

# HOUSTON FIRE DEPARTMENT FOLLOW-UP AUDIT



## OFFICE OF THE CITY CONTROLLER

**CHRIS HOLLINS  
CITY CONTROLLER**

**FY2026  
Report #2026-04  
March 25, 2026**



**CHRIS HOLLINS**  
City Controller

The Honorable John Whitmire, Mayor  
City of Houston, Texas

**SUBJECT: HOUSTON FIRE DEPARTMENT FOLLOW-UP AUDIT REPORT**

We have completed follow-up procedures on remediation efforts carried out by the Houston Fire Department management relating to the following audit reports:

REPORT NUMBER	REPORT TITLE	TOTAL FINDINGS
2009-17	Houston Fire Department Vehicle Allowance Program	2*
2017-10	Houston Fire Department Life Safety Bureau Performance Audit	28
2020-05	Houston Fire Department Arson Bureau Performance Audit	3

\* One (1) finding was assessed in 2021-06 HFD Follow-Up report as "Fully Implemented". As such, the finding was closed and not included in this report.

Based on the follow-up procedures outlined in this report, and in accordance with professional auditing standards, we obtained sufficient and appropriate evidence to support the conclusions presented in Appendix 1.

FINDINGS	FINDING REMEDIATION STATUS	DESCRIPTION
29	Fully Implemented	Successful implementation of processes to address the audit finding.
1	Partially Implemented	Significant efforts and implementation of processes to address the audit finding.
1	Incomplete/Ongoing	Ongoing development of a process and/or efforts toward a policy to address the audit finding.
1	Not Implemented	No effort to implement processes to address the audit finding.

This assessment reinforces our commitment to conducting thorough and objective audits, ensuring that identified issues have been properly addressed and corrective actions have been effectively implemented.

We would like to thank the management and staff of the Houston Fire Department for their cooperation during the follow-up audit process.

Respectfully submitted,

A handwritten signature in blue ink, appearing to be "CH", written over a light blue background.

Chris Hollins  
City Controller  
City of Houston, Texas

xc: City Council Members  
Dr. Cynthia Wilson, Chief of Staff, Mayor's Office  
Thomas Munoz, Chief, Houston Fire Department  
Alfredo Martinez, Executive Assistant Fire Chief, Houston Fire Department  
Aubrey Hooper, Chief Administrative Officer, Office of the City Controller  
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# FOLLOW-UP AUDIT

## SUMMARY

The Audit Division is tasked with providing independent and objective assurance services to enhance organizational performance, ensure compliance, and safeguard assets. As part of this mandate, follow-up audits are conducted to verify that corrective actions have been implemented for issues identified in prior audits.

This follow-up audit evaluates the remediation efforts carried out by Houston Fire Department's management in response to the findings from the Audit Reports:

- Houston Fire Department Vehicle Allowance Program Audit (2009-17)
- Houston Fire Department Life Safety Bureau Performance Audit (2017-10)
- Houston Fire Department Arson Bureau Performance Audit (2020-05)

The audits were conducted in accordance with Generally Accepted Government Auditing Standards (GAGAS) issued by the Government Accountability Office (GAO) and the Global Internal Audit Standards as established by the Institute of Internal Auditors (IIA).

## AUDIT OBJECTIVES

The follow-up audit was conducted to:

- Determine the status of each of the 32 open findings from Audit Report #2009-17, Audit Report #2017-10, and Audit Report #2020-05.
- Evaluate the adequacy of Houston Fire Department's remediation processes to address these findings.

## SCOPE

The scope of the audit included:

- Audit Report #2009-17 included two findings, one of which had already been assessed as 'Fully Implemented' in Audit Report #2021-06 and therefore was closed and excluded from this follow-up review.
- Audit Report #2017-10 had 28 findings.
- Audit Report #2020-05 had three findings.

As a result, the scope of the follow-up audit was limited to the remediation efforts performed by management on 32 high or medium risk findings arising from the reports.

## CONCLUSIONS

### **OBJECTIVE 1: STATUS OF OPEN FINDINGS**

HFD Management provided status updates related to all 32 open audit findings.

### **OBJECTIVE 2: REMEDIATION ASSESSMENT**

HFD Management's remediation efforts were adequate, in that 29 of the 32 audit findings were fully implemented and three audit findings remain open. See Appendix 1: Detailed Remediation Assessment for details.

<b>FINDINGS *</b>	<b>FINDING REMEDATION STATUS</b>	<b>DESCRIPTION</b>
29	<b>Fully Implemented</b>	Successful implementation of processes to address the audit finding.
1	<b>Partially Implemented</b>	Significant efforts and implementation of processes to address the audit finding.
1	<b>Incomplete / Ongoing</b>	Ongoing development of a process and/or efforts toward a policy to address the audit finding.
1	<b>Not Implemented</b>	No effort to implement processes to address the audit finding.

\* One (1) finding was assessed in 2021-06 HFD Follow-Up report as "Fully Implemented". As such, the finding was closed and not included in this report.

## **ACKNOWLEDGMENT**

We extend our appreciation to the management of Houston Fire Department for its cooperation and commitment to addressing the audit findings. It was noted that the department was proactive in its remediation of several of the audit findings, as they started immediately implementing processes to address the issues reported in 2017 following the 2017-10 Audit Report. Their efforts facilitated a thorough and effective follow-up audit process.

## **AUDIT TEAM**

Deputy Director: Jennifer Pierce

Audit Manager: Theresa Watson, CIA, CGAP

Lead Auditor: Paitchere' Amos, CFE

Quality Assurance: Mohammad Haroon, CPA, CIA

APPENDIX 1: DETAILED REMEDIATION ASSESSMENT

HOUSTON FIRE DEPARTMENT VEHICLE ALLOWANCE PROGRAM AUDIT (REPORT #2009-17)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIAION STATUS
1	<b>Compliance with Motor Vehicle Record Requirements</b>	<p><b>Recommendation</b>            Annual MVRs should be ordered from the Texas Department of Public Safety for all Department employees who drive on City business. When received, the MVRs should be reviewed and, if necessary, appropriate action taken. The MVRs should be filed in employee files to support compliance with AP 2-2.</p> <p><b>Updated Management Response: September 18, 2023</b>            At least annually, COH Safety, of which our current representative is Creshenda "Shay" Baylor, runs the MVRs for all HFD employees who drive on City business. When received, the MVRs are reviewed. If there is a question or concern regarding an MVR, HFD is notified, and appropriate action is taken in compliance with AP 2-2.</p>	<p>Audit obtained and reviewed the most recent annual Motor Vehicle Report (January 2024) and verified that identified employees with any citations/deficiencies (i.e., suspended driver licenses, other driving disqualifications, etc.) were assessed appropriate corrective actions. The department implemented enhanced monitoring procedures in April 2024 requiring supervisory verification of driver license status every six months, escalation of deficiencies through the chain of command, and issuance of a Driving Disqualification notice acknowledged by the employee and retained in the personnel file.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	Fully Implemented

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDATION STATUS
2	<b>No Comprehensive Risk-Based Approach to Inspections</b>	<p><b>Recommendation</b>            We recommend the 360 Degree Inspection Program be developed into a comprehensive risk-based inspection program to incorporate data from Fire Suppression reporting to assist in performing targeted inspections on higher risk locations. In addition, performing a risk assessment on all inspections teams to gather factors on the number of fire incidents for specific occupancy types, repeat violations, insurance ratings on buildings, most populated areas within the city, etc. will provide valuable information when assessing and prioritizing locations. Some specialized teams have characteristics that may warrant a different methodology to be utilized within the risk assessment, such as the Hazmat/High-Piled Storage Inspections Team.</p> <p>All approaches and methodologies to the inspection process should be documented and evaluated on a period basis to assess risk assessment procedures that may be impacted by growth, process changes, or other relevant risk factors. This process will also facilitate consistency and efficiency within the teams.</p> <p><b>Updated Management Response: August 24, 2023</b>            RBI system fully automated on 10/04/17 with all teams trained prior to full automation. COH moved to new, more robust system (INFOR) for permitting and fire inspections. RBI data is used to prioritize inspections and set milestones in INFOR. All LSB members trained on INFOR prior to going live in Feb 2020. High Risk properties assigned to specialty teams with inspections conducted on scheduled, re-occurring basis. Lower risk general occupancy inspections conducted in accordance with RBI Model.</p>	<p>Audit reviewed documentation supporting the risk-based inspection (RBI) methodology, obtained and reviewed inspection and permit information within INFOR, and evaluated whether the system is being used to prioritize and schedule inspections, including recurring and high-rise property inspections. Based on this work, Audit confirmed INFOR is used to manage permits and inspections and supports prioritization and recurring scheduling of higher-risk properties.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>

3	<p><b>The Fire Code Enforcement Program Is Not Adequately Designed</b></p>	<p><b>Recommendation</b>          We recommend LSB take a proactive approach to fire prevention by designing the fire code enforcement program to require the necessary fire prevention permits to be obtained by building owners and inspections performed by LSB prior to issuance of the COO. Joint efforts can be made to ensure compliance with Fire Code and Building Code regulations by both LSB and BCE, respectively. LSB should perform comprehensive plan reviews and inspections on all occupancy types requiring fire protection systems. In addition to the current review and inspection process, other fire protection features should be approved and inspected related to fire department access roads to ensure apparatus accessibility, hydrant spacing to ensure an adequate distribution of water supply throughout the property for new buildings, appropriate exit signage, etc., instead of after-the-fact when the structure is complete and the COO is issued. The Hazmat/High-Piled Storage Inspection Team within LSB performs comprehensive plan reviews and inspections of hazmat/high-piled storage facilities prior to COO issuance, which is the best practice that should be performed for all occupancy types.</p> <p><b>Updated Management Response: September 5, 2023</b></p> <ul style="list-style-type: none"> <li>• October 2017: LSB Plan Checking Inspectors have access to plans submitted electronically or scanned to the system by BCE (Building Code Enforcement). For those not scanned, BCE provides copies of the plans on a disk to LSB Inspectors upon request. Acting Building Official confirmed LSB Inspectors can have access to plans. Plan Checking Senior Inspector documents (Excel) new high rise construction projects as they come on-line. High rise team is then notified prior to issuance of COO. BCE is currently inviting LSB High-rise to the high-rise buildings initial planning.</li> <li>• December 2018: High-rise Chief Inspector provided handout of what will be required prior to obtaining a temporary Certificate of Occupancy (prerequisite checklist for partial occupancy of a high-rise building).</li> <li>• March 2019: Established liaisons from HFD and Building for pre-development meetings. Purpose is to establish clear line of communication between Plan Review and applicants. Includes reps from the following areas: Traffic, Health, Planning, Fire Marshal, Water/Waste, Flood, Electrical, Plumbing, Structural, HVAC, and Permits.</li> <li>• Currently, September 2023: plans are completed electronically. New construction is an ongoing compliance process. COOs are not issued until all required elements are completed. Temporary COOs are issued when many compliance requirements, including the life safety systems, are complete. These are issued after an agreement between BCE and LSB. For existing buildings that have changed their constructed use, a new COO may be required. Under these circumstances, violations will be corrected prior to a new COO being issued. High-rise temporary COOs are still being done as noted above. Permits are not always applicable prior to obtaining COO. Operational permits are only required once the operation has started. Some permits may be purchased prior to CO if it is part of the building process (i.e. hazmat, high-piled). The LSB division has established a plan</li> </ul>	<p>Audit obtained evidence of the Certificate of Occupancy (COO) prerequisite checklist functionality and performed a walkthrough of the end-to-end inspection process within INFOR. Audit confirmed that inspection tasks are assigned to inspectors, the appropriate checklist is system-generated for the specific inspection, and the documented future-state workflow aligns with how inspections and permits are executed electronically prior to occupancy.</p> <p>The management action plan is adequate to address the audit finding and considered “fully implemented”. This finding is Closed.</p>	<p><b>Fully Implemented</b></p>
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HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDATION STATUS
		review group for access roads, hose lay requirements and hydrant distance to be in place prior to the COO being issued.		

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIAION STATUS
4	<b>Policies and Procedures Not Adequately Defined and Updated</b>	<p><b>Recommendation</b>            The LSB Guidelines and Fire Marshall Directives should be reviewed and updated at least annually to ensure documented processes and key activities within LSB operations remain current. Guidelines should be sufficiently documented and contain detailed instructions to enable management and staff to properly carry out the operations of LSB. We recommend developing a standard operating procedures manual for the entire LSB Division, rather than certain teams within LSB. Operating procedures should include documented operational guidelines for all teams, including, but not limited to, internal control activities, risk management, best practices, and use of information technology, monitoring/quality assurance, and both internal and external LSB communications.</p> <p><b>Updated Management Response: September 5, 2023</b>            HFD is an accredited agency through CPSE Center for Fire Accreditation International. CPSE has the following must pass accreditation core competency: "9C.3 Organizational documents, forms, standard operating procedures or general guidelines, and manuals are reviewed at least every three years and updated as needed for all agency programs."</p> <p>LSB guidelines, standards, and policies are in compliance with this core competency as well as departmental directives. The International Fire Code (IFC) along with the LSB standards, which clarify sections of the IFC, are reviewed by Task Force 1 (City Team with reps from LSB, Building, Legal, etc.), amended, posted for public comments, and adopted by City Council. The 2015 Fire Code with Houston Amendments was adopted as the code of reference in April 2021. By February 2023, Task Force 1 had reviewed and approved all amendments to the 2021 Fire Code, met with internal/external stakeholders, and had begun review of public comments and amendment requests. The 2021 Fire Code with Houston Amendments along with the LSB Standards are expected to be adopted by City Council in October 2023 with an effective date of January 2024.</p> <p>LSB guidelines were last updated in 2021 to reflect any changes to processes and key activities. These guidelines are currently under review and revised guidelines will be posted in early 2024. Any necessary policy revisions in the meantime will be communicated via memorandum, email, meetings, and/or training depending on the complexity or urgency of the revisions.</p>	<p>Audit obtained and verified evidence of the most recent CPSE Center for Public Safety Excellence fire accreditation evaluation. Audit reviewed and traced the Fire Code amendments and related approval documentation to information posted on the Houston Permitting Center Code Development website and obtained and vouched to City Ordinance No. 2023-907 providing evidence of City Council's adoption in October 2023 with an effective date of January 1, 2024. Audit also reviewed the listed LSB Standards on the Houston Permitting Center site and verified whether updates were reflected. In addition, Audit inquired regarding policy revisions during the review phase and examined supporting memoranda, emails, meeting notes, and/or training documentation, if applicable. Based on the procedures performed, Audit determined the applicable guidelines and standards are updated and publicly posted.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIAION STATUS
5	<b>Lack of Communication Between LSB and Other HFD Divisions</b>	<p><b>Recommendation:</b>            In the short term, we recommend conducting scheduled periodic meetings between supervisors and Chiefs within LSB and the Suppression Division management to discuss strategies, goals/objectives, and any process changes. In addition, utilizing metrics provided by the Public Education Team could be beneficial to assist LSB specialized inspection teams in performing targeted inspections for higher risk locations. A longer-term solution is the acquisition of an integrated software solution that would allow information exchange and access to pertinent data.</p> <p><b>Updated Management Response: September 6, 2023</b></p> <ul style="list-style-type: none"> <li>Interface between Image Trend (Suppression/EMS RMS) and INFOR completed to share data between Suppression and LSB; however, the interface only allows information to flow from Image Trend to INFOR. Streamlined complaint notification process from suppression and OEC to LSB and reinforced documentation and feedback loop via Lagan.</li> <li>Standards Committee developed to include 2 Chief Inspectors and suppression reps. First meeting was held on 09/28/17. Meetings have continued as concerns arise.</li> <li>In October 2017: Arson began notifying Apt Team of fires in Apartment complexes. Fall 2018: Arson began sending list of accidental fires in commercial buildings, including Apartment buildings, to Chief Inspector. December 2018: Meeting held with District Chief, 311 Systems Administrator, and LSB to identify and correct any gaps or inefficiencies with the process.</li> <li>In August 2022: Began Weekly Apartment Task Force meetings. Task force includes representatives from LSB, Deputy Chief from suppression, and other departments. The goal is to discuss, and correct deficiencies and concerns in identified apartment complexes. Meetings are ongoing</li> <li>Currently, upper management from Suppression and LSB continue to collaborate on fire department access, response, properties with hazards (failing stairs, hazardous material storage, etc.), high-rise policies, new projects, etc. Planning and Special Events include LSB and suppression members in planning meetings, and LSB shares floor plans and pertinent information with Special Events and suppression members. Image Trend has increased its capabilities to include 2-way sharing. Research is being conducted to determine the cost and feasibility of upgrading the interface between Image Trend and INFOR to allow improved information sharing.</li> </ul>	<p>Audit obtained and reviewed evidence of formal collaboration efforts between the Life Safety Bureau (LSB) and other HFD teams by vouching to a communication/collaboration memorandum documenting a cross-functional workgroup and its intended information-sharing objectives. Audit also obtained and reviewed supporting process documentation (e.g., the Fire Prevention Complaint Form) and evaluated the mechanism used to route complaints and related information to LSB via a web-based self-service submission process (including linkage through internal "Quick Links" and 311 routing). Based on the procedures performed, Audit determined communication channels and information-routing processes have been established to address prior coordination and information-sharing gaps.</p> <p>Audit noted that HFD implemented processes to start remediating this audit finding in October 2017, as referenced in their Management Response.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIAATION STATUS
6	<b>Fragmented Lines of Interdepartmental Communication</b>	<p><b>Recommendation</b>            LSB should have at a minimum read-only access to approved plans in order to operate efficiently on its respective teams. In addition, communication protocols should be established and documented to ensure fire prevention is aware of new construction projects and new COOs issued.</p> <p><b>Updated Management Response: September 6, 2023</b></p> <ul style="list-style-type: none"> <li>• In August 2017: IT/GIS/LSB Discussion - INFOR Pre-Planning phase of INFOR project to develop an Inspection and Permitting solution for HFD. Phasing from ILMS to INFOR data management system.</li> <li>• In August 2018: HFD entered MOU with HAS and HPW to streamline scheduling of alarm system inspections at HAS.</li> <li>• In February 2020: LSB INFOR Go Live date.</li> <li>• The relationship between BCE and the Fire Marshal's Office was re-established with the interim Building Code Official and new Fire Marshal in 2017 and has continued to strengthen through present day. BCE and LSB regularly collaborate on Fire/Building Code revisions, new projects, violations, Apartment Task Force, Special Events requiring permit approval, fire department access, etc. INFOR includes milestones to notify and pre-schedule inspections once a COO application is entered into the system. All plans are submitted electronically through Project Docs giving LSB access to approved plans. See updated notes regarding finding: "The fire code enforcement program is not designed to ensure compliance prior to COO."</li> </ul>	<p>Audit interviewed management regarding protocols implemented to enhance communication channels and obtained and reviewed a Memorandum of Understanding among relevant City departments that documents ongoing coordination for plan reviews, inspections, and construction (renovation) activities. Audit also reviewed INFOR configuration and workflow and traced key milestone events to the system-generated notifications/inspection items that route work to the appropriate HFD team. In addition, Audit inquired about the status of the Business Analyst position and corroborated that it was not filled due to budget constraints. Based on the procedures performed, the communication and notification controls in place address the intent of the original recommendation.</p> <p>Audit noted that HFD implemented processes to start remediating this audit finding in October 2017, as referenced in their Management Response.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	Fully Implemented

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDATION STATUS
7	<b>Ineffective Communication Within LSB</b>	<p><b>Recommendation</b>            We recommend that division-wide meetings should be held with all personnel at least semi-annually to convey information about LSB performance and other HFD information. Meeting topics can include process changes, inspection performance metrics review, announce and/or celebrate promotions/retirements within LSB, present accolades to high performing inspectors, discuss goals/objectives and strategic plans, solicit ideas for ways to improve operations, and upcoming special projects that inspectors may be interested in working with to improve LSB operations. This could be a great way to boost employee morale and operational effectiveness. Advisory Committee meetings should also be assessed to determine effectiveness for LSB initiatives.</p> <p><b>Updated Management Response: September 6, 2023</b>            The Fire Marshal and Assistant Fire Marshal hold Chief/Senior meetings monthly and as needed. Meetings between the Chief Inspector and respective team held at least monthly to review performance, new directives or procedures, concerns, etc. Senior Inspectors communicate with Inspectors weekly and more often as needed to review performance metrics and ensure work quality. The EAC, Fire Marshal, Chief Inspectors, and Accreditation Manager meet at least annually to complete the annual appraisal of our fire inspection program.</p>	<p>Audit obtained and reviewed the most recent Fire Prevention Annual Evaluation (June 2023) and interviewed responsible management to understand the inspection program's performance appraisal and internal communication frequency. Audit also obtained and reviewed evidence of ongoing inspector/supervisory communications by agreeing to documented correspondence reflecting coordination among program leadership and management in support of the accreditation and inspection program oversight. Based on the procedures performed, Audit determined collaboration and communication processes are operating to support program governance and accountability.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>
8	<b>LSB Website Is Not Current and User Friendly</b>	<p><b>Recommendation</b>            The website should be updated to reflect current information and properly designed so that site visitors can navigate efficiently to obtain information needed about LSB's processes and key contacts for the different inspection teams.</p> <p><b>Updated Management Response: September 13, 2023</b>            HFD Webmaster Alicia Whitehead updated website using web style guide, as per Citywide Executive Order, to include current information. Additional updates have been ongoing as needed to remain current and in compliance with the Citywide Executive Order.</p> <p>HFD Fire Marshal site: <a href="https://houstontx.gov/fire/HFMO/">https://houstontx.gov/fire/HFMO/</a></p>	<p>Audit reviewed the HFD Fire Marshal's Division website to verify that the site was updated and provides accessible, user-oriented information for applicants and other stakeholders. Audit reviewed and traced key content to the public-facing webpages. Based on the procedures performed, Audit determined the website content was updated and is navigable, supporting improved access to inspection and permitting information.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIAION STATUS
9	<b>Mid-Rise Atrium Inspector Is Assigned to an Incompatible Team</b>	<p><b>Recommendation</b>            We recommend mid-rise atrium inspections be performed as part of the High-Rise Inspection Team due to the same nature and extent of processes involved. The mid-rise atrium evacuation trainer is organized as part of the High-Rise Team. To be consistent, the mid-rise atrium inspector should also report to the High-Rise Inspection team.</p> <p><b>Updated Management Response: September 13, 2023</b>            The Mid-Rise Atrium Inspector and Evacuation Trainer are both assigned to the High-Rise Team to better align with the nature and extent of processes involved.</p>	<p>Audit obtained and reviewed the Fire Marshal's organizational chart and traced it to the High-Rise Team structure. Audit also reviewed HFD website inspection team listings and interviewed management to verify the reporting status of the Mid-Rise Atrium Inspector function. Audit confirmed the Mid-Rise Atrium Inspectors were restructured into the High-Rise Team.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>
10	<b>Assistant Fire Marshal and Chiefs Tasks Are Similar</b>	<p><b>Recommendation</b>            We recommend an evaluation of Chiefs and Asst. Fire Marshals' roles and responsibilities to determine if positions should be redefined to ensure effective management practices. Sr. Inspectors are the first line of supervision that manages the daily field operations and inspector assignments. Chiefs should continue to focus on executing strategy, developing risk assessments, performance metrics, comprehensive quality assurance programs, professional development education and training programs, and heading special projects that arise within the division. A flatter organizational structure could improve communication effectiveness and allow major LSB functions to report directly to the Fire Marshal for better opportunities for collaboration and coordination among the various inspection teams.</p> <p><b>Updated Management Response: September 13, 2023</b>            In July of 2017, a new Fire Marshal was appointed. In July of 2020, then - Fire Marshal was appointed to EAC, and another new Fire Marshal was appointed. During their time as Fire Marshal, each Fire marshal reviewed the roles and responsibilities of Senior s, Chiefs, Assistant Fire Marshal and Fire Marshal and did not observe redundancies or ineffective management practices during their leadership as Fire Marshal.</p>	<p>Audit obtained and reviewed the job descriptions for the Fire Marshal and Assistant Fire Marshal and performed a comparative review to identify and assess any overlap in key duties, authority, and supervisory responsibilities. Based on this analysis, Audit determined the roles are differentiated and do not reflect overlapping responsibilities.</p> <p>Audit noted that HFD implemented processes to start remediating this audit finding in October 2017, as referenced in their Management Response.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDATION STATUS
11	<b>Compliance with Texas Commission of Fire Prevention Requirements Not Properly Reflected</b>	<p><b>Recommendation:</b>            From review of hours entered for the same course title and basic code training, the program should be reviewed to ensure compliance with Texas Commission on Fire Protection (TCFP) requirements are being met. Upon completion of earning credits for a course taken, a certificate of completion should be issued to inspectors and maintained on file that documents the title of the course, date course was taken, inspector's name, instructor's name and certification number, level of training (Level 1 or Level 2), and number of credits earned. Records should be maintained by inspector to easily reference all courses taken for any given license period. In addition, the LSB Guideline for District Training Officers (DTOs) should be updated to reflect the current requirements and procedures of the program.</p> <p><b>Updated Management Response: September 13, 2023</b>            Neither the Fire Marshal from 2017-2020 nor the Fire Marshal from 2020-present has observed this finding. In February 2018, TCFP conducted audit of HFD, which included an audit of Prevention's CE hours, with no violations found.</p>	<p>Audit reviewed applicable TCFP requirements governing required certifications and continuing education, obtained a personnel listing with titles/disciplines subject to certification, and selected a sample of 14 of 126 individuals to verify current credential status to the TCFP database. Audit also inquired about training completion documentation and how continuing education is recorded and monitored.</p> <p>Audit confirmed Plan Examiner and Fire Inspector certification compliance for a sample of 14 inspectors. In addition, Audit verified continuing education hours are consistently tracked and retained by each Supervising Chief within Fire Rescue 1 Academy.</p> <p>Audit noted that HFD implemented processes to start remediating this audit finding in October 2017, as referenced in their Management Response.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>
12	<b>No Professional Development Program</b>	<p><b>Recommendation</b>            Professional training and development should be established as part of a comprehensive training program. Inspectors need to be adequately trained and equipped with the skills to transition into roles that require more than an understanding of the Fire Code and LSB Standards. If the vision of the department is to utilize technological innovations to streamline processes to improve operational efficiency, training will need to be a priority to transition inspectors to this mindset for these initiatives to be effective.</p> <p><b>Updated Management Response: September 13, 2023</b>            Onboarding for Newly Promoted Inspectors has been formalized and placed under the direction of a Chief Inspector. Chiefs/ Seniors are offered management training opportunities through SHSU LEMIT program (Fire Executive Management Training). Refresher training is addressed through monthly CEs, training with vendors/ other area Fire Marshal's offices, in-house training, etc. LSB members are encouraged to attend presentations by university reps, which is generally held at Arson headquarters; Information presented includes degree requirements and tuition exemptions. All LSB members are encouraged to attend annual Greater Houston Fire Marshal's Conference in Pasadena, TX and the National Fire Academy in order to attend classes and collaborate with Inspectors, Investigators, and other Fire Service personnel across the country.</p>	<p>After review of the Fire Marshal Division's Professional Development Program and continuing education documentation, Audit confirmed that LSB Inspectors are attending approved annual external conferences and formal trainings to include the <i>Greater Houston Fire Marshal's Conference</i> and the <i>National Fire Academy</i>. The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIAION STATUS
13	<b>Inadequate Record Keeping Practices</b>	<p><b>Recommendation</b> We recommend establishing and documenting an effective record management program that includes records storage, access policies, disposition, maintenance, and other effective record management practices. As part of quality control procedures, supervisors should ensure all records are complete, accurate, and maintained in the database.</p> <p><b>Updated Management Response: September 18, 2023</b> Prior to the transition to INFOR, the immediate need was addressed through training and Chiefs' / Seniors' reviews of records. Adopted in 2018 with implementation continuing into 2020, INFOR now serves as the City of Houston's records management system for tracking inspections and permits. All Inspectors were trained in INFOR prior to implementation. INFOR records management system went live in February 2020, a month before COVID caused many commercial businesses to shut down. After businesses reopened and Inspectors were more active in INFOR, in-person refresher training was conducted, training/reference guides and video resources were created/posted, and INFOR subject matter experts were identified to better assist the Inspectors with proficiency and the transition to INFOR. All inspections must be documented in INFOR with the exception of Plan Checking. All plans must be submitted and reviewed in ProjectDox. On-site plan checks must be documented in ILMS. Chiefs regularly monitor reports to ensure compliance.</p>	<p>Audit obtained and reviewed INFOR training communications and supporting materials and performed a walkthrough of INFOR via virtual demonstration to identify and trace where inspection records are created, stored, and maintained. Audit then requested and used read-only access to review inspection reports and trace selected inspections from assignment through completion and electronic submission, including system-generated checklists, questionnaires, and supporting photos.</p> <p>Audit confirmed inspections are performed and documented electronically in INFOR; however, Audit was unable to verify actual attendance at the INFOR training sessions and could not fully conclude that inspections are consistently monitored and approved as designed.</p> <p>The finding will remain open with status of "partially implemented" until training on INFOR and monitoring processes is formally implemented and documented.</p>	<b>Partially Implemented</b>
14	<b>LSB Consistently Exceeds Approved Budget</b>	<p><b>Recommendation</b> We recommend that LSB evaluate the fire prevention permitting fee structure to ensure all costs for providing fire-watch/standby services are sufficiently covered by LSB's Management.</p> <p><b>Updated Management Response: September 13, 2023</b> LSB more accurately identified projected budget needs for FY19 budget. ~ 98% of LSB OT is customer driven. Since FY19, the overtime budget was derived from costs associated with projected revenue. Since 2018, LSB OT has not exceeded permit revenue that resulted from customer driven OT. Quarterly reports are produced to monitor revenue versus customer driven overtime.</p>	<p>Audit obtained and reviewed FY23 quarterly reports/charts used to monitor revenue and customer-driven overtime and the reported results for evidence of ongoing overtime monitoring. Audit also traced the quarterly data reported to source system outputs (IPS and SAP) and evaluated whether actual overtime remained within the approved FY23 overtime budget. Based on the review, Audit confirmed the LSB Division monitors revenue and customer-driven overtime on a quarterly basis and that the FY23 approved overtime budget was not exceeded.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIATION STATUS
15	<b>Population of Facilities to be Inspected Cannot be Verified as Complete and Accurate</b>	<p><b>Recommendation</b>            Because LSB currently lacks a sufficient database to manage inspection location information, we recommend all teams create a master list of locations subject to inspections. This is a guideline specified in the 360 Degree Inspection Program implemented for a short time in 2015. Once a master list is established, develop a set of robust internal controls to strengthen the verification process of all occupancy types to ensure the completeness and accuracy of the lists on an ongoing basis. Internal control procedures could include periodically comparing BCE's records of buildings with LSB, obtaining and comparing credible external resource data to master lists, and ensuring lists are maintained only by designated personnel. The listing should be verified with other sources at least on a monthly basis to ensure completeness and accuracy until the process is mature enough to warrant a change in frequency of the verification procedures. The verification process should be properly documented for control purposes.</p> <p><b>Updated Management Response: September 14, 2023</b>            This finding was addressed during the creation of the Risk Based Inspection Model. Alvarez &amp; Marsal consulting group created a master list of parent/child properties, cleaned existing data, and completed the address verification process. Per A &amp; M, the data continued to be cleaned as inspections were conducted. INFOR now serves as the City of Houston's records management system for tracking inspections and permits. Prior to implementation, INFOR further cleaned data. As a result, LSB currently has a sufficient database to manage inspection location information.</p>	<p>Audit interviewed management to understand how the team ensures facility lists are accurate and complete. Additionally, Audit obtained and reviewed documentation describing the RBI approach and its migration to INFOR. Audit also requested evidence of master facility files by institution type and assessed whether controls exist to validate and maintain address accuracy within INFOR.</p> <p>Management indicated that although inspectors perform address verifications during inspections and correct inaccurate addresses in INFOR, it is difficult to maintain an accurate master list of facilities.</p> <p>The finding is considered "incomplete/ongoing" until an accurate master list of facilities is developed, updated, and retained.</p>	Incomplete/ Ongoing

16	<p><b>Inspections Are Performed Inconsistently</b></p>	<p><b>Recommendation</b>          We recommend inspection checklists be developed and utilized by inspectors when performing inspections to ensure that the Fire Code minimum requirements are met for the locations under inspection and inspections are consistently performed by each inspector. The checklists should be customized for each specialized team as needed, reflect current code requirements, and LSB/NFPA Standards. In addition, the completed checklist documentation should be signed and dated by the inspector completing the inspection and included as part of the building's inspection file to evidence what was inspected and violation(s) found in order to generate the Inspection Report/Notice of Violation.</p> <p>Since the Inspection Reports/Notice of Violations are not designed to include both compliance and non-compliance components, using a checklist rather than a personal notepad to document violations and note areas inspected can evidence that a thorough inspection was completed. Supervisors should be reviewing the completed checklists in conjunction with the Inspection Report/Notice of Violation to verify a quality inspection was performed. In addition, we also recommend taking photographs of violations identified during inspections to support Inspection Reports/Notices of Violations issued.</p> <p><b>Updated Management Response: September 14, 2023</b>          In 2017, consolidated check lists were developed for each team, and ILMS-specific training materials were refreshed, and training was presented to teams.</p> <p>During the development phase of INFOR for Fire Prevention, INFOR reviewed all processes within each team and developed automated workflow to ensure consistency. Team checklists were reviewed to ensure lists reflect current code requirements and LSB/NFPA Standards. Team checklists were then programmed into INFOR (see attachment) to ensure that minimum Fire Code requirements are evaluated and that inspections are consistently performed by each inspector. In-person, division-wide training was conducted prior to the go-live date for INFOR, and in-person refresher training has been offered as needed. Extensive training guides, reference materials, and video resources were developed and placed on the z-drive, communicated, and made accessible to all LSB inspectors.</p> <p>A video resource was created to show how to upload attachments, including how to attach a photograph of a violation and embed the photo into the inspection report (see attachment). Report entries are date stamped, and INFOR and the Inspector's Surface Pros/similar equipment allow for signature.</p> <p>Houston Fire Department conducts inspections based on established protocols and on risk in an equitable manner. The use of checklists has helped ensure that key code requirements are evaluated in a consistent manner across the division.</p>	<p>Audit reviewed INFOR to verify that team checklists are accessible and programmed within the system and performed a walkthrough (via demonstration) to understand how inspection reports and related checklist requirements are retrieved and applied. Audit then generated an INFOR report of completed inspections for April-June 2024 and randomly selected a sample of ten (10) apartment/hotel inspections to trace documentation for consistency, including presence of required application/permit support. Audit noted that 4 of 10 (40%) sampled inspections did not include application/permit details but a code violation was properly recorded.</p> <p>Audit noted that HFD implemented processes to start remediating this audit finding in October 2017, as referenced in their Management Response.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<p><b>Fully Implemented</b></p>
17	<p><b>Inspection Records Are Incomplete,</b></p>	<p><b>Recommendation</b>          We recommend that LSB establish and define record keeping policies for key activities and processes.</p>	<p>Audit obtained and reviewed the latest available INFOR Activity Report Guidelines and guidance to assess whether it establishes uniform documentation expectations for LSB teams. Audit confirmed the guidelines (dated November 1,</p>	<p><b>Fully Implemented</b></p>

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIAATION STATUS
	Unavailable or Non-Existent	<p><b>Updated Management Response: September 14, 2023</b></p> <p>INFOR serves as the City of Houston’s records management system for tracking inspections, activities, and permits. INFOR integrates many of the components in scheduling the frequency of inspections from the third-party developed Risk Based Inspection (RBI) program that was previously active. State mandates require Houston Fire Department to inspect hazardous materials (hazmat) facilities, nursing homes, and schools annually. The department sets a five-year schedule for apartments and a two-year schedule for high rises. Inspection of general occupancies is permit-driven. Records of these inspections and activities are maintained in INFOR.</p> <p>LSB established the INFOR / Activity Report Guideline (see attachment) for accurate and uniform reporting of inspection activities performed by the Life Safety Bureau (LSB). The objectives of this guideline are to standardize the manner in which Inspector’s Daily Activity and Inspection Reports are completed, to improve accuracy and consistency of data collected while conducting inspection activities, and to enhance time management in the completion of Daily Activity Reports and inspections completed within INFOR. Within the INFOR system, there is an Activity Log Detail utilized to record, and document time not associated with an inspection as well as a Daily Activity Report utilized to record and document daily inspection activities. This guideline dictates what activities and fields must be completed and the manner in which to complete them.</p> <p>This guideline was last revised/posted on November 1, 2021. It is currently under review, and the next revision is scheduled to be posted in early 2024, in accordance with CPSE Accreditation best practices.</p>	<p>2021) define standardized requirements for inspector daily activity and inspection reporting and that these reports are completed electronically in INFOR, which serves as HFD’s records management system. Based on the procedures performed, INFOR and the written Activity Report Guidelines support consistent, standardized documentation across LSB teams.</p> <p>The management action plan is adequate to address the audit finding and considered “fully implemented”. This finding is Closed.</p>	

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIAATION STATUS
18	Inadequate Quality Assurance Program	<p><b>Recommendation</b>            We recommend updating current LSB Guidelines in order to develop a more robust quality assurance program that outlines in detail the requirements of supervisors and Chiefs to perform quality reviews. Accountability for performance should be promoted throughout LSB. The quality assurance program should involve periodic self- audits of the fire prevention inspection process that are documented to evidence quality reviews are performed. Quality review procedures should involve:</p> <ol style="list-style-type: none"> <li>1. Ensuring checklists are consistently used by inspectors to satisfy minimum code requirements were evaluated.</li> <li>2. Verifying inspection files contain complete information, such as photographs, email correspondence, Fire Protection Engineer Reports, permit copies, site plans, and other necessary documents to support inspection activities, inspection reports, and notices of violations.</li> <li>3. Ensuring follow-ups/re-inspections are performed timely and projects are completed within targeted time frames; and</li> <li>4. Ensuring completed inspection files are properly uploaded to designated shared drives or database that can be easily accessible, as needed, by the inspection teams.</li> </ol> <p><b>Updated Management Response: September 14, 2023 (Summarized)</b>            LSB Management has implemented the audit recommendation to ensure inspectors consistently use checklists to meet minimum code requirements, with all checklists now integrated into INFOR. The Chief Inspector holds monthly meetings with staff, and Senior Inspectors conduct weekly monitoring to ensure quality and compliance. Training has been provided on attaching supporting documents and embedding them in reports within INFOR. Milestones and follow-up inspections are automatically scheduled in INFOR, and Senior Inspectors review progress regularly. Inspections follow a -risk based or -state mandated- cycle, while complaint inspections are assigned by the Senior Inspector, addressed within 24 hours, and documented in INFOR.</p> <p>The <b>Fire and Life Safety Inspection Guidelines</b>, last updated on May 1, 2021, are under review and expected to be reposted in early 2024 in alignment with CPSE accreditation practices. These guidelines ensure efficient and consistent inspection practices, with Senior Inspectors responsible for maintaining required records and Chief Inspectors ensuring adherence and providing oversight. The <b>INFOR / Activity Report Guidelines</b> establish standards for accurate and uniform reporting of inspection activities.</p>	<p>Audit reviewed INFOR to verify checklists are in the system. Additionally, Audit obtained and reviewed the revised Fire and Life Safety Inspection Guidelines and the INFOR Activity Report Guideline and the September 2021 training communications supporting inspectors’ training on attaching documents and embedding reports. Audit performed a walkthrough/observation of the INFOR mobile workflow and traced an inspection from assignment through electronic submission, including supervisory monitoring steps performed by Senior Inspectors to review reports for completeness. Based on these procedures, INFOR has strengthened standardization and accountability through electronic records.</p> <p>The management action plan is adequate to address the audit finding and considered “fully implemented”. This finding is Closed.</p>	Fully Implemented

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIAION STATUS
19	<b>Inspection Reports Do Not Reflect Current Fire Code Requirements</b>	<p><b>Recommendation</b>            The ultimate solution would be to acquire a software specifically designed for the fire prevention inspection process that would include the current Fire Code amendments. However, at minimum, inspectors should document the current code requirements within the comment section of the inspection reports/notices of violations that differ from the 2006 Fire Code that is configured in the ILMS database so that facility/building's owners or representatives have the proper code reference information to remediate violations. Supervisors should review reports/notices to ensure proper code references are documented in the report as part of the quality review procedures.</p> <p><b>Updated Management Response: September 15, 2023</b>            In 2018, HFD signed a contract (see attached) with the International Code Council (ICC) for the electronic rights of the 2012 International Fire Code (IFC). This contract allowed HFD to use ICC's Licensed Material (IFC 2012) in connection with the creation of any Houston Amendments to the 2012 International Fire Code to create an integrated Houston Fire Code (the "Houston Fire Code"). This contract also allowed HFD to include the Houston Fire Code in the software (Integrated Land Management System) utilized at the time by HFD LSB. Later in 2018, ILMS IT support completed the programming effort for HFD and imported the 2012 Houston Fire Code into ILMS so that inspection reports reflected the current code requirements. The 2012 Houston Fire Code was also integrated into INFOR prior to the go live date of February 2020 so that inspection reports would continue to reflect the current code requirements.</p> <p>By October 2023, HFD expects City Council to approve the adoption of the 2021 Houston Fire Code with an effective date of January 1, 2024. HFD is seeking a similar agreement (see attached) with ICC to interface the 2021 Houston Fire Code with INFOR prior to the effective date of the 2021 code.</p>	<p>Audit obtained and reviewed City Ordinance No. 2023-907, which provided evidence of City Council's approval and adoption of the applicable code updates (adopted October 25, 2023; effective January 1, 2024). Additionally, Audit obtained and reviewed supporting documentation that rights were secured to interface the 2021 Houston Fire Code into INFOR. Audit obtained read-only access, reviewed INFOR configuration, and reviewed and traced a sample of inspection reports to determine whether the current 2021 Houston Fire Code is integrated and referenced accurately in inspection reporting. Audit verified and confirmed the 2021 Houston Fire Codes have been fully integrated into INFOR and are being referenced in inspection reports.</p> <p>Audit noted that HFD implemented processes to start remediating this audit finding in 2018, as referenced in their Management Response.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	Fully Implemented

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDATION STATUS
20	No Established Inspection Cycle	<p><b>Recommendation</b>            We recommend that an inspection schedule is established and documented to ensure all locations are inspected on a periodic basis for all occupancy types. This schedule should be evaluated as part of the risk assessment process that should be performed on a periodic basis.</p> <p>Fire Inspectors should always perform general inspections at all locations. Inspection checklists can be provided to building owners /representatives to educate and help them prepare for general inspections but should not be used to document an inspection was performed. In addition, we also recommend taking photographs of violations identified during inspections to support Inspection Reports/Notices of Violations issued.</p> <p><b>Updated Management Response: September 15, 2023</b>            Fire inspection cycles are based on risk, which is largely reflected in the type of occupancy. The COH hired consultants Alvarez &amp; Marsal to develop and implement a risk-based inspection (RBI) approach to drive more consistent prioritization and scheduling of inspections (see attached). With the RBI model, each property was assigned a weighted Risk Score using Information from the specific Risk Factors. Using this weighted "Risk Score", properties were then prioritized based on highest risk. The RBI system was fully automated and implemented on October 4, 2017, with all teams trained prior to full automation. INFOR now serves as the COH's records management system for tracking inspections and permits. All LSB members were trained on INFOR prior to going live in Feb 2020. High Risk properties were assigned to specialty teams with inspections conducted on scheduled, re-occurring basis. INFOR integrates many of the components in scheduling the frequency of inspections from the third-party developed RBI program that was previously active. State mandates require Houston Fire Department to inspect institutions, nursing homes, and schools annually. The department sets a five-year schedule for apartments and a two-year schedule for high rises. Inspection of general occupancies is permit-driven.</p> <p>Checklists (see attached) are available on the website under Business information to educate and help owners prepare for general inspections. A video resource was created to show how to upload attachments, including how to attach a photograph of a violation and embed the photo into the inspection report (see attachment) to support Inspection Reports/Notices of Violations issued.</p>	<p>Audit obtained and reviewed the HFD Risk-Based Inspection (RBI) Model Training packet and verified that a risk-based methodology was established to prioritize fire inspections and determine inspection cycles using risk factor criteria and an associated risk score. Audit also reviewed INFOR to confirm inspections are prioritized within the system and reviewed inspection documentation fields and checklists (e.g., code violations, permit details, and inspection details) are capturing safety issues and other attributes used to support prioritization.</p> <p>Audit noted that HFD implemented processes to start remediating this audit finding in October 2017, as referenced in their Management Response.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	Fully Implemented

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIAATION STATUS
21	<b>No Evidence of Review and Approval for Fire Safety and Evacuation Plans</b>	<p><b>Recommendation:</b>            All required occupancies should have a documented review and approval process of Fire Safety and Evacuation Plans to ensure they are in compliance with the current Fire Code. Either complete plans or approvals should be maintained as part of the location's file to monitor compliance on a periodic basis. This too should be included as part of the quality review procedures. In addition, the standard plan template utilized for high-rises need to reflect a current version date, in reference to the 2012 Fire Code that was adopted in February 2016, even if there are no changes to the requirements. The documented process of reviewing and approving Fire Safety &amp; Evacuation Plans performed by the High-rise Inspection Team is a best practice that should be performed across all teams where review and approval of plans are required by the Fire Officials.</p> <p><b>Updated Management Response: September 15, 2023</b>            High-Rise, Schools, and Institution Teams review and approve Fire Safety &amp; Evacuation plans and witness fire drills in compliance with current code and standards. Hospitals conduct evacuations in place. Documentation was previously entered manually but is now included in INFOR.</p> <p>The review and approval process of Fire Safety and Evacuation Plans are documented in INFOR to ensure compliance with the current Fire Code. Checklists in INFOR include drills, evacuation plans, floor plans, roll calls, etc. (see attached) to allow for consistency among inspections. This information is maintained as part of the location's inspection data in INFOR. LSB Standard 08 (see attached) details the requirements regarding Fire Drills. "Conducting Fire Drills in High Rise Buildings" guide (see attached) and links to LSB Standards are available on the HFD Fire Marshal website under "Helpful links and information" and "Standards and Codes", respectively.</p>	<p>Audit reviewed applicable requirements in the 2021 Houston Fire Code (Chapter 4, Section 403) and interviewed management regarding the process for receiving, reviewing, approving, and retaining Fire Safety and Evacuation Plans. Audit reviewed the High-Rise submission workflow (including website intake and demonstration) and selected a sample of seven (7) inspection files to trace plan review and approval evidence. Audit confirmed and obtained letters of approval for 86% (6 of 7), indicating complete approvals.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<p><b>Fully Implemented</b></p>

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
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22	<b>Transportation Reliability Challenges Exist</b>	<p><b>Recommendation</b>            Inspectors should be provided with reliable transportation to facilitate productivity in performing field operations. Inspectors in the field should be given first consideration for new vehicles, as reliable transportation is needed to perform their job functions and to meet established inspection goals set by management.</p> <p><b>Updated Management Response: September 15, 2023</b>            Inspectors have been provided with reliable transportation (see attached LSB vehicle roster) to facilitate productivity in performing field operations and to meet established inspection goals set by management. In 2017, the fleet replacement cycle was improved by the Assistant Chief over HFD Fleet who issued thirty-four new vehicles to LSB between the years 2017 - 2020. In 2021, HFD entered into a vehicle exchange program agreement with Enterprise, Inc. This agreement provided new trucks in exchange for vehicles greater than 7-years old and continued this process each year as other vehicles became eligible per the 7-year policy. The original agreement intended for the new trucks to be replaced on a yearly basis with a current model year; however, supply chain issues has limited this yearly replacement of the new trucks.            Since 2021, eighty-one aging LSB vehicles have been exchanged for new trucks. The new vehicles include six 2021 Chevy Silverado trucks, eleven 2022 Chevy Silverado trucks, eleven 2023 Chevy Silverado trucks, and fifty-three 2023 Dodge Ram 1500s. LSB currently only has four 2015 Ford Fusions eligible for the vehicle exchange program. The remainder of the LSB fleet is less than 7-years old and ranges in age from model years 2017 - 2020.            Life Safety Bureau vehicles receive routine maintenance as scheduled. Limited work has been needed due to the majority of the vehicles being new. No concerns were raised during the last annual appraisal of the LSB program (see attached).</p>	<p>Audit obtained and reviewed the current LSB vehicle listing to verify the status of LSB transportation and selected a sample from the list to verify shop numbers and assigned employees for accuracy, including confirming assignments were limited to LSB personnel. Audit also obtained and reviewed the HFD vehicle lease and maintenance agreement with Enterprise, Inc., to verify the mechanism for maintaining reliable fleet and exchanging aging vehicles. Based on these procedures, it was determined that LSB has secured reliable transportation.</p> <p>Audit noted that HFD implemented processes to start remediating this audit finding in 2017, as referenced in their Management Response.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<p><b>Fully Implemented</b></p>

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
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23	<b>Inspection Teams Are Understaffed</b>	<p><b>Recommendation:</b>            A staffing analysis should be performed to determine additional staffing needs for the various inspection teams. Appropriate inspection goals set by management combined with sufficient staffing can positively impact on the quality of the inspections performed and decrease the level of risks related to operational effectiveness.</p> <p><b>Updated Management Response: September 16, 2023</b>            In 2017, a staffing analysis was performed to determine additional staffing needs for LSB (see attached). A standard set of risk factor criteria was applied to each occupancy to establish a risk score for each. A periodic inspection cycle was established, varying from 1-5 years, for each occupancy based on the associated risk score. A gap of 6,451 inspections per year was identified to meet the Risk Based Inspection (RBI) model. It was determined that one Senior Inspector and six classified Inspectors would be needed to address this gap at a then-cost of \$1.26M for the first year and \$716,787 annually thereafter. An alternative was to use four Inspectors per day on overtime at a then-cost of \$553,320 annually. The reduced cost of the alternative was due to no start-up costs needed (use existing vehicles, computers), no additional training requirements/meetings (CE, staff meetings, etc.), and no additional supervisor required. Budget constraints and suppression staffing did not make either of these options feasible at the time. Inspectors are promoted from suppression. Adding additional Inspectors decreases the number of firefighters in suppression, which was already understaffed. Efficiencies were gained with the transition from ILMS to INFOR as well as new technology and vehicles. Inspection teams have consistently conducted inspections within their respective inspection cycles; however, additional staffing is needed to reduce the periodic inspection cycle to further reduce community risk. HFD will continue to pursue additional Inspectors as funding permits and recruiting efforts increase staffing in suppression.</p>	<p>Audit obtained and reviewed the 2017 staffing analysis and related gap/cost analyses developed for the Risk-Based Inspection Program to assess the identified staffing needs versus current capacity and planned performance targets. Audit evaluated management's documented actions and constraints, including budget limitations impacting hiring, and reviewed operational mitigation efforts implemented to improve productivity (e.g., INFOR implementation to streamline inspections and deployment of updated equipment to support fieldwork efficiency), as well as management's stated intent to pursue additional inspector positions when funding becomes available.</p> <p>After reviewing the Risk Based Inspection Program and staffing analysis, it was determined that HFD LSB have reviewed several options for increasing staff, however; additional funding would be needed. HFD will continue to pursue funding for additional inspectors. However, to mitigate this finding, HFD reviewed several options and their decision was to pay four inspectors' overtime to close the staffing gap, HFD has also implemented a risk-based data management system to streamline the inspection process and acquired new tablets used to perform the inspections, as well as new vehicles to meet target performances.</p> <p>Audit noted that HFD implemented processes to start remediating this audit finding in 2017, as referenced in their Management Response.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<p><b>Fully Implemented</b></p>

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24	<b>Lack of Resources to Meet Fire Prevention/Life Safety Program Needs</b>	<p><b>Recommendation</b>            Inspectors should be supplied with basic supplies, such as business cards, and have access to the currently adopted Fire Code, so they can properly perform their job duties. Inspectors should be provided with reliable computer equipment while working in the field to maintain productivity during field operations. We also recommend LSB apply for available grants to take advantage of opportunities to obtain financial resources to fund projects for LSB initiatives to offset budget constraints. Applying for grants is a very rigorous process that would take a dedicated team to ensure the process is properly completed. Creating a project team of selected field inspectors, Senior Inspectors, and Chiefs to define and document specifications of LSB's needs would be recommended to ensure the specific needs of the program are properly presented.</p> <p><b>Updated Management Response: September 16, 2023</b>            Inspectors have been supplied with equipment and supplies (see attachment) as listed in NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner, and have access to the currently adopted Fire Code, so they can properly perform their job duties. Equipment purchased for all Inspectors includes Hard Hats, Class-1 Division-1 LED Flashlight (explosion proof and intrinsically safe), monocular, disposable ear plugs, safety glasses, measuring wheels, and laser distance meters. Equipment listed in NFPA1031 that was not purchased by HFD (i.e., boots) has been made available through the voucher program. In 2017, IT completed the tablet roll-out with e-signature training to all Inspectors. These tablets were not originally purchased for LSB but addressed immediate need. In 2018, LSB began the purchase of Surface Pros as these were more compatible with the upcoming new records management system, INFOR. Prior to the go-live date of INFOR in February 2020, all Inspectors had been issued new Surface Pros. Additionally, mobile printers were purchased for teams that felt it would increase efficiency in the field. This year, HITS will be providing approximately 15 Dell laptop/tablets for feedback on the new technology and to ensure it meets the needs of the division.</p> <p>Each LSB fiscal year's budget includes tools and safety equipment to replace existing equipment as needed and to issue to new Inspectors. HFD will continue to ensure Inspectors have the proper tools and equipment to properly perform their duties in a safe and efficient manner.</p>	<p>Audit obtained and reviewed supporting documentation to verify the existence and distribution of Surface Pro tablets and PPE, including an email (November 2019) evidencing deployment and exchange instructions for Surface Pro tablets/printers and receipts (June 2018) evidencing PPE purchases for inspection teams. Audit reviewed the documentation to confirm that the equipment was delivered and assigned for inspectors' use in support of INFOR-enabled inspections.</p> <p>Audit noted that HFD implemented processes to start remediating this audit finding in 2018, as referenced in their Management Response.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	Fully Implemented

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIAION STATUS
25	<b>The Apartment Inspection Team Lacks Coordination and Communication</b>	<p><b>Recommendation</b>            We recommend that periodic meetings should be held on an ongoing basis between the two apartment teams to coordinate more effective operational practices and exchange pertinent information, such as inspection approaches, methodologies, and quality assurance control measures, etc., that can lead to best practices between the teams to enhance consistency, productivity and credibility. Standard operating procedures should also be developed to facilitate coordination of the two Apartment Inspection Teams. The evaluation should also be made to determine whether or not the team should remain split between north and south to provide the most effective solution.</p> <p><b>Updated Management Response: September 16,2023</b>            An HFD Assistant Chief was appointed to Fire Marshal in July 2017. In Summer 2020, that Fire Marshal was promoted to Executive Assistant Chief, and another Assistant Chief was appointed as Fire Marshal. Neither Fire Marshal has observed this finding. A Chief Inspector oversees the one Apartment Team, which is divided into north and south sectors to more effectively manage the geographical spread of apartments within the City of Houston. As with other teams, the Chief Inspector regularly meets with their team’s Senior Inspectors and team members and facilitates coordination among their team members.</p>	<p>Audit interviewed management to determine whether the Chief Inspector is facilitating recurring status meetings for the north and south sectors of the Apartment Team and requested evidence of the meetings (e.g., calendars, agendas, minutes, or attendance logs). Audit also obtained and reviewed the Apartment Manager Checklist Guide for Fire Inspection Survey to understand the standardized inspection approach used to support consistency in the inspection process. Management indicated meetings occur weekly; however, Audit was unable to obtain sufficient evidence to verify that the meetings occurred as described.</p> <p>The status of this finding will remain “not implemented” until management creates and retains formal documentation of ongoing periodic meetings between the two apartment teams.</p>	<b>Not Implemented</b>
26	<b>No Coverage During Specific Weekend Hours</b>	<p><b>Recommendation</b>            We recommend either extending the shift hours for the Weekend Team or assigning an inspector to that shift to ensure full 24-hour coverage on weekends.</p> <p><b>Updated Management Response: September 16, 2023</b>            At the time of the audit, there was an open position that has since been posted and filled in accordance with policy. The Weekend shift currently has full coverage, and management continues to ensure full coverage.</p>	<p>Audit interviewed management regarding staffing coverage for the LSB Weekend Team shifts and confirmed that previously open positions were filled. Audit also reviewed and verified a population of 30 scheduled weekend-shift inspections completed in INFOR by tracing to weekend inspection reports.</p> <p>The management action plan is adequate to address the audit finding and considered “fully implemented”. This finding is Closed.</p>	<b>Fully Implemented</b>

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDATION STATUS
27	<b>No Fire Protection Engineers Within LSB</b>	<p><b>Recommendation</b>            We recommend making it a requirement for hazmat/ high-piled storage plan reviewers to be certified as Fire Protection Engineers or employing/contracting Fire Protection Engineers. The additional skill could increase productivity within the team and allow for a more comprehensive review of plans for all occupancy types in the early development and construction phases of new buildings.</p> <p><b>Updated Management Response: September 19, 2023</b>            Rejects this recommendation (not finding). September 16, 2023, The Hazmat/ High-piled and Plan Checking teams are highly skilled / trained teams with more than sufficient productivity and expertise. Additionally, HFD Hazmat/ High-piled and Plan Checking teams currently have access to BCE Fire Protection Engineer and team, which provides consistency and productivity. As such, HFD rejects this finding.</p>	<p>Audit interviewed management and obtained and reviewed the City job description to verify the qualifications and process used to review complex plans related to Hazardous Materials/High-Piled Storage and other occupancy types, including whether a Fire Protection Engineer certificate is required. Audit also reviewed the division's stated approach for plan review coverage and confirmed that Senior Inspectors are required to have relevant inspection experience and that the division coordinates with Houston Public Works Building Code Enforcement for support on complex plan reviews. Based on these procedures, the department has an established approach for addressing complex plan reviews through defined qualifications and cross-department collaboration.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>
28	<b>Number of Completed Inspections Reported Is Inaccurate</b>	<p><b>Recommendation:</b>            We recommend that the new process for calculating inspections completed for performance metrics only includes general inspections actually performed by each inspector and not non-inspection data, such as analytical inspections, follow-ups, consultations, phone calls, etc.</p> <p><b>Updated Management Response: September 17, 2023</b>            The immediate need for accurate reporting was addressed by Alvarez &amp; Marsal's Consulting group through their RBI model programming/reports, Tableau dashboard reports, and training. Training was completed prior to automation on October 4, 2017. Accuracy further improved upon the implementation of INFOR in February 2020. The programmers for INFOR included pre-built reports that are routinely run and reviewed by analysts and management to assess performance metrics. INFOR's "Completed Inspections" report (see attached) includes actual inspections performed such as general inspections, follow-up inspections, and permit compliance inspections. Phone calls, meetings, analytical inspections (which were phone calls, not inspections), etc. are not included in this report. The total number of inspections for Fiscal Years 18-22 were FY18: 25,742; FY19: 30,579; FY20: 34,582; FY21: 36,160; and FY22: 27,731. It should be noted that Fiscal Years 19-21 included "COVID" Complaint Inspections whereby Inspectors responded to complaints such as overcrowding at businesses during the COVID restrictions on occupancy loads. During this time period, HFD staffed Occupancy Task Force with Inspectors on overtime to address the inundation of complaints and to maintain the capacity to respond to the locations.</p>	<p>Audit performed a walkthrough of the inspection recording process by observing an INFOR demonstration to understand how inspections are completed in the mobile application and how inspection reports are generated. Audit then obtained and verified evidence of the current "Completed Inspections Report" by generating an INFOR report under read-only access and traced the reported completed inspection count to the Annual Compliance Report (dated May 5, 2023) for validation. Based on these procedures, Audit confirmed the ACR-reported volume was supported by INFOR (36,041 completed inspection records for FY2021 versus 36,000 reported).</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>

HOUSTON FIRE DEPARTMENT LIFE SAFETY BUREAU (#2017-10)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDIAION STATUS
29	<b>Lack of a Comprehensive Inspection Software and Database</b>	<p><b>Recommendation:</b>            HFD and LSB management should determine if any additional time and resources should be invested into the ILMS database that is not designed to be used by LSB. The financial resources that it will take to upgrade the ILMS database should be used to acquire software adequately designed for end-to-end LSB inspection activities. We recommend that LSB assess whether or not Firehouse will be used for the inspection process. If it is determined that Firehouse will not be used, payment of maintenance fees should cease immediately, and a comprehensive and integrated software package should be acquired to meet LSB needs.</p> <p>The need for a comprehensive and integrated software solution has been a recurring recommendation from multiple audits. However, LSB has continued to rely on and invest resources in the ILMS database that has not proven to sufficiently meet its operational and reporting needs.</p> <p><b>Updated Management Response: September 17, 2023</b>            INFOR now serves as LSB's comprehensive inspection application that captures the end-to-end inspection process and manages the daily operations, including inspection planning, field activities, and reporting (see attached). Prior to implementation in February 2020, INFOR held regular meetings as well as training sessions and testing scenarios with Inspectors as subject matter experts to ensure needs were met.</p>	<p>Audit reviewed INFOR to verify the system is operating as planned by confirming inspection workflows are executed electronically through the INFOR mobile application and that inspection activity can be managed and monitored through system reporting and record retention. Based on these procedures, INFOR is functioning as the department's inspection records management and operational monitoring system.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>
	<b>Review of Investigation Reports are not Tracked</b>	<p><b>Recommendation:</b>            We recommend that the Arson Bureau expand the SharePoint case log to also include review status, priority (severity) of the case report, and indicate whether additional quality review of the report was performed. This allows Management to identify case reports requiring revisions and perform follow-up reviews, and to identify individuals that might require additional report writing training. This also helps ensure that high priority cases receive the necessary scrutiny and/or review before delivery of the case reports to district attorneys or other agencies for next steps.</p> <p><b>Updated Management Response: September 18, 2023</b>            The case log has been expanded to incorporate review statuses, including documentation of each administrative review, follow up review, technical review, and quality assurance review. This has allowed Management to identify case reports requiring revisions and perform follow-up reviews, and to identify individuals that might require additional report writing training. This has also ensured that high priority cases receive the necessary scrutiny and/or review before delivery of the case reports to district attorneys or other agencies for next steps.</p>	<p>Audit reviewed available operating procedure evidence and reviewed the electronic Arson Case Log to assess whether periodic case assessments and staged reviews are required and occurring in alignment with NFPA 921. Audit selected a sample of 30 arson cases and traced each case through documented review phases to verify that administrative reviews are performed by investigators, technical reviews are performed by supervisors to determine whether additional investigative work is required, and follow-up status is documented. Audit also verified that Chief Investigators perform documented quality assurance reviews to support compliance oversight. Based on these procedures, Audit determined cases are being monitored and reviewed through defined phases with appropriate management review.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>

HOUSTON FIRE DEPARTMENT ARSON BUREAU PERFORMANCE AUDIT (REPORT #2020-05)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDATION STATUS
30	Limitations to Current Reporting Capabilities	<p><b>Recommendation</b> We recommend that the Arson Bureau consider the following:</p> <ul style="list-style-type: none"> <li>Expand the SharePoint case log to include necessary data fields that track case status and assignments. As SharePoint contains rolling case data since 2011, the cases listed on the logs, if remained open, are still within the statute of limitations, where investigators can provide assessment on whether additional investigative work can be performed, or all leads exhausted, and case pending new information.</li> <li>Update Bureau operating procedures require investigators and/or supervisors to periodically review details of their respective cases to ensure that case information is accurately reflected on the SharePoint case log.</li> <li>Implement changes to enable Department Chiefs to perform a periodic review of the updated case log to determine whether they agree with the investigators' assessments.</li> <li>Implementing such procedures could also allow the Bureau to quickly provide certain Department statistics and key performance measures for internal and external reporting.</li> </ul> <p><b>Updated Management Response: September 18, 2023</b> The Arson case log has been updated to allow for accurate and timely caseload assessment by supervisors. Investigators are responsible for the administrative review and Supervisors are responsible for the technical review on all arson cases. Chief investigators are responsible for quality assurance reviews to ensure compliance. Supervisors now utilize our report writing system to accurately evaluate investigators' caseloads.</p>	<p>Audit requested and evaluated evidence that operating procedures were updated to require periodic case assessments and reviewed the Arson Case Log as alternative evidence of implementation when updated procedures were not provided. Audit obtained the Arson Case Log maintained in SharePoint and selected a sample of 30 arson cases to trace evidence of periodic administrative and technical reviews and to identify the steps performed. Audit also reviewed the Bomb and Arson Tracking system (BATs) to verify reviewer activity and timing and confirmed three-step administrative reviews are occurring by investigators, technical review by supervisors, and quality assurance review by Chief Investigators that are consistent with NFPA 921 expectations. Based on these procedures, Audit determined case assessments and review controls are operating as intended. The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	Fully Implemented
31	No Back up to Forensic Photographer on Staff (Civilian Position)	<p><b>Recommendation</b> We recommend that the Arson Bureau consider adding qualified resources and or establishing a Forensic Photographer Apprenticeship program. This succession planning is considered best practice to ensure business continuity and proper staffing, assuring that required photographs for investigations are taken to allow adequate investigations of all applicable fires.</p> <p><b>Updated Management Response: September 18, 2023</b> The hiring of an additional forensic photographer was included in the proposed arson budget but due to budgetary constraints, it was not approved. To supplement the need, all Investigators were provided with upgraded cameras, and additional scene documentation equipment was purchased. Lab investigators were trained in drone and 360 photographic technologies to assist the forensic photographer with scene documentation. A Chief Investigator has been assigned to the lab to ensure business continuity at the lab and that lab investigators have the proper training, expertise, and equipment.</p>	<p>Audit interviewed management and inquired about steps implemented to ensure business continuity at the lab, including whether a backup position was established for forensic photography coverage. Audit obtained and reviewed evidence of cross-training completed by a designated investigator assigned to the lab, including Foundations of Forensic Photography (June 2019), Forensic Photography I (June 2020), Forensic Photography II (August 2021), and Forensic Technician (April 2024), to corroborate enhanced coverage capability. Based on these procedures, the lab has implemented continuity measures through documented training to provide qualified backup support.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	Fully Implemented

HOUSTON FIRE DEPARTMENT ARSON BUREAU PERFORMANCE AUDIT (REPORT #2020-05)				
#	FINDING NAME	RECOMMENDATION AND MANAGEMENT RESPONSE(S)	CONCLUSION	REMEDATION STATUS
32	<b>Review of Investigation Reports are not Tracked</b>	<p><b>Recommendation:</b>            We recommend that the Arson Bureau expand the SharePoint case log to also include review status, priority (severity) of the case report, and indicate whether additional quality review of the report was performed. This allows Management to identify case reports requiring revisions and perform follow-up reviews, and to identify individuals that might require additional report writing training. This also helps ensure that high priority cases receive the necessary scrutiny and/or review before delivery of the case reports to district attorneys or other agencies for next steps.</p> <p><b>Updated Management Response: September 18, 2023</b>            The case log has been expanded to incorporate review statuses, including documentation of each administrative review, follow up review, technical review, and quality assurance review. This has allowed Management to identify case reports requiring revisions and perform follow-up reviews, and to identify individuals that might require additional report writing training. This has also ensured that high priority cases receive the necessary scrutiny and/or review before delivery of the case reports to district attorneys or other agencies for next steps.</p>	<p>Audit reviewed evidence of operating procedure and reviewed the electronic Arson Case Log to assess whether periodic case assessments and staged reviews are required and occurring in alignment with NFPA 921. Audit selected a sample of 30 arson cases and traced each case through documented review phases to verify that administrative reviews are performed by investigators, technical reviews are performed by supervisors to determine whether additional investigative work is required, and follow-up status is documented. Audit also verified that Chief Investigators perform documented quality assurance reviews to support compliance oversight. Based on these procedures, Audit determined cases are being monitored and reviewed through defined phases with appropriate management review.</p> <p>The management action plan is adequate to address the audit finding and considered "fully implemented". This finding is Closed.</p>	<b>Fully Implemented</b>

## APPENDIX 2: FOLLOW-UP AUDIT PLAN

### AUDIT OBJECTIVES

The objectives of the follow-up audit were to:

1. Determine the status of each open item.
2. Evaluate the adequacy of the department's remediation process to resolve open findings.

### PROCEDURES PERFORMED

Audit procedures performed to meet the audit objectives and provide a basis for our conclusions were as follows:

- Obtained, reviewed and assessed management's status updates to open findings.
- Determined the findings for which management's status updates indicated remediation.
- Determined and requested the documentation necessary to support the status of each finding reported by management.
- Reviewed supporting documentation and other evidence provided for sufficiency and appropriateness.

### AUDIT APPROACH

Our follow-up audit process utilizes a risk-based approach, which contains the two primary components:

- Management Status Updates
- Audit Testing/Verification

### MANAGEMENT STATUS UPDATES

Our follow-up audit process includes sending requests for status updates related to management's progress toward the remediation of open findings. Management provides status updates through an online portal. This information is then assessed by the follow-up auditor, who considers responsiveness to the original issue and remediation of the issue.

### AUDIT TESTING / VERIFICATION

A management status update indicating that a finding has been remediated is then tested/verified by the follow-up auditor prior to being closed.

The information received through management status updates form the basis for follow-up testing. If needed, additional supporting information is gathered by the follow-up auditor to provide sufficient and appropriate evidence to achieve our objectives. Once the testing and verification of a department's remediation processes have been completed, Audit then assess each finding based on one of the following four categories:

- **Fully Implemented:** Successful implementation of processes to address the audit finding.
- **Partially Implemented:** Significant efforts and implementation of processes to address the audit findings.
- **Incomplete/Ongoing:** Ongoing development of a process or efforts towards a policy to address the audit finding.
- **Not Implemented:** No effort to implement processes to address the audit finding.

## **AUDITING STANDARDS**

The Audit Division conducted follow-up audit procedures in accordance with the Generally Accepted Government Auditing Standards (GAGAS) issued by the Government Accountability Office (GAO) and the Global Internal Audit Standards as established by the Institute of Internal Auditors (IIA).

These standards require that we plan and perform the audit to obtain sufficient and appropriate evidence to provide a reasonable basis for the findings and conclusions drawn in alignment with audit objectives.

### **GOVERNMENT AUDITING STANDARDS (YELLOW BOOK)**

#### GAGAS 8.30

“Auditors should evaluate whether the audited entity has taken appropriate corrective action to address findings and recommendations from previous engagements that are significant within the context of the audit objectives. When planning the audit, auditors should ask management of the audited entity to identify previous engagements or other studies that directly relate to the objectives of the audit, including whether related recommendations have been implemented. Auditors should use this information in assessing risk and determining the nature, timing, and extent of current audit work, including determining the extent to which testing the implementation of the corrective actions is applicable to the current audit objectives.”

### **GLOBAL INTERNAL AUDIT STANDARDS (RED BOOK)**

#### IIA Standard 11.5

“Internal auditors must confirm that management has implemented internal auditors’ recommendations or management’s action plans following an established methodology, which includes:

- Inquiring about progress on the implementation.
- Performing follow-up assessments using a risk-based approach.
- Updating the status of management’s actions in a tracking system.

The extent of these procedures must consider the significance of the finding.