FOLLOW-UP REPORT
Denver Fire Department
Resource Allocation Practices Audit
June 2018
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Audit report year: 2016
June 7, 2018

Fire Chief Eric Tade
Denver Fire Department
City and County of Denver

Re: Audit Follow-Up Report

Dear Chief Tade:

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.

This report is to inform you that we have completed our follow-up effort for the Resource Allocation Practices audit issued November 17, 2016. Our review determined that the Denver Fire Department has adequately implemented some of the recommendations made in the audit report while others that were agreed to be implemented from March 1 through July 1, 2017, are still in progress. Auditors determined that the risk associated with the audit team’s initial findings has not been fully mitigated. As a result, the division may revisit these risk areas 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 you and to department 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 LaKeshia Allen Homer, Internal Audit Supervisor, at 720-913-5085.

Denver Auditor’s Office

Timothy M. O’Brien, CPA
Auditor
Status
The Denver Fire Department has fully implemented three recommendations and partially implemented two recommendations made in the November 2016 audit report.

Background
First organized in 1866, DFD protects Denver and surrounding communities by providing emergency medical and fire services. The department also conducts a variety of prevention efforts and public education programs to promote fire safety and emergency preparedness.

Purpose
The purpose of this audit was to assess DFD’s resource allocation practices, including analysis of policies and procedures to determine the extent to which they align with applicable laws, regulations, professional standards, and leading management practices. This audit also examined the effectiveness of DFD’s processes for identifying and managing resource allocation risks.

Highlights from Original Audit
Resource allocation is a broad term used to describe the choices an organization makes to use resources in an effective manner to achieve its mission. DFD’s resource allocation process revealed the department to be data-driven in nature, and continuously looking for ways to improve and incorporate the most advanced technologies to provide emergency services.

Despite these efforts, the audit found that DFD needs to strengthen its long-term decision-making processes to ensure that resource allocation keeps pace with Denver’s changing dynamics. In our assessment of DFD’s resource allocation practices, we identified three growth-related issues regarding resource allocation and three gaps in its long-term decision-making processes.

Growth-Related Issues – First, we found that DFD is unable to meet its fire safety inspection goals, as Denver has grown. Second, DFD’s hiring practices are not keeping pace with firefighter attrition and increases in budgeted strength. Third, DFD has persistent coverage issues in the northeastern corridor of Denver.

Decision-Making Processes – First, we found that DFD does not have an updated formal strategic plan that guides its long-term decision-making. Second, DFD does not have a robust framework by which to systematically identify and address resource allocation risks. Third, the department’s process for assessing the cost and benefits associated with its intergovernmental agreements is not well documented and is missing critical information that would better support decision-making.

Findings at Follow-up
The Denver Fire Department has acted to evaluate the department’s hiring practices and understand the factors to narrow the gap between vacant positions and the number of personnel authorized by the department’s budget. Additionally, the department has updated and formalized its strategic plan and developed a risk assessment framework to identify, analyze, and respond to long-term risks associated with resource allocation. However, DFD could better document the methodologies and results associated with its annual review of intergovernmental agreements (IGAs). Further, DFD should ensure that the qualitative factors associated with IGAs are well-documented for each agreement.

For a copy of this report, visit www.denvergov.org/auditor or contact the Auditor’s Office at 720-913-5000.
Recommendations: Status of Implementation

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<td><strong>FINDING:</strong> DFD Needs To Strengthen Its Decision-Making Processes To Ensure That Resource Allocation Keeps Pace with Denver’s Changing Dynamics</td>
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<td>1.1</td>
<td>In consultation with the Executive Director of Public Safety’s Office and the Budget and Management Office, DFD assessed its hiring strategies to ensure that staffing levels keep pace with attrition and to reduce reliance on overtime. In addition to analyzing academy class scheduling, the assessment examined other factors affecting staffing such as injuries, retirements, attrition, and the fiscal implications of unforeseen events or circumstances. Based on its analysis, DFD’s 2018 budget submittal included a request for an additional 17 firefighters to address staffing needs and reduce reliance on overtime. Although this budget request was not approved, DFD will continue to work with the Executive Director of Public Safety’s Office and the Budget and Management Office to review annually and update the staffing analysis and ensure DFD has the appropriate complement of personnel to achieve the department’s mission.</td>
<td>Implemented</td>
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## Recommendations: Status of Implementation

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<td><strong>1.2</strong></td>
<td>To guide and improve the department’s long-term decision-making, DFD should update and formalize its draft strategic plan. In accordance with best practices for strategic planning, the formal strategic plan should identify pathways for meeting long-term strategic goals; discuss the impact of external factors; define results-oriented performance measures; and provide managers and decision-makers with a better understanding of how resource allocation affects the organization’s ability to achieve its mission.</td>
<td>In 2018, DFD updated and formalized its 2017 through 2020 strategic plan to provide department managers and other stakeholders with the information required to guide and improve long-term decision-making. In accordance with best practices for strategic planning, DFD’s plan identifies six long-term strategic goals: strengthening the Department’s professional environment, increasing training opportunities, enhancing business processes, improving the quality of emergency response, increasing community preparedness, and updating infrastructure, equipment, and technology. Additionally, the plan defines objectives or approaches for addressing each of the long-term goals identified. Moreover, the plan reflects consideration of external factors that could impact DFD operations, such as changes in Mayoral priorities or other contextual changes associated with the City’s increased population. Finally, DFD’s strategic plan defines results-oriented performance measures to help the department progressively assess outputs and outcomes associated with the level of services delivered and corresponding results.</td>
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<td><strong>1.3</strong> To systematically identify and address long-term resource allocation risks, DFD should develop a comprehensive and systematic risk management framework that will enable the department to identify, analyze, and respond to long-term risks associated with its resource allocation objectives. Within these risk management efforts, DFD should:</td>
<td>As part of the Commission on Fire Accreditation International (CFAI) accreditation process, DFD developed a Standards of Cover document for 2018. This document establishes a risk management framework that defines metrics and outlines methodologies for scoring risks to understand the impact on departmental operations and the broader community. DFD officials stated that the department will use this document to continually analyze and address long-term risks associated with DFD’s resource allocation objectives. This document will be reviewed and updated annually by the Fire Chief in consultation with the Executive Director of Public Safety’s Office.</td>
<td>Implemented</td>
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- Consider National Fire Protection Association (NFPA) Community Risk Assessment guidelines to determine whether there are alternative approaches to managing the department’s fire safety inspection workload, while maintaining a high level of preparedness and safety for its firefighters. Alternative approaches could include aligning fire safety inspection frequencies with building occupancy risks.

- Clearly define risk tolerances and key risk indicators (KRIs) to identify relevant metrics that provide useful insights about potential risks that may have an impact on the achievement of the organization’s objectives. DFD should include key risk indicators for the coverage issues identified in District 5 as a way to monitor and communicate the potential impact of the delayed development of the Northfield fire station to stakeholders.
## Recommendations: Status of Implementation

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<td>1.4</td>
<td><strong>To fully understand the full costs and benefits of intergovernmental agreements (IGAs) to the City, DFD should continue to use its cost-benefit analysis template for all future agreements, including those agreements pending renewal. We also recommend that DFD periodically review its cost-benefit analysis for longstanding multi-year agreements.</strong> DFD has developed a cost-benefit analysis template to document its analysis of the full costs and benefits of fire and emergency services IGAs to the City. DFD used these templates to guide the department’s decision-making processes for renewing the City’s agreements with the City of Glendale and the City of Sheridan. Also, according to DFD officials, the department has established an annual review process to assess the financial impacts of these agreements to the Department and the City. Officials state that the department has incorporated the results of these reviews into its submission for the City’s annual budget process. However, the department was unable to provide auditors with documentation of the methodologies used to conduct these annual reviews or the associated results.</td>
<td><strong>Partially Implemented</strong>&lt;br&gt;<strong>Original target date for completion:</strong> March 1, 2017</td>
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<td>1.5</td>
<td>DFD’s current cost-benefit analyses for IGAs include a citywide indirect cost rate as calculated by the City’s contracted cost allocation consulting firm—MGT of America—and provided by the Budget and Management Office. However, DFD officials explained that the department is working with MGT of America to develop indirect cost rates specific to DFD services. The department anticipates that this study will be completed by June 30, 2018 and plans to use the new indirect cost rates in future years’ analyses. The rates will also be updated by the consultant every three years. Although DFD has begun to include indirect costs into its cost-benefit analyses for IGAs, the analyses do not include complete and comprehensive documentation of the qualitative factors that were considered for each agreement.</td>
<td>Partially Implemented</td>
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Conclusion

While the Denver Fire Department (DFD) has implemented some recommendations made in the Resource Allocation Practices audit report, others have yet to be acted upon or fully implemented. Despite the department’s efforts, auditors determined that the risks associated with the audit team’s initial findings have not been fully mitigated. Specifically, the department could improve documentation of the annual IGA review process and the qualitative factors associated each agreement. 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 DFD for their cooperation during our follow-up effort and for their dedicated public service.