

**Performance Audit 22-08:
Fire Safety Inspections**

May 2023

City Auditor

Stan Sewell, CPA, CGFM, CFE

Senior Auditor

Jeff Connor, J.D., CFE





OFFICE OF INTERNAL AUDIT

Stan Sewell, City Auditor

May 3, 2023

To: Mayor Kelly
City Council Members

RE: Fire Safety Inspections
(Report #22-08)

Dear Mayor Kelly and City Council Members:

The attached report contains the results of our Fire Safety Inspections audit. Based on our audit findings, we concluded that fire safety inspections performed by the Chattanooga Fire Prevention Bureau (CFPB) during the audit period substantially complied with the standards established by the State Fire Marshal for exempt jurisdictions, the City's Fire Code, and applicable policies and procedures. However, our audit identified opportunities to strengthen CFPB internal control procedures and operational efficiency.

To address the opportunities for improvement, we recommended the CFPB implement semiannual management reviews of annual fire safety inspection records. We also recommended the CFPB formalize the current process for handling complaints involving potential Fire Safety Code violations.

We would like to thank the CFPB management and staff for their courtesy, cooperation and assistance during this audit.

Sincerely,

Stan Sewell, CPA, CGFM, CFE
City Auditor

Attachment

cc: Audit Committee Members
Joda Thongnopia, Chief of Staff
Ryan Ewalt, Chief Operating Officer
Julia Bursch, Deputy Chief Operating Officer
Phil Hyman, Fire Chief
Seth Miller, Executive Deputy/Administrative Chief
William Matlock, Fire Marshal
Jim Arnette, Tennessee Local Government Audit jim.arnette@cot.tn.gov

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AUDIT PURPOSE

This audit was performed in accordance with the Office of Internal Audit's 2022 Audit Agenda. The objective of the audit was to determine whether fire safety inspections comply with the standards established by the State Fire Marshal's Office (SFMO) for exempt jurisdictions, the City's Fire Code, and the Chattanooga Fire Department's policies and procedures.

BACKGROUND

The SFMO for the State of Tennessee has delegated to certain local jurisdictions authority to enforce their own building and fire safety codes pursuant to T.C.A. § 68-120-101(b)(2). These "exempt" jurisdictions, which include the City of Chattanooga (hereinafter the "City"), have consistently demonstrated the ability to effectively enforce building and fire codes, evaluate construction plans and specifications, and conduct comprehensive fire safety inspections as required by law.¹



To comply with the SMFO requirements for exempt jurisdictions, the City established the Chattanooga Fire Prevention Bureau (CFPB) as a unit of the Chattanooga Fire Department. The CFPB is organized into five (5) divisions: Fire Prevention, Public Education, Plans Review, Records, and Investigations. Collectively, the CFPB divisions are responsible for administering the City's fire safety programs.

¹ The SFMO performs quality assurance audits of exempt jurisdictions every three (3) years. The SMFO conducted an onsite audit of the City's fire safety programs in 2022 and determined the City was in full compliance with all exempt jurisdiction standards and building code enforcement programs. *See* Appendix C.



The City's Fire Code conforms to all international, national and state standards for fire prevention. For new construction, the City has adopted the International Fire Code, 2018 Edition, including all referenced standards and publications. For state buildings, educational occupancies and all other existing buildings, the City has adopted the 2018 National Fire Protection Association 101 Life Safety Code.



In accordance with the City's Fire Code directives, the CFPB performs fire safety inspections on all commercial buildings, hazardous manufacturing and storage facilities, and places of assembly within the

City.² CFPB fire safety inspections are designed to ensure that fire protection systems are properly maintained, egress systems are adequate and unobstructed, and conditions that could result in a fire are mitigated. The CFPB employs six (6) inspectors, certified by the SFMO, to perform all fire safety inspections. CFPB inspectors are assigned to geographic districts and are responsible for inspections within their respective districts.

Statistics

CFD Summary	FY2020	FY2021	FY2022
<i>Administration</i>	\$1,035,418	\$565,006	\$857,006
<i>Operations</i>	\$42,346,515	\$39,515,641	\$45,090,268
<i>Prevention</i>	\$1,659,929	\$1,687,058	\$1,909,259
<i>Training</i>	\$1,253,499	\$1,172,715	\$793,278
<i>Inspections</i>	4,385	4,314	4,094
<i>Building fires</i>	212	270	268

Source: Comprehensive Annual Budget Reports 2020-2023

FINDINGS AND RECOMMENDATIONS

Annual fire safety inspections

Based on our audit findings, we concluded that fire safety inspections performed by the CFPB during the audit period (CY2022) substantially complied with the SFMO requirements for exempt jurisdictions, the Fire Code, and applicable policies and procedures. However, our audit testing disclosed limited instances where the CFPB had no record of required annual fire safety inspections.

For example, we examined fire safety inspection records from the audit period for all licensed daycare facilities, schools, and hotels located in the City’s fire districts.³ We reviewed fire safety inspections records for 84 licensed daycare facilities and identified two (2) facilities (approximately 2%) that had no record of an annual

² Places of assembly include, without limitation, schools, hotels, daycares, hospitals and nursing homes, high-rise buildings, apartments, large assemblies, detention centers and Risk Management Planned facilities.

³ The SMFO requires exempt jurisdictions to perform annual fire safety inspections on licensed daycares, schools and educational occupancies. For hotels, City Code § 11-187 requires a City permit and an annual inspection by the CFPB. The CFPB is required to inspect and approve/disapprove a hotel for continuing operation within sixty (60) days of renewal.

inspection during the audit period. We reviewed fire safety inspections records for 64 schools and identified two (2) schools (approximately 3%) that had no record of an annual inspection during the audit period.⁴ Finally, we reviewed fire safety inspections records for 26 hotels that received permit renewals from the City during the audit period and identified two (2) hotels (approximately 8%) that had no record of an annual inspection within sixty (60) days of renewal.

Recommendation 1: We recommend CFPB management review fire safety inspection records semiannually to ensure all annual inspections mandated by the SMFO or City Code are completed. We also recommend the CFPB include the management review process in the Chattanooga Fire Department Manual.

Auditee Response: We agree with the audit finding and recommendation.

Estimated Implementation Date: June 1, 2023

Priority Level: 2

**Procedures for
complaints
involving potential
Fire Code
violations**

Section 4.2.03(c) of the Chattanooga Fire Department Manual requires the CFPB to respond to complaints involving potential Fire Code violations within one (1) business day. Complaints regarding Fire Code violations are typically directed to CFPB administrative personnel. The complaint information is informally documented and subsequently forwarded by email to the CFPB inspector responsible for the district in which the complaint arises. Although we found no deficiencies with regard to the CFPB's process for handling complaints, we believe formalizing the process would likely improve response times and fire safety compliance.

Recommendation 2: We recommend the CFPB formalize the process for handling complaints concerning potential Fire Code violations and include the procedures in the Chattanooga Fire Department Manual.

Auditee Response: We agree with the audit finding and recommendation.

Estimated Implementation Date: June 1, 2023

Priority Level: 3

⁴ We also identified five (5) Hamilton County schools that either failed inspection or received unsatisfactory inspection results during the audit period.

APPENDIX A: SCOPE, METHODOLOGY AND STANDARDS

Based on the work performed during the preliminary survey and our assessment of risk, this audit covers CFPB fire safety inspections from January 1, 2022 to December 31, 2022. As part of our analysis, we reviewed documentation and records maintained by the CFPB and the City Treasurer. We used original records and copies as evidence verified through physical examination.

We examined evidence on a test basis and applied other procedures required to meet our audit objectives. Those procedures included:

- Reviewing applicable laws, regulations and departmental policies and procedures;
- Reviewing the City's Fire Code;
- Evaluating best practices and industry standards for fire safety programs;
- Conducting a risk assessment to identify high-risk activities and potential fraud risks;
- Observing CFPB fire safety inspections; and
- Interviewing CFPB management and staff.

We used non-statistical sampling to determine the sample size and selection of the data we tested. Non-statistical sampling is the selection of a test group based on the auditor's judgment, rather than a formal statistical method. To determine the appropriate sample size, we considered sampling risk and the extent to which errors were expected. Sampling risk arises from the possibility that a conclusion may be different from the conclusion reached by subjecting the entire population to the same testing procedures. We did not extrapolate the results of our testing to draw conclusions on the population as a whole.

We conducted this performance audit from November 2022 to April 2023 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence we obtained provides a reasonable basis to support the findings and conclusions expressed herein.

APPENDIX B: PRIORITY LEVEL DEFINITIONS

Priority 1: Critical control weakness exists that exposes the Auditee to a high degree of risk. Noncompliance with federal, state or local law, regulation, statute, charter or ordinance will always be considered a priority 1.

Priority 2: Control weakness exists that exposes the Auditee to a moderate degree of risk.

Priority 3: The opportunity for improved efficiency or reduced exposure to risk exists.

APPENDIX C: SMFO EXEMPT JURISDICTION AUDIT REPORT



February 28, 2023

Mr. Dallas Rucker
Building Official
Chattanooga Code Enforcement Codes
5715 Uptain Rd. Suite 100
Chattanooga, Tn 37411

William Matlock
Fire Marshal
910 Wisdom Street
Chattanooga, Tn 37406

RE: City of Chattanooga Exempt Jurisdiction Audit Report

Dear Mr. Rucker & Mr. Matlock

The State Fire Marshal is authorized by T.C.A. § 68-120-101 to conduct audits of a local government which chooses to enforce its own codes pursuant to T.C.A. § 68-120-101(b)(2). The purpose of this audit is to ensure that the local government is adequately enforcing its codes and is performing reviews of construction plans and specifications as well as field inspections.

On July 19, 2022, an on-site audit was conducted of the Townplace Suites, 5248 TN Hwy 153, Hixon, Tn, Chattanooga. The audit team consisted of Chris Bainbridge, George Smith, Philip Cameron, and Jeremy Tipton.

The result of the audit is:

- Adequate Enforcement: The performance rating that is given to an exempt jurisdiction that has demonstrated during the audit process provided for herein that it is adequately performing its building code enforcement programs.
- Marginal Enforcement: The performance rating that is given to an exempt jurisdiction that has demonstrated during the audit process provided for herein that, although it is not adequately performing its building code enforcement programs, public safety is not jeopardized by such inadequate performance such that the danger to the public is imminent.
- Inadequate Enforcement: The performance rating that is given to a locality that has demonstrated during the audit process provided for herein that it is not adequately performing its building code enforcement programs and that such failure may result in imminent danger to the public.



The following items were assessed to determine the results:
Administration Scores

		<i>Adequate</i>	<i>Marginal</i>	<i>Inadequate</i>	<i>N/A</i>
1.	An organizational chart and resumes for enforcement program staff were submitted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	All staff changes that have occurred since the last audit were submitted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	A list of enforcement officials performing building and fire inspections was submitted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	A list of plans examiners who review and approve architectural and engineering design drawings was submitted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	The person responsible for reviewing shop drawings of proposed fire protection sprinkler system installations, for reviewing shop drawings of proposed commercial kitchen hood and suppression systems, and for witnessing and inspecting fire hydrant flow tests, fire sprinkler system installations, fire alarm system or other fire protection systems was listed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Local ordinances that amend the adopted codes were supplied.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	When the adopted codes require compliance with other referenced codes or standards, they are enforced.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	The types of construction requiring plans and specifications to be submitted were listed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Records of the building and fire codes enforcement program are available	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	The policy on archiving records was given.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Code requirements for a change	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	of occupancy are followed to receive a Certificate of Occupancy.				
12.	Conditions (if any) for a temporary certificate of occupancy were given.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	Limitations on the terms of a temporary certificate of occupancy were given.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	The policy regarding re-roofing projects was given.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	Concurrent jurisdiction reviews/inspections are performed with the State Fire Marshal's Office.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	Plans and specs are submitted prior to the start of construction.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspection & Plan Review Scores

1.	Inspection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Permitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Initial plans submittal and application.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Plans Review.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Plans Approval.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Other Local Agency Reviews.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Record Filing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Plans Archiving.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Field Inspections.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	The Exempt Jurisdictions Enforcement Process.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Issuance of Occupancy Permits.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Plan Review Findings

The audit team conducted a review of plans for the construction documents to determine compliance with the adopted codes and standards. The building is a new R-1, A-2 five story, type III-B construction provided with a NFPA 13 sprinkler system:

All plans review findings have been addressed or with a satisfactory resolution to require these items in the future.

Inspection Findings



The audit team conducted an inspection of the project located at the same location to determine compliance with the adopted codes and standards.

All site inspection findings have been addressed or with a satisfactory resolution to require these items in the future.

Recommendations

Require a more detailed sprinkler design intent and have the engineer of record review the shop drawings. This helps take some of the liability of the code official and ensure the engineers design is met.

The staff was courteous and professional, and we look forward to working with you in the future.

Respectfully,

Danny Peck

Danny Peck, Audit Team Leader
Plans Examiner Supervisor
Deputy State Fire Marshal

CC: Mr. Tim Kelly, Mayor
mayor@chattanooga.gov

City of Chattanooga Fraud, Waste, and Abuse Hotline

Internal Audit's Fraud, Waste, and Abuse Hotline gives employees and citizens an avenue to report misconduct, waste or misuse of resources in any City facility or department.

Internal Audit contracts with a hotline vendor, The Network, to provide and maintain the reporting system. The third party system allows for anonymous reports. All reports are taken seriously and responded to in a timely manner. Reports to the hotline serve the public interest and assist the Office of Internal Audit in meeting high standards of public accountability.

To make a report, call 1-877-338-4452 or visit our website:

www.chattanooga.gov/internal-audit