needs projects be reviewed and approved by the **REPAIR** Project Advisory Committee.

Program Objectives:

The objectives of the **REPAIR** Program are:

1. To identify, quantify, and prioritize according to urgency of need deferred maintenance, capital repair/replacement projects, and special needs projects.
2. To develop a **REPAIR** Project Advisory Committee specifically charged with:
 - a) Reviewing and evaluating existing reports and publications about deferred maintenance recommendations;
 - b) Identifying and evaluating all current and deferred maintenance needs;
 - c) Submitting a report to Facilities Services of its findings and recommendations;
 - d) Reviewing and recommending approval and/or disapproval of institutional deferred maintenance, capital repair, and special needs projects.
 - e) Reviewing draft maintenance standards and forwarding those recommended for adoption.

The REPAIR Project Advisory Committee shall consist of representatives from Facilities Services and designated representatives from each institution. Each institution shall have equal voice.

3. To focus attention on maintenance, health and safety, environmental protection, energy conservation, ADA accommodations, and facility improvement needs.
4. To expedite completion of deferred routine/preventative maintenance, capital repairs/replacement, and special needs projects.
5. To allocate **REPAIR** Program project funding based on priority need.
6. To manage the program within policies and priorities established by executive staff.
7. To maintain accountability for completion of projects and expenditure of funds.

Program Scope:

General: Deferred maintenance and capital repair budgets shall be administered through the **REPAIR** Program. This includes many types of maintenance/repair work needed to maintain the existing level of services, and renovations/improvements needed to increase efficiency or to support changes in institutional requirements. Projects include the following:

1. Facility Maintenance/Capital Repair and/or Improvement.
2. Utility Systems Maintenance/Repair/Improvement.
3. Health and Safety Code Compliance.
4. Environmental Protection.
5. Energy Conservation.
6. ADA Accommodations.
7. Roads/Walks/Support Facilities Maintenance/Repair.
8. Preventive Maintenance.
9. Special Needs Projects for urgent maintenance or code compliance, maintenance training, or other maintenance initiatives.

Definitions of maintenance activities are explained in Attachment No. 1.

A summary of Special Needs Projects and procedures for implementing them is attached (Attachment No. 2).

Funding Priorities:

REPAIR Program project-funding priorities are as follows:

- Priority 1, protecting the health and safety of people; protecting the environment; maintaining integrity of the building's structural system; maintaining utility services.
- Priority 2, maintaining the building envelope (roof, walls, etc.);
- Priority 3, maintaining the mechanical, plumbing, and electrical systems; maintaining institutional roads/ walks, removing architectural barriers.
- Priority 4, Repairing interior finishes, architectural/fixed equipment, and other site development work; renovation or improvements to facilitate program changes.

Facility Repair/Renovation Projects:

Scope: Facility repair/renovation projects may include:

1. Maintenance of building systems and components to maximize useful life and increase dependability, including repair or replacement of building components and equipment which have failed or have served beyond their normal useful life;
2. Modifications to provide ADA access;
3. Minor remodeling/improvement projects that are essential to support changes in institution/program requirements.

Examples: Typical facility maintenance projects include repair/replacement of roofing, masonry, HVAC equipment, and electrical distribution equipment. Refer to attached project Guidelines for more specific information on types of maintenance work qualifying for funding.

Facility remodeling and/or improvement projects include minor improvements to facilities that are needed to accommodate changes or expansion of the institution's needs. The scope and budget must maximize use of existing space and address documented program needs. An institution space plan must be submitted to Facilities Services before projects involving remodeling or space reconfiguration will be considered.

Comments: Facility repair/replacement work should be beyond the scope of the institution's normal maintenance activities and may require special tools or construction trades to complete. **Replacement should be considered only when repair is no longer feasible or cost effective.**

American Disabilities Act accommodation projects include access ramps, automatic exterior doors, rest room modifications, elevators and elevator control modifications, etc. The scope of ADA accommodation work should be limited to providing reasonable access to program spaces and services, not providing access to every space within an existing building. Projects must be supported by a comprehensive evaluation of program access per ADA regulations.

In general, facility **REPAIR** Program funding cannot be used for the following:

1. Special program, or moveable equipment that is generally purchased and installed separate from the building construction.
2. Inspections, adjustments, and minor maintenance such as: (1) cleaning and painting of building components and equipment, (2) replacing flush valves on plumbing fixtures, (3) replacing bearings and seals on building system mechanical equipment, (4) replacing electrical outlets and switching devices, or (5) other periodic or routine maintenance work which should be performed by institution staff using operations and maintenance funds.
3. Expendable items such as filters, chemicals, lubricants, small parts, tools, light bulbs, and other supplies used in maintenance activities unless need is the direct result of eligible work.
4. Nonessential facility improvements.

Utility Repair/Renovation Projects:

Scope: Utilities repair/renovation projects may be:

1. Repair/replacement of utility systems components and equipment as needed to maintain services;
2. Repair of institution roads, walks, bridges, and other support facilities/systems;
3. Minor utility improvements needed to accommodate program changes.

Examples: Typical utility maintenance projects include repair/replacement of steam and condensate lines, chilled water lines, primary electric service, universal cabling systems, roads and walks, and energy management systems. Maintenance of energy management systems may be split between maintenance and energy conservation projects.

Safety and Environmental Protection Projects:

Scope: Health, safety, and environmental protection projects may be implemented to upgrade systems or provide corrective work necessary to bring facilities into compliance with current health and safety codes and environmental regulations.

Examples: Typical projects include fire alarm and smoke detection systems, asbestos abatement, lead and PCB removal, toxic fume ventilation, fire safety code compliance, steam safety devices, hazardous spill cleanups, underground tank removal, etc.

Comments: The intent of health, safety, and environmental funding is for improvements needed to protect the health and welfare of people or the protection of the environment.

Energy Conservation Projects:

Scope: Energy conservation projects may be implemented under the Oregon Department of Energy Small Scale Energy Loan Program for projects that will produce a reduction in energy consumption and a corresponding savings in operating cost sufficient to offset the initial cost plus added maintenance costs over a discounted payback period of approximately nine (9) years or less. The ability to aggregate higher and lower payback projects is an option the Oregon Department of Energy is willing to explore.

ODOE staff engineers will work with designers and engineers early in a project's design phase. They will look at all aspects of the project to identify opportunities for energy efficiency, and often recommend measures or technologies that may have been overlooked. A comprehensive review of a project's technical feasibility is completed to ensure the project is practical and environmentally sound.

Once a loan is approved, the loan can be used to pay most direct energy project costs and related project costs, such as engineering and design; permits, loan fees, and project management. Projects for new construction as well as projects that replace or remodel facilities qualify for loans. Loans can range from \$25,000 to millions. Amounts are based on project costs, security value, and financial factors.

Small Scale Loans usually take two to three weeks to approve. Major loans may take 60 days or more.

Examples: Typical projects include thermal insulation, energy management systems, heat recovery, steam trap repair, destratification fans, relighting, etc.

Comments: Energy projects must be supported by a payback period calculation as calculated by the Oregon Department of Energy. Project payback will be made by the institution from the resulting energy cost savings until the energy loan debt is retired.

Preventative Maintenance (PM) Projects:

Scope: Preventive maintenance projects include the maintenance of key elements of building and utility systems and components to maximize useful life and increase dependability, including:

- (1) Inspection/maintenance of building envelop;
- (2) Scheduled inspections/testing of utility generation and distribution systems and building HVAC equipment;
- (3) Road and parking maintenance;
- (4) Implementing and maintaining a computerized maintenance management system (CMMS);
- (5) Maintenance related training and other materials.

Examples: Under the **REPAIR** Program, Facilities Services will implement a system to address several facility and utility systems and components, including masonry inspection; roof inspection and maintenance; asphalt crack patching and sealing; inspection/testing of boiler and chiller tubes and primary electric equipment; cleaning and testing of smoke detectors; purchase of CMMS software and upgrades, training of maintenance personnel, and obtaining video or other documentation for the proper operation and maintenance of mechanical and electrical systems and equipment.

Comments: Computerized maintenance management systems (CMMS) will be implemented at each institution. Training opportunities for institutional maintenance staff will be specific to the CMMS system and the equipment they are maintaining. Facilities Services may also initiate broad base training programs and make them available to various institution personnel. While registration and instruction costs will be funded, funding will not be provided for travel, lodging, and other miscellaneous expenses. Recurring training required to maintain a license or worker certification, such as required for asbestos workers, will not be funded.

REPAIR Project Authorization Request Procedures:

Project Requests: Project requests must be submitted by the institution to Facilities Services for review by the **REPAIR** Project Advisory Committee. The projects may also be initiated by Facilities Services on behalf of the institution.

A **REPAIR** Program Coordinator should be designated at each institution where project requests are originated to facilitate submittal of requests and to coordinate the work within the institution program and impacts on other planned projects. All required internal institution approvals shall be obtained prior to the **REPAIR** Program Coordinator submitting the request to Facilities Services for subsequent **REPAIR** Project Advisory Committee review.

Project authorization requests may be submitted as needs occur. In an emergency, requests may be made via telephone to the Facilities Services Administrator or Senior Project Manager, followed up with a request form by mail or facsimile (503-378-6536).

The Facilities Services **REPAIR** Project Authorization Request Form shall be used for all project requests. A detailed cost estimate or explanation of how the budget was

developed must accompany the project request. Requests will not be approved without adequate cost information. Assistance in developing costs can be requested through the Facilities Services Project Managers. Directions for completing the request form and a sample are attached (Attachment No. 3).

Contracts for architectural or engineering consultant services needed to evaluate the scope of work, develop the cost estimate or budget, prepare bidding documents, or perform other services will only be awarded by DOC Contracts Services through Facilities Services. Institutions may indicate their preference for a particular firm to receive a bid solicitation on the project request form. For authorization to obtain architectural or engineering services to define a solution and to develop a cost estimate, send a request to Facilities Services Administrator or Senior Project Manager. Institutions are not authorized to contract with outside consultants without Facilities Service's and DOC Contracting's prior approval.

Changes in the scope of consultant services may be needed as the work progresses. Such changes are to be approved by the Facilities Services Project Manager who is responsible for directing the consultant to provide a proposal for the change. Written authorization will be given to the consultant authorizing any change in the scope or direction of services provided. **Under no circumstances will work be allowed to proceed without a fully executed contract document.**

If consultant or A/E services are needed to define the scope of work for a maintenance/improvement problem, and development of a cost estimate, the institution may request Facilities Services to contract for this service.

Review/Approval: Upon receipt by Facilities Services, the Facilities Services Project Manager will act on requests based on review comments received from the **REPAIR** Project Advisory Committee. The institution contact person will be informed if additional information is needed.

The Facilities Services Administrator/designee will review recommendations for approval. When necessary, Facilities Services technical staff will make a site inspection for clarifications prior to approval of projects recommended by the **REPAIR** Project Advisory Committee.

Requests for institution delegated design and project management, or assignment to Facilities Services or a Consultant A/E, will be reviewed and acted on by the **REPAIR** Project Advisory Committee based on the requesting institution's staff capability, work load, backlog of approved requests, prior performance, etc.

Approved requests will have a tracking number assigned by the CMMS prior to review by the **REPAIR** Project Advisory Committee. Copies of the **REPAIR** Project Request Form will be returned to the institution without delay. Denied or deferred requests will be returned to the institution with a statement explaining the reason for denial. All approved projects must be completed within 12 months of approval unless otherwise stated on the **REPAIR** Project Request Form, or as extended by Facilities Services.

Delegated Design and Supervision:

The **REPAIR** Project Advisory Committee will consider delegation of design and on-site construction supervision for **REPAIR** Program projects on a case-by-case basis. Delegation authorization is accomplished via the **REPAIR** Project Authorization Request Form. Delegated design is subject to Facilities Services design standards, Facilities

Services Policy and Procedures Manual, current industry codes, and permitting by the local jurisdiction. For all projects, bidding documents must be reviewed and approved by Facilities Services before being submitted to DOC Purchasing for procurement.

Delegated Bidding and Contracting:

Bidding and Contracting Authority: An assigned Facilities Services Project Manager will review and approve all bidding and contracting documents to ensure the institution is bidding and contracting in accordance with applicable administrative rules, the project is consistent with Project Advisory Committee approval, and Facilities Services standards. Facilities Services then sends the documents to DOC Purchasing for advertising, solicitation, receipt, award, contract issuance, and Notice to Proceed letter.

At times, Facilities Services may batch several requests from single institutions together under a project number to simplify administrative and contracting procedures and to gain economies for similar type projects under one contract.

A summary of laws, administrative rules, and dollar thresholds impacting project contracting is available for review at Facilities Services.

Construction Contracting and Purchase Orders:

When bidding and contracting using construction contracts, procedures must comply with the Facilities Services Policy and Procedures Manual, which reflects the requirements of Oregon Administrative Rule Chapter 125 and the Oregon Attorney General's Model Rules.

REPAIR projects will usually be implemented by construction agreements. "Construction" includes all labor and materials used in framing or assembling of component parts in the erection, installation, enlargement, alteration, repair, moving, razing, demolition, or removal of any appliance, device, equipment, building, structure, or facility.

REPAIR projects may also be implemented by purchase orders, generally limited to the procurement of materials or for limited trade's work. Equipment repair and overhaul is maintenance that involves repair or replacement in kind, where the cost does not exceed \$75,000. The scope of work must not alter the performance of any building system, structure, exterior walls, roof, or exits, or the fire protection or sanitation of the building.

Minority, Women Owned and Emerging Small Business:

In the interest of promoting Minority, Women Owned and Emerging Small Business, when the contract is less than \$75,000, and the bidders are being drawn exclusively from a list of certified Emerging Small Businesses maintained by the Advocate for Minority, Women and Emerging Small Business, the institution may let the contract without formal competitive bidding after a good faith effort to obtain a minimum of three competitive quotes from Emerging Small Businesses. Bid solicitations and contracts with Minority, Women Owned and Emerging Small Business firms shall be indicated on the Closeout Report for Delegated Projects. This does not relieve the institution from having all solicitation documents reviewed by Facilities Services and procured by DOC Purchasing.

Audit Review:

Records and files for fully delegated projects shall be kept by the institution and provided as directed to Facilities Services for review. Facilities Services and/or Internal Audits will

review institution performance on a cross-section of selected projects and delegated activities. Reviews may occur at anytime during or shortly after the 12-month project period, and will focus on the following:

1. Verification of the need for the project and the suitability of the allocated funding.
2. Adequacy of bid documents.
3. Procurement/contracting methods.
4. Minority business involvement.
5. Contract administration/supervision of construction.
6. Project Accounting procedures.
7. Compliance with **REPAIR** Project Advisory Committee and Facilities Services control standards.
8. Implementation and completion within the project schedule and budget.

A preliminary report of findings will be provided to the institution, including any recommendations for corrective action. Facilities Services may recommend cancellation of delegation where serious problems are found. The institution will be given the opportunity to respond to the recommendations, after which a final report and a deadline for corrections will be issued by Facilities Services.

Project Closeout:

Delegated projects are to be completed and closed out within 12 months of approval, unless Facilities Services approves an extended contract period. Upon completion, the institution must provide a Closeout Report showing the authorized funding, remaining balances, and minority business involvement for each project. This report is needed to close the project with Facilities and Fiscal Services. Any remaining funds will be reverted to their source for use on other projects.

A Closeout Report for fully delegated projects must be completed. The assigned Project Manager will assist the institution in completing the report. Copies should be maintained by the institution and the Facilities Services Project Manager.

Facilities Services Assistance/Training:

Facilities Services staff are available to assist with the identification and resolution of problems and the implementation of corrective work. The phone number and FAX number for Facilities Services are included in Attachment No. 7. When problems are encountered that require advice and guidance, they may be contacted directly.

From time to time training opportunities in managing delegated projects, developing special maintenance skills, etc. will be offered by Facilities Services. Notices will be given to alert the institutions to such opportunities. Training of institution maintenance staff may be accomplished via a Special Needs Project funding when approved by Facilities Services.

Approximate Project Planning Timelines (Under \$500,000.)

- | | |
|---------------------------|----------------------------|
| 1. Draft RFP | 1 Week |
| 2. Contracts Finalize RFP | 2 Weeks |
| 3. AG Review | 2 Weeks (If Over \$75,000) |
| 4. Advertise | 1 Week |
| 5. Proposals Due | 1 Week After Site Meeting |
| 6. Evaluate Proposals | 1 Week |

7. Negotiate Consultant Fee	1 Week
8. Issue Contract	2 Weeks (Verify Insurance)
9. Design (Develop Construction Documents)	12 Weeks
10. AG Review Bid Documents	2 Weeks
11. Obtain Permits	4 Weeks
12. Advertise	3 Weeks
13. Award	1 Week
14. Notice To Proceed	2 Weeks (Verify Insurance, Bonds, etc)

This timeline supports the start of contractor work on a project approximately 35 weeks after funding is identified and the Cost Center for the project is established.

SECTION 3

COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM

In today's cost-cutting, high demands environment, a computerized maintenance management system (CMMS) that optimizes the use of our equipment and resources is necessary. Maintenance management is becoming more data intensive each day, and a CMMS that offers data management power is crucial to our efficiency and future success in our physical plant operations. CMMS is not a cure-all for problems and concerns facing our institutional maintenance management mission, but it offers the physical plants and the Department an opportunity at harnessing technology to solve problems, streamline operations and contribute to the overall efficiency of our facilities.

CMMS is a system of integrated software applications designed to assist in the planning, management, and administration required for effective facility maintenance management. A CMMS can perform the following:

1. Record maintenance history and track costs by each piece of equipment and work order;
2. Establishing baselines for effective maintenance management;
3. Control work through prioritization, planning, and scheduling; and
4. Manage materials, parts, and labor resources required to perform maintenance functions.

A valuable asset of a CMMS is the ability to provide reliable baseline data that can be utilized to support budget requests. With a complete CMMS database available to the Department and institutional physical plants, the Department will be more successful in substantiating their budget requests when submitted to budget decision makers.

CMMS will enable the Department to improve planning, management, and administration of facility maintenance, upgrades, modifications, and construction processes in accordance with proven industry standards and best business practices. A computerized system will provide the flexibility and functionality to support a department-wide maintenance plan and meet the needs of the future.

The implementation of a CMMS package is labor intensive. The largest job is gathering the necessary information for the database. The time required to complete the information gathering and data input is estimated at six months to one year. After the development of the equipment database, it is anticipated that it will take approximately two additional years to begin generating realistic maintenance cost reports from the CMMS.

Facilities Services has purchased a CMMS from Benchmate, Incorporated for implementation and use by the Department.

SECTION 4

ELECTRICAL MASTER PERMIT PROGRAM

The Oregon Revised Statutes (ORS), Chapter 479 “Electrical Safety Law” and the Oregon Administrative Rules (OAR), Chapter 918 “Electrical Standards” require permits for electrical installations. This requirement can be met by obtaining a permit for each installation or by meeting the requirements of the Master Permit Program under ORS 479.560 and OAR 918-309-0100. Annual inspections are necessary to comply with the ORS 470.630 for all electrical maintenance and installation work done in industrial, commercial and government properties by owners, contractors or employees, unless separate electrical permits (labels) are purchased. Annual inspections eliminate the costly and time consuming process of purchasing separate permits for electrical work done within the scope of the Master Permit Program. Inspections are conducted to identify electrical hazards and to ensure electrical maintenance and installations are made safely and meet the minimum requirements of the Oregon Electrical Specialty Code, state and local jurisdiction laws. The Master Permit Program also satisfies the requirements of OAR 918-282-0120 by providing a means for the managers of the facility to report the names and license numbers of all electrical employees. In addition, it is to promote electrical safety, eliminate electrical hazards and potential accidents or fires.

PROGRAM REQUIREMENTS

The Master Permit Program requires periodic, or at least annual electrical safety inspections. This eliminates the need to purchase individual electrical permits for work covered by the Master Permit.

The Master Permit Program covers work done on participating sites by employees and inmates holding an appropriate electrical license issued by the State of Oregon, Building Codes Division.

Employees and inmates with proper electrical licensing can perform electrical work only within the scope of the license held as long as all of the licensing requirements are met within the ORS/OAR. (Fees paid, continuing education up-to-date, etc.). Additionally, all electrical work performed by licensed inmates must be in compliance with the interpretation of the process issued by the Chief Electrical Inspector and the Elevator and Electrical Board. Inmates may be assigned to perform electrical work within the confines of the DOC procedure on the “Utilization of Inmates with Electrical Licenses”.

A regional DOC Electrical Supervisor (E3) has been designated for each institution to oversee all of their electrical installations, repair, and maintenance and maintain a record of all licensed employees, inmates and contractor electricians performing electrical work at the site including name, license number and type of electrical license. An updated roster shall be sent to ODOC Facilities Services quarterly.

All requests for electrical permits and inspections must go through the designated regional DOC Electrical Supervisor (E3). This position will act as the liaison between the institutions and jurisdictions having authority. All electrical permits must be posted in the Physical Plant office. Upon final inspection and completion, the original copy of the permit will be sent to Facilities Services to be filed in the Project file for record keeping.

The institution must also maintain a list of what electrical work is done, showing date, location, electrician name, Service/Work Order tracking number, and a brief description of the work. This would include work performed by employees, inmates and contractors. These lists will be used for the periodic inspections and are the only paperwork required in place of a separate electrical permit. These lists will be sent to designated regional DOC Electrical Supervisor (E3) monthly.

ODOC Facilities Services will fund the cost of establishing the Master Permit Program at eligible institutions. The institutions will pay the hourly annual inspection fees to the jurisdiction having authority.

Oregon Department of Corrections will require a DOC Building Permit Request Form Attachment 4, to obtain a permit, and if required by the designated regional DOC Electrical Supervisor (E3) or Permitting Authority, a plan review and separate permit for the following: (The list provides examples, but does not include all cases.)

- New electrical installation of any electrical panel, distribution, or disconnect of 100 amperes or more with any voltages.
- New electrical installation in any hazardous area.
- New electrical installation of any lighting. (Changing the scope of illumination within an area).
- New electrical installation of any electrical generating equipment, i.e. generators, UPS, fuel cells, co-generation.
- New electrical installation of any kitchen equipment that exceeds 30 amperes with any voltage.
- New electrical installation of any air exhaust, air supply, heating, cooling or refrigeration equipment.
- New installation of any perimeter security, CCTV, CATV, or personnel detection devices.

WORK INCLUDED:

OAR 918-309-0100 (4)(a), A master permit is allowed for repair, alterations or replacement of existing electrical products. An electrical product replacement includes installing a product in place of another that shall not exceed the capacity or design of the existing electrical system. Examples of work covered by the Master Permit Program are:

- Installations, extensions or relocation of branch circuit outlets.
- Installation, extension or relocation of feeders or panels.
- Replacement of electrical components, motors, ballasts, starters, etc.
- Installation or relocation of electrical operated machinery or process equipment and controls.
- Installation or relocation of light fixtures, switches and controls.
- Installation, extension or relocation of limited energy systems and control panels for all types data, network, and signal, control and CCTV systems.
- A separate permit and inspection is not required for new installations within the threshold of OAR 918-309-0100 (4) (b), (A) through (E).

WORK EXCLUDED:

Under OAR 918-309-0100, subsection (4)(b), the following **DO NOT** constitute repair, alteration or replacement of existing electrical products and **REQUIRE** a separate permit and inspection:

- Electrical installations in a new building shell, structural retrofits, installation or alteration of load bearing walls, foundations or exit passageways.
- Any electrical installation in connection with changing the type of use or occupancy classification of the building or structure.
- Any addition which increases the square footage of the building or structure.
- Remodeling within an occupied, existing shell which results in the vacating of more than 25% of occupants within a floor or building resulting from remodel, termination of a tenant's usual activities for more than ten working days or construction that involves more than 25% of the contiguous area of any floor.
- Electrical installations as part of construction within a covered facility that also involves a plumbing, structural or mechanical permit other than a Master Permit under ORS 455.190.

SECTION 5

FUNDING GUIDELINES FOR SPECIFIC TYPES OF WORK

General:

This Section of the guideline identifies specific types of work and projects that will be funded under the **REPAIR** program. Included is a definition of the scope of work, examples of acceptable types of projects, identification of preventive maintenance activities, which will be funded, and funding priorities. The REPAIR Project Review Committee will revise these guidelines when needed to reflect current facility management problems and priorities.

Specific Funding Guidelines:

The following guidelines are attached.

1. Masonry and Structural Maintenance.
2. Roofing Maintenance.
3. Power Plants and Central Distribution Systems.
4. Water Chillers and Refrigeration Equipment.
5. Plumbing/Fire Protection Systems, and Site Services.
6. Temperature Control and Energy Management Systems.
7. HVAC Systems/Equipment.
8. Electrical Distribution and Lighting Systems.
9. Telecommunications, Fire Alarm, and Security Systems.
10. Fire and Smoke Alarm Systems.
11. Underground Tank Compliance and Spill Cleanup.
12. Asbestos Abatement.
13. Elevator Maintenance.
14. Small Energy Conservation and Energy Incentive.
15. Exterior Doors, Windows, Hardware, and Cladding.
16. Interior Finishes/Floor Coverings.
17. Facility Accessibility.
18. Road/Walk Maintenance.
19. Architectural/Built-in Equipment.
20. Indoor Air quality and Industrial Ventilation.
21. PCB Disposal.
22. Mercury-Containing Lamps Funding Guidelines
23. Lead-Based Paint Funding Guidelines

MASONRY AND STRUCTURAL MAINTENANCE FUNDING GUIDELINES

Scope of Qualified Work:

Includes maintenance/repairs and needed investigations by an A/E to maintain masonry, building structure, and related elements in a safe and watertight condition in accordance with the priorities listed below. Maintenance of the exterior envelope/building structure is a high priority use of **REPAIR** Project funds.

Qualified Preventative Maintenance:

1. Urgent maintenance/repairs on masonry may be funded from a special needs project.
2. Highest priority for preventive maintenance will be given to projects where a small expenditure now will prevent a high future repair cost, or where structural integrity must be maintained.

Determination of Priorities (ranked in the following order):

1. Structural or Safety Concern: Potential structural collapse and/or danger of masonry or appurtenances falling from the building. Repairs will normally be funded, by emergency measures if necessary.
2. Water Penetration Through The Wall Envelope: Damage to contents, equipment, interior finishes, and/or the wall envelope from water penetration. Repairs will usually be funded whenever maintenance dollars are available for use.
3. Water Penetration Into the Wall Envelope: Potential rapid deterioration of the wall envelope from water penetration without leakage into the building. Repairs will typically be funded after a priority comparison with other specialty items of work, but may be temporarily deferred if sufficient funds are not currently available.
4. Excessive Energy Consumption or Loss of Comfort: Excessive heat loss/gain, air leakage, sound transmission and/or cold walls. Repairs may be funded from other than "maintenance funds" where appropriate.
5. General Deterioration, Adverse Appearance and Nuisances: Age deterioration, graffiti or pollution remnants and insect invasion. Repairs may be funded from other than "maintenance funds" where appropriate.

ROOFING MAINTENANCE FUNDING GUIDELINES

Scope of Qualified Work:

1. Roof repair: The repair of selected, isolated portions of the roof system necessary to maintain a watertight condition. Repairs may involve the removal of wet materials along with correction of the original cause of the problem.
2. Roof Replacement: The removal of all roof system components down to the structural roof deck, followed by installation of a completely new roofing system.

Qualified Preventative Maintenance:

1. A roofing specialist will not give automatic approval to preventive maintenance projects involving spray-applied polyurethane foam or PVC single-ply materials that may require inspection of conditions affecting the work.

Determination of Priorities:

1. Repairs shall be given highest priority.
2. The REPAIR Project Review Committee will prioritize replacement projects.
3. If it can be documented that repairs will not put the roof back in serviceable condition, total roof replacement projects will be funded. Project requests involving replacement must have a roofing specialist's report attached.

Funding:

1. Projects for roofing repair or maintenance, up to \$500,000, are implemented through the REPAIR Program.

POWER PLANTS AND CENTRAL DISTRIBUTION SYSTEMS FUNDING GUIDELINES

Scope of Qualified Work:

Repairs other than minor routine inspections, calibrations, or lubrication of power plant boiler systems and ancillary systems equipment, which provide for reliability and efficiency of the central plants and distribution systems, and/or which affect the plant compliance with State and Federal regulations of air emissions, solid wastes, or liquid effluents.

Typical Projects:

1. Boiler, economizer, or superheater tube repairs.
2. Combustion controls/O₂ analyzers repairs.
3. Chimney or breaching externals or internal repairs.
4. Pump rebuilds or replacements where required.
5. Breakdown/overhauls for turbines, chillers, or air compressors.
6. Deaerator tank or trays repairs.
7. Steam safety valve rebuilds/replacements.
8. Large valves--steam or chilled water repairs/replacements.
9. Cooling towers fans or tower sump repairs.
10. Breakdowns of boiler forced or induced draft fans repairs.
11. Water treatment systems and piping repairs.
12. Dust collector or pollution control equipment repairs.
13. Boiler blowdown piping or valves repairs.
14. Steam or condensate line repairs or replacements.
15. Isolation valve repairs.
16. Steam traps or expansion joints replacements.

Qualified Preventive Maintenance:

1. Heat exchanger tube eddy current leak testing/repair.
2. Steam turbine, electric generators, and chillers inspections, as called for by equipment manufacturer recommendations or other source.
3. Required stack testing and urgent plant equipment repairs may be funded from Capital Repair funding.

Determination of Priorities (ranked in following order):

1. Those projects which directly impact safety and/or capability of plant to produce steam, electricity, compressed air, hot water, domestic water, or chilled water.
2. Those projects which impact the plant's capability to comply with DEQ/EPA, air emissions, water effluent, or solid waste disposal regulations.
3. Those central plant projects which relate to saving energy by reason of making the repairs requested.

WATER CHILLERS AND REFRIGERATION EQUIPMENT FUNDING GUIDELINES

Scope of Qualified Work:

Repairs other than routine inspections, calibration, cleaning or lubrication of chillers, refrigeration and ancillary equipment. Work that is required for code compliance, energy conservation guidelines and EPA regulations.

Typical Projects

1. Major equipment replacements (compressors) due to failures.
2. Compressor motor drivers
3. Heat exchanger repair/replacement
4. Control system/modifications
5. Refrigerant replacement
6. Cooling towers
7. Refrigerant leak detection systems

Qualified Preventive Maintenance:

1. Heat exchanger eddy current tube testing/repair
2. Chillers and refrigeration equipment major inspections as specified by equipment manufacturer

Determination of Priorities (ranked in following order):

1. Emergency repair due to catastrophic failure
2. Projects which impact ability to provide chilled water/refrigeration service
3. Code violation or other regulatory requirements
4. Health and safety issues
5. Energy related

PLUMBING/FIRE PROTECTION SYSTEMS AND SITE SERVICES FUNDING GUIDELINES

Scope of Qualified Work:

Includes repairs and replacements needed to maintain plumbing/fire protection systems and site utilities and services in serviceable and code complying condition.

Work Included:

1. Major Equipment Replacements Due To Failure:
 - a) Steam to hot water converters
 - b) Industrial water softeners
 - c) Pressure booster systems
2. Major Piping Replacements Due To Failure:
 - a) Gas/sewer/site water
3. Site Services Upgrade Due To Failure:
 - a) Well systems
 - b) Septic systems
4. Other:
 - a) Filtration, chlorination or other equipment needed to improve water quality or keep discharge effluent within limits of disposal operating permit.

Work Excluded:

1. Minor Equipment Replacements:
 - a) Conventional water heaters
 - b) Residential/commercial water softeners
 - c) Plumbing fixtures
 - d) Pump replacements (booster/recirculating)
2. Other:
 - a) Minor piping repair/replacement in buildings
 - b) Localized water, sewer, gas in building
 - c) Water treatment chemicals

Qualified Preventive Maintenance:

1. TV inspection of sewer lines when approved by Facilities Services on case by case basis, and urgent maintenance/repairs to site utilities and services may be funded from a Capital Improvement fund.

Determination of Priorities (ranked in following order):

1. Emergency repair due to catastrophic failure.
2. Repairs to correct immediately hazardous conditions.
3. Repairs required by code citation.
4. General system failures.
5. Revisions required by facility programs changes or use changes.

TEMPERATURE CONTROL AND ENERGY MANAGEMENT SYSTEMS FUNDING GUIDELINES

Scope of Qualified Work:

Replacement of antiquated or obsolete equipment for which replacement parts are no longer available. Upgrading systems for energy conservation considerations where six-year discounted payback can be achieved.

Typical Projects:

1. Major equipment replacement due to failure.
2. Replacement of antiquated or obsolete equipment for which replacement parts are no longer available.
3. Cleaning and repairing or replacing pneumatic control systems with oil or water entrainment failures.
4. Additions or modifications to control systems and/or Energy Management Systems with proprietary equipment and software.
5. Projects providing night setback, occupied/unoccupied control or other energy conservation-related, control-related strategy.
6. Major system calibration and upgrading for systems with marginal performance requiring more than routine seasonal calibration and maintenance.
7. Fiber-optic replacement of copper data-net for Energy Management Systems in areas susceptible to E.M.I. lightning damage losses, or upgrading facilities which have fiber optic networks in place.

Qualified Preventive Maintenance:

1. Service contracts on Energy Management Systems and Digital Control Systems with proprietary software, which require special equipment and training to service and maintain.
2. Training of institution staff may be funded on a special needs basis where judged appropriate by Facilities Services.

Determination of Priorities (ranked in following order):

1. Emergency repair due to catastrophic failures.
2. Repairs to correct hazardous conditions.
3. Repairs or calibration required by code citation.

HVAC SYSTEMS/EQUIPMENT FUNDING GUIDELINES

Scope of Qualified Work:

Repairs other than routine inspections, calibration or lubrication of HVAC equipment. Work that is required for code compliance and work meeting energy conservation guidelines. Testing, balancing and upgrading of systems.

Typical Projects:

1. Major equipment replacement due to failure.
2. Major piping replacement due to failure.
3. Replacement of variable speed/flow devices that have failed and parts are no longer available.
4. Upgrade or replacement of systems to meet code:
 - a) Duct changes
 - b) Exhaust systems
5. Upgrade or replacement systems for energy conservation considerations where payback can be achieved:
6. Providing energy efficient control dampers
 - a) Duct changes
 - b) Testing and balancing

Qualified Preventive Maintenance:

1. Preventive maintenance to be funded by institution.
2. Urgent maintenance to HVAC equipment may be funded from a Capital Improvement account.

Determination of Priorities (ranked in following order):

1. Emergency repair due to catastrophic failure.
2. Repairs to correct hazardous conditions.
3. Repairs required by code citation.

ELECTRICAL DISTRIBUTION AND LIGHTING SYSTEMS FUNDING GUIDELINES

Scope of Qualified Work:

Includes testing and maintenance of primary (high voltage) electrical distribution systems, repair or replacement of secondary distribution and emergency generation equipment, and replacement of incandescent, obsolete or inefficient lighting systems where appropriate. Funding will not be provided for predictable routine items typically handled by maintenance staff.

Typical Projects:

1. Replacement of obsolete electrical distribution panels for which replacement parts are no longer available.
2. Rewiring of secondary distribution systems where deteriorated wiring presents a safety hazard.
3. Modifying electrical systems to comply with state electrical codes where code violations are found.
4. Emergency replacement of failed components needed to restore service in the event of power outages.
5. Replacement of energy inefficient lighting fixtures or lamps with energy efficient units providing payback criteria is met.
6. Replacement of deteriorated and unsafe lighting standards along walkways, roadways, or parking lots.

Qualified Preventive Maintenance:

1. Testing of primary voltage systems and equipment when determined by Facilities Services to be necessary.
2. Periodic maintenance of primary voltage switchgear.
3. Urgent electrical system maintenance/repairs may be funded from Special Needs projects.

Determination of Priorities (ranked in following order):

1. Safety aspects.
2. Condition of equipment (as determined by testing and failure rates).
3. Amount of disruption to facility operation when failures occur.
4. Equipment's age and expected service life.

TELECOMMUNICATIONS AND SECURITY SYSTEMS FUNDING GUIDELINES

Scope of Qualified Work:

Security Systems: Corrective work where systems no longer meet current standards for intrusion detection or access control and where cost of repairs are high and parts are not readily available. High incidence of nuisance alarms due to the technology used at the time of original installation shall be considered.

Telecommunication Systems: Corrective work where code violations exist, where susceptibility to EMI lightning damage is high as demonstrated by loss history, or where cost of repairs is high and parts are not readily available. Telecommunications repair will be facilitated by the Information Support Unit (ISU), using Telephony Service Order (TSO) requests.

Typical Projects:

1. Security Systems: Replacement of ultrasonic systems by passive infrared systems; replacement of unsupervised line security communicators by high security communicators.
2. Door Controls: Replacement of push button panels and non-Programmable Logic Controller (PLC) controls with touch screens and PLC driven operation.
3. Perimeter Security Systems.
4. Telecommunication Systems: Replacement of non-code complying cabling systems (fire rating, smoke rating), correction of shared conduit systems (high voltage with communications lines) when necessary to comply with code.

Qualified Preventive Maintenance:

1. Preventive maintenance and service contracts to be funded by institution.
2. Urgent alarm system repairs may be funded from a Capital Improvement fund.

Determination of Priorities (ranked in following order):

1. Life Safety Systems: Lightning protection and other protective systems where personnel safety is of concern.
2. Prison security systems and security protection of vaults where fire arms, munitions are stored.
3. Property Protection: Heat detection in storage areas, lightning protection on telecommunications lines, access control.
4. Property protection by lightning deterrence. Perimeter security systems.

FIRE AND SMOKE ALARM SYSTEMS FUNDING GUIDELINES

Scope of Qualified Work:

Fire Alarm Systems: Corrective work where systems no longer comply with State, National Electric Code or Federal code requirements, are no longer dependable, or where maintenance costs are high and parts are difficult to locate.

Typical Projects:

1. Fire Alarm Systems: Replacement of box coded and A/C signal systems.
Replacement of mechanical relay coded panel systems.

Qualified Preventive Maintenance:

1. Preventive maintenance and service contracts to be funded by institution.

Determination of Priorities (ranked in following order):

1. Replacement or repair of non-operating systems.
2. Replacement of obsolete systems such as box coded or 120 VAC operating systems.
3. Adding to or modifying functioning systems to comply with change in codes.

UNDERGROUND STORAGE TANK COMPLIANCE AND SPILL CLEANUP FUNDING GUIDELINES

Scope of Qualified Work:

1. Underground Tanks: Remedial work or tank replacements needed to comply with the federal EPA requirements by December 22, 1998, for underground fuel storage.
2. Spill Cleanup: Environmental engineering services and cleanup measures associated with fuel spills from leaking underground tanks and other sources of soil and groundwater contamination as required by DEQ or other code authorities.
3. Storm Water Spill Prevention/Secondary Containment: Construction of containment facilities and other needed improvements for facilities impacted.

Typical Projects:

1. Integrity testing of underground fuel tanks that will continue in service, and removal or closure of tanks with a confirmed leak and tanks no longer in service.
2. Testing, excavation, and disposal of contaminated soils from a leaking underground or other source of contamination such as a prior on-site disposal pit. Disposal methods may also include application of biotechnology, vacuum extraction, or other alternative decontamination techniques.
3. Installation of monitoring wells, pumping equipment, and extraction of contaminants from groundwater.
4. Replacement of underground storage tank, piping, and leak detection equipment when replacement is justified by operational and economic needs. The cost of fuel pumping and dispensing equipment will not be funded.
5. Construction of material storage facilities to prevent exposure of storm water to hazardous substances.
6. Construction of curbs, culverts, gutters, sewers, retention ponds, secondary containment, etc., needed to control and minimize contamination of storm water from facility operations.
7. Tank upgrade/replacements to meet EPA requirements

Qualified Preventive Maintenance:

1. Preventive maintenance to be funded by institution.
2. Emergency spill responses may be funded from a Special Needs Project.

Determination of Priorities:

1. Priority will be given to environmental contamination problems, which present an imminent threat to groundwater resources or human health.
2. Priorities for underground tank compliance work will be based on the age groups and compliance deadlines given in the federal EPA and Oregon DEQ guidelines. Regardless of age, tanks with known leaks will receive top priority.
3. Environmental contamination, non-threatening groundwater or human health.
4. Out of service tanks requiring DEQ or local regulation actions.

ASBESTOS ABATEMENT FUNDING GUIDELINES

Scope of Qualified Work:

Asbestos abatement where there is a demonstrated risk to employees and the public. Typically, projects must be evaluated on a case by case basis using the attached guide for arriving at appropriate response. Many asbestos projects are necessitated by other work involving mechanical changes, remodeling and other building changes and should be funded by the corresponding assigned project funds.

Types of asbestos containing materials (ACM):

1. Surface ACM:
 - a) Spray-on material
 - b) Troweled on material
2. Thermal System ACM:
 - a) Covering on pipes, fittings, boilers, tanks and other mechanical systems
3. Cohesive ACM:
 - a) Floor tile, hardboard, siding, roofing, etc.
4. Miscellaneous ACM:
 - a) Fire screens, roofing materials, etc.

Work Included:

1. Surface ACM that is damaged or has potential for damage.
2. Thermal ACM that is damaged or where maintenance persons have regular contact.
3. Cohesive ACM that is damaged and poses a health threat.
4. Miscellaneous ACM that is damaged or where human contact is unavoidable.

Work Excluded:

1. Where ACM is undamaged, not accessible and where it creates no health hazard.
2. Development of management plan and follow up inspections except where required by law.

Qualified Preventive Maintenance:

1. Preventive maintenance to be funded by institution.

Determination of Priorities (ranked in following order):

1. Emergency abatement due to catastrophic failure.
2. Abatement required to correct hazardous health conditions.
3. Abatement required to correct violations and code citations.

ELEVATOR MAINTENANCE FUNDING GUIDELINES

Scope of Qualified Work:

Repair and replacement work over and above that provided by a service contract needed to maintain elevators in a serviceable and code complying condition.

Typical Projects:

1. Modify control panels to comply with handicap accessibility codes.
2. Installation of "Fireman's Service".
3. Replacement of ropes, brakes, rail guides, and/or rails.
4. Replacement or recondition door operating systems including hangers, closers, locks, gibs, and door safety edges and light rays. (Generally will not be considered unless system is 20 years old).
5. Replacement of elevator control system. (Generally will not be considered unless 25 years old).
6. Replacement or reconditioning of drive machine or piston.

Qualified Preventive Maintenance:

1. Preventive maintenance to be funded by the institution either under a service contract or by trained staff. Each elevator should be assigned a level of preventive maintenance service based on use, type of elevator, etc. Service contracts for three levels of service are bid through State Purchasing (lube only, maintenance & repair, complete maintenance).

Determination of Project Priorities (ranked in following order):

1. Work required to keep the elevator in safe operating condition.
2. Work required to comply with the elevator code including handicap accessibility requirements.

SMALL ENERGY CONSERVATION FUNDING GUIDELINES

Scope of Qualified Work:

Work performed under the Oregon Small Scale Energy Loan Program must provide an Oregon Department of Energy discounted payback, including items listed on the following page.

Typical Small Energy Conservation Projects:

Energy conservation projects must take into account the impact of energy savings in relation to other building systems. For example, the addition of thermal insulation to a building envelope may not be appropriate for a facility with a high internal heat load. Typical small energy conservation projects include:

1. Increasing heat gain/loss through building envelope by adding insulation, storm windows, decreasing openings, providing thermal breaks, decreasing infiltration.
2. Reducing ventilation loads by using variable volume air distribution systems, energy management systems to control hours of operation and space temperatures, economizer cycle to control amount of intake air, etc.
3. Capturing and reusing energy by heat recovery from lights, high volume exhaust systems, refrigeration condensing systems, etc.
4. Reducing energy consumption by converting to more energy efficient lighting and mechanical fixtures/equipment, insulating heating and steam condensate piping and storage tanks, reducing peak operating loads on electrical and mechanical systems, etc.
5. Reducing energy cost by converting from electric to less costly gas operated ovens, hot water heaters, etc.

Qualified Preventive Maintenance:

1. Staff training, maintenance videos, or other appropriate preventive maintenance initiatives related to a small energy project may be included in the project budget when approved by Facilities Services. This cost must be included in the payback calculations and is limited by the allowable payback period.

Determination of Priorities:

1. Priority will be given to energy conservation projects with the shortest calculated payback period and judged by Facilities Services as including all applicable maintenance costs.

Energy Conservation Examples That Payback

Mechanical:

- Mixed air reset.
- Adding filtered return air capability to 100% exhaust system.
- Destratification fans.
- Bakery oven heat reclaim.
- Replace backdraft dampers on roof exhaust fan.
- Heat recovery from refrigeration.

- Timer switch for kitchen hood control.
- Insulate behind convectors.
- Insulate steam and condensate lines.
- Insulate outside air duct.
- Insulate steam/hot water valves, expansion joints, etc.
- Interlock dishwasher exhaust fan control.
- Edge seals for outside air dampers.
- Night temperature set back.
- Reduce steam pressure to the building.
- Seven-day time clock control on exhaust fans, AHUs, and domestic water pumps.
- Shut down boiler and underground steam lines during summer months.
- Heat recovery from wastewater in laundry.
- Still to reverse osmosis.
- Install unit heater controls.
- Install/replace steam meters.

Plumbing:

- Install flow restrictors.
- Hand flush valves on urinals.
- Shower timers.
- Time clock on refrigerated drinking fountains.
- Insulate electric water heaters.

Electric:

- Change incandescent lights to fluorescent, HPS, or metal halide.
- Dual setting light switches.
- Relamp with reduced wattage.
- Remove lamps and ballasts.
- Fixture reflectors.

Others:

- Cogeneration and hydroelectric.
- Solar and geothermal heating.
- Building management and control systems.
- Methane gas recovery.
- Lighting improvements.
- Irrigation system improvements.
- Central steam plants.
- HVAC distribution systems.
- Motors and motor controls.
- Weatherization measures.
- Transportation projects.

EXTERIOR DOORS, WINDOWS, HARDWARE, AND CLADDING FUNDING GUIDELINES

Scope of Qualified Work:

Maintenance/repairs needed to correct problems related to protecting the envelope and extending the useful life of the building. Projects should be limited to work which is beyond the capability of ordinary maintenance procedures, requiring special tools or construction trades to correct. The work is necessary to protect the building and extend its useful life.

Work Included:

1. Repair or replace any exterior wall component which is a structural or safety concern, or allows water penetration, including needed survey or study by A/E.
2. Repair or replace rotted or rusted windows, rain gutters/downspouts, or other cladding components.
3. Recaulk or replace sealants.
4. Replace deteriorated exterior doors and worn hardware.
5. Repair/replace building hardware, including new cylinders as determined by Facilities Services on a case by case basis.
6. Paint exterior metals or other exterior surfaces where difficult to access or as determined necessary by Facilities Services.

Work Excluded:

1. Replacing windows that can be repaired, painting windows, or replacing hardware when parts are still available.
2. Replacing any exterior system, assembly or component that ordinary maintenance can correct.
3. Changing existing openings to meet a new program requirement or replacing doors because they do not meet current code except required fire separations not caused by a use change, or providing handicapped access.
4. Replacing cladding because it is dirty, unsightly or colors don't match.

Qualified Preventive Maintenance:

1. Preventive maintenance work to be funded by institution.
2. Smaller urgent building envelope maintenance/repairs may be funded from a Capital Improvement fund.

INTERIOR FINISHES/FLOOR COVERINGS FUNDING GUIDELINES

Scope of Qualified Work:

Limited repair and/or replacement of interior finishes, carpet, and other flooring materials needed to provide a safe and serviceable surface.

Work Included:

1. Only carpet originally installed in a **REPAIR** Project Authorization Team approved project will be considered for replacement or repair. Carpet failing after the tenth year following installation will be replaced or repaired, assuming the carpet has been properly maintained per manufacturers recommendations.
2. Carpet or other flooring materials will be replaced, repaired, or partially replaced when existing conditions pose a safety hazard or when Facilities Services determines they are no longer serviceable. When replacing, careful consideration shall be given to utilizing appropriate flooring materials for the use and locations required.
3. Interior painting of spaces with high ceiling heights such as gyms and armories.
4. Repairs to damaged interiors caused by water penetration.

Work Excluded:

1. Carpet that fails prior to the 10th year following installation will not be funded for replacement.
2. Other floor materials cannot be replaced with carpet, unless the **REPAIRS** Project Authorization Team determines that replacement is justified and that carpet is an acceptable alternate.
3. Entire rooms or areas of carpet will not be replaced if repairs, partial replacement or a partial change to a resilient surface would be an effective solution.
4. Interior painting, acoustical ceilings, wall coverings, drapes, blinds and other interior finishes will not be funded except when related to other qualified work.

Qualified Preventive Maintenance:

1. Preventive maintenance to be funded by institution.

Determination of Priorities:

1. Work in this category is a low priority for use of Capital Improvement/Deferred Maintenance funds.

FACILITY ACCESSIBILITY FUNDING GUIDELINES

Scope of Qualified Work:

Alterations to existing facilities needed to provide access to program services and activities as required by the Americans with Disabilities Act of 1990 and the Department of Industry, Labor, and Human Relations' ILHR 69 - Barrier Free Design.

The goal of ADA is that each service, program, or activity, when viewed in its entirety, be readily accessible and usable by individuals with disabilities. Where access can be provided by alternate means or in another facility, it should be considered as an accessible alternative. Therefore, remodeling or structural modifications will only be considered when feasible alternatives do not exist.

ADA required agencies to perform a self-evaluation of services, policies, and practices related to ADA requirements in 1993. Part of this evaluation involved assessing the status of existing facilities and identifying needed remodeling or structural modifications. Cases where no feasible alternatives exist must have structural modifications provided unless such changes would result in an undue administrative or financial burden, or would destroy the historical significance of an historical property.

In the event access alternatives do not exist and remodeling or structural modifications are needed, ADA required that agencies develop a transition plan, where access to programs, activities, or services could not be provided by alternate means, setting forth the steps necessary to complete the needed work. This plan must also prioritize the work and provide estimated costs. All work included in the agencies plan may not be implemented if sufficient funding is not available, or if it is judged that specified items are not needed based on viewing each service, program, or activity in its entirety. Remodeling or structural modifications for access will be viewed on a case by case basis and implemented on a priority basis as funding becomes available.

Funding requests for accessibility projects should be documented by a self-evaluation plan. ILHR 69.19 (3) requires a barrier free evaluation of the entire building identifying the accessibility problems in the building or facility and the potential solutions.

The emphasis of the ADA self-evaluation is on public access to programs and services. It is understood that access needs for individual work places may also occur at any time which can be resolved on a case by case basis.

Work Included:

1. Parking, curb cuts, and ramps needed to provide accessible route from mode of transportation to the accessible building entrance, and alterations needed to provide accessible route between accessible facilities on the same site.
2. Accessible entrance, interior ramps, and removal of obstructions to provide an accessible route to program and activity spaces and elements within the facility.

3. Elevators must be provided when facility modifications to a primary function on non-accessible floors are made for access to program services and activities when no other alternative exists. There is no exemption for state owned facilities. In lieu of an elevator, the program/activity may be made accessible by relocating to another accessible location or by changing policy (i.e., issuing fishing and hunting license by mail).
4. Reasonable number of accessible restrooms, drinking fountains, and similar accommodations should be provided in existing facilities, to be determined on a case by case basis. As an alternative to renovating men and women's restrooms for accessibility, a unisex toilet on the primary level of the building could be added to provide accessibility.
5. Signage at inaccessible entrances directing users to an accessible one, and other signage needed to identify accessible spaces and elements.

Work Excluded:

1. Alterations to existing facilities, except work needed to provide access to program activities where alternatives do not exist. Otherwise, facilities will be upgraded to ADA standards when other future remodeling or facility renovation work is completed.
2. Alterations which would alter the fundamental nature of a service, program, or activity, or result in undue financial or administrative burdens.
3. Alterations which would threaten or destroy the historic significance of an historic building.

Determination of Priorities:

1. Priority will be given to work needed to provide access to program services and activities, when no other alternatives exist.
2. Priority will be given to project requests supported by the institution self-evaluation or the barrier-free evaluation.

ROAD/WALK MAINTENANCE FUNDING GUIDELINES

Scope of Qualified Work:

Includes repairs and replacements needed to maintain institutional walkways, roadways, parking lots, and associated site drainage in a serviceable and safe condition, and to provide preventive maintenance to maximize their useful life. Roads and walks serving program revenue funded facilities do not qualify.

Typical Projects:

1. Repair aged and distressed pavements.
2. Correct load capacity inadequate for intended use.
3. Upgrade for use change:
 - a) Bus routes
 - b) Trash pick-up routes
 - c) Delivery routes
4. Repair concrete surfaces which have raised, settled, etc., and are tripping hazards.
5. Repair gravel surfaces.
6. Repair curb and gutter settlement which causes problems in adjacent pavements.
7. Correct drainage problems, which contribute to pavement defects.

Qualified Preventive Maintenance:

1. Preventive maintenance/repairs to roads and walks for the following types of work. Urgent maintenance items may be funded from a Capital Improvement fund:
 - a) Crack repairs
 - b) Base patching
 - c) Radiant heat patching
 - d) Slurry seals
 - e) Structural
 - f) Thin overlays
 - g) Mud-jacking
 - h) Site drainage
 - i) Gravel shouldering and paving.

Determination of Priorities:

1. Priorities are assigned based on an annual department-wide inspection program of all institutions.
2. Preventive maintenance activities receive high priority.

ARCHITECTURAL/BUILT-IN EQUIPMENT FUNDING GUIDELINES

Scope of Qualified Work:

Repair/replace critical built-in equipment/components needed to continue operations where the institutions could not foresee failure nor budget for. To qualify for funding, the institution must demonstrate they have provided a reasonable level of preventive maintenance on the failed equipment and the program utilizing the equipment will continue on a long-term basis.

Work Included:

1. Food service equipment, freezer or refrigeration components.
2. Lab equipment, detention equipment, waste handling equipment, and institutional laundry equipment.
3. Auto hoists including compressors, loading docks, overhead doors, etc.
4. Any piece of built-in equipment necessary to an agency's mission, not mentioned, but meeting these conditions may be requested and approved based on its priority and availability of funding.

Excluded Work:

1. Ordinary loose equipment that does not require a construction trade contractor to hook-up.
2. New equipment to accommodate or support a new or expanded program.
3. Built-in equipment deemed an enmity or convenience or very infrequently used.
4. Replacement/updating obsolete equipment still useful and working.
5. Required periodic maintenance and/or service contracts for inspection, adjusting, and minor repairs.

Qualified Preventive Maintenance:

1. Preventive maintenance to be funded by the institution.

Determination of Priorities (ranked in the following order):

1. High priority shall be given to repair alternatives.
2. Replacement of architectural equipment is a low priority use of All-Institution funds.

INDOOR AIR QUALITY AND INDUSTRIAL VENTILATION FUNDING GUIDELINES

Scope of Qualified Work:

Includes investigations of IAQ and industrial ventilation problems to determine the cause of a problem and/or code compliance deficiencies and repairs/modifications to ventilation or other building systems and components needed to correct the problem. Activity is often the result of significant complaints from building occupants.

Typical Projects:

1. IAQ problems are often the result of poor maintenance of building ventilation systems over a long period of time, a change in use of an area of the building from what the original design was based upon, introduction of some new substance or material into the space, or from other external factors. The source of the contamination must first be identified, then appropriate steps must be taken to remedy the problem.
2. Industrial ventilation involves the addition of local exhaust to capture dust, fumes, or vapors at the source of generation. Most of the time a make up air unit is required to replace the air being exhausted by the local exhaust system. Such projects often occur in wood working shops, welding areas, spray painting areas, and photo labs in order to bring them in compliance with current building codes or ASHRE Standards.

Qualified Preventive Maintenance:

1. Preventive maintenance to be funded by the institution.

Determination of Priorities:

1. Priority will be given to IAQ and industrial ventilation problems which presents a direct threat to human health as determined by reliable test data.

PCB DISPOSAL FUNDING GUIDELINES

Scope of Qualified Work:

Funding will be provided for testing, cleanup, disposal, and in some cases, replacement of PCB equipment containing PCB fluids with a contamination level of 51 parts per million (PPM) or greater to comply with EPA and DEQ regulations. Site contamination resulting from PCB release with contamination levels over .7 parts per million (PPM). Funding will not be provided for replacement of PCB equipment contaminated at levels less than 51 PPM. Electrical PCB or PCB contaminated equipment should be clearly identified and be incorporated into an existing disposal project.

Typical Projects:

1. Fluid or surface PCB contaminations testing by a qualified laboratory or testing company.
2. Removal and disposal of PCB or PCB contaminated fluids, equipment or other material by a DEQ permitted Full Service PCB disposal contractor.
3. Restoration of the surface removed for disposal.
4. Replacement of selected PCB or PCB contaminated equipment if the equipment is in service or spare status at the time of disposal.
5. Reclassification to a lower classification of selected equipment. Note: This will have limited application as Facilities Services' policy is generally to dispose of PCB equipment contaminated at 51 PPM or above.

Qualified Preventive Maintenance:

1. Preventive maintenance to be funded by institution.

Determination of Priorities (ranked in following order):

1. Direct or imminent threat to the environment or human health.
2. EPA or DEQ required deadlines.
3. Equipment contaminated to a level greater than 500 PPM and with a secondary voltage 480 volts or greater.
4. Equipment contaminated to a level greater than 500 PPM and with a secondary voltage less than 480 volts.
5. Equipment contaminated to a level less than 500 PPM.

MERCURY-CONTAINING LAMPS FUNDING GUIDELINES

Scope of Qualified Work:

Disposal/replacement of mercury-containing lamps must be provided for under institution routine maintenance funding. Mercury-containing lamps (fluorescent lamps) contain small quantities of mercury and other metals that are harmful to the environment and human health. DEQ includes mercury-containing lamps into the list of wastes subject to Universal Waste Management standards. Depending on the volume generated at the institution, restrictions and requirements for properly handling waste lamps will apply to the institution.

Qualified Preventive Maintenance:

1. Preventive maintenance to be funded by institution.

Lead-Based Paint Funding Guidelines

Scope of Qualified Work:

Lead-based paint construction activities are regulated by OR OSHA 1926.62. Employers are required to provide personal protection and initial air monitoring to determine if employee exposure may exceed the Action Level & Permissible Exposure Limit. Airborne concentrations above the Action Level, 30ug/m³, requires the employer to provide training and blood monitoring. Concentrations above 50ug/m³ require ongoing personal protection, air monitoring, and written compliance plans for performing the lead-related tasks.

Disposal of lead waste is regulated by EPA, RCRA regulations 40 CFR 261. Management of building demolition waste is governed by DEQ policy 92-002A for Hazardous Waste/Toxics Use Reduction.

Typical Projects:

1. Remodeling/renovation; e.g., disturbance of painted surfaces in facilities.
2. Demolition of existing structures with lead paint.
3. Facilities maintenance painting; e.g., routine painting with minimal surface prep.
4. Building component replacement; e.g., windows, doors, building trim, etc.
5. Paint removal (permanent removal); e.g., by abrasive blasting, by chemical stripping, by heat gun, by grinding, hydro blasting, etc.

Qualified Preventive Maintenance:

1. Maintenance or inmate personnel should receive at least eight hours of training in appropriate operations and maintenance (O & M) work practices.

Determination of Priorities:

1. Identify presence of lead prior to performing trigger activities.
2. Mitigate poor conditions and exposure to lead paint in working and living environments that have a direct threat of exposure to lead dusts generated by lead paint activities.

SECTION 6

REPAIR PROGRAM IMPLEMENTATION CHECKLIST

The implementation of the following checklist will require cooperative effort and input from Executive staff, institution plant personnel, and Facilities Services.

Planning and Programming

1. Inventory of facilities
 - a) By category
 - b) By condition
 - c) Verify 1996 Deferred Maintenance Listings
 - d) Highlight critical deficiencies
 - e) Identify additional deferred maintenance projects
2. Categorization of work
3. Standards
 - a) Timeliness
 - b) Quality
 - c) Work
4. Condition assessment
 - a) Trends
 - b) Critical deficiency trends
 - c) Adverse impacts
5. Priorities
 - a) By activity
 - b) By class
 - c) By critical deficiency
6. Develop annual work plan
7. Develop mid-term plan

Budgeting

1. Establish budget guidance
2. Flows from the work plan
3. Budget process
4. Impact of capital budget
 - a) Design budget to maintain current levels
 - b) Life-cycle costs to be optimized; not simply capital costs
5. Compare to target range of percentage of current replacement value (CPV)
6. Make historical trends comparisons
7. Develop impact statements
8. Define requirements
 - a) By activity
 - b) By criticality
9. Eliminate leakage of funds
 - a) By definition
 - b) By migration
10. Submit budget to meet multiple funding scenarios

Organizing

1. Lines of responsibility must be clear
2. Placement of program is important
3. Material management has an impact
4. Meter institutions for comparison

Staffing

1. Quality, technical competence
2. Quantity
3. Contracting vs. in-house mix
4. Role of inmate labor in maintenance
5. Training
6. Leadership
7. Inspection

Directing

1. Priorities set in budget cycle
2. Work management and coordination
3. Appropriate level of design
4. Rapid response to crisis
5. Some provision for necessity to react
6. Allocation of budgets to subactivities:
 - a) Ability to execute
 - b) Criticality
 - c) Provide specific guidance
7. Contracting strategies
8. Condition assessments
9. Commissioning periods/procedures for new buildings to reduce maintenance
10. Automate diagnostics (CMMS)

Controlling

1. Approval levels
2. Control of budget
3. Control of finances
4. Management Information Systems (CMMS)
5. Accountability
6. Ability to react to crises, new priorities, or end-of-year-windfalls
7. Documentation

Evaluating

1. Comparators
2. Condition assessment
 - a) Critical deficiency trends
 - b) Total deficiency trends
3. Work management system
4. Work order system
5. Comparison with historical data
6. Field assessments
7. Feedback

SECTION 7

ATTACHMENTS

Attachment No. 1

DEFINITION OF MAINTENANCE ACTIVITIES

Preventative/Routine Maintenance:

Preventative or routine maintenance is work that should be performed by institution maintenance staff to identify minor problems and repair systems and equipment before serious defects occur. Typically, activities include custodial work, repairing doors and hardware, painting walls and trim, servicing mechanical and electrical equipment, small parts replacement, and minor patching and repair of roofs and masonry, etc. Inspections of building components and systems will be completed by the institution in a timely manner. Service work performed under an institution service contract is considered preventive maintenance, with the exception of service contracts for energy management systems that are eligible for energy conservation funding. Funds for preventive maintenance should be included in the institution operating budget. Preventative maintenance projects will not be funded from **REPAIR** Program funding.

Scheduled Testing/Repair of Major Equipment:

Scheduled testing/repair, or predictive maintenance, is work usually performed on major equipment at regular intervals to assure continued efficient operation and avoid premature failure. Typical examples include cleaning and testing primary electrical switches, inspecting and testing tubes in chillers and boilers, and turbine inspection and testing. A good testing and repair program based on manufacturer's recommendations and operating experience is cost effective and will reduce the amount of unscheduled repairs required. Scheduled testing/repair will be funded from the institution's operating budget and will not be funded from the **REPAIR** Program funding.

Deferred Maintenance:

A formal or informal listing of unaccomplished maintenance tasks. Such situations arise because of shortages of funds, personnel, or specific management practices. Deferred maintenance projects may be funded from **REPAIR** Program funding.

Capital Repair and Replacement:

This recognizes the debilitating effect of the aging process on facilities, major building systems, and supportive infrastructures. Projects in this category address the physical deterioration aspect of long-term use, the need for overall facility renewal due to technological obsolescence, the replacement of building systems that have become functionally inadequate, the upgrading of supportive infrastructures that are no longer capable of adequately handling the needs of the institutions. Projects may be funded from **REPAIR** Program funding.

Unscheduled Repair and Replacements:

Unscheduled repair or replacement, or breakdown maintenance, is work needed to restore to service a building component or piece of equipment after it has failed or deteriorated to a point where it is no longer functional or reliable. Such repairs are

usually performed on an emergency basis. Critical types of work include repair of failed roofs, water and steam line breaks, heating and ventilating equipment failures, etc. Lower priority items include repairs or replacements to floor and ceiling tile, carpeting, fixed equipment, windows, and site development. Unscheduled maintenance may be funded from either institution operating budget or All-Institution funds and is decided on a case by case basis. Unscheduled repair and replacement projects may be funded from **REPAIR** Program funding.

Planned Replacement:

Planned replacement occurs when a major building component or piece of equipment has reached the end of its useful life and is no longer economical to maintain. Based on experience, replacement is scheduled to occur just prior to the anticipated failure. The cost alternatives should be carefully evaluated, and the selected component budgeted, bid and installed in accordance with a predetermined schedule. Planned replacements may be funded from **REPAIR** Program funds or taken into account in institution long-range planning and Capital Improvement funding requests.

Facilities Improvements:

Improvements occur when there is a need to update a building component to current technology in order to improve safety, performance, or efficiency, or to support new program requirements. Facilities improvement projects may be funded from **REPAIR** Program funding. Projects typically involve energy conservation, health, safety, environmental protection, architectural barrier removal, and functional improvements to support program changes.

SPECIAL NEEDS PROJECTS

Overview:

Special needs projects are implemented by Facilities Services and are under the direct control of the Facilities Services Project Manager who is authorized to approve expenditures. The purpose of these projects is:

1. To provide the capability for immediate response to urgent maintenance, code compliance, or chronic operational problems caused by deficiencies in building systems/equipment, where the Facilities Services Project Manager, in conjunction with the institution **REPAIR** Project Coordinator, determines there is an imminent danger to people and the environment, a potential for catastrophic loss of property, or where an economic benefit will be realized;
2. To accommodate other special facility needs and initiatives such as, scheduled inspection/testing of major mechanical and electrical equipment, maintenance training, etc.

Funding Guidelines:

Project Funding: The **REPAIR** Project Advisory Committee will set up funding allocations for each institution for different types of work and establish limits on the amount of funding available for such things as training, testing, environmental sampling, etc.

Funding will not be provided for work of a frequently recurring nature or work within the capabilities of the institution maintenance staff.

Funding will only be provided for work authorized by the **REPAIR** Project Authorization Team when other applicable funding is not available.

Approvals: Use of special needs funding should be discussed directly with the Facilities Services Administrator or Senior Project Manager. Following approval by the Facilities Services Administrator, the institution shall follow up with a **REPAIR** Project request/approval form to document the scope, need, and cost of the proposed work and noting the approval by the Facilities Services Administrator.

Special Procedures: The Facilities Services Administrator may issue additional instructions for identifying and implementing projects for specific types of work, or for special preventative maintenance programs.

Special Needs Projects:

Typical Special Needs Projects include:

1. Urgent repair needed to stop a roof leak or to correct a minor defect.
2. Repairs needed to address a serious safety concern.
3. Asbestos, PCB, and lead abatement.
4. Repairs needed to restore essential utility services.
5. Correction of alarm and control system deficiencies.
6. Service contracts for EMS systems.
7. Cleaning/testing of primary electrical switches.
8. Hazardous substance emergency spill response.

9. Masonry inspecting and minor repair.
10. Correction of deficiencies in general, mechanical, or electrical and related systems and equipment so they will perform.
11. Inspections and leak testing of boilers and chillers.
12. Power plant stack testing for compliance with air quality regulations.
13. Crack patching and sealing of roads and parking areas, and correction of uneven/hazardous sidewalks.
14. The purchase of maintenance management software (CMMS) and training of maintenance staff.

Utilization of Inmates:

REPAIR Project Authorization Team shall encourage the utilization of DOC inmates for completion of a variety of maintenance activities. The hours of work, transportation, security, supervision, costs, and other conditions for using inmates should be worked out between the institution and the DOC correctional center that will provide the inmates.

Typical maintenance activities performed by inmate labor include:

1. Testing/cleaning of fire/smoke detectors
2. Sweeping, cleaning, painting.
3. Lawn mowing, snow shoveling, other site work.
4. Asphalt crack patching and striping.
5. Cleaning HVAC coils, changing HVAC equipment filters.
6. Hallway and corridor scrubbing-stripping-waxing-buffing.
7. Furniture moving/cleaning/repairing/painting.
8. Scraping and painting wooden structures.
9. Recyclable materials collection and sorting.
10. Fin tube radiator elements vacuuming and cleaning.
11. Window washing.
12. Fleet garage clean up and car washes.

REPAIR PROJECT AUTHORIZATION REQUEST FORM

General Instructions:

The attached **REPAIR** Project Authorization Request/Approval Form must be used for project-funding requests. Submit a separate request form for each project. This form combines the project request, review, and delegation approvals into one document. Projects will not be considered unless the information requested on the form is provided. Completed request forms (original plus two copies) should be sent to: **REPAIR** Project Review Committee, FACILITIES SERVICES, 1793 13th Street SE, Salem, OR 97302. Emergency requests may be faxed (Facsimile No. 503-378-6536).

If requests are faxed, do not duplicate them with follow-up hard copies.

Specific Instructions:

1. Provide the descriptive title of the project, name of the institution, building and/or the building number, and the name and telephone number of a contact person who can answer questions about the project.
2. Provide a summary of the estimated budget and proposed funding sources. Attach a detailed cost estimate or explanation of how the budget was developed. Indicate if the project is classified primarily as a repair or improvement. Fee Guide for project costs attached.
3. The request must be signed by the institution **REPAIR** Coordinator who, by signing, verifies that:
 - a. The work involved does not conflict with any current or pending work at the site.
 - b. The work is not part of another enumerated major project.
 - c. The work involved will not effect the operation of the existing mechanical/electrical systems. If this is the case, detailed information is to be attached to the request.
 - d. The work is not preliminary work on a project that will appear on a subsequent **REPAIR** Project Authorization Request Form.
4. Indicate if delegated design and construction supervision is being requested and provide the name of the designated institution person responsible for implementation of the work and project management.
5. Indicate if work is to be performed by staff, contract labor, inmate labor, construction contract, purchase order, professional services contract or any combination of these.
6. Provide a brief, concise description of the work to be performed including related considerations such as security needs, asbestos, lead or PCB abatement, or any other special needs.
7. Explain the need for the project; provide information about age, conditions, code deficiencies, health and safety risks, etc. Attach supporting documentation such as, code compliance orders, vendor's proposals, photos, energy calculations, etc.
8. For energy projects, provide the projected payback period and amount of any utility company rebate which has been offered, if such a calculation has been performed by the Oregon Department of Energy. Facilities Services staff is available to assist with energy projects.

9. Provide a schedule for completion of the work including proposed dates for completion of design, receiving bids, award of contract, and start and completion dates of construction work. Keep in mind that **REPAIR** Projects are to be completed within twelve months of the date of project approval unless a different schedule has been agreed to between the institution **REPAIR** Coordinator and the Facilities Services project manager.
10. Spaces on the form that do not apply should be completed with N/A.
11. The **REPAIR** Project Advisory Committee will review and act upon each request as soon as possible. An explanation of recommended modifications or reasons for denial will be provided if appropriate. If additional time is needed for a site inspection or other reason, notification will be given.



STATE OF OREGON
DEPARTMENT OF CORRECTIONS
FACILITIES SERVICES

Mailing Address: 1793 13th St. SE,
Salem, OR 97302
Phone: (503) 373-1572
FAX: (503) 378-6536

REPAIR PROJECT AUTHORIZATION REQUEST

Project: _____ *FAC. SERVICES Tracking No: _____

Institution _____ *FAC. SERVICES Project No: _____

Project Manager: _____

Building Name: _____ Building No: _____

Contact Person: _____ Phone No: _____

Estimated Project Budget: (attach supporting cost est.)		Funding Sources:	
Construction	\$ _____	Deferred	\$ _____
Contingency	\$ _____	Capital Repair	\$ _____
Equipment	\$ _____	Capital Improvement	\$ _____
Security	\$ _____	Oregon Dept Energy	\$ _____
Design Fee	\$ _____	Inmate Work Program	\$ _____
Other	\$ _____	Institutional Funding	\$ _____
_____	\$ _____	Other	\$ _____
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____

Total Budget \$ _____ Work Classification: [] **REPAIR** [] Improvement

Institution Request Approval:

The work does not conflict with current or pending work at the site. The work is not part of an enumerated major project. The work will not effect the operation of the existing mechanical/electrical system; if so, detailed information is attached. If approved, the work will not appear on a subsequent Biennium's project request.

Approved By: _____ Date: _____
(Institution **REPAIR** Coordinator)

FACILITIES SERVICES Funding Recommendation:*

[] Approved [] Not Approved [] Approved With Modifications

Description of Modification/Reason for Non-Approval:

Reviewed By: _____ Date: _____
(Facilities Services Project Manager)

Approved By: _____ Date: _____
(Repair Project Advisory Committee)

*** items to be completed by Facilities Services**

Delegated Authority Requested by The Institution:

- Delegated Design
 - Delegated Bidding Rep:
 - Delegated Contracting Authority
 - Delegated Construction Oversight
- Institution Rep: _____

Non-Delegated Authority

- Design by FACILITIES SERVICES or Consultant
 - Bidding, Contracting by FACILITIES
 - Construction Oversight by FACILITIES SERVICES
- Consultant: _____

Work To Be Performed By:

- Construction Contract
- Purchase Order
- Professional Services Contract
- Institution Staff
- Inmate Labor
- Other _____

Description of Work: (attach additional pages if needed)

Explanation of Need: (attach supporting documentation)

Energy Projects:

Estimated Annual Savings: \$ _____ Estimated Payback Period: _____ years

Estimated Utility Rebate: \$ _____ ODOE Analysis Completed yes no

Project Schedule:

Complete Design: _____
Receive Bids: _____
Award Contract: _____
Start Construction: _____
Complete Project: _____

Distribution:*

FEE GUIDE FOR DELEGATED PROJECTS

Overview:

Outside Consultant Fees:

1. Facilities Services has authority to initiate action with DOC Contracting to enter into contracts with outside consultants.
2. Contracts for outside design and special consulting services will be administered by Facilities Services. Assistance in obtaining outside consultant services is the responsibility of the Facilities Services Project Managers. For limited scope services, Facilities Services may direct the institution to work directly with DOC Purchasing.
3. Fees for outside consultants may be charged to the project regardless of the method of project implementation. The requested project budget must reflect appropriate fees for consultant services. Use 10-12% for projects over \$100,000, 12-14% for projects costing over \$30,000, and 14 -16% for projects costing less than \$30,000.
4. When needed, institution funds may be used to fund preliminary engineering investigations by an outside consultant to assist with defining the scope and budget for corrective work. Before expending any such funding, check with Facilities Services to see if a consultant is currently under contract. This does not relieve the institution from selecting a consultant in compliance with the Oregon Attorney General's Model Rules.

Other Project Costs:

1. Institutions should include a line item in project budgets for reimbursement of direct project related costs
2. Direct project related costs should include security, plan reviews, permits, advertising, specification/plan printing, quality control testing, and similar job-specific costs payable to outside vendors.

DOC BUILDING PERMIT REQUEST FORM

The following DOC Building Permit Request Form must be submitted to obtain a permit.



BUILDING PERMIT REQUEST FORM

Project: _____

Tracking No: _____

Institution: _____

Project No: _____

Project Manager: _____

Building Name: _____ Building No: _____

Contact Person: _____ Phone No: _____

Approved By: _____ **Date:** _____

(Physical Plant Manager or Trade Maintenance Supervisor)

Required Information:

Electrical: Detailed description of work and associated drawings. _____

Structural: Detailed description of work and associated drawings. _____

Mechanical: Detailed description of work and associated drawings. _____

Boiler: Detailed description of work and associated drawings. _____

Additional area for Detailed Description of Work and/or Drawings:

Reviewed By: _____ Date: _____

Approved

Approved With Modifications

Description of Modification:

PERSONAL PROFESSIONAL SERVICES CONTRACTS

Information on this topic is subject to change by legislative action, changes in DAS and/or DOC policy. Current information on this subject is available from Facilities Services.

CONSTRUCTION CONTRACT FORMS FOR DELEGATED PROJECTS

All contracting will be coordinated by Facilities Services and Purchasing. The appropriate forms for Delegated Projects will be completed by Facilities Services, or provided to the requesting institution during the planning phase of any Delegated Projects.

NOTICE TO PROCEED LETTER

A Notice To Proceed Letter must be signed by Purchasing and delivered to the Contractor prior to any work commencing on a project.

CONTACTING FACILITIES SERVICES

Facilities Services can be contacted during normal working hours, (Monday through Friday, 8 am – 5 pm) by calling 503-373-1572, or FAX 503-378-6536. The Facilities Administrator can be reached at extension 7129.

Each project will be assigned a Project Manager to assist the requesting institution with questions that arise during the planning and work completion phases of the project. The requesting institution will be informed at the time of project approval, which Project Manager is assigned, and the extension for direct access.

Facilities Services

1793 13th Street SE
Salem, OR 97302-2595

(503) 373-1572

FAX: (503) 378-6536

www.doc.state.or.us