



**A Report to the  
Audit Committee**

**Mayor**  
John Cooper

**Nashville Fire Department**  
**Director Chief**  
William Swann

**Audit Committee Members**  
Kevin Crumbo  
Thom Druffel  
Charles Frasier  
Brackney Reed  
Jim Shulman  
Zulfat Suara

**Audit Recommendations Follow-up –  
Audit of the Metropolitan Nashville  
Fire Marshal’s Office**

December 18, 2020

Metropolitan  
Nashville  
Office of  
Internal Audit

## EXECUTIVE SUMMARY

December 18, 2020



### Why We Did This Audit

To evaluate management's implementation of previous audit recommendations as of December 18, 2020.

### What We Recommend

Management should continue efforts to implement the remaining three recommendations issued.

# Audit Recommendations Follow-Up - Audit of the Metropolitan Nashville Fire Marshal's Office

## BACKGROUND

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On November 11, 2019, the Metropolitan Nashville Office of Internal Audit issued an audit report on the inspections and life safety plan reviews performed by the Metropolitan Nashville Fire Marshal's Office between April 1, 2016, and March 31, 2019. The audit report included ten recommendations, all of which were accepted by management for implementation. Office of Internal Audit guidelines require monitoring and follow-up to ensure that the recommendations assessed as high or medium risk are appropriately considered, effectively implemented, and yield intended results.

## OBJECTIVES AND SCOPE

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The objectives of this follow-up audit were to determine if the recommended action or an acceptable alternative was implemented.

The scope of the follow-up audit included all ten accepted recommendations that management reported as implemented.

## WHAT WE FOUND

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Of the initial ten recommendations made, the Fire Marshal's Office has implemented seven recommendations and partially implemented three recommendations. The three partially implemented recommendations are open because of the additional work required for the implementations to cause or significantly influence the intended benefits. The three open recommendations are on track to be implemented by March 2021.

## AUDIT FOLLOW-UP RESULTS

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The initial audit report encompassed the inspections and life safety plan reviews performed by The Metropolitan Nashville Fire Marshal's Office between April 1, 2016, and March 31, 2019. The audit report included ten recommendations all of which were accepted by management for implementation.

The Office of Internal Audit will close a recommendation only for one of the following reasons:

- The recommendation was effectively implemented.
- An alternative action was taken that achieved the intended results.
- Circumstances have so changed that the recommendation is no longer valid.
- The recommendation was not implemented despite the use of all feasible strategies or due to lack of resources. When a recommendation is closed for these reasons, a judgment is made on whether the objectives are significant enough to be pursued at a later date in another assignment.

The scope of the follow-up audit included all ten accepted recommendations that management reported as implemented. Of the ten accepted recommendations, seven recommendations were fully implemented, and three were in progress. Implementation actions were evaluated, as well as progress being made on any open recommendations. Details of the implementation status and updated implementation dates can be seen in Appendix A.

## METHODOLOGY

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To achieve the audit objectives, auditors performed the following steps:

- Reviewed the implementation status report provided by the Fire Marshal's Office.
- Interviewed key personnel within the Fire Marshal's Office, including the Fire Marshal, Deputy Fire Marshal, and the Information Systems Administrator.
- Reviewed a Service Organization Control (SOC) report.
- Obtained an assessment of the Service Organization Control report from the Chief Information Security Officer.
- Accessed various SharePoint applications to verify relevant information.
- Observed user interface with upgraded web version of ImageTrend repository application.
- Considered risk of fraud, waste, and abuse, and information technology risks.
- Detail-tested sampled inspections and re-inspections.

We conducted this performance audit 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 findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our observations and conclusions based on our audit objectives.

## AUDIT TEAM

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Innocent Dargbey, CPA, CMFO, In-Charge Auditor

Lauren Riley, CPA, CIA, ACDA, CMFO, Metropolitan Auditor

## APPENDIX A – PRIOR RECOMMENDATIONS AND IMPLEMENTATION STATUS

The following table shows the guidelines followed to determine the status of implementation.

**Table 1**

Recommendation Implementation Status	
<b>Implemented</b>	The department or agency provided sufficient and appropriate evidence to support the implementation of all elements of the recommendation and the recommendation’s implementation caused or significantly influenced the benefits achieved.
<b>Partially Implemented</b>	The department or agency provided some evidence to support implementation progress but not of all elements of the recommendation were implemented.
<b>Not Implemented</b>	The department or agency did not implement a recommendation because: a) of lack of resources; b) an alternative action was taken that achieved the intended results; c) circumstances have so changed that the recommendation is no longer valid.

The following are the audit recommendations made in our original audit report dated November 19, 2019 and the current implementation status of each recommendation based on our review of information and documents provided by the Fire Marshal’s Office.

Recommendation	Implementation Actions	Outstanding Issues	Implementation Status
<p><b>A.1</b> Develop and disseminate standard operating procedures among all levels of staff and management.</p> <p><b>Assessed Risk Level: High</b></p>	Existing operating procedures guidelines (OPG) were reviewed and amended as necessary. Several new policies were added in September, November, and December of 2019, and two additional policies have been added in April 2020. The updated policies are posted on the SharePoint site and available to the department.	None	<b>Fully Implemented/ Closed</b>
<p><b>A.2</b> Ensure policies are regularly reviewed, consistently followed, and the dates of revision or review are noted to ensure alignment with version changes in codes and industry standards.</p> <p><b>Assessed Risk Level: High</b></p>	As stated in A.1, the OPG’s are on the SharePoint site for review. This tracks updates and rescinds to previous versions of OPGs. Deputy and Assistant Fire Marshals will be evaluated on structured reviews of policies and will ensure those policies meet current standards.	None	<b>Fully Implemented/ Closed</b>

## APPENDIX A – PRIOR RECOMMENDATIONS AND IMPLEMENTATION STATUS

<p><b>A.3</b> Policies and standard operating procedures should emphasize follow-up inspections and supervisor review of sampled inspections, especially those related to high risk occupancies, to ensure that the reports include relevant and adequate inspection information.</p> <p><b>Assessed Risk Level: High</b></p>	<p>This was incorporated into the OPGs. The Fire Marshal’s Office has included Supervisor Review of Inspections as criteria in evaluations for Deputy Fire Marshal and Assistant Fire Marshal positions</p>	<p>16 out of 21 failed inspections reviewed were not re-inspected due to several predicaments, notably Covid-19 and lack of cooperation from property managers. Management will provide monthly status of the 16 to the Office of Internal Audit. Other elements of this recommendation were fully implemented.</p>	<p><b>Partially Implemented/ Open</b></p>
<p><b>A.4</b> Establish a complete list of inspectable occupancies by obtaining and comparing occupancy data from other departments and update the list periodically.</p> <p><b>Assessed Risk Level: High</b></p>	<p>The Fire Marshal’s Office has obtained a list of property locations and occupancies from CityWorks data management team, managed by Metro IT. This list will allow us to fill in gaps we have in our list of inspectable occupancies. This will be reviewed on a regular basis to ensure the list is current.</p>	<p>Lists of locations and occupancies obtained from Metro IT are currently being reviewed together with other Metro departments like Codes and Planning to ensure that it is as complete as possible.</p>	<p><b>Partially Implemented/ Open</b></p>
<p><b>A.5</b> Establish a process for gathering and reviewing reports of third-party prevention testing performed. This will enable the Fire Marshals to schedule follow-up inspections.</p> <p><b>Assessed Risk Level: High</b></p>	<p>This will be a priority in the next few months. It will necessitate a contract at no cost to Metro with a third-party vendor that will ensure compliance with the code for notification of annual inspection, testing and maintenance of fire protection systems. The process of initiating an RFP and subsequent contract will take six months. The benefit will be to increase compliance, without having to assign FMO staff to the task.</p>	<p>As part of procurement process, an Intent to Award letter dated 11/3/2020 was sent to a prospective vendor of Electronic Reporting Services. Contracting process is expected to begin 30 days after.</p>	<p><b>Partially Implemented/ Open</b></p>

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<p><b>B.1</b> Review information systems’ access privileges to ensure proper segregation of duties. Other compensating control measures should be established should the user identified maintain administrative access privileges.</p> <p><b>Assessed Risk Level: Medium</b></p>	<p>The Fire Marshal’s Office implemented this review immediately after receiving the initial audit report and will continue to monitor access. The Fire Marshal’s Office completed a review of access changes and is confident that proper controls are in place. The Fire Marshal’s Office will continue to review permissions and access to records management programs to ensure control measures are working.</p>	<p>None</p>	<p><b>Fully Implemented/ Closed</b></p>
<p><b>B.2</b> Continue to pursue the inclusion of all National Fire Protection Association codes and checklists in ImageTrend while emphasizing the efficiencies to be derived.</p> <p><b>Assessed Risk Level: Medium</b></p>	<p>The Fire Marshal’s Office created the checklists necessary for each type of occupancy inspected and will incorporate these into the updated version of ImageTrend going forward. This will be for both NFPA and ICC code sets.</p>	<p>None</p>	<p><b>Fully Implemented/ Closed</b></p>
<p><b>B.3</b> Establish a policy and procedural statements to address the limited availability of audit trails in ImageTrend. The policy should state that periodic reviews of report openings dated after finalization will be conducted. Procedures should state the steps to follow if report changes are necessary.</p> <p><b>Assessed Risk Level: Medium</b></p>	<p>The FMO has implemented a policy to address the audit trails in ImageTrend. A procedure to lock the inspection record after 24 hours has been implemented to prevent the editing of the finalized report, and the policy outlines the steps to follow to make changes after the report has been locked. A copy of the policy “OPG 9.02 Inspections Practices – Documentation” is attached for review.</p>	<p>None</p>	<p><b>Fully Implemented/ Closed</b></p>

**APPENDIX A – PRIOR RECOMMENDATIONS AND IMPLEMENTATION STATUS**

<p><b>B.4</b> Schedule and provide the additional training necessary for users to be able to maximize the full potential of ImageTrend, especially all inspectors knowing that it is possible to access the application even without internet access.</p> <p><b>Assessed Risk Level: Medium</b></p>	<p>Training has been completed on the updated version of ImageTrend. All inspectors are trained on how to use the application in the field without internet connectivity, and they understand that the record will synchronize with the network once they return to the office. Currently our inspectors are working remotely, using their tablet computers to the fullest extent possible.</p>	<p>None</p>	<p><b>Fully Implemented/ Closed</b></p>
<p><b>B.5</b> Ensure a current annual internal control assessment report from ImageTrend and other external information systems service providers is obtained, reviewed in consultation with Metro Chief Information Security Officer, and retained in the office.</p> <p><b>Assessed Risk Level: High</b></p>	<p>The Fire Marshal's Office obtained the most recent SOC2-TYPE2 report for ImageTrend and caused the report to be reviewed by the Chief Information Security Officer. The Fire Marshal office will continue to request the annual internal control assessment report from ImageTrend and submit it for review with the Metro Chief Information Security Officer on an annual basis.</p>	<p>None</p>	<p><b>Fully Implemented/ Closed</b></p>

JOHN COOPER  
MAYOR



**METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY**

WILLIAM SWANN  
DIRECTOR-CHIEF

NASHVILLE FIRE DEPARTMENT  
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December 17, 2020

Lauren Riley  
Metropolitan Auditor  
Office of Internal Audit  
404 James Robertson Pkwy., Suite 190  
Nashville, TN 37219

RE: Audit of the Metropolitan Nashville Fire Marshal Office

Dear Ms. Riley,

This letter acknowledges that the Nashville Fire Department has received the Audit of the Metropolitan Nashville Fire Marshal Office and has reviewed the comments and recommendations.

The Fire Marshal Office will implement the recommended improvements.

It was a pleasure working with you and your team on this project. We specifically thank and extend our admiration to Mr. Innocent Dargbey for his extraordinary attention to detail reflected in the audit.

Sincerely,

A handwritten signature in blue ink, appearing to read "W. Swann", written over a horizontal line.

William Swann  
Director Chief  
Nashville Fire Department/OEM