COUNCIL AGENDA: 05-07-13
ITEM: 8.1

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Toni Taber, CMC
Acting City Clerk

SUBJECT: **SEE BELOW**

DATE: 4-24-13

SUBJECT: AUDIT OF FIRE PREVENTION

RECOMMENDATION

As recommended by the Public Safety, Finance and Strategic Support Committee on April 18, 2013 and outlined in the attached memo previously submitted to the Public Safety, Finance and Strategic Support Committee, accept the Audit of Fire Prevention.

CITY OF
SAN JOSE
CAPITAL OF SILICON VALLEY

Office of the City Auditor

Report to the City Council
City of San José

FIRE PREVENTION: IMPROVE FOLLOW-UP ON FIRE CODE VIOLATIONS, PRIORITIZE INSPECTIONS, AND TARGET PUBLIC EDUCATION TO REDUCE FIRE RISK

Report 13-04
April 2013

CITY OF
SAN JOSE
CAPITAL OF SILICON VALLEY

Office of the City Auditor
Sharon W. Erickson, City Auditor

April 10, 2013

Honorable Mayor and Members
Of the City Council
200 East Santa Clara Street
San José, CA 95113

Fire Prevention: Improve Follow-up on Fire Code Violations, Prioritize Inspections, and Target Public Education to Reduce Fire Risk

The San José Fire Department not only is responsible for responding to fires, but also has a key role in helping to prevent them. Although a very small percentage of Fire Department staffing and expenditures, the Bureau of Fire Prevention is the leader of those efforts. This audit focuses on the non-development fire prevention services provided by the Bureau of Fire Prevention Fire Code Compliance Division and related Fire Code inspections performed by fire station personnel.

Finding 1: The Fire Department Has Not Followed Up on Numerous Outstanding Fire Code Violations

At the time of the audit, about 1,800 locations that the Fire Department had inspected and notified of Fire Code violations from 2009 through 2012 still had outstanding violations. Collectively these locations had received about 4,300 violations during their most recent inspection, however, the Department had not followed up on these locations to ensure resolution of violations from the most recent inspection. In some cases, the Department had renewed operational and other permits for these locations, despite the fact that this contradicts the Department's policy. About 26 percent of the outstanding violations were in multi-family residences and hotels/motels, (about 1,100 violations in about 800 such locations). We recommend the Department establish a systematic process for ensuring that follow-up occurs.

Finding 2: The Bureau of Fire Prevention Should Improve Its Use of Data

FireHouse is the records management system used by inspectors, Department management, line staff, and billing staff. However, the available data is not consistently complete or accurate, nor is it used in meaningful ways to improve efficiency and effectiveness. The Bureau needs clear written policies and procedures that emphasize the importance of accurate data entry into FireHouse. To learn how to better use this database as a tool, the BFP should use resources and training available through the FireHouse vendor, and other jurisdictions.

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Finding 3: The Department Should Reconsider Its Fee Structure and Work with the Finance Department to Improve Efforts to Collect Overdue Revenue

The Bureau of Fire Prevention non-development program recovered most but not all of its costs in FY 2011-12. Under the current fee structure, the City charges for Fire Department non-development occupancy permits and hazardous materials permits, but not for fire safety permits. This fee structure results in businesses with operations that vary greatly in fire safety risk paying the same amount. This approach differs from that of other Bay Area cities we surveyed. We recommend the Department reexamine its non-development fire permit fee structure. It should also be noted that approximately $1.2 million in overdue Fire non-development fees are outstanding; the Fire and Finance Departments should work together to ensure overdue fees are collected. In addition, the Fire Department needs to ensure that there are written policies and procedures for billing and that appropriate separation of duties is in place.

Finding 4: The Bureau of Fire Prevention Lacks A Comprehensive Risk-Based Approach to Inspections

The current method of prioritizing inspections is based on the Department's understanding of state-mandated requirements. A recommendation to develop a risk-based approach to prioritizing workload is still outstanding from the 2003 audit report of the Bureau of Fire Prevention conducted by the City Auditor's Office. The Department should develop a risk-based prioritization of the workload and assess the extent to which existing resources may assist with the implementation of the plan. Given that the majority of fire safety inspections are completed by line staff, BFP should provide some oversight of line inspections, and should work with fire station staff to promote a shared sense of accountability for the safety of San José residents.

Finding 5: Most Fires in San Jose Occurred in Residences and Most Fire Deaths Occurred in Multi-family Residences; the Fire Department Needs Targeted Public Education Efforts to Reduce Such Fires and Deaths

In FY 2010-11 and FY 2011-12, there were 927 structure fires in San Jose. The vast majority (79 percent) were in residences, including 452 (or 49 percent) in one or two-family residence and 274 (or 30 percent) in multi-family residences. San José is consistent with national trends regarding where fires occur. However, the City differs from national trends in that nationally most fire deaths occur in one- or two-family residences. In San José, seven of the nine fire deaths in the last three years were in multi-family residences including four fire deaths in apartment complexes and three fire deaths in condominiums. Given that seven of the nine civilian fire deaths in the last three years occurred in multi-family residences, we recommend targeting inspection follow-ups to reduce outstanding violations in these properties. In addition, public education is a key component of fire prevention strategies. The Fire Department has started to develop a public relations committee to resume public education efforts.

Our report includes 20 recommendations to improve fire prevention services in San José. We would like to thank the Fire Department staff for their time and cooperation during the audit process.

The City Administration's response will be distributed under separate cover. I will present this report at the April 18, 2013 meeting of the Public Safety, Finance, and Strategic Support Committee. If you need any additional information, please let me know.

Respectfully submitted,

Sharon W. Erickson
City Auditor

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Introduction

In accordance with the City Auditor's FY 2012-13 work plan, we have audited the Fire Department's fire prevention activities in the City of San José. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We limited our work to those areas specified in the "Audit Objective, Scope, and Methodology" section of this report.

The Office of the City Auditor thanks the management and staff from the Fire Department for their time, information, insight, and cooperation during the audit process.

Background

The San José Fire Department provides fire suppression, emergency medical services (EMS), prevention and disaster preparedness services to residents and visitors in San José's incorporated and the County of Santa Clara's unincorporated areas, totaling approximately 200 square miles. The Fire Department's mission is *"to serve the community by protecting life, property, and the environment through prevention and response."*

One of the Department's bureaus is the Bureau of Fire Prevention (BFP). The mission of the Department's Fire Prevention services is:

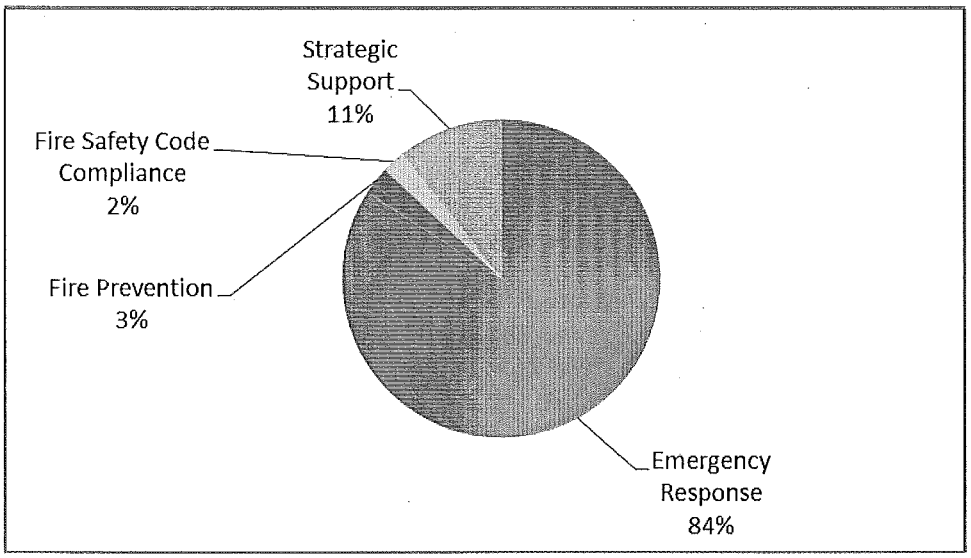
> *To educate the community to reduce injuries, loss of life, and property damage from fires and other accidents, and investigate fire cause; provide regulatory enforcement of fire and hazardous materials codes through inspection activities.*

The BFP is divided into three divisions: Code Enforcement, Development Services, and Arson. The Fire Code Enforcement division performs fire, life safety and hazardous materials inspections, issues renewable permits, investigates all complaint inspections, and handles fire safety services for special events. The Development Services division is responsible for plan checks for architecture, fire protection systems, alarms, and hazardous materials. The Arson division investigates all suspected cases of arson.

Fire Department Expenditures

The Fire Department's adopted FY 2012-13 budget totals about $152 million in spending. Exhibit 1 shows Fire Prevention accounts for about 3 percent of the Department's total expenditures.

Exhibit 1: Fire Department Expenditures by Core Service, FY 2012-13



Source: City of San José Adopted Operating Budget FY 2012-13

Fire Prevention Expenditures

The adopted FY 2012-13 budget for Fire Prevention totals about $4.3 million in spending. This is about 27 percent higher than in FY 2011-12 when expenditures totaled about $3.4 million and about 16 percent higher than five years ago when expenditures totaled about $3.7 million.

Staffing

The City's FY 2012-13 budget shows Fire Department staffing that totals 763 positions, a one percent increase over FY 2011-12 but a 12 percent decrease when compared to five years earlier when there were 865 positions.

The Fire Code Enforcement Division (also called the Non-Development Program) totals about 15 full-time equivalents. It includes nine sworn inspector positions and four civilian hazardous materials positions. As of February 2013, the Department advised that all nine of the sworn positions were filled and three of the four civilian positions were filled. A captain oversees the Fire Code inspectors, which includes the sworn and civilian positions. A Battalion Chief serves as the Assistant Fire Marshal and a Deputy Chief serves as the Fire Marshal.

California and San José Fire Code

The City of San José adopts the California Fire Code with amendments and other changes into the San Jose Municipal Code (SJMC) Section 17.12. This constitutes the San José Fire Code. The San José Fire Department is responsible for interpretation, application, and maintenance of the Fire Code. The BFP enforces the Fire Code by issuing operational permits, conducting annual inspections, one-time inspections, complaint investigations, hazardous materials inspections, and inspections for special events.

Under the San José Fire Code, there are two types of permits:

> *(1) Operational permit. An operational permit allows the applicant to conduct an operation or a business for which a permit is required by the California Code Section 105.6 for either:*
>
> *a. A prescribed period*
>
> *b. Until renewed or revoked*
>
> *(2) Construction permits. A construction permit allows the applicant to install or modify systems and equipment for which a permit is required by the California Fire Code Section 105.7.*

The BFP's non-development activities focus on operational permits. These include annual occupancy permits and, associated with these permits, fire safety permits specific to a particular activity. Operational permits also include permits for hazardous materials.

Inspection Authority

Much of the BFP's fire prevention work consists of inspecting occupancies to check for compliance with the Fire Code. The BFP's website states:

> *The California Fire Code (CFC) stipulates that during a reasonable hour, or during normal business hours, the fire code official may enter a business to conduct the duties bestowed upon them by the fire code. The City of San José adopts the CFC with amendments based on local requirements into the San José Municipal Code (SJMC) Section 17.12. This constitutes the San José Fire Code. This means any permitted building, operation, or activity is subject to inspection by the fire code official.*
>
> *The Inspection Process during a fire and life safety inspection for a permitted occupancy, the inspector will walk the property with the owner, or a representative from the business. Please review the common violations checklist and keep a copy on site for your records. The inspector will determine if violations of the fire code are present and provide education about general fire code regulations. In the event that violations are identified, the inspector will issue a written order to address the violations. A reasonable*

> *time frame will be given to the permit holder to comply based upon the nature or severity of the violations. Any life safety hazards require immediate correction once identified by the fire code official.*

When hazards are identified and violations issued, the Fire Department conducts follow-up or "re-inspections" to ensure that hazards have been corrected.

The Fire Department's Fire Safety Inspections

The primary activity of the Fire Code Enforcement Division is to inspect existing structures (referred to as "occupancies") as well as newly constructed structures for compliance with the California Fire Code and the San José Fire Code.[1] An "occupancy" is the purpose for which a building or part of a building is used or intended to be used. Examples of occupancies include businesses, multi-family residences, schools, etc. A given building or structure may have more than one occupancy. Occupancies (or the use of a given property) may change over time.

The BFP conducts annual and other inspections of structures that received permits ("permitted occupancies") to ensure that they remain in compliance with the Fire Code. For certain occupancies, the state mandates that inspections occur with a certain frequency. These occupancies are referred to as "special occupancies." Both civilian and sworn inspectors conduct inspections related to hazardous materials. Sworn inspectors conduct the non-complex hazardous materials inspections and civilians inspect the complex ones. As noted below, the fire station staff also plays a role in inspecting existing occupancies.

Fire Station Staff Also Play a Significant Role in Fire Prevention Inspections

In addition to the BFP, fire station ("line") staff also conducts inspections related to fire prevention. Line staff is responsible for inspecting certain multi-family residences and schools. Of the fire safety inspections completed by the Fire Department in FY 2010-11 and FY 2011-12, about 64 percent of initial inspections and about 40 percent of re-inspections were multi-family residences and schools conducted by line staff.

Hazardous Materials Program in San José

Currently, both civilian and sworn inspectors perform inspections of facilities with hazardous materials in San José. Civilian inspectors have background in chemistry, biology, geology, or a related discipline. They perform the more complex hazardous materials inspections, while the sworn inspectors perform less complex inspections. The complexity of an inspection is primarily based on the quantity of hazardous materials a facility has.

[1] Non-development inspectors in BFP inspect newly constructed structures once they are occupied. Prior to that, the employees in the Development program review design and construction plans for the structure.

The California Fire Code defines hazardous materials as chemicals or substances that are physical hazards or health hazards, whether in usable or waste condition. In San José, both the Santa Clara County Department of Environmental Health and the San José Fire Department regulate hazardous materials.

The Fire Department's Hazardous Materials program has undergone changes in recent years, with the transfer of some of its responsibilities to Santa Clara County.

The state of California designated Santa Clara County Department of Environmental Health to be the Certified Unified Program Agency (CUPA). Every county in California is a CUPA. The Unified Program is run by the California Environmental Protection Agency (Cal/EPA) and aims to consolidate the administrative and regulatory requirements regarding businesses with potential hazards. The Unified Program coordinates the following six programs:

- Hazardous Materials Release Response Plans and Inventories (Business Plans)
- California Accidental Release Prevention (CalARP) Program
- Underground Storage Tank Program
- Aboveground Petroleum Storage Act
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs
- California Uniform Fire Code; Hazardous Material Management Plans and Hazardous Material Inventory Statements.

Prior to July 2011, San José and Santa Clara County had an agreement that the San José Fire Department would perform inspections of underground storage tanks and coordinate the Hazardous Materials Business Plans on behalf of Santa Clara County.

In 2009, Cal/EPA and Santa Clara County learned that the Fire Department was not completing the CUPA requirements. A routine evaluation found a number of deficiencies, including the failure to complete all underground storage tank inspections. Between 2009 and 2012, at least nine evaluations were made of the Bureau of Fire Prevention's unsuccessful underground storage tank inspection program. Eventually, the City of San José and Santa Clara County decided to terminate the agreement regarding CUPA responsibilities. The Santa Clara County Department of Environmental Health now administers all elements of the Unified Program. San José is responsible for inspecting for the California Fire Code and for the San José Municipal Code. Neither set of codes mandates annual inspections of San José facilities with hazardous materials.

FireHouse System

FireHouse is the Records Management System (RMS) used by the Fire Department. Emergency incident data is automatically transferred from the Computer-Aided Dispatch (CAD) system to FireHouse.

The Bureau of Fire Prevention has been using FireHouse for Fire Code Enforcement activities since 2009. It is the foundation for data collection regarding the Bureau's activities including inspections, violations identified, and permits issued, and billing. BFP Inspectors and fire station staff enter records of inspections they have completed into FireHouse; administrative staff enters other pertinent information about San José facilities. These records contain basic information regarding the inspection, any violations of Fire Code that were noted, any permits the business holds, and information about fees paid or owed to the City. For FY 2010-11 and FY 2011-12, there are about 16,000 inspection records in FireHouse.

FireHouse has numerous reports available to track performance and workload. In the past, civilian support staff regularly ran such reports for the BFP management.

Audit Objective, Scope, and Methodology

One objective of the audit was to identify the causes and impacts of reported low compliance with state inspection requirements (according to the 2011-12 Operating Budget, an estimated 36 percent of dwellings received a state-mandated inspection in 2010-11 compared to a target of 100 percent). Other objectives included: (1) gaining an understanding of BFP's scope of responsibility (including fire prevention work performed by fire station staff), (2) assessing whether the Fire Department accurately identified the properties that are supposed to be inspected and determine whether such inspections have occurred and how they have been prioritized, (3) gaining an understanding of the inspection process, (4) determining whether San José's fire prevention fee structure appears to be reasonable and consistent with that of other jurisdictions, and (5) determining the reasonableness of staffing levels for fire prevention work.

We sought to understand the Bureau of Fire Prevention Fire Code Enforcement activities through analysis of relevant data, interviews, ride-alongs and literature reviews. Data testing, review of other written evidence and auditor observations support the report's conclusions. We limited our work to only the Fire Code Enforcement Division within the Bureau of Fire Prevention and related non-development work performed by fire station staff. Such work included:

- Extracting and analyzing data from the FireHouse system including data about fires, inspections, re-inspections, violations, administrative citations, permits, and invoices. We did not audit the FireHouse system but did

test various aspects of it. While we identified some limitations and data problems (as described in the audit) and could not confirm the completeness and accuracy of the data in FireHouse, we found that the system was sufficiently reliable to support the conclusions reached in the audit. Most of our analysis of FireHouse data was specific to data from FY 2010-11 and FY 2011-12 with exceptions as noted.

- Interviewing Fire Department staff regarding the inspection process and related data entry.
- Interviewing Fire Department and Finance Department staff regarding billing and invoices.
- Reviewing Fire Department written materials (including policies or procedures, if any) regarding inspections, billing, administrative citations, and non-billable items.
- Interviewing staff from other jurisdictions to understand fire prevention fees, policies, risk assessment practices, and use of the FireHouse system (when applicable) in those jurisdictions.
- Reviewing permit fee schedules from other cities as well as other fire prevention data available on cities' websites.
- Interviewing staff from FireHouse about training options potentially available to the Fire Department.
- Reviewing professional literature related to fire prevention including material from the International City/County Management Association (ICMA), the National Fire Protection Association (NFPA), as well as examples of fire prevention practices in other jurisdictions.

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Finding I The Fire Department Has Not Followed up on Numerous Outstanding Fire Code Violations

Summary

About 1,800 locations in San José that were inspected and notified of Fire Code violations from 2009 through 2012 by the Fire Department still had outstanding violations as of mid-February 2013.[2] Collectively, these locations had about 4,300 violations. Thirteen percent of these locations had five or more violations and 25 percent have not been re-inspected in more than a year. The Department had not followed up on these locations to ensure resolution of violations from the most recent inspection. In some cases, the Department has renewed permits for these locations, despite the fact that this contradicts the Department's policy. While the locations with the highest individual number of violations tend to be buildings other than residences, the data also reveal that about 26 percent of all outstanding violations were in multi-family residences and hotels/motels (about 1,100 violations were outstanding in about 800 such locations). It is not clear why the Department has not consistently followed up on violations. It appears there simply is not a systematic process in place for ensuring that follow-up occurs.

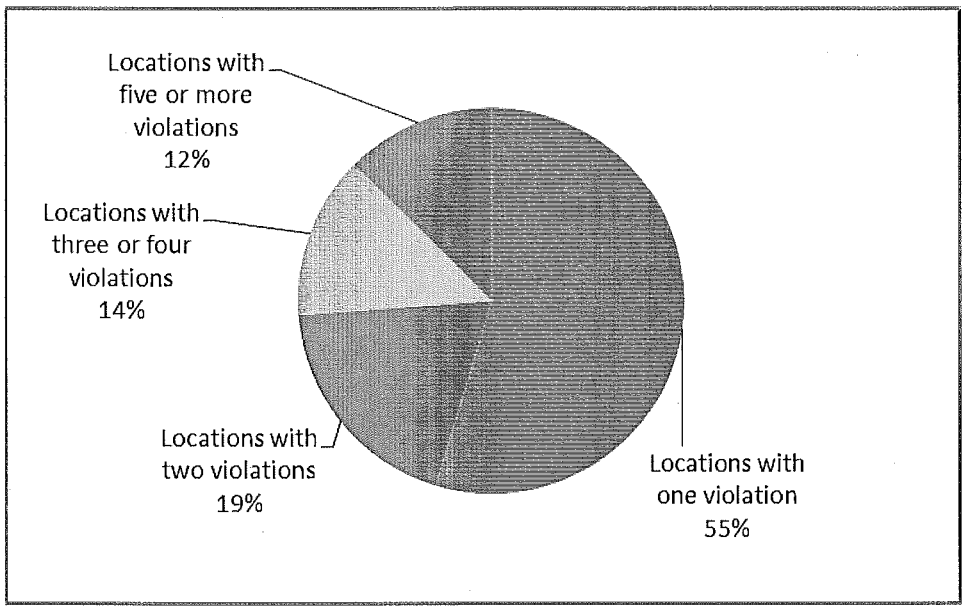
The Department Has Not Followed up on and Resolved Fire Code Violations Found During Inspections

The Fire Department issues annual permits based on a building's type and/or business. The fee for the annual permit is based on an average number of inspection hours typically required for that type of building or business. When the Department conducts inspections, the inspector records the inspection and identifies any Fire Code violations. The property/business owner or on-site manager is informed verbally of the violations and subsequently receives a notice of violations by email or mail. Violations are recorded in the inspection record (in the Department's FireHouse system) and, theoretically, a re-inspection is scheduled to revisit the property and confirm that violations are resolved.

[2] We extracted data from the FireHouse system on outstanding Fire Code violations as of mid-February 2013. In presenting the data here on the number of locations with outstanding violations as well as the number of violations, we included only those locations that received violations through the end of December 2012. The violations were solely from the most recent inspection or review that occurred. (For instance, a location may have received multiple inspections in 2010, 2011, and 2012. Some violations may have been cleared in the interim therefore, data included here reflects those violations still outstanding during the most recent inspection or review.) Because our review of the data occurred in February, we excluded those violations issued in January or early February as the Department (as of our mid-February run date) might not have had time yet to follow-up on those violations.

As described in the Background section of this report, "occupancy" refers to the purpose for which a building or part of a building is used or intended to be used. (In this section, the term "location" is used interchangeably with "occupancy.") Of the approximately 1,800 locations with outstanding violations, 44 locations had 10 or more outstanding violations (through December 2012) following their most recent inspection, including one with 61 violations. Three locations had between 20 and 33 violations. Collectively, the violations at the 1,800 locations totaled about 4,300. Exhibit 2 shows an overview of the number of violations by locations.

Exhibit 2: Locations with Outstanding Fire Code Violations



Source: Auditor Analysis of FireHouse system data on outstanding violations as of February 2013

Exhibit 2 shows that the about 55 percent of the locations with outstanding violations (979 locations) had only one outstanding violation. Twelve percent of locations (224 locations) had five or more violations.

Knowing which locations have a higher number of outstanding violations may assist the Department in prioritizing follow-up and in creating a risk assessment plan (as addressed in Finding 4). The National Fire Protection Association (NFPA) explains the nature of fire hazards and the importance of their timely correction:

> *Hazards can be installed or other relatively permanent conditions (e.g., improper interior finish, inadequate electrical service, absence of required sprinklers) or they can be relatively transitory conditions, which can be created or removed quickly and easily, often in a single action (e.g., sprinkler valve turned off, combustibles located too close to heat sources, exit paths blocked). Transitory hazards are less*

likely to be observed by an inspector, because they come and go, while installed hazards are more likely to stay in place and visible once they exist.

Therefore, the keys to keeping a property free of installed hazards are effective identification of the hazards and effectiveness in having them corrected in a timely manner. The keys to keeping a property free of transitory hazards will tend to rely more on the educational and motivational impact of code compliance activities.

With uncorrected hazards, one is concerned with the importance of the hazard and the duration of the hazard.

Importance means some measure of how much more likely a fire is because of the hazard or how much more serious a fire, once ignited, will be because of the hazard. For example, a broken exit sign and a locked exit door are both hazards that affect the ability of occupants to escape safely and in time, but the latter is much more likely to cause significant delay, resulting in harm to occupants.

The duration of the hazard is critical because every day with an uncorrected hazard in place is another day when a fire could start or become more severe because of that hazard.

Locations with outstanding violations in San José included a wide range of business types such as restaurants, hotels, retail stores, technology companies, schools, and an auto body shop, among others. Outstanding fire safety violations may pose a safety risk to the employees and occupants of the building as well as possibly the general public.

Exhibit 3 lists the 28 locations with the highest number of violations based on their last inspection. These violations were still outstanding as of February 2013. Some examples of Fire Code violations include access to exits, fire extinguishers, legible address numbers, and storage of materials among others.

Exhibit 3: List of 28 Individual Locations with the Highest Number of Outstanding Fire Code Violations

Location	Type of Facility	Most Recent Inspection or Review*	Number of Fire Code Violations	Has the Location Received an Administrative Citation?
#1	Industrial	2/22/2012	61	No
#2	High School	3/29/2012	33	No
#3	Multi-Unit Housing	6/15/2012	23	No
#4	Large Consumer Store	12/18/2012	20	No
#5	High Rise	4/12/2010	19	No
#6	Auto Shop	11/9/2011	19	No
#7	Technology Company	4/19/2011	18	No
#8	Community College	11/8/2012	18	No
#9	City Facility	8/5/2011	17	No
#10	Technology Company	1/6/2012	17	No
#11	Retail Store	11/4/2011	17	No
#12	Public School Maintenance Facility	12/21/2012	15	No
#13	City Facility	10/25/2012	15	No
#14	Auto Shop	10/11/2012	15	No
#15	Retail Store	1/21/2010	15	No
#16	Hotel	5/10/2012	14	No
#17	Car Dealership	6/23/2011	14	No
#18	High School	1/19/2011	14	No
#19	High School	2/3/2011	14	No
#20	Technology Company	4/19/2011	14	No
#21	City Facility	9/8/2011	14	No
#22	Auto Shop	11/9/2011	14	No
#23	Auto Shop	11/5/2012	14	No
#24	Restaurant	1/3/2012	13	No
#25	Technology Company	1/6/2012	13	No
#26	Restaurant	6/30/2011	13	No
#27	Industrial	4/9/2012	13	No
#28	Technology Company	9/27/2011	13	No

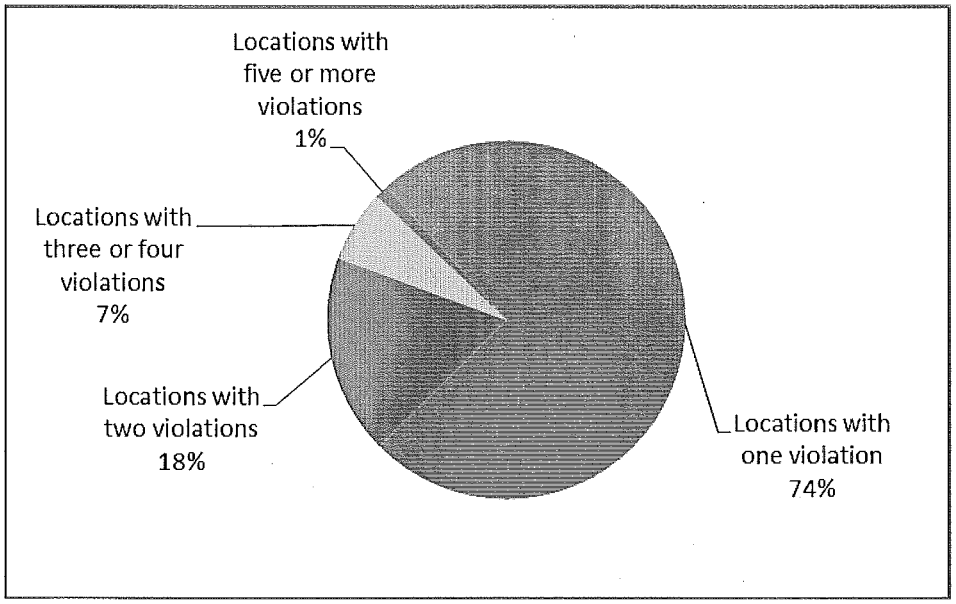
Source: Auditor Analysis of FireHouse database, data on occupancies with outstanding violations

* Most recent inspection or review as of mid-February 2013. Most recent inspections from January and February 2013 were excluded as the Department may not have had time to follow-up on those as of the mid-February date of this table. However, only one location on the list had its most recent inspection in 2013.

About One-Fourth of Outstanding Fire Code Violations Were in Multi-Family Residences

While the locations with the highest individual number of violations tend to be non-residences, the data also reveal that about 26 percent of all outstanding violations were in multi-family residences and hotels/motels. About 1,100 violations were outstanding in about 800 such locations. Exhibit 4 shows an overview of such locations and violations. It shows that 74 percent of such locations (588 locations) had only one violation. Only 1 percent had five or more violations (10 locations). As noted previously, knowledge of which particular locations have the most outstanding violations could assist the Department in its prioritization of follow-up and the development of a risk assessment plan.

Exhibit 4: Multi-Family Residences and Similar Properties with Outstanding Fire Code Violations



Source: Auditor Analysis of FireHouse system data on outstanding violations as of February 2013

This is significant because multi-family residences are where many fires occur and where most of the fire deaths in San José occurred during the last three years (see Finding 5).

It is not clear why the Department has not consistently followed up on violations. It appears there simply is not a systematic process in place for ensuring that follow-up occurs. To promote safety and prioritize re-inspections, the Department should develop a way to ensure timely follow-up on outstanding violations.

Recommendation #1: The Fire Department should develop and implement a written plan for ensuring timely follow-up on outstanding Fire Code violations.

The Department Should Revise the Policy of Issuing Permits to Facilities with Outstanding Violations

The Department has continued to issue annual permits to locations with outstanding violations despite the fact that this is contrary to Department policy. Fire Prevention Directive 002-2009 addresses Non-Development Fees and Charges and states:

> *"Annual permits will only be issued after all violations have been corrected. Permits will be held if there are any outstanding charges or violations."*

Bureau staff advised that even though permits were issued, the Department would not consider them to be valid because of the outstanding violations. We concluded that it may not necessarily be clear to property/business owners that such permits are invalid. In addition, regardless of the validity of such permits, the fact remains that occupancies are operating with outstanding Fire Code violations. In our opinion, the Department should issue the permit but should clearly state that it is issued conditionally pending correction of the outstanding violations and should clearly explain the actions required to achieve compliance.

Recommendation #2: To encourage resolution of outstanding Fire Code violations, the Fire Department should clearly specify that it is issuing conditional permits in instances in which there are outstanding violations. The materials sent to the property/business owner should clearly state: (a) that the permit is conditional due to the outstanding violations and (b) the actions that are necessary to achieve full compliance and a valid permit. The Fire Department should revise Fire Prevention Directive 002-2009 to reflect this practice.

The Department Does Not Frequently Issue Administrative Citations; Such Citations Could Expedite Compliance

The San José Municipal Code includes two administrative processes available to the City and the Fire Department for enforcing the Fire Code: (1) Administrative Remedies and (2) Administrative Citations.

Section 1.14.010 The San José Municipal Code states: *"This chapter provides for administrative remedies, which are in addition to all other legal remedies, criminal or civil, which may be pursued by the city to address any violation of this code."* The San José Municipal Code describes a Compliance Order as: *"Whenever the director determines that a violation of any provision of this Code within the director's responsibility is occurring or exists, the director may issue a written compliance order to any person responsible for the violation."*

Regarding Administrative Citations, section 1.15.010 of the San José Municipal Code states: *"The administrative citations process set forth in this chapter does not apply to continuing violations of this code that pertain to building, plumbing, electrical, or other similar structural or zoning issues."*

The Fire Department's Administrative Citation Procedures Manual for Fire Prevention Personnel further addresses Administrative Citations:

> *The Administrative Citation is an enforcement tool available for use by Fire Department Personnel to bring facilities and residents into timely compliance with the various laws and regulations that are enforced by the San José Fire Department. Administrative Citations are appropriate if the violation is minor, discrete, transitory, and can be easily remedied. This enforcement tool provides a greater penalty than a notice of violation but is less severe than permit revocation, Administrative Order, or Criminal Citation.*
>
> *Policy: It shall be the policy that Fire Prevention Personnel follow this procedure in accordance with Chapter 1.15 of the San José Municipal Code concerning issuance of Administrative Citations for violations of identified in sections Chapter 17.12 (sic.) Fire Code, 17.68 Hazardous Materials Storage Permits, and 17.78.260 Toxic Gases.*

The procedure further provides that an Administrative Citation shall be issued for violations defined as "recalcitrant." A recalcitrant violation is defined as:

> *A violation that is not remedied with compliance by the responsible party in a timely manner, usually within three site inspections, or a violation that continually reoccurs at the same facility. For a violation to be recalcitrant the violator must be advised of the problem, educated about the corrective action required, informed of the consequences of noncompliance, and receive an official written Fire Department notification.*

The procedure further states:

> *When a violation is defined as recalcitrant an Administrative Citation shall be issued (emphasis added) upon the third site inspection for any violation that has not been corrected.*

Upon the fourth site inspection a new Administrative Citation with an increased fee shall be issued for any violation that has not been corrected.

Upon the fifth and any subsequent site inspection a new Administrative Citation shall be issued with the maximum fees applied for any violation that has not been corrected.

If compliance is not achieved after the seventh site inspection the case shall be reviewed and other enforcement measures may be applied in order to gain compliance.

The Fire Department Has Not Followed Its Own Administrative Citation Procedure

The Fire Department completed about 16,000 inspections in FY 2010-11 and FY 2011-12 of about 8,200 locations. Through December 2012, about 1,800 of these locations had violations outstanding that had yet to be followed up on. Nonetheless, the Department issued only 18 administrative citations to 15 occupancies between August 2010 and early September 2012.

During our review, we found a number of locations that received multiple re-inspections but never received administrative citations despite repeated violations of the Fire Code. Exhibit 7 provides a sample of facilities that received at least six re-inspections in either FY 2010-11 or FY 2011-12. Nonetheless, the Department did not issue administrative citations to any of these occupancies. Fifteen of these occupancies were also on the Department's list of facilities with outstanding violations. Twelve of these occupancies were multi-family housing, including one with six re-inspections that subsequently had a fire in 2012 that displaced some residents. Eight of the 12 had outstanding Fire Code violations as of mid-February 2013. (See Finding 5 for discussion of the frequency of Fires in multi-family housing.)

Exhibit 5: Sample of Facilities with At Least Six Re-Inspections in FY 2010-11 or FY 2011-12

Location	Type of Facility	Number of Re-Inspections	Does the facility have outstanding Fire Code violations?*	Has the Location Received an Administrative Citation?
#1	Industrial	15	Yes	No
#2	Chain Consumer Store	9	Yes	No
#3	Corporate Office	8	No	No
#4	Chain Consumer Store	8	No	No
#5	Multi-Family Housing	7	Yes	No
#6	Elementary School	7	No	No
#7	Multi-Family Housing	7	No	No
#8	Chain Consumer Store	7	Yes	No
#9	Chain Consumer Store	7	No	No
#10	Multi-Family Housing	6	No	No
#11	Multi-Family Housing	6	Yes	No
#12	Multi-Family Housing	6	Yes	No
#13	Multi-Family Housing	6	Yes	No
#14	Multi-Family Housing	6	No	No
#15	Multi-Family Housing	6	Yes	No
#16	Multi-Family Housing	6	Yes	No
#17	Multi-Family Housing	6	Yes	No
#18	Multi-Family Housing	6	Yes	No
#19	Chain Restaurant	6	No	No
#20	Corporate Office	6	Yes	No
#21	City Facility	6	Yes	No
#22	Industrial	6	Yes	No
#23	Auto Repair	6	Yes	No
#24	Multi-Family Housing	6	No	No
#25	Consumer Store	6	No	No

Source: Auditor Analysis of FireHouse database, inspection records from FY 2010-11 and FY 2011-12

* Outstanding Fire Code violations as of mid-February 2013, as described previously in Finding 1.

The fee for an occupancy permit includes one initial inspection. For re-inspections to follow-up on outstanding code violations, the Department charges (in half-hour increments based on fire inspectors' pay rates) the time it takes an inspector to complete the inspection. We also found that the Department does

not charge for re-inspections of "R" occupancies, which include multi-family housing (12 of 25 locations on the list in Exhibit 5 were multi-family housing that had six or more re-inspections).

Multiple re-inspections of the same occupancies divert resources from inspections of other occupancies. If escalated enforcement action does not occur during the re-inspections (such as administrative citations), compliance is not encouraged and fire risks remain. If the Fire Department had issued just one administrative citation to each of the facilities listed in Exhibit 5 at the lowest citation rate ($500), this would have totaled $12,500 in penalties levied against these facilities and may have encouraged compliance.

Administrative Citations, because they are costlier than re-inspections, would likely encourage facilities to correct their Fire Code violations in a timely manner. This could lead to higher rates of compliance, fewer outstanding violations, and ultimately make San José safer. The need to complete fewer re-inspections would also free the inspectors' time to inspect more locations instead of repeatedly inspecting noncompliant ones.

The importance of encouraging compliance through re-inspections was noted in the 2005 Mayor's Budget Message which directed the City Manager to *"consistently apply re-inspection fees and impose increasing penalties for facilities that continue to have chronic fire safety problems."*

Recommendation #3: The Fire Department should: (a) enforce the BFP policy regarding the issuance of administrative citations for recurring violators as a means to encourage compliance and promote safety, (b) ensure that staff applies fines in the Administrative Citation procedure consistently, and (c) ensure that the Department is charging for all re-inspections.

Finding 2 The Bureau of Fire Prevention Should Improve Its Use of Data

Summary

The BFP began using the FireHouse system in 2009. It is the foundation for data collection regarding the Bureau's activities including inspections, violations identified, and permits issued, and billing. Data in FireHouse is used by inspectors, Department management, line staff, and billing staff. However, the available data is not consistently complete or accurate, nor is it used in meaningful ways to improve efficiency and effectiveness. The Bureau also needs clear written policies and procedures that emphasize to staff the importance of accurate data entry into FireHouse. To learn how to better use this database as a tool, the BFP should use resources and training available through the FireHouse vendor, and other jurisdictions.

Data in the Fire Prevention Database Is Inconsistent

BFP Inspectors and line staff enter records of inspections they have completed into the FireHouse database; administrative staff enters other pertinent information about San José facilities. In FY 2010-11 and FY 2011-12 combined, the Fire Department completed about 16,000 inspections and entered the related data in the database. These records contain basic information regarding the inspection, any violations of the Fire Code that were noted, any permits the business holds, and information about fees paid or owed to the City.

The completeness of the FireHouse inspection data is difficult to verify, however, during the audit we noted a number of inconsistencies and errors. The Bureau lacks written policies or procedures emphasizing the importance to staff of consistent and accurate data entry into the database. Although various screen shots provide step-by-step instructions for data entry, there are not broad policy statements regarding data entry and interpretations may not be consistent.

The FireHouse software also allows for certain controls over data entry to be activated (e.g. requiring a field to be completed before the record could be saved). However, the Fire Department has activated only minimal controls available over data entry. This results in variations in the data that is recorded and the possibility of altering past records. For instance, inspectors can leave fields blank when entering inspection records, resulting in incomplete or inaccurate inspection records.

Examples of data inconsistencies include:

- *Inspections with incorrect times recorded:* Some inspection records were entered without an ending time or listed the same start and ending times. As a result, those inspection records show the number of hours required to complete the inspection as negative numbers or zero. *In FY 2010-11 and FY 2011-12, about 1250 records listed zero as the number of hours required to complete the inspection. An additional 200 inspection or activity records listed a negative number of hours.* The majority of these errors occurred in records for inspections of multi-family residences performed by fire station companies in FY 2011-12. The Department advised that some of the inaccurate time entry may have been a "workaround" to ensure that re-inspections that required only a brief re-inspection were not billed. However, in both FY 2010-11 and FY 2011-12, only 250 records with errors were for re-inspections, as compared to 1200 that were initial inspections. Knowing the number of hours an inspection takes is critical for billing, as facilities are charged based on the amount of time an inspector spends on the inspection. Inspection hours are also necessary for tracking inspector workload and productivity as well determining the staffing level necessary to complete the workload. The importance of tracking hours spent on inspections is stated in Fire Prevention Directive #002-2009:

  > *Inspection and supervisory staff shall document all hours spent on inspections, plan reviews, EIR reviews, complaint investigations, and line referrals, as well as time spent conducting research or document review related to those activities. Include 15 minutes of travel time for each inspection. Staff shall document all hours spent in external meetings related to those activities. Time will be documented in increments determined by administrative and clerical staff.*

- *Apparent miscalculations of time:* For some records, it appears that the number of staff hours spent on an inspection has been miscalculated. Some inspections appear to have zero staff hours listed when, in fact, start and end times were entered that indicate how long the inspection took. Similarly, we also noted that, in a sample we reviewed, the FireHouse system generated an invoice that listed one hour of inspection time but billed for only half an hour. The dollar amount billed in our sample was correct based on the actual inspection time entered but it was unclear why some invoices showed one hour.

- *Incomplete business data:* BFP did not historically update the database when new businesses registered for a business license. However, BFP staff has recently begun receiving information on such new businesses from the Finance Department. Continually updating the database about new businesses will allow the BFP to ensure that data reflects that of current businesses and uses.

- *Potentially inconsistent or differing data with regard to multi-family residences:* Comparing properties listed in the Fire Prevention database with properties listed in the Multiple Housing Roster maintained by Planning, Building, and Code Enforcement would allow the BFP to know whether its list includes the same properties.
- *Potential to inappropriately alter inspection records:* Relying on only minimal controls over data entry in FireHouse allows users to potentially alter completed inspection records. In a test, we were able to modify key data fields, such as the date of the inspection and the violations that were noted, in a past inspection record. This creates the potential for fraud or error.

Fire Station (Line) Staff Data Entry Should be Reviewed and Coordinated with BFP

More than half the inspections completed in FY 2010-11 and FY 2011-12 were performed by fire station staff (line firefighters). These inspections were primarily of multi-family residences and public schools. The line companies are expected to enter the data regarding the inspections they complete. BFP has provided screen shot instructions to demonstrate to the line proper FireHouse data entry. However, the BFP does not regularly check the accuracy or completeness of the line staff data. As part of the comprehensive strategy to prevent fires in San José, the BFP should ensure that all Fire Department staff enters data into FireHouse regarding inspections completed.

Recommendation #4: The Fire Department should implement written policies to ensure that all fire prevention inspections are recorded and that the information in FireHouse is complete and accurate.

Recommendation #5: The Fire Department should activate controls in FireHouse to require users to enter key data and to prevent users from changing past inspection records to mitigate any risk of fraud or error.

The Fire Department Could Make Better Use of Available Data

Beyond record-keeping, BFP management uses few of the capabilities of FireHouse to perform data analysis. FireHouse has numerous automated reports that can be configured and run to extract data in meaningful ways.

In the past, the BFP staffing included civilians who were skilled users of FireHouse. The civilians had developed a number of FireHouse reports to provide analysis of the FireHouse data. Examples include: staff hours by activity (inspections, sick

leave, training, etc.), facilities with outstanding violations, delinquent accounts, past due inspections, weekly inspections completed, and pending inspections.

These reports are still available but are no longer run by BFP management, nor has management developed other comparable methods of tracking and analyzing data. BFP is tracking staff productivity using spreadsheets based on FireHouse data. It appears that the BFP is not tracking other measures, such as follow-up on facilities with outstanding violations, at all. However, BFP management could choose to begin using the available reports.

Use of the available FireHouse reports would allow the BFP to answer basic questions about workload and productivity such as:

- How many inspections were completed each week?
- How many hours were spent on those inspections?
- What Fire Code violations still exist in the community?

Available FireHouse Reports

We identified three reports that indicate, at a minimum, the kind of tracking that the BFP could be doing to answer these questions.

(1) *Inspections by Inspector:* This FireHouse report provides information on two key measures:

(a) Inspections an individual inspector completed: *Inspections by Inspector* provides information on staff inspection activity. The BFP is currently using an Excel spreadsheet, based on FireHouse data, which shows the number of inspections completed by inspector and property type every month. Tracking in this way does not provide data on how many hours are spent on inspections. (The number of hours spent is required to calculate staffing levels necessary to complete inspection workload. The current system of simply tracking the number of inspections does not take into account the variance in the length of different types of inspections.)

(b) Inspections that were completed in a specified period of time: Using the report, Fire Prevention management could track which inspections were completed in a given week or month. This report could be used to monitor the rate at which inspections are completed and it also provides detailed data about which specific inspections were completed, when, and by whom. The data it provides is more robust and useful than the currently used Excel spreadsheet that tracks solely the total number of inspections by month, inspector, and property type without providing additional detail.

(2) *Outstanding Violations:* This is an easy-to-use automated, web-based report that provides data from FireHouse on outstanding Fire Code violations from past inspections that have not been followed up on by the Fire Department. Using this report, the Department can follow-up on violations that were noted during inspections and ensure that identified Fire Code violations are eliminated. The Department is not currently using the system to follow-up on outstanding violations. Follow-up inspections of some facilities with violations seem to fall by the wayside as described in Finding 1. The Outstanding Violations report provides a blueprint for prioritizing follow-up on past violations.

(3) *Staff Activity:* This is an easy-to-use automated, web-based report that provides data from FireHouse on the day-to-day activities of the BFP staff. Effective use of this report is contingent upon management ensuring that staff has entered all hours for various activities including inspections, vacations, sick leave, disability leave, etc. This report would allow BFP management to better understand inspector workload and how much time is actually spent on inspections versus other activities. ***This information is key to determine the staffing level necessary to cover the expected workload. Since this information is not currently available, we were unable to determine whether current staffing levels are sufficient given the inspection workload.***

It is possible in FireHouse to run a variety of other reports and queries to monitor data integrity and inspector performance. It is also possible to run reports that highlight missing or incorrect data within the FireHouse database ("exception" reports). Regular use of such exception reports by management would improve the integrity of the data in FireHouse by ensuring timely corrections and updates.

The data inconsistencies previously identified were primarily due to inconsistent data entry or the failure to use controls available in the FireHouse system. As noted previously, the Department should address these problems. In addition, before relying upon any of the web-based or other reports that can be developed in FireHouse, the Department should ensure that the programming/queries underlying the reports are correct and that the data in the report reflects that which Department management expects it to reflect.

Recommendation #6: Fire Department management should (a) ensure that necessary data (inspections, staff activities, etc.) is entered into FireHouse consistent with the policies in Recommendation #4, (b) confirm that the programming/queries underlying the useful reports in FireHouse are accurate and provide the content that management understands it to include, and (c) use the reporting tools in FireHouse to manage workload and staff more effectively.

Recommendation #7: Fire Department management should use the data in the staff activity report to analyze how inspection workload compares to staffing levels.

The Department May Require Additional Training on FireHouse Software

The use of FireHouse may be limited by the lack of training BFP staff has received on how to use the database. Prior to the departure of BFP's civilian support in 2011, trainings were conducted both by SJFD civilian personnel and by a FireHouse Sales Representative. Since that time, however, significant staffing turnover has left few of the same inspectors in the BFP. The Department should work closely with the vendor to identify training options.

In addition, examples of how other jurisdictions are using FireHouse for fire prevention activities may prove useful to the Department. For example, other jurisdictions are using reporting software and tools to manage their fire prevention efforts. The Fire Department could talk with other jurisdictions to learn about how they use FireHouse to manage and analyze fire prevention work.

Recommendation #8: The Fire Department should train staff on the use of FireHouse software to produce more reliable data and more effective data analysis.

Finding 3 The Department Should Reconsider Its Fee Structure and Work with the Finance Department to Improve Efforts to Collect Overdue Revenue

Summary

The Bureau of Fire Prevention non-development program recovered most but not all of its costs in FY 2011-12. The City charges for Fire Department occupancy permits and hazardous materials permits, but not for fire safety permits. This fee structure results in businesses with operations that vary greatly in fire safety risk paying the same amount. This approach differs from that of other Bay Area cities we surveyed. We recommend the Department reexamine its fire permit fee structure. It should also be noted that approximately $1.2 million in overdue Fire non-development fees are outstanding; the Fire and Finance Departments should work together to ensure overdue fees are collected. In addition, the Fire Department needs to ensure that there are written policies and procedures for billing and that appropriate separation of duties is in place.

Fire Code Enforcement Recovered Most but Not All of Its Costs in FY 2011-12

The Bureau of Fire Prevention Fire Code Enforcement Division in FY 2011-12 did not generate enough revenue to cover its costs, when all costs (including Citywide overhead) are included as shown in Exhibit 6. As the exhibit shows, the largest source of revenue was annual renewable permits, while the largest expenditure was for personnel. The expenditures exceeded the revenue by approximately $180,790.

Exhibit 6: FY 2011-12 Cost Recovery of Bureau of Fire Prevention Non-Development Program

REVENUES		
Annual renewable permits	$	3,379,709
Non-renewable permits		75,563
Inspector activities		373,285
Fire Permits - Miscellaneous Fees		29,000
Miscellaneous revenue		480
Total revenues		3,858,037
EXPENDITURES		
Personnel	$	2,821,804
Non-personnel		76,538
Citywide overhead		649,850
Central City costs		24,952
Non-recoverable costs		465,683
Total expenditures		4,038,827
Excess (deficiency) of revenues over (under)	$	(180,790)

Source: FMS FY 2011-12 Revenue Status by Fund report and FY 2011-12 Responsibility Center Report by Department report, Fire Department Fee Program Analysis

The Non-Development Fire Permit Fee Structure

The Bureau of Fire Prevention works to promote fire safety and prevent fires by issuing and overseeing permits related to fire safety and hazardous materials. The goal is to conduct annual inspections for occupancies that receive such permits. The BFP inspectors also conduct inspections for special events.

Annual Renewable Operating Permits

The Fire Department issues two types of annual renewable operating permits: occupancy permits and hazardous materials permits. The Department also issues fire safety permits specific to activities performed on site.

Occupancy Permits

Occupancy permits are issued based on the business and type of the facility, such as a restaurant, a school, an office, a residential high-rise building, or a warehouse. The fee for an occupancy permit is based on the average amount of inspection time typically required for a given type of facility. In 2011-12 and 2012-13, the permit fees per facility ranged from $389 to $1,564, as shown in Exhibit 7.

Exhibit 7: San José Facility Permit Fees in 2011-12 and 2012-13

Facility Type	Fee per Facility*
Group 1: Includes theaters, restaurants, hazardous facilities, jails, mental hospitals, and storage sites	$389
Group 2: Includes churches, sports arenas, business offices, schools, industrial buildings, and stores	$442
Group 3: Includes nurseries and multi-family residences	$531
Group 9: Residential high-rises	$1,077
Group 18: Commercial high-rises	$1,564
Public Schools	$0
Records Retention Surcharge for all permits	5% of permit and inspection fees

*Fee based on cost to issue permits and average time required for an initial inspection.

Source: 2011-12 Fees and Charges Report

Fire Safety Permits

A sub-category of these occupancy permits is fire safety permits for specific activities in which a business might engage. For example, a bakery would receive an occupancy permit and would also receive a fire safety permit specific to operating industrial ovens.

Hazardous Materials Permits

In addition to occupancy and specific fire safety permits, non-development activities also include the administration of hazardous materials permits. Businesses that use or store hazardous materials are required to have permits. A hypothetical welding shop, for example, would receive three categories of permits: an occupancy permit to operate in San José, fire safety permits specific to activities such as hot work operations on site, and a hazardous materials permit for the substances that are used on site.

The City Does Not Charge for Fire Safety Permits

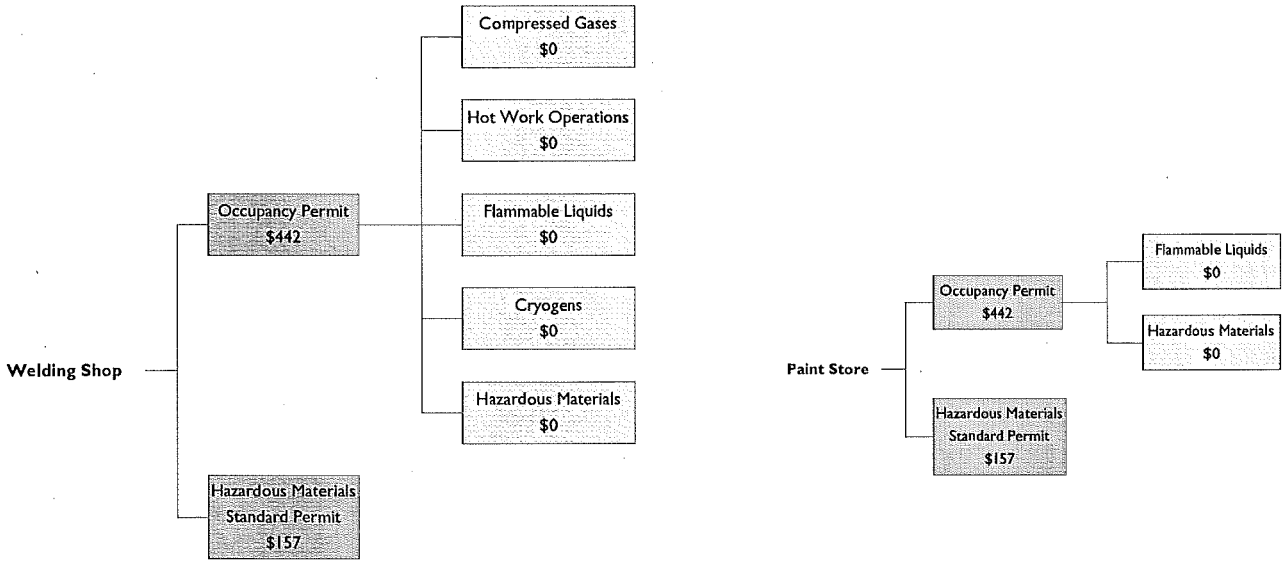
While the Fire Department charges for the occupancy permit and the hazardous materials storage permit, it does not charge for the activity-specific fire safety permits (for hot work operations, for instance). ***This fee structure results in businesses with operations that vary greatly in fire safety risk paying the same amount.***

As shown in Exhibit 8, a hypothetical welding shop would receive seven permits but would be charged for only the occupancy permit and the hazardous materials permit (a total of $599). Similarly, a hypothetical paint store would receive four permits but would be charged for only two. In these examples, both would pay

the City $599 in total for permits even though the paint store would receive four and the welding shop would receive seven.

Fire safety permits are issued to address particular life-safety hazards and so it is generally the case that businesses with more fire safety permits are those for which more hazards are inherent in their operations. In the example of the welding shop and the paint store, they would pay the same amount for their permits despite the differences in the nature of their operations.

Exhibit 8: Permits Issued to Hypothetical Welding Shop and Hypothetical Paint Store in San José



Welding Shop Total: $599 **Paint Store Total: $599**

Source: FireHouse Occupancy Records, 2011-12 Fees and Charges Report

Note: Permits that the businesses receive and pay for are marked in green. Permits that the businesses receive and do not pay for are marked in gray.

Other Cities Charge for Individual Fire Safety Permits

San José's method of charging for permits differs from that of other Bay Area cities that we surveyed. Other cities typically charge individually for the activity-specific fire safety permits. They may also charge for the occupancy permit in the same way San José does. Santa Clara charges occupancy fees but also charges for the individual activity-specific fire safety permits.

If San José had a fee structure like that of other cities, the two hypothetical businesses in Exhibit 8 would not be charged the same amount. For example, if San José's fee structure were similar to Oakland's, the paint store would pay far

less for permits than the welding shop. In Oakland, the paint store would pay half as much as the welding shop, as shown in Exhibit 9.

Exhibit 9: Permits Issued to Hypothetical Welding Shop and Hypothetical Paint Store in Oakland

Welding Shop Total: $669 **Paint Store Total: $334**

Source: 2012-13 Oakland Master Fee Schedule

Other Cities Charge Based on Fire Risk

Other cities, such as Oakland, Sunnyvale, and Palo Alto, charge different amounts for individual fire safety permits. These fees are related to the risk inherent in the activity for which the permit is issued. In Oakland and Sunnyvale, for example, an "assembly" permit costs more when the maximum capacity of the facility is higher. In these cities, a nightclub with a maximum capacity of 200 people would be charged more than a café with a maximum capacity of 60.

Under San José's current fee structure, some businesses that fall under the same broad classification, but are of different size with different hazards, end up paying the same amount. For example, a movie theater, a café, and a nightclub are all places of "assembly," so all three would be charged solely for an occupancy permit with an "assembly" fire safety permit attached as a sub-category of the occupancy permit. All three would pay the same amount even though the nightclub and the café, for example, are likely to differ in their levels of inherent risk.

The differences in the fee structures are shown in Exhibit 10.[3]

Exhibit 10: Types of Fees Charged in Bay Area Jurisdictions

	Fees for Fire Safety Permits	Fire Safety Fees Based on Risk
San José	**No**	**No**
Santa Clara	Yes	Yes
Sunnyvale	Yes	Yes
Palo Alto	Yes	Yes
Oakland	Yes	Yes
San Francisco*	Yes	No

Source: Cities' Fees and Charges Reports

* In San Francisco, businesses pay for each fire safety permit they receive, unlike in San José. However, unlike in most other cities in which the fees for fire safety permits vary, in San Francisco the fee for all fire safety permits is the same.

Recommendation #9: The Department should reexamine its non-development fire permit fee structure to charge San José facilities based on fire safety risk.

Approximately $1.2 Million in Overdue Accounts for Fire Department Non-Development Permits and Inspections Are Outstanding

The Fire Department, through the FireHouse system, bills for Fire Department non-development annual operating, fire safety, and hazardous materials permits and inspections related to such permits. As of mid-March 2013, about $1.2 million in overdue accounts was outstanding. Exhibit 11 shows the age of the overdue balances.

Exhibit 11: Overdue Fire Non-Development Permit Fees

Less than 1 year	$490,045
More than 1 year, less than 2	$323,025
More than 2 years, less than 3	$279,973
More than 3 years	$149,627
Total	$1,242,670

Source: FireHouse system

The amounts owed by twenty private entities totaled about $151,000 or about 12 percent of the total amount owed. Twenty-five entities owed $5,000 or more. There are no policies and procedures that clarify when billed accounts shift from the Fire Department's responsibility to the Finance Department. We noted that

[3] We reviewed the fee structure for fire safety permits in other cities but did not conduct a comprehensive analysis of overall costs of doing business in other cities compared to San José. We focused specifically on the fees for fire safety permits and the basis upon which they are issued.

coordination and communication between the Fire and Finance Departments regarding these accounts historically did not appear to have been strong or consistent.

Recommendation #10: The Fire Department should work with the Finance Department to ensure timely and sufficient follow-up on overdue accounts. The Finance and Fire Departments should work together to develop written policies and procedures that outline the division of responsibility for accounts between the Fire Department and the Finance Department.

The Fire Department May Have Issued to Permits to Businesses with Overdue Account Balances

The Fire Department may have issued permits to businesses that owe money even though this is contrary to both City's Fees and Charges Schedule and to the Fire Department's policy. Both the schedule and the policy state fees shall be paid before permits are issued. The Department's policy states:

> *"Annual permits will only be issued after all violations have been corrected. Permits will be held if there are any outstanding charges or violations."*

In a review of occupancies with a significant number of overdue invoices, the Fire Department's FireHouse system indicated that the Department issued permits to 12 of the 13 occupancies despite the fact that they had an outstanding balance. Department staff advise that such permits were not actually issued.

However, our review of the FireHouse system indicated that a permit was issued in those cases. If a permit was not actually issued, then the FireHouse system upon which inspectors rely is not providing accurate information. In our opinion, the Department should consider revising its policy to allow for the issuance of conditional permits that clearly inform the business owner that the permit will not be valid until fees owed are paid.

Recommendation #11: To encourage the payment of overdue balances, the Fire Department should clearly specify that it is issuing conditional permits in cases in which a balance is overdue. The materials sent to the property/business owner should clearly inform the recipient that the permit is conditional due to the outstanding balance. The Fire Department should revise Fire Prevention Directive 002-2009 to reflect this practice.

The Fire Department Needs to Ensure That There Are Written Policies and Procedures for Non-Development Billing and That Appropriate Separation of Duties Are in Place

Invoices for annual permits and re-inspections are generated by the Fire Administrative Services unit. Turnover and reorganization of the unit in the last year has resulted in shifting responsibilities and reporting relationships. A current organizational chart was not available and we were unable to verify that the organizational structure provides for appropriate separation of duties.

Organization and reporting relationships are significant with regard to billing functions in order to ensure that appropriate separation of duties are in place. For example, we noted that one of the employees who can create invoices was also able to modify the underlying data (the number of inspector hours) after the invoice was created. The employee should not have this ability. Written policies and procedures should be developed that clearly identify roles and responsibilities and ensure that duties are appropriately separated regarding functions such as invoicing, adjustments and credits to accounts, collections, and write-offs.

In a review of a sample of invoices for inspections, we noted that the number of days it took to generate the invoices varied significantly and in one instance it took more than 100 days to generate an invoice. Fire Department staff states that this has now been resolved but without additional review, we cannot verify this. The Department should ensure that timeliness guidelines are included in written policies and procedures related to billing and that they are implemented.

Recommendation #12: The Fire Department should update the organizational chart of Fire Administration, ensure that the appropriate separation of duties is in place, and develop written policies and procedures regarding billing processes. Such policies and procedures should address functions such as account: (a) invoicing, (b) adjustments and credits, (c) collections, and (d) write-offs.

The Fire Department Should Clarify Non-Billable Work in the Non-Development Program

Fire Prevention Directive #002-2009 states: *"Staff shall apply all fees with no exceptions. There are no fee waivers, except as specified in fee resolution...Fiscal staff shall bill all hours documented as above, with the following exceptions...Activities identified in this policy as non-billable activities."* The directive does not, however, go on to identify which activities should be considered non-billable.

Inspections records from FY 2010-11 and FY 2011-12, include about 70 records for which the work was categorized as "non-billable." The directive should be revised to clearly identify exceptions that the Department considers non-billable and the rationale for such exceptions. Management should ensure that staff is aware of these definitions and applies them consistently.

Recommendation #13: The Fire Department should revise Fire Prevention Directive #002-2009 to identify which, if any, types of work in the Non-Development program are "non-billable." The rationale for such a decision should be included in the revision and the revision should be disseminated to all inspectors to ensure consistent application.

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Finding 4 The Bureau of Fire Prevention Lacks a Comprehensive Risk-Based Approach to Inspections

Summary

The current method of prioritizing inspections is based on the Department's understanding of state-mandated requirements. A recommendation to develop a risk-based approach to prioritizing workload is still outstanding from the 2003 audit report of the Bureau of Fire Prevention conducted by the City Auditor's Office. The Department should develop a risk-based prioritization of the workload and assess the extent to which existing resources may assist with the implementation of the plan. Given that the majority of fire safety inspections are completed by line staff, BFP should provide some oversight of line inspections, and should work with fire station staff to promote a shared sense of accountability for the safety of San José residents.

Due to a Misinterpretation of State Requirements, the BFP Reported a Lower Percentage of State-Mandated Inspections Than Were Actually Completed

The BFP tries to complete all annual inspections that are mandated by the State Fire Marshal. The BFP has historically interpreted state requirements to mean that certain types of facilities are required to have annual inspections. Specifically, the BFP has been including "assemblies" and "facilities with hazardous materials"[4] as part of the category of "state-mandated inspections." Neither is actually required by the state to be inspected by the City every year.

Performance Measure Was Incorrectly Calculated

The City's annual budget document includes a performance measure for BFP that is a calculation of the percentage of occupancies receiving a state-mandated annual inspection. This measure is intended to be the number of state-mandated inspections completed by SJFD divided by the number of state-mandated inspections required. However, assemblies and facilities with hazardous materials have historically been treated and counted in the performance measure calculation as requiring annual, state-mandated inspections when, in fact, *annual inspections for those categories are not actually mandated by the state. The effect of this is that the Department's performance measure has understated the percentage of state-mandated inspections that were completed.*

[4] "Assemblies" refers to any occupancy in which 50 or more people gather in a building, room, or structure. "Facilities with hazardous materials" are those buildings or businesses that store or use any hazardous materials, as regulated by the California Fire Code and/or the San José Municipal Code.

As a result, the Fire Department's performance measure for FY 2011-12 showed that only 64 percent of the state-mandated facilities received an inspection in FY 2011-12, significantly below the Department's target of 100 percent. When the 1,500 places of assembly and the nearly 3,000 facilities with hazardous materials are correctly excluded, 89 percent of state-mandated inspections were completed.

The BFP may still consider it appropriate and important to inspect these facilities annually, however, they should not be included in the calculation of the percentage of state-mandated facilities inspected. The decision about how frequently to inspect them should be made in the context of a risk assessment by the Department.

Recommendation #14: The Fire Department should revise the calculation of state-mandated inspections to include only those that are state-mandated, or revise the wording of the performance measure to accurately reflect what it measures. The Department should determine whether to continue annual inspections of assemblies and facilities with hazardous materials in the context of a comprehensive risk assessment.

The Department Is Not Completing All Initial Inspections for Annual Renewable Permits

Annual renewable occupancy permits issued by the Fire Department state: "Permit issued on the condition that the facility passes inspection..." The City's Fees and Charges schedule describes fees for annual permits:

> *Facilities are grouped into Occupancy Groups based on average inspection times. Fees are then computed using the same average inspection times and the average number of permits for the group.*

For each Occupancy Group, the Fees and Charges schedule specifies an expected amount of inspection time. For example, for one category of occupancies it states:

> *$389.00 plus hourly rate if initial inspection surpasses 2 hours*

This wording (in a section titled *Annual Renewable Permits*) implies that the Department conducts an inspection each year and that the amount paid for the permit covers that inspection. However, we found that the Department has not inspected all occupancies that received annual renewable permits.

For example, all places of "assembly" receive permits; but only 73% of these places of assembly received an initial inspection in 2011-12. Additionally, all schools receive permits, though in FY 2011-12 fewer than 60% of schools

received an initial inspection. In a sample of 30 occupancies that were sent invoices for annual renewable permits in September 2012, 22 had not received an annual inspection during the prior year.

Recommendation #15: The Fire Department should clarify whether the Fees and Charges Schedule requires an inspection in conjunction with the issuance of an annual renewable permit or whether inspection hours are simply a basis for calculating the fees.

The City Auditor Recommended a Risk-Based Prioritization Ten Years Ago

In 2003, the City Auditor's Office issued the report "An Audit of the San José Fire Department's Bureau of Fire Prevention." One of the recommendations was: "Develop a risk assessment methodology to assign facility inspection frequencies." Ten years later, this recommendation has not yet been implemented. At least two attempts to implement a risk-assessment have been made, including a broad ranking of facility type by risk and the use of a consultant to create a BFP business plan. Neither of these resulted in a detailed risk-based model for handling the BFP workload.

The 2003 audit suggested three possible criteria that could be used to prioritize inspections: whether the state requires the facility to be inspected annually, the risk of fire danger, and the prior history of the facility. The Department's current approach is based primarily on the first criteria (state requirements for annual inspections). For assembly inspections only, there is a further inspection priority based on fire risk of different assembly types. As the 2003 audit stated, the lack of a system to prioritize inspections based on risk means the Department cannot assign appropriate inspection frequencies to facilities in San José (for facilities that are not state-mandated).

A 2006 draft BFP business plan reiterated that relying solely on state-mandated inspection frequencies to prioritize inspections is not sufficient to assess the potential risks and hazards of San José facilities. For example, the BFP's prioritization of "assembly" inspections does not take into account the varying levels of hazard (such as maximum number of occupants) among those assemblies. As such, a model of prioritization based only on business type does not take into account the relative risk of facilities within these classifications.

Since the recommendation was made in 2003, turnover in the BFP has been high. High rates of management turnover can make development and implementation of long-term inspection strategies more difficult. Over the past five years, there have been four Fire Marshals leading the Bureau of Fire Prevention. Additionally, turnover among the sworn BFP inspectors has been high over the past several years. Of the ten sworn inspectors who began work in FY 2010-11, five have

since retired and have been replaced, resulting in a 50% turnover rate over the past two fiscal years.

Risk Assessment Should Include Multiple Factors Related to Building Safety

Properties have different inherent fire risks depending on the type of structure and the building use. The National Fire Protection Association (NFPA) and the Fire Protection Research Foundation state:

> *Before receiving an inspection, specifically for fire related portions of a code, a property can be thought of as having a particular level of fire risk such as the probability of having a fire, a fire death, a fire injury, or a dollar of fire loss during the course of the year. This pre-existing risk may be better estimated as a function of various characteristics, such as the type of occupancy, the size of the property, the number of people or value of property on site, or the fire protection systems or features in place.*

According to these national organizations, the goal of a risk assessment should be prioritizing work to prevent fires and improve life safety. Any risk assessment should evaluate buildings based on the risk of injury or loss of life.

Prioritizing inspections is a common practice, as many fire departments cannot complete all annual inspections of public buildings. As previously noted, the San José Fire Department is not annually inspecting all permitted facilities in San José.

NFPA and the Fire Research Protection Foundation state:

> *The 1978 NFPA/UI study team recommended that departments make it a policy to annually inspect all or nearly all public buildings, as fire rates are lower when inspection rates were higher. (Hall, et. al 1978)*
>
> *Although it would be ideal for every property that is required by code to be inspected, to be inspected annually, this is not routine practice. The code enforcement process usually involves an inventory and prioritization of the properties. Typically, inspections are prioritized based on the statistical history of fire problems or on a list of potential problem occupancies where risk of death or loss is great, if infrequent. (Crawford 2002)*
>
> *Throughout the literature, there was one common issue with this recommendation. Fire departments and inspectors agree that annual inspections of all public properties would reduce fire losses within the community. With population growth not being matched by fire department growth, especially in fire prevention, and with lack of financial support in budgets, many fire departments are unable to achieve inspections of all or nearly all public buildings within one year.*

In a limited way, the Department is doing this now. In July 2011, the Department established a timeline for initial inspections by month. The first occupancies that were inspected in the BFP inspection cycle were high-rises, because of the safety risks that would be present in an emergency. Subsequent months were assigned other occupancy types (August and September were school and institutional inspections, October through January were assembly inspections). In August 2012, the BFP wrote another inspection priority order that further prioritizes inspections of assemblies with higher potential risk, such as nightclubs. Individual inspectors are responsible for scheduling the inspections in their inspection district.

Prioritizing inspections based on business type or occupancy class serves as a starting point, but there are other aspects of fire safety that should be considered. The Department should ask some key questions about building safety in San José to determine which factors should be included in a risk assessment. Such questions could include:

- In which kinds of buildings have fires occurred?
- Which buildings have a greater risk of catching fire?
- Which facilities have outstanding violations?
- How many fire safety permits does a location have and how much fire risk is inherent in the operations?
- Which buildings are most at risk for exceeding the allowable occupant capacity?
- How accessible are building exits in the case of an emergency?
- Are the residents in a building or neighborhood considered at high risk for fire loss (elderly, very young children, etc.)?
- Is the building in a low-income neighborhood?
- Where have fires occurred in the past? (See Finding 5 for data on the geographic dispersion of fires.)
- How much time is the Department spending on re-inspections that could potentially be spent on inspections of other locations?

These questions take into account criteria such as building age, presence of automatic sprinkler systems, the operations that are taking place in the facility, and the building's inhabitants. Two buildings that are places of assembly might not pose the same risk to life safety if one is a building without sprinklers or sufficient exits, and one is a building with a working sprinkler system and many exits.

The New York City Fire Department is in the process of developing a risk-based prioritization of its workload. In developing their system, fire officials are looking at factors such as age of the building, presence of fire sprinklers, outstanding violations in the facility, and past fires in the building.

There are some structures, such as certain small businesses, that are not included in the FireHouse database, and thus are not inspected. A risk assessment should indicate the rationale for including and excluding certain types of structures from the purview of the BFP Fire Code Enforcement inspection program.

Risk Assessment Should Evaluate Risk within Occupancy Classes

Not every facility in an occupancy class has the same level of risk, as noted in Finding 3. For example, a nightclub, a café, and a movie theater pose different risks, though they are all assemblies. Assessing risk for facilities in the same occupancy classes, instead of just by occupancy classes, would allow the BFP to better prioritize inspections.

As noted previously, the BFP broadly assesses risk within places of assembly. Currently, the BFP has a priority order established for places of assembly inspections in which nightclubs are inspected first, followed by restaurants, churches, and then all other assembly inspections.

This type of risk assessment should be made for all occupancy classes, based on data regarding building safety and fire history. The Department should identify risk factors for all occupancy types. For example, for multi-family residences, some key questions are:

- Do the property owners require smoke detectors in the individual units? Are checks of smoke detectors regularly made by the property owner?
- Does the building have easily accessible exits in the case of an emergency?
- Does the residential complex have a history of Fire Code violations?
- Does the building have fire sprinklers?

The BFP Should Incorporate Fire Trend Information Into the Risk Assessment

Tracking actual data about fires can indicate fire trends specific to San José. In our opinion, BFP management should be tracking information about actual fires and fire trends and incorporating this data into its database and into its risk assessment. Specifically, BFP should record which fires are happening in properties that were, should, or could have been inspected by the Fire Department to best eliminate potential fire risks.

Risk Assessment Should Be Used to Prioritize Inspections

The BFP should use the results of the risk assessment to prioritize inspections by line personnel and BFP inspectors. A risk assessment should provide an inventory of all occupancies, categorized and ranked by risk factors. Inspections should

then be completed according to the priority established by the risk ranking. Progress toward completing all inspections should be tracked to ensure that the riskiest facilities are being inspected regularly.

Austin, Texas developed a risk assessment to determine which buildings should be inspected, and in what order. The Austin Fire Department assigned every type of occupancy a risk indicator, based on the frequency of fires, number of casualties, and dollar loss for each property type. Using the risk indicators, all occupancy types were ranked from most risky to least risky. With this risk assessment, the Austin Fire Department could then create an inspection hierarchy.

Re-inspections should also be evaluated as part of the comprehensive risk assessment. Historically, the BFP's inspection timelines have not factored in re-inspections. The timelines were based solely on the amount of time required to conduct initial inspections of all occupancies in San José. However, as stated in Finding 1 of this report, re-inspections ensure that identified safety hazards have been corrected, and that the buildings that have been inspected by the Department are safer. As the Department refines its inspection priorities, including factors such as the number of violations found during an initial inspection could help the broader effort to eliminate safety hazards from San José buildings.

The BFP management should monitor inspectors' work to ensure that the prioritized work is completed according to the developed risk assessment plan. One way that the BFP can track the implementation of the risk-based prioritization model is through automated FireHouse reports, such as those previously cited (see Finding 2 for a discussion of the various FireHouse reports that would facilitate analysis of how workload and staffing align).

As was previously noted, in 2006 the BFP had developed a draft business plan that highlighted a number of key factors in performing risk analysis. This plan included significant detail and explanation of a rationale for how to analyze potential risks and prioritize work. The Fire Department should use this plan as a model for developing an up-to-date risk assessment that is similarly thorough.

Recommendation #16: The Fire Department should develop and implement a risk-based plan for prioritizing inspections that includes analysis of factors such as where fires have occurred, outstanding violations, building structure, and type of occupant. The Department should actively manage staff activities to ensure the plan's ongoing use and document progress towards completing inspections of riskiest facilities.

The Fire Department Should Ensure That It Is Fully Utilizing Available Staffing Resources to Complete Prioritized Workload

With the risk assessment to serve as a workplan, the Department should think broadly about its implementation. Performing a workload analysis can help the Department determine what resources are needed to complete inspections. The City Auditor's 2003 Audit of the San José Fire Department's Bureau of Fire Prevention recommended that the Department: "Develop a workload analysis to determine its inspection staff needs to achieve its inspection goals and objectives." This recommendation has yet to be fully implemented. Without a workload analysis based on accurate tracking of staff activities, it is difficult to determine the staffing requirements of the BFP.

In developing a workload analysis, the Department should assess whether it could make use of the skills of additional light-duty firefighters to supplement the work of the BFP staff. Light-duty firefighters have been placed into the Bureau in the past. The City Auditor's 2012 report "Fire Department Injuries: A More Coordinated Response and Better Follow-Up is Needed" identified improvements that the Department could make in maximizing use of the skills of injured firefighters. The audit recommended the Department "develop and implement a comprehensive and aggressive, time-limited modified duty program matched to employee experience and addressing upcoming training needs, where possible." For example, the Department could assign light-duty firefighters to assist the BFP in its fire prevention efforts. Finding 5 addresses other programs, beyond regular inspections, in which light-duty firefighters could potentially work, including public education campaigns.

In addition to the potential use of light-duty firefighters, the Department should consider whether fire station line staff could assist in more or different ways than they already do with inspections and prevention activities; the Department should also analyze how much additional time for fire prevention work might become available if the number of re-inspections are reduced (and replaced with more aggressive enforcement actions as addressed in Finding 1).

Recommendation #17: To implement a risk-based inspection approach, the Fire Department should develop a workload analysis that assesses: (a) staffing requirements in the Bureau of Fire Prevention, (b) the effective use of light-duty firefighters and line staff in fire prevention activities including public education, and (c) how much additional time could become available if the Department conducted fewer re-inspections.

The Fire Department Should Better Coordinate Line Inspections of Multi-Family Residences as They Are the Majority of Fire Safety Inspections Overall

Risk assessment should also take into account that most of the fires and fire deaths in San José are happening in multi-family residences. (This is described in more extensively in Finding 5.) Inspections of multi-family residences are completed by fire station staff ("line staff") rather than by the BFP. Of the approximately 16,000 fire safety inspections conducted by the Department in FY 2010-11 and FY 2011-12, about 10,000, or about 64 percent, were conducted by line staff. These consisted primarily of inspections of multi-family residences. Such inspections generally are under the purview of fire station companies and not the BFP. Of the total number of re-inspections performed by the Department (about 3,600 in FY 2010-11 and FY 11-12 combined), about 40 percent were re-inspections of mostly multi-family residences. These were also performed by line staff. Finding 1 describes how approximately 26 percent of outstanding violations were in multi-family residences hotels/motels; Finding 5 describes how most fires and fire deaths have occurred in such residences.

In developing its risk assessment, the Fire Department should prioritize follow-up on violations in multi-family residences. Incorporating these line inspections into the BFP risk assessment will take coordination and cooperation between the divisions of the Fire Department. There should be a sense of Department accountability for prevention efforts rather than divisions between line staff and BFP. This might include clear lines of reporting from line staff to the Fire Marshal. It might also include periodic meetings of line staff with BFP staff to discuss concerns specific to multi-family residences and a shared approach for how to address them. (Additional activities beyond inspections that the Department could consider when addressing risks in residential buildings are discussed in Finding 5.)

Recommendation #18: The Fire Department should develop formal coordination between the BFP and fire station staff and a shared sense of accountability with regard to inspections and safety in multi-family residences.

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Finding 5 Most Fires in San José Occurred in Residences and Most Fire Deaths Occurred in Multi-family Residences; the Fire Department Needs Targeted Public Education Efforts to Reduce Such Fires and Deaths

Summary

In FY 2010-11 and FY 2011-12, there were 927 structure fires in San José. The vast majority (79 percent) were in residences, including 452 (or 49 percent) in one and two-family residence and 274 (or 30 percent) in multi-family residences. San José is consistent with national trends regarding where fires occur. However, the City differs from national trends in that nationally, most fire deaths occur in one- and two-family residences. In San José, seven of the nine fire deaths in the last three years were in multi-family residences including four fire deaths in apartment complexes and three fire deaths in condominiums. As described in Finding 1, 26 percent of outstanding fire safety violations were in multi-family residences. Given that seven of the nine civilian fire deaths in the last three years occurred in these types of properties, we recommend targeting inspection follow-ups to reduce outstanding violations.[5] In addition, public education is a key component of fire prevention strategies. The Fire Department has started to develop a public relations committee to resume public education efforts.

Most Fires in San José Occurred in Residences, Consistent with National Trends

In FY 2010-11 and FY 2011-12, there were 927 structure fires[6] in San José. Seventy-nine percent of these fires were in residences including 452 (or 49 percent) in one and two-family residences and 274 (or 30 percent) in multi-family residences.

San José's general trend is consistent with national trends regarding where fires occur. For 2008-2010, the National Fire Data Center of the U.S. Fire Administration reported that nationally:

[5] The Fire Department does not inspect condominiums. However, public education efforts suggested later in this section could potentially be targeted towards homeowners' associations as well as landlords of apartment buildings.

[6] The Fire Department responded to 952 structure fires in FY 2010-11 and FY 2011-12. However, some of those fires were in neighboring communities. Data included here is specific only to the fires in San José. Also excluded were several fires for which the location was unclear based on the data entered into FireHouse.

- One-and two-family residential building fires account for 66 percent of all residential building fires, representing the largest subgroup of residential building fires.
- An estimated 240,500 one-and two-family residential building fires are reported to U.S. fire departments each year and cause an estimated 2,050 deaths, 8,350 injuries, and $5.8 billion in property loss.
- Multi-family residential building fires account for 28 percent of all residential building fires.
- An estimated 102,300 multifamily residential building fires are reported to U.S. fire departments each year and cause an estimated 400 deaths, 4,175 injuries, and $1.2 billion in property loss.

Exhibit 12: Geographic Dispersion of Fires in San José in FY 2010-11 and FY 2011-12

Zip Code	Number of Structure Fires in FY 2010-11 and 2011-12	Percent of Total Structure Fires
95112	99	11%
95111	70	8%
95116	70	8%
95127	58	6%
95122	50	5%
95136	49	5%
95126	49	5%
95125	48	5%
95132	47	5%
95123	45	5%
95128	44	5%
95124	36	4%
95117	28	3%
95118	27	3%
95133	27	3%
95131	24	3%
95120	23	2%
95148	23	2%
95129	21	2%
95121	19	2%
95110	18	2%
95130	12	1%
95119	10	1%
95138	8	1%
95134	8	1%
95135	5	1%
95113	4	0%
95002	3	0%
95139	2	0%
Total	927	100%

Source: Calculated based on FireHouse data reported by SJFD to the National Fire Incident Reporting System (NFIRS)

Seven of Nine Civilian Fire Deaths in San José in the Last Three Years Occurred in Multi-Family Residences

Although fires in multi-family residences accounted for 30 percent of the total building fires in the prior two fiscal years, they accounted for seven of nine (or 78 percent) of the civilian fire deaths in 2010, 2011, and 2012.

During those three years, San José had a total of 110 civilian casualties, including the nine deaths, one life threatening injury, 24 moderate injuries and remaining injuries that were classified as either minor or undetermined in severity. These statistics do not include injuries to firefighters.[7]

Data from the National Fire Protection Association (NFPA) indicate that civilian fire deaths per million population in San José are lower than elsewhere. San José had 3.1 fire deaths per million in FY 2011-12 compared to 5.2 per million in the Western United States and 9.6 per million in the United States overall in calendar year 2011.

While San José is consistent with national trends in that most fires occur in residences, the City differs from national trends in that nationally, most fire deaths occur in one- and two-family residences. In San José, seven of the nine fire deaths in the last three years were in multi-family residences including four fire deaths in apartment complexes and three fire deaths in condominiums. Fire and life safety codes generally do not provide for interior inspections of private residences, as noted by the International City/County Management Association (ICMA):

> *A basic precept in the United States is that a person's home is his or her castle. Accordingly, fire and life safety codes have traditionally been lenient with regard to personal living space. One- and two-family dwellings and even individual apartment units enjoy protection from code enforcement activities. But most fire-related deaths and injuries occur in residential properties, so public fire and life safety education should be one of the more important strategies of a comprehensive prevention program.*

Although interior inspections of residences do not occur, the fire stations companies conduct state-mandated, basic inspections of the exterior of apartment buildings, checking for things such as access to exits and fire extinguishers. Such inspections do not involve entrance into individual units and therefore, do not test for working smoke detectors in units. In our opinion, given that interior inspections are not an option in the way that they are for other occupancies, the Fire Department should focus on other activities that can reduce fire risk such as following up on outstanding violations from exterior inspections and developing a public education program.

[7] In a sample we reviewed of six fires in 2011 and 2012, there were five firefighter injuries.

Following Up on Outstanding Violations and Targeting Public Education About Smoke Alarms May Help Reduce or Prevent Fires with Deaths or Injuries

As described in Finding 1, 26 percent of outstanding fire safety violations were in multi-family residences. Given that these properties were where seven of the nine civilian fire deaths in the last three years occurred, targeting inspection follow-ups in an effort to reduce outstanding violations may be helpful. In addition, as noted previously by ICMA, fire and life safety education should be a key component of fire prevention strategies.

The Fire Department currently has fire safety educational materials on topics such as conducting practice fire drills, how smoke detectors save lives, and rules/laws regarding fireworks. While such web-based materials are helpful, it is our understanding that the Department does not currently have a formal public education program that involves meeting directly with the community and targeting fire risks based on historical and other data.

ICMA recommends that a fire department identify the needs in its community and then target public education accordingly:

> *A fire department needs to analyze its data about the community's fire or injury problem and then target audiences most at risk for fire loss. Taking this approach usually leads to the conclusion that there are several target audiences besides schoolchildren. National data published by the NFPA and U.S. Fire Administration (USFA) suggest that other groups at high risk for fire loss are elderly people, young children, ethnic minorities, and low-income residents. In fact, the strongest correlating factor for fire loss is usually the income level of the victims.*

Consistent with this statement, of the seven residents killed in multi-family residence fires in San José, three were children and one was an 82-year-old resident. According to the NFPA, working smoke alarms are a key to saving lives.

In its September 2011 whitepaper, "Smoke Alarms in U.S. Fires," the NFPA stated:

> ***The risk of dying in reported home structure fires is cut in half in homes with working smoke alarms.***
>
> *In 2005-2009, the risk of death from a fire in a home that had any smoke alarms (0.61 deaths per 100 fires), regardless of whether they were working, was 36% lower than the risk in a home with no smoke alarms at all (0.95 deaths per 100 fires). Interestingly, the death rate was substantially higher (1.93 deaths per 100 fires) in fires in which smoke alarms were present but failed to operate than in homes that had no smoke alarms at all. Households that have deliberately disabled and/or not maintained their smoke alarms may*

have different characteristics from households that have not installed smoke alarms.

The death rate in fires with working smoke alarms (0.52 per 100 fires) was less than half (56% lower) the risk of death from fires that did not have working smoke alarms (1.18 deaths per 100 fires), either because no smoke alarm was present or an alarm was present but did not operate).

If the Fire Department receives donations of smoke alarms, the data from its risk assessment (described in Finding 4) about where fires, fire injuries, and fire deaths have occurred could help the Department target the distribution of and education about smoke alarms accordingly.

For example, a jurisdiction in Oregon, Tualatin Valley, has proactively used grant funds to target educational efforts regarding smoke alarms. A Tualatin Valley fire official described the program to us:

During a ten year period between 1996 - 2006, Tualatin Valley Fire & Rescue had responded to over 1,200 apartment fires in which: 18 people had died; over 50 tenants had been injured, over 500 residents displaced, and millions of dollars in property damage occurred. In response to this incident data, TVF&R's Multi-Family Housing Fire Reduction Program was researched, designed, developed and implemented in incremental stages since 2004.

This unique program is an attempt to reduce life and property loss in apartment complexes through proactive fire and life safety inspections, a monthly eNewsletter, free pictorial and bi-lingual educational materials for complexes, and quarterly Landlord Training Workshops.

One of the most significant findings of the initial research was the critical role that landlords and apartment managers play in creating a fire-safe culture within the communities. Based on this finding, TVF&R Landlord Training Workshops were developed to educate apartment owners, landlords and maintenance staff. The workshops include presentations on how quickly fire spreads, common fire causes and human behavior, reduction of potential hazards, the fire inspection process, juvenile firesetting, and on-site educational tools and smoke alarm education. Landlords also have the opportunity to interact with their local fire crew and view their engine, truck, firefighting gear and EMS equipment. In addition, attendees are also able to use a fire extinguisher during a live-fire demonstration.

To date, more than 900 apartment owners, landlords and staff have attended these training workshops. The number of fires in multi-family housing in TVF&R's district has steadily declined since these programs have been implemented, hitting a new record low in 2012.

With regard to the role that landlords and apartment managers play in fire safety, the Tualatin Valley fire official also advised us that the project focused on an effort to educate landlords and to therefore develop a culture within the apartment complexes in which fire safety is taken seriously. One realization from the research was that tenants were disabling smoke alarms because they were penalized with potential eviction for false fire alarms. Fire officials were able to encourage landlords to change the incentives in the lease agreements so that tenants were no longer penalized for false alarms but, instead, were penalized for disabling smoke alarms.

Combining data about where fires have occurred, with whom appears to be at the highest risk, as well as known information on outstanding fire safety violations in multi-family residences may help the Fire Department to develop and target public education efforts to improve safety. As noted in Finding 4, employees on light duty could potentially assist with public education efforts.

Public education is a valuable part of a fire prevention strategy. According to a 2012 ICMA publication:

> *Many jurisdictions say that public education is a priority but in fact give it little support. However, more fire departments are coming to understand the value of public education and the effect that it can have on their total protection and prevention effort. They are increasing their resources for this vital function and are seeing positive results.*
>
> *A modern public education program that strives to reach the general public and change behavior to improve safety consists of two approaches: bringing education into the schools and taking it directly to the public. Bringing fire education into the schools reflects the long held belief that the way to produce lasting results in safety attitudes and behaviors is to reach young children, who will grow up to be safer adults. Going directly to the public with a variety of methods has the same basic goal: to increase knowledge and change behavior so that people are safer. Another decision is whether to deliver the public education program as a stand-alone message or whether to deliver it in partnership with other agencies (and their respective messages).*
>
> *Conducting a comprehensive public fire and life safety education program means providing true educational opportunities in a variety of settings. Whether in schools, at community meetings, or through marketing outlets, high-quality education must be age appropriate and in a form that will capture interest. It raises the public's level of consciousness about safety. But to be effective, education efforts must ultimately do more than raise consciousness: they must change the behavior of targeted populations to reduce the risk of, and the losses from, fire and various injuries.*

....Educating children is only one major part of comprehensive public education strategy. The other is taking the message directly to the general public, usually using one or more of the media. Because public education programs are usually not well funded, the effort to reach the public outside the school system must be prioritized and targeted....

Public education programs are most effective when they are developed specifically for each target audience or target message. And for maximum effect, they are often combined with other prevention strategies. Portland, Oregon, for example, has a combination program designed specifically for elderly (mobility-impaired) people that couples fire safety education with low-cost program to prevent falls....

....Door-to-door visits in high-risk areas are providing documented results in the United Kingdom and elsewhere in the world and are beginning to make a resurgence in popularity in the United States. Many fire departments (like that in Dallas, Texas) are finding value in having firefighters be more actively involved with their communities. The solid educational value of station-based prevention efforts is substantiated by greatly reduced fire incident rates (by 40 percent in some areas of the United Kingdom).....

Recommendation #19: The Fire Department should develop a public education program based on the fact that many fires and most of the fire deaths in recent years occurred in multifamily residences. Public education efforts should include working with the community to provide education to children and other high-risk groups as well as education about and access to smoke detectors.

The Fire Department Should Draw on Existing Resources and the Idea of a Public Relations Committee to Resume Public Education Efforts

We noted that the following was previously posted on the Fire Department's website but no longer is:

> **San Jose Fire Department**
> **Public Relations and Education**
>
> *To Our Neighbors and Valued Customers,*
>
> *During these challenging times that have affected so many people throughout countless communities, we here at the San Jose Fire Department were forced to make unprecedented changes within our organization in order to provide the essential services necessary to protect you and your family. One of these difficult choices was to discontinue our Public Education Division. We no longer have the full time staff to develop, organize, administer and follow through with our Mission to sustain a public safety and prevention program through Public Education. For 156 years San Jose Firefighters have been proud to serve the community of San José outside of our routine operations. These recent changes have created a deficiency that has separated San Jose Firefighters from the communities we serve. In an effort to bring this voluable component of our Profession back to the citizens of San Jose, we have assembled a Public Relations Committee that is focusing on the needs of our individual communities. At this time we are building a sustainable program that will further educate and allow interaction between all San Jose residents and Firefighters.*

Given that budget constraints continue, we agree the Department should try to develop this committee as a source of connecting to the community and providing targeted public education. The Department should also assess the extent to which firefighters on light or modified duty could perform public education activities such as speaking at schools or community meetings, going door-to-door in high-risk areas, or distributing smoke detectors. This would provide the Department with additional resources for public education without requiring the addition of more staff. Additionally, once the Department has data on total inspection hours and those correlate to workload (as noted in previous Findings), the Department may be able to present a persuasive case for additional inspection and education staff.

Recommendation #20: The Fire Department should continue to develop a Public Relations Committee as a way to connect with the community and provide targeted public education. The Department should assess the extent to which light or modified-duty firefighters could perform public education activities.

Conclusion

San José residents depend on their Fire Department to not only respond to fires, but to help prevent them. The Bureau of Fire Prevention is responsible for inspecting San José facilities that are subject to the Fire Code. We found the Department has not followed up on numerous outstanding Fire Code violations. In addition, the Department's use of data to track fire prevention activities and to prioritize Fire Code inspections can be improved. The Department should to reconsider its fee structure and work with the Finance Department to improve collection efforts. Finally, we found that the majority of fires and fire deaths in San José occur in residences, and the Department needs targeted public education efforts to reduce such fires and deaths.

RECOMMENDATIONS

Recommendation #1: The Fire Department should develop and implement a written plan for ensuring timely follow-up on outstanding Fire Code violations.

Recommendation #2: To encourage resolution of outstanding Fire Code violations, the Fire Department should clearly specify that it is issuing conditional permits in instances in which there are outstanding violations. The materials sent to the property/business owner should clearly state: (a) that the permit is conditional due to the outstanding violations and (b) the actions that are necessary to achieve full compliance and a valid permit. The Fire Department should revise Fire Prevention Directive 002-2009 to reflect this practice.

Recommendation #3: The Fire Department should: (a) enforce the BFP policy regarding the issuance of administrative citations for recurring violators as a means to encourage compliance and promote safety, (b) ensure that staff applies fines in the Administrative Citation procedure consistently, and (c) ensure that the Department is charging for all re-inspections.

Recommendation #4: The Fire Department should implement written policies to ensure that all fire prevention inspections are recorded and that the information in FireHouse is complete and accurate.

Recommendation #5: The Fire Department should activate controls in FireHouse to require users to enter key data and to prevent users from changing past inspection records to mitigate any risk of fraud or error.

Recommendation #6: Fire Department management should (a) ensure that necessary data (inspections, staff activities, etc.) is entered into FireHouse consistent with the policies in Recommendation #4, (b) confirm that the programming/queries underlying the useful reports in FireHouse are accurate and provide the content that management understands it to include, and (c) use the reporting tools in FireHouse to manage workload and staff more effectively.

Recommendation #7: Fire Department management should use the data in the staff activity report to analyze how inspection workload compares to staffing levels.

Recommendation #8: The Fire Department should train staff on the use of FireHouse software to produce more reliable data and more effective data analysis.

Recommendation #9: The Department should reexamine its non-development fire permit fee structure to charge San José facilities based on fire safety risk.

Recommendation #10: The Fire Department should work with the Finance Department to ensure timely and sufficient follow-up on overdue accounts. The Finance and Fire Departments should work together to develop written policies and procedures that outline the division of responsibility for accounts between the Fire Department and the Finance Department.

Recommendation #11: To encourage the payment of overdue balances, the Fire Department should clearly specify that it is issuing conditional permits in cases in which a balance is overdue. The materials sent to the property/business owner should clearly inform the recipient that the permit is conditional due to the outstanding balance. The Fire Department should revise Fire Prevention Directive 002-2009 to reflect this practice.

Recommendation #12: The Fire Department should update the organizational chart of Fire Administration, ensure that the appropriate separation of duties is in place, and develop written policies and procedures regarding billing processes. Such policies and procedures should address functions such as account: (a) invoicing (b) adjustments and credits (c) collections and (d) write-offs.

Recommendation #13: The Fire Department should revise Fire Prevention Directive #002-2009 to identify which, if any, types of work in the Non-Development program are "non-billable." The rationale for such a decision should be included in the revision and the revision should be disseminated to all inspectors to ensure consistent application.

Recommendation #14: The Fire Department should revise the calculation of state-mandated inspections to include only those that are state-mandated, or revise the wording of the performance measure to accurately reflect what it measures. The Department should determine whether to continue annual inspections of assemblies and facilities with hazardous materials in the context of a comprehensive risk assessment.

Recommendation #15: The Fire Department should clarify whether the Fees and Charges Schedule requires an inspection in conjunction with the issuance of an annual renewable permit or whether inspection hours are simply a basis for calculating the fees.

Recommendation #16: The Fire Department should develop and implement a risk-based plan for prioritizing inspections that includes analysis of factors such as where fires have occurred, outstanding violations, building structure, and type of occupant. The Department should actively manage staff activities to ensure the plan's ongoing use and document progress towards completing inspections of riskiest facilities.

Recommendation #17: To implement a risk-based inspection approach, the Fire Department should develop a workload analysis that assesses: (a) staffing requirements in the Bureau of Fire Prevention, (b) the effective use of light-duty firefighters and line staff in fire prevention activities including public education, and (c) how much additional time could become available if the Department conducted fewer re-inspections.

Recommendation #18: The Fire Department should develop formal coordination between the BFP and fire station staff and a shared sense of accountability with regard to inspections and safety in multi-family residences.

Recommendation #19: The Fire Department should develop a public education program based on the fact that many fires and most of the fire deaths in recent years occurred in multifamily residences. Public education efforts should include working with the community to provide education to children and other high-risk groups as well as education about and access to smoke detectors.

Recommendation #20: The Fire Department should continue to develop a Public Relations Committee as a way to connect with the community and provide targeted public education. The Department should assess the extent to which light or modified-duty firefighters could perform public education activities.

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CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: Sharon Erickson
City Auditor

FROM: William L. McDonald

SUBJECT: **2013 Fire Prevention Audit**

DATE: April 5, 2013

Approved

Date 4/12/13

The Fire Department appreciates the efforts and comments made by the City Auditor in the completion of the audit. Although the Fire Department agrees with most of the recommendations, some information provided in this report requires further clarification. These items will be discussed in the relevant recommendation section.

An important clarification to the Audit is as follows. The Bureau of Fire Prevention is staffed with 47 full time equivalent positions and with 2012-2013 personnel budget of $7.0 M or about 5% of the Fire Department Budget.

Recommendations and Response

Recommendation #1: The Fire Department should develop and implement a written plan for ensuring timely follow-up on outstanding safety violations.

Administration Response:
The Administration agrees with this recommendation. Fire Department will develop and implement a detailed plan to follow-up on outstanding safety violations. The table presented on page 13 presents a list of 28 individual locations with the highest number of outstanding fire violations. The department has worked diligently to resolve issues related to outstanding violations.

Recommendation #2: To encourage resolution of outstanding fire code violations, the Fire Department should clearly specify that it is issuing conditional permits in instances in which there are outstanding violations. The materials sent to the property/business owner should clearly state: (a) that the permit is conditional due to the outstanding violations and (b) the actions are necessary to achieve full compliance and a valid permit. The Fire Department should revise Fire Prevention Direction 002-2009 to reflect this practice.

Administration Response:
The Administration agrees with this recommendation. Fire Department will explore the recommendation on issuance of conditional permits. The department will also look into implementing revisions to its print layout of permits and make corresponding updates to Fire Department directives.

Recommendation #3: The Fire Department should: (a) enforce the BFP policy regarding the issuance of administrative citations for recurring violators as a means to encourage compliance and promote safety, (b) ensure that staff applies fines in the Administrative Citation procedure consistently, and (c) ensure that the Department is charging for all re-inspections.

Administration Response:
The Administration agrees with the recommendations on administrative citations. Fire Department will look into (a) evaluating administrative citations as a means of encouraging compliance and promoting safety and (b) staff training for consistent application of administrative citations. The Administration however disagrees with the recommendation regarding re-inspections. The Fire Department currently charges for re-inspections conducted by Fire Inspectors.

Recommendation #4: The Fire Department should implement written policies to ensure that all fire prevention inspections are recorded and that the information in FireHouse is complete and accurate.

Administration Response:
The Administration agrees with this recommendation. Although desktop manuals serve as a ready reference for new employees, the Department will work on documenting current procedures to ensure accuracy and consistency in FireHouse data entry.

Recommendation #5: The Fire Department should activate controls in FireHouse to require users to enter key data and to prevent users from changing past inspection records to mitigate any risk of fraud or error.

Administration Response:
The Administration agrees with this recommendation. The Fire Department anticipates filling critical information technology and analytical positions by July 2013. Additional resources will enable the Department will look into implementing automated controls in FireHouse.

Recommendation #6: Fire Department management should (a) ensure that necessary data (inspections, staff activities, etc.) is entered into FireHouse consistent with the policies in Recommendation #4, (b) confirm that the programming/queries underlying the useful reports in FireHouse are accurate and provide the content that management understands it to include, and (c) use the reporting tools in FireHouse to manage workload and staff more effectively.

Administration Response:
The Administration agrees with this recommendation. The Fire Department will identify elements of this recommendation and develop a plan of implementation given availability of resources.

Recommendation #7: Fire Department management should use the data in the staff activity report to analyze how inspection workload compares to staffing levels.

Administration Response:
The Administration agrees with this recommendation. The Fire Department implements a 15-month work cycle plan for Fire Inspectors. This plan was developed by establishing estimates of hours required for each type of inspection. On a monthly basis, the Bureau of Fire Prevention tracks inspections to evaluate workload and actual time spent performing inspections, comparing workload for inspections with staffing levels.

Recommendation #8: The Fire Department should train staff on the use of FireHouse software to product more reliable data and more effective data analysis.

Administration Response:
The Administration agrees with this recommendation. As described in recommendation numbers 5 and 6, the Fire Department anticipates filling critical information technology and analytical positions by July 2013. Additional resources will enable the Department will look into implementing this recommendation.

Recommendation #9: The Department should reexamine its non-development fire permit fee structure to charge San Jose facilities more appropriately for the permits issued.

Administration Response:
The Administration acknowledges that there are other approaches to developing a fee structure. The Fire Department's fees for facilities to obtain Fire Safety permits are based on the business type of facility, as classified by the California Building Code and as modified by the City of San Jose Fire Department. Facilities are grouped into Occupancy Groups based on average inspection times. Fees are then computed using the same average inspection times and the average number of permits for the group.

Recommendation #10: The Department should work with the Finance Department to ensure timely and sufficient follow-up on overdue accounts. The Finance and Fire Departments should work together to develop written policies and procedures that outline the division of responsibility for accounts between the Fire Department and the Finance Department.

Administration Response:
The Administration agrees with this recommendation. The Fire Department will coordinate implementation of this recommendation with the Finance Department.

Recommendation #11: To encourage the payment of overdue balances, the Fire Department should clearly specify that it is issuing conditional permits in cases in which a balance is overdue. The materials sent to the property/business owner should clearly inform the recipient that the permit is conditional due to the outstanding balance. The Fire Department should revise Fire Prevention Directive 002-2009 to reflect this practice.

Administration Response:
Although the Administration agrees in concept with this recommendation, the Fire Department maintains that under current practices, no permits are issued to properties or businesses with outstanding balances.

Recommendation #12: The Fire Department should update the organizational chart of Fire Administration, ensure that the appropriate separation of duties is in place, and develop written policies and procedures regarding billing processes. Such policies and procedures should address functions such as account: (a) invoicing (b) adjustments and credits (c) collections and (d) write-offs.

Administration Response:
The Administration agrees with this recommendation. Fire Department will work on documenting policies and procedures regarding billing processes.

Recommendation #13: The Fire Department should revise Fire Prevention Directive #002-2009 to identify which, if any, types of work in the Non-Development program are "non-billable". The rationale for such a decision should be included in the revision and the revision should be disseminated to all inspectors to ensure consistent application.

Administration Response:
The Administration agrees with this recommendation. Fire Department will prepare updates to department directives.

Recommendation #14: The Fire Department should revise the calculation of state-mandated inspections to include only those that are state mandated, or revise the wording of the performance measure to accurately reflect what it measures. The Department should determine whether to continue annual inspections of assemblies and facilities with hazardous materials in the context of a comprehensive risk assessment.

Administration Response:
The Administration agrees with this recommendation. The Fire Department will however continue to treat assemblies and facilities with hazardous materials as inspections that have to be conducted annually to protect life, property and the environment. The current Department practice is based upon an established occupancy risk assessment.

Recommendation #15: The Fire Department should clarify whether the Fees and Charges Schedule requires an inspection in conjunction with the issuance of an annual renewable permit or whether inspection hours are simply a basis for calculating the fees.

Administration Response:
As discussed in recommendation # 9, Fire fees are calculated using the same average inspection times and the average number of permits for the group.

Recommendation #16: The Fire Department should develop and implement a risk-based plan for prioritizing inspections that includes analysis of factors such as where fires have occurred, outstanding violations, building structure, and type of occupant. The Department should actively manage staff activities to ensure the plan's ongoing use and document progress towards completing inspections of riskiest facilities.

Administration Response:
The Administration partially agrees with this recommendation. Fire Department does not utilize the risk-based inspection prioritization system as defined in this report. The department however believes that the system, as defined in this report, would be challenging to implement. Including a year-to-year fire experience as part of the process is not practical when considering the volume of activities and the current staffing level in the department.

Recommendation #17: To implement a risk-based inspection approach, the Fire Department should develop a workload analysis that assesses: (a) staffing requirements in the Bureau of Fire Prevention, (b) the effective use of light-duty firefighters and line staff in fire prevention activities including public education, and (c) how much additional time could become available if the Department conducted fewer re-inspections.

Administration Response:
The Administration partially agrees with this recommendation. (a) The Fire Department has a 15-month work cycle plan for Fire Inspectors. An evaluation of workload and staffing levels is conducted on a regular basis. This analysis has supported the department's need for additional resources. (b) With service reductions experienced due to budgetary actions, the department believes that, at this time, it is optimizing its use of line staff in fire prevention activities. Full utilization of light duty personnel however presents some challenges due to work limitations, training needed, and availability of computers and vehicles. To the extent possible, the department has been utilizing light duty personnel who have been trained in fire safety code inspections. (c) The department needs to study recommendation on re-inspections.

Recommendation #18: The Fire Department should develop formal coordination between the BFP and fire station staff and a shared sense of accountability with regard to inspections and safety in multi-family residences.

Administration Response:
The Administration partially agrees with this recommendation. Remedial training, enhance quality control and greater accountability will be implemented through established reporting relationships. In this way, the appropriate supervisory and management principles will be maintained and confusion reduced.

Recommendation #19: The Fire Department should develop a public education program based on the fact that many fires and most of the fire deaths in recent years occurred in multifamily residences. Public education efforts should include working with the community to provide education to children and other high-risk groups as well as education about and access to smoke detectors.

Administration Response:
The Administration is concerned with the findings leading to this recommendation. The extremely small sample size (seven fires fatalities in three years) makes it impossible to predict a trend. It is important to state that every fire death is a tragedy; the City's low fatality rate (3.0% in 2010-2011) was far below the national rate of 8.1% and below the western U.S. rate of 4.3%. It should be noted that public education program for the Fire Department is incorporated in the

draft San Jose Fire Department Strategic Business Plan. In addition, the Fire Department has established a public relations committee to build and maintain relationships within the City's diverse customer base. This committee will also identify specific public education programs to targeted communities.

Recommendation #20: The Fire Department should continue to develop a Public Relations Committee as a way to connect with the community and provide a targeted public education. The Department should assess the extent to which light or modified-duty firefighters could perform public education activities.

Administration Response:
The Administration agrees with this recommendation. As described in recommendation #19, public education program is incorporated in the department's Strategic Plan and has established a public relations committee.

Conclusion

The Fire Department thanks the Auditor and her staff for their review of the Fire Department Non-Development Fee Program. The Fire Department continues with its efforts to fill vacancies in information technology and analytical staffing positions. As resources become available, the department will review and prioritize recommendations, providing more information at a later date on the feasibility and timing of implementation of these recommendations.

Recommendations on the fee structure would require resources not currently available to the Fire Department. As the City's budget situation improves, the Fire Department could make recommendations for additional resources to assist with the study and implementation of recommendations contained in this report.

/s/
William L. McDonald
Fire Chief