# AUDITOR GENERAL'S DEPARTMENT PERFORMANCE AUDIT REPORT MANAGEMENT OF FIRE PREVENTION ACTIVITIES JAMAICA FIRE BRIGADE (JFB)

The Auditor General is appointed by the Governor General and is required by the Constitution, Financial Administration and Audit Act, other sundry acts and letters of engagement, to conduct audits at least once per year of the accounts, financial transactions, operations and financial statements of central government ministries and departments, local government agencies, statutory bodies and government companies.

The Department is headed by the Auditor General, Pamela Monroe Ellis, who submits her reports to the Speaker of the House of Representatives in accordance with Section 122 of the Constitution of Jamaica and Section 29 of the Financial Administration and Audit Act.

This report was prepared by the Auditor General's Department of Jamaica for presentation to the House of Representatives.



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## <u>Vision</u>

A better country through effective audit scrutiny

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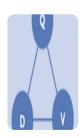


# AT A GLANCE





## Performance Audit Report Jamaica Fire Brigade (JFB)



#### **Key Data**

- •Jamaica's fire services evolved from the Parochial Fire Departments to an amalgamated and Unified Fire Services in 1995; the legal framework is outlined in the Fire Brigade Act of 1988.
- •JFB's vision is to be "a citizen centered fire and rescue service that provides high quality emergency response and value-added services.
- •The Jamaica Fire Brigade's records revealed that there were 44,764 genuine fires for the period 2017-18 to 2021-2022.



#### **Main Findings**

- •Three recommendations from our 2014 audit report, were partially implemented; one was not implemented.
- •The JFB's building inspections revealed a high level of non-conformities, but JFB's rate of follow up inspections for non-conformities by building owners was relatively low.
- •JFB's 'out of commission' fire and emergency vehicles constrained its ability to effectively respond to fires.



#### Conclusion & Recommendations

JFB's operations continued to be adversely impacted by the out of commission vehicles despite an increase in the size of its fleet of fire and emergency vehicles. JFB should seek to implement strategies to improve the timeliness in servicing its vehicles.

JFB should also ensure strict adherence to its building inspection and fire investigation policy to strengthen its fire prevention activities, as well as submit all outstanding annual reports and financial statements to its portfolio Minster for tabling in the Houses of Parliament to enable the Government's oversight responsibilities.



#### **Auditor General's Overview**

In 2014, we conducted a performance audit of the Jamaica Fire Brigade (JFB) which assessed the effectiveness and efficiency of JFB's fire prevention; firefighting; rescue and emergency medical services, as well as its fire regulation and enforcement mechanisms. The audit found that the high incidence of out of service emergency vehicles affected JFB's ability to carry out its firefighting activities, emergency medical care and rescue services. Additionally, JFB was not adequately managing its fire prevention activities to minimize injuries, loss of lives and damage to properties. I therefore commissioned this audit to determine the progress made to date by JFB in improving its operations and systems of internal controls as well as the implementation of my 2014 recommendations.

I found that JFB has made significant improvements in its operations and partially implemented three of the four 2014 recommendations. Whereas JFB has stepped up building inspections between 2017-2018 to 2021-2022, follow-up inspections for non-conformities have been minimal, with only 49 (10 per cent) follow ups from a sample of 500 buildings that were identified with breaches. Additionally, the level of fire investigations was a mere one per cent of reported fires over the review period, while the ratio of out of commission vehicles was relatively high, although somewhat improved relative to the 2014 audit. However, I cannot overstate the importance of the need for JFB to improve its governance practices. The delay in preparation and non-submission of annual reports and audited financial statements for the period 2019-2020 to 2021-2022 is not only a breach of the Public Bodies Management and Accountability Act (PBMA) and the Fire Brigade Act, but also undermines the oversight responsibilities of the Portfolio Ministry and Parliament. Nonetheless, I note that JFB was able to fully implement six of 15 recommendations from its latest National Fire and Rescue Cover and partially implemented five.

I therefore urge the JFB to implement the recommendations contained in this report, while seeking to address the gaps that are outstanding. I also take this opportunity to thank the management and staff of the JFB for the courtesies extended to my audit team during the audit.

Pamela Monroe Ellis FCCA, FCA

**Auditor General** 

# This report contains the findings from the performance audit of the Jamaica Fire Brigade

#### **Executive Summary**

Vision 2030 National Development Plan (NDP) recognised as a priority component of disaster preparedness and emergency management, the building of emergency response capacity of key agencies such as the health and fire services. One of the selected sector strategies under National Outcome 14 of the Vision 2030 NDP is to develop institutional capacity to respond in a timely and effective manner, to natural and man-made disasters such as fires. The JFB's mandate of saving lives and protecting property is aligned to Vision 2030 National Outcome 14- Hazard Risk Reduction and Adaptation to Climate Change.

The performance audit sought to assess the status of implementation of recommendations made in the 2014 performance audit report and to determine whether the JFB was managing its firefighting and fire prevention activities effectively, as it seeks to protect lives and property from fire and other hazards. The audit also sought to ascertain whether appropriate controls were in place to achieve the JFB's strategic objectives.

#### **Key Findings**

- 1. JFB partially implemented three of four recommendations made in our 2014 performance audit report (Appendix 1). Regarding implementation of the recommendations:
  - JFB established internal performance standards for response times but did not periodically compare performance against the standards.
  - ii. Although JFB's Management initiated discussion with the Jamaica Constabulary Force (JCF) to identify and prosecute perpetrators of illegal fires and malicious false alarm calls, discussions stalled as such matters required court action and JFB did not have on staff the services of a legal officer. JFB stated that it recently received approval for the procurement of a legal officer, but the process has not yet commenced. Nonetheless, JFB has intensified its public education campaign to persuade the public to desist from these illegal activities.
  - iii. JFB is yet to develop an information system to manage and monitor its fleet in accordance with the Auditor General's recommendation, attributing this failure to a lack of funding for ICT support, in successive budgets over the last four financial years.
  - iv. Whereas JFB increased building inspections, we noted from a sample of 500 inspections conducted between financial years 2017-2018 to 2021-2022, that follow-up inspections were conducted for only 49 (10 per cent) of the buildings JFB identified as non-conforming with fire safety standards, which undermined the effectiveness of JFB's enforcement activities.



- 2. JFB fully implemented six of 15 recommendations from its latest National Fire and Rescue Cover (2019) aimed at improving JFB's effectiveness in fighting fires and responding to emergencies.
  - i. <u>Six recommendations fully implemented</u>: JFB increased its use of Information Technology, including the implementation of Aeronautical Reconnaissance Coverage Geographic Information System (ArcGIS) for hydrant mapping, the Bush Fire Warning Index for the prediction of the likelihood of bush fires and the acquisition of drones for aerial reconnaissance. The JFB also acquired additional emergency vehicles; recruited additional firefighters; established benchmarks for urban and rural response times and KPIs; and increased the network of fire hydrants and other fire service water supplies. JFB increased the number of fire stations by five, of which four replaced existing dilapidated stations.
  - ii. <u>Five recommendations partially implemented</u>: Special Risk Areas were assessed but Response Plans were not prepared; Search and Rescue Squads, though available in some areas, were not established for all designated areas. JFB is in the process of expanding its Very High Frequency (VHF) service through the ODPEM but is yet to establish a central dispatching system.
  - iii. <u>Four recommendations not implemented</u>: The establishment of Fire Investigation and Fire Prevention Regulations; introduction of Alternate Fire Stations for volunteer fire fighting, establishment of dedicated training facilities; and the acquisition of high velocity pumps (Appendix 2).
- 3. "Out of commission' fire and emergency vehicles constrained JFB's ability to effectively respond to fires. As at February 2023, JFB's non-operational vehicles accounted for 41 (39 per cent) of the fleet of 105 fire and emergency vehicles. JFB's records showed that the fire and emergency vehicles were out of service due mainly to engine and transmission failure; leaking water tanks; mechanical issues, and accidents. Further, JFB's vehicle servicing schedules for 2017-2018 to 2021-2022 showed that vehicles were being serviced between two months and two years after the required service dates. JFB indicated that it was unable to adhere to maintenance schedules for some vehicles due to factors such as inadequate funding, removal of vehicles with major mechanical defects from the active fleet to be serviced; and the recommended decommissioning of some vehicles based on the frequency of breakdowns and the age of vehicles. However, it cannot be discounted that prolonged delays in servicing vehicles would exacerbate some mechanical problems, thereby contributing to an increase in the number of 'out of commission' vehicles.
- JFB's rate of building certification was affected by a high degree of non-conformity among buildings inspected; however, JFB's rate of follow up inspections for non-conformities was relatively low.
  - i. We found that for five selected parishes, 3,623 (or 46 per cent) of the 7,873 building inspections were not certified due to non-conformities identified (Table 1). Section 22 of the Fire Brigade Act authorizes the Commissioner or his nominee to enter any specified



buildings<sup>1</sup> or part thereof at any reasonable time for the purpose of determining the condition of the building regarding its safety against fire or other disaster. For the period 2017-2018 to 2021-2022, JFB conducted 36,868 inspections which covered buildings within the applicable groups. The non-conformities included the absence of an emergency plan, no fire alarm system or smoke detector installed, an inaudible fire alarm system throughout premises, loose electrical wiring, deficiencies in emergency exits among other defects.

Table 1: Non-Conformities Identified in Building Inspections for 5 Parishes

Parish	Total Inspections	Conformity	Non-conformity	Not Stated
KSA	1,399	673	726	0
Saint Catherine	2,191	1,620	568	3
Saint Ann	1,815	797	1,018	0
Westmoreland	1,938	1,026	908	4
Portland	530	127	403	0
Total	7,873	4,243	3,623	7
Percentage		54%	46%	0.09%

Source: JFB Inspection Records

ii. JFB rate of follow up inspections for non-conformities was approximately 10 per cent. From a sample of 500 inspections conducted over the financial years 2017-2018 to 2021-2022, we identified that follow-up inspections were conducted for only 49 (10 per cent) over the period (Figure 1). JFB's policy requires that delinquent owners of specified buildings are given specific time for corrective action although the length of time was not indicated. Nonetheless, the policy required follow up based on the nature of the breach/nonconformity. JFB's low rate of follow-up inspections on specified buildings where nonconformities were identified, would have undermined enforcement activities while increasing the risk of safety hazards.

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<sup>&</sup>lt;sup>1</sup> Specified building" means any public building, office building, factory, warehouse, any building in which workers are employed, any building in which hazardous substance or material is stored, manufactured or processed, any building of more than one floor level constructed or intended for occupation by more than one family, and any place of entertainment or building to which the public has access whether on payment of a fee or otherwise.

Building Inspections for the period 2017-18 to 2021-22 500 451 450 400 350 300 Fotal 250 200 150 49 100 50 0 No Follow-up Follow-up Total 451 49 Inspection Status

Figure 1: JFB Building Inspections 2017-2018 to 2021-2022

Source: JFB Building Inspection Reports

- 5. JFB investigated less than 1 per cent (210) of the reported 44,764 fires over the five-year review period. JFB indicated that fires were selected for investigation based on the criteria established in its Fire Investigation handbook although our review of the handbook showed no evidence of an established criteria. Nonetheless, the criteria outlined in JFB Fire investigation policy developed in May 2022, requires the investigation of fires that caused death or serious injury, structural fires, fires believed to be incendiary in nature, explosions, any unique or complex situation involving a suspicious or consequential fire, wildland or bush fires of a predetermined magnitude<sup>2</sup>, among other criteria. Of the 210 investigations conducted, JFB presented 100 reports for our review, which revealed that the major cause of fires investigated were due to accidents. The Fire Investigation Policy also requires that the instructions for investigation be given by the Chief Fire Prevention officer or Divisional Head. However, for 17 fire investigation reports conducted from May to September 2022 for the parishes of Kingston and St. Andrew, we noted that the investigations were based solely on a request by the Senior Deputy Superintendent.
- 6. JFB is yet to prepare and submit annual reports and audited financial statements for the period 2019-2020 to 2021-2022, in breach of the Public Bodies Management and Accountability Act

<sup>&</sup>lt;sup>2</sup> Example: Farmland and Livestock at risk, Residential or Commercial property at risk, Death or serious injury caused by Wildland/Bush fire.

(PBMA) and the Fire Brigade Act<sup>3</sup>. JFB's management attributed the delays to high staff attrition/turnover of key staff personnel. However, the delay in submission of required reports would have limited the Portfolio Ministry's and Parliament's oversight of the JFB. In addition, JFB is awaiting a waiver for accumulated interest and penalty in the amount of \$80.60 million owed to Tax Administration of Jamaica (TAJ) for the period 2013-2016 in relation to statutory deductions. However, as at January 2023 the matter remained unresolved. Further, we identified that all five of its bank accounts were not reconciled for periods ranging from 1 month to 29 months. JFB's failure to prepare monthly bank reconciliation increased the risks of financial losses as management may not be able to promptly identify and correct accounting and bank errors/irregularities, including erroneous debits, which could result in losses.

7. JFB's Approved Budget for the period 2017-2018 to 2021-2022 was consistently lower than the requested budget, as reflected in the allocations for the acquisition of firefighting equipment (Appendix 4). Despite a trend increase, budget allocations were less than requested, as reflected in acquisition of firefighting equipment where budget requests averaged \$320.5 million, while the approved budget averaged \$184.5 million. Accordingly, given the budgetary shortfall, which was 23 per cent for 2021-2022, JFB would have been required to adjust its priority areas relating to the acquisition of firefighting equipment.

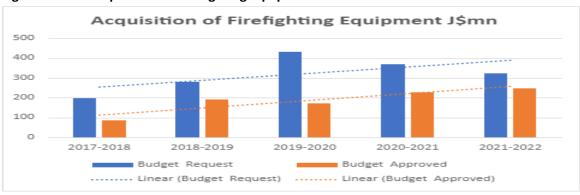


Figure 2: JFB's Acquisition of Firefighting Equipment

Source: GOJ's Estimates of Expenditure

Section 8f (3)- Within three months after the end of each financial year or within such further time as may be allowed by the Minister, the Board shall send the statement of its accounts referred to in subsection (1) to the Minister, together with a copy of any report made by the auditor on that statement and on the accounts of the Board.



<sup>&</sup>lt;sup>3</sup> Section 8c- The Board shall, within three months after the end of each financial year submit to the Minister a report on the operation of the Brigade and the Board during the previous year and without prejudice to the generality of the foregoing, as the (a) the condition of the fire engines, fire boats, fire equipment and other property of the Brigade; (b) the income and expenditure of the Brigade, in detail, for the previous year; (c) particulars of fires and other disasters known to it to have occurred in the previous year and the estimated damage; (d) such other particulars and recommendations as may be required by the Minister.

Section 8f (1)- The Board shall keep proper accounts and other records in relation to its activities and shall prepare annually a statement of accounts in a form satisfactory to the Minister.

Section 8f (2)- The accounts of the Board shall be audited annually under such arrangements and in such manner as may be approved by the Auditor-General and the members, officers and agents of the Board shall grant to the person conducting such audit access to all the books, documents, cash and securities of the Board and shall give to him on request all such information as shall be within their knowledge in relation to the operation of the Board.

#### What Should be done



JFB should increase its follow-up building inspection activities to ensure that all deficiencies are remedied within the specified period as per its building inspection policy.

Enforcement mechanism applicable under the Fire Brigade Act should be utilized by JFB for owners of specified buildings who are found to be in breach.



JFB should ensure strict adherence to the applicable Acts and circulars in relation to the preparation of annual reports, audited financial statements and bank reconciliation statements; and submit all such outstanding reports and financial statements to the portfolio minister for tabling in the Houses of Parliament.



#### **PART ONE**

#### Introduction

#### Establishment of the Jamaica Fire Brigade

**1.1.** The Jamaican fire services evolved from Parochial Fire Departments to an amalgamated and Unified Fire Services in 1995. The legal framework for the Jamaica Fire Brigade (JFB) is outlined in the Fire Brigade Act of 1988. The role of the JFB is to protect lives and property from fire or other disasters within the island and its territorial seas (**Figure 3**).

Figure 3: Duties of the Jamaica Fire Brigade



Source: Fire Brigade Act 1988

#### Mission and Vision Statements

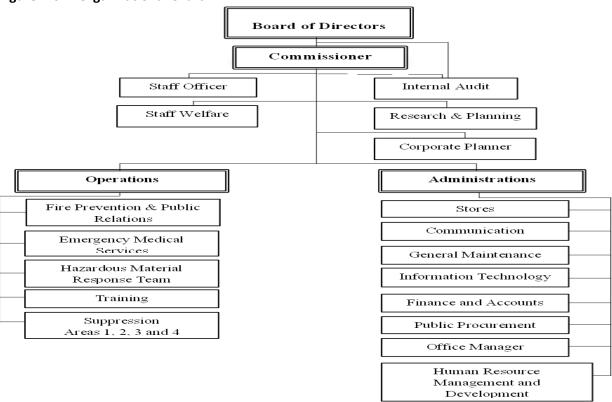
**1.2.** JFB's mission is "To minimize loss of lives, injury to persons and damage to property from fires, natural disasters, accidents, and other emergencies by the application of appropriate technology, fire prevention doctrines, rescue and firefighting tactics and by acting in close collaboration with industries, businesses, institutions, households and community organizations in fulfilling the role of saving lives protecting property."

- JFB's vision is to be "a citizen centered fire and rescue service that provides high quality 1.3. emergency response and value-added services. Vision 2030 Jamaica National Development Plan (NDP) highlighted the risk of man-made hazards including oil spills, pollution, chemical contamination, and fire and noted that fires were the major man-made hazards that threaten Jamaica, with bush fires for 55 per cent of all fires in 2006. The NDP outlined the Country's intention to build the capacity of key agencies such as the health and fire services to be able to respond to natural and man-made disasters in a timely and effective manner. The JFB's mandate of saving lives and protecting property is aligned to Vision 2030 National Outcome 14- Hazard Risk Reduction and Adaptation to Climate Change.
- 1.4. National Outcome 14-Hazard Risk Reduction and Adaptation to Climate Change sector strategies includes: building adequate emergency response capability and warning systems; developing institutional capacity to respond to potential emergencies such as fires; developing a larger core of trained volunteers to effectively manage emergency response; building the capacity of state agencies and facilities (e.g. hospitals, fire services) to manage any potential disasters; increasing the capacity for search and rescue; develop mass casualty plans; develop procedures to cope with potential disasters (e.g. continuous education simulation exercises and drills); and strengthening the regional mechanisms for emergency response. A review of JFB's Strategic Plans revealed that its priority programmes were aligned with the National Development Plan and its related Medium Term Economic Programme (MTEP).

#### Organization and Staffing

1.5. JFB is governed by a Board of Directors composed of 11 members including the Commissioner who is an ex-officio member. The Board is appointed by the Minister of Local Government and Rural Development. The Directors are compensated for their service and are reimbursed for expenses, including travel expenses necessary for the performance of their duties. The Commissioner oversees the operational command and the day-to-day running of the Brigade. JFB has two branches, an Operations Branch and an Administrative Branch, each headed by a Deputy Commissioner.

Figure 4: JFB Organizational Chart



Source: JFB Records

**1.6.** The JFB is financed from the Consolidated Fund. Approximately \$37.16 billion was allocated to JFB over the period 2017-2018 to 2021-2022. The main allocation was compensation of employees which accounted for approximately 80 per cent of the total budget each year and travel expenses and subsistence ranging from 8 to 9 per cent each year. Further, although less than requested, JFB budgetary allocation reflected a trend increase over the review period, with the most significant increase observed in 2019-2020 for the acquisition of firefighting equipment. **(Table 2)**.

**Table 2: Budgetary Allocation** 

		JAMAICA FIR	E BRIGADE						
Rec	Recurrent & Capital A Approved Budget for financial years 2017-18 to 2021/2022								
Sub Objects	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022				
	\$	\$	\$	\$	\$				
Compensation of Employees	4,725,462,000	4,972,645,000	5,565,871,000	5,752,236,000	6,055,895,000				
Travel expense and Subsistence	484,685,000	456,087,000	535,596,000	562,486,000	567,881,000				
Rental of Property & Machinery	35,238,000	35,238,000	22,947,000	14,015,000	25,495,000				
Utilities and Communication Services	80,822,000	80,121,000	104,141,000	117,810,000	108,310,000				
Use of goods and Services	153,591,000	153,591,000	205,085,000	219,315,000	219,285,000				
Grants, Contributions& Subsidies	-	-	154,800,000	154,800,000	65,720,000				
Capital Goods (Fixed Assets)	2,501,000	2,501,000	2,501,000	9,753,000	506,000				
Motor Vehicle Revolving loan	1,000,000	-	-	-	-				
Maintenance of Fire Hydrants	14,044,000	14,044,000	4,044,000	14,044,000	14,044,000				
Rehabilitation of Fire Vehicles	20,578,000	96,112,000	46,112,000	46,112,000	46,112,000				
Acquisition of firefighting equipment	84,906,000	189,851,000	171,486,000	227,534,000	248,556,000				
Repairs to Fire Stations	39,855,000	39,855,000	39,855,000	97,431,000	39,855,000				
Total Recurrent Budget	5,642,682,000	6,040,045,000	6,852,438,000	7,215,536,000	7,391,659,000				
Acquisition of Fixed assets (Fire Vehicles) Capital A Budget	187,111,000	232,651,000	1,575,000,000	91,862,000	1,930,350,000				
Grand Total	5,829,793,000	6,272,696,000	8,427,438,000	7,307,398,000	9,322,009,000				
Percentage change year/year		8%	34%	(13) %	28%				

Source: GoJ's Estimates of Expenditure



#### **Audit Rationale**

1.7. In 2014, we conducted a performance audit of the JFB to determine whether JFB was employing appropriate mechanisms to ensure its capability of delivering effective and efficient island wide fire cover. The audit aimed to assess the effectiveness and efficiency of JFB's fire prevention; firefighting; rescue and emergency medical services. The audit also included an assessment of JFB's fire regulation and enforcement mechanisms. Further it was expected that the findings of the audit and recommendations would contribute positively to JFB's management of firefighting and fire prevention activities and is consistent with the Auditor General Department's (AuGD) theme of governance and resource management.

#### Audit Objective, Scope and Methodology

- **1.8.** The 2022 audit sought to determine if JFB implemented the recommendations made in the 2014 Performance audit report and whether the Brigade was managing its firefighting and fire prevention activities effectively in contributing towards protection of lives and property from fire and other hazards.
- 1.9. We planned and conducted our performance audit in accordance with Government Auditing Standards, which are applicable to Performance Audit, our Performance Audit Manual (2017), as well as standards issued by the International Organization of Supreme Audit Institutions (INTOSAI). Our assessment covered the period April 2017 to March 2022, along with updated information, and our criteria developed accordingly. Our findings and conclusions are supported by evidence garnered by way of various qualitative and quantitative analyses conducted, with specific focus on the following key areas:
  - Corporate Management
  - Fire Prevention
  - Fleet Management and Infrastructure Development



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#### **PART TWO**

### **Corporate Management Practices**

At A Glance				
Systems and Practices	Criteria	Key Findings		Assessment Against Criteria
Reporting Responsibilities (to Portfolio ministry) Principle 15 of the Corporate Governance Framework for public bodies	Permanent Secretaries are required to monitor public bodies' performance against expected results, manage risks and advise/inform the Portfolio Minster.	JFB did not faithfully submit to its portfolio annual reports and au statements for the period 2021-2022.	ministry its dited financial	0
Strategic Business Plan	To guide the Board's strategic direction consistent with the GOJ's strategic priority for JFB	JFB Strategic Business period 2019 to 2023 s Government's priority and protection throuprogrammes and project	supported the for fire safety igh identified	
Strong Internal Controls	Strong internal controls are implemented to minimize risk and meet objectives.	JFB did not implement robust internal controls to safeguard against the risk of		<b>A</b>
Board Charter	To define role and responsibilities of the board and code of ethics.	JFB's Board Charter was in January 2023.	only approved	<b>A</b>
MET the criteria	Partially m	et	Oid not m	eet the criteria

#### Oversight and Strategic Direction

2.1 JFB's current governance and accountability practices were assessed to determine conformity with the Fire Brigade Act, Public Bodies Management and Accountability (PBMA) Act and as well as its own policies and procedures. Despite being in operation for over 25 years, JFB's Board Charter was only approved on January 25, 2023. The Corporate Governance Framework for Public Bodies in Jamaica (revised 2012) stipulates that "each Board must have a Charter, which defines the roles and responsibilities of the Board including its responsibilities for corporate governance and its code of ethics." The framework document also requires that on first appointment, and at any time when circumstances dictate, all directors should, in good faith, disclose to the Board, for recording and disclosure to external auditors, any business or other interests that are likely to create a potential conflict of interest. The absence of an approved Board Charter would have hindered the Ministry of Local Government and Rural Development in its ability to hold Members to account in the execution of their fiduciary duties.

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2.2 Under the regulation of the Corporate Governance Framework for Public Bodies, the Board is responsible for the strategic direction of the Public Body ensuring alignment with the policy direction of government. JFB Board approved JFB Strategic Business Plan for the period 2020-21 to 2024-25 and Operational Plans for the period 2020-2021 and 2022-2023. The Ministry of Local Government and Rural Development outlined in its Strategic Business Plan 2019-2023, the Government's strategic priority for JFB was fire safety and prevention. The Ministry developed its priority for JFB in accordance with Vision 2030 National Goals/Outcomes to the National Strategy to determine key actions for the medium term (Table 3).

Table 3: Ministry of Local Government and Community Development Alignment of Priority Policies/Programmes/Projects for JFB

Vision 2030 National Goals	Vision 2030 National Outcomes	National Strategies (Sectorial Paper, Modernization Document, Manifesto)	Ministry's Priority Policies/Programme/ Project	Key Actions for the Medium Term
National Goal # 4  Jamaica has a Healthy Natural Environment	National Outcome # 9 Hazard Risk Reduction and Adaption to Climate Change	National Strategy # 14-2 Improve emergency response capability.	Ministry Priority # 1  Fire Safety & Protection	<ul> <li>Increase Public awareness of fire prevention.</li> <li>Increase efficiency, service delivery and response time.</li> <li>Increase and rehabilitate resources for better service delivery.</li> </ul>

Source: Ministry of Local Government and Rural Development Strategic Plan

Our review of JFB Strategic Business Plan for the period 2019 to 2023 indicated that JFB developed the following programmes to support the Government's priority for fire safety and protection:

#### **Priority Programmes and Projects**

- Citizen Empowerment Programme
- Acquisition of Fire Vehicles Programme
- Public Education and Safety Programme
- Infrastructure Development
- Fleet Management Programme
- **Hydrant Rehabilitation Programme**
- Human Resource and Development
- Policy Development Programme
- Firefighting Equipment Programme



**2.3** JFB however, did not faithfully submit annual reports to the portfolio minister and there was no evidence that the portfolio Ministry requested submission of the reports. JFB is yet to submit audited financial statements and annual reports for the period 2019-2020 to 2021-2022. The Board's failure to ensure timely preparation and consistent submission of annual reports and the audited financial statements to the Minister within three months after the end of financial year as stipulated by the Fire Brigade Act<sup>4</sup> would have limited Parliament and the portfolio Ministry's oversight of JFB's operational and financial performance.

JFB in its response dated January 13, 2023 indicated that they are working assiduously to prepare and submit audited Financial Statements for 2019-2020 to 2021-2022 financial years and Annual Reports for 2019-2020 to 2021-2022 in accordance with the PBMA Act and the JFB Act. Consequently, a schedule has been developed with a view to become current by end of financial year 2023-2024.

**2.4** By way of correspondence dated February 8, 2023, JFB outlined the status of its annual reports and unaudited reports (**Table 4**).

Table 4: Update of JFB's Annual Reports and Audited Financial Statements

Period	Annual Reports	Audited Financial Statements			
2021 – 2022	50% completed.	Audit has not yet commenced.			
2020 –2021	95% completed, Financial Statement outstanding.	Audit has not yet commenced.			
2019 – 2020	Currently being edited and reviewed, 80% completed.	Approximately 90% completed.			
2018 – 2019	100% completed.	Audited financial statement for the period 18-19 was signed on September 7, 2022 by the Board of Directors			
2017 – 2018	Audited financial statements for the period 17-18 were signed on September 16, 2021 by the Board of Directors and sent along with the annual report to the Ministry of Local Government and Community Development on October 21, 2021.				

Source: Information compiled from correspondence obtained from JFB

2.5 We noted that JFB requested a waiver of accumulated interest and penalties owing to TAJ for the period 2013-2016 in relation to statutory deductions for the following: NHT, NIS, ED TAX and PAYE. JFB wrote to TAJ on January 21, 2019, indicating that it had completed a reconciliation which indicated the balance owed of \$179.98 million, excluding interest and penalties. JFB further requested that

Section 8f (3)- Within three months after the end of each financial year or within such further time as may be allowed by the Minister, the Board shall send the statement of its accounts referred to in subsection (1) to the Minister, together with a copy of any report made by the auditor on that statement and on the accounts of the Board.



<sup>&</sup>lt;sup>4</sup> Section 8c- The Board shall, within three months after the end of each financial year submit to the Minister a report on the operation of the Brigade and the Board during the previous year and without prejudice to the generality of the foregoing, as the (a) the condition of the fire engines, fire boats, fire equipment and other property of the Brigade; (b) the income and expenditure of the Brigade, in detail, for the previous year; (c) particulars of fires and other disasters known to it to have occurred in the previous year and the estimated damage; (d) such other particulars and recommendations as may be required by the Minister.

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overpayment and refund of NIS be applied to offset the balance. JFB paid \$99.38 million on March 29, 2019, and was seeking to have credit balances used to offset the outstanding balance of \$80.60 million. At the time of this audit report, the matter remained unresolved. However, to its credit JFB has since taken steps to meet its statutory obligations to the TAJ in relation to the submission of Employer's Annual Return and monthly statutory deductions (Table 5).

**Table 5: JFB Statutory Obligations** 

Statutory Obligations	Deadline	Submission by JFB
Employer's Annual Return (SO2) for December 31, 2022	March 31, 2022	March 29, 2022
Statutory deductions (SO1) for the month of July	August 15, 2022	August 2, 2022

Source: Information compiled from TAJ receipts

JFB, by way of correspondence dated January 13, 2023 indicated that "the application for waiver of accumulated interest and penalty which was submitted to TAJ for consideration was forwarded to the responsible Government appointed committee for write off of the approved amount in keeping with the Government's plan for ministries, agencies and departments with outstanding tax obligations. The JFB was advised that the delay in finalizing this matter was due to the huge workloads from Government agencies and private entities being handled by that Committee. A commitment date was not given, however, we were referred to Gazette #3, dated April 9, 2019."

2.6 JFB did not prepare monthly bank reconciliations, which contravenes Ministry of Finance Circular and the Financial Administration and Audit Act<sup>5</sup>. JFB delayed the preparation of reconciliations of all five of its bank accounts, for period ranging from 1 month to 29 months (**Table 6**). JFB's failure to prepare timely monthly bank reconciliation increases the risk of financial losses as management will not be able to promptly identify and correct accounting and bank errors/irregularities.

Table 6: JFB delayed preparation of bank reconciliations

Bank Name	Account Number	Date of Bank Reconciliation	Preparer Date	Months Delayed	
Bank of Nova Scotia	Misc Loan Bank 396818	March 31, 2021	February 15, 2022	10 months	
Bank of Nova Scotia	Departmental Deposit Bank 801879	February 26, 2021	March 1, 2023	24 months	
National Commercial Bank	Recurrent Bank 061829237	March 31, 2020	September 15, 2022	29 months	
Bank of Nova Scotia	Capital Bank 46213	September 30, 2021	November 2, 2021	1 month	
National Commercial Bank	Salary Bank 061007024	June 30, 2019	November 10, 2021	29 months	

Source: JFB Bank Reconciliations

<sup>&</sup>lt;sup>5</sup> `The Ministry of Finance and Planning Circular 22 dated November 13, 2003, states that the late preparation of bank reconciliation statements undermines the effective management of the bank account while the absence of the reconciliation impinges on the integrity and accuracy of the accounts. Also, section 5.5.10 of the FAA Act Instructions stipulates that bank accounts should be reconciled monthly and at the end of the financial year.



Since September 2022, a bank reconciliation project was embarked upon by the JFB (Microsoft Dynamics Cash Manager Bank Reconciliation. Restart and Stabilization Project) to restart the Cash Manager on Microsoft Dynamics. This project is scheduled to end January 2023, which when implemented will enable the JFB to have the bank reconciliation done on the system through the Cash Manager. The system will then be used to complete the bank reconciliation to current, thus clearing the backlog and eliminate the need for a manual bank reconciliation process thereby reducing the time it will take to complete the reconciliation process. In recognition of the challenges the JFB has been experiencing with the bank reconciliation, we have also implemented the following changes in the accounts department: Staff and Supervisory changes

- Additional training for staff
- Updated banking information
- Revision of the internal processes
- 2.7 JFB is financed through the consolidated fund, however JFB did not consistently prepare needs assessment and justification to inform its annual budget submission to its portfolio ministry. Whereas JFB prepared a justification for its 2020-2021 budget submission, we saw no other evidence of justifications for the period under review. A total of \$37.16 billion was allocated for the period 2017-18 to 2021-22 (Appendix 4); however, JFB indicated that the budgetary allocation was insufficient (Table 7). Notwithstanding, the absence of needs assessments and justifications impeded our ability to determine the accuracy of resources required by JFB to rehabilitate fire vehicles and procure ICT.

Table 7: JFB's Budget Request versus Approved Budget for the period 2017-18 to 2021-22

	Requested Estimates 2017-2018	Approved Budget 2017-2018	Requested Estimates 2018-2019	Approved Budget 2018-2019	Requested Estimates 2019-2020	Approved Budget 2019-2020	Requested Estimates 2020-2021	Approved Budget 2020-2021	Requested Estimates 2021-2022	Approved Budget 2021-2022
ICT Budget Submission (Capital										
Goods Budget)										
Procurement of Desktop Computers island-wide	4,663,000	1,403,000	6,008,000	2,371,000	1,473,000	271,000	20,793,000	2,371,000	27,710,000	52,000
Procurement of Laptops & Tablets for officers	1,095,000		1,969,000		3,139,000	2,100,000	3,170,000		4,240,000	399,000
Procurement of Computer Devices	1,713,000	-	2,285,000		2,172,000		10,077,000		17,631,000	
Computer Software (i.e., Procurement of Fleet and Management Software, Records Management Inventory Software)										
	2,400,000	-	19,183,000	130,000	19,183,000	130,000	12,491,000	130,000	9,401,000	55,000
TOTAL	9,871,000	1,403,000	29,445,000	2,501,000	25,967,000	2,501,000	46,531,000	2,501,000	58,982,000	506,000
Rehabilitation/Maintenance/Services of Fire Vehicles Budget Submission										
Minor Repairs, Servicing/Maintenance of Fire Vehicles (Goods & Services Budget)	23,700,000	14,090,000	23,715,000	14,500,000	14,500,000	14,500,000	33,100,000	14,500,000	33,400,000	14,500,000
Rehabilitation of Fire Vehicles	34,500,000	20,578,000	36,500,000	96,112,000	96,112,000	46,112,000	96,112,000	46,112,000	96,112,000	46,112,000
TOTAL	58,200,000	34,668,000	60,215,000	110,612,000	110,612,000	60,612,000	129,212,000	60,612,000	129,512,000	60,612,000

Source: GOJ's Estimates of Expenditure and JFB's Financial Records



JFB indicated in correspondence dated January 1, 2023"in relation to justification for the annual budgets for years 2017-2018 to 2019-2020 and 2021-2022; whilst justifications were submitted, we were unable to locate same."

**2.8** Section 18 of the Fire Brigade Act prescribes the allocation of Uniforms, Equipment, and Accourtements. The Fire Brigade Regulations (1993) stipulates that uniformed staff must be in receipt of uniforms on an annual basis.

Acquisition of Firefighting Equipment J\$mn

Acquisition of Firefig

Figure 5: JFB's Budget Request versus Approved Budget for Firefighting Equipment

Source: GOJ's Estimates of Expenditure

A review of JFB's budget for the financial years 2017-2018 to 2021-2022 indicated that the Brigade was allocated consistently less than requested for the acquisition of firefighting equipment, over the review period (Figure 5). JFB records for the financial year 2021-2022 identified firefighting equipment as listed in the table below (Table 8).

Table 8: JFB's Fire Fighting Equipment acquired for the period 2021-2022

Quantity	Particulars	Total
		\$'000
350	Bunker Gears	145,915
25	Fire Extinguishers	1,348
24	Chemical Suits	9,874
100	Full Face Respirator	8,910
200	Respirator Cartridge	3,300
200	Firefighting Gloves (inclusive of clearance fee)	3,740
150	Coverall with reflector	1,515
150	Safety Hard Hats	518
150	Safety Boots	2,481
9	55g AR-AFFF Firefighting Foam	4,013
9	55g AFFF Firefighting Foam	3,736
3	Stand-by Generators (Auxiliary power for fire station)	20,845
2	Industrial Washing Machine (including installation)	18,244
15	Rescue Rope Equipment	3,960
12	High Velocity & Variable Stream Nozzles	1,386
4	Shoring Ramps	5,293
2	Drones	7,000
13	Flood Lights	6,478
Total		248,556
JFB's Reque	sted Budget	323,761
Percentage	Shortfall	23%

Source: GOJ's Estimates of Expenditure and JFB's Financial Records



JFB's budgetary shortfall would have required an adjustment in the Brigade's priority areas included in Acquisition of Firefighting Equipment. The shortfall in budget for the 2021-2022 relating to the acquisition of firefighting equipment was a 23 per cent.

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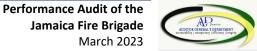
#### **PART THREE**

## **Management of Fire Prevention Activities**

At A Glance			
Systems and Practices	Criteria	Key Findings	Assessment Against Criteria
Improve fire awareness, prevention and education of the public.	To ensure compliance with the relevant codes and standards regarding inspection of buildings.	JFB did not consistently carry out periodic repeat inspection on specified building where nonconformities were identified. Of 25 building inspections selected in Kingston and St. Andrew for 2017-2018 only the University Hospital had an annual inspection. For 2018-2019 of the 25 inspections selected, none showed a repeat inspection for subsequent years. For 2019-2020 only one repeat inspection was observed the following year in 2020-2021 and none in 2021-2022.	
JFB's Building policy requires follow up inspections for non- conformities	To assess the extent to which corrective measures were undertaken and assess compliance with safety standards	Of a sample of 500 inspections, follow up inspections were only conducted for 49 (10 per cent)	<b>A</b>
MET the criteria	A Partially	y met Did not m	eet the criteria

#### **Roles and Responsibilities**

- 3.1 The Fire Prevention Division of the JFB is responsible for the collection and analysis of fire prevention and response statistics that advise operational decision making. The Division is also responsible for public education, building and subdivision plan reviews, provision of fire safety certification for hotels, hospitals, schools and other public buildings. To carry out its mandate the Fire Prevention Division is divided into five (5) units.
  - The Public Education Unit
  - The Research, Development and Training Unit
  - The Inspection and Enforcement Unit
  - Plan Review Unit
  - The Fire Investigation Unit



3.2 JFB developed its own Building Inspection Policy which was informed by the International Building Code (IBC) and International Fire Code (IFC). JFB indicated that its Building Inspection policy grouped and categorized buildings based on occupancy and risk. For the period 2017-2018 to 2021-2022, JFB conducted 36,868 inspections which covered buildings within the applicable groups based on occupancy. Section 22 of the Fire Brigade Act authorises the Commissioner or his nominee to enter any specified buildings <sup>6</sup> or part thereof at any reasonable time for the purpose of determining the condition of the building with regard to its safety against fire or other disaster. Our review of JFB's records for five selected parishes, showed that 3,623 (or 46 per cent) of the 7,873 sampled building inspections were not certified due to non-conformities identified (Table 9 & Appendix 3). The non-conformities identified included the absence of emergency plans; no fire alarm system installed; no smoke detector installed; fire alarm system not audible throughout premises; loose electrical wiring; exit routes not kept cleared; exit doors do not swing outward and, no exit sign above all exit doors that will be used as emergency exits during an emergency.

Table 9: Non-Conformities Identified in Building Inspections across 5 selected parishes

Parish	Total Inspections	Conformity	Non-conformity	Not Stated
KSA	1,399	673	726	0
Saint Catherine	2,191	1,620	568	3
Saint Ann	1,815	797	1,018	0
Westmoreland	1,938	1,026	908	4
Portland	530	127	403	0
Total	7,873	4,243	3,623	7
Percentage		54%	46%	0.09%

Source: JFB Building Inspection Reports

3.3 JFB's policy requires that delinquent owners of the specified buildings are given specified periods for corrective action although the policy did not indicate the length of time to be given. However, the corrective action and timing would be based on the nature of the breach/nonconformity. Nonetheless, we expected JFB to conduct inspection in reasonable time after its original inspection report to assess the extent to which corrective measures were undertaken to make buildings safe in the event of fire or other disaster and to maintain their safe status by adhering to the safety requirements and standards. From a sample of 500 inspections, we identified that follow-up inspections were conducted for only 49 (10 per cent) over the period (Figure 6). JFB's failure to conduct follow-up inspections on specified buildings where nonconformities were identified would have hampered enforcement activities while increasing the risk of safety hazards.

Building Inspections for the period 2017-18 to 2021-22 451 500 450 400 350 300 otal 250 200 150 49 100 50 0 No Follow-up Follow-up 49 Total

Figure 6: JFB Building Inspections 2017-2018 to 2021-2022

Source: JFB Building Inspection Reports

For example, of 25 building inspections selected in Kingston and St. Andrew for 2017-2018 only the University Hospital had an annual inspection. For 2018-2019, of the 25 inspections selected, none showed a repeat inspection for subsequent years. For 2019-2020 only one repeat inspection was observed the following year 2020-2021 and none in 2021-2022.

Inspection Status

3.4 JFB is empowered under Section 22 (6) of Fire Brigade Act to take action against building owners for fire safety noncompliance after inspection and written notice. The Act states "any person who fails to comply with the requirements of a notice issued by the Commissioner under this section shall be guilty of an offence and shall be liable on summary conviction before a Resident Magistrate to a fine not exceeding five thousand dollars or to imprisonment for a term not exceeding six months and in the case of a continuing offence, to a fine not exceeding five hundred dollars for each day during which the offence continues after conviction." We noted that JFB did not exercise its enforcement mechanism by taking legal proceedings against non-compliant building owners who failed to address non-conformities identified through building inspections and send letters advising them to rectify the non-conformities within the specified time period. However, we noted that JFB through its Board Chairman, made a request to its portfolio Ministry seeking an increase in penalties under Section 17 and 22(6) of the Fire] Brigade Act. JFB indicated that it did not have the capacity to enforce non-compliance through the courts as it did not have the services of a legal officer on staff.

JFB in its response dated January 13, 2023 indicated "representation was made and approval was received from Ministry of Finance and Public Service for the employment of a legal officer. Additionally, the JFB has received approval for the employment of the code enforcement and compliance officer for which active steps are being taken to have these vacancies filled. The employment of these officers is partially geared towards pursuing legal actions against non-compliant occupiers/owners of buildings where breaches are identified.

**3.5** JFB's records revealed that only 210, less than one percent, of the reported 44,764 fires were investigated. JFB indicated that fires were selected for investigation based on the criteria established in its Fire Investigation handbook although our review of the handbook showed no evidence of an

established criteria. Nonetheless, to its credit, in May 2022, JFB developed and approved a Fire Investigation Policy aimed at guiding the investigation process. The policy requires upon instruction from the Chief Fire Prevention officer or Divisional Head, investigation of fires based on the following criteria:

- Death or serious injury caused by fire.
- Structural Fires.
- A fire that is believed to be incendiary in nature.
- Explosion.
- Any unique or complex situation involving a suspicious or consequential fire.
- Wildland or Bush Fires of a predetermined magnitude for example:
  - Farm Land and Livestock at risk,
  - Residential or Commercial property at risk,
  - Death or serious injury caused by Wildland/Bush fire.
- Fires of significant educational benefit, as it relates to the location of the fire and unique characteristics.

Of the 210 investigations conducted, we were presented with 100 reports for review which revealed that the major cause of fires investigated was deemed to be accidental. Further, our review of 17 fire investigation reports conducted from May to September 2022 for the parishes of Kingston and St. Andrew, also determined that the investigations were based solely on a request by the Senior Deputy Superintendent, instead of the Chief Fire Prevention Officer or Divisional Head, as outlined in Fire investigation policy.

National Fire Protection Association (NFPA) 1033 requires that a fire investigator should have knowledge of the required topics<sup>6</sup> beyond the high school level at a post-secondary educational level. Although the JFB does not have designated fire investigators, we noted that a total of 44 fire prevention officers obtained training in fire investigation (**Table 10**).



<sup>&</sup>lt;sup>6</sup> NFPA 1033 required topics:

<sup>1.</sup> Fire Science

<sup>2.</sup> Fire Chemistry

<sup>3.</sup> Thermodynamics

<sup>4.</sup> Thermometry

<sup>5.</sup> Fire Dynamics

<sup>6.</sup> Explosion Dynamics

<sup>7.</sup> Computer Fire Modeling

<sup>8.</sup> Fire Investigation

<sup>9.</sup> Fire Analysis

<sup>10.</sup> Fire investigation Methodology

<sup>11.</sup> Fire investigation Technology

<sup>12.</sup> Hazardous Materials

<sup>13.</sup> Failure Analysis and Analytical tools

**Table 10: Fire Investigation Training** 

Parishes	Number of Persons Trained
0. 50 1 1	
St. Elizabeth	3
Manchester	3
Hanover	3
Westmoreland	3
St. James	5
Clarendon	3
Trelawny	4
St. Mary	4
St. Ann	5
Portland	3
St. Thomas	2
St. Catherine	3
KSA	3
TOTAL	44

**Source: Training Certificates** 

JFB indicated in correspondence dated February 8, 2023 "Before now, we used the draft policy. The policy will be amended to take into account the audit findings as the JFB sees it reasonable to delegate this function as may be required."

3.6 JFB developed a draft Complaints Form Policy based on its Citizens Charter. Although JFB required a specific length of time to respond to the complainant, no response time was included in the Charter. Further, we saw no evidence of a complaints logbook and JFB did not present evidence of an alternative complaints system for tracking external complaints. In our review of JFB's correspondence file, we identified 3 complaints for the period 2017-18 to 2021 -2022; however, we noted that it took JFB approximately 7 months to respond to one complaint while, for the remaining 2 complaints, we were unable to ascertain if any action was taken (Table 11). An effective system to manage complaints can not only build stakeholder relationship but can also assist in improving operational efficiencies.

Table 11: JFB Complaints for the period

	Date Of	Date Letter	Type of	Information of			Response
No.	Letter	Received	Complaint	Complaint	Complainant	Action Taken	Date
1	18-Jul-17	10-Oct-17	Procurement	Award of contact for procurement of parts and labour to effect repairs to fire boats.	OCG	None seen	None seen
2	8-Nov-17	16-Jan-18	Fire Hydrant	Malfunction of fire hydrant at Palm Valley townhouses.	Citizen	None Seen	None seen
	20-Jan-21	20-Jan-21	Damage to Property	Workshop was damage due to the construction work that took place at Black River Fire Station.	Citizen	Letter sent from Divisional Head Quarters (St. Elizabeth Division) dated August 9, 2021, indicated that an investigation was conducted, and the letter sent from the compliant was deemed factual. In addition, JFB legal team was to handle the matter and subsequently respond to both parties	

Source: JFB Correspondence Records

## **PART Four**

# **Management of Firefighting Activities**

At A Glance							
Strategic Objective	Criteria		Key Findings		Assessment Against Criteria		
Increase fire coverage by boosting and maintaining fire brigade fleet.			totalled 105 a	mergency vehicles at February 2023 ease relative to 75 in	<b>&gt;</b>		
	To reduce vehicles.		and emergency grew resulting complement con optimal. To date and emergency vo 30 (40 per cen- commission/servi increased from 31	to f commission fire vehicles however in JFB's vehicle tinuing to be subspiciously. JFB's fleet of fire ehicles increased by t) and it's out of ice vehicles also to 41 (32 per cent).	0		
To provide technical and protective support to members of the Jamaica Fire Brigade to assist with improving service delivery.	Fighting Ed towards imp capabilities firefighting will allow bring fires of more timely a measure	rement of Fire puipment geared proving firefighting through effective strategies that firefighters to: (1) under control in a manner (2) act as in reducing firects and accidents.		s fire and rescue he purchase of field of US\$67,811.			
To provide technical support to the Brigade through the provision of secured facilities for personnel and other quality of training conducted		2018 to 2021-202	year period, 2017- 22 JFB rehabilitated cross the island at a hillion.	<b>✓</b>			
resources.	and servion building of headquarte	ce through the a training Facility,	cost of \$1 billio	five fire stations at a n of which \$968.7 led by the Jamaica : Fund (JSIF).			
MET the criteria	4	Partially met		Oid not meet	the criteria		

4.1 JFB increased its fleet of fire and emergency vehicles in accordance with its 2021-22 to 2024-25 Strategic Plan. As at February 2023, JFB's fleet of emergency vehicles was 105 comparable to the 75 at 2014 (Table 12). Since our 2014 Audit Report, JFB's fleet management increased its fleet of firefighting vehicles by 34 pumpers at a cost of US\$18.56 million. At the time of the 2014 Performance Audit, JFB had two fire boats, both of which were out of commission/service. Subsequently, JFB sold one of the boats and carried out significant rehabilitation work to the other. Since then, JFB acquired two additional fire boats, at a cost of US\$1.3 million. The new acquisitions are commissioned to the Montego Bay pier and Kingston Harbour whilst the older fleet at the Ocho Rios pier was decommissioned as of February 2023. We also noted JFB purchased six ambulances at a cost of \$69.29 million. It was also noted that JFB increased its number of utility and command vehicles to include a motor bike and a wrecker.

Table 12: Number and Types of Fire and Emergency Vehicles Presently in Fleet

Areas	Pumpers	Water Tenders/ Tankers	Foam Tenders	Hydraulic Platform	Turntable Ladders	Emergency Tenders	Fire Boats	Ambulance
Area 1	19	4	1	3	3	1	1	1
Area 2	12	3	1	1	1	1	0	1
Area 3	11	3	1	0	1	2	0	2
Area 4	15	6	1	2	1	1	1	5
Total	57	16	4	6	6	5	2	9

Source: Information obtained from JFB's Motor Vehicle Inventory Records

4.2 JFB rehabilitated 25 fire and emergency vehicles at a cost of \$39.36 million (Table 13). We noted that JFB was constantly rehabilitating its fleet of fire and emergency vehicles to operate at an acceptable level. For instance, JFB spent \$3.88 million rehabilitating the Caterpillar Fire Boat commissioned at the Ocho Rios Pier. That fire boat was part of JFB's fleet at the time of the 2007-2013 audit and at that time, also underwent constant rehabilitation. It cost approximately US\$650,000 to procure a new fire boat visà-vis the rehabilitation cost of \$3.9 million.

Table 13: Fire Vehicles Rehabilitated during the period 2017 – 2022

Vehicle Type	Number/Amount	Cost of Rehabilitation
Pumpers	9	\$15,033,964.53
Water Tenders	5	\$5,662,243.94
Foam Tender	1	\$1,257,019.44
Aerials	5	\$7,363,628.63
Emergency	3	\$5,060,824.37
Tenders		
Fire Boat	1	\$3,884,772.65
Ambulance	1	\$1,100,193.27
Total	25	\$39,362,646.83

Source: AuGD compilation of information taken from JFB's records

**4.3** JFB made strides to deploy two pumpers (first responders) at the York Park Fire Station which, at the time of the 2014 report, was not assigned a pumper. JFB also commissioned two pumpers at the busier fire stations such as, Spanish Town, Mandeville, Black River, Lucea and Santa Cruz and one pumper at all other fire stations island wide. This assignment of the first responders represents an improvement over

what existed up to the time of the 2014 report, when JFB was unable to deploy a pumper to all its fire stations.

Table 14: Status of Fire and Emergency Island Wide Vehicle Distribution as at February 2023

Vehicle Type		2007-2013		2017-2022			
	Total	Vehicle in Commission	Vehicle Out of Commission	Total	Vehicle in Commission	Vehicle Out of Commission	
Pumper (First Responders)	35	27	8	57	39	18	
Foam Tenders	4	3	1	4	1	3	
Emergency Tenders	5	3	2	5	2	3	
Water Tankers	8	4	4	16	9	7	
Hydraulic Platforms	6	2	4	6	2	4	
Turntable Ladders	6	4	2	6	2	4	
Fire Boats	2	0	2	2	1	1	
Ambulances	9	1	8	9	8	1	
Total	75	44	31	105	64	41	
Percentage	100%	59%	41%	100%	61%	39%	

Source: AuGD compilation of information as obtained from JFB's Fleet Management records

**Despite increasing its fleet of fire vehicles, JFB's vehicle complement was sub-optimal based on an increase in out of commission fire and emergency vehicles.** Our 2014 audit report revealed that 36 per cent of JFB's fleet of emergency vehicles were out of service. At that date, JFB's fleet of emergency vehicles totalled 75, of which 31 (41 per cent) were out of commission/service. To date, JFB fleet of fire and emergency vehicles increased by 30 (40 per cent) and it's out of commission/service vehicles also increased from 31 to 41 (32 per cent) **(Table 14)**. Based on JFB's Vehicle Servicing Schedule 2017-2018 to 2021-2022, we noted that vehicles were being serviced between two months and two years after their required service dates and for several vehicles there were no servicing time recorded. **(Table 15)**.

Table 15: Fire Vehicles Serviced during the period 2017 – 2022

UNIT	REGISTRATION #	YEAR	MAKE	LAST SRVICE DATE	NEXT SERVICE DATE	REMARKS
3-26	30-4745	2020	Mazda BT-50	04.12.2020	03.03.2021	Service date pass due over 1 year
4-2.	30-4783	2020	Isuzu NPR85H	25.02.2021	24.05.2021	Service date pass due over 1 year
5-6.	30-4541	2018	International	23.10.2020	22.04.2021	Service date pass due over 1 year
8-10.	30-4503	2018	ISUZU	02.11.19	02.05.20	Service date pass due over 2 years
8-11	30-4667	2020	MACK	12.02.2022	11.08.2022	Service date pass due 2 months

Source: AuGD compilation of information as obtained from JFB's Fleet Service records

As shown in **Table 16** below, the fire and emergency vehicles were out of service for various reasons, namely: engine and transmission failure, leaking water tanks, mechanical issues, accidents, among others. At the same time, it should not be discounted that the extended delay in servicing some vehicles may have also contributed to the frequency of breakdown.

Table 16: Vehicles Out of Service during 2017 – 2022

Vehicle Type	Reason for Out of Service
Pumpers	Defective transmission, Engine overheating, Defective accelerator, Engine
	repair, needs body work, Defective gearbox, Water mix with engine oil
Emergency Tenders	Defective body, Engine problem
Turntable Ladder	Mechanical issue, Body work needed
Foam Tenders	Leaking water tank, Mechanical defects, Major accident
Water Tenders/Tankers	Defective clutch, Major accident, Defective engine, Defective gearbox,
	Defective water tank, Mechanical defects
Hydraulic Platform	Hydraulic Platform issues, Check engine light illuminated
Boat	Engine defects
Ambulance	Losing power and shutting down

Source: AuGD compilation of information as obtained from JFB's records

JFB indicated in correspondence dated January 13, 2023 "we were unable to adhere to maintenance schedule dates for some of vehicles during the period based on:

- Inadequate funding in some instances as the JFB did not receive the full amount that was requested in the budget for vehicle maintenance and servicing during the period.
- Vehicles that were not serviced for prolonged periods (up to 2 years) had major mechanical
  defects that would render them inoperable and therefore could not be included as part of our
  active fleet to be serviced. Some of these vehicles were also recommended to be
  decommissioned based on a number of factors inclusive of frequent breakdowns as well as age
  of vehicles (16 years and older).

JFB improved its fire and rescue operations with the purchase of field drones at a cost of USD \$67,811. During the five-year period, 2017 - 2022, JFB purchased field drones to further improve its firefighting capabilities by providing aerial view of fires and emergency scene, especially for hard-to-reach areas. Two large field drones were purchased for firefighting activities, whilst four Mavic Mini drones

training drones were purchased for training of Firefighters to use field drones. This accorded with JFB's 2020-21 to 2024-25 Strategic Objective relating to Public Safety/Community Risk Reduction. JFB indicated its intention to conduct risk assessments and hazard mapping in the community, by ascertaining and profiling fire risk factors with the aid of the most suitable technology to mitigate against the consequence level, to promote public safety and citizen empowerment.

4.6 During the five-year period, 2017-2018 to 2021-2022, JFB rehabilitated 20 fire stations across the island at a cost of \$209.4 million. Of this amount, the rehabilitation of 19 fire stations was completed between 2018 and 2020, whilst rehabilitation of the other was not completed at the time of this report. In addition to rehabilitating fire stations, JFB also constructed five fire stations, of which four replaced existing dilapidated stations. The Brigade also constructed a new fire boat facility in St. James. The total cost of the new constructions was \$1 billion of which \$968.72 million was funded by the Jamaica Social Investment Fund (JSIF). JFB also broke ground in Falmouth Trelawny for the construction of a new fire station in Ulster Spring. Further, JFB has signed a MOU with the University of the West Indies (UWI) for the construction of a fire station in Papine. Currently, the Half-Way Tree (HWT) Fire Station provides services to the Papine, Gordon Town and surrounding areas, all of which are high risk areas given the number of schools, the University Hospital of the West Indies (UHWI), size of the population and the hilly terrain. Table 17 represents the newly constructed and rehabilitated fire stations for the period 2017-18 to 2021-22.

**Table 17: Rehabilitated and Newly Constructed Fire Stations** 

Rehabilitated Fire St	ations		Newly Constructed Stations				
Date Rehabilitated	Fire Stations	Rehabilitation Cost	Date Constructed	Fire Stations	Construction Costs		
February 2018	Fire Boat KSA	\$5,701,062.50	December 2021	Old Harbour	\$59,720,922.68		
January 2019	Spanish Town Phase 3	\$4,818,350.00	March 2022	Barnett Street (JSIF Project)	\$587,344,645.00		
May 2018	Half-Way Tree	\$1,391,300.00	June 2022	Yallahs (JSIF Project)	\$143,247,059.00		
September 2018	Spanish Town Phase 1	\$24,095,271.20	January 2023	Port Maria (JSIF Project)	\$238,127,734.00		
December 2018	Frankfield	\$9,977,772.00	December 2018	Fire Boat St. James (JSIF Project)	\$15,428,176.99		
February 2018	Fire Boat KSA	\$1,600,000.00					
March 2020	Ironshore	\$1,535,100.00					
February 2019	Falmouth Phase 1	\$10,583,587.05					
May 2019	Ocho Rios	\$10,301,005.00					
May 2019	Spanish Town Phase 2	\$2,159,328.00					
December 2019	Falmouth Phase 2	\$9,997,154.39					
December 2019	Negril	\$8,194,952.44					
2020	Ocho Rios	\$903,252.10					
March 2021	Lucea	\$11,225,083.34					
January 2020	EMS St. Ann's Bay	\$9,664,072.00					
January 2021	Black River Phase 1	\$28,642,650.00					
April 2020	May Pen	\$27,732,957.00					
2020	Ocho Rios	\$1,162,570.70					
March 2020	Stony Hill	\$897,809.00					
Not yet completed	Black River Phase 2	\$38,793,200.00					
Total		\$209,376,476.72	Total		\$1,043,868,537.67		

Source: AuGD compilation of information as obtained from JFB's records



- reported a total of 13,207 hydrants, of which 8,288 (63 per cent) were in working condition; 2,958 (22 per cent) were non-functional and the status of the remaining 1,961 (15 per cent) was reported as unknown, due to the absence of running water to determine whether the hydrants were functional. For the current period under review, JFB has reported a total of 20,191 hydrants of which 14,528 (72 per cent) were in working condition; 5,663 (28 per cent) were not working/non-functional. The Auditor General's 2014 audit report highlighted that the underperformance of JFB's maintenance programme contributed to the increasing number of non-functional fire hydrants. The JFB estimated that it would cost \$67 million to repair the out-of-service fire hydrants. The repairs and maintenance costs for the period totalled \$56.1 million and \$5.7 million, respectively. Repairs and maintenance were done from JFB's approved budget allocation of \$14 million for repairs and rehabilitation of defective fire hydrants. Prior to the 2022-23 financial year, JFB used its hydrant budget allocation to stockpile hydrant parts. The hydrant team would then carry out repairs to defective hydrants.
- 4.8 Since 2022-23 financial year, JFB commenced procurement to outsource the material and labour for the repairs to fire hydrants, to a major contractor; details of which are yet to be finalized. We also noted a total of 2,631 newly installed hydrants. These installations were not done by JFB's Hydrant Maintenance and Rehabilitation Team but rather by the National Water Commission (NWC) and private developers. However, JFB indicated that after the hydrants are installed, the Fire Prevention Unit collects and analyses the data collected from divisions in regard to the hydrants installed. Table 18 details the status of fire hydrants in JFB's 13 divisions over the financial year 2017-2018 to 2021-2022.

Table 18: JFB's Status of Island wide Hydrant Distribution for the period 2017 - 2022

Period	Hydrants	Working	Not Working	Hydrant Repairs	Cost	Hydrant Maintenance	Cost	Hydrants Installed	Cost
2021-22	20,191	14,528	5,663	342	\$12,941,324	1,036	\$1,086,700	563	N/A
2020-21	19,627	13,623	6,004	275	\$12,863,920	1,176	\$ 1,116,780	818	N/A
2019-20	18,809	12,530	6,279	236	\$12,381,944	940	\$ 1,227,016	563	N/A
2018-19	18,246	11,731	6,515	126	\$6,052,929	751	\$ 1,214,550	371	N/A
2017-18	17,875	11,234	6,641	297	\$11,893,944	516	\$ 1,034,256	316	N/A

Source: AuGD compilation of information as obtained from JFB fleet records

4.9 Since the 2014 audit, JFB has set pre-determined response time for arriving at the scene of fire and other emergencies. The National Fire Rescue Cover revealed that Fire Stations were in far proximity to each other, and fire scenes were in more than 10 km range of the responding Fire Station. Thus, one of the recommendations in the Review was that JFB "establish benchmarks for urban and rural response times as key performance indicators (KPIs) to evaluate fire brigade service delivery. Acceptable response times need to be agreed by fire brigade managers and local authorities and will be influenced by the degree of risk acceptance for different communities. Suggested response times are a maximum of 8 minutes for urban responses, and 20 minutes for the arrival of the first pumping appliance in rural responses."

While JFB established urban and rural response times for emergencies, the recording of the emergency calls follows a manual process whereby calls are recorded in a 'Telephone Book' and there is no subsequent collating of the daily call records or analysing of response times. Emergency calls are received, recorded and transmitted through each fire station watch room.

JFB indicated in its response dated January 13, 2023 "The JFB had conducted detailed assessments outlined in the National Fire and Rescue Cover - 2019, whereby distances and response times between fire stations and key population centres were identified. As a result, key recommendations were made for the establishment/construction of additional fire stations, EMS sites and Marine Stations which would lead to the JFB's conformity with predetermined response criteria. Further representation based on these findings which has resulted in commitment by the government to build eight (8) new fire stations islandwide, which is in direct relations to addressing the issue of response time."

emergency calls. This, when compared to the total response of 92,791 in financial years 2006-07 to 2012-13, showed a 30,893 (33 per cent) reduction in the total number of emergency calls responded to by JFB. The reduction resulted from a 24,185 (35 per cent) decrease in genuine fire response, a 4,479 (43 per cent) reduction in the number of malicious false alarm calls and a further reduction of 648 (24 per cent) and 1,581 (15 per cent) in the false alarm with good intent and the special service calls, respectively (Table 19). The overall reduction in the number of fire calls reported may indicate the public's positive awareness and vigilance to fire safety mechanisms and precautions which the JFB has been communicating through its social media and Community Fire Safety Program. One such community program was the interface with farmers in the Mavis Bank community, where firefighters discussed the 'do's and don'ts' of bush fires with the community.

Table 19: Fire Calls Reported for the period 2017 – 2022.

Fiscal Year	Genuine	%	Malicious	%	False Alarm	%	Special	%	Total
	Fire		False		with Good		Service		Number of
			Alarm		Intent		Calls		Calls
2021 – 2022	7,881	71	1,194	11	452	4	1,611	15	11,138
2020 – 2021	9,774	77	1,075	9	399	3	1,480	12	12,728
2019 – 2020	10,406	73	1,250	9	464	3	2,056	15	14,176
2018 – 2019	10,069	73	1,307	10	422	3	1,959	14	13,757
2017 – 2018	6,634	66	1,073	11	345	3	2,047	20	10,099
Total	44,764	72	5,899	10	2,082	3	9,153	15	61,898

Source: JFB Fire Statistics Report obtained from JFB's Operations Unit.

showed significant time loss to JFB's operations which may have adversely affected the response to genuine fires. JFB's Management had initiated discussion with the Jamaica Constabulary Force (JCF) to identify and prosecute perpetrators of illegal fires and malicious false alarm calls, however the discussions did not continue. It was highlighted that such matters would have to be taken to the Courts but the portfolio Ministry, the Ministry of Local Government and Rural Development were limited in terms of legal personnel and the Brigade at the time, did not have its own legal personnel. The JFB has subsequently been granted approval to procure the services of a legal officer; however, the process has not yet started.

- **4.12** In 2019, JFB's Board approved the implementation of the recommendations arising from the National Fire Rescue Cover. The Fire Rescue Cover review made recommendations; (i) on the standard cover for fire and rescue response Island wide (ii) to acquire equipment to improve existing standards where there were gaps (iii) to develop strategies to reduce the number of fires and other emergencies using public education and (iv) to implement fire protection systems and other mitigation measures as well as long term sustainable improvement strategies. Of the 15 recommendations, JFB fully implemented six, whereas five were partially implemented and four not implemented (Appendix 2). Regarding implementation of the recommendations:
  - i. Among the six recommendations implemented: JFB increased its use of Information Technology, including the implementation of ArcGIS for hydrant mapping, the Bush Fire Warning Index for the prediction of the likelihood of bush fires and the acquisition of drones for aerial reconnaissance. The JFB also acquired additional emergency vehicles; recruited additional firefighters; established benchmarks for urban and rural response times ad KPIs; and increased the network of fire hydrants and other fire service water supplies. Additionally, as recommended, JFB increased the number fire stations by five, of which four replaced existing dilapidated stations.
  - ii. Among the Five recommendations partially implemented: was the assessments of Special Risk Areas, however, the Response Plans were not prepared; whereas there were some Search and Rescue Squads, these were not established for all designated areas. JFB is in the process of expanding its VHF service through the ODPEM, however it is yet to establish a central dispatching system.
  - iii. Four recommendations were not implemented, namely, the establishment of Fire Investigation and Fire Prevention Regulations, introduction of Alternate Fire Stations for volunteer fire fighting, establishment of dedicated training facilities and the acquisition of high velocity pumps (Appendix 2)

#### JFB indicated in its response dated January 13, 2022 the following:

- As it relates to the absence of an Information System to manage and monitor the JFB's fleet, request has been made in successive budget over the last four (4) financial years for funding for ICT support for which the JFB has received little or no funding; hence the JFB's inability to procure the requisite software.
- JFB attributes the failure to establish a training facility to the lack of funding. During the period under review, the JFB completed a training master plan that provides a blueprint of a fixed based training facility in Twickenham Park, St. Catherine along with the associated cost. Also, the Brigade submitted in budget for the continued development of the facility; however, the brigade has received no budgetary support regarding same.
- In considering the possibility of the introduction of volunteers into the operation of the JFB
  which will ultimately lead to an expansion of fire coverage to the public, a committee was
  established in 2015. However based on the literature review, the conclusion and
  recommendation from the research, the JFB's management at the time was of the view that due
  to budgetary constraints, the lack of resources, and the perennial shortages of full-time
  firefighters it would not have been feasible.



 Notwithstanding, while the JFB (one of the main commenting agencies to the local authority under the Building Act) is awaiting the promulgation of the National Building Codes of Jamaica sensitization and technical training on the codes, the activation of the appeal boards and other developments under the act, the Brigade continue to evaluate, develop and maintain Fire Prevention professionals within the Brigade.

#### **APPENDICES**

## Appendix 1-Implementation Status of AuGD Recommendations- 2014 Performance Audit

No.	Recommendation	JFB Response to the AuGD Recommendations	Implementation of Recommendation Status (Implemented, Partially or Not Implemented)
1	JFB should examine the response times for all emergencies over the next six months and implement corrective measures, if necessary, to ensure that they arrive at emergency scenes in the shortest possible time. Thereafter, internal performance standards should also be established for response time. In addition, actual response time should be periodically compared with the performance standards to monitor compliance, and address deviations.	During the strategic planning exercise in 2014-15 from the JFB SWOT analysis, one of the key strategic priorities was to reduce response time to emergency (The JFB having factored the findings in the Auditors Generals report) having recognized that there are several factors that contributed to reducing response time.  Firstly, strategies/KPIs were formulated and executed to assist in this regard. e.g., Fleet Management and maintenance Programme  The Brigade formulated a committee comprising of divisional commanders to assess and revised the national fire and emergency cover yearly.  In 2017 a body of work was undertaken to conduct a comprehensive review of the national Fire and Emergency which was completed in 2019. Please note that to date it is an ongoing and iterative process (PDCA). Reduction of response time is also a key strategic outcome.  A number representation was made to include stakeholder partnership/engagement to add new fleet and to replace the aged fleet.	Partially implemented
2	JFB should immediately develop an information system that will allow management to readily monitor trends such as: working strength of its fleet; efficiency of repair function; fleet performance and effectiveness of its repair and	Emergency vehicles are assigned to all fire stations on a consistent basis.  Over the period 2018 to 2021 the Brigade acquired thirty-eight (38) firefighting vehicles to replace some of the older vehicles in the fleet as	Not Implemented

well as to add to the fleet as part of maintenance functions. This will facilitate effective decision making the problem had to do with aged and replacement needs and overworked vehicles. assessment of the efficiency of each emergency vehicle. This would The Brigade continues to strategies facilitate timely repairs its effort in the area of preventative emergency vehicles and enhance maintenance (see JFB fire-fighting JFB's firefighting and emergency and emergency medical service medical service capacity. capacity. Managers are more aware of emergency vehicle operations. For example, sensitization sessions are conducted upon receipt of new fleet. Drivers are continuously trained in the operation of emergency vehicles by means of the JFB internal Drivers Training Programme. A servicing and Maintenance Schedule was implemented. 3 JFB should immediately take Since, 2015 a body of work was Partially Implemented appropriate actions to ensure that undertaken both qualitatively and owners of specified buildings, quantitatively with the aid of Interns including fire stations, are in strict from UWI adherence to JFB's fire safety A) Fire Prevention & Public standards. In addition, JFB should Relations is a key strategic improve on its building inspection programme of the JFB. activities to ensure that all B) A comprehensive deficiencies identified are remedied Community fire & within the specified period. Further, Life Safety JFB should improve its record Education keeping to ensure that all building Programme (CFLSEP) was inspection files are available for developed and review. implemented. C) A Fire prevention Inspection policy was developed and implemented. D) JFB increased social, print and electronic media presence. E) Recommendation was made to amend the JFB Act and the implementation of Fire **Prevention Regulations** 

We encourage JFB to continue its collaboration with the Jamaica Constabulary Force (JCF) to identify and prosecute perpetrators of illegal brush/debris fires and malicious false alarm calls. Further, JFB should intensify its public education activities to persuade members of the public to desist from these illegal activities.

- A) Educational activities were intensified through the implementation of the Community Fire and Life Safety Education Program established in 2015.
- B) The "Mek wi fix it" campaigns were also introduced in 2018 with the aim of identifying and implementing creative ways to raise Fire and Life Safety Awareness.
- C) JFB increase social media, print and electronic presence.
- D) Local Stakeholders& International partnerships employed were:
- DFID bush Fire Management Programme-201516
- JSIF Community Fire Warden Project.
- Fire Warden Clubs in Schools was launched in 2015.
- Meteorological Service of Jamaica Bush Fire Warning Index.
- United States
   Forrest Service
   (USFS) Wildland
- Bush Fire Management and Wildland Fire Investigation annual project, training over 1001
- USFS Wildland fire observations and origin scene protection for first responders 27<sup>th</sup> July 2021

Partially Implemented



## Appendix 2-Recommendations Implemented from the Fire Cover and Emergency Review

Recommendations	Fully Implemented/Partially Implemented/Not Implemented	Remarks
Increase the use of information technology	Implemented	Implemented: MY HR+ Software, ArcGis for hydrant mapping, Bush Fire Warning Index use for the prediction of the likelihood of bush fires and drones acquired for aerial reconnaissance.
The number of emergency response vehicles and related firefighting equipment needs to be increased	Implemented	From 2017-2022, JFB acquired 34 pumpers, 8 water Tenders 6 ambulances and two (2) marine firefighting vessels.
Recruitment of personnel Establish benchmarks for urban and rural response times as key performance indicators (KPIs) to evaluate fire brigade service delivery	Implemented Implemented	From 2018- 2022, 598 firefighters were recruited.  Benchmarks established but performance not measured.
Increase the network of fire hydrants and other fire service water supplies	Implemented	Network of fire hydrants increased to 20,191 compared to 13,207 in 2014.
Increase the number of fire stations	Implemented	One new fire station constructed; four constructed to replace dilapidated stations. Proposal to construct new fire stations in Mona, St. Andrew and Ulster Spring, Trelawny.
Improve preparedness to respond to potential emergencies through risk analysis and the preparation of response plans for special risk areas	Partially implemented	Special risk areas assessed but Response Plans not prepared.
Establish central dispatching and enhance the existing radio communications network.	Partially implemented	JFB is yet to establish a central dispatching system. The JFB is in the process of expanding its VHF radio capacity through a ODPEM led project.
Develop and implement urban search and rescue capability; establish a search and rescue squad in each area	Partially implemented	Search and Rescue Squads were not established for all designated areas.
Improve preparedness to existing Hazardous Response Team for emergencies involving chemical, biological and radiological hazards	Partially implemented	A series of Hazardous material training conducted and some Personal Protective Equipment for the response to Hazardous material incidents acquired.  Four members of staff were trained in Urban Search and Rescue, the relevant equipment was also procured and the operationalized establishment of trained individuals were distributed island wide and are available to be called upon when the need arises.
Expand Emergency Medical Service	Partially implemented	One EMS site was launched in Portmore, two additional fire stations, St. Ann's Bay and Ocho Rios Fire Stations were retrofitted for EMS.

		EMS sites planned for Montego Bay, Yallahs and Port Maria Fire Stations.
Establish dedicated training facilities in order to improve and maintain the technical competence of the staff	Not implemented	No funding secured.
Acquisition of high velocity pumps	Not implemented	Funds reallocated to procure Command Vehicles.
Establish Fire Investigation and Fire Prevention Regulations	Not implemented	Regulations drafted but not implemented.
Introduction of Alternate Fire Stations for volunteer fire fighting	Not implemented	

Source: AuGD compilation of information gathered from JFB's Fire Cover Review 2019 and Management

## Appendix 3-Non-Conformities Identified in Building Inspections

Kingston and St.	2017-	2018-	2019-	2020-	2021-	TOTAL
Andrew	2018	2019	2020	2021	2022	
Number of	106	154	389	286	464	1399
Inspection						
Compliant	10	30	156	144	333	673
Non-Compliant	96	124	233	142	131	726
% Breach	91%	81%	60%	50%	28%	52%

St. Catherine	2017-	2018-	2019-	2020-	2021-	TOTAL
	2018	2019	2020	2021	2022	
Number of	425	464	501	370	431	2191
Inspection						
Compliant	309	354	372	256	329	1620
Non-Compliant	114	110	128	114	102	568
Not stated	2	0	1	0	0	3
% Breach	27%	24%	26%	31%	24%	26%

St. Ann	2017-	2018-	2019- 2020-		2021-	TOTAL
	2018	2019	2020	2021	2022	
Number of	357	371	328	379	380	1815
Inspection						
Compliant	186	171	156	134	150	797
Non-Compliant	171	200	172	245	230	1018
% Breach	48%	54%	52%	65%	61%	56%

Westmoreland	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	TOTAL
# Inspection	367	288	380	400	503	1938
Compliant	217	150	217	190	252	1026
Non-Compliant	150	136	161	210	251	908
Not stated	0	2	2	0	0	4
% Breach	41%	47%	42%	53%	50%	47%

Portland	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	TOTAL	
# Inspection	141	165	60	98	66	530	
Compliant	52	63	5	6	1	127	
Non-Compliant	89	102	55	92	65	403	
Not stated	0	0	0	0	0	0	
% Breach	63%	62%	92%	94%	99%	76%	

# Appendix 4-JFB's Approved Budget versus Requested Budget for the period 2017-2018 to 2021-2022

Objects	Sub-Objects	Requested Estimates 2017-2018	Approved Budget 2017- 2018	Requested Estimates 2018-2019	Approved Budget 2018- 2019	Requested Estimates 2019-2020	Approved Budget 2019- 2020	Requested Estimates 2020-2021	Approved Budget 2020- 2021	Requested Estimates 2021-2022	Approved Budget 2021- 2022
21	Compensation of Employees	4,616,422,899	4,725,462,000	4,814,748,000	4,972,645,000	5,390,020,000	5,565,871,000	5,827,721,000	5,752,236,000	5,861,664,000	6,055,895,000
22	Travel Expenses & Subsistence	461,528,943	484,685,000	494,308,000	456,087,000	509,149,000	535,596,000	657,308,000	562,486,000	674,418,000	567,881,000
23	Rental of Property & Machinery	49,115,290	35,238,000	46,335,000	35,238,000	30,387,000	22,947,000	35,366,000	14,015,000	43,085,000	25,495,000
24	Utilities and Communication Services	64,739,032	80,822,000	70,776,000	80,121,000	120,038,000	104,141,000	104,141,000	117,810,000	109,348,000	108,310,000
25	Use of Goods & Services	294,523,505	153,591,000	285,821,000	153,591,000	285,929,000	205,085,000	399,624,000	219,315,000	491,223,000	219,285,000
27	Grants, Contributions & Subsidies (One- off Payment)						154,800,000	154,800,000	154,800,000		65,720,000
32	Capital Goods (Fixed Assets)	38,659,953	2,501,000	42,839,000	2,501,000	43,671,000	2,501,000	74,611,000	9,753,000	90,058,000	506,000
36	Motor Vehicle Revolving Loan	1,000,000	1,000,000		-	15,000,000	-	15,000,000		15,000,000	-
1708 (32)	Maintenance of Fire Hydrants	20,150,000	14,044,000	20,500,000	14,044,000	18,000,000	4,044,000	16,000,000	14,044,000	14,044,000	14,044,000
1721 (32)	Rehabilitation of Fire Vehicles	34,500,000	20,578,000	36,500,000	96,112,000	96,112,000	46,112,000	96,112,000	46,112,000	96,112,000	46,112,000
1722 (32)	Acquisition of Fire Fighting Equipment	199,014,358	84,906,000	279,259,000	189,851,000	431,108,000	171,486,000	369,189,000	227,534,000	323,761,000	248,556,000
1723 (25)	Repairs to Fire Stations	366,000,000	39,855,000	701,000,000	39,855,000	324,000,000	39,855,000	224,855,000	97,431,000	124,855,000	39,855,000
Total Recuri	rent Budget	6,145,653,980	5,642,682,000	6,792,086,000	6,040,045,000	7,263,414,000	6,852,438,000	7,974,727,000	7,215,536,000	7,843,568,000	7,391,659,000
0528	Acquisition of Fixed Assets (Fire Vehicles) - Capital 'A' Budget	558,502,783	187,111,000	540,466,000	232,651,000	955,846,000	1,575,000,000	1,690,523,000	91,862,000	1,765,407,000	1,930,350,000
Grand Total		6,704,156,763	5,829,793,000	7,332,552,000	6,272,696,000	8,219,260,000	8,427,438,000	9,665,250,000	7,307,398,000	9,608,975,000	9,322,009,000