



## MEMORANDUM

**TO:** Audit Committee of the School Board of the City of Virginia Beach

**FROM:** Karen W. Woodson, CIA <sup>KW</sup>  
School Board Internal Auditor, Department of Internal Audit

**SUBJECT:** Bus Maintenance Audit

**DATE:** April 4, 2023

---

## BACKGROUND

As part of the calendar year 2022 Audit Work Plan, the Department of Internal Audit (IA) has performed a Bus Maintenance Audit.

The Office of Transportation and Fleet Management Services (Transportation), within the Department of School Division Services, performs maintenance on over 850 school and activity buses, including eight electric buses. This maintenance includes mechanical repairs, upholstery, glasswork, rebuilding engines, bodywork, and painting. Transportation staff performs most repair work; therefore, very little work is subcontracted to outside vendors. Bus repair and maintenance are performed at two VBCPS-owned and operated facilities.

Transportation employs Fleet Technicians (Technicians) who perform the preventative bus maintenance work at VBCPS facilities. Staff in the administrative offices of Transportation have developed and maintain a robust preventative maintenance program using AssetWorks, Transportation's fleet management system, for tracking when buses are due for maintenance/inspection and the type of maintenance/inspection completed. VBCPS bus drivers learn in their Commercial Driver License (CDL) training how to perform a pre-trip inspection. This inspection is required before operating the vehicle. Transportation employs Area Supervisors that oversee all drivers in specified areas (regular education, special education, etc.). The Area Supervisors ensure drivers turn in required documentation each month, including notification of any defects with their buses.

- **State Board of Education (SBOE) requires that:** All school and activity buses used to transport students to and from school and activities be inspected and maintained by competent mechanics at least once every 45 school days or every 5,000 miles. This inspection is required to be recorded on the Virginia Department of Education (VDOE) inspection form or on a form that is approved by the VDOE.

- **VBCPS policy requires that:** Drivers bring their bus in for service on their scheduled day. Any deviation from the schedule must be approved by a Transportation staff member. Transportation will take disciplinary action against drivers failing to comply with the assigned schedule.
- **SBOE requires that:** Before the driver starts their route to pick up students each day, the drivers of school and activity buses perform a daily pre-trip safety inspection of the vehicle using a specific list of items issued by the VDOE. Drivers are required to check each item on the list.
  - **VBCPS policy requires:** The driver to perform the pre-trip inspection and record the information for the inspection showing all items checked and any items that need attention. The driver is required to send the completed form to the Area Supervisor each month. Drivers of school-assigned activity buses are required to perform and turn in the pre-trip inspection form to the Student Activities Coordinator (SAC) at their school.
- **The State of Virginia requires that:** All buses receive an annual Virginia State Inspection by a certified Virginia State Police (VSP) Inspector, and a vehicle registration from the Department of Motor Vehicles (DMV) must be maintained on the bus.
  - **VBCPS policy requires:** VBCPS technicians to become licensed by VSP to perform these inspections. As a licensed VSP inspector, the technician has an obligation to follow VSP guidelines and cannot receive influence over the inspection results from management.
  - **VBCPS policy requires:** Buses placed into service receive a one-time vehicle registration from the DMV, and subsequently, the vehicle registration must remain on the bus.
- **SBOE requires that:** Original Equipment Manufacturer (OEM) inspections and maintenance recommendations be maintained during the service life of each bus to ensure that safety and warranty requirements are met.
  - **VBCPS policy requires:** The preventative maintenance program and inspection schedules meet or exceed the OEM inspection and maintenance requirements.

## **AUDIT OBJECTIVES, METHODOLOGY, RESULTS, AND CONCLUSIONS**

Inquiry and examination of documents and data, as well as site visits, were the methods of reviewing internal controls. The audit period was January 1, 2022, through December 31, 2022. Judgmental sampling was the primary sampling technique used in this audit. Judgmental sampling allowed IA to select buses and drivers from different areas, covering all bus types as well as buses being used for regular education, special education, summer school, and activities. The results cannot be extrapolated to the entire population.

IA conducted this audit primarily to review the bus maintenance process. The audit objectives, methodology, results, and conclusions are as follows:

1. Objective:

Determine if VBCPS buses are being maintained in accordance with VBCPS preventative maintenance and inspection program schedules.

Methodology:

A) IA reviewed the maintenance records for 15 buses (this included one gas/propane bus from each Area Supervisor plus one electric bus) and walked through the mandatory preventative maintenance schedules for each bus.

Results:

All 15 buses reviewed received preventative maintenance applicable to their bus type.

B) IA reviewed 44 buses scheduled during a three-day period during the audit period to ensure buses that were late and/or did not arrive for their mandatory 45-day inspection, Virginia State Inspection, or other mandatory inspections were rescheduled for and received maintenance and applicable inspections.

Results:

44 buses scheduled over the three-day period received maintenance and the applicable inspections on their scheduled day, or the driver was confirmed absent, and the bus was rescheduled and received maintenance and inspections due at a later date.

C) IA reviewed the list of all buses that received preventative maintenance during the audit period and compared it to the list of VBCPS assets maintained by the Office of Business Services (OBS) to ensure that all VBCPS buses on the asset list received the required maintenance.

Results:

VBCPS buses listed as assets received preventative maintenance during the audit period.

Conclusion:

VBCPS buses are being maintained in accordance with VBCPS preventative maintenance and inspection program schedules.

2. Objective:

Determine if bus drivers are in compliance with VBCPS pre-trip inspection policies.

Methodology:

A) IA reviewed pre-trip inspection forms for five buses for each of the 14 Area Supervisors, assigned by driver, by reviewing the month of March 2022 bus and employee listing to ensure they were filled out completely and submitted to Transportation. Also, IA reviewed summer school pre-trip inspection forms for one bus for each of the 14 Area Supervisors, assigned by driver, by reviewing the month of July 2022 or August 2022 bus and employee listing to ensure they were filled out completely and submitted to Transportation.

Results:

IA determined that all pre-trip inspection forms reviewed from March 2022 and all summer school pre-trip forms for July 2022 or August 2022 reviewed were filled out completely and submitted to Transportation.

B) IA performed walk-throughs of five buses on one of three selected days to confirm that the driver's process aligned with VDOE and VBCPS guidance on

how to complete and document the pre-trip inspection. IA also observed seven buses on one of five selected days without approaching the driver to observe their pre-trip inspection process.

Results:

IA determined for five out of five walk-throughs performed that pre-trip inspections performed by drivers were inconsistent, including the time to complete the inspection and thoroughness of the inspection. In addition, three out of seven observations of drivers showed inconsistent pre-trip inspections. IA also determined four out of seven drivers observed did not perform the pre-trip inspection.

Conclusion:

Bus drivers are not in compliance with VBCPS pre-trip inspection policies.

3. Objective:

Determine if VBCPS fleet technicians are licensed to complete Virginia State Inspections.

Methodology:

A) IA obtained a listing from the VSP website showing all VBCPS employees that are licensed to complete Virginia State Inspections and ensured that the licenses are active.

Results:

One employee listed as a licensed VSP Inspector retired on 8/31/22 and was not removed as an inspector for VBCPS.

B) IA confirmed that only licensed VBCPS employees completed Virginia State Inspections by reviewing all state inspections completed during the audit period compared to the licensed inspectors on the VSP website.

Results:

All state inspections completed during the audit period were completed by VBCPS employees that are licensed Virginia State Inspectors.

Conclusion:

VBCPS fleet technicians are licensed to complete Virginia State Inspections.

4. Objective:

Determine if five buses on one of three selected days have a Virginia vehicle registration and current Virginia State Inspection on their bus.

Methodology:

IA performed walk-throughs of five buses on one of three selected days to review the driver's bus registration and Virginia State Inspection documents.

Results:

All buses reviewed had current Virginia State Inspection documents on the bus, and four out of five buses reviewed had registration documents on their bus.

Conclusion:

All buses reviewed had current Virginia State Inspection documents, and substantially all had registration documents on the bus.

## AUDITING STANDARDS

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings, other items noted, and conclusions based on our audit objectives.

The results of the audit were discussed with management. We thank management and staff of the Office of Transportation and Fleet Management Services and others that were contacted for their cooperation throughout the audit.

cc: James T. Lash, Executive Director, Office of Transportation and Fleet  
Management Services  
Jack Freeman, Chief Operations Officer

## AUDIT RESULTS AND MANAGEMENT'S RESPONSES

### **Finding No. 1: Pre-trip Inspections**

Four out of seven drivers that IA observed did not perform pre-trip inspections for their buses. During the walk-throughs and observations of eight VBCPS buses, IA noted that the pre-trip inspections performed were inconsistent, including the following:

- The time to complete pre-trip inspections ranged from six minutes to 16 minutes;
- Some drivers opened the hood to inspect the contents underneath, while others did not;
- Some drivers conducted air brake tests on the bus, while others did not; and
- Some drivers inspected the perimeter of the bus, while others did not.

The State Board of Education Regulation, *8VAC20-70-380. Pre-trip inspection* states, "Prior to the initial transporting of children each day, the drivers of school and activity buses shall perform a daily pre-trip safety inspection of the vehicle. The items checked and recorded shall be at least equal to the pre-trip inspection procedure in the Preventative Maintenance Manual for Virginia School Buses." In addition, School Board Policy 3-76, *Transportation/Generally*, states, "The School Board will operate its transportation system in compliance with the regulations of the Virginia Board of Education and all applicable law and regulation." The drivers that did not perform their pre-trip inspections were not approached by Internal Audit; they were observed from a distance that allowed IA to see what the driver was doing. The reasons for drivers omitting or not thoroughly completing the pre-trip inspections could be due to a variety of reasons (e.g., not enough time before needing to pick up students, lack of understanding, lack of oversight, etc.). Drivers and students may be put at risk if pre-trip inspections are not completed by the driver.

### ***Recommendations:***

Internal Audit recommends that Transportation communicate with the four drivers whom IA observed omitting the pre-trip inspection and remind them of the pre-trip inspection requirement. In addition, Internal Audit recommends that Transportation reiterate the importance of thoroughly completing the pre-trip inspection to all drivers and develop a process to monitor pre-trip inspections.

### ***Management's Response:***

The Chief Operations Officer (COO) concurs. Transportation will communicate with the four drivers who omitted the pre-trip inspection immediately to discuss this requirement. In addition, Transportation will reiterate the importance of thoroughly completing the pre-trip inspection to all drivers by June 1, 2023. Transportation will develop a process to monitor pre-trip inspections by August 1, 2023.

### **Finding No. 2: Retired VBCPS Employee Listed as Virginia State Inspector**

One VBCPS employee retired on 8/31/22 but is still listed as an active VSP Inspector for VBCPS. Best practices state that once a VBCPS employee leaves the division, all access and rights should be removed from that employee. Transportation stated they have not reached out to VSP to let them know this VBCPS employee retired. The VBCPS inspection credentials, which should have been removed, could be used by former VBCPS employees to log into the software.

## AUDIT RESULTS AND MANAGEMENT'S RESPONSES, CONTINUED

### ***Recommendations:***

Internal Audit recommends that Transportation request that VSP remove the retired employee from the VSP system and develop a process to ensure that once a VBCPS employee leaves the division, they are no longer registered under VBCPS as a licensed Virginia State Inspector.

### ***Management's Response:***

The COO concurs. Transportation will request that VSP remove the retired employee immediately. In addition, Transportation will develop a process to ensure that once a VBCPS employee leaves the division that they are no longer registered under VBCPS as a licensed Virginia State Inspector by June 1, 2023.

### **Finding No. 3: Missing DMV Registration**

One bus out of five did not have a vehicle registration on the bus during the walk-through. *Code of Virginia 46.2-2130 – Registration violations; penalties*, states, “Any person who operates or causes to be operated on any highway in the Commonwealth any motor vehicle that does not carry the proper registration and identification that this title requires...to display is guilty of a Class 4 misdemeanor.” The driver stated she was unsure if she needed the registration on the bus and that she had never seen the registration document on the bus. Transportation stated during each bus's Virginia State Inspection that the technician completing the inspection should ensure the registration document is on the bus. Failing to provide the required vehicle registration information can have legal ramifications for the driver and for VBCPS.

### ***Recommendations:***

Internal Audit recommends that Transportation develop a process to ensure the vehicle registration document is on each bus in an area the driver is aware of and can easily access.

### ***Management's Response:***

The COO concurs. Transportation will develop a process to ensure the registration document is on each bus in an area the driver is aware of and can easily access by July 1, 2023.

## ITEMS NOTED AND MANAGEMENT'S RESPONSES

### **Items Noted No. 1: Pre-trip Inspection Policy Regarding Buses with Stop Arm**

#### **Cameras**

Drivers parking at home on the street with stop arm cameras were instructed to complete the pre-trip inspections after moving the bus to the closest school parking lot, church parking lot, etc., to prevent tickets from being issued to Virginia Beach residents for passing the bus during the pre-trip inspection. Transportation has given verbal guidance for this process; however, this needs to be included as an allowable exception to the current policy. Having a consistent policy or procedure provides a resource for employees so they can meet departmental expectations.

#### ***Recommendations:***

Internal Audit recommends that Transportation create and distribute a policy for drivers with stop arm cameras needing to complete their pre-trip inspection in a different location.

#### ***Management's Response:***

The COO concurs. Transportation will create and distribute a policy for drivers with stop arm cameras to complete their pre-trip inspections in a different location, as needed by August 1, 2023.