

**TAMPA FIRE RESCUE
FALSE ALARMS
AUDIT 18-01
FEBRUARY 8, 2018**



CITY OF TAMPA

Bob Buckhorn, Mayor

Internal Audit Department

Christine Glover, Internal Audit Director

February 8, 2018

Honorable Bob Buckhorn
Mayor, City of Tampa
1 City Hall Plaza
Tampa, Florida

RE: TFR False Alarms, Audit 18-01

Dear Mayor Buckhorn:

Attached is the Internal Audit Department's report on TFR False Alarms.

We thank the management and staff of Tampa Fire Rescue for their cooperation and assistance during this audit.

Sincerely,

/s/ Christine Glover

Christine Glover
Internal Audit Director

cc: Dennis Rogero, Chief of Staff
Sonya Little, Chief Financial Officer
Ernest Mueller, Chief Assistant City Attorney
Tom Forward, Fire Chief

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/s/ Stephen Mhere

Auditor

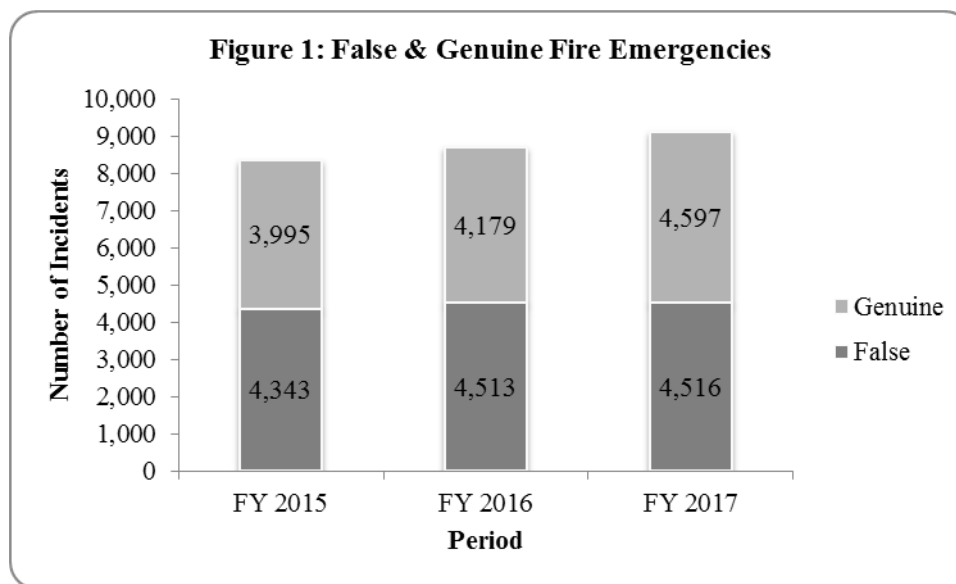
/s/ Christine Glover

Audit Director

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BACKGROUND

Tampa Fire Rescue (TFR) is the City of Tampa (COT)'s fire-fighting agency. Between FY 2015 and 2017, it responded to more than 200 thousand emergencies, both medical and fire. But not all of those emergencies were genuine. Figure 1 below is an illustration of fire emergencies to which TFR responded. It shows that at least half of the fire calls that the department responded to were false (approximately 52% in FY 2015, 52% in FY 2016, and 50% in FY 2017).



Source: Auditor adaptation of CAD system data provided by COT's T&I Department.

False alarms are a major drawback in local and city governments' fight against emergencies that threaten not only people's lives but also property. According to the National Fire Protection Association (NFPA), fire departments responded to an estimated 2.2 million false fire alarms in the United States in 2009. The cost of responding to these false emergencies can be severe and wide-ranging, including unproductive personnel hours, unnecessary consumption of fuel, and wear-and-tear on equipment. Over and above this is also an incalculable social cost associated with the risk of injury and/or loss of life due to accidents that sometimes happen when firefighters travel to emergency locations.

The annual fire budget allocation of a jurisdiction is often influenced by the number of emergency responses, including false emergencies, that the jurisdiction's fire department makes in a year.¹ COT's Department of Revenue & Finance provided us with TFR's operating expenditure data for FY 2015, 2016, and 2017 to help us estimate the cost associated with false emergencies. Our calculations are based on the total number of responses to all emergencies for each of the three years and the corresponding operational budget allocations for each year.

¹ Blackstone, E. A., Buck A. J., & Hakim S. (2007). The economics of emergency response. *Policy Science*, 40, 313 – 334.

The table below shows what we found:

Table 1: Estimated TFR Expenditure on False Alarms	
YEAR	TOTAL COST FOR FALSE CALLS
FY 2015	\$396,009
FY 2016	\$371,919
FY 2017	\$401,128

Source: Auditor adaptation of operating expenditure data provided by COT's Revenue & Finance Department.

TFR did not experience fatalities or accidents as a result of responding to false alarms in these three years. However, research by the NFPA has shown that nationwide, 29 firefighters lost their lives during false fire emergency operations prior to 2011. Operational costs, risk of injury or death, and the potential to compromise efficiency and/or timeliness of responses to legitimate emergencies are all important factors when fire chiefs consider strategies to deal with false fire alarms.

STATEMENT OF OBJECTIVES

This audit was conducted in accordance with the Internal Audit Department's FY 2018 Audit Agenda. Audit objective was to determine if TFR has sufficient internal controls to provide reasonable assurance that the department is complying with COT's false fire alarm ordinance.

STATEMENT OF SCOPE

The audit covered the three-year period from FY 2015 through FY 2017. Only fire emergency operations as classified in the Computer-Aided Dispatch system were analyzed. Operations relating to medical emergencies were excluded. The audit also included a high-level review of post-response activities of billing alarm operators for false emergencies. Billing activities are not part of TFR operations; they are the responsibility of the Department of Revenue & Finance.

STATEMENT OF METHODOLOGY

We reviewed TFR's internal control environment relevant to fire emergencies including COT's false fire alarm ordinance, the relevant Council Resolution, and the fire department's standard operating guidelines on fire operations and false alarms.

We reviewed false fire alarm ordinances from other city and county authorities and identified best practices they have implemented to minimize the occurrence of false fire emergencies. We assessed Tampa's operational activities against those best practices and provided that assessment to TFR.

We conducted interviews with TFR management in charge of false alarm operations, including leadership responsible for TFR Administration and Rescue Divisions as well as leadership personnel in the fire department's Emergency Communications Center. We also interviewed members of staff in COT's Department of Technology & Innovation (T&I) who are responsible for the data management systems used in fire operations. We also requested, and obtained, information from members of staff in the Department of Revenue & Finance relating to how the department carries out its responsibility to bill fire alarm owners who violate the false fire alarm ordinance.

We requested and received fire and medical emergency response data from T&I for analysis of false fire alarms. We also obtained and reviewed billing information from the Department of Revenue & Finance.

STATEMENT OF AUDITING STANDARDS

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.

AUDIT CONCLUSION

Based upon the test work performed, we conclude that TFR has sufficient internal controls to provide reasonable assurance that it complies with COT's false fire alarm ordinance.