

### June 10, 2020

**To:** Finance and Administration Committee

From: Darrell E. Johnson, Chief Executive Officer

Janet Sutter, Executive Director

Internal Audit Department

**Subject:** Revenue Vehicle Maintenance, Internal Audit Report No. 20-506

#### Overview

The Internal Audit Department of the Orange County Transportation Authority has completed an audit of revenue vehicle maintenance. Based on the audit, controls in place to ensure compliance with revenue vehicle maintenance standards and related policy and procedures are generally adequate. One recommendation was made to further enhance work order templates.

#### Recommendation

Direct staff to implement the recommendation provided in Revenue Vehicle Maintenance, Internal Audit Report No. 20-506.

## **Background**

The primary goals of the maintenance program include maintaining vehicles in a state of good repair with a goal of no more than 15 percent of buses on hold at any time, maximizing the miles between road calls with a 14,000-mile goal, adhering to preventive maintenance service intervals with a 100 percent on-time goal, and maximizing vehicle useful life with a minimum 18-year life goal.

Buses are scheduled for a series of eight preventive maintenance inspections (PMI) at intervals of 6,000 miles. Inspections are considered to be on-time if they are completed within ten percent of 6,000 mile goal. The job templates for inspections are created and maintained by maintenance staff.

Mileage is tracked in the Fleetwatch fluid management system, and the HASTUS system is used for scheduling of buses each day. Daytime maintenance supervisors run Fleetwatch and HASTUS reports to identify buses due for inspection, and then project total miles as of the end of the day. Based on the

projected miles and anticipated manpower, the maintenance supervisors decide which PMIs to schedule for the next day. The maintenance supervisors then create and print out work orders in the Ellipse system for all work associated with the PMIs, including supplemental inspections. The graveyard shift supervisors place buses on hold in the HASTUS system the day before planned PMIs. Typically, the PMI work orders are performed by the daytime shift mechanics, and supplemental inspections are performed by the later shifts. The supervisors review and sign all work orders.

## Discussion

The maintenance work order templates did not include several preventive maintenance tasks recommended by the manufacturer. Additionally, one of the tasks has a mileage interval that differs from the manufacturer's guidelines, and various operating and leakage tests recommended by the manufacturer were not specifically defined in the work orders. Internal Audit recommended that management either incorporate these tasks into the work order templates or document variances from the manufacturer guidelines with justification. Management acknowledged the deviations from manufacturer guidelines but indicated that the deviations are warranted and have not led to the deterioration of assets or reduced performance. Management agreed with the recommendation and indicated that the deviations identified in the audit, and any future deviations, will be documented.

# Summary

Internal Audit made one recommendation to further enhance work order templates.

#### Attachment

A. Revenue Vehicle Maintenance, Internal Audit Report No. 20-506

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