The Board’s Contract Modification Process Related to Renovation Projects Is Generally Effective
Executive Summary, 2022-FMIC-B-002, February 2, 2022

The Board’s Contract Modification Process Related to Renovation Projects Is Generally Effective

Finding

The Board of Governors of the Federal Reserve System complied with its change order process by using contractors to mitigate schedule delays and financial risks associated with renovation projects. For example, the Board consulted with its contractors to assess whether additional work was warranted and to obtain independent government cost estimates for negotiations. The Board also complied with policy requirements and generally complied with guidance related to its review process for renovation contract modifications. Specifically, the Legal Division reviewed all applicable modifications in compliance with the Board’s Acquisition policy, and the Facility Services section generally complied with the Long-Term Space Plan—Change Order Responsibility Matrix (RACI) guidance for modifications on all renovation contracts.

However, in five instances, the Board issued modifications without completing the RACI forms or obtaining the appropriate approvals because of administrative oversights. Obtaining properly approved RACI forms before requesting and processing modifications ensures that Board leadership approves, concurs with, and is informed of potential cost overruns and schedule delays.

Recommendations

Our report does not contain any recommendations because Facility Services replaced the manual RACI process with an electronic RACI process during our audit. We observed the automated RACI form approval routing, including automatic email reminders to approvers and electronic approval status tracking. Further, the Division of Management designated a reviewer to confirm that each RACI form was properly signed, which should ensure RACI forms are approved before a modification request. In their response to our draft report, the director of the Division of Management and the chief financial officer state that they are pleased with our audit finding and remain committed to maintaining effective controls in planning and managing the remaining major renovations.

Purpose

We conducted this audit to review the Board’s contract modification process related to its renovation projects to ensure compliance with its relevant process, policy, and guidance. Our scope covered all 48 renovation-related contract modifications issued from April 1, 2019, through March 31, 2020, including 33 construction contract modifications, that resulted in a change to the relevant renovation project’s cost or schedule. These modifications totaled approximately $42 million.

Background

The Board is planning and managing major renovations of all four buildings it owns. We have identified the Board’s management of its physical infrastructure as a major management challenge since 2014. These multiyear projects pose financial and operational risks, such as overpayment for services and schedule delays. For example, the renovation of the William McChesney Martin, Jr., Building (which costs an estimated $436.5 million) has had scope changes, delays, and cost increases since the original concept was developed.
The Board's Contract Modification Process Related to Renovation Projects Is Generally Effective

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<th>Recommendation</th>
<th>Responsible office</th>
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<td>No recommendations.</td>
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MEMORANDUM

DATE: February 2, 2022

TO: Winona H. Varnon
   Director, Division of Management
   Board of Governors of the Federal Reserve System

   Ricardo A. Aguilera
   Chief Financial Officer
   Board of Governors of the Federal Reserve System

FROM: Cynthia Gray
   Assistant Inspector General for Audits and Evaluations
   

We have completed our report on the subject audit. We conducted this audit to review the Board of Governors of the Federal Reserve System’s contract modification process related to its renovation projects to ensure compliance with its relevant process, policy, and guidance.

We provided you with a draft report for review and comment. In your response, you state that you are pleased with our finding and that you remain committed to being good financial stewards and maintaining effective controls in planning and managing the remaining major renovations. We have included your response as appendix B to our report.

We appreciate the cooperation that we received from your staff during our audit. Please contact me if you would like to discuss this report or any related issues.

cc: Patrick J. McClanahan
   Donna Butler
   Kendra Gastright
   Stephen Pearson
   Steve Bernard
   Monica Manning
   Kimberly Briggs
   Craig Delaney
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Introduction

Objective

The Board of Governors of the Federal Reserve System is in the process of planning and managing major renovations of all four buildings it owns. We have identified the Board’s management of its physical infrastructure as a major management challenge since 2014. These multiyear projects pose significant risks and challenges because of their size and complexity. For example, the William McChesney Martin, Jr., Building project, which is an estimated $436.5 million expenditure, has faced scope changes, delays, and cost increases since the original concept was developed.

The objective of this audit was to review the Board’s contract modification process related to its renovation projects to ensure compliance with its relevant process, policy, and guidance. Our scope covered all 48 renovation-related contract modifications, including 33 construction contract modifications, issued from April 1, 2019, through March 31, 2020, that resulted in a change to the relevant renovation project’s cost or schedule. These modifications totaled approximately $42 million. For the 33 construction contract modifications, we tested internal controls in the process to ensure (1) the additional work was warranted and (2) the cost associated with the new work was reasonable. For all 48 modifications, we tested internal controls related to the modification policy and guidance.

We conducted a separate concurrent audit that reviewed the Board’s process for planning and managing multiple renovation projects as well as procuring services under various renovation-related contracts. The two audits will result in a comprehensive review of the Board’s renovation projects. Our scope and methodology are detailed in appendix A.

Background

The Board’s Renovation Projects

The Board plans to renovate all four of its buildings, and these renovation efforts have been grouped into three projects. The Board has awarded four contracts for the renovation projects to facilitate the work.

- **Martin renovation.** The Board awarded its construction contract for the Martin building in 2018. The Board awarded three contracts to support construction: (1) a construction contract for supervision, labor, equipment, and materials necessary to complete the full renovation; (2) an architectural and engineering (A/E) contract to respond to the construction contractor’s questions related to design or site conditions and to conduct merit assessments on proposed changes to the construction contract; and (3) a construction administrator (CA) contract to conduct site visits, monitor the construction schedule, and provide advice to the Board on

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1. The Board issued a total of 52 renovation-related modifications from April 1, 2019, through March 31, 2020; we excluded 4 modifications because they were administrative changes and did not affect a project’s cost or schedule.

proposed schedule or cost changes, including preparing independent cost estimates. The Board moved packed items into the building during September 2021 and began moving employees in during November 2021.

- **Eccles/1951 renovation.** The Board is in the design stage for the Marriner S. Eccles Building and the 1951 Constitution Avenue NW building renovation. The Board awarded an A/E contract to design both buildings as a single project in 2019. No construction contract has been awarded as of November 2021; however, we were informed that the Board completed limited scope demolition and abatement work in the 1951 Constitution Avenue NW building in October 2021.

- **New York Avenue renovation.** The Board is in the planning stage for the full renovation of the New York Avenue building. As of November 2021, only limited-scope contracts were in place aimed at improving end-of-life building components to allow the Board to continue to safely occupy this building until the move out of the building in 2027.

As outlined in table 1 below, the Board approved 48 renovation-related contract modifications from April 1, 2019, through March 31, 2020, that resulted in cost or schedule changes totaling approximately $42 million.

Table 1. Renovation Project Contract Modifications From April 1, 2019, Through March 31, 2020

<table>
<thead>
<tr>
<th>Renovation project</th>
<th>Contractor role</th>
<th>Original award</th>
<th>No. of modifications</th>
<th>Dollar value of modifications</th>
</tr>
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<tbody>
<tr>
<td>Martin</td>
<td>Construction</td>
<td>$217,776,250</td>
<td>33</td>
<td>$38,981,889</td>
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<td></td>
<td>A/E</td>
<td>$14,900,000</td>
<td>8</td>
<td>$1,407,141</td>
</tr>
<tr>
<td></td>
<td>CA</td>
<td>$2,482,668</td>
<td>5</td>
<td>$1,353,512</td>
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<td>Eccles/1951</td>
<td>A/E</td>
<td>$41,697,899</td>
<td>2</td>
<td>$270,553</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$276,856,817</strong></td>
<td>48</td>
<td><strong>$42,013,095</strong></td>
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Source: Compiled by the OIG based on Board documents.

**Roles and Responsibilities**

The Division of Management (MGT) is responsible for managing the day-to-day aspects of the renovation projects, including facilitating modifications to the renovation contracts. Board senior leadership oversees MGT’s work on the renovation projects, and the Division of Financial Management (DFM) and the Legal Division support MGT’s work.

- **Administrative governor.** The Board’s administrative governor is responsible for overseeing activities within the chief operating officer’s (COO) purview and is informed of changes that are likely to increase the overall construction budget or delay the schedule.
• **COO.** The COO is responsible for the Board’s day-to-day operations and oversees MGT, DFM, and another Board division. The COO approves changes related to the renovation projects that are likely to increase the overall construction budget or delay the schedule.

• **MGT.** Within MGT, the Facility Services (FS) section is responsible for planning and managing the renovation projects. FS leadership, including the associate directors and chiefs, (1) establishes work and project priorities and (2) reports to Board senior leadership on the section’s initiatives.

• **DFM.** DFM’s Procurement section awards and administers the Board’s contracts with construction contractors, A/E firms, CAs, and others, and it serves as the liaison between the Board’s project team and contractors.

• **Legal Division.** The Legal Division generally reviews contract actions over $200,000 and provides legal advice.

**The Board’s Renovation Contract Modification Process**

*Modification Approval Policy and Guidance*

Modifications to any of the renovation-related contracts are subject to certain approvals.

- The *Acquisition* policy requires that the Legal Division review contract actions, including modifications, over $200,000, with a few exceptions.³

- The *Long-Term Space Plan—Change Order Responsibility Matrix (RACI)* guidance specifies who is responsible for and who needs to approve, concur with, or be informed of various modifications affecting the schedule or budget for a contract.⁴ The level of approval required in the RACI form ranges from the project manager to the COO, depending on several factors such as (1) whether the contractor or the Board initiates the changes, (2) the amount of funds remaining in the contingency fund or the time remaining in the schedule contingency, and (3) the modification cost or schedule changes.⁵

*Change Order Process*

In addition to the approvals noted above, modifications to construction contracts also follow the change order process. A *change order* is an agreement between the Board and the construction contractor authorizing a change to the work, cost, or schedule. The process can be initiated by the contractor, typically because the contractor encounters conditions that materially differ from those listed in the

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³ Legal review is not required for exercising an option that was priced in a contract already reviewed by the Legal Division or for justification memorandums for certain noncompetitive methods of acquisition.

⁴ Contract modifications that do not affect the cost or schedule of the project do not require a RACI form.

⁵ The Board established a construction contingency budget and a schedule contingency to account for risks associated with the potential discovery of unforeseen site conditions and minor errors, omissions, or changes in the work.
contract or an error in the construction drawings. The process can also be initiated by the Board if it would like to change the contract documents or the contractor’s method of performing the work.

For contractor-initiated change orders, the process is as follows:

1. The construction contractor submits a request for information (RFI) to obtain clarification regarding site conditions from FS in accordance with the contract.
2. FS may consult with the A/E firm to determine whether the submitted RFI merits additional work, as allowed by the A/E contract.
3. If the submitted RFI warrants additional work, FS works with Procurement to direct the construction contractor to proceed with the work not in the original contract.
4. The construction contractor submits a change notice to FS notifying the Board that the change will result in an adjustment to the contract price or the period of performance.
5. The construction contractor provides FS with a detailed change estimate or pricing proposal to capture the anticipated changes to the cost and the effect on the schedule in accordance with the contract.
6. FS may consult with the CA, who then develops a government cost estimate as allowed by the CA contract.
7. FS and Procurement, in consultation with the CA, negotiate the final price with the construction contractor.
8. FS obtains approvals on the changes through the RACI process.
9. Once approved, MGT submits a purchase request to Procurement to process the modification.
10. Procurement sends draft modifications over $200,000 to the Legal Division for review; the Legal Division responds with or without comments to Procurement.
11. Procurement issues the modification.

For Board-initiated change orders, the process is substantially similar to the contractor-initiated process except that the Board does not perform a merit assessment. A Board-initiated change order starts with FS and Procurement directing the contractor to perform work that is not in the original contract (step 3). See figure 1 below for the change order process.
Figure 1. Change Order Process

Contractor initiated

Contractor submits RFI to FS.

FS may consult with A/E firm to determine if work is warranted.

FS and Procurement direct contractor to proceed with work not in original contract.

Contractor submits change notice to FS.

Contractor provides FS with a detailed estimate or pricing proposal.

FS may consult with CA to develop a government cost estimate.

FS and Procurement, in consultation with the CA, negotiate the final price with the contractor.

FS obtains change approvals through the RACI process.

MGT submits purchase request to Procurement.

Legal reviews all modifications over $200,000.

Procurement issues the modification.

Source: OIG summary of FS process flowchart, policy, guidance, and interviews.

The Board complied with the change order process for the 33 construction contract modifications we reviewed by using contractors to mitigate schedule delays and financial risks associated with the renovation projects. For example, the Board consulted with its contractors to assess whether additional work was merited and to obtain cost estimates. The Board also complied with policy requirements and generally complied with guidance related to its review process for all 48 of the renovation contract modifications we reviewed. Specifically, Procurement ensured that the Legal Division reviewed all applicable modifications in compliance with the Board’s Acquisition policy, and FS complied with the RACI guidance for 43 of the 48 renovation contract modifications we reviewed. In 5 instances, the Board issued modifications either without completing the RACI forms or without the appropriate approvals because of administrative oversights. Obtaining properly completed and approved RACI forms before requesting and processing modifications ensures that Board leadership approves, concurs with, and is informed of potential cost overruns and schedule delays.

Facility Services Complied With the Change Order Process by Using Contractors to Mitigate Schedule Delays and Financial Risks

FS designed its change order process to include certain practices that are permitted by the Federal Acquisition Regulation and documented the process in an internal flowchart. Specifically, to mitigate schedule delays, the Board allows the construction contractor to proceed with work while negotiating the price for approved change orders. In addition, the Board mitigates financial risk by consulting with contractors (1) to assess whether additional contractor-initiated work is warranted through a merit assessment and (2) to obtain an independent government cost estimate to use in negotiations. Specifically, although not required by policy, the Board used its contractors to assess additional work for 25 of the 27 contractor-initiated modifications. Additionally, it obtained cost estimates for 30 of the 33 construction contract modifications. The construction contractor initially proposed approximately

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6 The Board has implemented policies and procedures to govern the acquisition of goods and services; it is not required to comply with the Federal Acquisition Regulation.

7 One modification was for the removal of asbestos, which a Board official explained was generally warranted when detected, and the other extended the term of a contract at previously agreed-upon pricing.

8 We noted that one modification pertained solely to schedule adjustments and did not have any associated costs, one was for the extension of an already-existing priced rental, and one was to reflect the Board’s decision to allow overtime to accelerate the schedule.
$47.4 million for these change orders; however, the Board, consulting with its CA, ultimately agreed to pay approximately $38.7 million, or about 18 percent less than the initial proposals.

The Board Complied With Policy and Generally Complied With Guidance for Approving All Renovation Contract Modifications

The Board generally complied with its modification review processes for its renovation contracts. Specifically, Procurement ensured that the Legal Division reviewed all 17 modifications that exceeded $200,000, as required by the Board’s Acquisition policy. In addition, FS complied with its RACI guidance for 43 of the 48 modifications we reviewed by obtaining the proper approvals. However, the Board issued 3 modifications, valued at $2,907, $8,500, and $58,185, without completing RACI forms. In addition, the Board issued 2 modifications, valued at $3,951,000 and $685,407, with RACIs approved by the director of MGT rather than the COO as is required by established thresholds included in the RACI guidance.

The Board’s 2018 RACI guidance specified who was responsible for and who needed to approve, concur with, or be informed of various modifications affecting the schedule or budget for a contract. The associated change order process flowchart indicated that a RACI form should be approved before Procurement issued a contract modification.

The RACI process was manual and paper based, and FS noted that the modifications that were issued either without completed RACI forms or without properly approved RACI forms were administrative oversights. Obtaining properly completed and approved RACI forms before requesting and processing modifications ensures that Board leadership approves of potential cost overruns and schedule delays.

Management Actions

In July 2020, FS replaced the existing manual RACI process with an electronic RACI process, and in October 2021, the section made updates to the electronic process. The electronic process automates the routing of RACI forms for approval, including sending email reminders to approvers, and allows MGT staff to track the approval status. MGT also mitigated the risk of incomplete or improperly approved RACI forms by designating a reviewer to ensure that the proper signatory levels are on each RACI form. This reviewer is also the individual responsible for requesting modifications from Procurement, which should ensure that RACI forms are approved before the request. We observed the system and the layer of review. Based on MGT’s actions and our observation of the system and additional review, we are not recommending any enhancements to the automated RACI process.

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9 Procurement issued two of these modifications without a RACI form on May 15, 2019. The project manager completed and approved the RACI forms, and the branch officer was informed of the modification via the RACI form, on August 9, 2020. One other modification was issued on March 16, 2020, and the RACI form was approved on July 31, 2020.

10 Although the COO did not approve the $3,951,000 RACI form for the contract modification, the former COO had approved an initial RACI form authorizing up to $4 million while pricing was being determined.
Management Response

In response to our draft report, the director of MGT and the chief financial officer state that they are pleased with our audit finding and remain committed to maintaining effective controls in planning and managing the remaining major renovations.
Appendix A: Scope and Methodology

Our objective was to review the Board’s contract modification process related to its renovation projects to ensure compliance with its relevant process, policy, and guidance. The scope of this audit included all 48 approved renovation-related contract modifications issued from April 1, 2019, through March 31, 2020, that resulted in a change to the relevant renovation project’s cost or schedule. These modifications totaled approximately $42 million.

To accomplish our objective, we reviewed Board policy, guidance, and contract documents, including the Acquisition policy, the 2018 Long-Term Space Plan—Change Order Responsibility Matrix, the Long-Term Space Plan—2020 Revisions to the Change Order Responsibility Matrix, the Strategic Plan 2020–23, and all four renovation contracts (the A/E contract for Martin, the construction contract for Martin, the CA contract for Martin, and the A/E contract for Eccles/1951).

We tested controls related to the Board’s renovation contract modifications, including reviewing the 33 construction contract modifications that followed the change order process, to determine whether the Board consulted with the A/E firm or the CA firm to perform merit assessments or cost estimates. Our testing also included reviewing all 48 renovation-related contract modifications to determine whether the Board’s Legal Division reviewed the modifications in accordance with the Acquisition policy and whether FS complied with its RACI guidance.

We also interviewed FS officials and staff as well as Procurement staff. Additionally, we reviewed previous relevant audit reports conducted by the Office of Inspector General and reports by the U.S. Government Accountability Office and other federal agencies.

Auditing standards require that we assess internal controls significant to our audit objective. Accordingly, we assessed the internal controls related to the Board’s process for modifying its renovation project contracts. Our assessment included reviewing Board policies, guidance, and contracts. We tested the operating effectiveness of controls significant to our objective, as noted above. Internal control deficiencies identified during the audit are presented in the body of this report.

We conducted this performance audit from June 2020 to November 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our finding and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our finding and conclusions based on our audit objective.
January 20, 2022

Ms. Cynthia Gray  
Assistant Inspector General for Audits and Evaluations  
Office of Inspection General  
Board of Governors of the Federal Reserve System  
20th Street and Constitution Avenue, NW  
Washington, DC 20551

Dear Ms. Gray:

Thank you for the opportunity to review and comment on the Office of Inspector General’s draft report, *The Board’s Contract Modification Process Related to Renovation Projects is Generally Effective*. We appreciate your partnership with our divisions during the course of this audit.

As part of your comprehensive review of the Board’s renovation projects, we are pleased that your audit found that the Board’s contract modification process related to renovation projects is generally effective in ensuring compliance with our relevant process, policy, and guidance. We are extremely proud of the hard work our divisions, working collaboratively, have accomplished in advancing the Board’s long-term strategic space plan. We remain committed to continuing to be good financial stewards and maintaining effective controls in planning and managing our remaining major renovations.
Thank you for your review.

Sincerely,

Winona H. Varnon  
Director  
Division of Management

Ricardo A. Aguilera  
Chief Financial Officer and Director  
Division of Financial Management
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>A/E</td>
<td>architectural and engineering</td>
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<tr>
<td>CA</td>
<td>construction administrator</td>
</tr>
<tr>
<td>COO</td>
<td>chief operating officer</td>
</tr>
<tr>
<td>DFM</td>
<td>Division of Financial Management</td>
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<td>Facility Services</td>
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