

# Denver International Airport Planning and Development Division Follow-up Report

March 2015

Office of the Auditor  
Audit Services Division  
City and County of Denver



Dennis J. Gallagher  
Auditor

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Report number **A2013-001**



# City and County of Denver

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*Dennis J. Gallagher*

Auditor

March 13, 2015

Kim Day, Chief Executive Officer  
Department of Aviation  
City and County of Denver  
Re: Audit Follow-Up Report

Dear Ms. Day:

In keeping with professional 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 audit findings are being addressed and to aid us in planning future audits.

This report is to inform you that we have completed our follow-up effort for the Denver International Airport (DIA) Planning and Development Division audit issued June 20, 2013. Our review determined that the Airport Infrastructure Management (AIM) Division has adequately implemented all of the recommendations made in the audit report.

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 you and to DIA personnel who assisted us throughout the audit and follow-up process. If you have any questions, please feel free to contact me at 720-913-5029 or Sonia Montano, Internal Audit Supervisor, at 720-913-5157.

Sincerely,

Kip Memmott, MA, CGAP, CRMA  
Director of Audit Services

KRM/sm

cc: Honorable Michael Hancock, Mayor  
Honorable Members of City Council  
Members of Audit Committee  
Ms. Cary Kennedy, Deputy Mayor, Chief Financial Officer  
Ms. Janice Sinden, Chief of Staff

*To promote open, accountable, efficient and effective government by performing impartial reviews and other audit services that provide objective and useful information to improve decision making by management and the people.  
We will monitor and report on recommendations and progress towards their implementation.*

Mr. David P. Edinger, Chief Performance Officer  
Ms. Beth Machann, Controller  
Mr. Scott Martinez, City Attorney  
Ms. Janna Young, City Council Executive Staff Director  
Mr. L. Michael Henry, Staff Director, Board of Ethics  
Mr. Dave LaPorte, Senior Vice President for Airport Infrastructure Management

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## REPORT HIGHLIGHTS



### DIA Planning and Development Division Follow-up Report: March 2015

The Airport Infrastructure Management Division has implemented all seven recommendations made in the June 2013 audit report.

#### Background

The Denver International Airport (DIA) Planning and Development Division was responsible for overseeing project management, planning, design, and construction of projects at the airport. In 2013, DIA management combined the Planning and Development Division with the DIA Maintenance Division, creating the Airport Infrastructure Management (AIM) Division to ensure a more comprehensive approach to building, maintaining, and managing assets.

#### Purpose

The purpose of the audit was to assess the effectiveness and efficiency of DIA's Planning and Development Division with specific focus on change order practices for construction projects including the impact change orders have on budgets and schedules.

#### Highlights from Original Audit

In 2012, the DIA Planning and Development Division (Division) oversaw approximately \$93 million worth of construction projects, which included oversight of the management, planning, design, and construction components for these projects. There are several phases of a construction project, including contract procurement, project construction, and project close-out. Our audit focused on change order practices related to the project construction phase.

The audit found that the Division could significantly enhance its internal control structure related to construction practices, specifically in the area of change order management. Substantive weaknesses identified by audit work indicated that the Division had a lax control environment for change order management, which had several negative effects that posed unnecessary risk to the City. For example, inappropriate use of change orders reduces transparency and accountability, circumvents the City's contracting rules, and reduces DIA's ability to manage projects.

The audit asserted that strengthening the control oversight structure would be crucial for effective project management, transparency of expenditures, and maintaining a competitive marketplace for City projects. As such, we recommended that the Division take immediate action to establish an effective control structure for change order management.

#### Findings at Follow-up

The DIA Airport Infrastructure Management (AIM) Division has implemented all seven audit recommendations. AIM has taken many steps to enhance its internal control structure related to the area of change order management. Project Management Guidelines were developed that include business process workflows and forms, and employees have been trained on these processes.



# Recommendations: Status of Implementation

Recommendation	Auditee Action	Status
<b>Finding: Poor Internal Controls Governing Denver International Airport’s Planning and Development Division’s Change Order Practices Pose Substantive Risk</b>		
<p><b>1.1 Change Order Controls</b> – The Manager of Aviation should establish controls to enhance change order practices. These practices should prevent change orders from being created that are not related to the original scope of work.</p>	<p>With extensive input from a multitude of stakeholders, business process workflows and forms were developed and included in AIM’s Project Management Guidelines (PMG). In the Change Management section of the PMG, controls for change order practices and forms are clearly defined in accordance to Title 11 of General Contract Conditions, Changes in Work, Contract Price or Contract Time of the Standard Specifications for construction and General Contract Conditions of CCD, 2011 Edition (the Yellow Book). All AIM employees were trained on these processes in April 2014. In addition, all forms are accessible on the AIM Project Controls SharePoint site, as well as hyperlinked in the PMG and posted on flydenver.com.</p>	<b>Implemented</b>
<p><b>1.2 Contract Process</b> – The Manager of Aviation should ensure that separate contracts are created for each project to avoid circumventing the established contract process.</p>	<p>With extensive input from a multitude of stakeholders, business process workflows and forms were developed and included in the Contract Procurement section of AIM’s Project Management Guidelines (PMG). All AIM employees were trained on these processes in April 2014. In addition, all forms are accessible on the AIM Project Controls SharePoint page, as well as hyperlinked in the PMG and posted on flydenver.com.</p>	<b>Implemented</b>

# Recommendations: Status of Implementation

	<b>Recommendation</b>	<b>Auditee Action</b>	<b>Status</b>
<b>1.3</b>	<b>Policies and Procedures</b> – The Deputy Manager of Aviation for Planning and Development should implement specific policies and procedures that assist project managers with all phases of the contracting process, which includes bidding, contract monitoring, change orders, and the close-out process.	With extensive input from a multitude of stakeholders, the new Project Management Guidelines were completed in April 2014 and posted on the DIA SharePoint site and flydenver.com. Training for all project managers and contract administrators was completed in April 2014.	<b>Implemented</b>
<b>1.4</b>	<b>Process Flows</b> – The Deputy Manager of Aviation for Planning and Development should ensure policies and procedures reflect the current process flows and the utilization of Primavera in order to reduce confusion and ensure consistency between project managers.	With extensive input from a multitude of stakeholders, business process workflows were developed and included in the Project Management Guidelines. Training for all project managers and contract administrators was completed in April 2014.	<b>Implemented</b>
<b>1.5</b>	<b>Roles and Responsibilities of the Change Review Board</b> – The Manager of Aviation should reevaluate the roles and responsibilities of the Change Review Board, including the selection of its members.	AIM considered different methodologies for change review and determined that in an effort to drive accountability, it was best to develop specific guidelines that require project managers to gain different levels of approval based on set criteria. The Senior Director of Development and the Deputy Manager of Aviation have ultimate responsibility to ensure change management compliance. The procedures are outlined in the Project Management Guidelines. The AIM Project Management Office is in the process of defining roles and responsibilities for clarification of signature duties on change orders and task orders. This information will be reviewed and vetted with all stakeholders and AIM Leadership.	<b>Implemented</b>

# Recommendations: Status of Implementation

	<b>Recommendation</b>	<b>Auditee Action</b>	<b>Status</b>
<b>1.6</b>	<b>Segregation of Duties</b> – The Manager of Aviation should ensure the Change Review Board is designed to address any segregation of duties issues. This includes alignment with the new organizational structure, ensuring that proper approvals are obtained, and providing visibility to the change management process.	Although a formal Change Review Board was not implemented, proper controls and processes are outlined in the Project Management Guidelines as well as approval forms. Additionally, AIM has engaged an external auditor that was recommended by the Auditor. AIM will use this external auditor for a number of reasons, one of which is to review the change management process.	<b>Implemented</b>
<b>1.7</b>	<b>Root Cause Analysis</b> – The Deputy Manager of Aviation for Planning and Development should develop and require that a root cause analysis be conducted at the conclusion of each project to identify trends and make improvements to future projects.	A lessons learned meeting will be conducted for each project and a guide has been developed that includes information such as tasks to be complete prior to the meeting, a meeting agenda, and questions to consider. In addition, a post project evaluation form and a lessons learned form were developed and will be utilized for each project. Requirements related to these processes are outlined in the Project Management Guidelines.	<b>Implemented</b>

# Conclusion

We found that the DIA Airport Infrastructure Management (AIM) Division has fully implemented all recommendations and adequately mitigated the risk identified during the original audit. AIM has worked to build a culture that provides structure and focuses on continuous improvement and learning, accountability, consistency, and transparency. As a result, we conclude our follow-up effort related to the DIA Planning and Development Division performance audit.

On behalf of the citizens of the City and County of Denver, we thank staff and leadership from the AIM Division for their cooperation during our follow-up effort and their dedicated public service.