

ASD INTERNAL AUDIT REPORT

2021-01

Student Transportation Maintenance

Transportation Department

Anchorage School District

April 20, 2021

MUNICIPALITY OF ANCHORAGE
Internal Audit Department
632 W 6th Avenue, Suite 710
P.O. Box 196650
Anchorage, Alaska 99519-6650
www.muni.org/departments/internal_audit



INTERNAL AUDIT DEPARTMENT
Michael Chadwick, CIA, CICA
Director
Phone: (907) 343-4438

E-Mail: michael.chadwick@anchorageak.gov



Municipality of Anchorage

Austin Quinn-Davidson
Acting Mayor

Internal Audit Department

April 20, 2021

Anchorage School District Superintendent and Members of the School Board:

I am pleased to present for your review **ASD Internal Audit Report 2021-01; Student Transportation Maintenance; Transportation Department; Anchorage School District**. A brief summary of the report is presented below.

We have completed an audit of Student Transportation Maintenance at the Transportation Department of the Anchorage School District. The objective of this audit was to determine if the policies and procedures were adequate to ensure operational efficiency and safely transport students. To achieve our objective, we determined if preventive maintenance was performed regularly and properly documented. In addition, we determined if proper inventory controls were in place and if pre-trip and post-trip inspections were completed daily. Moreover, we interviewed staff and reviewed state and federal inspection requirements. In addition, we randomly selected 25 buses to determine if pre-trip inspections, post-trip inspections, annual state inspections, preventive maintenance, and unscheduled repairs were performed and documented from January 2019 through December 2020. Finally, we conducted a physical inventory count of 30 randomly selected items to verify the accuracy of inventory records.

Based on our review, we found the Transportation Department performed its maintenance activities in a timely manner to ensure operational efficiency and safely transport students. However, additional improvements can be made. Specifically, the Transportation Department's inventory system needs improvement and the Transportation Department had no formal preventive maintenance procedure and schedule.

There were two findings in connection with this audit. Management was responsive to the findings and recommendations.

Michael Chadwick, CIA, CICA
Director, Internal Audit



Municipality of Anchorage

Austin Quinn-Davidson
Acting Mayor

Internal Audit Department

April 20, 2021

ASD Internal Audit Report 2021-01
Student Transportation Maintenance
Transportation Department
Anchorage School District

Introduction. The Anchorage School District's (District) Transportation Department (Department) provides transportation service for approximately 8,900 students daily with 840,826 miles driven annually. The Department has a maintenance shop with eight staff who maintain the fleet of 116 buses. In addition, there is a parts room where commonly used items, such as filters, wiper blades, and headlights are stocked. Less commonly used items are available from local vendors, which are purchased as needed.

Maintenance staff conduct a full annual inspection of the entire bus fleet, which is required by Federal Motor Carrier Safety Administration guidelines. The State of Alaska also completes an annual inspection of each District bus. Department management reported a 98.2 percent pass rate at the last inspection in 2020, an increase from a 32 percent pass rate in 2012, which was the lowest pass rate in the last ten years. Additional preventive maintenance services are conducted throughout the year. Drivers also conduct pre-trip and post-trip safety inspections each day. If any defects are noted, maintenance staff are notified. If the bus is determined to be unsafe, it is pulled from service.

In our sample review of 25 randomly selected District buses, preventive maintenance was completed in an average of 1.3 days and unscheduled repairs/maintenance were completed in an average of 4.9 days. Warranty and other repairs that were sent out to vendors to be completed averaged 23.4 days. The system used to track preventive maintenance schedules, work orders, and inventory is Dossier.

Objective and Scope. The objective of this audit was to determine if the policies and procedures were adequate to ensure operational efficiency and safely transport students. To achieve our objective, we

determined if preventive maintenance was performed regularly and properly documented. In addition, we determined if proper inventory controls were in place and if pre-trip and post-trip inspections were completed daily. Moreover, we interviewed staff and reviewed state and federal inspection requirements. In addition, we randomly selected 25 buses to determine if pre-trip inspections, post-trip inspections, annual state inspections, preventive maintenance, and unscheduled repairs were performed and documented from January 2019 through December 2020. Finally, we conducted a physical inventory count of 30 randomly selected items to verify the accuracy of inventory records.

We conducted this performance audit in accordance with generally accepted government auditing standards, except for the requirement of an external quality control review. 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. The audit was performed during the period of October 2020 through February 2021. The audit was requested by the Anchorage School Board Finance Committee.

Overall Evaluation. The Department performed its maintenance activities in a timely manner to ensure operational efficiency and safely transport students. However, additional improvements can be made. Specifically, the Department's inventory system needs improvement and the Department had no formal preventive maintenance procedure and schedule.

FINDINGS AND RECOMMENDATIONS

1. Inventory System Needs Improvement.

- a. Finding.** The Department's inventory system needs improvement. Specifically, our review revealed the following conditions:

- *Physical Counts and System Reconciliations Not Performed* - According to Department staff, a physical inventory had not been performed in many years, if

at all. As a result, inventory balances had not been reconciled. We pulled a random sample of 30 inventory items and found that 20 of 30 (67%) items did not match the inventory balance in the Dossier system, resulting in a negative variance of \$35,390 for the selected sample. For example, item ASD2530 (water filter) had a system balance of 21 but had a physical count of zero. Similarly, ASD1770 (circuit breaker) had a system balance of 24 but had a physical count of zero. Department staff stated that many of the items were obsolete or no longer stocked but had not been removed from the Dossier system. It was also reported that former staff had made unsupported entries into the Dossier system to avoid the system's audible low balance warning.

- *Obsolete Items In Stock* – Some items stocked in the Department's parts room inventory were obsolete. According to Department staff, many of these items were for buses that had aged out of the District's fleet. For example, a circuit breaker, old switches, a service door, and a heater were identified as obsolete.
- *Duplicate Items* - In reviewing Dossier system inventory records and performing a physical sample count, there were duplicate item entries. The Department did not use the part number assigned by the vendor. Instead, when items were ordered from vendors, a unique ASD (Anchorage School District) number was assigned. This allowed interchangeable items from multiple vendors to be stocked together. However, multiple ASD numbers were assigned to identical items. For example, items ASD1941 and ASD1669 both had the description "Latch, Engine Door", and items ASD2378 and ASD2379 had the description "Mirror Base, L.S. Bus-34,35,36". This can cause confusion when looking for items, as well as cause unnecessary ordering.

- b. **Recommendations.** The Department Director should develop and implement an inventory system and schedule for the Department. Any discrepancies should be

reconciled to the system so that accurate inventory counts are available and reportable. Finally, the Department Director should determine if an annual or cyclical count would be most beneficial and conducive to work schedules.

- c. **Management Comments.** Management stated, “Management concurs with the audit finding and recommendations. The Transportation Maintenance Division began the task of going through current stock room inventory back in late 2019 to update the inventory program, Dossier, with correct account codes and accurate quantities for currently used parts and deleting all obsolete items. The Lead Mechanic has gone through and narrowed the 256 pages of listed stock parts to 86 pages of listed stock parts and continues to work through Dossier to match actual stocked parts with the lists in Dossier.”
- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendations.

2. **No Formal Preventive Maintenance Procedure and Schedule.**

- a. **Finding.** The Department had no formal preventive maintenance procedure and schedule. According to Department staff, they perform annual preventive maintenance on the entire bus fleet in accordance with the Federal Motor Carrier standards. The annual preventive maintenance is performed during the summer. The Department also stated that they perform other preventive maintenance, such as lubing the chassis, every 90 days during the school year. Shop staff verbally communicated these goals and timelines for the preventive maintenance. However, we found no procedure and schedule for employees to refer to for the goals and timelines. While it appears that this maintenance was generally completed as intended, the absence of written procedures could lead to inconsistent practices and the inability to enforce employee accountability. An article published in School Transportation News stated that there is no universal

preventive maintenance schedule and each fleet “. . . develops a schedule that they believe is best for them.”

- b. **Recommendation.** Department management should develop and implement standard operating procedures for preventive maintenance.
- c. **Management Comments.** Management stated, “Management concurs with the audit finding and recommendation. The Director of the Transportation Department and the Lead Mechanic in the shop are going to get a standard operating procedure in place that will be used when training new mechanics. The current team will have important input to have this document accurate and informative for each team member to follow.”
- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

Discussion With Responsible Officials. The results of this audit were discussed with appropriate Municipal officials on April 7, 2021.

Audit Staff:
Dawn Brown