

**Joint Legislative Committee on Performance  
Evaluation and Expenditure Review (PEER)**

Report to  
the Mississippi Legislature



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# **A Review of the Management of the State Construction Process**

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In recent years, the Legislature and the Department of Finance and Administration have attempted to improve management of the state construction process through statutory and operational changes. The Legislature has changed state law to address the budgeting of and accountability for construction funds. The Department of Finance and Administration's Bureau of Building has implemented a more thorough project evaluation system when selecting and approving projects, as well as a quality assurance method called building commissioning.

Management of the state construction process is affected to a certain extent by exceptions and inconsistencies in state law. State law provides an exception to the two-phase funding and approval requirement for emergency and critical need projects. However, because neither the law nor the Bureau of Building has standards or criteria for determining critical need, this exception could provide a "loophole" for avoiding the accountability imposed by the two-phase funding requirement. Community and junior colleges' construction projects are not held to the two-phase funding and approval requirement because these buildings are not considered to be state-owned buildings, although the projects utilize funds from general obligation bonds repaid by the state's taxpayers. Also, bond legislation for community and junior college projects is not consistent with other bond legislation that requires bond funds to be spent on specific projects.

Mississippi's construction process for state buildings generally functions well, but needs refinement in the following areas to protect the state's best interests: additional, more precise information for considering projects for selection and approval; consistency in documenting selection of contractors; more appropriate use of bond financing; improved change order management; and proof of implementation of quality assurance methods.

The workload of the Bureau of Building's professionals hinders them from devoting the necessary amount of management attention to each project. To reduce the workload of the bureau's professional staff, the Legislature could implement one or more of the following options: authorize para-construction specialist positions to perform clerical and administrative duties; allow agencies to manage construction projects under \$250,000; allow the Department of Archives and History to manage historic preservation projects.

**June 21, 2005**

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The Committee assigns top priority to written requests from individual legislators and legislative committees. The Committee also considers PEER staff proposals and written requests from state officials and others.

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On June 21, 2005, the PEER Committee authorized release of the report entitled **A Review of the Management of the State Construction Process.**

A handwritten signature in cursive script that reads "Dirk D. Dedeaux".

Representative Dirk Dedeaux, Chair

**This report does not recommend increased funding or additional staff.**



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# A Review of the Management of the State Construction Process

## Executive Summary

### Introduction

In response to a legislative request, the PEER Committee reviewed the state construction process, including the Department of Finance and Administration's management of state construction projects through its Bureau of Building (hereafter called the bureau).

The purpose of this review was to determine whether the state's construction process yields quality facilities on time at the lowest possible cost.

### Background

In most cases, the Department of Finance and Administration's Bureau of Building serves as the construction program manager for state construction projects in Mississippi. The Bureau of Building represents the interests of the entity and exercises independent oversight of the professional contractor and constructor team (i.e., general contractor and sub-contractors).

The Bureau of Building, professional team, constructor team, and a building commissioning agent, when applicable, enter a contractual relationship for a project. The Bureau of Building exercises direct oversight of architects, engineers, building commissioning agents and other contract professionals, while it performs indirect supervision of the construction contractors through the primary professional contractor and the building commissioning agent. Because the bureau does not have the in-house capability to perform some of the design and construction tasks that some private construction program managers can provide, it may employ engineers, contract analysts, architects, or construction project administrators to manage and monitor projects.

The bureau has authority to compel adherence to contract specifications and schedules, applying sanctions to firms or individuals within the constructor team that do not fulfill their responsibilities.

## Components of Managing the State Construction Process

Although the construction process involves multiple tasks within each phase, PEER identified five major components of the state construction process, or ones that will have the biggest effect throughout several phases and on the overall outcome of the projects. These are:

- *Selecting and approving projects*--The state should use an objective and documented process to make decisions regarding need for the project, type of project to best fulfill the need, estimates of cost, and priority of the project.
- *Selecting professional contractors*--Decisionmakers should develop and implement a structured, objective process that will ultimately result in selection of the most qualified professional to perform the job. The selection should be made with input from stakeholders, should be fair, and should avoid any appearance of bias.
- *Appropriate use of bond financing*--In financing construction projects, the state should minimize the use of bond financing because of the additional debt service costs associated with the bonds. Such financing should only be used for capital improvement projects including associated real property that is part of the project or for items having a life expectancy at least as long as that of the financing period.
- *Managing change orders*--To ensure that changes to building construction contracts are justified and cost-efficient, the oversight process should include assessment of the reasoning for and cost efficiency of change orders and retention and use of experience data in future decisionmaking. Also, the cost of any change orders resulting from design errors, design omissions, or documentation deficiencies should be paid for by the responsible contractor through liability insurance or directly from company assets.
- *Implementing quality assurance methods*--The state should use whatever means available to assure quality design and construction in its projects in order to maximize the quality and useful life of the project at the lowest possible cost.

### **Statutory Change Affecting the State Construction Process**

In 2000, the Legislature established a two-phase funding and approval process for construction projects (codified in MISS. CODE ANN. Section 31-11-30 [1972]). The goal was to establish a more accurate budgeting and funding process for new construction projects and proposed major repair and renovation projects. The two-step process incorporates the bureau's staff in preplanning for projects, including making site visits and determining the most precise project estimates possible. The Legislature then has the opportunity to review and consider the project twice before final authorization.

### **Improvements in the Bureau of Building's Evaluation of Proposed Projects**

Before FY 2004, the Bureau of Building did not clearly identify in the annual Needs Assessment those projects it recommended. The bureau also did not show any estimated debt service for each project submitted. In the FY 2004 annual Needs Assessment provided to the Legislature, the Bureau of Building began identifying the projects it recommends for construction. The bureau also now shows the estimated annual debt service cost of each project.

### **Implementation of the Building Commissioning Concept**

*Building commissioning* is a quality assurance process the Bureau of Building began implementing on November 24, 2004, for all new state construction projects estimated to cost three million dollars or more. In his role of providing quality assurance, the building commissioning agent serves as a communications link between the professional team, constructor team, and Bureau of Building to ensure that building projects meet the need of the agency or institution in the most efficient manner. Fees for this service range from 1.25% to 2.25% of total project cost. The ultimate success of this concept must take cost into consideration, along with quality outcomes.

## The Effect of Exceptions and Inconsistencies on Management of the State

### Construction Process

#### Exceptions to the Two-Phase Funding and Approval Requirement

MISS. CODE ANN. Section 31-11-30 (1972) provides an exception to the two-phase funding and approval requirement for emergency and critical need projects. However, because neither the law nor the Bureau of Building has standards or criteria for determining critical need, this exception could provide a “loophole” for avoiding the accountability imposed by the two-phase funding requirement.

Also, community and junior colleges’ construction projects are not held to the requirements of MISS. CODE ANN. Section 31-11-30 (1972) because these buildings are not considered to be state-owned buildings. However, these projects utilize funds from general obligation bonds repaid by the taxpayers of Mississippi and should be subject to some form of accountability review such as the two-phase funding and approval process.

#### Statutory Inconsistencies

While most legislation that authorizes issuance of bonds for construction projects lists those projects and the amount of bond funds to be used for each project, some bond legislation (such as that for community and junior colleges) does not tie bond funds to specific projects, thus reducing accountability for spending.

### Conditions That Impair Management of the State Construction Process

Mississippi’s construction process for state buildings generally functions well, but needs refinement in the following areas to protect the state’s best interests in construction and renovation of its buildings: additional, more precise information for considering projects for selection and approval; consistency in documenting selection of contractors; more appropriate use of bond financing; improved change order management; and proof of implementation of quality assurance.

#### Need for Additional, More Precise Information When Considering Projects for Selection and Approval

Although the Bureau of Building now includes estimates of the annual debt service costs for each construction project in its annual capital improvements needs assessment provided to the Legislature, it does not provide estimates on the long-term debt service costs of each project. Also,

the method the bureau uses to estimate debt service is not the most precise method available for estimating the debt service costs of a project. Thus legislative decisionmakers are not receiving the most precise information possible with which to decide how the state's limited resources are to be used.

## **Need for Consistency in Documenting Selection of Professional Contractors**

Although the Bureau of Building has improved its documentation of the contractor selection process since the changeover in administrations, the bureau still is not consistent in documenting individual steps in the process.

Since FY 2004, the Bureau of Building has revised its practices to include documentation for both pre-selection grading/evaluation and final selection grading/evaluation. PEER sampled the bureau's project files and found that although the bureau is making attempts to ensure that files contain proper documentation of requests for proposals and grading/evaluation, the bureau still is not consistent in ensuring that the entire contractor selection evaluation process is documented in project files. When proper documentation is not present in the files, the bureau cannot ensure and defend that it used an objective decisionmaking process to select the best-qualified professionals to construct state buildings.

## **Need for More Appropriate Use of Bond Financing**

When bond funds are expended, over the course of the bond the state pays not only the cost of the item, but also the cost of financing that item over the life of the bond. Because of this, the use of bond funds should be limited as much as possible.

The state has routinely used bond financing, the purpose of which is to fund capital projects with a life expectancy of twenty years or more, to purchase furniture and equipment when the life expectancy of those items does not meet or exceed the term of the bonds used to purchase them. This practice increases debt service costs.

Preplanning of construction projects most likely increases their cost-effectiveness. However, Mississippi has also used bond funds to cover preplanning costs, which incurs additional long-term debt for an administrative expense.

Recent bond legislation has allowed funds left unspent at the end of a project to be used to fund repair and renovation projects. As a result, the state's long-term debt

has increased unnecessarily and opportunities to retire debt early have been lost.

## **Need for Improvement of Change Order Management**

In 2002, PEER identified weaknesses in the Bureau of building's management of change orders, including problems with the review of change orders, with overhead and profit paid for change orders, and with paying for errors and omissions. PEER followed up on these issues in the 2005 review and found that many of the same problems still exist with the bureau's management of change orders. PEER found:

- The bureau's management of change orders still does not assure that cost changes to projects are reasonable.
- The bureau's maximum overhead and profit percentage paid for change order work remains at 40%, an excessive amount far higher than that of other states.
- The bureau still pays for change order work resulting from design errors and omissions.
- The bureau still does not have a project management system that measures planned versus actual construction performance.

These deficiencies could lead to costs that would contribute to significant increases in the long-term debt liability of the state.

## **Need to Ensure Implementation of Quality Assurance Methods**

The Bureau of Building does not include specific language in its contracts requiring professionals to implement quality assurance methods because the bureau expects these professionals to implement quality assurance as part of their professional responsibilities. However, the bureau does not require professionals to document any quality assurance methods that they voluntarily implement or report any cost savings. This documentation is necessary to assure that every effort was made to execute the project at the lowest possible cost without sacrificing quality.

## Managing Workload of the Bureau of Building's Staff

The workload of the Bureau of Building's professionals hinders them from devoting the necessary amount of management attention to each project. To reduce the workload of the bureau's professional staff, the Legislature could implement one or more of the following options: authorize para-construction specialist positions to perform clerical and administrative duties; allow agencies to manage construction projects under \$250,000; allow the Department of Archives and History to manage historic preservation projects.

### Workload of the Bureau of Building's Staff

As of February 2005, the bureau's staff managed approximately 636 active projects with twenty staff members. The Bureau of Building's staff architects manage from seventy to ninety projects each. This heavy workload hinders the architects from devoting the necessary amount of management attention to each project. Also, according to the bureau's director, each staff architect and project administrator spends at least two hours a day performing clerical or administrative tasks. This situation could affect the quality and quantity of state construction projects because these individuals' expertise is not being properly utilized.

### Legislative Options for Reducing the Workload of the Bureau of Building's Staff

PEER offers three options for reducing the workload of the Bureau of Building's professional staff.

- *Authorize para-construction specialist positions*—To make more efficient use of state resources, the bureau could request that the Legislature approve and fund two new positions, duties of which would be to assist in the clerical and administrative work uniquely related to management of construction projects. At an estimated annual salary of \$35,000 each, the cost to the state for these positions would be approximately \$90,134, including fringe benefits. This would represent a cost avoidance of approximately \$43,237 annually, due to the time that professionals are currently devoting to these duties. Also, this would allow professionals to spend more time on management duties.
- *Allow agencies to manage construction projects under \$250,000*—According to the bureau's director, this option would reduce the bureau's workload without incurring a high level of risk to state resources. This option would require that the bureau monitor the

agencies that are managing projects; the bureau should also have the discretion to choose which agencies could manage projects. The goal of implementing this option would be to allow the bureau's staff to focus on larger projects to maximize their effort in minimizing risks to the state.

- *Allow the Department of Archives and History to manage historic preservation projects that are not state-owned buildings or on state-owned property*—The Department of Archives and History already in effect manages some historic preservation grant projects. The Department of Finance and Administration's role basically is a perfunctory role of approving payments on the project. If the Department of Archives and History were allowed to manage such projects in entirety, the bureau's workload would not be significantly reduced, but risks to the state would not likely increase.

The Legislature and the bureau could choose one or any combination of these options to reassign the bureau's workload or could choose not to reassign the workload. PEER also offers recommendations 22 through 25, pages xviii through xix, to help in implementing these options.

## Recommendations

### Legislative Action

1. The Legislature should amend MISS. CODE ANN. Section 31-11-30 (1972) to define critical need construction projects in order to reduce the potential for state entities claiming a particular project as a critical need project to bypass the two-phase project funding and approval process required by that section.
2. The Legislature should amend MISS. CODE ANN. Section 31-11-30 (1972) to subject projects of the community and junior colleges to the two-phase funding and approval requirement in order to ensure that community and junior colleges projects compete with other state projects for funding and are in the best financial interest of the state.
3. The Legislature should require all professional contractors, such as building commissioning agents, with the Bureau of Building or local governmental entities to be independent of all professional and construction firms working on a state or local governmental construction project. This would eliminate a possible conflict of interest situation.



4. In future bond legislation for capital improvement projects, the Legislature should include a list specifying approved projects with an amount of bond funds designated for each project.
5. The Legislature should eliminate the use of bond funds for preplanning and replace these with appropriated funds of approximately \$300,000 per legislatively approved project for the bureau's preplanning revolving fund so that the state can pay all preplanning costs from appropriated funds and not use bond proceeds.
6. The Bureau of Building should develop a method for assessing fees against state entities and the institutions to fund the bureau's preplanning. Such method should be presented in a report to the Legislature by January 1, 2006. The Legislature should determine at that time whether to use fee assessments of general funds to fund the bureau's preplanning. Fees from user entities would allow the state to recoup some of the pre-planning costs from programs that use state facilities and are funded by federal grants or special funds.
7. The Legislature should fund moveable furniture and equipment purchases for most capital improvement projects from general fund appropriations to the occupying entities. The Bureau of Building's staff and/or a professional contractor for the project should assist agencies with the planning, selection, and delivery of this furniture. For a newly constructed or renovated building that will be used by more than one state agency, the bureau should purchase the furniture by pooling the agencies' appropriated funds so that the state can take advantage of bulk buying discounts and the furniture design can be consistent throughout the building.
8. The Legislature should require that any funds not spent by the close of a project be used to retire part of the bond debt that financed the project.

## **Administrative Action**

9. The Bureau of Building should establish a consistent method of documenting project proposals of the interested professional contract candidates in each pre-planning project file.

10. The Bureau of Building should include a list of evaluation standards in each request for project proposal in order to clearly define and advise all potential professional contractors, including building commissioning agents, of the bureau's standards used to make professional selection decisions.
11. If the Legislature chooses to continue allowing the use of unspent bond funds for general repair and renovation projects, the Bureau of Building should track the instances in which funding is moved from one project to another. The new construction management system (that will replace the current PATS) should be designed to extract information that shows the number and times and the amount of unspent bond funds spent for other repair or renovation projects. In the alternative, the bureau should maintain a list of when these funds are used, including the project the money is being moved from, the project the money is being moved to, and the amount of this transaction.

Also, if the Legislature chooses to continue the use of unspent funds from one project for other general repair and renovation projects, the Legislature should provide time limits for completely spending the funds in the enabling legislation for the project in order to eliminate the possibility of federal arbitrage penalties.

12. Using existing resources, the Bureau of Building should estimate:
  - annual and total long-term debt service costs of projects in the need assessment presented to the Legislature: and,
  - total debt service for change orders to determine their total cost prior to the bureau's approving them.

The bureau should utilize software that uses current rates at the time the debt service is estimated and that projects the debt service costs over the life of the bond, taking into account compounding and payments toward interest and principal.

13. The Bureau of Building should create a step-by-step evaluation process for professionals and bureau staff to evaluate and document the necessity and cost reasonableness of each change order and should formalize this process in the bureau's policies. The bureau could use Georgia as a model for change order review.

14. The Bureau of Building should require the standardized, itemized cost information on each change order recommended in the 2002 PEER report (see Appendices E and F). The bureau should use the forms from Illinois as a model for this aspect of change order review.
15. Before the start of construction for a project, the Bureau of Building should require that construction contractors provide documentation substantiating all aspects of the overhead and profit and labor burden cost rates that they will charge throughout the construction project, including on change orders. Upon receipt, the bureau's staff should verify the information, making sure there is no duplication of costs between these rates.
16. The Bureau of Building should determine what overhead and profit rate is fair and optimal for paying contractors' overhead costs and profit costs while keeping the state's cost to a minimum. The bureau should then adjust the maximum cost rate for overhead and profit for change orders accordingly.
17. The Bureau of Building should not pay both the contractor and subcontractor the same amount of overhead cost when the subcontractor mainly completes the work.
18. The Bureau of Building should change its standard design professional contract to state that the bureau's policy will be to file insurance claims for all change order work that is caused by the professional's design errors, omissions, or documentation deficiencies and file claims accordingly, unless the professional chooses to pay the contractor directly. Further, the bureau should not pay any additional fees to the professional team for such change orders.
19. The Bureau of Building should clearly identify change orders that contain items that are the result of design errors and omissions on its standard approval form for change orders.
20. In planning for the purchase of a new project management system, the Bureau of Building should ensure that the system will measure planned versus actual construction performance and produce both on-demand and periodic management reports. The bureau should consider relevant recommendations from PEER's 2002 reports (see Appendices E and F).
21. The Bureau of Building should include all projects costing \$1 million or more in the

building commissioning process to ensure that the state has a consistent process for obtaining quality assurance on all building construction projects that require pre-planning.

If the Bureau of Building chooses to not implement building commissioning on projects costing from \$1 million to \$2.9 million, the bureau should require the professional contractors:

- to perform appropriate quality assurance methods; and,
- to submit a documented cost savings report for all project savings generated through these methods at appropriate times in the project.

This process would help protect the best interest of the state by ensuring buildings are being constructed in the most cost efficient and effective way.

## **Actions to Implement Legislative Options on Managing the Bureau's Workload**

*To implement Option One (Authorizing Para-Construction Specialist Positions to Perform Clerical and Administrative Duties):*

22. The Legislature should authorize and fund two full-time para-construction specialist positions for the Bureau of Building as discussed on page xiii. These positions should perform clerical duties and responsibilities that are currently performed by the staff architects and construction project administrators.

*To implement Option Two (Allowing Agencies to Manage State Construction Projects Under \$250,000):*

23. The Legislature should amend MISS. CODE ANN. Section 31-11-3 (1972) to authorize the Department of Finance and Administration Bureau of Building to permit institutions of higher learning and state agencies to manage capital improvement or repair and renovation projects with a total cost of \$250,000 or less.
24. If the Legislature authorizes institutions of higher learning and state agencies to manage capital improvement or repair and renovation projects with a total cost of \$250,000 or less, the Bureau of Building should:

- Develop criteria by which to determine what institutions of higher learning and state entities will be allowed to manage their own projects and allow only those agencies meeting these criteria to manage projects.
- Require that state entities use standard state contracts and procedures for project management as outlined in the bureau's policies and procedures manual.
- Conduct the projects on a reimbursable basis, requiring sufficient documentation for payment requests.
- Revoke an institution's or agency's permission to manage its own projects should it fail to meet one of the bureau's requirements for managing these projects.

*To implement Option Three (Allowing the Department of Archives and History to Manage Historic Preservation projects):*

25. The Legislature should write future bond legislation for historic preservation grant projects that are not state-owned buildings or on state-owned property in such a way as to authorize the Department of Archives and History to manage those funds. Such bond legislation language could be modeled after the language that allows the Mississippi Arts Commission to manage the Building Fund for the Arts (House Bill 1637, 2001 Regular Session).

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# A Review of the Management of the State Construction Process

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## Introduction

### Authority

In response to a legislative request, the PEER Committee reviewed the state construction process, including the Department of Finance and Administration's management of state construction projects through its Bureau of Building (hereafter called the bureau). PEER conducted the review pursuant to the authority granted by MISS. CODE ANN. Section 5-3-57 et seq. (1972).

### Scope and Purpose

The purpose of this review was to determine whether the state's construction process yields quality facilities on time at the lowest possible cost.

PEER sought to answer specific questions regarding the state construction process. PEER first formulated and answered two background questions:

- What are the major components of the state construction process?
- What problems with the state construction process has PEER already identified in previous reports?

The review's final four questions focus on recent developments in this area and identify the problems that still exist.

- How has the state recently attempted to improve the state construction process through statutory and operational changes?
- What impact have exceptions to statutory requirements and inconsistencies in state law had on the state construction process?
- What statutory requirements and management policies or practices still contribute to inefficiencies in the state construction process?

- How does the workload of the Bureau of Building affect its management of the state construction process?

## Method

In conducting this review, PEER:

- reviewed laws, policies, and procedures related to the pre-planning, planning, and construction phases;
- compared policies, procedures, and professional/construction contract standards from six states in the southeastern region (Alabama, Arkansas, Florida, Georgia, Louisiana, Tennessee) with those of Mississippi;
- analyzed requests for proposals and professional selection grading criteria for sixteen building construction projects costing \$1 million or more in order to determine whether proper documentation exists;
- reviewed the Bureau of Building's policies and procedures on bonds and bond legislation;
- interviewed staff of the Bureau of Building, Department of Archives and History, and State Treasurer's Bond Division;
- reviewed project data through the bureau's Project Accounting and Tracking System (PATs);
- reviewed change order documentation on selected projects, including the Sillers Building, Department of Archives and History Building, and the New Supreme Court Facility; and,
- surveyed members of the National Association of State Facilities Administrators regarding construction management practices and overhead/profit percentages.

PEER also reviewed relevant information obtained from the construction industry, the State Treasurer, Attorney General, the State Auditor, and the Department of Finance and Administration's regulations and policies. PEER also interviewed state government personnel and officials from Mississippi and other states.



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# Background

## Construction of Public Buildings in Mississippi

The state construction process for public buildings in Mississippi is a four-phased, sequenced construction process with multiple participants. These construction phases are: *pre-planning*, during which the state entity prepares a construction needs request with a tentative project budget; *planning*, during which design professionals prepare definitive plans and contract documents and the contract is awarded to a general contractor; *construction*, during which the general contractors and trade contractors complete the actual building work; and, *post construction*, when final acceptance, start-up, and occupancy occur. (Appendix A, page 57, contains a glossary of terms related to the construction of public buildings and Appendix B, page 60, lists the major tasks in the construction process for state buildings).

To help entities through the construction process, the Bureau of Building serves as the construction program manager for projects constructed with funds regardless of funding source. The exceptions to this are projects exempted by statute or the state constitution, such as:

- public school district projects that are funded with state funds;
- institutions of higher learning, community and junior colleges, and State Military Department projects paid for by federal, self-generated, local, or other non-state funds; and,
- any construction project specifically exempted in legislation.

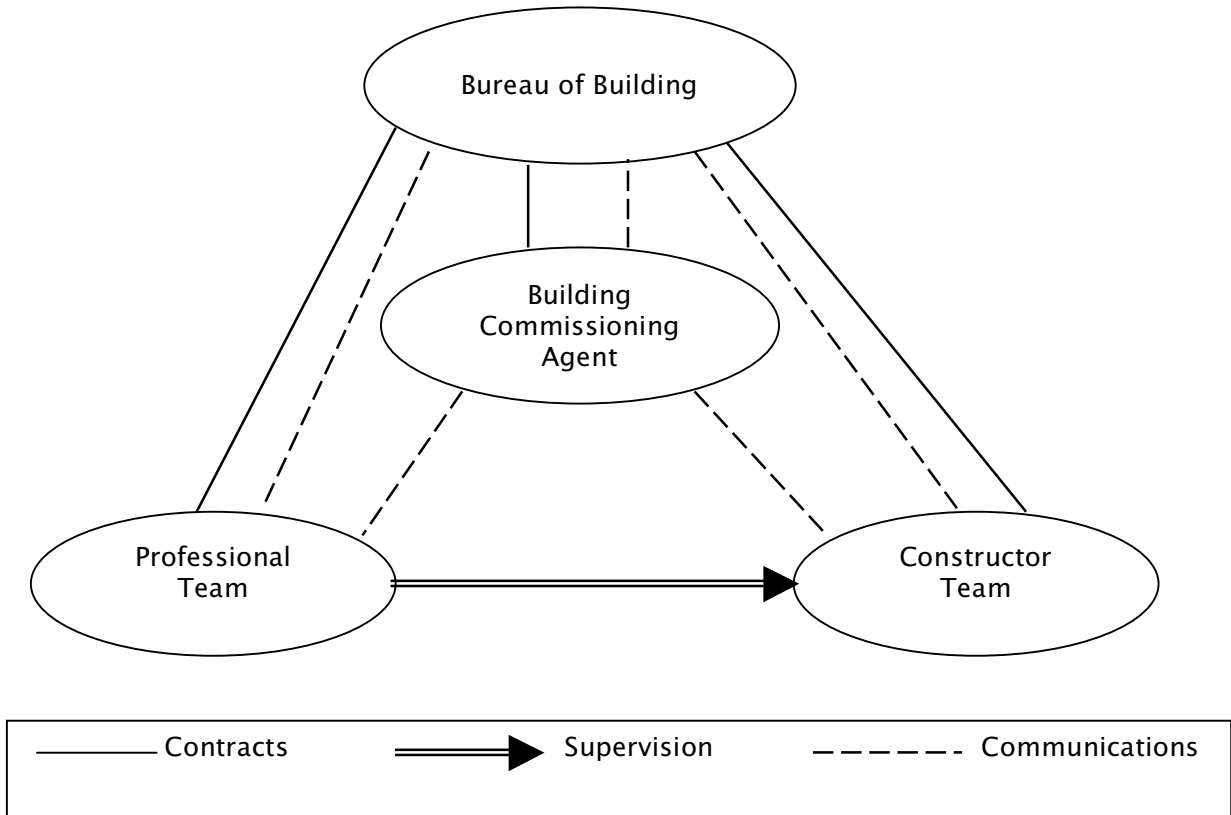
## Responsibilities of the Bureau of Building in the Construction of Public Buildings

For those projects for which it is responsible, the Bureau of Building represents the interests of the entity and exercises independent oversight of the professional contractor and constructor team (general contractor and sub-contractors). The Bureau of Building, professional team, constructor team, and a building commissioning agent, when applicable, enter a contractual relationship for

a project.<sup>1</sup> Exhibit 1, below, illustrates the relationships that exist between these participants.

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**Exhibit 1: Relationship Between the Bureau of Building, Building Commissioning Agent, Professional Team, and Constructor Team**



SOURCE: PEER analysis of Bureau of Building’s Engineering and Construction Manual

NOTE: For projects estimated to cost \$3 million or more, the Department of Finance and Administration now contracts with a building commissioning agent who serves as a communication line between the Bureau of Building and the professional and constructor teams.

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The Bureau of Building exercises direct oversight of architects, engineers, building commissioning agents and other contract professionals, while it performs indirect supervision of the construction contractors through the primary professional contractor and the building commissioning agent. Because the bureau does not have the in-house capability to perform some of the design and

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<sup>1</sup> Effective November 24, 2004, the state began involving a building commissioning agent in the contractual relationship for projects estimated to cost over \$3 million. See page 16 for a discussion of the building commissioning agent concept.)

construction tasks that some private construction program managers can provide, it may employ engineers, contract analysts, architects, or construction project administrators to manage and monitor projects.

The bureau has authority to compel adherence to contract specifications and schedules, applying sanctions to firms or individuals within the constructor team that do not fulfill their responsibilities.

Following are the Bureau of Building's specific responsibilities within the four construction phases:

1. *Pre-planning phase*--A state entity submits its construction needs request, including a tentative budget, to the Bureau of Building or a professional consultant. The bureau may also initiate projects and contract for pre-planning and developing a master program.

After reviewing or modifying the project after consultation with the requesting entity, if necessary, the Bureau of Building includes the request, along with a schematic design, in its annual construction budget submission to the Legislature.

The Legislature determines which projects to approve and considers funding. Most capital improvement projects must adhere to the two-phase funding requirements established in MISS. CODE ANN. Section 31-11-30 (1972) (see page 15 for an explanation of the two-phase funding requirement). Pre-planning is the first phase of the requirement and must be funded in a separate legislative session from the second phase of funding for construction. Once funding is made available, the Bureau of Building is responsible for managing the funds through phases of the construction process. The bureau accomplishes its management responsibilities in this phase through a staff architect who works with the requesting state entity and the necessary design or other professional contractors, including a building commissioning agent. This agent primarily focuses on planning in detail the scope and extent of the commissioning services in order to ensure that the occupant's needs for facility design and operations are met as defined and approved in the architect's design intent document. At the end of this phase, the Bureau of Building contracts with a design professional for definitive plans and contract documents for bidding and awarding the construction contract to a general contractor.

2. *Planning phase*--The bureau or the building commissioning agent is responsible for reviewing and analyzing the professional's deliverables to help

ensure that the project will achieve its goals for budgeted cost, schedule, construction quality, and code compliance. The building commissioning agent also enhances the design document review by ensuring that the design documents (1) are consistent with the design intent; (2) specify commissionable systems; (3) include inspection and testing details; (4) include verifiable equipment parameters (5) incorporate a layout that allows testing and maintenance; and (6) fully describe the commissioning process for the construction contract bidders. The agent then reviews the construction contract documents to confirm that each piece of equipment or system can be tested and measured against confirmable objective performance parameters and writes the commissioning plan that includes the commissioning specifications. The bureau approves the professionals that the professional contractor hires to perform contract work.

3. *Construction phase*--The Bureau of Building contracts with a general contractor to accomplish the construction project work in accordance with the architect's plans and any bureau-approved modifications through a change order process. The general contractor also conducts the contract award process for trade contractors and exercises contract administration. The bureau has no contractual relationship with the trade contractors.

During this phase, the Bureau of Building normally hires the architect (for an additional fee) to supervise and administer the work of the general contractor and trade contractors. The bureau retains responsibility for project management and accomplishes this responsibility through construction administrators who oversee the professional contractor and overall project management as well as its building commissioning agent who ensures that the construction contractor successfully fulfills the commissioning plan for the project. Other actions include configuring and installing communications networks and computer infrastructure, as well as buying and installing furniture and equipment.

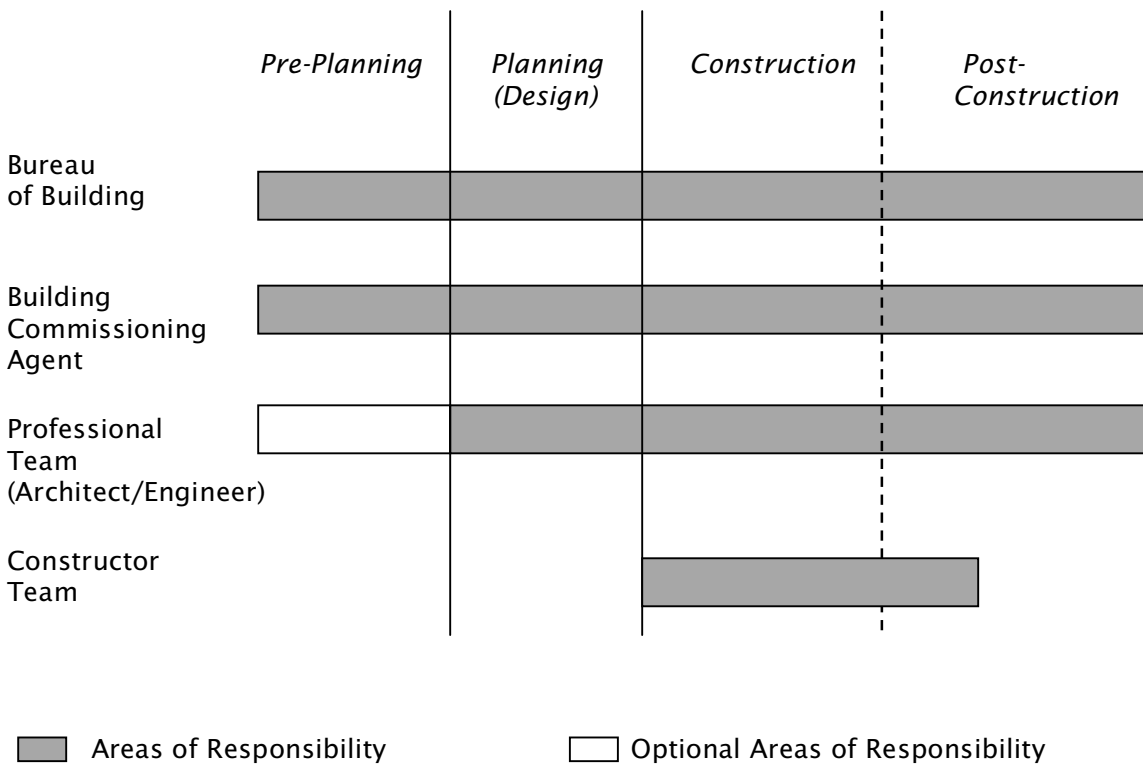
4. *Post Construction phase*--Working with the general contractor, the Bureau of Building, through its professional contractor and building commissioning agent, is responsible for final acceptance, start-up, and occupancy of the project. The bureau has the option of hiring the professional contractor to perform these responsibilities for an additional fee

since it is not a basic design service; however, it does not usually exercise this option.

Exhibit 2, below, shows the responsibilities of each participant in each of the four phases. Appendix C on page 61 shows the duties and responsibilities of the contract architect and bureau's staff. Appendix D on page 62 shows the services performed by a building commissioning agent.

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**Exhibit 2: Distribution of Responsibilities in the Four Phases of State Construction Projects**



SOURCE: PEER's review of state construction process.

NOTE: The Bureau of Building assumed pre-planning responsibilities when the Legislature changed the budgeting and funding process for new construction and renovation repair projects over \$1 million in the 2000 Regular Session, effective April 30, 2000. For projects \$3 million or more, a building commissioning agent now assumes responsibility for monitoring all four construction phases.

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# Components of Managing the State Construction Process

The construction process for public buildings in Mississippi is a four-phased, sequenced construction process with multiple participants. Each phase of the process has components that must be accomplished to meet the goal of building quality facilities on time at the lowest possible cost to state citizens.

Although the construction process involves multiple tasks within each phase, as shown in Appendix B, page 60, PEER determined that the major components of the state construction process, or ones that will have the biggest effect throughout several phases and on the overall outcome of the projects, are:

- selecting and approving projects;
- selecting professional contractors;
- appropriate use of bond financing;
- managing change orders; and,
- implementing quality assurance methods.

These components are common to all construction projects. PEER has noted in previous reports that the state could improve in some of these areas (see “Problems Identified in Previous PEER Reports Regarding the State Construction Process,” pages 11 through 14) and offers additional suggestions for improvement as a result of this most recent review (see “Conditions that Impair Management of the State Construction Process,” pages 24 through 44). Following is a discussion of the nature of each of these components and their importance in affecting the success of each project.

## Selecting and Approving Projects

During this component, decisions should be made regarding need for the project, type of project to best fulfill the need, estimates of cost, and priority of the project. The state should use an objective and documented process that:

- allows entities to identify and justify their proposed construction projects and estimated costs;
- evaluates projects by need and estimated cost;
- prioritizes projects based on need and cost relative to the total package of proposed projects and estimated available funding; and,

- results in an annual capital improvement budget proposal, including prioritized needs and costs.

This type of decisionmaking process is necessary to ensure that the state uses its limited resources to meet its most pressing construction needs in a timely manner.

## Selecting Professional Contractors

In selecting professional contractors, decisionmakers should develop and implement a process that will ultimately result in selection of the most qualified professional to perform the job. The selection should be made with input from stakeholders, should be fair, and should avoid any appearance of bias. Ideally, the selection process should be structured and objective, using pre-determined evaluation criteria with written policies and procedures for rating the candidates and documenting the results.

## Appropriate Use of Bond Financing

In financing construction projects, the state should minimize the use of bond financing because of the additional debt service costs associated with the bonds. Such financing should only be used for capital improvement projects including associated real property that is part of the project or for items having a life expectancy at least as long as that of the financing period, usually twenty years. Also, any unused bond proceeds should be utilized to retire associated bond debt early rather than financing new projects that were not within the scope of original approval.

## Managing Change Orders

A change order is a written agreement between parties involved to change a building construction contract. Change orders add to, delete from, or otherwise alter the work set forth in the contract documents at the time that the construction was bid. As the legal means for changing contracts, change orders are standard in the construction industry. Change orders may result for numerous reasons--e.g., change in scope for the project, unforeseen conditions, or professional errors and omissions.

To ensure that changes to building construction contracts are justified and cost-efficient, the oversight process should include assessment of the reasoning for and cost efficiency of the change order and retention and use of experience data in future decisionmaking. Also, the cost

of any change orders resulting from design errors, design omissions, or documentation deficiencies should be paid by the responsible contractor through liability insurance or directly from company assets. Contractors responsible for errors and omissions should not receive any additional payments for work associated with these types of change orders.

## Implementing Quality Assurance Methods

The state should use whatever means available to assure quality design and construction in its projects in order to maximize the quality and useful life of the project at the lowest possible cost. To achieve this goal requires the use of quality assurance methods (e.g., life cycle costing, value engineering). Improvements in quality and cost benefits achieved through these methods should be reported and documented in project records for future reference.



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## Problems Identified in Previous PEER Reports Regarding the State Construction Process

Two 2002 PEER reports, *The Bureau of Building's Management of Construction Change Orders* and *The Department of Finance and Administration's Management of Construction Projects at Selected State-Owned Buildings*, are the most recent PEER reports dealing with management of the state's construction process. Those reports discussed areas of weakness in the Bureau of Building's change order management, the Project Accounting and Tracking System, and in the estimation of debt service. The following sections summarize PEER's 2002 conclusions and recommendations regarding these issues.

### Change Order Management

As noted on page 9, a change order is a written agreement between the parties involved to change a building construction contract. As the legal means for changing contracts, change orders are standard in the construction industry. In 2002, PEER found problems with the Bureau of Building's review of change orders, with the overhead and profit paid for change orders, and with payment for errors and omissions.

### Problems with the Bureau's Review of Change Orders

In 2002, PEER noted that the bureau's oversight of change orders fails to assure that cost changes to building construction projects are reasonable. The bureau's standard professional contracts did not require professionals to analyze the reasonableness of change order costs nor did the bureau require that contract professionals certify in writing that the cost of the change order has been analyzed and found to be reasonable. The bureau had no internal process for analyzing the costs of change orders for accuracy or reasonableness or for verifying that the change order was not already a part of the original contract. Also, the bureau had no formal process to identify professional design errors and omissions.

These problems were compounded by the fact that the bureau had not developed a change order cost review process to protect the state against the inherent conflict of interest for contract professionals (i.e., a personal financial incentive to approve change orders that result in

additional costs versus ethical obligations to the state). The bureau's management of change orders at four state-owned buildings contributed to cost overruns.

PEER recommended a modified change order form with a cost summary sheet to be completed for each contractor that breaks out the component costs of the change order (e.g., labor, fringe benefits, materials); a mandate for each contractor to substantiate with written documentation the fringe benefit rate to be charged for the project; and that the bureau determine long-term debt service cost for work associated with each change order. Appendices E and F, pages 63 and 65, include the recommendations made in PEER's 2002 reports *The Department of Finance and Administration's Management of Construction Projects at Selected State-Owned Buildings* and *The Bureau of Building's Management of Construction Change Orders*.

Pages 35 through 38 of this report discuss the status of implementation of these conclusions and recommendations.

### **Problems with Overhead and Profit Paid for Change Orders**

In 2002, PEER found that Bureau of Building was paying both the general and trade contractors the maximum 20% overhead and profit for a change order even when a trade contractor solely performed the work. The combined 40% rate was the highest among eleven other surveyed states, with the next highest state having a combined rate of 27.5%.

PEER recommended that the bureau reduce the overhead and profit percentage paid to general and trade contractors and that the bureau set a maximum total percentage for such regardless of the number of persons involved in the contract.

Pages 38 through 40 of this report discuss the status of implementation of this conclusion and these recommendations.

### **Problems with Paying for Errors and Omissions in Change Orders**

PEER also found in 2002 that the bureau was paying for change order work that was the result of a professional's design error or omission and was not, in turn, filing an insurance claim for such work. In addition to paying for the actual change order work, the Bureau of Building was also paying additional fees to professionals for overseeing the work.

PEER recommended that the bureau file insurance claims for all change order work caused by the professional's

design errors, omissions, or documentation deficiencies and that the bureau should not pay any additional fees to the professional team for such change orders.

Pages 40 through 42 of this report discuss the status of implementation of these conclusions and recommendations.

## The Bureau of Building's Project Accounting and Tracking System

The Bureau of Building uses the Project Accounting and Tracking System (PATS) to account for and track data throughout the phases of construction projects. The Project Accounting and Tracking System also provides a way to make queries and the capability to change project data as needed. The system's design allows bureau managers to obtain project reports on an as-needed basis.

The Bureau of Building also uses the Project Accounting and Tracking System to manage the additional fees for the professional team when it approves a change order for the construction team. These fees are computed using a logarithmic formula that depends on the project construction cost and the fee complexity rating, as determined by the building classification.

In 2002, PEER determined that the Project Accounting and Tracking System did not capture critical management information for controlling cost or time. As a result, the bureau managers did not have access to some project information that would have helped to identify and correct project management problems. The system also was not designed to measure actual project accomplishments at various milestones from project initiation to project completion or to identify time deviations from the planned project budgets and schedules.

PEER recommended that the Bureau of Building modify the Project Accounting and Tracking System to capture milestones essential in tracking time and cost and use these data elements for management purposes. PEER also recommended that the bureau modify PATS to provide management reports to the Department of Finance and Administration (DFA) on a routine or real-time basis and to capture information concerning bureau and professional team visits to construction sites and project meetings. Additionally, PEER recommended that the Bureau of Building modify PATS to capture the following data elements for change orders and use the information for management purposes: initiator, category, type, and average processing days measured from the date the change order is formally requested.

Page 43 of this report discusses the status of implementation of these conclusions and recommendations.

## Estimating Project Debt Service

In 2002, PEER found that the bureau's capital needs study that was reported annually to the Legislature listed only proposed projects and estimated project costs, without showing the estimated total long-term debt service for the projects.

PEER recommended that the Legislature amend state law to require the Department of Finance and Administration, in reviewing and reporting on project preplanning, to estimate and report to the Legislature the projected debt service costs for each preplanned project.

Pages 28 through 34 of this report discuss the status of implementation of this conclusion and relevant recommendations.

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## Recent Attempts to Improve the State Construction Process

In recent years, the Legislature and the Department of Finance and Administration have attempted to improve management of the state construction process through statutory and operational changes. The Legislature has changed state law to address the budgeting of and accountability for construction funds. DFA has implemented a more thorough project evaluation system when selecting and approving projects, as well as a quality assurance method called building commissioning.

### Statutory Change Affecting the State Construction Process

**In 2000, the Legislature established a two-phase funding and approval process for construction projects.**

The Legislature passed Section 6, Chapter 531, *Laws of 2000*, codified as MISS. CODE ANN. Section 31-11-30 (1972), to establish a two-phase legislative approval process for pre-planning and construction authority. The goal was to establish a more accurate budgeting and funding process for new construction projects and proposed major repair and renovation projects over \$1 million.

**The two-step funding and approval process incorporates the Bureau of Building's staff in preplanning for projects, including making site visits and determining the most precise project estimates possible.**

In the first phase, the Department of Finance and Administration (DFA) selects the proposed project from the list submitted by agencies and institutions (see page 16) and presents a pre-planned capital improvements project budget projection to the Legislature for consideration for funding. For each project, the Department of Finance and Administration submits a cost estimate to establish a baseline budget for construction projects.

In the second phase, DFA presents a refined estimate that includes the costs of repair, renovation, construction remodeling, addition to or improvement of the building, and acquisition of furniture and equipment for that building. The Legislature funds this phase in a separate legislative session from the first phase.

The two-step funding and approval process incorporates the Bureau of Building's staff in preplanning for projects, including making site visits and determining the most precise project estimates possible. The Legislature then has the opportunity to review and consider the project twice before final authorization.

Exceptions to the two-phase legislative approval and funding process are discussed beginning on page 20.

## Improvements in the Bureau of Building's Evaluation of Proposed Projects

**In the FY 2004 annual Needs Assessment provided to the Legislature, the Bureau of Building began identifying the projects it recommends for construction. The bureau also now shows the estimated annual debt service cost of each project.**

In selecting and approving construction projects, the evaluation of projects begins with the Bureau of Building's submitting a request to the entity (a college, university or agency) for a prioritized listing of projects to be considered for capital improvements. In spring or summer, the entity submits a list prioritized by need. The Bureau of Building's Director, Deputy Director, staff architects, and Facilities Management Advisory Committee of the Legislature then make site visits to these entities in the summer. After site visits, Bureau of Building staff meet with the Facilities Management Advisory Committee to select and prioritize projects for funding. The Bureau of Building completes the project evaluation by submitting all projects for funding in a Needs Assessment manual to the Legislative Budget Office in September for the following fiscal year's budget.

**The Bureau of Building submits a list of projects for funding in a Needs Assessment manual to the Legislative Budget Office in September for the following fiscal year's budget.**

Before FY 2004, the Bureau of Building did not clearly identify those projects recommended by the Bureau and the Facilities Management Advisory Committee in the annual Needs Assessment. The bureau also did not show any estimated debt service for each project submitted. The bureau now uses a more detailed process for identifying prioritized projects for funding. In the 2006 Needs Assessment, the bureau indicated with arrows the projects it recommended of those projects listed as priorities submitted from each entity. Also, the bureau has added a column that lists the estimated annual debt service costs of each project.

## Implementation of the Building Commissioning Concept

**In an attempt to reduce costs and enhance projects' long-term value, in 2004 the Bureau of Building began utilizing a building commissioning agent for construction projects estimated to cost \$3 million or more.**

*Building commissioning* is a quality assurance process the Bureau of Building began implementing on November 24, 2004, for all new state construction projects estimated to cost three million dollars or more. The bureau adopted building commissioning as a management practice; no state law or regulation requires building commissioning.

## Purpose of Building Commissioning

*In his role of providing quality assurance, the building commissioning agent serves as a communications link between the professional team, constructor team, and Bureau of Building to ensure that building projects meet the need of the agency or institution in the most efficient manner.*

**The primary purpose of building commissioning is to provide a quality-based process in the delivery of constructed projects that will reduce costs and enhance projects' long-term value.**

The primary purpose of building commissioning is to provide a quality-based process in the delivery of constructed projects that will reduce costs and enhance projects' long-term value. The building commissioning process begins in the pre-planning phase, continues through the construction phase, and ends after the one-year warranty ends.

The building commissioning agent is an independent professional consultant and not an employee or subcontractor of the general contractor. The building commissioning agent offers insight during planning, design, construction, turnover, and occupancy to mitigate problems such as unclear design intent, conflicts between drawings and specifications, or inadequate provisions for maintenance. The Bureau of Building is the main overseer and final decisionmaker in all building commissioning decisions during the phases of the construction process. The building commissioning agent reports directly to the Bureau of Building and provides a written report updating the quality assurance activity performed during each phase. The building commissioning agent is a communications link between the professional team, constructor team, and Bureau of Building to ensure that building projects meet the need of the agency or institution in the most cost efficient manner. Appendix G, page 69, lists the criteria for selecting a building commissioning agent in the state building construction process, and Appendix D, page 62, lists the major services to be performed by a building commissioning agent.

The Bureau of Building is using guidelines established by Emory University and the National Association of State Facilities Administrators as a model for the building commissioning process in Mississippi.

## Cost of Building Commissioning

*The National Association of Facilities Administrators estimates that fees for building commissioning agents would range from 1.25% to 2.25% of total project cost. The ultimate success of this concept must take cost into consideration, along with quality outcomes.*

The ultimate success of building commissioning in Mississippi must be determined, in part, by balancing its cost with quality outcomes. Mississippi has so far utilized building commissioning for only one project, at a total cost of \$31,800 for the total project budget of

\$11,144,708. However, this cost will not be typical of most building commissioning projects, since the cost only includes building commissioning for work completed in the construction phase due to the late implementation of this process. Most building commissioning costs will significantly exceed this amount when building commissioning starts from the beginning of the pre-planning phase. Georgia, the only other southeastern state that utilizes building commissioning, began the practice in 2002, but has not tracked any cost savings associated with the building commissioning process thus far.

**For currently active projects, at rates charged for building commissioning ranging from 1.25% to 2.25%, the total cost to the state for projects estimated to cost \$3 million or more would be between \$7 million and \$12 million.**

To determine the potential costs of implementing building commissioning in Mississippi for currently active state construction projects, PEER produced a report of active projects from DFA's Project Accounting and Tracking System (PATs) database. As of February 2005, the PATs database showed 464 active projects (i.e., projects showing actual expenditures). PEER categorized these projects by projected budget amount (See Exhibit 3, page 19, for categories), then multiplied the total expenditures in each category by 1.25% and 2.25% (the range of percentage fees that the National Association of Facilities Administrators estimates would be charged by building commissioning agents).

For active projects, at the above range of rates, the total cost to the state for projects estimated to cost \$3 million or more would be between \$7,125,335 and \$12,825,603. If the bureau began commissioning projects ranging in cost from \$1 million to \$2.99 million, the additional cost would range from \$1,577,669 to \$2,839,804. As noted above, the ultimate success of this concept must take cost into consideration, along with quality outcomes.



**Exhibit 3: Expenditures for Active State Construction Projects and Estimated Cost of Building Commissioning for Those Projects (As of February 2005)**

| <b>Project Category (by Project Budget Amount)*</b> | <b>Number of Projects</b> | <b>Percent of Total Projects</b> | <b>Total Project Budget Expenditures to Date</b> | <b>Percent of Total Project Budget Expenditures</b> | <b>Estimated Cost of Building Commissioning (1.25% to 2.25%)</b> |
|---|---------------------------|----------------------------------|--|---|--|
| Up to \$1,000,000                                   | 321                       | 69.2%                            | \$107,640,365                                    | 13.4%   | not applicable   |
| \$1,000,000 to \$2,999,999                          | 76                        | 16.4%                            | 126,213,531                                      | 15.7%   | \$1,577,669 to \$2,839,804                                       |
| \$3,000,000 or more                                 | 67                        | 14.4%                            | 570,026,821                                      | 70.9%   | \$7,125,335 to \$12,825,603                                      |
| Totals  | 464                       | 100%                             | \$803,880,717                                    | 100%  | \$8,703,004 to \$15,665,407                                      |

SOURCE: The Bureau of Building and Project Accounting and Tracking System records

\*The Bureau of Building's current practice is to contract with building commissioning agents for projects estimated to cost \$3 million or more.

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# The Effect of Exceptions and Inconsistencies on Management of the State Construction Process

Management of the state construction process is affected to a certain extent by exceptions and inconsistencies in state law. MISS. CODE ANN. Section 31-11-30 (1972) provides an exception to the two-phase funding and approval requirement for emergency and critical need projects. Community and junior colleges' construction projects are not held to the two-phase funding and approval requirement because these buildings are not considered to be state-owned buildings. Also, bond legislation for community and junior college projects is not consistent with other bond legislation that requires bond funds to be spent on specific projects.

## Exceptions to the Two-Phase Funding and Approval Requirement

### Emergency or Critical Need Projects

**MISS. CODE ANN. Section 31-11-30 (1972) provides an exception to the two-phase funding and approval requirement for emergency and critical need projects. However, because neither the law nor the Bureau of Building has standards or criteria for determining critical need, this exception could provide a “loophole” for avoiding the accountability imposed by the two-phase funding requirement.**

As noted on page 15, in 2000 the Legislature established a two-phase funding and approval requirement, codified in MISS. CODE ANN. Section 31-11-30 (1972), to implement a more precise budgeting and funding process for proposed construction and repair/renovation projects.

Some types of projects are not subject to the two-phase funding requirements in Section 31-11-30. In addition to providing exceptions for projects authorized before the 2001 Regular Session of the Legislature, projects of a state-owned port, or projects mandated by court order, the section provides an exception for projects related to emergency or critical need.

MISS. CODE ANN. Section 31-11-30 (1972) allows projects for which the Legislature determines that an emergency exists to be exempt from two-phase funding and approval. According to the Bureau of Building's policies and procedures manual, an emergency is “an unforeseen occurrence damaging facilities and necessitating immediate action.” According to MISS. CODE ANN. Section 31-7-1 (f) (1972), *emergency* shall mean:

*. . .any circumstances caused by fire, flood, explosion, storm, earthquake, epidemic, riot,*

**Other exceptions to the two-phase funding and approval requirement are projects authorized before the 2001 Regular Session of the Legislature, projects of a state-owned port, or projects mandated by court order.**

*insurrection or caused by any inherent defect due to defective construction, or when the immediate preservation of order or of public health is necessary by reason of unforeseen emergency or when the immediate restoration of a condition of usefulness of any public building, equipment, road or bridge appears advisable.*

Although Section 31-7-1 defines “emergency” for purposes of the exception to the two-phase funding and approval requirement, Section 31-11-30 does not establish standards or criteria to use in determining which projects are “critical need.” According to the Director of the Bureau of Building, in the past the bureau has interpreted critical need to include cases involving the need for a facility to meet accreditation standards and to respond to construction pressures due to improper planning or deadline demands.

**Because of the necessity of prioritizing expenditures and making the best use of resources, the state should use standards or criteria in determining critical need for construction projects.**

Emergencies and critical need may be valid reasons for bypassing the two-phase funding and approval requirement. However, because of the necessity of prioritizing expenditures and making the best use of resources, the state should use standards or criteria in determining critical need for construction projects. If no standards or criteria are in place by which to judge critical need, the possibility exists that “critical need” might be used as a loophole for avoiding the level of accountability that the two-phase funding requirement imposes.

## **Community and Junior College Projects**

**Community and junior colleges’ construction projects are not held to the requirements of MISS. CODE ANN. Section 31-11-30 (1972) because these buildings are not considered to be state-owned buildings. However, these projects utilize funds from general obligation bonds repaid by the taxpayers of Mississippi and should be subject to some form of accountability review such as the two-phase funding and approval process.**

Construction projects of the community and junior colleges are not within the scope of the two-phase funding requirement in MISS. CODE ANN. Section 31-11-30 (1972) because these buildings are not considered to be state-owned facilities.

MISS. CODE ANN. Section 37-29-5 (1972) vests title to community or junior college property in the individual boards of trustees. MISS. CODE ANN. Section 37-4-1 (1972) provides that local community or junior college boards of trustees are local governmental agencies and not state agencies. Also, several opinions of the Attorney General’s Office support the proposition that local community colleges are local governmental entities and not state

**At present, the bond funds that the Legislature provides to the community and junior colleges for construction may be utilized without the level of accountability imposed by the two-phase funding requirement.**

entities. Thus buildings constructed for community and junior colleges are not considered to the state-owned buildings. The requirements of MISS. CODE ANN. Section 31-11-30 (1972) apply to state-owned buildings.

However, even though community and junior colleges are considered local governmental entities and their construction projects are not considered state-owned buildings, these projects are financed with funds from state general obligation bonds repaid by the state's taxpayers. At present, the bond funds that the Legislature provides to the community and junior colleges for construction may be utilized without the level of accountability imposed by the two-phase funding requirement. Recently, Senate Bill 2010, Third Extraordinary Session of 2004, authorized \$50 million in bonds for construction projects at community and junior colleges. These funds may be expended without being subject to two-phase funding and approval.

Because the Legislature makes decisions regarding issuance of bonds for construction projects, the community and colleges should be subject to some type of preplanning requirement that requires a level of accountability such as that provided by the two-phase funding and approval process. By comparison, when governmental or nonprofit bodies issue grants, grantees provide planning information and estimated expenditures by virtue of fulfilling a requirement for receiving the grant. A similar arrangement should be in place for the state's supply of public funds for construction projects of the community and junior colleges.

## **Statutory Inconsistencies**

**While most legislation that authorizes issuance of bonds for construction projects lists those projects and the amount of bond funds to be used for each project, some bond legislation (such as that for community and junior colleges) does not tie bond funds to specific projects, thus reducing accountability for spending.**

PEER reviewed bond legislation from 2002 through 2004 and found that while much of the state's bond legislation does tie specific amounts of bond funds to specific capital improvements or repair and renovation projects, some does not. Some, such as legislation for construction projects at community colleges, gives a total amount to be used at each community college but does not designate specific projects.

For example, Senate Bill 2010, 2004 Third Extraordinary Session, provides \$13,600,000 for projects at Alcorn State University and specifies that \$12,600,000 of those funds be used for design, construction, furnishing, and equipping of a new dining facility and \$1,000,000 be used for construction of a new baseball stadium, field, and

related facilities. However, the same bill provides \$2,429,419 for Coahoma Community College but does not specify the projects for which the funds should be used. The bill states only that the funds provided for community and junior colleges should be used for the acquisition of real property, construction of new facilities, equipping and furnishing facilities, and renovation of existing facilities as recommended by the State Board of Community and Junior Colleges.

**By omitting a listing of specific projects, the law allows for the possibility of entities' spending the funds for projects that the Legislature might determine to have a lower priority or level of need than projects of other state entities.**

By listing specific projects to be funded with a specific amount listed for each project, the Legislature makes its preferences known regarding use of bond funds and can hold agencies and institutions accountable for use of the funds. By omitting a listing of specific projects, the law allows for the possibility of entities' spending the funds for projects that the Legislature might determine to have a lower priority or level of need than projects of other state entities. Thus, the Legislature in effect foregoes its policymaking and approval role for state-funded construction projects by not listing these projects in bond legislation.

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## Conditions That Impair Management of the State Construction Process

**Mississippi's construction process for state buildings generally functions well, but needs refinement in the following areas to protect the state's best interests in construction and renovation of its buildings: additional, more precise information for considering projects for selection and approval; consistency in documenting selection of contractors; more appropriate use of bond financing; improved change order management; and proof of implementation of quality assurance.**

**PEER compared Mississippi's state building construction policies, procedures, and contract standards to those of six states in the southeastern region and found them to be consistent with those of the other states.**

In conducting background research for the review, PEER attempted to identify best industry practices in state construction management. Although PEER could not identify any such "best industry practices," PEER compared Mississippi's state building construction policies, procedures, and contract standards to those of six states in the southeastern region and found them to be consistent with those of the other states.

However, PEER did identify areas within the five major components of the state construction process (see pages 8 through 10) that need improvement in order to protect the state's best interests regarding the construction and renovation of buildings. PEER found that the state's construction process needs:

- additional, more accurate information when considering projects for selection and approval;
- consistency in documenting selection of professional contractors;
- more appropriate use of bond financing;
- improvement of change order management; and,
- to ensure implementation of quality assurance.

This chapter discusses the need in each of these areas.

## Need for Additional, More Precise Information When Considering Projects for Selection and Approval

***Although the Bureau of Building now includes estimates of the annual debt service costs for each construction project in its annual capital improvements needs assessment provided to the Legislature, it does not provide estimates on the long-term debt service costs of each project. Also, the method the bureau uses to estimate debt service is not the most precise method available for estimating the debt service costs of a project.***

MISS CODE. ANN. Section 31-11-27 (2) (a) (x) (1972) requires DFA to include in its annual capital improvements needs assessment:

*The proposed method of financing each project and the effect such financing will have on the state budget, including an estimate of any required debt service for the project. . . .*

In its FY 2006 capital improvements needs assessment provided to the Legislature, the bureau began including estimates of the annual debt service costs of each construction project. However, the information presented to the Legislature does not provide an estimate of the total debt service for the project, including principal and interest that would be paid for the life of the bond and the anticipated actual cost of funding the project. Thus the Legislature does not have a total picture of the “effect such financing will have on the state budget.”

**Although the method that the bureau uses to estimate the annual debt service payment for the capital improvements needs assessment is a standard industry method, it does not take into account fluctuations in bond rates.**

The method that the Bureau of Building uses to estimate the annual debt service payment for the capital improvements needs assessment is to multiply the anticipated project cost by 8%, which is, according to the director of the bureau, a standard industry method. The Bureau of Building’s current method of estimating debt service does not take into account fluctuations in bond rates and its use may mean that legislative decisionmakers are not receiving the most precise information possible with which to decide how the state’s limited resources are to be used.

According to the Director of the Mississippi Treasury Department Bond Division, that division uses a computer software program called Munex to estimate long-term debt service and annual debt service payments. Munex uses the current rates at the time the debt service is estimated and projects the debt service costs over the life of the bond, taking into account compounding and payments toward interest and principal. The Director of the Treasury Department’s Bond Division stated that DFA’s Bond Advisory Division has this same software and could

estimate the debt service costs using the same method as does the Treasury Department.

## Need for Consistency in Documenting Selection of Professional Contractors

*Although the Bureau of Building has improved its documentation of the contractor selection process since the changeover in administrations, the bureau still is not consistent in documenting individual steps in the process.*

### The Bureau's Process for Selecting Contractors

*Since FY 2004, the Bureau of Building has revised its practices to include documentation in the project file for both pre-selection grading/evaluation and final selection grading/evaluation.*

The Bureau of Building requires each professional who seeks to be a contractor for a state building construction project to maintain on file with the bureau an updated contact information form (known to the bureau and the contractors as an M-54 form). The bureau sends requests for proposals (RFPs), which list upcoming projects of \$1 million or more, to professionals who have updated M-54 forms on file. For those projects in which they are interested, the professionals respond to the bureau with a form (known to the bureau and the contractors as an M-55 form) that provides information on their employees and subcontractors who would potentially be used for the project.

**Although the bureau has revised its practices to include documentation in the file for both pre-selection grading/evaluation and final selection grading/evaluation, the bureau does not have a formal, written policy stating that the staff should use these methods of documenting the process of contractor selection.**

The bureau then compiles a list of all respondents to the RFP and conducts a pre-selection process to narrow the number of responding professional firms to three. Once the bureau narrows the list of candidates to three, the bureau's staff interviews and review presentations from the final three candidates for the final selection process. The bureau evaluates professionals on pre-determined grading criteria and scores them based on total points awarded from each grading criteria category. The individual or firm with the highest score of a possible 100 points is the firm awarded the contract for the job. However, the bureau may award the project to the second or third candidate on the basis of factors such as a firm's workload or proximity to the job.

Since FY 2004, the Bureau of Building has revised its practices to include documentation in the project file for both pre-selection grading/evaluation and final selection grading/evaluation. The bureau does not have a formal, written policy stating that the staff should use these methods of documenting the process of contractor selection.



## PEER's Sample of Project Files Regarding the Bureau's Contractor Selection

*Although the bureau is making attempts to ensure that files contain proper documentation of requests for proposals and grading/evaluation, the bureau still is not consistent in ensuring that the entire contractor selection evaluation process is documented in project files.*

**Of the sixteen project files PEER reviewed, none contained all three forms of documentation for contractor selection.**

To determine how the bureau has documented its selection of professional contractors, PEER identified 222 project files for construction projects costing \$1 million or more in the bureau's Project Accounting and Tracking System. PEER's objective was to review the bureau's documentation of the contractor selection process prior to and subsequent to the change in administrations in 2004.

PEER evaluated the documentation present in files for sixteen active projects to determine if they contained these three forms of documentation (i.e., request for proposals, grading/evaluation criteria form, and final selection grading/evaluation criteria form) used in the selection of professional contractors. These sixteen projects included:

- six projects dated before September 17, 2003;<sup>2</sup>
- six projects dated September 17, 2003; and,
- four projects with various dates after September 17, 2003.

None of the sixteen project files PEER reviewed contained all three forms of documentation for contractor selection.

- For the six projects dated before September 17, 2003, none of the files contained any of the three forms of documentation.
- For the six projects dated on September 17, 2003, and conducted under the new gubernatorial administration, all six files contained the request for proposals and documentation for final selection grading/evaluation. However, these files did not contain the pre-selection grading/evaluation documents.
- For the four projects dated after September 17, 2003, all four files contained documentation for final selection grading/evaluation. However, none of these files contained documentation for the project's request for proposals or pre-selection grading/evaluation.

Although the bureau is making attempts to ensure that files contain proper documentation of requests for proposals and grading/evaluation, the bureau still is not

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<sup>2</sup> On September 17, 2003, the Bureau of Building issued its first request for proposals for state construction projects to be conducted under the new gubernatorial administration.

**When proper documentation is not present, the bureau cannot prove that it used an objective decisionmaking process to select the best-qualified professionals.**

consistent in ensuring that the entire contractor selection evaluation process is documented in project files.

When proper documentation is not present, the bureau cannot ensure that it used an objective and transparent decisionmaking process to select the best-qualified professionals to construct state buildings and thus protect the state's best interests. Such files also would not provide the necessary information to respond to any firm's complaints about the process.

## **Need for More Appropriate Use of Bond Financing**

*The state has used bond financing, the purpose of which is to fund capital projects with a life expectancy of twenty years or more, to fund furniture and equipment purchases and to pay projects' pre-planning costs. Also, recent bond legislation has allowed funds left unspent at the end of a project to fund repair and renovation projects. As a result, the state's long-term debt has increased unnecessarily and opportunities to retire debt early have been lost.*

**When bond funds are expended, over the course of the bond the state pays not only the cost of the item, but also the cost of financing that item over the life of the bond. As of May 1, 2005, the state's outstanding bonded indebtedness for capital improvement was \$420 million.**

When bond funds are expended, over the course of the bond the state pays not only the cost of the item, but also the cost of financing that item over the life of the bond (usually twenty years). Because of this, the use of bond funds should be limited as much as possible.

As of May 1, 2005, the state's outstanding bonded indebtedness for capital improvement was \$420,245,000 and total state bonded indebtedness was \$3,103,275,000. Total annual debt service costs for the state have increased from \$116,078,057 in FY 1996 to \$338,569,556 in FY 2005. Exhibit 4, page 29, shows the amount the state has paid for capital improvement debt service from FY 2003 through FY 2005.

PEER sought to determine ways in which the construction management process could be improved to ensure that the state uses bond funds in the most appropriate manner.

**Exhibit 4: Mississippi's Capital Improvement Debt Service Payments, FY 2003 through FY 2005**

|   | FY 2003       | FY 2004       | FY 2005       |
|---|---------------|---------------|---------------|
| Total debt service payment                                    | \$324,725,515 | \$305,527,557 | \$338,569,556 |
| Amount paid for capital improvement debt service              | 73,892,132    | 92,891,303    | 86,620,419    |
| Percentage of total debt service paid for capital Improvement | 23%           | 30%           | 26%           |

SOURCE: Mississippi Treasury Department Bond Division

NOTE: According to staff of the Mississippi Treasury Department Bond Division, almost all of this payment is made from the general fund; however, a small amount of this payment is made from interest generated by capital improvement bond funds.

**Use of Bond Funds vs. Appropriated Funds to Purchase Furniture and Equipment**

*Despite the associated debt service costs, Mississippi routinely uses bond funds to purchase furniture and equipment when the life expectancy of those items does not meet or exceed the term of the bonds used to purchase them.*

The general practice in Mississippi state government is that for some construction or renovation projects, as authorized by the Legislature, the Bureau of Building uses bond funds to purchase furniture and equipment for the project buildings. According to Bureau of Building staff, the total amount spent for furniture and equipment bought with bond funds has increased over the last five to ten years, as has the percentage of a project's funds used for furniture and equipment. Exhibit 5 on page 30 shows the total amount that the state has expended on furniture and equipment from FY 1999 to FY 2005 (as of April 18, 2005) from bond funds.

**Since FY 1999, the state has spent more than \$38 million in bond funds on furniture and equipment.**

State bond legislation directs how bond money will be spent, either listing specific projects to be funded or, as is the case with community and junior colleges, specific amounts of money to be used on various projects for a state entity. (See discussion on page 21.) In most cases, the state's bond legislation for a construction project provides a total amount for a project and states that it can be used for capital improvements or repair and renovation, as applicable, and furnishing and equipping the building. The Bureau of Building, in consultation with the state entity requesting the building, then decides exactly how

the money will be allocated between construction and furniture and equipment. According to Bureau of Building staff, the percentage of the total project funding used for furniture and equipment is usually between 10% and 12%, but may be as high as 35% for a university project with lab equipment.

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**Exhibit 5: Amount Expended on Furniture and Equipment from Bond Funds, FY 1999 through FY 2005**

| Fiscal Year       | Total Expenditures on Furniture and Equipment |
|-------------------|---|
| 1999              | \$3,960,156.92                                |
| 2000              | 3,828,603.93                                  |
| 2001              | 7,279,431.55                                  |
| 2002              | 5,092,013.42                                  |
| 2003              | 7,146,245.85                                  |
| 2004              | 6,018,307.76                                  |
| 2005 (to 4/18/05) | 5,567,766.06                                  |
| Total             | \$38,892,525.49                               |

SOURCE: PEER analysis of Bureau of Building's data

NOTE: This table reflects the amount of funds spent on furniture that was actually delivered during that fiscal year. The Bureau of Building's staff may plan, select the furniture, and award contracts for the purchase of furniture in years prior to when the funds are actually expended, since funds are not expended until the furniture is actually delivered.

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The bureau's policies and procedures manual states that "items purchased with general funds or bond funds fall into the capital outlay category and must generally have a life expectancy of twenty (20) years." The policy goes on to state that "the using agency may use its own funds to procure the non-purchasable items, however, the Bureau will not consider using its limited funds for such purposes." The policy does state that some exceptions are allowed with sufficient justification.

**Buying moveable furniture with appropriated funds instead of bond funds would allow the state to avoid interest costs.**

However, the Bureau of Building's staff said that, in practice, the criteria they routinely use to determine what they will or will not buy with bond funds is that they will buy furniture and equipment that will make the building functional for the purpose for which it was designed and this includes buying some computers and other furniture and equipment that does not meet the life expectancy requirement.

Moveable furniture that does not have a life expectancy of twenty years or more would not be appropriate for capital financing. Moveable furniture of a more permanent nature and items that are non-moveable or built into a facility (e.g., security systems, heating and cooling systems, data and communication cables, and panel systems for

cubicles) would be appropriate items to be purchased with bond funds.

Buying moveable furniture with appropriated funds instead of bond funds would allow the state to avoid interest costs. Alternatively, in some cases in which a state agency is moving from one building to another new or renovated building, such furniture in good condition could be moved instead of buying new furniture, thus saving both the cost of the new items and the interest on those items.

### **Use of Bond Funds vs. Appropriated Funds for Preplanning of Construction Projects**

*Preplanning of construction projects most likely increases their cost-effectiveness. However, Mississippi has used bond funds to cover preplanning costs, which incurs additional debt.*

Preplanning of construction projects can save the state time and money. According to a report released by the State Auditor's Office entitled *Bond Management and Capital Projects in Mississippi: A Performance Audit Report* (April 1, 2005), preplanning can save time in project development and implementation and save the state money by reducing inflation of costs associated with project delays. Preplanning can also save the state money, according to the report, by decreasing change orders and their associated costs. MISS. CODE ANN. Section 31-11-30 (1972) currently requires preplanning for all capital improvement projects estimated to cost more than \$1 million. (See discussion on page 15.)

Between FY 2001 and FY 2005 (through February 15, 2005), the Bureau of Building spent \$3,181,652 on preplanning for thirty projects, twenty-one of which were at institutions of higher learning. Of these funds, \$2,151,496 was from the preplanning revolving fund (see discussion of this fund in the following paragraph). The remaining \$1,030,156 in pre-planning funds was specifically granted in bond legislation. Exhibit 6, page 32, shows the amount of preplanning funds spent each year between FY 2001 and FY 2005 (through February 15, 2005).

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**Exhibit 6: Bureau of Building's Preplanning Expenditures from Bond Funds, FY 2001- FY 2005**

|       | <b>Preplanning Expenditures</b> |
|-------|---------------------------------|
| 2001  | \$178,537.13                    |
| 2002  | 957,474.21                      |
| 2003  | 989,846.59                      |
| 2004  | 947,917.60                      |
| 2005  | 107,876.55                      |
| Total | \$3,181,652.08                  |

SOURCE: Bureau of Building

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The state currently funds preplanning through the Bureau of Building Capital Improvement Preplanning Fund, a revolving fund established in MISS CODE ANN. Section 7-9-151 (1972) to provide Bureau of Building with a source of preplanning funds. The fund is \$200,000 and is replenished with bond funds after a preplanned project is approved by the Legislature. Preplanning funds are also sometimes specifically included in a project's bond legislation and do not require use of the revolving fund.

**While the revolving fund is meant to allow the bureau to preplan projects and then be reimbursed with bond funds, there can be cases in which decisionmakers determine that the project should not be undertaken. In those cases, the preplanning fund would not be repaid with bond funds.**

While the revolving fund is meant to allow the Bureau of Building to begin preplanning projects before bond legislation and then be reimbursed with bond funds after the project gets underway, there can be cases in which in preplanning, decisionmakers determine that the project should not be undertaken. In those cases, the preplanning fund would not be repaid with bond funds. According to the Bureau of Building's staff, an example of this project type occurred with the preplanning of the music facility renovations and additions at the University of Southern Mississippi from 2000-2003 at a total cost of \$478,710. This pre-planned project has not yet received legislative authorization for construction, so the preplanning fund has not been repaid with bond funds.

According to Bureau of Building staff, they could need as much as \$3 million a year to preplan all of the projects that are required by the Legislature to be preplanned. If this \$3 million was spent from bond funds, according to estimates of the Mississippi Treasury Department Bond Division, the state would end up paying approximately \$4,398,160 in principal and interest over the life of a twenty-year bond. Thus the state would avoid estimated costs of \$1,398,180 if appropriated funds were used instead of bond funds for preplanning these projects.

Using appropriate funds instead of bond funds to finance preplanning would allow the state to gain the benefits of preplanning without increasing long-term debt service for an administrative expense.

## **Use of Unspent Bond Funds for Repair and Renovation Projects vs. Retiring Bond Debt Early**

*Recent bond legislation has allowed funds left unspent at the close of a construction project to be used for other repair and renovation projects, rather than to help retire bond debt.*

**Although allowing entities to use unspent bond funds may provide greater flexibility for repairs and renovations in years when budgets are tight, this practice does not take advantage of using the funds to reduce outstanding bond debt and save debt service funds over the long term.**

Before 1999, if a project was finished but had bond funds remaining, state law required the bureau to use those funds to retire some of the bond debt early. Retiring debt early decreases the amount of interest the state must pay on bond funds.

However, bond legislation since 2000 has allowed the institutions of higher learning and state entities to use any bond funds in excess of those needed to complete projects in the bond legislation to be used for general repairs and renovation of the institution of higher learning or state agency to which it is allocated. Institutions of higher learning have had this language in their bond legislation since 1999 in House Bill 1675 but it was added for state agencies in Senate Bill 3315, 2000 Regular Session:

*Any amounts allocated to an agency or institution of higher learning that are in excess of that needed to complete the projects at such agency or institution of higher learning that are described in subsection (1) of this section may be used for general repairs and renovations at the agency or institution of higher learning to which such amount is allocated.*

Since 2000, each year, the major bond legislation for institutions of higher learning and state agencies has allowed this practice, including Senate Bill 3158, 2001 Regular Session; Senate Bill 3197, 2002 Regular Session; Senate Bill 2988, 2003 Regular Session; and Senate Bill 2012, 2004 Third Extraordinary Session.

Information is available in the PATS that shows the number of times and the amount of unspent bond funds that have been spent for other repair or renovation projects. However, the Department of Finance and Administration does not use this information for project management purposes because the system is not designed to extract this information. Staff of both the Bureau of Building and the Mississippi Treasury Department's Bond Division said that they believe that as the projects under

the new bond legislation language close, the state will see a decline in the amount of debt retired using unspent bond funds from construction projects, since agencies are no longer required to do so.

Although allowing state agencies and institutions of higher learning to use unspent bond funds may provide greater flexibility for repairs and renovations in years when budgets are tight, this practice does not take advantage of using the funds to reduce outstanding bond debt and save debt service funds over the long term.

**If unspent bond funds are held in a state's account for more than three years, the state runs the risk of being charged federal arbitrage penalties.**

Additionally, the bond legislation language that allows unspent bond funds to be spent on other projects does not include a time limit on when these funds should be spent. Staff of Mississippi Treasury Department Bond Division said that the later bond funds are spent after being sold, the more likely that the state will be charged federal arbitrage penalties. If unspent bond funds are held in a state's account for more than three years, the state runs the risk of being charged federal arbitrage penalties.

## **Need for Improvement of Change Order Management**

*The Bureau of Building still does not manage construction change orders to assure that costs are reasonable; it continues to pay overhead and profit percentages for change orders that are higher than those of other states; it continues to pay for change order work resulting from errors and omissions; and the project management system still does not measure planned versus actual construction performance.*

**As the legal means for changing contracts, change orders are standard in the construction industry.**

As noted on page 9, a construction change order is a written agreement between the parties involved to change a building construction contract. Change orders add to, delete from, or otherwise alter the work set forth in the contract documents at the time that the construction contract was awarded. As the legal means for changing contracts, change orders are standard in the construction industry.

In 2002, PEER identified weaknesses in the Bureau of Building's management of change orders, including problems with the review of change orders, with overhead and profit paid for change orders, and with paying for errors and omissions (see summary of these conclusions and recommendations on pages 11 through 13 of this report).

PEER followed up on these issues in the 2005 review and found that many of the same problems still exist with the bureau's management of change orders. PEER found:



- The bureau's management of change orders still does not assure that cost changes to projects are reasonable.
- The bureau's maximum overhead and profit percentage paid for change order work remains at 40%, an excessive amount far higher than that of other states.
- The bureau still pays for change order work resulting from design errors and omissions.
- The bureau still does not have a project management system that measures planned versus actual construction performance.

The following sections discuss these conclusions.

## **The Bureau's Review of Change Order Costs**

*The Bureau of Building does not assure that project cost changes made through change orders are reasonable.*

While change orders are a necessary part of the construction management process and are often beyond the control of the Bureau of Building and its professional and construction contractors, the bureau must have a thorough review process to ensure that all change order costs are necessary and reasonable.

### ***Lack of Policies and Procedures Regarding Change Order Evaluation***

Although bureau staff may be analyzing cost reasonableness in some cases, the Bureau of Building does not have procedures outlined for such in the policy manual.

According to the bureau's policies and procedures manual, when the user agency, the professional, or the contractor initiates a change order, the professional prepares a detailed description of the changes needed, including the necessary drawings and specifications, for the contractor. The contractor then provides an estimate of the cost and/or time extension required. The contractor should include in these documents a cost and justification for each task to be accomplished. The contractor must also submit documentation of the cost estimates to the professional. The professional then prepares and signs the change order documents, including the need, justification, and necessary specifications and drawings, to the bureau's director for consideration. The bureau's policies and procedures manual states that when submitting a change order "the Professional will sign all five (5) originals certifying the Change Order has been examined and analyzed, found to be in order and the cost reasonable." The manual does state "if sufficient funds are available and it is in the best interest of the Project for the

Change Order to be approved, the Bureau Director, acting as the Owner will sign and approve the changes.”

However, the bureau’s manual does not:

- require the Bureau of Building to verify the cost estimate information;
- require the professional to provide the cost breakdown information for the change order with the other documents to Bureau of Building;
- specify how the Bureau of Building should determine whether it is in the best interest of the project for the change order to be approved or whether the costs included in the change order are reasonable; or,
- require any documented evaluation process for the professional or the bureau to verify the cost estimates of the contractors.

**The bureau’s policy manual does not require the bureau’s staff to verify the cost estimates of change orders.**

According to the Director of the Bureau of Building, the bureau does not have a documented evaluation process for change orders. Although bureau staff may be analyzing cost reasonableness in some cases, the Bureau of Building does not have procedures outlined for such in the policy manual nor does it have documentation of the process to do this.

### ***PEER’s Review of Recent Change Orders***

PEER reviewed change order documentation for three recent projects to determine whether the bureau had implemented PEER’s 2002 recommendations regarding the change order review process. The Bureau of Building has not fully implemented any of the specific recommendations regarding evaluating the cost reasonableness of change orders.

PEER reviewed change order documentation for selected projects to determine whether PEER’s specific 2002 recommendations regarding Bureau of Building change order review process, shown in Appendices E and F, pages 63 and 65, had been implemented.

PEER reviewed twenty-two change orders from three construction projects--the renovation of the Sillers Building, the construction of the new Archives and History Building, and the construction of the new court facility. PEER chose change orders from these projects to review because they were either included in the change order review for PEER’s 2002 report or were related to those projects. PEER reviewed all change orders on these three projects and found that the Bureau of Building had not fully implemented any of the specific recommendations regarding evaluating the cost reasonableness of change orders. Specifically, PEER found the following:

- *Professional Certification of Cost Reasonableness*--None of the change orders had specific language in which the professional certified the cost reasonableness of the change orders. Most of the change orders did include the following standard language regarding work items to be done, the cost of those work items, and the justification of those work items: “The Architect and his Consultants have reviewed the above items and recommend approval of the above items.”
- *Breakdown of Costs*--While all twenty-two change orders listed the total cost of the change order, only five contained cost breakdown information. Of those five, one did not include the overhead and profit amount in the breakdown and one did not include the labor burden rate paid.
- *Labor Burden Rate*--Only four of the twenty-two change orders showed the labor burden rate paid to the professional. The rates shown ranged from 30% to 41.55%. None of the change order documents reviewed included a breakdown of what is included in the labor burden rate.
- *Overhead and Profit Rate*--According to Bureau of Building staff, the bureau pays the maximum 20% to the general contractor for overhead and profit, no matter what rate the schedule of values for the project shows. The documentation reviewed by PEER did not substantiate the amount paid to contractors for overhead and profit for change order work.
- *Estimated Debt Service*--None of the change order documentation showed that Bureau of Building had estimated the debt service costs associated with the change orders.

### ***Potential Effect of Poor Change Order Management***

Since the bureau's current practices do not assure that cost changes to projects are reasonable, its approval of change orders may contribute to significant increases in the long-term debt liability of the state.

**The bureau has the responsibility as a prudent steward of state funds to evaluate the total cost implications of a proposed change order.**

Because of the lack of a change order management system that assures cost changes to building construction projects are reasonable, the state may be paying more for change orders than necessary. While change orders and their inevitable cost are often necessary due to the unknowns in a construction project, the Bureau of Building still has the responsibility as a prudent steward of state funds to evaluate the total cost implications of a proposed change order. Since its current review process does not fulfill this responsibility, the bureau's approval of change orders may contribute to significant increases in the long-term debt liability of the state.

### ***Model States for Change Order Management***

Certain aspects of Georgia's and Illinois's change order management systems should serve as a model for Mississippi.

PEER identified two states that have aspects of their change order management system that Mississippi should use as a model in improving its change order review: Georgia and Illinois.

Georgia's standard state construction contracts detail the change order review process. Professionals in Georgia are required by contract to provide documentation of their analysis of a change order's cost reasonableness. Illinois's change order forms require a detailed breakdown of all costs--material, labor, rental equipment, and overhead and profit--for all parties. Illinois's change order forms also include forms to break down labor costs, including a breakdown of what is included in labor burden rates (fringe benefits).

### **The Bureau's Payment of Excessive Overhead and Profit Percentages**

*The bureau's maximum overhead and profit percentage paid for change order work remains at 40%, an amount far higher than that paid by other states.*

For change order work, Bureau of Building pays contractors a percentage for overhead and profit. Currently, the maximum a contractor is allowed to charge in overhead and profit is 20% of the actual work completed.

The bureau's policies and procedures manual states that:

*The maximum cost included in a Change Order for profit and overhead is limited to twenty (20%) percent of the total of the actual cost for materials, labor, and subcontracts. Profit and overhead include: all taxes, fees, permits, insurance, bond, job superintendent, job and home office expense. All Subcontractors shall acquiesce to the same requirements when participating in a Change Order.*

In 2002, PEER recommended that the Bureau of Building consider reducing the overhead and profit percentage. However, according to Bureau of Building staff, the overhead and profit rates paid to contractors and subcontractors for change order work have not changed. While the policies and procedures state that 20% is the maximum amount paid to each contractor, it is in practice the default overhead and profit rate charged by the bureau with or without substantiation of what the contractor includes in the 20% overhead and profit rate. Thus the bureau pays 40% when both contractors and subcontractors are used.

PEER obtained information from sixteen states regarding the overhead and profit percentages that they pay for change order work. As shown in Exhibit 7, page 42, out of sixteen states, Mississippi still pays the highest maximum overhead and profit percentage when a contractor and subcontractor complete change order work.

**The bureau's staff believes that by paying a substantial overhead and profit percentage to contractors, that contractors, in turn, do not charge for extended overhead when the initial construction contract is delayed or extended.**

Bureau of Building staff believes that by paying a substantial overhead and profit percentage to contractors, that contractors, in turn, do not charge for extended overhead when the initial construction contract is delayed or extended and they incur costs greater than what the initial contract provides for. According to Bureau of Building staff, change order documents signed by the contractor prevent the contractor from charging extended overhead because the documents state that the amount of the change order is all-inclusive and may not be changed. However, this does not explain the difference in Mississippi's rates and those of other states, which may face similar circumstances.

By paying more in overhead and profit percentage than other states, the state is increasing its total project costs and state indebtedness. Additionally, paying high overhead and profit rates for change orders may provide an incentive for a dishonest professional or contractor to initiate change orders to increase their fees or profit from a project.

The Director of the Bureau of Building plans to change the maximum overhead and profit percentage for a change order for which a trade contractor performs the actual change order work. Under the proposed change, the

general contractor and trade contractor would receive an overhead and profit rate of seven and twenty percent, respectively, of the construction cost of the change order. The maximum overhead a profit percentage paid for change orders would then decrease from 40% to 27%.

The bureau's staff does not know exactly when this change would occur but plans to meet with industry groups before the change is put into place. The bureau's staff could not provide a methodology for determining the appropriateness of the proposed new maximums.

## **The Bureau's Payment for Change Orders Resulting from Design Errors and Omissions**

*The Bureau of Building still pays for change order work that is the result of design errors and omissions, which results in increased construction project costs for the state.*

When the Bureau of Building contracts with professional and constructor teams, each team must post liability insurance, with the amount based on the project size, to cover any additional state cost that might result from negligent actions. The contract states that such insurance will provide protection from claims resulting from errors and omissions or negligent acts arising out of the performance of professional services and operations. It also notes that the Bureau of Building may hold contractors responsible for these actions.

As discussed on page 12, PEER recommended in 2002 that the Bureau of Building change its standard contract to state that the bureau's policy will be to file insurance claims for all change order work that is caused by the professional's design errors, omissions, or documentation deficiencies and that the state should not pay any additional fees to the professional team for such change orders.

Bureau of Building staff said that they have not added this language to their design professional's contract but will consider adding it. Also, they said that they usually do not have to file a claim on their insurance because professionals will often pay for the change without their insurance being filed. Bureau of Building staff provided five examples of cases in which a professional paid for the work to be completed without requesting a change order. They said they do sometimes withhold professional's fees, but not when the error or omission is something that would have needed to be done anyway and adds value to the project.

The Bureau of Building's staff provided PEER with a list of change orders between December 2002 (when PEER's report on change orders was released) and March 2005 in which all or part of a professional's fee was withheld

because of an error or omission. The list included forty-three change orders in which all or parts of the professionals' fees were withheld and \$90,037 in withheld fees.

**The bureau has not filed a claim on a professional's insurance for costs of change order work since PEER's 2002 report.**

While these change orders were the result of errors and omissions and Bureau of Building withheld professionals' fees on those change orders, the bureau did not file any insurance claims to recover the construction costs for the actual work completed as a result of the errors and omissions. According to the Director of the Bureau of Building, the bureau has not filed a claim on a professional's insurance for costs of change order work since PEER's 2002 report.

During the review of twenty-two change orders for selected projects described on page 36, PEER identified four change orders that included items resulting from design errors and omissions. In those cases, the bureau paid the professionals' fees for these change orders and did not file insurance claim for the work done as a result of the errors and omissions.

**The bureau does not have sufficient evaluation criteria for change orders that would clearly identify change orders resulting from errors and omissions.**

A contributing factor to this problem is that Bureau of Building does not have sufficient evaluation criteria for change orders that would clearly identify change orders resulting from errors and omissions. Also, the bureau has not developed a formal policy to file on errors and omissions insurance for all change orders resulting from errors and omissions. As a result, the state pays fees for work that results from errors and omissions that should be paid either by the persons responsible or by their insurance. This practice is increasing project costs and state indebtedness.

**Exhibit 7: Change Order Overhead and Profit Maximum Percentage Paid to Construction Teams in Mississippi Compared to Fifteen Other States (As of April 2005)**

| State                         | Maximum Overhead Paid for Change Order work (%) | General Contractor Only (%) | Trade Contractor (%)<br>General Contractor (%) |
|-------------------------------|---|-----------------------------|--|
| <b>Mississippi (current)</b>  | <b>40.0</b>                                     | <b>20</b>                   | <b>20</b><br><b>20</b>                         |
| South Carolina (1)            | 30.0  | 17                          | 17<br>13                                       |
| Georgia                       | 27.5  | 20                          | 20<br>7.5                                      |
| <b>Mississippi (proposed)</b> | <b>27.0</b>                                     | <b>20</b>                   | <b>20</b><br><b>7</b>                          |
| Connecticut (2)               | 26.0  | 12-20                       | 12-20<br>6                                     |
| Louisiana                     | 25.0  | 15                          | 15<br>10                                       |
| Missouri                      | 25.0  | 15                          | 15<br>7  |
| North Carolina                | 25.0  | 20                          | 15<br>10                                       |
| Virginia                      | 25.0  | 15                          | 15<br>10                                       |
| Wisconsin                     | 22.5  | 15                          | 7.5<br>15                                      |
| Alaska                        | 20.0  | 20                          | 10<br>10                                       |
| Maryland                      | 20.0  | 15                          | 15<br>5  |
| Michigan                      | 20.0  | 15                          | 15<br>5  |
| Minnesota                     | 20.0  | 15                          | 15<br>5  |
| Tennessee                     | 20.0  | 15                          | 15<br>5  |
| Arkansas                      | 17.0  | 12                          | 12<br>5  |
| Arizona                       | 15.0  | 10                          | 10<br>5  |

SOURCE: Survey of members of the National Association of State Facilities Administrators

NOTE 1: South Carolina allows up to 3 levels of OHP for contractor, sub-contractor, and sub-subcontractor in which case the maximum would be 43%. The maximum shown in the table is the maximum for work performed by the contractor and one subcontractor only.

NOTE 2: Percentage changes based on the cost of the change order.



## The Bureau's Lack of an Updated Project Management System

*The Bureau of Building still does not have a project management system that measures planned versus actual construction performance.*

**The bureau's project management system does not measure actual project accomplishments at various milestones from project initiation to project completion or identify time deviations from planned project budgets and schedules.**

The Bureau of Building has not modified its Project Accounting and Tracking System since PEER made its recommendations in 2002 (see discussion on page 13 and the recommendations in Appendices E and F on pages 63 and 65). At that time, PEER determined that the PATS system does not capture critical management information for controlling cost or time. The system also does not measure actual project accomplishments at various milestones from project initiation to project completion or identify time deviations from planned project budgets and schedules.

Because the Department of Finance and Administration acquired the Project Accounting and Tracking System approximately twenty years ago, it would be impractical to modify the system. According to the Bureau of Building's staff, it currently has \$400,000 in funding allocated for the purchase of a new project management system this year, but it has not yet purchased one. The Director of the Bureau of Building is preparing a list of requirements for buying a new system.

The lack of an adequate project management system could cause the Bureau of Building to have an inadequate source of management information, which could hinder decisionmaking and resource allocation. Ultimately, this could affect the bureau's ability to complete quality construction projects on time at the lowest possible cost.

## Need to Ensure Implementation of Quality Assurance Methods

*The Bureau of Building does not include specific language in its contracts requiring professionals to implement quality assurance methods because the bureau expects these professionals to implement quality assurance as part of their professional responsibilities. However, the bureau does not require professionals to document any quality assurance methods that they voluntarily implement or report any cost savings.*

**Documentation of quality assurance methods and their success is important to show that every effort was made to execute the project at the lowest possible cost to the state without sacrificing quality.**

The Bureau of Building does not require in its professional contract that quality assurance methods (such as constructibility reviews, life-cycle costing, value engineering, and materials research) be implemented on projects costing \$1 million or more.

PEER does not imply that these individuals or firms are not performing appropriate quality assurance methods as part of their professional responsibility. However, documentation of these methods and their success is important to show that every effort was made to execute the project at the lowest possible cost to the state without sacrificing quality. The lack of documentation of quality assurance opens up the possibility that unscrupulous professionals might not actually be implementing these methods and that the state's best interests are not fully being protected.

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# Managing Workload of the Bureau of Building's Staff

The workload of the Bureau of Building's professionals hinders them from devoting the necessary amount of management attention to each project. To reduce the workload of the bureau's professional staff, the Legislature could implement one or more of the following options: authorize para-construction specialist positions to perform clerical and administrative duties; allow agencies to manage construction projects under \$250,000; or allow the Department of Archives and History to manage historic preservation projects.

**Due to the state's current budget crisis, the most viable options for managing workload of the bureau's staff are those that rely on existing resources.**

The Bureau of Building manages the construction process for government buildings all over the state. This is a tremendous responsibility and a heavy workload.

PEER does not normally recommend adding staff to mitigate the problem of heavy workload without first assessing the potential for more efficient use of existing resources. Also, due to the state's current budget crisis, the most viable options are those that would rely on existing resources.

In this chapter, PEER describes the current workload of the Bureau of Building and presents options for reassigning that workload. The Legislature and/or the Bureau of Building could choose one or any combination of the options to reassign the bureau's workload. Pages 54 through 55 include specific recommendations to help in implementing options.

## Workload of the Bureau of Building's Staff

*The Bureau of Building's staff architects manage from seventy to ninety projects per architect. This heavy workload hinders the architects from devoting the necessary amount of management attention to each project.*

As of February 2005, the Bureau of Building staff managed approximately 636 active projects with twenty staff members. The staff includes four staff architects, four project administrators, and two contract analysts. Other staff include directors and administrative staff. Appendix C on page 61 shows the duties and responsibilities of DFA Bureau Staff.

The Bureau of Building's staff architects manage from seventy to ninety projects per architect. Although PEER could not compare this workload to that of architects in the private sector due to differences in job duties and method of assigning workload in the private sector, a workload of seventy to ninety projects per architect would be considered heavy under any circumstances. This heavy

**In addition to their heavy workload, staff architects and project administrators must perform clerical and administrative duties associated with each project.**

**The cost to the state for having these professionals perform clerical and administrative duties is approximately \$133,371 per year.**

workload hinders the architects in devoting the necessary amount of management attention to each project.

Compounding this situation is the fact that, due to lack of support staff, staff architects and project administrators must perform various clerical and administrative duties associated with each project. Although staff architects and project administrators should be using their time to complete tasks at the level their professional training justifies (e.g., examining professional drawings and plans, visiting building construction sites, or updating their knowledge of standards and practices in the building construction industry), according to the bureau's director, each staff architect and project administrator spends at least two hours a day in clerical or administrative work. The total combined time per year that the bureau's staff architects and project administrators spend performing clerical or administrative duties is 4,016 hours, the equivalent of 502 workdays per year or the amount of time that would be worked by two staff members in a year.

This situation may affect the quality and quantity of state construction projects because these individuals' expertise is not being properly utilized. Also, this could increase costs associated with the building process. The total cost to the state for having these professionals perform clerical and administrative duties is approximately \$133,371 per year.

### **Legislative Options for Reducing the Workload of the Bureau of Building's Staff**

*To reduce the workload of the bureau's professional staff, the Legislature could implement one or more of the following options: authorize para-construction specialist positions to perform clerical and administrative duties; allow agencies to manage construction projects under \$250,000; or allow the Department of Archives and History to manage historic preservation projects.*

PEER offers three options for reducing the workload of the Bureau of Building's professional staff. The Legislature and the bureau could choose one or any combination of the following options to reassign the bureau's workload or could choose not to reassign the workload. PEER also offers recommendations 22 through 25, pages 54 through 55, to help in implementing options.

#### **Option One: The Legislature Could Authorize Para-Construction Specialist Positions to Perform Clerical and Administrative Duties**

To make more efficient use of state resources, the bureau could request that the Legislature approve and fund two new positions for the Bureau of Building--i.e., para-construction specialists. Their duties would be to assist

staff architects and project administrators in the clerical and administrative duties uniquely related to management of construction projects. If the Legislature chooses to authorize and fund these new positions, DFA could work with the State Personnel Board to establish the positions in the Statewide Payroll and Human Resource System database.

**At annual salaries of \$35,000 each, the cost to the state for two para-construction specialist positions would be approximately \$90,134, including fringe benefits.**

The use of staff architects and project administrators to perform these duties currently costs approximately \$133,371 per year. At an estimated annual salary of \$35,000 each, the cost to the state for two para-construction specialist positions would be approximately \$90,134, including fringe benefits. This would represent a cost avoidance of approximately \$43,237 and would free these professionals to perform the tasks and responsibilities needed for construction project management.

## **Option Two: The Legislature Could Allow Agencies to Manage State Construction Projects with a Total Estimated Cost of \$250,000 or Less**

MISS. CODE ANN. Section 31-11-3 (1972) authorizes the Bureau of Building to have entire control and supervision of buildings, additions, repairs, or improvements, as directed by the Legislature, when funds have been appropriated for such. This section requires that the Bureau of Building review and pre-approve all architectural or engineering service contracts entered into by any state agencies regardless of the source of funding. The requirement does not apply to contracts paid for by self-generated funds of state institutions of higher learning, community college projects funded by local funds or other non-state sources, or federally funded State Military Department projects, and certain contracts approved by the State Prison Emergency Construction and Management Board.

PEER interviewed Bureau of Building staff, analyzed Bureau of Building project data, and surveyed other states to gather information regarding whether allowing agencies to manage their own capital improvement projects would be feasible and if so, what the best threshold for these projects would be.

**If agencies were allowed to manage their own projects costing under \$250,000, the bureau's workload would be reduced without incurring a high level of risk to the state.**

PEER surveyed other states with help from the National Association of State Facilities Administrators (NASFA). NASFA sent the PEER survey to all of its members. Of the fourteen states that responded to the survey, seven responded that they allow agencies to manage certain projects themselves either under a certain cost threshold or on a case-by-case basis.

According to the Director of the Bureau of Building, a threshold of \$250,000 would meet PEER's criteria of reducing the bureau's workload without incurring a high level of risk to state resources.

**The percentage of projects under the \$250,000 threshold could range from 23% to 32% of state construction projects.**

PEER analyzed the Bureau of Building's project data and found that approximately 148 (23%) of the 636 active projects as of February 2005 would fall at or below the \$250,000 threshold for potential management by agencies. However, only 464 of the 636 active projects had a project budget specified at the time of the analysis. Thus the percentage of projects under this threshold could actually range from 23% to 32% of projects.

**The planned effect of this policy change would be to allow the Bureau of Building's staff to focus on larger projects to maximize their effort and minimize risks to the state.**

Implementation of this threshold would require that the bureau monitor the agencies that are managing projects by requiring these agencies to use state contracts and procedures for project management, by reviewing project documentation, and by paying project costs through reimbursement. The bureau should also have the discretion to choose which agencies could manage projects, based on the bureau's assessment of the agency's internal expertise to manage projects and, in the future, on their success in managing such projects.

The planned effect of this policy change would be to allow the Bureau of Building's staff to focus on larger projects to maximize their effort and minimize risks to the state.

### **Option Three: The Legislature Could Allow the Department of Archives and History to Manage Historic Preservation Projects Not on State-Owned Buildings or on State-Owned Property**

Some of the Bureau of Building's active projects are historic preservation grant projects managed by the Department of Archives and History but funded through the Department of Finance and Administration. Historic preservation grant funds go to local governments or other organizations to restore historic properties. The Department of Archives and History selects the projects to be funded and consults with the grantee regarding design and construction of the properties. The grantees expend funds for the grant projects and are reimbursed through the historic preservation grant funds. In order to be reimbursed, the grantees send all supporting documentation on the funds they have expended for the project to the Department of Archives and History (MDAH). The Department of Archives and History then sends the supporting documentation to the Department of Finance and Administration Accounting and Finance Director. The Accounting and Finance Director's staff then sends the documentation to the Bureau of Building Director to approve the payment.

Some of the Bureau of Building's staff told PEER that they would like to give up their perfunctory role in managing some MDAH projects that are not state-owned buildings or on state-owned property in order to reduce their workload and their liability in signing off on projects they have not closely monitored.

**While allowing the Department of Archives and History to manage historic preservation projects would not significantly reduce Bureau of Building's workload, it would also not likely increase risks to the state given the bureau's already perfunctory role in monitoring these projects.**

There is a precedent in the state for allowing some state organizations the authority to totally manage construction related grant projects. The Legislature has allowed the Mississippi Arts Commission to manage its own building fund per House Bill 1637 of the 2001 regular legislative session. Because the statutory responsibility for administering historic preservation grant funds is provided in the bond legislation that authorizes the funds, if this option is implemented, the Legislature would need to write future bond bills in such a way as to provide full responsibility for these projects to MDAH.

The number of current projects that would be totally managed by MDAH if this were already implemented is relatively small compared to the number of current active projects. Only fifteen currently active projects would be affected by such a policy change; however, since 1993 sixty-four other projects would have fallen into this category.

While allowing MDAH to manage both the grant projects and grant funds for historic preservation grants would not significantly reduce Bureau of Building's workload, it would also not likely increase risks to the state given the already perfunctory role of the bureau in monitoring these projects. The change might mean some up-front workload increase for the Department of Archives and History in setting up its bond funds for future grants; however, according to staff of the Mississippi Treasury Department Bond Division, that division's staff could help MDAH staff to learn what they need to manage the funds.

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## Recommendations

### Legislative Action

1. The Legislature should amend MISS. CODE ANN. Section 31-11-30 (1972) to define critical need construction projects in order to reduce the potential for state entities claiming a particular project as a critical need project to bypass the two-phase project funding and approval process required by that section.
2. The Legislature should amend MISS. CODE ANN. Section 31-11-30 (1972) to subject projects of the community and junior colleges to the two-phase funding and approval requirement in order to ensure that community and junior colleges projects compete with other state projects for funding and are in the best financial interest of the state.
3. The Legislature should require all professional contractors, such as building commissioning agents, with the Bureau of Building or local governmental entities to be independent of all professional and construction firms working on a state or local governmental construction project. This would eliminate a possible conflict of interest situation.
4. In future bond legislation for capital improvement projects, the Legislature should include a list specifying approved projects with an amount of bond funds designated for each project.
5. The Legislature should eliminate the use of bond funds for preplanning and replace these with appropriated funds of approximately \$300,000 per legislatively approved project for the bureau's preplanning revolving fund so that the state can pay all pre-planning costs from appropriated funds and not use bond proceeds.
6. The Bureau of Building should develop a method for assessing fees against state entities and the institutions to fund the bureau's preplanning. Such method should be presented in a report to the Legislature by January 1, 2006. The Legislature should determine at that time whether to use fee assessments of general funds to fund the bureau's preplanning. Fees from user entities would allow the state to recoup some of



the pre-planning costs from programs that use state facilities and are funded by federal grants or special funds.

7. The Legislature should fund moveable furniture and equipment purchases for most capital improvement projects from general fund appropriations to the occupying entities. The Bureau of Building's staff and/or a professional contractor for the project should assist agencies with the planning, selection, and delivery of this furniture. For a newly constructed or renovated building that will be used by more than one state agency, the bureau should purchase the furniture by pooling the agencies' appropriated funds so that the state can take advantage of bulk buying discounts and the furniture design can be consistent throughout the building.
8. The Legislature should require that any funds not spent by the close of a project be used to retire part of the bond debt that financed the project.

## Administrative Action

### Selecting Professional Contractors

9. The Bureau of Building should establish a consistent method of documenting project proposals of the interested professional contract candidates in each pre-planning project file.
10. The Bureau of Building should include a list of evaluation standards in each request for project proposal in order to clearly define and advise all potential professional contractors, including building commissioning agents, of the bureau's standards used to make professional selection decisions.

### Appropriate Use of Bond Financing

11. If the Legislature chooses to continue allowing the use of unspent bond funds for general repair and renovation projects, the Bureau of Building should track the instances in which funding is moved from one project to another. The new construction management system (that will replace the current PATS) should be designed to extract information that shows the number and times and the amount of unspent bond funds spent for other repair or renovation projects. In the alternative, the bureau should maintain a list

of when these funds are used, including the project the money is being moved from, the project the money is being moved to, and the amount of this transaction.

Also, if the Legislature chooses to continue the use of unspent funds from one project for other general repair and renovation projects, the Legislature should provide time limits for completely spending the funds in the enabling legislation for the project in order to eliminate the possibility of federal arbitrage penalties.

12. Using existing resources, the Bureau of Building should estimate:
  - annual and total long-term debt service costs of projects in the need assessment presented to the Legislature: and,
  - total debt service for change orders to determine their total cost prior to the bureau's approving them.

The bureau should utilize software that uses current rates at the time the debt service is estimated and that projects the debt service costs over the life of the bond, taking into account compounding and payments toward interest and principal.

## Managing Change Orders

13. The Bureau of Building should create a step-by-step evaluation process for professionals and bureau staff to evaluate and document the necessity and cost reasonableness of each change order and should formalize this process in the bureau's policies. The bureau could use Georgia as a model for change order review.
14. The Bureau of Building should require the standardized, itemized cost information on each change order recommended in the 2002 PEER report (see Appendices E and F). The bureau should use the forms from Illinois as a model for this aspect of change order review.
15. Before the start of construction for a project, the Bureau of Building should require that construction contractors provide documentation substantiating all aspects of the overhead and profit and labor burden cost rates that they will charge throughout the construction project, including on change orders. Upon receipt, the bureau's staff should verify the information,

making sure there is no duplication of costs between these rates.

16. The Bureau of Building should determine what overhead and profit rate is fair and optimal for paying contractors' overhead costs and profit costs while keeping the state's cost to a minimum. The bureau should then adjust the maximum cost rate for overhead and profit for change orders accordingly.
17. The Bureau of Building should not pay both the contractor and subcontractor the same amount of overhead cost when the subcontractor mainly completes the work.
18. The Bureau of Building should change its standard design professional contract to state that the bureau's policy will be to file insurance claims for all change order work that is caused by the professional's design errors, omissions, or documentation deficiencies and file claims accordingly, unless the professional chooses to pay the contractor directly. Further, the bureau should not pay any additional fees to the professional team for such change orders.
19. The Bureau of Building should clearly identify change orders that contain items that are the result of design errors and omissions on its standard approval form for change orders.
20. In planning for the purchase of a new project management system, the Bureau of Building should ensure that the system will measure planned versus actual construction performance and produce both on-demand and periodic management reports. The bureau should consider relevant recommendations from PEER's 2002 reports (see Appendices E and F).

## **Implementing Quality Assurance Methods**

21. The Bureau of Building should include all projects costing \$1 million or more in the building commissioning process to ensure that the state has a consistent process for obtaining quality assurance on all building construction projects that require pre-planning.

If the DFA Bureau of Building chooses to not implement building commissioning on projects costing from \$1 million to \$2.9 million, the bureau should require the professional contractors:

- to perform appropriate quality assurance methods; and,
- to submit a documented cost savings report for all project savings generated through these methods at appropriate times in the project.

This process would help protect the best interest of the state by ensuring buildings are being constructed in the most cost efficient and effective way.

## Actions to Implement Legislative Options on Managing the Bureau's Workload

*To implement Option One (Authorizing Para-Construction Specialist Positions to Perform Clerical and Administrative Duties; page 46):*

22. The Legislature should authorize and fund two full-time para-construction specialist positions for the Bureau of Building as discussed on page 46. These positions should perform clerical duties and responsibilities that are currently performed by the staff architects and construction project administrators.

*To implement Option Two (Allowing Agencies to Manage State Construction Projects Under \$250,000; page 47):*

23. The Legislature should amend MISS. CODE ANN. Section 31-11-3 (1972) to authorize the Department of Finance and Administration Bureau of Building to permit institutions of higher learning and state agencies to manage capital improvement or repair and renovation projects with a total cost of \$250,000 or less.
24. If the Legislature authorizes institutions of higher learning and state agencies to manage capital improvement or repair and renovation projects with a total cost of \$250,000 or less, the Bureau of Building should:
  - Develop criteria by which to determine what institutions of higher learning and state entities will be allowed to manage their own projects and allow only those agencies meeting these criteria to manage projects.
  - Require that state entities use standard state contracts and procedures for project management as outlined in the bureau's policies and procedures manual.

- Conduct the projects on a reimbursable basis, requiring sufficient documentation for payment requests.
- Revoke an institution's or agency's permission to manage its own projects should it fail to meet one of the bureau's requirements for managing these projects.

*To implement Option Three (Allowing the Department of Archives and History to Manage Historic Preservation projects; page 48):*

25. The Legislature should write future bond legislation for historic preservation grant projects that are not state-owned buildings or on state-owned property in such a way as to authorize the Department of Archives and History to manage those funds. Such bond legislation language could be modeled after the language that allows the Mississippi Arts Commission to manage the Building Fund for the Arts (House Bill 1637, 2001 Regular Session).



## Appendix A: Glossary of Terms Related to the State Construction Process

| Report Term                  | Definition   |
|------------------------------|--|
| Public entity                | any state or local governmental entity, excluding any state entity construction project exempted by the Mississippi Legislature.   |
| State entity                 | receives state funds or expends self-generated funds for construction; can also include a local public entity if the Legislature gives DFA control of its appropriated state funds for construction projects.  |
| Local entity                 | has the authority to enter into construction contracts paid with public funds or self-generated funds.   |
| Construction process         | delivers a state-managed construction project through a professional and constructor team of private firms after the public entity plans, programs, schedules, budgets, and finances the project.  |
| Professional team            | includes the professional contractor and the architect, electrical engineer, mechanical engineer, structural engineer, or other professional consultants.  |
| Constructor team             | includes general contractor(s), trade contractors, and contractor consultants who perform the construction project work.   |
| General contractor           | is a firm or individual that contracts with a public entity to construct the project. These contractors usually contract directly with the trade contractors and directly supervise their work on the construction project.  |
| Trade contractor             | is a firm or individual specializing in a building trade necessary to construct a project; examples are brick masons, electricians, painters, plumbers, roofers, or specialty skill consultants.   |
| Building Commissioning Agent | is an independent third party that oversees the four designated phases of a construction project. This party is directly contracted with DFA Bureau of Building and exercises oversight independent of the professional and constructor teams as well as serving as a communication line between all parties involved in the construction process. |
| Construction goal            | is a quality project that is delivered on time at the lowest possible cost and satisfactorily meets the needs of the user(s).  |

|                          |   |
|--------------------------|---|
| Pre-planning             | The tasks accomplished in the pre-planning and design phases of the construction process to ensure that the project provides a completed project that meets the needs of the facility occupant(s) satisfactorily within an optimum budget cost by the established timeline.   |
| Pre-planning Phase       | The public entity is responsible for the planning, programming, scheduling, budgeting, and financing responsibilities for a construction project that it has determined to be necessary and feasible. At the public entity's discretion, for an additional fee, the architect may perform additional services, such as planning and programming. Architects' design service fees cover their basic services in the design phase.  |
| Design Phase             | The public entity contracts with an architect, engineers, or other consultants to design a construction project with definitive plans and contract documents for bidding and awarding the construction contract to a general contractor. During this phase, the entity is responsible for reviewing and analyzing the architects' and engineers' deliverables to help ensure that the designed project will achieve its goals for cost, schedule, and construction quality. |
| Construction Phase       | The public entity contracts with a general contractor to build the construction project in accordance with the architect's plans and any entity-approved modifications. The general contractor also conducts the contract award process for trade contractors and exercises contract administration.  |
| Constructibility Reviews | These reviews help to ensure clear plans and specifications for a constructible facility and to reduce design modifications during construction that could lead to higher costs and delays. They involve a review of the contract documents to determine the feasibility and/or cost effectiveness of constructing specific design details.   |
| Life Cycle Cost Studies  | These studies balance construction cost with operational/maintenance costs over the anticipated life of the facility in order to provide the facility at optimum cost to the public entity.   |



|                           |   |
|---------------------------|---|
| Value Engineering Studies | These cost-effectiveness studies evaluate alternative systems, materials, systems, specifications, and construction methods in order to determine the best combination of price, schedule, constructibility, function, and aesthetics for each project segment. They involve the proposed substitution of less expensive materials or systems for those initially suggested, without changing the intended utility or overall appearance of the facility. |
| Conceptual Cost Estimates | These estimates for each design stage continuously monitor and modify the anticipated project cost of the designed project.   |
| Materials Research        | This research should identify and use the most cost efficient materials that will provide a quality facility at optimum cost to the public entity when considering the operational and maintenance costs of the facility.   |

SOURCE: PEER analysis of public and private sector construction delivery systems.

## Appendix B: Major Tasks in the State Construction Process

| Responsible Party              | Pre-planning Phase   | Planning Phase   | Construction Phase  | Post Construction Phase  |
|--------------------------------|--|--|---|--|
| State Entity                   | need and feasibility of project  | project management and approval authority  | project management and approval authority   | project management and approval authority                                  |
| State Entity                   | master plan  | constructibility reviews   | general contractor contract   | acceptance and start-up  |
| State Entity or DFA Contractor | master program   | life cycle costing   | life cycle costing  | facility occupancy   |
| State Entity or DFA Contractor | project budget   | value engineering  | value engineering   | warranty reviews   |
| DFA and Legislature            | financing  | conceptual cost estimates  | monitoring construction timeliness  | occupant evaluation  |
| DFA                            | information control system   |  | cost accounting system  | maintenance program  |
| DFA                            | professional contract  |  | construction cost estimating  | operational program  |
| DFA                            | other professional contracts   |  |   | close out actions  |
| Design Professional Contractor | project management responsibilities of public entity<br><br>(separate fee) | facility design and related duties<br><br>(separate fee)<br>contracting for necessary architects or engineers<br><br>materials research in accordance with contract specifications<br>construction cost estimating<br><br>project manual with construction documents<br>assistance in selecting general contractor | construction supervision<br><br>(separate fee)<br>office construction administration<br><br>on-site construction monitoring<br><br>change order control system<br><br>shop drawing reviews and approvals<br><br>close out actions | project management responsibilities of public entity<br><br>(separate fee) |
| General and Trade Contractors  |  |  | construction methods and means<br><br>contract and supervision of subcontractors<br><br>owner-approved construction schedule  | warranty deficiencies<br><br>post construction evaluation                  |

SOURCE: PEER's review of construction delivery system information.

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## **Appendix C: Duties and Responsibilities of the Contract Architect and Bureau Staff**

### *Contract Architect, Engineer, and/or Architect & Engineer*

All state construction projects are contracted with a private Architect, Engineer, and/or Architect & Engineer firm that is the Bureau of Building, Grounds, and Real Property Management's representative from planning through the construction phase, which terminates upon expiration of the warranty period or settlement of all warranty claims. This professional contractor is responsible for preparing plans, specifications, contract documents, and supervising all phases of construction work performed by the general contractor, subcontractors, and engineering consultants. In this role, the architect is the interpreter of the contract document requirements and the contractor's performance of them. The private architect also provides a monthly report to the Bureau of Building on the progress of work on the construction site that includes their on-site visit log and details the project progress and work condition.

### *Staff Architect*

DFA employs staff architects who are responsible for consulting with state agency personnel to determine the functional and spatial requirements of proposed buildings, reviewing the architectural, structural, and mechanical plans and specifications prepared by the private architect to ensure compliance with building codes adopted by the Bureau of Building. These individuals also inspect proposed building sites for suitability through evaluation of size, accessibility, availability, and cost of utilities, and determine minimum size or areas required for proposed buildings and other structures, equipment requirements, and alternative construction methods that would result in lower construction and maintenance costs.

### *Professional Construction Administrators*

DFA employs staff building inspectors who are responsible for managing the various types of bureau's capital improvement and repair/renovation construction projects to ensure compliance with contractual agreements, state laws, and Bureau of Building, Grounds, and Real Property Management Policies and Procedures. In this capacity, these inspectors serve as a liaison between the using agency, the professional(s) and contractor(s) to ensure the timely completion of a quality building, meeting the functional needs of the using agency. They issue Notices to Proceed and hold pre-construction conferences with the general contractor, professionals, and the using entity to review policy, procedures, and construction time frame. They also review projects at least monthly to determine progress, requirements/validity of proposed change orders; attend monthly progress update meetings with contractor professional team members, and meet with the using agency. Other duties include processing monthly progress payments, completing final inspections for acceptance by the state, and closing projects when all requirements have been met.

### *Staff Contract Analyst*

The bureau's contract analyst reviews and investigates contract proposals and negotiations. The contract analyst also initiates bid specifications, solicitations, and advertisements and presides at formal bid openings.

SOURCE: PEER analysis of public and private sector construction delivery systems.

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## **Appendix D: Major Services Performed by the Building Commissioning Agent in the State Construction Process**

1. Assist in development of a Design Intent Document.
2. Assist in development of a Basis of Design Document.
3. Develop a Preliminary Commissioning Plan.
4. Review Design Development Documents.
5. Develop project specific Commissioning Specifications.
6. Review final Construction Documents.
7. Develop System Verification/Installation Checklists
8. Review Equipment Submittals.
9. Develop Functional Performance Documents.
10. Monitor Contractor equipment startup
11. Confirm Installation Verification.
12. Review Balancing Report.
13. Conduct Functional Performance Tests.
14. Track problem issues to resolution.
15. Participate in identifying Owner training needs and assisting in coordinating training.
16. Prepare and submit final Commissioning Report including System Manual for the Owner.
17. Perform two off-season Functional Performance Tests within the eleven months immediately following project completion and attend warranty meeting and assist in resolving any issues regarding commissioned systems.
18. Chair or attend commissioning meetings as required and provide commissioning reports to the Owner/Architect during the project.

SOURCE: Bureau of Building

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**Appendix E: Recommendations from PEER's Report *The Department of Finance and Administration's Management of Construction Projects at Selected State-Owned Buildings* (December 17, 2002)**

**Legislative**

1. The Legislature should amend MISS. CODE ANN. Section 31-11-30 (1972) to require the Department of Finance and Administration, in reviewing and reporting on project preplanning, to estimate and report to the Legislature the projected debt service costs for each preplanned project.

**Other State Entities**

2. The State Auditor should conduct a compliance audit of the four personal services contracts associated with grounds or building cleaning at the Woolfolk Building.  
  
If this audit identifies these expenditures as an unauthorized use of bond funds, the state should make a claim against the surety bond of the Executive Director of the Department of Finance and Administration under MISS. CODE ANN. Section 7-7-211 (1972).

**Change Orders**

3. The Bureau of Building should use a modified change order form that includes a cost summary sheet for the proposed work. This sheet should list the following costs for the general and each trade contractor:
  - labor;
  - labor burden (fringe benefits);
  - material;
  - equipment;
  - overhead and profit amount; and,
  - total cost.
4. The Bureau of Building should require the general contractor and each trade contractor to substantiate with written documentation the labor burden (fringe benefit) rate that they will charge during the construction project.  
  
This cost requirement could be made a part of the contract bid process for the general contractor and at the beginning of a trade contractor's participation in the project.
5. Upon the receipt of a change order request, the Bureau of Building should determine the total cost for the change order by estimating the long-term debt service costs, so that the total cost of this

additional work can be considered in the approval process. If this change order is approved, the bond proceeds and debt service costs should be documented in the Project Accounting and Tracking System.

### **Project Accounting and Tracking System (PATS)**

6. The Bureau of Building should modify the Project Accounting and Tracking System to capture milestones essential in tracking time and cost for the various phases and participants in the construction process and use these data elements for management purposes. The bureau should also modify PATS to provide management reports to DFA on a routine or real time basis and capture information concerning bureau and professional team visits to construction sites and project meetings.
7. The Bureau of Building should modify PATS to capture the following data elements for change orders and use the information for management purposes: initiator, category, type, and average processing days measured from the date the change order is formally requested.

### **Payment Practices**

8. The Bureau of Building should change its standard design professional contract to state that the bureau's policy will be to file insurance claims for all change order work that is caused by the professional's design errors, omissions, or documentation deficiencies. Further, the bureau should not pay any additional fees to the professional team for such change orders.
9. The Bureau of Building should consider reducing the overhead and profit percentage that it pays to general and trade contractors, taking into consideration the rates paid by other states. The bureau should set a maximum total percentage regardless of the number of participants involved in the contract. The bureau should allocate this percentage proportionately based on the amount of work performed by each contractor.
10. The Bureau of Building should modify its bid process to require the general contractor to substantiate with written documentation a detailed breakdown of what is included in the overhead rate that they will charge. The general contractor should subsequently require the trade contractors to do the same at the point of their contract negotiation.

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## Appendix F: Recommendations from PEER's Report *The Bureau of Building's Management of Construction Change Orders* (May 14, 2002)

### Process for Selecting Contract Professionals to Oversee Change Orders

1. The bureau should require its selection committee members to rate contract professionals against pre-determined criteria for selection and complete evaluation forms documenting that process. The bureau should retain these forms as documentation of its selection process for a selected period, such as three years after the process has been completed. The evaluation forms should require that the professionals' record of managing changes to contracts be evaluated.
2. The bureau should develop policies and procedures to implement its goal of increasing competition among contract professionals who are awarded construction contracts. In doing so, the bureau should study other states' policies and consider their potential for application in Mississippi, including those that:
  - base a part of the selection process on consideration of the volume of work the firm has performed for the state (i.e., giving extra points to those who have not done work for the state recently); and,
  - include an element of cost competition in the criteria for selection.

### Cost Review Process Contracted to Professionals

3. The bureau should revise its internal procedures to require that bureau staff construction administrators obtain complete cost itemizations (e.g., quantities of labor, materials, and equipment) from contract professionals before change orders can be approved.
4. The bureau should revise its standard professional contract to require that the contract professional obtain complete cost itemizations (e.g., type and quantities of materials, hours of labor, and equipment rental rates) from both contractors and subcontractors in the preparation of change orders.
5. The bureau should revise the standard contract with the general contractor to require that the contractor *always* provide change order cost quotes to the contract professional that include quantities of labor, equipment, and materials (unless documentation in files gives a specific, legitimate reason for a waiver).

6. The bureau should inform the contractors in the pre-construction conferences that they will always be required to itemize their quotes into quantities of labor, equipment, and materials.
7. The bureau should revise its professional contracts to conform to policy by requiring the contract professional to:
  - analyze and document the reason for and cost of change orders before presenting them to the bureau; and,
  - certify in writing that the costs have been examined and documented and have been found to be reasonable. This could be accomplished in practice by revising the approval forms to require the statement.

### **Bureau's Oversight Process for Analyzing and Controlling Costs**

8. The bureau should implement policies and procedures requiring its personnel to review change order proposal costs and document their review. The bureau's policy should also require its staff and the contract professional to verify and certify that the change order costs are not already included in the bureau's contract with the general contractor.
9. The bureau should determine the types of training that a staff construction administrator needs to analyze and determine the cost efficiency of proposals for change orders. The bureau should research ways to conduct training at minimal cost and develop a routine system of training for its administrators. To provide training at a reasonable cost, the bureau could consider requesting help from retired and active professionals, academics, and contract estimators without direct ties to the state contracting process who would train the staff at bureau offices.
10. The bureau should develop policies and procedures related to errors and omissions to give guidance to staff construction administrators in identifying, investigating, and resolving problems that might arise. As part of such procedures, the bureau should revise its standard change order forms to require that bureau staff note whether a change order is caused by an error or omission, an unforeseen circumstance only, a scope change by the tenant agency, or for some other reason. This would require the construction administrator to address the question of potential errors and omissions directly and would require that the issue be discussed and resolved by bureau management.



11. In some cases, all or part of the increased costs due to errors and omissions may be owed to a third party such as a contractor, and the professional may elect to negotiate directly with the contractor and pay the contractor directly for the work. In those cases, the bureau should require that all work added to the project for the errors or omissions be reported to the bureau. As a result, the bureau would be able to monitor the total cost of the contract and the status of change orders and errors and omissions, information which is currently not recorded in the bureau's data.
12. The bureau should consider prohibiting construction oversight work on a given project by those professionals who perform design work on that project. This would help to avoid a conflict of interest on the part of an architect or engineer who might hide, during the construction oversight stage, an error or omission that he or she committed during the design stage.
13. The bureau should study its system of compensating contract professionals and also study the compensation systems and contract provisions of other states' building agencies. The study should seek to find better and more cost-effective ways to provide financial incentives and disincentives to the contract professionals to encourage them to reduce change order costs.

In devising a new compensation system to improve cost effectiveness, the bureau should consider revising the standard professional contract as follows:

- a. Currently, the bureau is in the practice of reducing the contract professionals' fees when it approves change orders that reduce the contract cost. This is a disincentive for the professional to seek ways to reduce total contract costs. The bureau should eliminate this practice but offset the costs of this change with a decrease in overall fees paid to professionals. Therefore, the overall amount paid to professionals would remain the same, but professionals who are successful in keeping costs down would not be directly penalized as is currently the case. (The bureau should study the history of change order fees in its database to project the cost of the policy change and to calculate the amount by which overall fees should be decreased to offset the costs.) The bureau should also consult with the state of Washington to discuss its implementation of this policy.
- b. The bureau should revise its contracts to require an *automatic* denial of a change order fee if the bureau determines an error or omission was

committed (the contract currently states that fees *may* be denied if the professional is found to be at fault).

- c. The current standard contract does not include a requirement that the professional pay for the cost of a change order resulting from an error or omission caused by the professional. The bureau should revise its contracts to require the professional to pay the bureau or contractor for the portion of change order costs caused by an error or omission, unless all or a portion is waived by the bureau. This would allow the bureau to determine if there are extenuating circumstances (which must be documented) in which a professional should not be required to help pay for a change order.
- d. The bureau should revise its contracts to require a reduction in the final payment to the professional by a specified amount (determined by the bureau) if final change order costs are 2% or more above the original contract amount. In order to be fair to the professional, the calculation of the final change order costs would exclude:
  - amounts resulting from a scope change by the agency (a letter from the agency would have to prove this); and,
  - an "alternate" included in the original contract bid (i.e., a bid for a specific item or part of the project which is optional).

### **Lack of a System to Retain and Use Experience Data for Future Decisionmaking**

14. The bureau should begin to collect and analyze information and develop reports to help in the overall management of change orders. For example, the bureau should develop a system to classify change orders by type, such as requesting entity (bureau, professional, tenant agency, contractor) and reason (error, omission, scope change).
15. Bureau personnel should comply with the bureau's policy of evaluating architects and engineers on their performance twice during the lifespan of a project. The bureau should document this evaluation, compile the information in a management information system, and use the data to assist during the selection process in rating contract professionals on their experience working for the state.

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## Appendix G: Major Criteria for Selecting a Building Commissioning Agent in the State Construction Process

It is desired that the person designated as the site building commissioning agent satisfy as many of the following requirements as possible. A weighted or grading system will be developed to evaluate all proposals submitted in response to this solicitation.

1. Have acted or be acting as principal commissioning agent on at least three projects over 50,000 square feet.
2. Have extensive experience in the operation, maintenance and troubleshooting of HVAC systems, energy management control systems and lighting control systems. Extensive field experience is required. A minimum of five years in this type work is required.
3. Five years' experience in an engineering position in the field of facilities management, facility engineer, building operation, maintenance, and operations and maintenance training.
4. Knowledgeable in the process and theory of test and balance of both air and water systems.
5. Ten years' experience in the design of energy-efficient systems and system control strategy optimization.
6. Ten years' experience in monitoring and analyzing system operation using energy management control system trending and stand-alone data logging equipment.
7. Excellent verbal and written communication skills. Highly organized and able to work with owners, professionals, and contractors.
8. Experience with ability to develop contract documents in the form of commissioning specifications.
9. A bachelor's degree in Mechanical or Electrical Engineering is required and a Professional Engineer's registration in the State of Mississippi is strongly preferred.
10. The majority of the required expertise for this project must be part of the skill and experience set of the prime firm making the proposal. A member of that firm will be the designated Commissioning Agent. The Commissioning Agent must be fully qualified to commission all of the above-listed systems. If the Commissioning Agent or prime firm does not have sufficient skills or knowledge to commission a specific system, the prime firm shall subcontract with a qualified party to do so. That party's qualifications shall be submitted to the Architect or Owner of the project for approval, before they are retained.
11. The Commissioning Agent will be an independent professional consultant and not an employee or subcontractor of the General Contractor, or any other subcontractor on the project. This includes the Test and Balance Contractor and the Architect or Engineer.

SOURCE: DFA Bureau of Building



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# Agency Response



**STATE OF MISSISSIPPI**  
HALEY BARBOUR, GOVERNOR

**DEPARTMENT OF FINANCE AND ADMINISTRATION**

J.K. STRINGER, JR.  
EXECUTIVE DIRECTOR

June 13, 2005

Honorable Dirk Dedeaux, Chairman  
Joint Committee for  
Performance Evaluation and Expenditure Review  
P.O. Box 1204  
Jackson, MS 39215-1204

Dear Chairman Dedeaux:

We have reviewed the draft **A Review of the Management of the State Construction Process** prepared by the Joint Committee for Performance Evaluation and Expenditure Review (PEER) and offer the following response from the Department of Finance and Administration.

The Department of Finance and Administration is appreciative of this PEER review of the management aspects of the State Construction Process. We acknowledge the concerns of the five major processes identified that require careful consideration to make the State's Construction Process operate in an efficient and effective manner. The Department of Finance and Administration will carefully review the recommendations of PEER and strive to continue implementing initiatives that will improve the value of the management of the State's Construction Program to the constituency of the State of Mississippi.

We look forward to the continuous improvement of the Construction Program as resources will allow.

Sincerely,

J.K. Stringer, Jr.

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