Audit Team

Sonia Montano, CGAP, CRMA, Audit Supervisor
Patrick Schafer, MBA, CPA, CIA, CFE, Audit Supervisor

Audit Management

Timothy M. O’Brien, CPA, Auditor
Valerie Walling, CPA, CMC®, Deputy Auditor
Katja E.V. Freeman, MA, MELP, Audit Manager
Kevin Sear, CPA, CIA, CISA, CFE, CGMA, Audit Manager

Audit Committee

Timothy M. O’Brien, CPA, Chairman
Rudolfo Payan, Vice Chairman
Jack Blumenthal
Leslie Mitchell
Florine Nath
Charles Scheibe
Ed Scholz

You can obtain copies of this report by contacting us:

Office of the Auditor
201 West Colfax Avenue, #705
Denver, CO 80202
(720) 913-5000 • Fax (720) 913-5253

Or access an electronic copy by visiting our website at: www.denverauditor.org
December 6, 2018

AUDITOR’S REPORT

In keeping with generally accepted government auditing standards and the Audit Services Division’s policy, as authorized by D.R.M.C. § 20-276, our Division has a responsibility to monitor and follow up on audit recommendations to ensure that audit findings are being addressed through appropriate corrective action and to aid us in planning future audits.

In our follow-up effort for the Denver International Airport Airside Construction Projects audit issued July 20, 2017, we determined that the Airport Infrastructure Management (AIM) and Business Management Services (BMS) divisions have adequately implemented six of seven recommendations made in the audit report. Despite AIM’s efforts, auditors determined that the risk associated with one recommendation in the audit team’s initial finding has not been fully mitigated. As a result, the Audit Services Division may revisit this risk area in future audits to ensure that appropriate corrective action is taken.

For your reference, this report includes a highlights page that provides background and summary information on the original audit and the completed follow-up effort. Following the highlights page is a detailed implementation status update for each recommendation.

This concludes audit follow-up work related to this audit. I would like to express our sincere appreciation to the airport personnel who assisted us throughout the audit and follow-up process. If you have any questions, please feel free to contact me at 720-913-5000 or Sonia Montano, Internal Audit Supervisor, at 720-913-5157.

Denver Auditor’s Office

Timothy M. O’Brien, CPA
Auditor
Airside Construction Projects
December 2018

Follow-up Status
Airport Infrastructure Management (AIM) has implemented four recommendations and partially implemented one of the recommendations made in the July 2017 audit report. Business Management Services (BMS) has successfully implemented the two recommendations made.

Objective
The objective of the audit was to determine whether Denver International Airport’s (DEN) AIM Division had effective controls in place to ensure that airside construction projects were managed appropriately and addressed fraud, waste, and abuse. In addition, we determined whether construction projects were following various rules and regulations. We also reviewed AIM’s internal controls surrounding the timekeeping process of staff augmentation contractors.

Background
The AIM Division is responsible for constructing, maintaining, and tracking DEN’s capital assets, as well as establishing quality controls and quality assurance for DEN’s capital projects.

Highlights from Original Audit
The original audit involved an evaluation of Denver International Airport’s (DEN) administration of airside construction projects and identified weaknesses in DEN’s Airport Infrastructure Management (AIM) Division that impacted DEN’s ability to execute airside construction projects in the most efficient and effective manner. Additionally, our evaluation identified weaknesses in DEN’s Business Management Services (BMS) Division that affected the bidding process of airside construction projects.

In the recent years prior to our original audit, AIM had made significant positive operational and organizational changes. Although our audit identified some areas of concern, we encouraged AIM to continue incorporating improvements.

Weaknesses in the AIM Division’s practices identified in the audit included not having adequate controls in place to ensure that technical specifications were accurate and complete. Such weakness could lead to project delays, cost overruns, a reduction in airfield pavement service life, and maintenance cost increases. Additional weaknesses in the AIM Division’s practices included failing to ensure that construction project files were maintained in accordance with policies and procedures, failing to have a structure surrounding the Tollgate and lessons-learned processes, and having project management software systems that duplicated and overlapped with one another.

Weaknesses in BMS’s practices included not having adequate controls in place to ensure that the information in airside construction bid documents was reviewed and aligned with BMS’s standard operating procedures. BMS also failed to maintain the required support documentation for bids.

To enhance the administration of airside construction projects, we offered five recommendations to the AIM Division and two to BMS.

For a copy of this report, visit www.denverauditor.org or contact the Auditor’s Office at (720) 913-5000.
RECOMMENDATION STATUS OF IMPLEMENTATION

FINDING 1: The Airport Infrastructure Management Division Should Improve Management of Airside Construction Project Execution

Recommendation

1.1 Technical Specification Review and Approval Process - The Airport Infrastructure Management Senior Director of Development should establish a process by which to ensure that all airfield project specifications are reviewed internally for accuracy and completeness and approved prior to being included in projects going out for bid.

Status: Implemented

Agency Action

The AIM Division created a position for a technical specification writer to help ensure accuracy and completeness of project specifications. Additionally, all specifications are being reviewed by AIM’s Quality Assurance/Quality Control Section manager, the designer of record, and the project manager prior to being included in projects going out for bid. This review process has been incorporated into the division’s policies and procedures and are reviewed by management on an annual basis to ensure it is being properly administered.

1.2 Document Management - The Airport Infrastructure Management Senior Director of Development should ensure that project management files are maintained in accordance with policies and procedures, which shall include clear and proper labeling and final versions.

Status: Implemented

Agency Action

The AIM Division implemented a standardized file structure that now incorporates clear and proper labeling. The document management program, Unifier, is now the main database for all projects. The policies and procedures have been updated to include the Unifier business processes, which now govern the new file structure. Lastly, the new business processes are being communicated to staff through regular and ongoing training sessions.
1.3 **Tollgate Process** - The Airport Infrastructure Management Senior Director of Development should document a formal process for Tollgate meetings in the AIM Division's policies and procedures and communicate the process to users.

**Status: Implemented**

**Agency Action**

The AIM Division has enhanced its Tollgate process to now use SharePoint—a centralized data repository. Policies and procedures have been updated to reflect the new Tollgate process, which requires a) project managers to submit through SharePoint a request to present a Tollgate, and that b) an AIM director review and approve all Tollgates prior to them being presented. The SharePoint site also houses the standardized Tollgate templates, which project managers are now required to use.

1.4 **Lessons-Learned Process** - The Airport Infrastructure Management Senior Director of Development should document a formal process for lessons-learned activities in the AIM Division's policies and procedures, which should include how the data will be maintained and utilized for future projects.

**Status: Implemented**

**Agency Action**

The AIM Division created a standardized lessons-learned library in Unifier, which provides a resource for project managers and contract administrators to reference for future projects. This library provides personnel with the ability to sort and use keywords to search historical files for past lessons-learned. Additionally, the policies and procedures have been updated to reflect the new lessons-learned library.

1.5 **Project Management System Evaluation** - The Airport Infrastructure Management Senior Director of Development should evaluate the current project management systems to ensure that functionalities are properly utilized and duplication of efforts is minimized.

**Status: Partially Implemented**

**Agency Action**

The AIM Division has continued to expand its use of Unifier as the sole source for project management documentation. Although Unifier currently is the primary system, there are some functions that the division personnel believe are still best performed in other software programs—specifically BIM 360, which is the system used by quality assurance and quality control field inspectors. The division is working with Oracle, the creator of Unifier, to install a version of Unifier that will offer similar functionalities as BIM 360. Transitioning from BIM 360 to Unifier will require a transfer of historical data into the new system. This will alleviate the need for two separate systems, making Unifier the sole source of project management documentation.
RECOMMENDATION STATUS OF IMPLEMENTATION

FINDING 2: The Bid Process Needs Improvement to Ensure That the Integrity of the Process Is Maintained

Recommendation

2.1 **Align Standard Operating Procedures with Bid Documents** - The Director of DEN Business Management Services (BMS) should ensure that the information in bid documents is reviewed and aligns with BMS Standard Operating Procedures.

**Status: Implemented**

**Agency Action**

We obtained documents showing that DEN Contract Services has initiated Tollgate discussions at the pre-advertisement phase of the procurement process. The intent of the pre-advertisement Tollgate meeting is to allow for better transparency and quality control of proposed bids across all levels of management—the project manager, senior vice president of the sponsoring division, DEN Legal, and DEN Contract Services—where these attendees can verify pertinent information in the bid document before it is released to the public for advertisement. The meeting helps ensure that the bids follow Contract Services’ procurement guidelines. Additionally, Contract Services conducts weekly team meetings to brief contract administrators on any updates to standard operating procedures or bid documents.

Recommendation

2.2 **Maintain Supporting Documentation** - The Director of DEN Business Management Services should establish controls in the bid process, which require that the proper support documentation for bids is maintained.

**Status: Implemented**

**Agency Action**

DEN Contract Services created a document peer-review guideline and checklist that allow staff to review each of the bid procurement documents at execution of the contract. This process allows DEN Contract Services staff and management to review each bid procurement document and ensure proper retention and organization of the documents. Contract Services conducts weekly team meetings to brief contract administrators on any updates to standard operating procedures, which includes peer review guidelines and document retention policies.
CONCLUSION

While the Airport Infrastructure Management (AIM) Division has implemented most recommendations made in the Denver International Airport Airside Construction Projects Audit Report, one has yet to be fully implemented. On the other hand, Business Management Services (BMS) has fully implemented its two recommendations and has adequately mitigated the risks identified during the audit. Despite the AIM Division’s efforts, auditors determined that the risk associated with the audit team’s initial findings for one recommendation has not been fully mitigated. As a result, the Audit Services Division may revisit these risk areas in future audits to ensure that appropriate corrective action is taken.

On behalf of the citizens of the City and County of Denver, we thank staff and leadership from the AIM Division and the BMS Division for their cooperation during our follow-up effort and for their dedicated public service.
The Auditor of the City and County of Denver is independently elected by the citizens of Denver. He is responsible for examining and evaluating the operations of City agencies and contractors for the purpose of ensuring the proper and efficient use of City resources. He also provides other audit services and information to City Council, the Mayor, and the public to improve all aspects of Denver’s government.

The Audit Committee is chaired by the Auditor and consists of seven members. The Audit Committee assists the Auditor in his oversight responsibilities regarding the integrity of the City’s finances and operations, including the reliability of the City’s financial statements. The Audit Committee is structured in a manner that ensures the independent oversight of City operations, thereby enhancing citizen confidence and avoiding any appearance of a conflict of interest.

Our Mission
We deliver independent, transparent, and professional oversight in order to safeguard and improve the public’s investment in the City of Denver. Our work is performed on behalf of everyone who cares about the City, including its residents, workers, and decision-makers.