



Maricopa County Equipment Services Audit of Fuel Usage Management By Maricopa County Internal Audit August 2021

Why This Audit Is Important

The Maricopa County Equipment Services Department (EQS) provides fleet services, including vehicle purchases, repairs, maintenance, and fuel management to Maricopa County departments. Departments can acquire fuel using county or commercial fuel stations. EQS strives to provide efficient and cost-effective fuel management programs.

We performed this audit to assess whether EQS' fuel usage controls (including fuel data verification and usage management) provide reasonable assurance that county fuel resources are appropriately managed.

Key Findings

- AIMS modules, used to dispense fuel and capture data, did not always connect properly. This can prevent fueling and/or capturing important vehicle information.
- Controls over the management of Prokees and fuel cards, used as fueling alternatives, can be strengthened to ensure proper and authorized use.
- Fuel usage monitoring can be enhanced to provide meaningful information for better fuel control and decision making.
- Fuel usage management can be strengthened through written policies and procedures directing consistent implementation of processes.

All key findings requiring corrective action were addressed through agreed-upon management action plans.

What We Audited

Following is a summary of work performed and recommendations. Nat Matsuda, EQS Director, approved the responses on June 30, 2021. We also communicated detailed observations and recommendations to management throughout the audit process.

Fuel Data Integrity

Background – Fuel data integrity requires the accurate transmittal of data to support better informed decisions and accurate department billing for service and fuel costs. We interviewed EQS staff, observed fuel transactions, and tested a sample of fuel transactions to determine if the data captured from fuel transactions is accurately transmitted.

Observations – EQS utilizes multiple systems and manual procedures in its fuel management processes. During our testing, EQS implemented a software upgrade to the FASTER Web

system which resolved some issues we identified during testing. However, we found that departments were charged twice for a fuel surcharge fee (an extra 17¢ per gallon) after the system upgrade. Fortunately, this error was found early after the software upgrade implementation.

Recommendation to EQS	Response
Review county fuel transactions made after the FASTER Web implementation to determine the amount of excess fuel surcharge fees (17¢ per gallon) charged to departments. Ensure departments are appropriately refunded and confirm that the issue is resolved.	<p>Concur – Completed</p> <p>Removed surcharge from Fuel Master database. Credited customers in June 2021 billing cycle.</p> <p>Completion Date: 6/30/2021</p>

AIMS modules installed in county vehicles allow access to use county fueling stations and help prevent unauthorized use. We found that AIMS modules did not always connect to the county fuel station terminals to allow fuel dispensing or did not accurately transmit odometer data from the vehicle. When malfunctions prevent fueling, frustrated employees may use a less controlled means of fueling. When malfunctions lead to odometer reading errors, it can result in unnecessary or missed vehicle service maintenance.

Recommendation to EQS	Response
Update/repair AIMS modules and implement a monitoring process to ensure that they consistently connect to the FuelMaster terminals and transmit correct odometer readings.	<p>Concur – In progress</p> <p>EQS will:</p> <ol style="list-style-type: none"> 1. Modify software so technicians can interact and have access to the system. 2. Develop a monitoring process that is sustainable and accountable. 3. Conduct odometer reading reconciliations during preventative/scheduled/unscheduled maintenance appointments. This will be added as a routine maintenance inspection item. <p>Target Date: 6/28/2022</p>

Prokee and Flyers Fuel Card Use

Background – For alternative fueling options, departments can implement the use of Prokees or Flyers Fuel Cards (Fuel Cards) for making purchases at fuel stations. Prokees contain an encoded memory chip designed to control access to fuel dispensers and capture transaction data at county fuel sites. Fuel Cards are similar to a credit card but can only be used at the pump (not in-store) for fueling at authorized, commercial fueling stations.

We interviewed EQS employees, observed Prokee and Fuel Card use, and reviewed transaction documentation to determine if controls ensure Prokees and Fuel Cards are used properly and only by authorized individuals.

Observations – We found that some active Prokees were assigned to inactive vehicles or assigned to a department instead of a specific vehicle. In addition, some Prokee controls were not being utilized (e.g., PINs, transactional or daily fuel limits, assigned users). Several active Fuel Card accounts were tied to terminated employees and some Fuel Cards did not require entering odometer readings or restrict the allowable fuel type. Effective management controls over Prokees and Fuel Cards can help prevent and detect misuse of county fuel resources.

Recommendations to EQS	Responses
<p>To ensure only authorized users can use Prokees and Flyers Fuel Cards:</p> <ul style="list-style-type: none"> • Remove access to Prokees assigned to inactive vehicles or Prokees not assigned to a specific vehicle that are no longer needed • Remove Fuel Card access for individuals no longer county employees • Review recent Prokee and Fuel Card activity for potential inappropriate usage 	<p>Concur – In progress</p> <p>EQS will:</p> <ul style="list-style-type: none"> • Conduct monthly fuel key reconciliations with vehicle disposal in FASTER Web and Fuel Master. • Conduct a Flyers database reconciliation with departments for authorized employee access. <p>Target Date: 12/31/2021</p>
<p>Establish controls that can help reduce the risk of Prokees or Flyers Fuel Cards being inappropriately used. Consider which controls should be EQS' responsibility and those for the department via countywide policy.</p>	<p>Concur – In progress</p> <p>EQS will:</p> <ul style="list-style-type: none"> • Test PIN controls and reduce limits for non-vehicle fuel keys. • Include EQS and department fuel key responsibilities in countywide policy. • Create a countywide fuel card policy with EQS and department responsibilities. <p>Target Date: 3/30/2022</p>

Fuel Usage Monitoring

Background – Fuel usage monitoring includes measuring and tracking fuel inventories and fuel consumption. EQS’s fuel management software system can be used to help capture and store information reported to management for monitoring fuel use and making informed decisions. We interviewed EQS staff and reviewed supporting documentation to determine if EQS has effective fuel usage monitoring controls.

Observations – EQS’ current fuel usage monitoring process is highly manual and vehicle consumption analyses are not performed. EQS reports that incorrect odometer readings entered by employees during fueling, and a lack of vehicle usage data, makes the analyses difficult. Furthermore, EQS does not track the expected miles per gallon for vehicles to compare to the actual miles per gallon. It appears that EQS’ upgraded software has potential fuel usage monitoring functionality that is not being used. Understanding regular fuel consumption makes it easier to recognize anomalies that could indicate vehicle issues or fuel theft.

Recommendations to EQS	Responses
Set up alerts in FASTER Web to automatically identify transactions that require further review (e.g., fuel quantity anomalies, odometer discrepancies, etc.) and ensure those transactions are reviewed and properly dispositioned.	Concur – In progress EQS will coordinate with MCDOT/ITC office on creating a report of fuel transactions for identifying discrepancies. Target Date: 6/28/2022
Consider whether fuel usage data can be made available to departments to perform their own consumption analysis.	Concur – In progress EQS will coordinate with MCDOT/ITC office on creating a report of fuel usage for departments. Target Date: 12/31/2021

Fuel Usage Management Policies and Procedures

Background – Written policies and procedures can improve governance and guide consistent implementation of fuel usage management processes to ensure adequate protection of county resources. We interviewed key employees and reviewed available policy and procedure documentation.

Observations – EQS has not established written fuel usage management policies addressing data integrity, fuel usage monitoring, billing, AIMS use, Prokee and Flyers Fuel Card management, or fuel station monitoring. EQS’ informal desktop procedures only address certain fuel related processes and appear incomplete and out of date.

Recommendation to EQS	Response
Establish or update documented fuel usage management policies and detailed procedures addressing data integrity, fuel usage monitoring, billing, AIMS use, Prokee and Flyers fuel card management, and fuel station monitoring.	Concur – In Progress EQS will update department operating procedures for fuel management processes. Target Date: 12/31/2021

Additional Information

This audit was approved by the Maricopa County Board of Supervisors and was conducted in conformance with International Standards for the Professional Practice of Internal Auditing. This report is intended primarily for the County Board of Supervisors. However, this report is a public record, and its distribution is not limited. If you have any questions about this report, please contact Mike McGee, County Auditor, at 602-506-1585.