AUDITOR GENERAL'S DEPARTMENT

PERFORMANCE AUDIT REPORT

JAMAICA URBAN TRANSIT COMPANY LIMITED

Governance, Procurement and Operations Management

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.

AUDITOR GENERAL'S DEPARTMENT OF JAMAICA

'A better Country through effective audit scrutiny'

Auditor General of Jamaica
Auditor General's Department
40 Knutsford Boulevard
Kingston 5, Jamaica, W.I.
www.auditorgeneral.gov.jm

Document No.:	Date Published
AuGD 149 - 1602.67.2.	July 28, 2020

Table of Contents

Key Statistics 7

Executive Summary 8

What we found 9

JUTC unable to reconcile fuel inventory 17

What should be done 18

Part One: Introduction 19

Part Two: Governance and Human Resource Practices 21

Legislative Context 22

JUTC was partially compliant with Corporate Governance Framework and PBMA 22

Ineffective Governance by JUTC Board and Sub-committees 23

JUTC's recruitment practices for some management positions lacked transparency 24

JUTC's breach of government guidelines resulted in unauthorized car rental payment totalling $1.2 million. 25

JUTC has unapproved staff capacity that cost an accumulated $1.15 billion 25

JUTC exceeds overtime budget by $728.6 million 27

Absence of clear criteria for JUTC Voluntary Separation Exercise 28

Part Three: Operations Management 29

Operations Management Overview 29

Route Rationalization 30

Route Rationalization Programme discontinued without Board approval 31

JUTC bus availability continued to decline 32

JUTC transported fewer passengers in all categories, relative to target 33

The JUTC lacked an effective methodology to track the operational efficiency of its fleet of buses 35

No clear success criteria for AVL Pilot Project 36

No structured monitoring of JUTC Sub-Franchise Holders 38

Part Four: Maintenance 39

Maintenance Management Overview 39

Preventative Maintenance Targets not attained 40
High occurrence of Unscheduled Repairs and Road Calls 40
Core Maintenance activities were consistently below target 41
JUTC outsourcing costs for maintenance increased despite excess numbers of mechanics 43
JUTC did not have an effective recruitment and retention strategy for maintenance staff 45
Part Five: Procurement and Inventory Management 47
Absence of effective procurement planning contributed to excess downtime for buses 48
JUTC did not ensure it obtained best price for fuel and breached procurement guidelines 49
JUTC did not conduct adequate due diligence prior to purchasing buses to enable value for money 50
Poor monitoring and management of inventory undermined accountability and heightened the risk of stock outs, obsolescence, as well as other material and financial losses 52
High Incidence of Stockouts 53
Costly Obsolete Stocks 54
JUTC inventory management system was inefficient in logging and tracking purchase of parts 54
JUTC unable to reconcile fuel inventory 56
Case Studies 58
Appendices 64

Auditor General's Overview

The analytical review of the JUTC's financial statements over the period FY2009/10 to FY2012/13, which was tabled in 2015, revealed a consistent fall in ridership and associated decline in revenue. An attempt to reassess JUTC's performance through a five-year financial statement trend analysis was thwarted owing to the absence of financial statements for the period FY2017/18 and FY2018/19. Given JUTC's mandate to provide a safe, reliable, modern, professional, efficient, and cost-effective transportation service to the Kingston Metropolitan Transport Region (KMTR), I commissioned a performance audit to determine the root cause of the reduction in the usage of the service provided by the JUTC over the years. The audit sought to determine whether JUTC had adequate internal controls to enable the entity to operate in an efficient and effective manner, such that commuters receive an acceptable level of service and taxpayers receive value for money.

The audit found that JUTC lacked a robust maintenance and inventory management system to facilitate adequate supplies of buses on a timely basis to meet the demand of customers. JUTC invested in costly bus tracking and inventory management systems, which were not adequately utilized, as well as made poor decisions in the selection of buses that were unsuitable for its needs. The audit also found weaknesses in JUTC's governance practices and internal control environment, which were manifested by a lack of financial transparency, breaches of the Human Resource (HR) policy, minimal adherence to Government guidelines, including procurement law and guidelines and limited accountability by JUTC's leadership. These inefficiencies also worsened the JUTC's financial position over the period.

I urge the JUTC and the Ministry of Transport and Mining (MTM), to seriously consider the recommendations contained in this report to resolve the weaknesses identified, which if left unresolved, could expose the JUTC to further financial losses and place additional strain on the fiscal position of the Government.

I take this opportunity to thank the management and staff of the JUTC for the courtesies extended to the audit team during the execution of the audit.

Pamela Monroe Ellis, FCCA, FCA
Auditor General

This page is intentionally left blank

Key Statistics

Net accumulated shortage of over 231,222 litres of fuel valued at approx. $36.5 million between FY2014/15 and FY2018/19

36.5% decline in ridership between FY2014/15 and FY2018/19.

11.6% decline in available Bus service between FY2014/15 and FY2018/19.

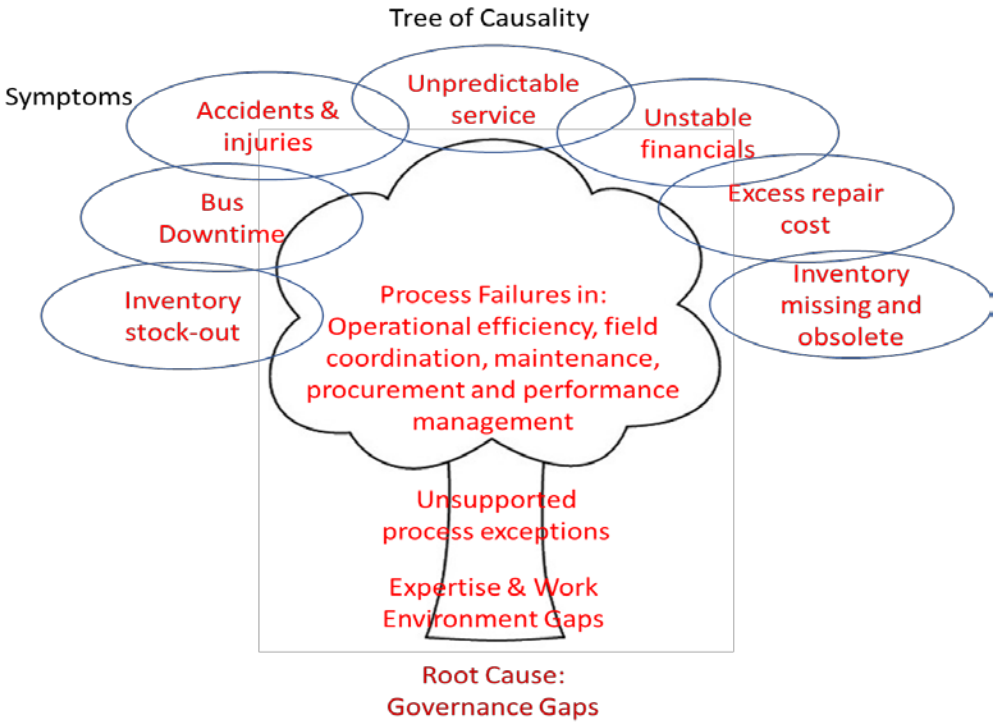
$178.7 million of obsolete spare parts at end FY2018/19.

16 buses (avg.) out of service for 139 days (avg.) awaiting parts.

Executive Summary

The Jamaica Urban Transit Company (JUTC) is a wholly owned government-subsidized public entity that was established in July 1998. The entity currently holds the exclusive license to provide public passenger transportation service in the Kingston Metropolitan Transport Region (KMTR), which comprises Kingston and St Andrew, Portmore and Spanish Town in St. Catherine. The company operates under the policy guidance of the Ministry of Transport and Mining (MTM). JUTC's mandate is to provide a safe, reliable, modern, professional, efficient, and cost-effective transportation service to the KMTR. However, over the years, commuters have been complaining about the unreliable public transportation services provided by the JUTC, while the entity has continuously experienced financial losses despite significant subsidy of $3.3 billion each year from the Government of Jamaica (GOJ) for the period FY2014/15 to FY2017/18.

The performance audit sought to determine the root cause of the problems experienced by commuters over the years and whether JUTC had adequate internal controls to enable the entity to operate in an efficient and effective manner, such that commuters receive an acceptable level of service and taxpayers receive value for money.



What we found

Weak Internal Controls led to poor decision-making and costly Human Resource and Administration (HRA) breaches

1. **JUTC's Board of Directors failed to implement the necessary internal controls to protect the financial resources of the Company.** Accordingly, poor Human Resource Management (HRM) practices and weak financial management, resulted in unbudgeted or unapproved expenditures. We identified breaches and issues related to procurement and inventory management and multiple instances of HRA irregularities that were not addressed by the Board, in accordance with the Risk Management Framework. For example, we found:

   i. **JUTC had an unapproved staff capacity costing an accumulated $1.15 billion that was not leveraged for operational efficiency.** The Ministry of Finance Circular#15 Ref. No. SB 50/43 dated July 1, 2016- "Revised Guidelines for the Operation of Posts in the Public Sector" states "in an effort to achieve public sector efficiencies while maintaining fiscal discipline several guidelines must be followed, one of which is that, MDA's and Public Bodies should contain employment within their approved establishment and approved budget". However, JUTC did not contain employment within its approved establishment contrary to the Guidelines as 508 unapproved positions were being operated as at July 2019, costing the entity $1.15 billion for the period April 2014 to July 2019. Further, we found no evidence that the unapproved staff created value by enhancing operational efficiency and improving service delivery. Of note, the unapproved positions included 145 staff as at July 2019 that were permanently employed, while the remainder related to temporary contracts. In June 2020, JUTC indicated that as at May 2020, the number of permanently employed staff in unapproved posts was 92.

   ii. **JUTC's management exceeded the overtime budget by $728.6 million, despite excess staff capacity**. A review of the overtime claims for the two years 2017/18 to 2018/19 revealed that drivers and mechanics accounted for the top 15 highest overtime claims for the Spanish Town and Ashenheim (Central Maintenance Location). Furthermore, these overtime claims, ranged between 71 per cent to 182 per cent of some employee's annual salaries, with overtime hours ranging from 1,200 hours to a high of 2,200 hours annually (18 – 83 hours for a fortnight). Consequently, the JUTC exceeded its operational overtime hour's percentage strategic target by an average of 5.8 per cent annually and incurred costs totalling $1.71 billion, which exceeded the budgeted amount by $728.6 million or 74 per cent between 2014/15 and 2018/19. We found no records where JUTC evaluated the potential risks to the travelling public and drivers from persistent overtime work or to the quality of maintenance work, in the case of mechanics.

iii. **JUTC failed to advertise vacant positions and engaged staff in unapproved positions or without the minimum qualifications, in breach of its HRA policy and procurement guidelines.** From a sample of 21 senior managers recruited, we found no evidence that JUTC advertised for nine of the positions and in addition, eight of the officers engaged were not interviewed for the job. Further, six of the senior managers engaged did not meet the minimum qualification for the job and two were assigned higher positions shortly after employment, which resulted in a 64 per cent and 583 per cent increase, in their respective salaries. For one of the officers, the promotion was awarded within a year, despite an unsatisfactory performance appraisal, while the other did not provide evidence of the requisite qualification. JUTC also employed a general manager and operations manager for its corporate office in unapproved positions, at salaries of $6.4 million and $4.3 million, respectively. The employment of these officers was not subject to a competitive recruitment/selection process and there were no signed job descriptions outlining the actual functions and duties. We found no evidence of justification for the employment to the positions and further, JUTC could not demonstrate that the most suitable candidate was chosen for the position to improve operational deficiencies and service delivery.

iv. **JUTC's recruitment and retention strategy for maintenance staff was ineffective to enable quality service delivery**. Best practice recommends that recruitment for maintenance staff should be informed by a skills-need assessment that is suitable for the fleet specification, complexity and type of preventative maintenance program. Additionally, there should be a retention strategy that provides employees with competitive compensation, opportunities for advancement, training, and continuous development, which will provide the JUTC with skills needed for operational efficiency. However, JUTC's recruitment practices for mechanics did not always encourage engagement commitment. We noted that as at July 2019, 140 mechanics were employed, relative to 85 approved posts; 40 were on temporary contracts, while 22 were acting in higher unapproved posts. Moreover, the recruitment of mechanics during the period was mainly apprentices and lower grade mechanics on temporary contracts ranging from 6 to 12 months initially, with subsequent short-term extensions. However, there was no effective mechanism in place to encourage commitment such as an effective technical training and development program, which would strengthen technical skills and allow for employee advancement.

2. **The Portfolio Ministry was deficient in its oversight of the JUTC to ensure adherence to the Public Bodies Management and Accountability (PBMA) Act and the GOJ Corporate Governance Framework.**

i. **The Ministry did not conduct annual performance reviews of the JUTC's Board as required by the GOJ Corporate Governance Framework (CGF).** The CGF requires Ministers to assess its effectiveness in ensuring that JUTC's affairs are managed in a

prudent and efficient manner. Annual evaluations of the Board's performance would have enabled the Portfolio Ministry to reduce the risk of the non-detection of adverse developments in a timely manner.

ii. **JUTC's Board was partially compliant with the CGF.** The Board held an average 8 of the 12 required meetings and established several committees with delegated specialized functions, including the following: Audit and Risk Management (which combined Asset Management, Procurement and Corporate Governance); Finance; 'Human Resource and Administration'; and Operations, Logistics & Security (which included Information Technology). Similarly, each committee had an established Terms of Reference, which stipulated the regularity of meetings required.

iii. **The Board failed to implement recommendations of the Internal Audit Committee**. Despite regular meetings of the Board and sub-committees, breaches identified by the Risk Manager and recommendations of the Internal Auditor were either ignored or not adequately addressed, which heightened the risk of financial losses.

iv. **The Portfolio Ministry did not ensure that the Board adhered to the Risk Management Framework to protect the interest of the JUTC.** We found no instance where the Board was held accountable by the Ministry for breaches of Government guidelines. For example, the Board breached the Government motor vehicle guidelines when its authorized car rental payments of US$2,400 monthly effective May 20, 2016 for a car utilised by the Acting Managing Director without approval from the MoFPS. This resulted in total charges of $1.2 million for 114 calendar days. The Revised Comprehensive Motor Vehicle Policy for the Public Sector Circular # 8 (2003) requires that, except in the case of emergency, no Ministry, Department or individual shall enter into a contract for the hireage of a motor vehicle, whether through the Hire Fund Scheme, private rental agency or private individual without the specific permission of the Ministry of Finance and Planning. Further, the circular states that each hireage case will be considered on its own merit and that officers found in breach will be liable to surcharge up to the amount of any unauthorised expenditure so incurred. Of note, a similar breach was identified in a previous report of the Ministry of Transport, Works and Housing (MTWH), dated March 6, 2012, against advice of Ministry of Finance and the Public Service (MoFPS).

Deficiencies in Operations and Maintenance Management adversely impacted service delivery

3. **JUTC's management was ineffective in implementing strategies to improve the Company's operational efficiency and financial viability**. We found JUTC to be ineffective

in its management of the bus service. Although JUTC conducted a route assessment in FY2017/18 to streamline its operation and improve efficiency via route rationalisation, the programme was subsequently discontinued without any evidence of approval from the Board or analysis regarding the impact on service or financial sustainability. Further, although JUTC utilised data collected from various internal sources to measure operational efficiency of the depots, actual data for individual buses were not captured to identify specific performance gaps. Hence, JUTC could not determine the specific operational cost per bus to inform its operational strategies and further, most of the fleet were not installed with the necessary specialized hardware and software to facilitate this analysis.

i. **The average number of buses available between FY2014/15 and FY2018/19 was consistently lower than target, with a declining trend in supply from FY2016/17.** Based on findings of its route assessment in FY2017/18, JUTC took the decision to discontinue the use of large buses on some routes where there was an oversupply of seats and subletting those routes to private operators with smaller units. However, even where routes were considered financially viable, JUTC continually experienced challenges in rolling out an adequate supply of buses to satisfy demand and facilitate a reliable service. At the same time, we found that JUTC carried fewer passengers in all categories over the five-year period of review, despite concessionary fares for the elderly and school children. Our informal survey undertaken in 2019, indicated reliability and speedy movement between home and work were important considerations among commuters. JUTC has consistently ascribed defective units and absenteeism of drivers as a major factor affecting the supply of buses on the roads. Whereas JUTC's records for the three-year period FY2016/17 to FY2018/19, confirmed a high incidence of mechanical issues on the roads, the suggestion that absenteeism of drivers as another factor affecting supply was somewhat inconsistent with JUTC's records, which indicated an oversupply of drivers and excess overtime payments.

ii. **JUTC fleet management software - Automated Vehicle Locator (AVL) system acquired in 2017 is yet to be implemented, denying the achievement of value for money.** The AVL was acquired to improve efficiency through tracking of various areas including geographic location, idling and speeding, as well as aid in improving scheduling and bus rotation. The JUTC indicated that the system was due for full implementation in FY2019/20; however, at the time of our audit, the project, which commenced in February 2017 was still at the pilot stage. The JUTC, in response to our request for evidence of the success criteria, informed that there were no contracts or a service level agreement in place for the AVL pilot project, as the providers were engaged for a testing phase and further, the company had only paid for the devices currently being used on the 25 buses. A review of expenditure records indicated that US$61,170 and €72,026.55 was spent on the procurement of hardware for the AVL system between July 2016 and October 2017, while the annual staff cost for four

operators and a manager was $7.1 million. Given the limited information, we were unable to determine if value was received for funds spent.

iii. **JUTC's management did not actively monitor sub-franchise operators to assess whether the arrangement benefitted the Company**. JUTC indicated that sub-franchise holders were monitored periodically by officers of their Franchise Protection Division, to determine whether operators were adhering to the terms and conditions of their contracts. However, we found no structured reporting on the operations of these sub-franchises in respect of the total performance of all JUTC routes, in terms of revenue and passenger count, to inform route rationalization exercises and assess the viability. Although JUTC's strategic plan indicated a need to increase the number of sub-franchise holders, which was consistent with commuter demand for faster service, JUTC did not provide a cost-benefit analysis supporting the planned expansion in sub-franchise operations that would deliver a reliable transportation service.

iv. **JUTC's maintenance programme was ineffective as demonstrated by a high incidence of malfunctioning buses, which adversely impacted service delivery.** A critical component of an effective maintenance programme is a planned service schedule, the objective being to decrease the probability of future failures through preventative maintenance. JUTC's maintenance records for the three-year period FY2016/17 to FY2018/19, showed that unplanned work and road calls increased by 49.2 per cent and 80.9 per cent, respectively. Of note, road calls occur because of mechanical issues and are a critical measure of maintenance as they impact directly on bus availability and the reliability of service. Further, based on data provided by JUTC, the maintenance department had an annual target (KPI), including its core maintenance targets that were never achieved despite the introduction in 2015/16 of an initiative whereby each maintenance supervisor was assigned personal responsibility for the maintenance of a fleet of vehicles.

v. Although JUTC used data collected from various internal data sources, including fuel cost to track operational efficiency per depot, the methodology did not capture actual data on individual buses. Therefore, JUTC could not accurately determine operational cost per bus, which limited its ability to effectively analyse each unit and plan its operational strategies. Based on the methodology used, buses that are more efficient would technically be subsidizing less efficient units, giving a skewed representation of the efficiency of the fleet. Whereas some extrapolation was done to arrive at a figure per bus, we could not attest to the robustness of the process, given that JUTC merely used a simple average. At the same time, accurate operational metrics per bus were

not available for most of the fleet given the absence of installed specialized hardware and attendant software.

vi. **Despite excess mechanics on staff and available funding for training, JUTC's management outsourced maintenance and repairs services, costing approximately $419 million.** We found that costs increased by approximately 364 per cent from $26.1 million in FY2014/15. We observed from purchase orders, that outsourced maintenance activities often included basic servicing of JUTC buses. For instance, for its fleet of Golden Dragon buses acquired in 2016, JUTC completely outsourced all repair and maintenance services to the local dealer, costing $97.9 million over the period. This was despite the inclusion of 1-year technical training provision in the contract agreement for the purchase of these buses. In addition, given that the company employs mechanics to service and maintain its fleet of buses at each depot location and at the central maintenance facility, we could not determine how JUTC assured itself that value for money was obtained as it did not provide any cost benefit analysis that guided such a decision. JUTC did not provide for review, a framework that guided the decisions to outsource repair and service works. Even with the high level of outsourcing, JUTC was unable to provide an adequate level of buses to fulfil its obligations to provide a safe and reliable public transport system.

vii. **JUTC did not take full advantage of the capacity-building component of various contracts signed with overseas suppliers**. Despite technical assistance funding of €4.5 million, which would have included training and approximately $14.5 million for the implementation of a Heavy-Duty Mechanic Training Programme in conjunction with HEART, JUTC stated that it did not have the capacity or resources to address certain technical issues affecting its buses. Accordingly, JUTC did not adequately demonstrate that value for money was obtained, with the provision of a comprehensive mechanic-training programme to meet the needs of the Company.

Deficiencies observed in JUTC's Procurement practices

4. **Frequent use of direct contracting procurement methodology for high value transactions, particularly fuel, did not meet the important principles of transparency, competition, and fairness.** The competitive bidding procurement methodology facilitates transparency and the provision of opportunities to obtain quality goods and services at the best price. However, JUTC's frequent use of the direct contracting methodology did not guarantee that the best prices would be obtained for goods and services.

i. For example, we found that JUTC used direct contracting for 99.8 per cent of contracts valuing $16.6 billion, for the acquisition of fuel, spare parts from bus manufacturers, tyres, and dealer services. In all cases, the value of each contract exceeded the established threshold, which required use of the competitive bidding methodology. Whereas the use of direct contracting for spare parts, tyres and dealer services would have been permitted under varying circumstances outlined in the Procurement Guidelines, there was no such permit for JUTC's direct contracting of fuel services which accounted for $10.5 billion (63.4 per cent) of the contracts. Furthermore, we noted that for FY2016/17 and subsequent years, JUTC's direct contracting of fuel services was limited to only one supplier, despite the existence of multiple local suppliers. In this regard, JUTC would not have satisfied itself that it paid the best price for fuel services and that the procurement process was transparent.

ii. **JUTC's procurement planning was not always transparent due to incomplete information on some planning documents**. Whereas JUTC completed and submitted annual procurement plans during the period FY2014/15 to FY2018/19, these plans did not always contain sufficient detail as required by the GOJ Procurement Guidelines and at times, were incomplete. We noted that the procurement plans only provided a general description of goods and services and estimated cost, while the units of measure and quantity were not included as required. Furthermore, for several key procurement items, such as bus spare parts, the estimated timelines for the procurement process (publication, award and start dates) provided little or no guide to the procurement activities. Accordingly, we could not confirm that JUTC's strategic and operational objectives were aligned to provide assurance that value for money was attained for expenditures.

iii. **Lack of adequate due diligence by JUTC in its procurement of buses resulted in the non-receipt of full value for money.** We found deficiencies in JUTC's evaluation of buses prior to procurement by GOJ, particularly with regards to the specifications required for buses and the testing of prototypes. During the five-year period, JUTC acquired 35 Golden Dragon buses to operate on the hilly routes of St. Andrew via a contract between GOJ and the Xiamen Golden Dragon Bus Co. Ltd. at a total cost of US$4.2 million. While JUTC noted that it had internally developed the specifications required for buses, these were not provided for review nor was JUTC able to demonstrate how the internal specifications were used to evaluate those specifications of the Golden Dragon buses that were under consideration. As a result, we could not verify that the specifications of the buses procured conformed with JUTC's own specifications.

iv. Furthermore, although JUTC tested a prototype of the bus prior to purchase, the report and supporting documents of the testing were not provided for review. Therefore, we were unable to confirm the basis by which JUTC determined that the prototype performed satisfactorily and was fit for purpose and purchase. A review of test reports for two similar prototype buses revealed a lack of rigour and detail in the assessment of the prototypes when compared to international benchmarks. For instance, we found no clear criteria/benchmark that was used to measure satisfactory performance of the prototypes. We noted that in a letter dated April 25, 2019 from the JUTC to the MTM, the Company stated that the Golden Dragon buses were not suitable for the hilly terrain and would have to be replaced within a year. Against this background, JUTC was unable to demonstrate that the buses procured during the review period were fit for purpose in terms of service delivery and that value for money was obtained.

Poor monitoring and management of inventory undermined accountability and heightened the risk of stock outs, obsolescence, as well as other material and financial losses

5. JUTC operated an electronic inventory management system, Sage Accpac, which facilitated the ability to log and track the full list of inventory items from receipt of shipment at the Central Stores to issuance of items from individual depot stores. However, we noted that JUTC did not fully utilise this software to proactively track inventory levels and generate orders to prevent stock out of critical items. Accordingly, JUTC would not have been assured of full receipt of value for money.

i. We also noted that for the review period, JUTC's primary method of monitoring inventory activity was limited to the ad hoc preparation of "Not Available (N/A)" reports. These reports represented a collation of inventory items demanded by the Engineering and Technical Services department to effect repairs and maintenance of buses that were currently out of stock. However, we found that the reporting system did not provide proactive monitoring of inventory nor did it mitigate against inventory stock outs as items were only flagged upon request, while stocks levels were zero. In April 2018, JUTC implemented "Bi-Weekly Spare Parts Ordering" to supplement the use of 'NA' reports and "prevent stock out of critical fast-moving parts or overstocking". However, our assessment of a sample of Bi-weekly tracking reports revealed that JUTC was continually plagued by frequent stock outs of inventory items.

JUTC unable to reconcile fuel inventory

ii. **Fuel purchases represented JUTC's single largest expenditure, valuing $2.5 billion for FY2018/19 up from $1.5 billion in FY2014/15.** Given the sizeable level of expenditure and the importance of fuel to JUTC's operations, we expected significant focus on ensuring the accuracy and proper management of the fuel inventory to ensure that costs were minimized. Our review of the fuel records for the period FY2014/15 to FY2018/19 identified significant variations in fuel inventory levels across all depot locations. We noted a net accumulated shortage of 231,222.3 litres of fuel, valued at approximately $36.5 million. We found that shortages at the Portmore depot accounted for approximately 55 per cent of the net accumulated shortage and JUTC failed to properly account for the fuel variations recorded in its reconciliation reports. JUTC indicated that variances were attributable to spillages, theft, and malfunctioning equipment at various depot locations in some instances; however, the amounts lost were not calculated.

iii. JUTC's management of fuel inventory was manual and largely paper-based, although JUTC had in place an electronic system, known as Petro Vend, which was intended to automatically record and monitor the fuel inventory. This system has been in a state of disrepair and was not in use during the review period. JUTC revealed that the Petro Vend system has been malfunctioning for years, despite its best efforts to have the owners of the equipment effect the necessary repairs. However, we found no evidence that JUTC sought to fix the existing system or implement a new electronic monitoring system and hence, its reliance on a manual system, impaired its ability to accurately record and monitor fuel levels on a consistent basis, which heightened the risk of misappropriation and possible fraud.

JUTC inventory management system was inefficient in logging and tracking the purchase of parts

iv. We were unable to identify from the inventory management system, items relating to 47 purchase orders totalling $422.6 million that were received by the Central Stores. JUTC subsequently provided documentation confirming that items relating to all purchase orders, except for one, was received but not all were included in the inventory management system, highlighting deficiency in the system's logging of records. The failure of inventory system to capture all purchases heightened the risk of stockouts, non-detection of pilferages as well as compromised accountability and the accuracy of Company's records. Sixteen of the 47 purchase orders totalling $223.4 million were received and entered into the inventory system; however, the

required information to link these items to the associated purchase orders were omitted. JUTC acknowledged that the inability of current inventory management system to allow the logging of all purchase orders associated with the inventory items received, contributed to this issue. We noted that items relating to the remaining 31 purchase orders totalling $199.2 million were intentionally excluded from the inventory tracking system by JUTC. As a result, we were unable to determine whether these items were used in the maintenance and repairs of the company's fleet or other operational activities as there was no way to track the movement through the company.

What should be done

6. JUTC should urgently conduct a cost-benefit analysis to determine the feasibility of its bus routes. This is not only necessary to inform any decision regarding the pursuit of its Route Rationalisation Programme but is critical to the financial viability of the company.

7. JUTC should also conduct a cost-benefit analysis to determine whether an expansion in the sub-franchise operations would be beneficial to the financial sustainability of the Company; in addition, a structured monitoring mechanism should be implemented for sub-franchise operators to increase the level of accountability.

8. The Board should implement internal controls to ensure adherence to Government Policy guidelines and regulations, as well as the adoption of proper HRA practices. JUTC should seek to improve its procurement practices to ensure adherence to Government Procurement laws and guidelines, including the use of competitive bidding to achieve best price for its major purchases, in particular the acquisition of fuel.

9. Additionally, JUTC must take immediate steps to improve inventory management systems and consider full implementation of the electronic inventory management system Sage Accpac. This will enable JUTC to take full advantage of its logging and tracking features to reduce risk of stock outs, obsolescence and pilferage that can lead to financial losses; as well as to achieve value for money from funds spent to acquire the system.

10. The Portfolio Ministry should consider developing a competency profile for the JUTC Board in accordance with the GOJ Corporate Governance Framework. Having the appropriate skillsets on the Board is essential to effective strategic oversight and efficiency of the Company, consistent with its mandate and public sector accountability. In addition, consideration should be given for the inclusion on the Board, of experts in logistics and financial analysis to enhance service delivery and financial risk management.

Part One: Introduction

Background

1.1 The JUTC established in 1998, is a wholly owned by the Government of Jamaica (GOJ). The Company which currently falls under the Ministry of Transport and Mining (MTM) holds an exclusive license to provide public passenger transportation service in the KMTR, which comprises Kingston and St Andrew, Portmore and Spanish Town in St. Catherine. The JUTC's mandate is to provide 25,000 seats per day to meet the demands of the commuting public within the KMTR. Recent estimates from the Transport Authority indicated that the seating capacity required is 31,000 per day. Under the KMTR, the responsible Minister has the power to grant exclusive transport licences. JUTC operates an electronic fare collection system, which can accommodate both cash and cashless transactions (using Smart Cards). JUTC also operates under a flat fare system, while some public passenger services operate with a fare system based on distance. This fare structure provides cheaper alternatives to commuters particularly for the elderly and children, although many passengers opt for alternatives because of other factors besides cost.

Government Support

1.2 JUTC benefits from Government support in the form of subventions, capital contributions, write-offs in outstanding pension obligations and statutory deductions. In light of accumulating losses, the JUTC has continually relied on Government grants to finance its operations. During FY2017/18, the Government of Jamaica provided a grant of $3.6 billion (FY2016/17: $2.7 billion) to supplement revenues from fare box ($4.8 billion) and other income ($173.9 million). However, the company made huge losses, accumulating to $5.8 billion for the period FY2014/15 to FY2016/17, against the backdrop of expenditure that continually, significantly outpaced revenue.

GOJ financial support to JUTC 2014/15 to 2017/18 ($'000)

Government Grants	2017/18*	2016/17	2015/16	2014/15
Cash Subvention	960,347	844,223	578,780	517,890
Purchase of Spare Parts	1,091,157	488,095	736,810	1,151,500
Loan Payment on Behalf of the Company	125,866	303,639	138,973	423,367
Payment/waiver of Statutory Liabilities	-	146,598	145,468	232,282
Payments to Collection of Customs	188,591	898,069	460,514	2,574,100
User Fee HWT Transport Centre	96,996	-	-	-
SCT Ad valorem	807,716	-	-	-
Pension and Insurance Payment	316,000	-	-	-
Other	(19)	-	-	-
Total	**3,586,654**	**2,680,624**	**2,060,545**	**4,899,139**

Source: JUTC's Financial Statement (*Draft)

Rationale for the Audit

1.3 The analytical review of the JUTC's financial statements over the period FY2009/10 to FY2012/13, which was tabled in 2015, revealed a consistent fall in ridership and associated decline in revenue. An attempt to reassess JUTC's performance through a five-year financial statement trend analysis was hindered owing to the absence of audited financial statements for the period FY2017/18 and FY2018/19. JUTC's mandate is to provide a safe, reliable, modern, professional, efficient, and cost-effective transportation service to the KMTR. In this context, a performance audit was undertaken to determine the root cause of the reduction in the usage of the service provided by the JUTC over the years. The audit sought to determine whether JUTC had adequate internal controls to enable the entity to operate in an efficient and effective manner, such that commuters receive an acceptable level of service and taxpayers receive value for money.

Audit Objectives and Scope

1.4 The audit sought to determine how effectively JUTC is managing the operation and maintenance of its fleet, its governance and human resource management practices, in particular, the training and development of staff and its accounting practices. The accounting records, financial transactions and operating records were largely examined for the review period, April 2014 to March 2019; but augmented for completeness, by a review of transactions beyond this period, where relevant.

Audit Methodology

1.5 We planned and conducted our audit in accordance with Standards issued by the International Organization of Supreme Audit Institutions (INTOSAI), which are applicable to Performance Audit. In this regard, we gained knowledge and understanding of JUTC's operation through a review of internal and external information, interviews with management, staff and other stakeholders, observations, walkthroughs, and analytical reviews. Other stakeholders were facilitated through a Focus Group to ascertain their views on the operations of the JUTC and the impact on the public transportation sector. We conducted a risk assessment and developed an issue analysis with questions and procedures, which helped in undertaking the fieldwork stage of the audit, that was undertaken between May 2019 and August 2019. We also utilized the Root Cause Analysis tool during the audit process, which facilitated a deeper understanding of the contributing factors to the issues identified.

Part Two: Governance and Human Resource Practices

At A Glance

Systems and practices	Criteria	Key Findings	Assessment Against Criteria
Board Performance Evaluation (CGF: Principle 12)	Each Board of a Public Body should be subject to a formal and rigorous annual appraisal of its performance and that of its committees and individual Directors.	No evidence was provided to indicate that this activity was performed during the review period.	⛔
Reporting responsibilities (PBMA)	The Board of a public body shall submit the annual report including audited financial statements to be laid on the Table of the House of Representatives and of the Senate	JUTC was not compliant with this regulation as it has not provided the Ministry with the FY2017/18 and FY2018/19 Annual Reports and Audited Financial Statements.	⛔
Board of Directors' and Sub-Committee Meetings	Meetings are to be held according to each Terms of Reference	Meetings were frequently held for the Board and sub-committees.	☑
Human Resource best practice.	GOJ employment practice, JUTC Human Resource Standard Operating Procedures (1.1) requires vacancy for promotion and hiring to be advertised, interview/competency assessment done, and candidate should meet the minimum qualification as per job description.	• Engagement for 9 of 21-sampled management positions did not demonstrate transparency. • Six senior managers sampled did not meet qualification requirements on the job descriptions.	⚠
MoFPS Approved Establishment for Public Body	The MoFPS Circular#15 Ref. No. SB 50/43 dated July 1, 2016 requires Public Bodies employment within their approved establishment	• JUTC has staff in unapproved positions that cost an accumulated $1.15 billion over the review period; which was not leveraged for operational efficiency. • JUTC exceeded the overtime budget by $728.6 million despite excess staff in maintenance and operations.	⛔

☑ MET the criteria ⚠ Met the Criteria, but improvements needed ⛔ Did not meet the criteria

Legislative Context

2.1 JUTC is a limited liability company incorporated under the Companies Act of 1998. The entity operates under the Transport Authority Act (1968) and the Public Passenger (Kingston Metropolitan Transport Region) Act. Under the Public Passenger Transport (KMTR) Act. JUTC currently operates through an exclusive licence within the KMTR; any other bus operators wishing to operate within the KMTR must do so as a sub-franchisee with the consent of the JUTC. At end-June 2019, JUTC's management indicated that it was awaiting written confirmation to a request to the MTM for the renewal of the exclusive licence which expired in September 2018.

JUTC was partially compliant with Corporate Governance Framework and PBMA

2.2 The Corporate Governance Framework for Public Bodies, 2012 states *"Each Board of a Public Body should be subject to a formal and rigorous annual appraisal of its performance and that of its committees and individual Directors. The Ministry of Finance & Planning should develop a Performance Evaluation Template to be used by all Boards".* However, we found no evidence to indicate that this activity was performed during the review period. The failure by the MTM to ensure that such an evaluation was conducted limited the ability of the Ministry to effectively monitor the performance of the Board against expected results, manage risks and advise/inform the Minister[1].

2.3 The Corporate Governance Framework recommends that the board members declare any conflicts of interest in keeping with the established Conflict of Interest rules identified in the Code of Ethics. Upon inspection of the Board minutes, the declaration of conflict by the members to the chairman was first recorded in board minutes on November 1, 2018. The minutes indicated that no conflict of interest had been declared during the review period.

2.4 We found that the Ministry of Transport and Mining (MTM) had not developed a competency profile for the Board of the JUTC, for the period under review. We expected the competency profile for the Board to be consistent with that outlined in the Competency Profile Instrument for the Boards of Public Bodies (MoFPS, January 2017). We requested the information from the Ministry on December 2, 2019, which indicated that it had not been advised of the Instrument being brought into effect but had requested the information and would thereafter move to implement a regime for administering the Instrument.

[1]GoJ Corporate Governance Framework, PRINCIPLE 15: MONITORING ARRANGEMENT OF MINISTRIES

2.5 Based on the Public Bodies Management and Accountability (PBMA) Act, the Board of a public body should submit the annual report including audited financial statements to be laid before the House of Representatives and of the Senate. JUTC has not been consistently compliant with this regulation as it has outstanding Annual Reports and Audited Financial Statements for FY 2017/18 and FY2018/19. JUTC has been in dialogue with the MTM and the Ministry of Finance and Planning (MoFPS) regarding the reasons for the delay.

Ineffective Governance by JUTC Board and Sub-committees

2.6 The JUTC Board has an established Terms of Reference (TOR) consistent with the Corporate Governance Framework. According to the TOR, the Board is collectively responsible for strategic management and oversight of the entity. The members serve as the focal point for corporate governance and are accountable to the responsible Minister and shareholder representatives, as determined by law. In keeping with the Government's policy framework, the Board shall decide on the Company's values and strategy and provide the necessary leadership to secure human, physical, and financial resources required for the organisation to meet its objectives. Consistent with its respective statutes, constitution, governing codes and government guidelines, the Board shall apply leadership styles, which are consistent with good practice in the conduct of its affairs.

2.7 We found that JUTC's Board held regular meetings (on average 8 per year) and established several committees with delegated specialized functions in accordance with the TOR (**Table 1**). The established committees included: Audit and Risk Management (which incorporated Asset Management, Procurement and Corporate Governance); Finance; 'Human Resource and Administration'; and Operations, Logistics & Security (which included Information Technology). Similarly, each committee had an established Terms of Reference, which stipulated the regularity of meetings required.

Table 1: **JUTC's Board and Sub-Committee Meetings**

Board and Sub-Committee	Required Meeting	Financial Year				
		2018/19	2017/18	2016/17	2015/16	2014/15
Board	12*	7	7	10	9	8
Audit and Risk Management	4	8	4	6	2	2
Finance	12	7	10	10	3	4
HR & Administration	12	7	8	8	2	0
Operations, Logistics & Security	12	8	10	7	5	6

* The Board shall meet with such frequency and at such times as it may determine. Good practice is for the Board to convene monthly.

2.8 Despite regular meetings, we found that the Board was deficient in undertaking its responsibilities to protect the interest of stakeholders, given breaches revealed by this audit. We found breaches and issues related to procurement, irregularities with overtime, unreconciled fuel and poor inventory management that were not addressed by the Board in accordance with the Risk Management Framework, to protect the interest of JUTC and stakeholders. We noted that similar breaches and issues had been identified by JUTC's Internal Audit Unit, which were raised at the committee level and further communicated to the Board. Accordingly, we found the Board to be ineffective in ensuring that the recommendations put forward by Internal Audit were properly implemented to mitigate the risk of recurrence.

JUTC's recruitment practices for some management positions lacked transparency

2.9 Human Resource best practice in Government, as well as JUTC's internal procedures require that vacancies be advertised, and the selection of candidates done in a manner that ensures equity and transparency in the recruitment and promotion process. However, we found no evidence that the positions for nine of 21 senior managers sampled were advertised; and no evidence that eight senior managers were interviewed in accordance with guidelines. Further, we gleaned that despite the advertisement for the position of a Security Manager in December 2018 and interviews conducted with four candidates, the JUTC engaged another officer who was not a part of the official recruitment process, on a one-year contract. The JUTC indicated that the interview for the Security Manager did not yield any suitable candidate; therefore, the selected individual was interviewed from a pool of application on file. However, no evidence was provided to support this claim. Additionally, there was no evidence that the requisite minimum qualifications as outlined in the job description for six of the senior managers engaged, were met (**Appendix 1 & 2).**

2.10 Furthermore, from the sample, two of the candidates were assigned to higher positions shortly after employment, which resulted in a 64 per cent and 583 per cent increase in their respective salaries. One was promoted within a year, despite an unsatisfactory performance appraisal and the other without providing evidence of qualification. (**Case Studies 1 - 5**). Despite requests, the JUTC did not provide a justification for the employment of a general manager and an operations manager in its corporate office at salaries of $6.4 million and $4.3 million, respectively to unapproved positions, incurring additional cost to the entity. The employment of these officers was not subject to a competitive recruitment/selection process; there was also no signed job description outlining the actual functions and duties, as such no determination could be made as to the basis for employment; particularly in a context where the company faced decline in financial viability.

JUTC's breach of government guidelines resulted in unauthorized car rental payment totalling $1.2 million.

2.11 We found no instance where the Board was held accountable by the Ministry for breaches of Government guidelines. For example, the Board breached the Government motor vehicle guidelines when its authorized car rental payments of US$2,400 monthly effective May 20, 2016 for a car utilised by the Acting Managing Director without approval from the MoFPS. This resulted in total charges of $1.2 million for 114 calendar days. The Revised Comprehensive Motor Vehicle Policy for the Public Sector Circular # 8 (2003) requires that, except in the case of emergency, no Ministry, Department or individual shall enter into a contract for the hireage of a motor vehicle, whether through the Hire Fund Scheme, private rental agency or private individual without the specific permission of the Ministry of Finance and Planning. Further, the circular states that each hireage case will be considered on its own merit and that officers found in breach will be liable to surcharge up to the amount of any unauthorised expenditure so incurred. Of note, a similar breach was identified in a previous report of the Ministry of Transport, Works and Housing (MTWH), dated March 6, 2012, against advice of Ministry of Finance and the Public Service (MoFPS) (**Case Study 6**).

JUTC has unapproved staff capacity that cost an accumulated $1.15 billion

2.12 The MoFPS Service Circular #15 dated July 1, 2016, Revised Guidelines for the Operation of Post in the Public Sector requires that in an effort to achieve public sector efficiencies while maintaining fiscal discipline, several guidelines must be followed, one being that MDAs and Public Bodies should contain employment within their approved establishment. The Ministry of Finance approved 1,652 positions in 2014 for the JUTC, which stood at 1,691 as at July 2019. We found that JUTC did not contain employment within its approved establishment, contrary to the guidelines. We noted that 508 positions, which had not been approved by the Ministry of Finance were being operated by the JUTC, costing the entity $1.15 billion for the period April 2014 to July 2019 (**Appendix 3)**.

2.13 JUTC indicated in its Strategic Plans that an annual staff to bus ratio target of 4.5: 1 was set in accordance with an international benchmark. However, we saw no details of the nature of the specific international benchmark. Notwithstanding, JUTC exceeded the targeted staff to bus ratio of 4.5:1; and it was not evident that the JUTC leveraged these excess positions for operational gains in terms of effectiveness and efficiency given concerns related to service delivery and financial weakness. (**Table 2**).

Table 2: JUTC Actual Staff to Bus ratio FY2014/15 to FY2018/19

	FY2018/19	FY2017/18	FY2016/17	FY2015/16	FY2014/15
JUTC Staff: Bus Target Ratio	4.7	5.3	5.6	5.1	4.9

Source: JUTC Strategic Plan FY2019/2022/23

2.14 We identified that the unapproved positions included 145 staff as at July 2019, that were permanently employed in positions from as far back as 2014, while the reminder related to temporary contracts. Of note, the JUTC had 215 positions marked as vacant; 21 per cent were for drivers of articulated buses and 39 per cent attributed to conductors. These positions should have been abolished as the JUTC took a strategic decision to move to a fleet of single operator buses in 2017, thereby eliminating the need for those positions. In June 2020, JUTC indicated that as at May 2020, the number of staff in unapproved posts was 92.

2.15 The number of persons in unapproved positions has been a chronic problem from as far back as 2013, with the last internal review in 2015 revealing 477 excess posts at the time. This was reflected in the JUTC's records and correspondence between the JUTC, MTM and the MoFPS, with the most recent being January 2019 for the regularization of the unapproved posts. Notwithstanding, the condition persisted for the period reviewed with the unapproved positions increasing to over 500 by July 2019. Consequently, the MoFPS response dated January 15, 2019 and April 23, 2019 to the JUTC recommended that the regularization request be sent to Cabinet under the aegis of the parent ministry. The MoFPS scheduled a post audit on the JUTC request for July 2019, which is intended to inform the Cabinet Submission for the regularization.

Management Response

The JUTC acknowledges that the staff complement exceeds the approved establishment. This has been a long-standing issuing stemming over ten (10) years. The matter was previously discussed at a PAAC meeting in 2017, and since then the Company has been working with the unions, Ministry of Transport and Mining (MTM) and the Ministry of Finance and Public Service (MoFPS) with a view to rectifying the issues. There has been a reduction of the number of confirmed staff in unapproved posts to ninety-two (92).

Additionally, since the completion of the AGD's fieldwork the posts of Charter & Events Supervisor and Manager FPI have been approved. Further even though the post of Junior

Legal Officer is un-established; approval was granted by the MoFPS for the operations of the post.

JUTC exceeds overtime budget by $728.6 million

2.16 Overtime claims over the period averaged $197 million per annum (budgeted) and a targeted 10 per cent of total hours for the period 2014/15 to 2017/18, which was increased to 14 per cent in FY2018/19. Notwithstanding, we saw no evidence that the JUTC leveraged the unapproved excess capacity to reap operational gains especially in key positions. Consequently, the JUTC incurred overtime expenses of $1.71 billion over FY2014/15 to FY2018/19, which was 74 per cent (or $728.6 million[2]) over the budgeted amount (**Table 3**). Further, JUTC did not achieve the overtime hours percentage strategic target, which saw an annual average variance of 5.8 per cent**.**

Table 3: Actual vs Budgeted Overtime

Financial year	Budgeted Overtime Cost J$	Actual Overtime Cost J$	Variance J$
2018/19	245,771,578.97	376,338,620.03	(130,567,041.06)
2017/18	215,349,449.92	325,526,429.38	(110,176,979.46)
2016/17	189,623,456.67	333,296,065.00	(143,672,608.33)
2015/16	167,088,607.65	335,675,182.00	(168,586,574.35)
2014/15	167,710,507.46	343,311,355.00	(175,600,847.54)
Total	**985,543,600.67**	**1,714,147,651.41**	**(728,604,050.74)**

Source: AuGD compilation from JUTC Data

2.17 A review of the overtime claims for Spanish Town and Ashenheim locations for the two years 2017/18 and 2018/19, indicated that drivers and mechanics were among the top 15 highest overtime claims. Furthermore, we found these overtime claims ranged between 71 per cent to 182 per cent of employee's annual salaries while overtime hours ranged well over 1,200 hours, to a high of 2,200 hours or between 18 – 83 hours for a fortnight (**Appendix 4 & 5**). Moreover, some employees' names re-occurred over the period, which suggested a reliance on overtime by these employees. JUTC should consider whether the high overtime by drivers and mechanics could pose a risk to the health of these staff, compromising transport safety and impacting the quality of maintenance work and the reliability of the bus service.

[2] Excludes Overtime for Corporate services.

Absence of clear criteria for JUTC Voluntary Separation Exercise

2.18 The Redundancy Act Section 5 allows redundancy payment on specific grounds[3]. We found that the JUTC implemented a voluntary separation procedure, which allowed employees to be separated from the company based on medical grounds, early retirement, redundancy or "voluntary separation". However, there were no clear criteria under which "voluntary separation" would be effected. Consequently, 62 employees were granted voluntary separation from the company between March 2018 and May 2019 with severance payments calculated under the redundancy guidelines without meeting the requisite criteria. Fifty-seven of these employees were in established posts while the other five were attached to unapproved posts. The JUTC did not provide evidence that the exercise which costed $52 million was budgeted for or that it was approved by the Board, (**Appendix 6**).

2.19 The JUTC's management explained that this was an attempt to reduce staff; however, the entity has since replaced 55 of 62 established positions with officers who were confirmed without post-numbers. Notwithstanding, management continued to employ persons on temporary contracts and in positions that were unapproved, resulting in an increase in JUTC staff complement, with an additional 48 staff employed in August 2019. The failure of the JUTC to effect proper terms for voluntary separation resulted in critical staff not being protected in the context where the JUTC had consistently indicated that there was a shortage of drivers. Of note, the drivers complement was the most impacted, as 63 per cent of drivers opted to leave the entity through the "voluntary separation" procedure. Loss in the availability of qualified drivers would have presented a significant risk to the safety and undermined efforts to improve the reliability of the bus service.

[3] The specific redundancy criteria are: the employer intends to cease business in that location; the employer requires less or no work of a type to be done by the employee at all or at that location; and personal injury in the course of employment or diseases specified in the act which are deemed to be related to the job.

Part Three: Operations Management

At A Glance

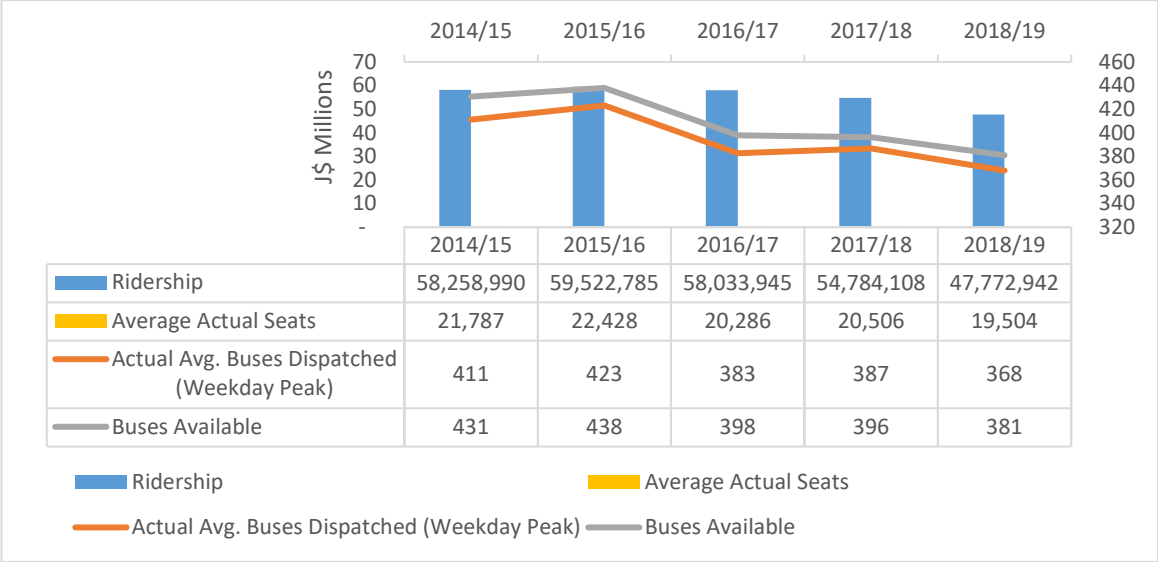
Systems and practices	Criteria	Key Findings	Assessment Against Criteria
Good Governance Practices of Board and Respective Board Sub committees	Board Approval required for cessation of route rationalization programme. Route Rationalization programme outlined in strategic plan	Route Rationalization programme discontinued without Board approval	⛔
Decision making at strategic level must be grounded in good governance practices.	Route Assessments Recommendations. Corporate Strategic plan objectives.	JUTC continued to face significant losses on routes	⛔
Sub-committee and board strategic oversight must be robust	Corporate Strategic Plan Objectives. Route and Passenger Assessments Recommendations.	JUTC carrying less passengers in all categories.	⛔
Strategic oversight by board. Efficient operational reporting to executive and board	Strategic Plans Objectives: Establishment and Monitoring of KPI's relating to Sub Franchise Holders Needs Assessment Surveys Recommendations.	No structured monitoring of JUTC Sub-Franchise Holders	⛔

✔ MET the criteria ⚠ Met the Criteria, but improvements needed ⛔ Did not meet the criteria

Operations Management Overview

3.1 The JUTC currently operates from three bus depots, Spanish Town, Portmore and Rockfort. The depots are assisted by satellite stations commonly referred to as lay-bys or hubs at Downtown, Greater Portmore and Spanish Town and the Half Way Tree Transport Centre (HWTTC). JUTC states in all the strategic plans covering the review period that the entity has a "mandate" to provide 25,000 seats per day (approximately 450 buses) to operate within the KMTR. However, both seat counts and bus availability targets have never been achieved and have been trending downward for the five-years to FY2018/19 (**Figure 1**). Notwithstanding, the JUTC reiterated its difficulty to provide the number of buses to meet this mandate, given that there has been no major purchase since FY2014/15, coupled with not having a dedicated bus lane.

Figure 1: JUTC Ridership and Buses Dispatched 2014/15 to 2018/19



	2014/15	2015/16	2016/17	2017/18	2018/19
Ridership	58,258,990	59,522,785	58,033,945	54,784,108	47,772,942
Average Actual Seats	21,787	22,428	20,286	20,506	19,504
Actual Avg. Buses Dispatched (Weekday Peak)	411	423	383	387	368
Buses Available	431	438	398	396	381

Source: JUTC KPI Data

3.2 The determination of bus routes is an internal process conducted through the Operations Logistics and Security committee, a subcommittee of the Board. Surveys of routes are conducted through the Service Planning Department to determine among other factors, passenger bus stop usage and cost-coverage of various routes. The JUTC indicated that it also undertook surveys to identify and build on areas of strength and correct weaknesses, in order to provide the optimal commuter experience after which recommendations are sent to the Board for ratification. Despite this, JUTC continued to experience challenges in identifying and maintaining the most cost-effective and profitable routes.

Route Rationalization

3.3 In an effort to streamline its operations and improve efficiency in the overall public passenger transportation industry, JUTC as a major player, conducted a route assessment exercise in FY2017/18. The JUTC identified that on some routes, the capacity of buses was not consistent with commuter demand as the presence of large buses represented an oversupply of seats; other issues such as significant levels of illegal transportation activity also exacerbated the problem. The JUTC concluded that direct provision of service be discontinued on these routes and instead sublet to private operators with smaller units. As a result of this strategy, buses operating on those routes would be reallocated to routes that would need additional capacity. Stemming from this assessment was the

recommendation to discontinue bus operations on eight routes[4] due primarily to poor cost coverage and proximity to other routes. In addition, the JUTC's Board considered route rationalization for a total 25 routes inclusive of the initial eight routes. These routes covered less than 40 per cent of total cost including corporate and administrative expenses, which were intended to be rationalized (**Appendix 7**). From this, 17 routes were to be reallocated to underserved routes, five were to be put under sub-franchise operations, and no change for the remaining three routes.

3.4 Cost coverage reports were used by the JUTC to assess revenue generation against the cost of operation, to inform decisions on the discontinuation of specific routes and the impact on commuters. We saw only two route cost coverage assessments, one prepared in March 2019 and another in FY2015/16, the year before the last route rationalization exercise was executed in 2017. The infrequency of the cost coverage report would have affected the JUTC's ability to evaluate the performance of routes on a timely basis and make decisions on viability. Consequently, JUTC could not be assured that it took sound decisions, based on accurate data and rigorous analysis.

Route Rationalization Programme discontinued without Board approval

3.5 JUTC management subsequently discontinued the route rationalization programme without the approval from the Board and no evidence of who authorised the change, although, as of March 2019, some routes that were slated to be discontinued, remained in operation. Whereas the Service-Planning department indicated that only two routes, 44B and 46B, that were recommended for discontinuation remained in the system, our examination of the revenue reports as of March 2019 indicated that routes, numbers 33, 500 and 800 were also recommended for discontinuation but remained, bringing into question, the accuracy of the route revenue reports, which continued to evaluate the passenger and revenue performance on these routes, relative to budget. The two routes 44B and 46B along with 33, 500 and 800, continued to operate with an average negative revenue variance of 65.1 per cent for the month of March 2019 and an average negative revenue variance of 73.5 per cent over the two-year period, since the recommendation to abort the rationalise programme and to sub-franchise route taxis (**Table 4**).

Management Response

The JUTC stated that the Route Rationalization was placed on hold based on the push back from the public, when 'rumours' of wide scale service withdrawal circulated. JUTC

[4] These route numbers were the 33, 42, 44B, 46B, 500, 800, 81 and 87 routes.

management conceded that discussions with the Board ought to have been more frequent and commits to ensuring that the matter is brought back to the attention of the Board. However, the decision to maintain or discontinue service levels on a particular route is significantly driven by the need for the state-run public transit company to provide service to the commuters who need it most.

Table 4: Route Revenue Variances After end of Rationalization Exercise (%)

Routes	Average Variance for FY2017/18*	Average Variance for FY2018/19	Average Variance for March 2019
46B	-75.9	-12.1	-15.8
500	-97.2	-94.7	-37.9
800	-90.8	-56.0	-73.3
44B	-89.0	-33.8	-98.7
33	Budgeted figure Not Seen	-96.6	-99.7
Total Average Variance	**-88.2**	**-58.6**	**-65.1**

Source: AuGD analysis of JUTC Data

*10-month period. Rationalization exercise discontinued in July 2017.

3.6 Notwithstanding, we saw no evidence of cost-benefit analysis regarding impact of the decision on the Company's core operations or financial position. This is in a context where the JUTC over the five-year review period continued to record reductions in ridership, declining by 18 per cent between 2014/15 and 2018/19 and 13 per cent since the route rationalization assessment initiated in June 2017. In addition, the JUTC in all five strategic plans since 2014, has stated that the use of a route rationalization was a major strategic objective to be pursued to increase operational efficiency and aid in a reversal of the Company's adverse financial position. Over the period of study, we observed adverse revenue and passenger variances averaging 13.5 per cent and 12.8 per cent respectively, worsening an already weak financial position (**Table 5**).

Table 5: Revenue and Passenger Load Variances

%	2018/19	2017/18	2016/17	2015/16	2014/15
Revenue Variance	-19.5	-24.0	-9.4	-10.4	-4.1
Passenger Variance	-18.2	-14.3	-17.1	-7.7	-6.5

Source: AuGD computation from JUTC Data

JUTC bus availability continued to decline

3.7 Faced with internal inefficiencies and strong competition from other transport operators, JUTC was persistently challenged to put adequate buses on routes to support customer

demand, consistent with its financial viability. Actual buses available for the five-year period FY2014/15 to FY2018/19 consistently averaged below budget, particularly in the last three years of the review period (**Table 6**). At the same time, a resolution of underlying weaknesses in maintenance management to reduce road calls through preventative maintenance and improve fleet reliability, will be essential to the JUTC's sustainability.

Table 6: Bus Availability Profile

	2018/19	2017/18	2016/17	2015/16	2014/15
Actual Avg. Buses Available (Weekday Peak)	381	396	398	438	431
Budgeted Buses (Weekday Peak)	424	440	464	431	406
Variance	**-43**	**-44**	**-66**	**7**	**25**

Source: JUTC KPI Data

3.8 For the period under review, the JUTC consistently stated that the main factors, which affected operational performance were defective units at the time of run-out and the absenteeism of drivers. However, the JUTC did not present data to support its claim regarding causation from the absenteeism of drivers, although our analysis indicated excess driver capacity. Further, JUTC claimed a shortage of drivers and continued its practice of recruiting on a continual basis despite exceeding the approved complement of drivers (**Table 7**). Despite the prevalence of these issues over the period, we saw no structured attempt by the JUTC to derive an effective solution to the seemingly worsening problem of bus availability, which continued to negatively impact the reliability of its fleet and the Company's financial position.

Table 7: JUTC Drivers Employed vs MoFPS Approvals for 2014/15 to 2018/19

	2018/19	2017/18	2016/17	2015/16	2014/15
Employed	996	1044	1084	1064	1096
MoFPS Approved	833	836	836	836	836
Excess	163	208	248	228	260

Source: AuGD compilation from JUTC data

JUTC transported fewer passengers in all categories, relative to target

3.9 From a positive standpoint however, JUTC's average load factor increased over the period moving from 50 to 60 per cent, though averaging below budget for the last two years of the review period (**Table 8**). For FY2015/16 and FY2016/17 actual total passenger trips would have had a marginal increase, which would have impacted the movement in load factor during these years, with subsequent declines showing a positive correlation in the

last two years of the period.[5] However, given that JUTC was unable to segment peak and off-peak data over a time band longer than a day, we were unable to ascertain the load factor performance across these time bands, which would be critical in determining true operational performance of the buses over different time periods. This would also aid in clearly explaining any movement in load factor during the period.

Table 8: JUTC Load Factor Percentage

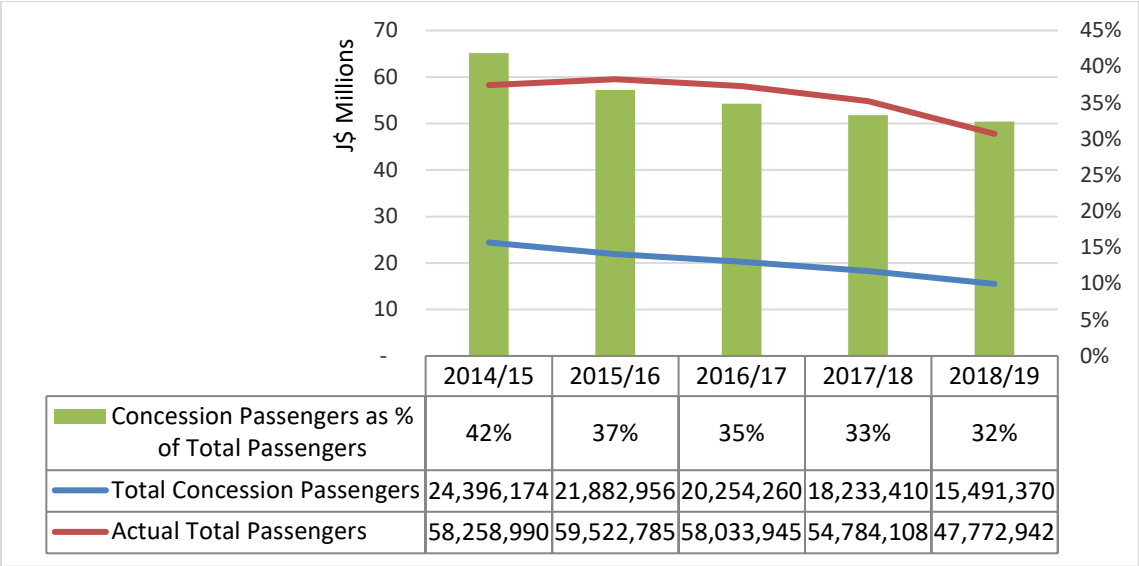
	2018/19	2017/18	2016/17	2015/16	2014/15
Actual	60	65	67	60	50
Budget	67	68	46	52	58
Variance	-7	-3	21	8	-8

Source: JUTC KPI data

3.10 JUTC also failed to meet its bus roll out targets over the five-year period of review. Concurrently, over the period, JUTC also carried fewer passengers in all categories including elderly and school children who benefitted from concessionary fares. While there would be some correlation between the number of buses and passengers, it was observed that even with fewer number of buses than targeted, some buses were rarely filled to capacity. However, we were unable to ascertain bus performance during peak and off-peak times, as the JUTC's electronic fare collection system only generated data between time bands on a given day but not for multiple days. The availability of peak and off peak data, could have also assisted JUTC in its scheduling and cash flow management decisions, particularly in a context where, based on our informal survey, other non-cost factors, such as shorter travel time due to the manoeuvrability of smaller transport vehicles through traffic also informed commuters' selection of modes of transportation.

[5] Load factor is generally used to assess how efficiently a transport provider fills seats and generates fare revenue. JUTC calculated load factor as a ratio of actual passenger trips to the product of average capacity of buses and actual total trips per depot.

Figure 2: JUTC Ridership



	2014/15	2015/16	2016/17	2017/18	2018/19
Concession Passengers as % of Total Passengers	42%	37%	35%	33%	32%
Total Concession Passengers	24,396,174	21,882,956	20,254,260	18,233,410	15,491,370
Actual Total Passengers	58,258,990	59,522,785	58,033,945	54,784,108	47,772,942

Source: AuGD's analysis of JUTC Ridership data

The JUTC lacked an effective methodology to track the operational efficiency of its fleet of buses

3.11 Although JUTC used data collected from various internal data sources, including fuel cost to track operational efficiency per depot, the methodology did not capture actual data on individual buses. Therefore, JUTC could not accurately determine operational cost per bus, which limited its ability to effectively analyse each unit and plan its operational strategies. Based on the methodology used, buses that are more efficient would technically be subsidizing less efficient units, giving a skewed representation of the efficiency of the fleet. Whereas some extrapolation was done to arrive at a figure per bus, we could not attest to the robustness of the process, given that JUTC merely used a simple average (**Table 9**). At the same time, accurate operational metrics per bus were not available for most of the fleet given the absence of installed specialized hardware and attendant software.

Table 9: Operational Cost per Bus, FY2014/15 to FY2018/19 (Extrapolated Data)

J$	2018/19	2017/18	2016/17	2015/16	2014/15
Actual Operational Cost Per Bus (Per Month)	2,195,525	1,867,430	1,679,439	1,558,783	1,323,733
Budgeted Operational Cost Per Bus (per month)	2,501,774	1,889,863	2,633,585	1,833,678	1,354,591

Source: JUTC KPI Data

3.12 We noted that JUTC acquired a fleet management software - Automated Vehicle Locator (AVL) system with one of the objectives being, the tracking and monitoring of the

operational efficiency of its fleet. The AVL system was expected to aid the JUTC to achieve efficiency through tracking of various areas including geographic location, idling and speeding. In addition, the JUTC indicated that the features of the system would aid in improving schedule creation and bus rotation as capturing data by electronic means would be an improvement over the current manual clipboard system. The JUTC indicated that the system was due for full implementation in FY2019/20; however, the project, which commenced in February 2017 was still in the pilot stage at the time of our audit, with 25 buses, representing approximately 7 per cent of the total available buses being equipped with this tracking system. This included 15 of the Chinese Golden Dragon buses acquired in 2016.

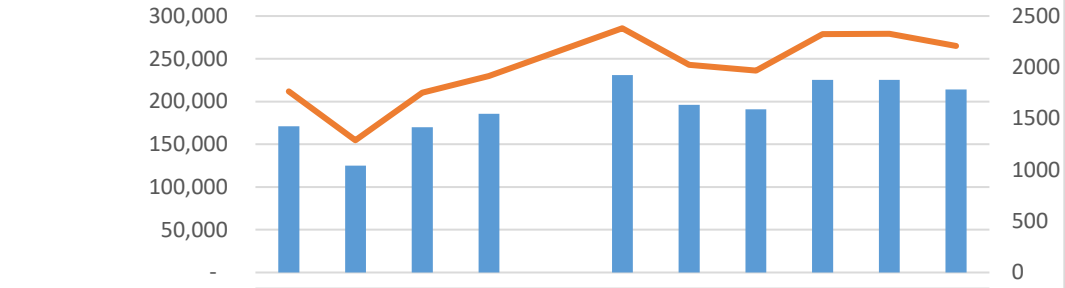
No clear success criteria for AVL Pilot Project

3.13 However, with the implementation of the pilot project, we saw no evidence of the success criteria, or the standards by which the project would be judged at its conclusion. In addition, we saw no cost-benefit analysis used by the JUTC to determine the feasibility of the project. A contract signed with the supplier ECIS, a Belgian Firm in 2016 had no specific provision for the AVL system and as such it was unclear regarding the terms of reference that guided this testing phase. In the absence of documented predetermined performance criteria, the ability to measure success at the end of the pilot would be difficult. It is critical that benchmarks be determined before commencement to minimize any uncertainty arising from subjective bias, interest and influence. The JUTC, in response to our request, informed that there were no contracts or a service level agreement in place for the AVL pilot project, as the providers were engaged for a testing phase. As it relates to the AVL project, the JUTC has paid only for the devices currently being used on the 25 buses.

3.14 Although the AVL system had the capacity to generate periodic reports with some manual intervention, the reports did not clearly indicate the actual savings that accrued from the engagement and the appropriate follow up for infractions observed. We noted that the JUTC, in a letter dated June 17, 2018 to the Ministry of Transport and Mining, requested an amount of J$129 million for the phased implementation of the system on 150 buses at the Rockfort Depot. The JUTC further stated that based on expectations at the end of year one, the entity would have gathered sufficient information and conducted the relevant analysis to demonstrate the actual impact of the technology on the efficiency of the Company's operations. However, up to the time of this audit, JUTC had not fully or partially implemented this system despite setting this target in the last three strategic plans. In addition, reports indicating the impact of the use of technology on the entity's operational efficiency were also not presented.

3.15 Notwithstanding, a report generated using data from the AVL system over the 10-month period July 2018 to May 2019 showed an increase in fuel consumed and cost (25 per cent) resulting from over-idling of buses. The JUTC used a threshold of 30 minutes for idling of buses; once that period was exceeded, the driver was deemed to have committed an infraction. The report used a sample of 10 Golden Dragon buses (**Figure 3)**. The information generated could have provided an insight into problem of reliability of buses in terms of their schedules, which was a major concern of commuters. Additionally, given the adverse impact of excessive fuel consumption on the finances of the company, we expected to see follow up action by JUTC to correct the adverse trend based on the information garnered over the period. However, no evidence of this was presented for our review.

Figure 3: Fuel usage and cost related to over idling



	Jul-18	Aug-18	Sep-18	Oct-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19
Consumed Fuel (L)	1427	1041	1416	1548	1923	1635	1590	1877	1879	1784
Fuel Cost $	211,92	154,65	210,27	229,95	285,69	242,86	236,14	278,83	279,11	265,06

Source: JUTC AVL system Data
*November data are unavailable as a result of the failure of the GDS system

3.16 We reviewed the expenditure statement for the project, which included capital outlay for equipment, maintenance, and staff cost, to ascertain whether value for money had been obtained from the two years of testing for this system. We observed where US$61,170 and €72,026.55 was spent on procurement of hardware for the AVL system between July 2016 and October 2017. These payments were made to ECIS to provide the hardware on both the Golden Dragon and Volvo buses. In addition, JUTC records indicated an annual staff costs of $7.1 million for the four operators and a manager, that comprised the AVL unit. However, we saw no evidence of a formal tendering process for this software nor the associated hardware. We could not determine that value for money was received from the expenditures.

No structured monitoring of JUTC Sub-Franchise Holders

3.17 The JUTC sub-franchised 35 routes within the KMTR; routes were sub-franchised, typically, in instances or areas where there were prevailing factors that inhibited the JUTC's direct operation. These factors may be physical, e.g. difficult terrain, or social factors, e.g. volatile communities where there had been a history of attacks on buses. The JUTC stated that the number of units allocated on each sub-franchise corridor was a function of the public transit demand that existed along that corridor, which in turn would influence allocation of buses.

3.18 JUTC indicated that monitoring of sub-franchise holders was undertaken by officers of the Franchise Protection Division, who did periodic checks to ascertain whether operators were adhering to the terms of the contract. The JUTC added that these surveys were done by the Service-Planning Department on routes operated by the sub-franchisees, on an "ad hoc" or demand basis. In a context where sub-franchise operators enabled JUTC to satisfy the demand of the commuting public in areas not served by its fleet, timely monitoring is essential to the optimal supply of seats as well as to assess the overall efficiency/effectiveness of service provided to the commuting public.

3.19 However, the absence of structured reporting on the sub-franchise operators, undermined JUTC's ability to critically assess the overall performance of all routes from the standpoint of revenue and passenger count, which could inform any future route rationalization exercise. In our examination of the Operations subcommittee minutes for the audit review period, we saw no deliberation on the operations of the sub-franchise operators with a view to strategically manage their operations to the benefit of the JUTC. Given JUTC's thrust to increase the number of sub-franchise holders, outlined in the strategic plan, we expected to see a formal monitoring mechanism for these sub-franchise operators, with clear objectives being outlined.

Part Four: Maintenance

At A Glance			
Systems and practices	**Criteria**	**Key Findings**	**Assessment Against Criteria**
Good Practice of consistent preventative maintenance activities.	Undertake PM service to 100 per cent of the fleet monthly.	Preventative Maintenance Targets not met.	⛔
Good Industry practices consistent with Fleet management policy (maintenance)	Limit of Road Calls to 10 per cent of fleet allocation	High occurrence of Unscheduled Repairs and Road Calls	⛔
Requires compliance with objectives/targets of Strategic operational plan.	Achieve at least 85% of targeted Key Performance Indicators (KPI) each month	Core Maintenance activities consistently below targets.	⛔
Effective Training Programme should be in place and consistent with relevant international benchmarks and Strategic Plan to reduce the use of external contractors.	Undertake effective Training Programmes to increase capacity of personnel	JUTC maintenance outsourcing increases over period.	⛔
Effective retention and recruitment strategy should lead to more effective recruitment and retention in the entity. Should be in sync with Strategic Plan.	Undertake and have in place an effective recruitment and retention programme in line with strategic plan and international benchmarks	JUTC does not have an effective recruitment and retention strategy for maintenance staff.	⛔
✔ MET the criteria	⚠ Met the Criteria, but improvements needed	⛔ Did not meet the criteria	

Maintenance Management Overview

4.1 The Central Maintenance Unit, located at Ashenhiem Road, is responsible for all major repairs, auto body works, servicing and scheduled preventative maintenance. The three depots perform the function of minor repairs and servicing of buses assigned to the depot. The execution of these functions should ensure the quality, efficiency, and adequacy of the JUTC buses. Central Maintenance produced a Daily Fleet Status Report, which listed the vehicles, on its compound, that were being worked on. We expected the JUTC to be guided by effective maintenance policy and procedures in keeping with best practices. Such a policy and procedure document would indicate the levels and type of maintenance (planned and unplanned) and refurbishment of units, as well as guide the timely and proper maintenance of buses. We expected the policy to enable an assurance of reliability, service life and maximum utilization of the JUTC's fleet. However, JUTC only presented us with an

undated document, outlining maintenance procedures, which was prepared by the Deputy Managing Director Engineering & Technical Services. We found no evidence that the policy was approved by the Board.

Engineering and Technical Services Targets

● The Maintenance Manager will be set the following targets and will be held accountable if and when any of the targets are not met
● Achieve at least 85 per cent of targeted Key Performance Indicators (KPI) each month
● Undertake Preventive Maintenance service to 100 per cent of the fleet monthly
● Meet daily run out target
● Have 100 per cent compliance with all service schedule such as wheel alignment, lube service, engine and radiator wash
● Evaluation of the supervisory staff every four (4) months
● Limiting daily returns/road call to 10 per cent of the fleet allocation

Source: JUTC Engineering and Technical Services Department

Preventative Maintenance Targets not attained

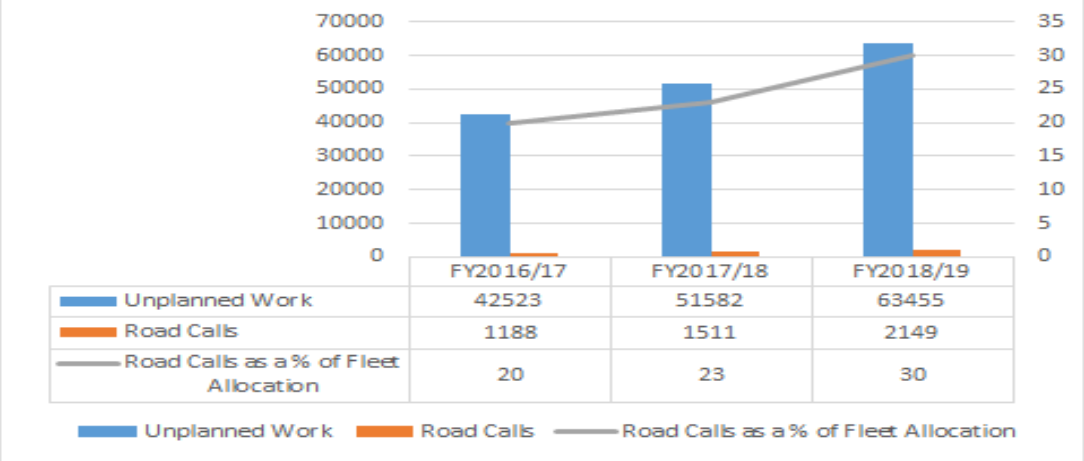
4.2 JUTC identified four categories of servicing for buses namely: A-Inspection - all buses are inspected every 28 days; B - Oil change; combination of A and B (inspection and oil change); and F - Comprehensive Service. A critical component of an effective maintenance programme is a planned service schedule; the goal being to decrease the probability of future failures and consequently, curative-maintenance needs. JUTC's maintenance department KPI was a 100 per cent attainment for planned service. However, based on limited data provided, this target was never attained, notwithstanding some improvement observed in FY2018/19, the final year of the audit period (**Appendix 8**). The absence of data for some periods, despite requests, prevented a more comprehensive assessment, including a trend analysis for the five-year study. Such analysis would also assist JUTC in designing strategies to improve the quality of maintenance for its existing fleet, in a context of GOJ's policy directive to defer any new bus acquisitions until 2021.

High occurrence of Unscheduled Repairs and Road Calls

4.3 An assessment of KPI for the maintenance department revealed that over the three-year period FY2016/17 to FY2018/19, unplanned work and road calls increased by 49.2 per cent and 80.9 per cent respectively (**Figure 4**). Of note, road calls occur when buses return to the depot because of mechanical issues during the normal course of operations. A critical measurement of maintenance performance is the frequency of road calls, which impacts directly on the number of buses available for service, thereby undermining the provision of reliable transportation services to the public. Based on the operational manual, engineering

and technical service targets limited daily road calls to 10 per cent of the fleet allocation; however, we found no correlation to the stated maintenance KPIs. In addition, road calls as a percentage of fleet allocation averaged 24 per cent over the period, moving to 30 per cent in FY2018/19 from 20 per cent in FY2016/17, indicating a worsening position. The three-year period also saw unplanned work increasing by 49.2 per cent, which indicated a positive correlation with road calls. In addition, there were no stated targets for the KPI's although road calls impacted heavily on the availability of buses where they must be taken out of service. These unplanned occurrences, adversely affected JUTC inability over the period to provide adequate buses to the commuting public.

Figure 4: Maintenance Number of Unplanned work and road calls



Source: JUTC Maintenance KPI

Core Maintenance activities were consistently below target

4.4 The execution of critical maintenance activities is also crucial in preventing incidences of mechanical fires, among the other issues affecting the buses. The JUTC indicated that in FY2015/16, a maintenance improvement initiative was introduced, whereby each maintenance supervisor was assigned responsibility for all aspects of maintenance for a fleet of vehicles. The intention was to increase the overall quality of repairs and reliability of the fleet. We found that despite this initiative, the KPI's outcomes related to the repair and servicing of vehicles remained below target for those years that data were provided. However, we were unable to ascertain a proper trend for KPI attainment for the first two years of the period as only two months of KPI outcomes were provided **(Table 10**). In a document submitted to the Ministry of Transport and Mining in July 2018, JUTC stated that inadequate servicing and poor maintenance over several years, combined with the age of the fleet, left the buses in a state of disrepair such that a significant refurbishing programme was required to sustain the budgeted run out.

Table 10: Maintenance Average KPI Percentage (Actual)

	2018/19	2017/18	2016/17	2015/16	2014/15
April	79	83	Not Provided	Not Provided	Not Provided
May	85	88	Not Provided	Not Provided	Not Provided
June	75	84	86	Not Provided	Not Provided
July	78	94	70	Not Provided	Not Provided
August	73	86	72	Not Provided	Not Provided
September	79	75	74	Not Provided	Not Provided
October	77	81	65	Not Provided	Not Provided
November	89	84	72	Not Provided	Not Provided
December	93	68	67	Not Provided	Not Provided
January	93	Not Provided	83	Not Provided	Not Provided
February	92	65	81	78	Not Provided
March	91	73	82	86	Not Provided
Average for FY	84	80	75		

Source: AuGD Analysis of JUTC data

4.5 JUTC's fire safety protocol dictates the presence and use of a fire extinguisher on all buses for fires emanating from inside the bus or engine bay. We noted from JUTC's records that in May 2019, there were three reported incidents of fire on JUTC units. Preliminary reports indicated that for two incidents, the fire emanated from the engine bay while the third was a case of arson. For two of the incidents, the fire extinguisher on each of the buses was not operational. We also noted that for both engine bay fires, fleet-wise maintenance records and the preliminary failure reports indicated that recent work was done on the buses, which included work to correct leaking oil and fuel issues. The reports stated that the findings from one incident was inconclusive but recommended several actions to be executed consistently, notably a critical point check (to include backpressure test) as part of all A, B, C & F Service and the correction of all fuel and oil leaks, among other actions.

Management Response

Ninety-five per cent of all engine bay fires affecting the JUTC's fleet are due to high back pressure and hydraulic system failure and that a maintenance exercise would not necessarily pick up issues with this system. All hydraulic high-pressure hoses have since been replaced and biweekly fire prevention checks are being conducted which should prevent the recurrence of these fires.

4.6 We observed that over the 11-month period between July 2018 and May 2019 there were an additional eight recorded incidents of fire affecting JUTC buses. Preliminary failure reports indicated that for all incidents, the fire emanated from the engine bay or other mechanical part. Of note, the preliminary failure report for three of the incidents stated that the fire extinguishers on the buses were also not operational. As a result of these fires, four buses were damaged beyond repair with an associated cost, net book value after

impairment of $45.4 million (**Table 11**). Accordingly, JUTC would not have received full value from its expenditure of $122.0 million to purchase the four buses.

Table 11: Cost of Buses significantly damaged by Fire

Acquisition Date	Fleet #	Purchase price	NBV After Impairment
March 2004	98B1130	11,514,100.00	30,000.00
August 2010	10N1688	29,203,046.61	4,873,738.12
March 2011	10N1700	30,796,798.74	7,053,417.78
May 2015	15D1997	50,490,636.26	33,403,533.32
Total J$		**122,004,581.61**	**45,360,689.22**

Source: AuGD analysis of JUTC data

4.7 Of the 11 buses that were damaged by fire, six had the B12B engines, for which earlier correspondence and reports had indicated major issues with engine design and susceptibility to fires. Despite earlier internal maintenance bulletins detailing the risks posed by these engines and the mitigating strategies to be employed, we saw limited execution of these actions by the JUTC to address this stated issue. As such, failure to implement these measures may have aided in the realization of these fires along with inadequate supervision of repairs.

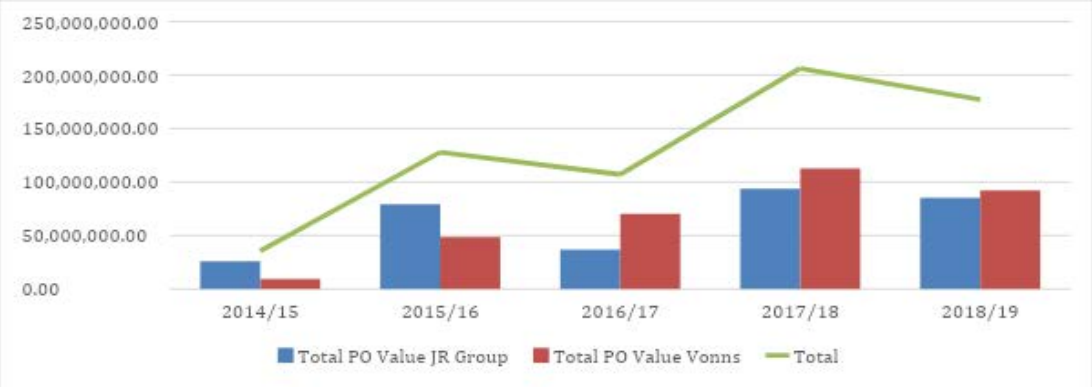
JUTC outsourcing costs for maintenance increased despite excess numbers of mechanics

4.8 Over the period of review, JUTC outsourced maintenance and repairs services to the local dealers of its main bus manufacturers, with a total cost of approximately $419 million. This indicated an increase in cost of almost 364 per cent over the period to $120.9 million in FY2018/19 from $26.1 in FY2014/15 (**Figure 5**). At the same time, we saw no structured mechanism for JUTC to assess value for money for the work done by these external entities. In addition, we requested from JUTC, the framework that guided its decisions to outsource repairs and service work; however, none was presented. In a context where JUTC employed mechanics to service and maintain its fleet of buses at each depot location and at the central maintenance facility, such a framework would be important to prevent duplicate roles and inform cost-benefit analyses to control costs.

4.9 From our review of the purchase orders, we noted that outsourced maintenance activities often included basic servicing of JUTC buses. For instance, for its fleet of Golden Dragon buses acquired in 2016, JUTC completely outsourced all repair and maintenance services to the local dealer at a total cost of $97.9 million. JUTC did not provide any cost-benefit analysis which guided such a decision, despite the inclusion of 1-year technical training provision in the contract agreement for the purchase of these buses by the overseas supplier. Further the increasing trend in outsourcing ran counter to the achievement of

value for money in the context of JUTC's maintenance improvement initiative introduced in FY2015/16, which assigned responsibility for all aspects of maintenance to each supervisor.

Figure 5: JUTC Maintenance Outsourcing (J$)



Source: AuGD analysis of JUTC Data

4.10 We found that even with this increased level of outsourcing, the JUTC was unable to provide an adequate level of buses to meet customer demand, given the increasing number of buses awaiting repairs over the period of study. The JUTC consistently stated that it did not have the capacity or resources to address certain technical issues affecting its buses. However, we found that the JUTC did not take full advantage of the capacity-building component of various contracts signed with overseas suppliers, as well courses provided by local entities, which would have provided both technical assistance, including equipment and training to JUTC personnel. These programmes, if implemented effectively, would have negated the need for the JUTC to engage in significant outsourcing for its maintenance activities. However, we found that the JUTC did not have a comprehensive training programme that enabled the Company to equip itself with the appropriate skills required to deliver quality output and improve productivity, thereby reducing maintenance costs. This deficiency obtained despite Technical Assistance Funding of €4.5 million, which should have included training and approximately $14.5 million for the implementation of a Heavy-Duty Mechanic Training Programme in conjunction with HEART.

4.11 Training records provided by the JUTC showed that 351 technicians including instructors were trained in different technical elements during the period examined. A total of 99 of these technicians remained with the entity at July 2019, yet efficiency and effectiveness of the maintenance function did not improve. Against this background, JUTC was unable to adequately demonstrate that value for money was obtained from the resources provided for the various training programmes over the period, in a context of a consistent decline in fleet availability and reliability. This also reflected a breakdown in the leadership's fiduciary

practices, to ensure that the financial resources were protected and that human resources were managed proactively and effectively to respond to the needs of the Company.

JUTC did not have an effective recruitment and retention strategy for maintenance staff

4.12 Best practice recommends that recruitment for maintenance staff should be informed by a skills-need assessment that is suitable for the fleet specification, complexity and type of preventative maintenance program undertaken by the entity. Additionally, there should also be a retention strategy that provides employees with competitive compensation, opportunities for advancement, training, and continuous development, which will equip the JUTC with skills needed for operational efficiency. Despite the size and importance of JUTC's fleet operations, its recruitment practices for mechanics did not always encourage engagement commitment. At the same time, whereas JUTC had 85 approved posts, 140 mechanics were employed in July 2019, with 39 on temporary contracts and 22 were acting in higher unapproved posts (**Table 12**). Moreover, mechanics recruited on temporary contracts, comprised mainly apprentices and lower grade mechanics for periods ranging from 6 to 12 months initially, with subsequent short-term extensions. Further, once recruited, there was no effective mechanism in place to motivate job commitment for example, through technical skills training and development to enable employee advancement.

Table 12: JUTC Employed Mechanics vs Approved at July 2019

Grade	MoFPS Approved	JUTC Current	Excess
1	43	45	**2**
2	26	29	**3**
3	15	38	**23**
Apprentice	1	28	**27**
Total	**85**	**140**	**55**

Source: AuGD analysis of JUTC data

4.13 The JUTC's management highlighted challenges related to a high attrition of mechanics, especially with the senior mechanics or Grade 1, identifying compensation as the main hindrance in engaging the mechanics with the right skills. However, our analysis revealed that in general, the tenure of Grade 1 mechanics ranged between 5-20 years, with 36 of the 45 mechanics on staff having been with the entity for over 10 years (**Table 13**). On the other hand, of the Grade 2 mechanics employed, only seven of the 28 were employed over 5 years, while 61 of 65 Grade 3 and Apprentice mechanics were all employed in the last 5 years. The statistics suggested that JUTC was not very effective in retaining the newer skills acquired through the recruitment process. Consequently, this limited the opportunity for

the transfer of skills and increased the risk of failure to retain institutional knowledge, which is an ultimate charge on the financial resources of the company.

Table 13: Tenure of Employed Mechanics (June 1, 2020)

	2018/19	2017/18	2016/17	2015/16	2014/15	1999 to 2013		Total
Tenure	**1 yr.**	**2yrs**	**3yr**	**4yr**	**5yr**	**6-10yrs**	**11-20yrs**	
Mechanic 1	1	0	0	1	2	5	36	45
Mechanic 2	4	0	2	7	8	7	0	28
Mechanic 3	15	3	5	5	7	4	0	39
Apprentice	11	1	2	9	2	1	0	26
								138

Source: AuGD analysis of JUTC Data

4.14 We noted that in seeking to address the compensation and retention issue, JUTC sought the assistance of the MoFPS in March 2015 for a reclassification of mechanics' positions, in order to stem attrition. However, the MoFPS responded that a reclassification of the positions would not solve the issue based on the justification presented by the JUTC as the matter was more than compensation. JUTC is yet to formally implement an effective retention strategy. However, we noted where, at August 2019, 22 mechanics were acting in higher positions that were unapproved, as well as high overtime claims for some staff including mechanics. For example, at least four senior mechanics at the Spanish Town location with overtime payments exceeded their salaries by 92 per cent to 182 per cent and 13 mechanics at the Ashenheim location, with overtime payments being 37 per cent to 108 per cent more than their annual salaries for the period FY2018/19. This suggested the need for a comprehensive review of emoluments including overtime payments to determine an appropriate compensation framework. This is important in a context where excessive overtime hours may be counterproductive to the quality of work and employees' health risks.

Part Five: Procurement and Inventory Management

At A Glance

Systems and practices	Criteria	Key Findings	Assessment Against Criteria
Comprehensive procurement planning based on GOJ Procurement Guidelines	Procurement plans prepared in detail incorporating needs of entities.	Procurement plans did not incorporate sufficient detail and were not used to guide the procurement process.	⛔
Use of competitive bidding as part of good procurement practice.	The use of the competitive bidding process is encouraged to promote transparency and opportunity to obtain quality goods and services at the best price.	JUTC consistently utilized the direct contracting procurement methodology to purchase fuel, its largest expenditure item, which offered the least assurance that value for money was obtained.	⛔
Best practice in the evaluation of buses before purchase.	Adequately assess buses prior to purchase using clear requirements and rigorous physical testing.	While JUTC established minimum requirements for buses, it did not have in place an effective framework to physically test prototype buses.	⛔
Effective inventory management system	Proactively track inventory levels to minimize stockouts and overstocking to limit obsolescence.	• JUTC continued to be plagued by stock out of critical items to repair and maintain buses. • 16.4 per cent of inventory valuing $178.7 million was written off as obsolete in FY2018/19.	⛔

✔ MET the criteria | ⚠ Met the Criteria, but improvements needed | ⛔ Did not meet the criteria

5.1 The procurement of goods and services is a key support function for JUTC as it provides critical resources, particularly for the daily operating and maintenance of the bus fleet. Between 2014/15 and 2018/19, JUTC procurements totalled $20.5 billion with the main areas of expenditure being fuel, spare parts, tyres and non-warranty repairs by local dealers, which together accounted for 82.4 per cent ($16.9 billion) of the total value of procurements (**Table 14**).

Table 14: Total purchase orders

	2018/19	2017/18	2016/17	2015/16	2014/15
Number of POs	1,433	1,383	1,369	1,574	1,586
PO Total (J$ million)	5,145.1	4,691.1	3,701.0	3,277.7	3,679.0

Source: AuGD Analysis of JUTC data

Absence of effective procurement planning contributed to excess downtime for buses

5.2 Procurement planning is an integral aspect of the procurement cycle as it allows the entity to proactively establish what items to procure, in what quantities and at a reasonable cost in order to meet its needs in a timely manner. This would entail the proper scheduling of the procurement process to incorporate lead times so that items would be readily available when needed. We expected JUTC to have in place a detailed procurement plan adequately informed by its strategic plans and updated to reflect changes in needs during the period. An effective procurement plan is important to JUTC's bus availability as the maintenance of its fleet is heavily reliant on having access to the necessary spare parts and equipment when needed to minimise downtime.

5.3 We found that JUTC did not produce detailed procurement plans, which outlined the necessary items, quantities and expected delivery periods as recommended by the Procurement Guidelines. JUTC acknowledged the lack of details in its procurement plans and indicated that it will endeavour to improve the procurement planning and implementation process. Consequently, JUTC did not actively use these plans to guide the procurement process. Instead, JUTC's procurement process was "ad hoc" often prompted by immediate needs. This often resulted in extended wait times for items based on availability of items and did not assure best price. With regards to the procurement of spare parts, lead times typically ranged from one month to six months, which generally curtailed the availability of buses. From an analysis of maintenance records at the end of each year, we identified that on average 16 buses were out of service for an average period of 139 days, while awaiting parts (**Table 15**).

Table 15: Buses - Days out of service

	2018/19	2017/18	2016/17	2015/16	2014/15
Total Buses	23	14	15	10	20
Avg. Days Out	139	169	122	143	122

Source: AuGD analysis of JUTC data

Management Response:

It should also be noted that the procurement of spare parts, which is done on a payment before delivery basis from the overseas manufacturer of the buses, can only be done based on available funds. Additionally, based on the age of the fleet it is very difficult to predict the possible requirement for non-service parts. Therefore, it is only when certain component or part fails that those items are procured.

JUTC did not ensure it obtained best price for fuel and breached procurement guidelines

5.4 In a context where JUTC consistently experienced financial constraints, having recorded cumulative losses of $5.8 billion for FY2014/15 to FY2016/17, we expected JUTC to have measures in place, to contain the cost of procuring its main expenditure items[6]. According to GOJ Procurement guidelines, the use of competitive bidding is recommended as the preferred procurement method as it promotes transparency and is often the best avenue for an entity to acquire goods and services at the most reasonable cost.

5.5 However, regarding its procurement of fuel, we found that JUTC consistently utilised the direct contracting methodology, which offered the least assurance that value for money was obtained and did not facilitate an environment of assured transparency, competition and fairness in the procurement process. During the review period, JUTC's procurement of fuel totalled $10.5 billion (51.5 per cent of total procurements), with an average transaction value of $22.3 million, all of which was acquired via direct contracting. We also noted that these transactions exceeded the established threshold for use of direct contracting and did not meet any of outlined exemption criteria; therefore, constituting a breach of the Procurement Guidelines.

5.6 For FY2016/17 and subsequent years, JUTC's procurement of fuel by direct contracting was done using the same supplier on each occasion, despite the existence of multiple local suppliers. In addition, we found no evidence that JUTC attempted to obtain comparable estimates from other suppliers. As a result, JUTC could not assure itself that it paid the best price for fuel during the period and that the procurement process was transparent. JUTC

[6] Financial Statements for FY2017/18 and FY2018/19 were not available.

revealed that the issues surrounding the methodology it used to procure fuel has been a longstanding problem. JUTC also indicated its awareness regarding the breach of GOJ Procurement Guidelines and sought guidance from the MTM via letter dated June 28, 2018. The JUTC indicated that its ability to pursue a competitive bidding process was constrained by the fact that the fuel facilities at its depot locations were owned by two other fuel suppliers and as such any tender process would place these suppliers at an advantage. In a letter dated May 6, 2019, JUTC sought approval from the Public Procurement Commission to continue its current arrangement of procuring fuel from the same supplier using direct contracting. However, JUTC was informed that sufficient evidence was not provided to sanction such approval. At the time of this report, the matter was still being deliberated.

JUTC did not conduct adequate due diligence prior to purchasing buses to enable value for money

5.7 Buses are at the core of JUTC's operations, as they enable JUTC to fulfil its mandate of transporting passengers within the KMTR. Over the years, JUTC has acquired buses to increase the size and capabilities of its fleet, as well as to replace existing rolling stock. The procurement of buses was jointly undertaken by the JUTC and GOJ (via MTM), with JUTC identifying the supplier and models of the buses to be procured while the GOJ finances the purchases on the company's behalf. Between 2014/15 and 2018/19, JUTC acquired 161 new buses via two separate contracts between GOJ and bus suppliers (**Table 16**). Given the operational implications and significant financial outlay associated with the procurement of buses, JUTC would be expected to exercise the appropriate due diligence in its selection of buses to ensure that they are fit for purpose and able to withstand the rigours of its operations, so that value for money can be achieved.

Table 16: JUTC Bus acquisitions: FY2014/15 – FY2018/19

	2018/19	2017/18	2016/17	2015/16	2014/15
VDL/Volvo	-	-	-	27	93
Golden Dragon	-	1	37	1	1
Yutong	-	-	-	1	-

Source: JUTC fleet status

5.8 Best practice would recommend that JUTC have a framework that clearly outlines the minimum specifications that different bus types should meet, in order to be considered for purchase. In addition, we expected JUTC to have in place, standardised evaluation procedures for the physical testing of prototype buses, in line with international standards. These would include clear objectives with adequate coverage of the areas to be assessed, as well as appropriate performance criteria. The acquisition of buses that are correctly specified and have been adequately physically evaluated would be able to operate

optimally within the KMTR with minimal unscheduled downtime due to defects, thereby allowing JUTC to be better able to maintain its bus availability and meet customers' needs for reliability.

5.9 We found that JUTC did not have an effective mechanism to assess the overall suitability of buses for its operations prior to selection for procurement. JUTC had in place minimum specifications for three bus types; a city bus, premium bus and hill route bus and indicated that in its development of these specifications, it considered local factors such as road conditions, load carrying as well as, the driving habits of its operators, among others. However, we identified weaknesses in the physical evaluation process of prototype buses. JUTC did not have in place a standardised process and the evaluations had no clear benchmark to measure satisfactory performance in each area assessed. We were only able to review evaluation reports for two of four prototypes tested during the period as JUTC failed to make available the other reports despite our requests. Our review of the two reports further revealed a lack of rigour and detail in the assessment of the prototype buses when compared to international benchmarks. For example, we observed that data collected during the test period were either incomplete or missing and, in some instances, we found inconsistencies with results stated in the evaluation reports relative to the support documents.

5.10 The shortcomings in JUTC's evaluation process would have led to the recommendation of buses that were unsuitable for its operations. One such case was the 2016 procurement of 35 Golden Dragon buses which were specifically acquired to service the hilly routes of St. Andrew. JUTC records indicated that the specifications for these buses were found to be in line with JUTC's minimum requirements and a prototype was acquired and tested during 2015. However, an assessment of JUTC's monthly Engineering and Technical Services reports on the other hand revealed that the Golden Dragon buses were beset with defects, within 3 months of their arrival in August 2016. In a March 2017 letter to the local dealer, JUTC indicated that the entire Golden Dragon fleet had to be grounded to repair a major steering defect. These defects would have reduced JUTC's bus availability and therefore limiting its ability to adequately service its routes. We were unable to confirm how JUTC had assured itself of the reliability of the prototype as details of the evaluation report were not provided for review. JUTC also indicated that an engineer's report was done on the prototype bus, but this report was not made available, despite request. Hence, we could not confirm the basis by which JUTC determined that the particular bus model performed satisfactorily and was suitable for purchase for its operations. Additionally, JUTC did not provide for review, individual bus maintenance reports to enable meaningful analysis regarding downtime for the buses in question.

5.11 In a letter dated April 25, 2019 to the MTM, JUTC indicated that the Golden Dragon buses were not suitable for the hilly terrain and would have to be replaced within a year. This raised questions regarding JUTC's prior recommendation that the bus was suitable for its operations following the evaluation of the prototype. There was further failure by JUTC to recognize the unsuitability of the buses when the Managing Director and the Deputy Managing Director for Engineering & Technical Services visited the manufacturing plant in China during July 2016 for the sole purpose of inspecting the buses for quality and adherence to stated specifications. However, the subsequent report concluded that "there were no major concerns and with proper maintenance there was no reason why the units should not perform well".

5.12 We identified that JUTC would have spent in excess of US$581,000 above the contract value for these buses as the dealer made recommendations for supplementary features to be fitted subsequent to the contract agreement, which were intended to further improve the performance of the new buses on the hilly routes relative to the prototype. In addition, JUTC would have expended $97.9 million during the review period to have the buses exclusively serviced and maintained by the local dealer. This was in a context where JUTC had mechanics in excess of the approved capacity and the opportunity was received to get one year of technical training for this type of bus. Given that bus manufacturers indicated that the useful life of passenger buses typically ranged from 10-15 years, the premature retirement of these buses would signal that JUTC did not receive value for money for these buses. This further, raises questions regarding the adequacy of fiduciary oversight of the affairs of the company to protect its limited financial resources.

Poor monitoring and management of inventory undermined accountability and heightened the risk of stock outs, obsolescence, as well as other material and financial losses

5.13 JUTC's inventory management process was managed by the Central Stores Department, situated at the Spanish Town location, as well as individual stores at each depot location. According to internal reports, JUTC total inventory in stores as at March 2019 stood at $1.1 billion, up from $0.9 billion at end FY2016/17 (**Table 17**)[7]. We observed that bus spares accounted for 96 per cent of the total stock of inventory each year.

[7] Inventory presented does not include fuel.

Table 17: JUTC Inventory: FY2014/15 to FY2018/19 (J$ Million)

	FY2018/19	FY2017/18	FY2016/17	FY2015/16	FY2014/15
Oil & Lubricant	8.7	4.0	4.4	Not Seen	Not Seen
Bus Spares	1,040.8	930.2	867.6	Not Seen	Not Seen
Tyres	3.5	3.2	3.0	Not Seen	Not Seen
Others	36.6	27.4	29.0	Not Seen	Not Seen
Total Inventory	1,089.6	964.8	904.0		

Source: JUTC Inventory Records

5.14 JUTC's Central Stores is solely responsible for the receipt and warehousing, where applicable, of all spare parts and equipment and distributes to individual depot stores on request. Given the heavy reliance on the availability of spare parts to effect repairs and maintenance of the fleet, it was expected that JUTC would have in place an inventory management system that facilitated the timely and accurate tracking of inventory levels in order to minimise inventory stock outs as well as overstocking, which can lead to obsolescence. Such a system should incorporate the use of inventory reorder levels to prompt requisition of items. The tracking of inventory movements throughout its supply chain from supplier to end user/bus would also engender greater transparency and accountability while also mitigating against pilferage and other adverse issues.

High Incidence of Stockouts

5.15 Although JUTC operated an electronic inventory management system, Sage Accpac, which facilitated the ability to log and track the full list of inventory items from receipt of shipment at the Central Stores to issuance of items from individual depot stores, JUTC did not fully utilise this software to proactively track inventory levels and generate orders to prevent stock out of critical items. Accordingly, JUTC would not have been assured of the full receipt of value for money as we observed over the review period, since its primary method of monitoring inventory activity was limited to the ad hoc preparation of "Not Available (N/A)" reports. These reports represented a collation of inventory items requested by the Engineering and Technical Services department to effect repairs and maintenance of buses, which were out of stock. These reports, which also served as the primary catalyst for spare parts ordering, were manually prepared at all levels, requiring several days for completion which extended the time needed to order spare parts. At the same time, this methodology did not provide proactive monitoring of inventory nor did it mitigate against inventory stock outs as items were only flagged upon request, while stocks were zeroed.

5.16 In April 2018, JUTC adopted a system of "Bi-Weekly Spare Parts Ordering", to supplement the use of 'NA' reports and "prevent stock out of critical fast-moving parts or overstocking". However, this system was primarily a manual process similar to that of the NA reports,

categorizing inventory items as Fast-moving, Medium-moving, and Slow-moving, based on monthly issues whereby Fast and Medium moving items "should never be out of stock". However, our assessment of a sample of Bi-weekly tracking reports revealed that JUTC was continually plagued by frequent stock outs of inventory items. For example, January 2019 records showed that 250 of the 366 items categorized as either Fast or Medium moving, were out of stock. Furthermore, we found that Bi-weekly tracking was not carried out at the prescribed frequency. This compromised the intended effectiveness of the system and indicated that JUTC would have failed to maximise the potential of the system, to obtain full value for money. It also demonstrated the absence of proper quality assurance, internal controls and systems of accountability, and we found no evidence of sanctions to raise standards. JUTC indicated that it will seek to engage the software provider for its inventory management system to facilitate staff training that is geared towards better utilization of the system.

Costly Obsolete Stocks

5.17 An assessment of JUTC inventory reports revealed that at end FY2018/19, spare parts valued at $178.7 million were classified as obsolete, representing 16.4 per cent of total inventory value. This value represented a 9.9 per cent increase relative to the provision for obsolete parts in FY2016/17. This followed the completion of an inventory verification exercise in November 2018, that began in May 2016 but was beset by delays. This exercise assessed a list of provisional obsolete parts as well as slow moving stock procured over the years. The high level of obsolescence is essentially a charge against the financial viability of the company as it represented loss of resources that could be in other areas of the company's operations to enhance service delivery. JUTC noted that the conversion of its fleet from Mercedes Benz would have contributed to the level of obsolete parts in inventory as no provision was made for the disposal of the stock of spare parts relating to those buses. While highlighting that the management of obsolete parts has been a long-standing issue, JUTC pledged to redouble its efforts at addressing this issue.

JUTC inventory management system was inefficient in logging and tracking purchase of parts

5.18 We found that JUTC did not consistently monitor the movement of inventory items to ensure all items procured were received and properly logged by the inventory management system. According to JUTC Stores Procedure, upon receipt of each shipment, items are to be verified and logged in the inventory management system before warehousing, using information from the associated purchase orders. We assessed purchase orders for shipments containing spare parts and other equipment procured by JUTC from its main supplier's over the period FY2014/15 to FY2018/19, in an attempt to track the movement

of inventory items throughout the entity, from receipt to end user. We were unable to identify from the inventory management system, items relating to 47 purchase orders totalling $422.6 million that were received by the Central Stores **(Table 18)**. JUTC subsequently provided documentation confirming that items relating to all purchase orders, except for one, was received but not all were included in the inventory management system; thus, highlighting deficiency in the system's logging of record. The failure of inventory system to capture all purchases heightened the risk of stockouts, non-detection of pilferages, as well as compromised accountability and the accuracy of Company's records.

Table 18: Unrecorded spare parts shipments by supplier – FY2014/15 to FY2018/19

Supplier/ Dealer	2018/19	2017/18	2016/17	2015/16	2014/15
VDL (J$)	2,153,493.1	21,474,323.4	23,172,378.3	149,730,125.5	162,047,170.5
Volvo (J$)	-	-	-	-	20,112,177.0
Von's (J$)	30,700,359.3	264,524.9	1,346,984.7	693,197.0	93,200.0
ZF (J$)	-	-	10,874,610.7		
Total (J$)	**32,853,852.4**	**21,738,848.3**	**35,393,973.7**	**150,423,322.5**	**182,252,547.5**

Source: AUGD analysis of JUTC Data

5.19 We found that the required information to link items to the associated purchase orders for 16 of the 47 purchase orders totalling $223.4 million were omitted, which affected our ability to track inventory movements of items (**Table 19**). JUTC acknowledged that the inability of current inventory management system to allow the logging of all purchase orders associated with the inventory items received, contributed to this issue. We noted that items relating to the remaining 31 purchase orders totalling $199.2 million were intentionally excluded from the inventory tracking system by JUTC. As a result, we were unable to determine whether these items were used in the maintenance and repairs of the company's fleet or other operational activities as there was no way to track the movement through the company.

Table 19: Verified shipments by item type – FY2014/15 to FY2018/19

	FY2018/19	FY2017/18	FY2016/17	FY2015/16	FY2014/15
Inventory	31,458,012.29	21,349,921.42	20,454,401.65	119,487,024.18	30,667,402.36
Non-Inventory	-	-	13,444,200.00	30,243,101.35	143,285,701.92
Tools	-	32140.80	148387.3	-	8192291.22
Direct Charge	1,395,840.09	356,786.05	1,289,666.65	693,197.00	93,200.00
Unaccounted	-	-	-	-	13,952.08

Source: AuGD Analysis of JUTC Data

JUTC unable to reconcile fuel inventory

5.20 Fuel is JUTC's single largest expenditure with the valuing $2.5 billion for FY2018/19 up from $1.5 billion in FY2014/15. Given the sizeable level of expenditure and the importance of fuel to JUTC's operations, we expected significant focus on ensuring the accuracy and proper management of the fuel inventory to ensure that costs are minimized. However, we found that JUTC's management of its fuel inventory during the period was manual and largely paper based. We observed that JUTC had in place an electronic system, known as Petro Vend, which was intended to automatically record and monitor the fuel inventory. However, this system has been in a state of disrepair and was not in use during the review period. JUTC revealed that the Petro Vend system has been malfunctioning for years, despite its best efforts to have the owners of the equipment effect the necessary repairs. However, we found no evidence that JUTC sought to fix the existing system or implement a new electronic monitoring system. JUTC's reliance on a manual system, impaired its ability to accurately record and monitor fuel levels on a consistent basis, which heightened the risk of misappropriation and possible fraud.

5.21 We reviewed JUTC's fuel reconciliation records for the period FY2014/15 to FY2018/19 and found significant variations in fuel inventory levels across all depot locations. Based on information from the reports, we noted a net accumulated shortage of 231,222.3 litres of fuel, valued at approximately $36.5 million (**Table 20**). Fuel shortage for FY2018/19 was 102,906.4 litres when compared to an average of 7,303.5 litres for FY2015/16. We found that shortages at the Portmore depot accounted for approximately 55 per cent of the net accumulated shortage and JUTC failed to properly account for the fuel variations recorded in its reconciliation reports. In some instances, JUTC indicated that variances were attributable to spillages and malfunctioning equipment at various depot locations; however, the amounts lost were not calculated.

5.22 In most cases, no explanations were provided in the reports to justify the recorded variance, which was of great concern owing to the lack of transparency. JUTC confirmed difficulties with managing the manual system and noted that the process has been plagued with high volumes of theft for over a decade. We noted that JUTC has managed to prevent some instances of theft, but the entity noted that the problem persists. JUTC indicated that it continues implement strategies to monitor, mitigate, and track the theft of fuel while simultaneously implementing stronger accountability measures. However, JUTC did not articulate the nature of these measures.

Table 20: JUTC Fuel Variances - FY2014/15 to FY2018/19 (litres)

Depot	2018/19	2017/18	2016/17	2015/16	2014/15
Spanish Town	-34,393.8	-26,887.4	-16,690.2	-16,478.6	11,364.5
Rockfort	-31,626.2	-21,957.7	-10,081.8	20,158.6	23,337.4
Portmore	-36,886.4	-27,725.7	-25,954.2	-10,983.5	-26,417.3
Total	**-102,906.4**	**-76,570.8**	**-52,726.2**	**-7,303.5**	**8,284.6**

Source: AuGD analysis of JUTC Data

Case Studies

Case Study 1: Employment as Stores Clerk, promotion to Fuel Control Officer and Acting Manager, Depot Operations

Table Showing Movement in Salary for Stores Clerk to Acting Depot Manager

Date	Position	Annual Salary and Allowance	Percentage Change (%)
April 2018	Stores Clerk	568,256.00	
June 2018	Fuel Control Officer	2,295,347.25	(2,295,347.25 - 568,256)/568,256 =**304%**
November 2018	Fuel Control Officer	2,371,147.25	(2,371,147.25 - 568,256/568,256 **=317%**
May 6, 2019	Acting Depot Operations Manager	3,878,826.99	(3,878,826.99 - 568,256)/568,256 **=583%**

JUTC engaged a Stores Clerk on a 6-month contract from April 9 to September 9, 2018 at a salary of $568,256 per annum. Approximately two months into the contract, the Clerk was promoted to the position of Fuel Control Officer. The promotion took effect June 18 - September 8, 2018 at a basic salary of $1,823,375.25 and motor vehicle allowance $471,972.00, an increase of 304 per cent. The employee's temporary contract was extended for another 4 months from November 1, 2018 to February 28, 2019. He was also selected for cross-training selection during the same period as Manager; Spanish Town Depot from November 26, 2018 to February 25, 2019. During this he was paid a basic salary $1,828,375.25 and motor vehicle allowance $542,772.00. The employee received a second unsatisfactory performance evaluation in the position of Fuel Officer with an overall score of 2.5/5 for the period September 26 to December 31, 2018 but was allowed to continue cross-training.

On January 14, 2019, the employee was reassigned to the Portmore Depot to continue cross-training in the post of Depot Operations Manager from January 15, 2019 to February 27, 2019 with a further extension to March 1, 2019. He was subsequently promoted to act (letter dated May 6, 2019) in the post of Depot Operations Manager at Downtown Office from May 7, 2019 until further orders at a salary of $2,983,903 and motor vehicle allowance of $894,924. He was given an overall increase in salary more than 583 per cent with a performance assessment overall score of 3.18 for period January 2019 - April 30, 2019 by General Manager, which was signed off on May 5, 2019. The employee was appointed to Fuel Control Officer effective May 1, 2019 at a

salary $1,976,464 with a motor vehicle allowance of $597,048 and laundry of $22,548 signed by DMD HR on June 7, 2019 while continuing to act as Depot Operations Manager.

JUTC Job description Minimum Qualification Requirement; Depot Operations Manager Revised February 2014

- Bachelor's Degree in Management Studies or Industrial Engineer or other relevant discipline and
- 5 years' experience as a Dispatcher.

JUTC Job description Minimum Qualification Requirement, Fuel Control Officer Revised June 2018

- Bachelor's Degree in Business Management or a relevant combination of professional certification, academic qualifications and extensive experience in logistics operations, supply chain management
- At least Two (2) years' experience in a similar position

Qualification/Experience on record:

- Dec 15, 2017 UCC Certificate in Business Processing Outsourcing Certificate
- Dec 15, 2017 UCC Certificate Youth Leadership Development and Public Speaking.
- 1994 CXC Certificate 6 subject at grade III Accounts, Geography and (2011 Principles of Business, IT, English & Mathematics).

HRA Issues:

- Officer did not meet minimum qualification as per job description.
- No evidence of position being/ advertised internally/externally
- Officers promoted resulting in approximate increase by 583% on salary despite unsatisfactory performance evaluation

Case # 2: Employment of Depot Operations Manager, promoted to General Manager, HWTTC

Table Showing Movement in Salary for Depot Operations Manager to General Manager

Date	Position	Annual Salary and Allowance	Percentage Change (%)
July 2017	Depot Operations Manager	3,386,421.00	
November 1, 2018	General Manager	5,538,476.39	(5,538,476.39 - 3,386,421)/3,386,421 **=64%**

JUTC engaged a Manager, Depot Operations and later promoted the employee to General Manager; however, we saw no evidence of the employee's qualification on record. The employee was offered a salary of $2,678,933 and motor vehicle allowance of $707,488 on July 3, 2017. Two months after initial employment (July 3, 2017) the employee was given additional oversight responsibility for the entity's Half Way Tree Transport Centre location from September 27, 2017 to October 13, 2017 and an additional 15 per cent on his salary. The employee was later selected for cross-training in keeping with the company's succession planning mandate in April 3, 2018 and by May 2018 was afforded acting as General Manager at the company's Rockfort location at a salary of $3,995,612.39 and motor car allowance of $1,542,864.00. The officer was subsequently appointed General Manager effective November 1, 2018 based on a performance evaluation that was considered satisfactory at 3/5.

JUTC Job description Minimum Qualification Requirement; Depot Operations Manager Revised February 2014

- Bachelor's Degree in Management Studies or Industrial Engineer or other relevant discipline and
- 5 years' experience as a Dispatcher.

JUTC Job description Minimum Qualification Requirement, Manager HWTTC Revised May 2013

- B.Sc. Degree in Industrial Engineering, Operations Management, or equivalent qualification.
- Ten (10) years' experience as a manager in operations management of which at least five (5) years should have overseen a business unit or major cost centre.

Qualification/Experience on Record: None Presented

HRA Issues:

- No evidence of recruitment process i.e., Advertisement of position, interview/selection process
- No evidence of qualification
- There was no evidence of an approved cross training policy outlining basis for selection.

Case Study 3: Employment of Operations Manager/AVL Manager

JUTC engaged an Operations Manager/AVL Manager for the corporate office on secondment from a primary school outside the corporate. The employee was awarded a one-year contract dated April 30, 2018, which was signed by the JUTC's Managing Director. The contract period was May 1, 2018 to April 30, 2019, with a salary of $3,222,593.79 p.a. and motor vehicle allowance of $707,448.00 ($4.3 million). JUTC subsequently renewed the employee's contract for 3 years on

June 7, 2019 for period May 1, 2019 to April 30, 2020 at basic salary $3,450,390.43 and motor vehicle allowance of full upkeep $894,924.00 signed by Managing Director.

HRA Issues:

- No evidence of position being/ advertised internally/externally, or interview conducted
- Unapproved position and salary
- There was no evidence of the standard recruitment process to ensure transparency
- There was no evidence of signature on an equivalent job description as part of the contract, outlining the details and functions of the position and as such, we could not determine whether or not there was a clear understanding of the functions to be performed or justification for employment.
- Qualification requirements could not be verified.

Case Study 4: Employment: Deputy Managing Director to Engineering and Technical Service

The Position of Deputy Managing Director Engineering and Technical Services became vacant due to non-renewal of the contract of the incumbent who served form October 2012-June 2016. JUTC subsequently engaged to the position, an independent contractor who had a 3-month contract and who was previously employed to JUTC from 2010-2013. The contractor was employed on a 3-year Fixed Term Contract commencing September 1, 2016 at a basic salary of $5,372,583 and a fixed motor vehicle allowance of $1,341,624.00.

JUTC records showed that the officer (contractor) was previously an Assistant VP Engineering for October 10, 2010 – October 9, 2013. Contract Terminated October 2011. The officer had filed claim against the JUTC for $6.2 million for premature termination of contract. The Officer was awarded $3.75 million based on negotiation with the JUTC.

The officer was re-employed to the company as Fleet Quality Assurance Specialist at March 1, 2014-April 30, 2017 during the negotiations and served for approximately 10 months before resigning in effective April 22, 2015. He served as temporary contractor on 3 months renewable contracts between October 1, 2015 – July 2016 before awarding the 3-year contract of employment commencing August 1, 2016 current position as DMD Engineering.

JUTC Job description Minimum Qualification Requirement, Revised May 2018

- Bachelor's Degree in Mechanical Engineering or equivalent qualification from a recognised institution.
- Five (5) years' experience as a senior manager directing the mechanical engineering maintenance programme of a large fleet of heavy equipment.

Qualification/Experience on Record:

- Sherwin Williams Special Training for JUTC July 14-16, 2003

HRA Issues:

- Officer did not meet minimum qualification as per job description.
- No evidence of position being advertised internally/externally
- Officer was awarded $3.75 million based on negotiation with previous MD that did not demonstrate that the government interest was protected.

Case Study 5: Employment - Deputy Managing Director, Human Resource and Administration

- According to JUTC records, the position of Deputy MD HRA, became vacant in 2008 with the sudden separation of the then VP HR and Administration. The officer was who held the position of Human Resource Manager for six years (2008-2014) and who had been providing oversight of the Human Resources Department was awarded the position due to satisfactory performance.

- The contract for Human Resource Manager ran for April 2014-March 2017; thereafter the officer was promoted to DMD Human Resource and Administration at a salary $4,876,614.37, and traveling of $111,802 p/m.

JUTC Job description Minimum Qualification Requirement, Revised April 2018

- Post Graduate degree in Human Resource Management
- Ten (10) years' experience in personnel and employee relations, five (5) of which should be at the senior management

Qualification/Experience on record:

1996- HEART Certificate; Supervisory Management (36 Hrs)
1997 - IMP Certificate Introduction to Personnel Management
2000 – Franklin Covey, Time Management Workshop
2001 – University of New Orleans, Certificate Leadership, Motivation and Organisation Change (24 hrs)
2011 – Make Your Mark Consultant, Certificate How to Communicate Strategic Decision to Employee
2012 – Make Your Mark Consultant, Middle Managers Development Program (April 19-20, 2012)
2016 – Jamaica Theological Seminary; Certificate Coaching & Feedback Workshop

HRA Issues:

- Officer did not meet minimum qualification as per job description.

- No evidence of position being*/ advertised internally/externally, or interview conducted for promotion to the position of Human Resource Manager 2014 and further DMD Human Resource in 2017.
- No evidence of POC approval for filing the position or MoFPS non-objection to contract.

Case Study 6: Breach of Government Guidelines Unauthorised Car Rental Payment for $1.2M

The JUTC Board, in filling the position of managing director, following the resignation of the previous MD on May 11, 2016, assigned a then Board Director to act as managing director from May 12, 2016 pending the completion of the recruitment process. In response to a letter dated May 18, 2016 from Board Chairman regarding compensation of Director during his acting assignment, Ministry of Finance on June 16, 2016 granted approval for travelling allowance of $50,532 p/m.

However, the JUTC's Finance Committee Meeting of the Board dated June 21, 2016 approved car rental charges in respect of the acting Managing Director, for the period May 20, 2016 to September 30, 2016 at a cost of US$2,400 monthly, which was recorded in the Minutes of 154th Board Meeting June 30, 2016, due to the excessive amount with justification to purchase of new motor vehicle for the managing director.

The Revised Comprehensive Motor Vehicle Policy for the Public Sector Circular # 8 (2003) requires that, except in the case of emergency, no Ministry, Department or individual shall enter into a contract for the hireage of a motor vehicle, whether through the Hire Fund Scheme, private rental agency or private individual without the specific permission of the Ministry of Finance and Planning. Further, the circular states that each hireage case will be considered on its own merit and that officers found in breach will be liable to surcharge up to the amount of any unauthorised expenditure so incurred. Additionally, the approval of the Financial Secretary must be obtained and a report of the circumstances for the emergency rental submitted within five days of the vehicle being rented.

The JUTC incurred the car rental charges of $1.2 million for the 114 calendar days, which was not authorized by the Ministry of Finance. The action was also a repeated breach following a previous report done by the MTWH in March 2012, which showed similar unauthorized car rental charges of $472,584.98 for 55 days. This breach went unsanctioned and was even against advice of MoFPS pertaining to the same matter.

Appendices

Appendix 1: Sample of JUTC Recruitment and Promotion of Senior Managers for 2014/15-2018/19 Advertisement or interview of Candidate not evident

	Position	Employee	Date of Engagement/Contract	Type of Engagement	Internal/External Advertisement	Interview/ Selection
1.	Deputy Managing Director Engineering and Technical Services	Employee# 1	September 1, 2016	Hire	None Seen	None presented
2.	Managing Director	Employee# 2	July 1, 2016	Hire Article 110	None Seen	None Presented
3.	Deputy Managing Director Human Resource	Employee# 3	April 1, 2017	Promotion	None seen	None presented
4.	General Manager Depot Operations HWTTC	Employee# 4	July 3, 2017	Hire	None seen	None presented
5.	Fuel Control Officer/Depot Operations Manager	Employee# 5	June 18th, 2018	Hire	None Seen	None presented
6.	Procurement Manager/Fuel Control Officer	Employee # 6	March 5, 2018 & May 6, 2019(Temp)	Hire	None Seen	None presented
7.	Manager Special Projects	Employee# 7	Sept.3, 17, 2017	Hire	None Seen	Presented- Did not include HRD
8.	Operations Manager (Unapproved Post)	Employee# 8	May 1, 2018	Hire	None Seen	None presented
9.	General Manager (Unapproved)	Employee# 9	April 2019-July 2019	Hire (Temp)	None Seen	None presented
10.	Security Manager	Employee# 10	May 1, 2019	Hire	Seen	**

** Interview documents presented officer was not a candidate

Appendix 2: JUTC Managers not meeting Minimum Qualification as per Job Description

	Position-Employee	Minimum Education Requirement as per Job description	Candidates Qualification seen Personal File	Remark
1	Managing Director;	▪ Post Graduate Degree in Management/ Industrial Engineering or equivalent qualifications from a recognised tertiary institution. ▪ Qualification in Transport Management would be an asset. ▪ General management of enterprise with revenue of over 3 billion dollars. ▪ Ten (10) years post-qualification experience at the senior management level.	High School Diploma	Owner and Manager of Private Auto Service Centre Previously served as MD 2009-2012.
2	DMD Engineering and Technical Services	▪ Bachelor's Degree in Mechanical Engineering or equivalent qualification from recognised institution. ▪ Five (5) years' experience as a senior manager directing the mechanical engineering maintenance programme of a large fleet of heavy equipment	None seen; Acceptance to UTECH for Diploma in Engineering; no evidence of completion	▪ Worked at JUTC in various management positions; Last of which was Ass. VP 2009-2012. Terminated. ▪ Owner of Motor vehicle transportation and service business.
3	DMD Human Resource and Administration	▪ Post Graduate diploma in Human resource, ▪ (10) Years' experience in personnel and employee relations, five (5) of which should be at the senior management level.	Certificate; Intro to Personnel Management, IMP, 2001 Certificate: Leadership Motivation and Organisational Change, and several professional development certificates.	Employed since 2002 as recruitment officer
4	Security Manager;	▪ First Degree in Management Studies or equivalent qualification, ▪ At least five (5) years Military /Police/Security training	Sixth Standard	Retired Assistant Senior Police Officer

5	General Manager; Half Way Tree Transport Centre;	▪ B.Sc. Degree in Industrial Engineering, Operations Management or equivalent qualification. ▪ Ten (10) years' experience as a manager in operations management of which at least five (5) years should have been in charge of a business unit or major cost Centre.	None seen	
6	Fuel Control Officer; Depot Operations Manager	▪ Bachelor is Degree in Business Management or a relevant combination of professional certification, academic qualifications and extensive experience in logistics operations, supply chain management. ▪ At least Two (2) years' experience in a similar position	▪ Business Processing Outsourcing Certificate 15th December 2017 UCC, ▪ Youth Leadership Development 2017, and Public Speaking.	

Appendix 3: JUTC Breakdown of Approved Staff against Staff Employed and related costs for April 2014 – July 2019

Post	Total Employed in Post as per Staff List	MoFPS Established	Unapproved as per Staff List	Related Cost as per Finance ($)
Accident Investigator	7	3	4	$ 39,112,609.07
Accounting Clerk I	7	6	1	$ 2,872,994.80
Accounting Manager	4	3	1	$ 2,032,210.17
Administrative Asst 2	7	5	2	$ 2,587,255.48
Analyst Roster & Statistics	3	2	1	$ 8,687,484.65
Apprentice Mechanic	28	1	27	$ 43,709,330.72
Auto Electrician 2	3	2	1	$ 1,660,772.97
Auto Mechanic I	45	43	2	$ 6,851,316.14
Auto Mechanic 2	29	26	3	$ 4,865,112.07
Auto Mechanic 3	38	15	23	$ 26,751,276.06
AVL Operator	4	1	3	$ 4,843,438.43
Bus Cleaner	146	84	62	$ 51,654,712.84
Bus Cleaning Supervisor	6	4	2	$ 3,440,417.93
Call Centre Operator	6	3	3	$ 9,357,125.40
Casual Worker	18	0	18	$ 39,508,789.29
Charter & Events Supervisor	1	0	1	$ 1,303,043.14
Claims Administrator	2	0	2	$ 12,181,406.13
Customer Service Guide	57	11	46	$ 60,611,816.39
Operations Manager (AVL)			1	$ 5,076,576.73
Dispatcher (Point)			2	$ 6,577,466.75
Driver SOP	866	667	199	$ 357,059,763.20
Driver SOP Artic	102	79	23	$ 174,562,972.98
Driver Instructor	8	6	2	$ 19,154,276.42
Electronic Services Technician	1	0	1	$ 167,429.14
Facilities Manager	1	0	1	$ 10,040,267.74
Fuel Control Officer	2	1	1	$ 5,011,783.00
Groundsman			1	$ 1,569,142.69
Handyman	3	2	1	$ 684,296.26
Handyman Central Stores	5	2	3	$ 1,197,383.27
Human Resources Clerk	12	11	1	$ 161,519.49
Industrial Nurse	3	2	1	$ 4,022,713.90
Investigator IR	1	0	1	$ 4,721,556.12
Internal Security Guard	8	7	1	$ 3,171,324.38
Janitor	28	19	8	$ 6,305,269.57
Maintenance Clerk	3	2	1	$ 822,470.23
Maintenance Foreman	3	0	3	$ 13,990,470.02
Manager FPI	1	0	1	$ 37,599,564.31
Plumber	2	1	1	$ 1,516,969.13
Records Assistant II			1	$ 1,907,926.68
Revenue Clerk	2	1	1	$ 5,424,342.83
Revenue Control Administrator	2	1	1	$ 9,720,014.88
Revenue Monitor (FPI)	44	13	31	$ 112,636,591.29
Security Officer	1	0	1	$ 161,789.30

Senior Cashier	10	9	1	$	5,798,583.55
Special Assignment Coordinator	1	0	1	$	15,087,518.76
Stores Clerk	33	20	13	$	12,071,148.53
Stores Driver Central	2	1	1	$	4,569,166.12
Stores Supervisor	5	4	1	$	1,824,241.24
Technical Training Coordinator	2	1	1	$	6,688,843.22
	1562	**1058**	**508**	**$**	**1,151,334,493.41**

Source: JUTC Human Resource Record

Appendix 4: Overtime Claims - Spanish Town Overtime Payment for Top 15 Highest Claims Calendar Year 2017 and 2018

Emp.	Post	Annual ($)	Overtime Amount ($)	Retro Amount ($)	Annual Hours	Annual Retro	Annual hours-retro	F/N Hours	Overtime % of Annual Salary	Overtime less Retro ($)	Overtime W/out Retro % of Annual Salary
January 2017-December 2017											
1	Auto Mechanic 1	1,078,791.79	1,659,965.44	49,079.37	4283.5	2161	2122.5	81.6	154%	1,610,886.07	149%
2	Auto Mechanic 1	1,078,791.79	1,284,704.34	-	1770	0	1770	68.1	119%	1,284,704.34	119%
3	Auto Mechanic 1	1,078,791.79	1,269,073.58	24,647.19	2878	1225	1653	63.6	118%	1,244,426.39	115%
4	Driver, SOP Arctic	1,078,791.79	1,009,720.57	70,987.70	4643	3316	1327	51.0	94%	938,732.87	87%
5	Auto Mechanic 1	1,078,791.79	995,069.99	229.58	1567	13	1554	59.8	92%	994,840.41	92%
6	Driver, SOP Arctic	1,078,791.79	881,318.23	51,196.20	3607.5	2420	1187.5	45.7	82%	830,122.03	77%
7	Driver SOP Arctic	1,078,791.79	863,106.25	49,281.69	3395	2251	1144	44.0	80%	813,824.56	75%
8	Driver, SOP Arctic	1,078,791.79	800,927.26	33,874.16	3607.5	2420	1187.5	45.7	74%	767,053.10	71%
9	Driver Single Operator	850,470.82	799,898.56	1,041.96	1576	76	1500	57.7	94%	798,856.60	94%
10	Driver	914,027.92	751,666.27	2,330.00	1405.5	166	1239.5	47.7	82%	749,336.27	82%
11	Driver SOP	914,027.92	720,107.37	3,352.62	1474.5	240	1234.5	47.5	79%	716,754.75	78%

Emp.	Post	Annual ($)	Overtime Amount ($)	Retro Amount ($)	Annual Hours	Annual Retro	Annual hours-retro	F/N Hours	Overtime % of Annual Salary	Overtime less Retro ($)	Overtime W/out Retro % of Annual Salary
12	Driver Single Operator	914,027.92	707,090.77	931.68	1274.5	62	1212.5	46.6	77%	706,159.09	77%
13	Driver Single Operator	914,027.92	700,500.23	28,428.75	3085.5	1981	1104.5	42.5	77%	672,071.48	74%
14	Driver Single Operator	914,027.92	699,302.10	30,781.36	3273.5	2172	1101.5	42.4	77%	668,520.74	73%
15	Driver SOP	914,027.92	689,683.52	37,930.04	2662.5	2173	489.5	18.8	75%	651,753.48	71%
January 2018 - December 2018											
1	Auto Mechanic 1	1,078,791.79	2,044,179.12	81,126.32	4606.50	2451.00	2155.50	83	189%	1,963,052.80	182%
2	Auto Mechanic 1	1,078,791.79	2,028,584.83	73,478.14	4566.00	2534.00	2032.00	78	188%	1,955,106.69	181%
3	Driver, SOP Arctic	1,078,791.79	1,655,054.16	31,535.70	2889.00	2024.50	864.50	33	153%	1,623,518.46	150%
4	Auto Mechanic 1	1,078,791.79	1,400,217.89	56,662.70	3204.50	1690.00	1514.50	58	130%	1,343,555.19	125%
5	Driver, SOP Arctic	1,078,791.79	1,045,724.60	45,848.20	2626.00	1335.00	1291.00	50	97%	999,876.40	93%
6	Driver, SOP	1,078,791.79	983,301.04	16,007.85	2626.50	2105.50	521.00	20	91%	967,293.19	90%

Emp.	Post	Annual ($)	Overtime Amount ($)	Retro Amount ($)	Annual Hours	Annual Retro	Annual hours-retro	F/N Hours	Overtime % of Annual Salary	Overtime less Retro ($)	Overtime W/out Retro % of Annual Salary
7	Driver SOP	914,027.92	901,148.12	44,452.50	3182.00	1378.50	1803.50	69	99%	856,695.62	94%
8	Driver SOP	914,027.92	894,388.37	34,777.30	2499.50	1354.00	1145.50	44	98%	859,611.07	94%
9	Driver SOP Arctic	1,078,791.79	864,355.85	44,072.90	2335.50	1100.00	1235.50	48	80%	820,282.95	76%
10	Driver Sop Arctic	1,078,791.79	854,893.21	29,556.47	2068.50	1104.50	964.00	37	79%	825,336.74	77%
11	Driver Sop Arctic	914,027.92	846,951.22	26,143.16	2158.00	1287.00	871.00	34	93%	820,808.06	90%
12	Driver SOP	850,470.82	846,079.97	37,391.71	2898.00	1423.00	1475.00	57	99%	808,688.26	95%
13	Driver Single Operator	914,027.92	818,073.07	35,356.78	2400.00	1220.00	1180.00	45	90%	782,716.29	86%
14	Driver Single Operator	914,027.92	793,036.00	37,429.65	2603.00	1213	1390.00	53	87%	755,606.35	83%
15	Driver Single Operator	772,694.54	772,694.54	34,760.41	2689.50	1310.5	1379.00	53	100%	737,934.13	96%

Appendix 5: Overtime Claims - Ashenheim Top 15 Overtime Claims

Calendar Year 2017 and 2018

	Post	Annual Salary	Overtime Amount	Retro OT	Amount less Retro	Hours	Retro	Dif	FN Hours
January 2018 - December 2018									
1	Auto Mechanic 1	1,078,791.79	1,219,478.97	49,870.17	1,169,608.80	2633.50	1283.00	1350.50	51.94
2	Wrecker Driver	1,078,791.79	1,196,916.59	47,181.09	1,149,735.50	2628.50	1123.00	1505.50	57.90
3	Auto Mechanic 1	1,078,791.79	874,842.14	25,654.66	849,187.48	1732.00	836.50	895.50	34.44
4	Apprentice Mechanic	603,829.41	861,747.64	42,717.63	819,030.01	2635.00	1120.00	1515.00	58.27
5	Auto Mechanic 2	892,842.08	829,107.45	29,405.78	799,701.67	2140.00	981.50	1158.50	44.56
6	Auto Body Repairman 1	1,078,791.79	803,503.98	27,496.14	776,007.84	1618.00	675.5	942.50	36.25
7	Auto Mechanic 1	1,078,791.79	764,975.87	27,897.72	737,078.15	1670.50	745.50	925.00	35.58
8	Auto Mechanic 3	733,888.90	699,225.84	33,016.13	666,209.71	2170.00	1056.00	1114.00	42.85
9	Handyman	457,966.29	684,697.43	34,780.61	649,916.82	3930.00	2061.00	1869.00	71.88
10	Auto Mechanic 1	1,078,791.79	675,910.46	20,517.30	655,393.16	1325.00	530.50	794.50	30.56
11	Wrecker driver	1,078,791.79	669,225.67	18,322.96	650,902.71	1195.50	449.00	746.50	28.71
12	Auto Mechanic 1	1,078,791.79	658,636.08	32,362.10	626,273.98	1539.00	803.00	736.00	28.31
13	Auto Mechanic 1	1,078,791.79	644,011.81	30,127.01	613,884.80	3271.00	2325.00	946.00	36.38
14	Auto Mechanic 3	784,251.52	624,379.92	27,890.20	596,489.72	2279.00	1127.00	1152.00	44.31
15	Auto Mechanic 3	658,344.96	576,129.48	21,870.98	554,258.50	1827.00	870.00	957.00	36.81
January 2017-December 2017									
1	Wrecker Driver	1,078,791.79	1,187,466.42	105,781.66	1,081,684.76	3271.00	1259.00	2012.00	77.38
2	Auto Mechanic 1	1,078,791.79	1,167,747.14	35,773.14	1,131,974.00	6295.50	4861.50	1434.00	55.15
3	Wrecker Driver	1,078,791.79	1,080,749.29	76,011.77	1,004,737.52	803.50	38.00	765.50	29.44
4	Wrecker Driver	1,078,791.79	1,167,747.14	85,726.66	1,082,020.48	1631.00	434.50	1196.50	46.02

	Post	Annual Salary	Overtime Amount	Retro OT	Amount less Retro	Hours	Retro	Dif	FN Hours
5	Auto Mechanic 1	1,078,791.79	785,255.59	55,246.44	730,009.15	894.50	40.00	854.50	32.87
6	Handyman	457,966.29	705,000.77	-	705,000.77	2392.00	1678.00	714.00	27.46
7	Auto Mechanic 1	1,078,791.79	701,565.37	5,705.05	695,860.32	657.00	0.00	657.00	25.27
8	Auto Body Repairman 1	996,900.74	673,034.61	21,559.63	651,474.98	994.50	45.50	949.00	36.50
9	Auto Body Repairman 1	1,078,791.79	616,395.12	37,835.83	578,559.29	2097.00	0.00	2097.00	80.65
10	Apprentice Mechanic	550,049.55	616,249.31	4,481.16	611,768.15	1912.00	0.00	1912.00	73.54
11	Auto Mechanic 1	1,078,791.79	611,267.85	4,592.39	606,675.46	4888.00	3872.00	1016.00	39.08
12	Auto Mechanic 1	1,078,791.79	607,586.99	40,435.92	567,151.07	2357.00	1651.00	706.00	27.15
13	Auto Mechanic 1	1,078,791.79	595,376.04	42,077.69	553,298.35	2555.00	1858.00	697.00	26.81
14	Auto Mechanic 3	784,251.52	571,386.69	-	571,386.69	1664.00	0.00	1664.00	64.00
15	Auto Body Repairman 1	1,078,791.79	563,571.39	22,729.01	540,842.38	1688.00	1012.00	676.00	26.00

Appendix 6 - JUTC Schedule of Voluntary Separation for March 2018 - May 2019

Employees (Names Redacted)	DEPOT	POSITION	TERMINATION DATE	GROSS PAY ($)	REASON FOR Voluntary Separation	STATUS 3	POST #
1	Spanish Town	Driver SOP	1-Mar-18	796,935.86	Personal Reason	Another employee was assigned this post number	275398
2	Spanish Town	Driver SOP	1-Mar-18	318,775.31	Medical reasons/IOJ	Another employee was assigned this post number	275575
3	Spanish Town	Driver SOP	1-Mar-18	696,597.87	Personal Reasons-migration		
4	Spanish Town	Driver SOP	1-Mar-18	762,217.75	Personal Reasons-	Another employee was assigned this post number	275342
5	Spanish Town	HR Clerk	1-Apr-18	574,611.66	Personal Reasons-migration	Another employee was assigned this post number	275014
6	Spanish Town	Driver SOP	4-Apr-18	327,886.65	Personal Reasons	Another employee was assigned this post number	275613
7	Portmore	Auto Mechanic 1	11-Apr-18	1,029,439.73	Personal Reasons	Another employee was assigned this post number	274578
8	Rockfort	Driver SOP	11-Apr-18	972,748.11	Personal Reasons-Health	Another employee was assigned this post number	275613

Employees (Names Redacted)	DEPOT	POSITION	TERMINATION DATE	GROSS PAY ($)	REASON FOR Voluntary Separation	STATUS 3	POST #
9	Spanish Town	Driver SOP Arctic	17-Apr-18	1,333,530.07	Personal Reasons	Another employee was assigned this post number	275156
10	Portmore	Driver Premuim	25-Apr-18	1,044,999.58	Personal Reasons-Health	Another employee was assigned this post number	274079
11	Rockfort	Driver SOP	25-Apr-18	894,268.10	Personal Reasons	Another employee was assigned this post number	275359
12	Portmore	Driver SOP	25-Apr-18	868,504.96	Personal Reasons-Health	Another employee was assigned this post number	275448
13	Corporate	Marketing & Sales Assistant	1-May-18	847,663.40	Personal Reasons	Another employee was assigned this post number	273964
14	Spanish Town	Administrative Assistant 2	1-May-18	819,357.31	Personal Reasons	Another employee was assigned this post number	274551
15	Ashenheim Road Depot	Driver Wrecker	9-May-18	1,368,751.82	Was advised that the Company was overstaffed	Another employee was assigned this post number	275952
16	Rockfort	Driver, SOP Arctic	9-May-18	1,300,375.58	Personal Reasons		
17	Spanish Town	Revenue Agent	15-May-18	274,343.33	Personal Reasons-medical	Another employee was assigned this post number	275965

Employees (Names Redacted)	DEPOT	POSITION	TERMINATION DATE	GROSS PAY ($)	REASON FOR Voluntary Separation	STATUS 3	POST #
18	Rockfort	Cashier	1-Jun-18	799,033.09	Personal Reasons	Temp in Post (Another employee)	274114
19	Portmore	Point Dispatcher	1-Jun-18	1,238,775.44	Personal Reasons-migration	Vacant	
20	Corporate	Accounting Clerk 2	1-Jun-18	1,135,588.81	Personal Reasons	Another employee was assigned this post number	275979
21	Portmore	Driver SOP, Artic	6-Jun-18	1,174,228.44	Personal Reasons-Health	Another employee was assigned this post number	275160
22	Rockfort	Driver SOP	6-Jun-18	953,152.46	Personal Reasons	Another employee was assigned this post number	275257
23	Rockfort	Driver SOP	13-Jun-18	978,774.46	Personal Reasons	Another employee was assigned this post number	275258
24	Portmore	Driver SOP	13-Jun-18	960,519.74	Personal Reasons-migration	Vacant	274997
25	Portmore	Accounting Clerk 1	18-Jun-18	1,065,114.99	Personal Reasons	Another employee was assigned this post number	275975
26	Rockfort	Accounting Clerk 1	25-Jun-18	1,454,868.85	Personal Reasons	Another employee was assigned this post number	275976

Employees (Names Redacted)	DEPOT	POSITION	TERMINATION DATE	GROSS PAY ($)	REASON FOR Voluntary Separation	STATUS 3	POST #
27	Spanish Town	Human Resources Officer/Benefits Administrator	1-Jul-18	1,302,560.29	Personal reasons (due to the passing of her father)	Another employee was assigned this post number	274128
28	Spanish Town	Driver SOP	4-Jul-18	364,848.08	Personal reasons	Another employee was assigned this post number	275596
29	Spanish Town	Driver Single Operator	27-Jul-18	327,692.87	Personal reasons	Another employee was assigned this post number	275728
30	Rockfort	Driver Single Operator	1-Aug-18	715,665.71	Personal reasons	Another employee was assigned this post number	275292
31	Ashennheim Road	Maintenance Planner	1-Aug-18	1,348,275.17	Personal reasons	Another employee was assigned this post number	274085
32	DownTown	Office Attendant	29-Aug-18	542,277.07	Personal reasons	Another employee was assigned this post number	275043
33	Portmore	Revenue Agent	1-Sep-18	492,552.31	Personal reasons	Another employee was assigned this post number	273994
34	Corporate	Driver SOP Arctic	11-Sep-18	1,094,018.49	Personal reasons	Another employee was assigned this post number	275085

Employees (Names Redacted)	DEPOT	POSITION	TERMINATION DATE	GROSS PAY ($)	REASON FOR Voluntary Separation	STATUS 3	POST #
35	Rockfort	Driver SOP Arctic	11-Sep-18	1,315,858.43	Personal reasons	Another employee was assigned this post number	275094
36	HWTTC	Chief Dispatcher	1-Oct-18	1,893,630.53	Personal reasons-migration	Vacant	
37	Rockfort	Driver SOP	10-Oct-18	669,131.92	Personal reasons	Another employee was assigned this post number	275468
38	Spanish Town	Driver SOP	10-Oct-18	378,591.45	Medical Reasons	Another employee was assigned this post number	275683
39	Rockfort	Administrative Assistant 2	22-Oct-18	272,273.64	Personal Reasons-migration		
40	Rockfort	Driver SOP	23-Oct-18	1,171,353.94	Medical reasons	Another employee was assigned this post number	275275
41	Spanish Town	Driver SOP	23-Oct-18	415,706.94	Medical reasons	Another employee was assigned this post number	275557
42	Rockfort	Driver SOP	6-Nov-18	341,209.17	Medical reasons	Another employee was assigned this post number	275723

Employees (Names Redacted)	DEPOT	POSITION	TERMINATION DATE	GROSS PAY ($)	REASON FOR Voluntary Separation	STATUS 3	POST #
43	Portmore	Driver SOP Artic	7-Nov-18	1,191,091.83	Personal reasons	Another employee was assigned this post number	275111
44	Portmore	Driver SOP	7-Nov-18	509,950.39	Personal reasons	Another employee was assigned this post number	275496
45	Rockfort	Driver SOP	14-Nov-18	317,547.20	Medical Reasons	Another employee was assigned this post number	275691
46	Rockfort	Driver SOP Arctic	21-Nov-18	1,226,990.46	Personal reasons	Another employee was assigned this post number	275128
47	Rockfort	Driver SOP	21-Nov-18	359,730.30	Personal reasons	Another employee was assigned this post number	275729
48	Rockfort	Driver SOP	21-Nov-18	327,887.24	Medical reasons	Another employee was assigned this post number	275693
49	Portmore	Driver Premium	21-Nov-18	685,693.08	Personal reasons	Another employee was assigned this post number	274981
50	Spanish Town	Driver SOP Arctic	24-Nov-18	1,259,853.79	Personal Reasons-migration		
51	Portmore	Chief Dispatcher	1-Dec-18	1,445,717.23	Personal reasons	Vacant	274776

Employees (Names Redacted)	DEPOT	POSITION	TERMINATION DATE	GROSS PAY ($)	REASON FOR Voluntary Separation	STATUS 3	POST #
52	Rockfort	Dispatcher, Point	1-Dec-18	1,048,478.81	Personal reasons	Another employee was assigned this post number	274932
53	Corporate	Administrative Assistant 2	1-Dec-18	387,107.16	Personal reasons		
54	Portmore	Driver SOP	5-Dec-18	916,198.03	Personal Reasons-migration	Another employee was assigned this post number	275312
55	Spanish Town	Driver SOP	5-Dec-18	456,064.02	Personal reasons	Another employee was assigned this post number	275631
56	Spanish Town	Driver SOP Artic	29-Dec-18	793,446.74	Personal reasons	Another employee was assigned this post number	275099
57	Corporate	Stores Clerk	1-Jan-19	686,193.69	Medical reasons	Vacant	275933
58	Spanish Town	Driver SOP	1-Feb-19	260,078.80	Personal Reasons-migration	Another employee was assigned this post number	275751
59	HWTTC	Chief Dispatcher	1-Feb-19	1,402,930.78	Personal Reasons-migration	Vacant	274777
60	Spanish Town	Driver SOP	13-Feb-19	947,373.01	Personal Reasons	Another employee was assigned this post number	275332
61	Spanish Town	Accounting Clerk 2	1-Mar-19	1,048,704.13	Personal Reasons-Health	Another employee was assigned this post number	274547

Employees (Names Redacted)	DEPOT	POSITION	TERMINATION DATE	GROSS PAY ($)	REASON FOR Voluntary Separation	STATUS 3	POST #
62	DownTown	Senior Revenue Agent	27-May-19	524,752.77	Personal Reasons	Another employee was assigned this post number	275971
				52,432,498.84			

Appendix 7: Route Rationalization

	Route	Depot	Cost Coverage % (excluding Corp admin)	Cost Coverage % (including Corp Admin)	Budgeted Buses	Proposed Action
1	17AX	Portmore	50	39	2	Re-Allocate
2	19A EXP	Portmore	49	39	1	Re-Allocate
3	12AX	Portmore	47	37	1	Re-Allocate
4	19BX	Portmore	44	35	1	Re-Allocate
5	5A	Portmore	44	35	1	Re-Allocate
6	8AX	Portmore	39	31	1	Re-Allocate
7	54	Rockfort	48	38	7	No change
8	89	Rockfort	46	36	1	Sub-Franchise
9	99EX	Rockfort	41	32	1	Re-Allocate
10	87	Rockfort	31	25	1	Sub-Franchise
11	75EX	Rockfort	31	24	2	Re-Allocate
12	51EX	Rockfort	29	23	1	Re-Allocate
13	50X	Rockfort	25	20	2	Re-Allocate
14	88	Rockfort	23	16	3	Sub-Franchise
15	86	Rockfort	19	15	3	Sub-Franchise
16	50A	Rockfort	19	15	1	No change
17	81	Rockfort	16	13	1	Sub-Franchise
18	32AX	Spanish Town	47	37	1	Re-Allocate
19	33	Spanish Town	47	37	2	Re-Allocate
20	800	Spanish Town	35	28	2	No change
21	44B	Spanish Town	29	23	2	Re-Allocate
22	32EX	Spanish Town	27	21	1	Re-Allocate
23	45EX	Spanish Town	26	20	2	Re-Allocate
24	46	Spanish Town	25	20	2	Re-Allocate
25	500	Spanish Town	15	12	2	Re-Allocate

Source: AuGD compilation of JUTC Data

Appendix 8: Planned Service KPI Percentage (Actual)

	2018/19	2017/18	2016/17	2015/16	2014/15
April	90	79	Not Provided	Not Provided	Not Provided
May	98	89	Not Provided	Not Provided	Not Provided
June	75	77	73	Not Provided	Not Provided
July	84	94	59	Not Provided	Not Provided
August	69	98	87	Not Provided	Not Provided
September	79	81	91	Not Provided	Not Provided
October	74	88	99	Not Provided	Not Provided
November	95	97	89	Not Provided	Not Provided
December	79	60	63	Not Provided	Not Provided
January	88	Not Provided	92	Not Provided	Not Provided
February	92	63	80	77	Not Provided
March	93	75	86	83	Not Provided
Average for FY	**85**	**82**	**82**		

Source: AuGD Analysis of JUTC data

Appendix 9: JUTC Overtime Variance by Location for 2014/15 to 2018/19

Location (J$)	2018/19	2017/18	2016/17	2015/16	2014/15	Total Variance
Spanish Town	(52,135,174.86)	(46,309,484.32)	(47,287,800.05)	(56,383,085.50)	(57,039,654.88)	(259,155,199.61)
Portmore	(32,047,972.11)	(16,433,050.35)	(34,484,930.84)	(41,405,225.66)	(45,991,610.17)	(170,362,789.13)
Premium	9,664,571.27	10,167,452.36	(1,938,763.68)	(2,152,003.63)	1,593,964.87	17,335,221.19
Rockfort	(28,026,850.09)	(31,863,197.92)	(35,392,082.60)	(43,275,996.02)	(32,629,693.97)	(171,187,820.60)
Ashenheim	(26,970,680.01)	(22,914,147.60)	(26,575,573.76)	(26,666,556.32)	(38,566,729.03)	(141,693,686.72)
Half Way Tree	(1,457,219.11)	918,687.22	838,919.06	2,531,613.12	(5,257,190.31)	(2,425,190.02)
Downtown	406,283.85	(3,743,238.85)	1,167,623.53	(1,235,320.34)	2,290,065.96	(1,114,585.85)
Total	**(130,567,041.06)**	**(110,176,979.46)**	**(143,672,608.34)**	**(168,586,574.35)**	**(175,600,847.53)**	**(728,604,050.75)**

Source: AuGD compiled from JUTC data