



The University of Texas Medical Branch
Audit Services

Audit Report

Facilities Management Audit

Engagement Number MBG25AS0003

July 2025

The University of Texas Medical Branch
Audit Services
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Background

The Facilities Management audit was included in the Fiscal Year 2025 Audit Plan with the goal of evaluating the internal controls related to work order processing and administration and assessing the integrity, consistency, and operational oversight of the work order management process within the Property Services and Utilities Operation departments of the University of Texas Medical Branch (UTMB Health).

Facilities Management is overseen by the Vice President of Business Operations and Facilities (BOF) who manages the Property Services division and Utilities Operations division. Both of these divisions are responsible for managing work orders across all campuses and clinics utilizing the Maximo, a computerized maintenance management system. Maximo is utilized for scheduling preventive and corrective maintenance and tracking equipment status. These two divisions operate as two separate divisions and maintain work orders independently. As such, the policies and procedures vary between the divisions, and the administration of work orders is governed separately.

Property Services

Building Infrastructure

Groundskeeping

Environmental Services

Utilities Services

Electricity

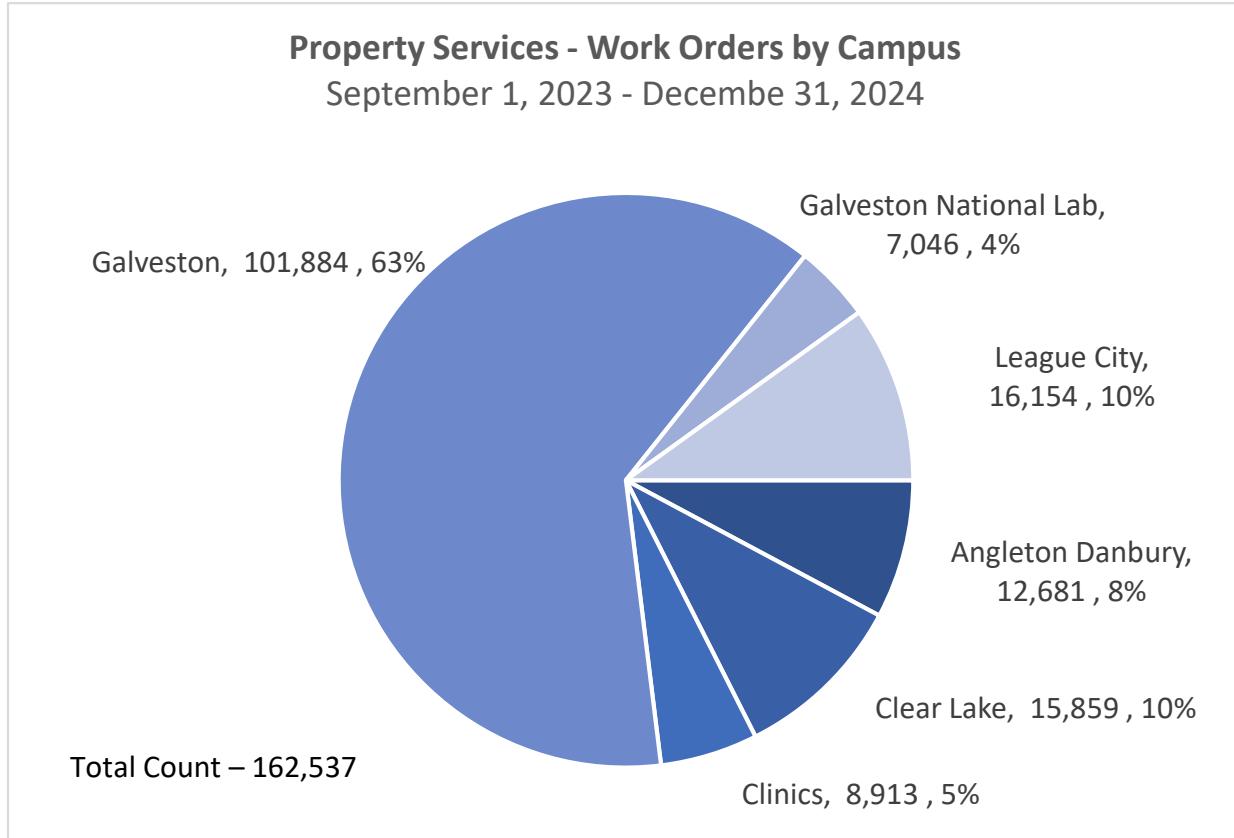
Heating and Cooling

Waste Management

Property Services

The Property Services division is led by the Associate Vice President of Property Services, four program directors, 23 supervisors and managers, and over 150 technicians. This division is responsible for maintaining UTMB Health facilities which includes the physical environment, such as, elevators, painting, building systems infrastructure, landscaping and grounds. Additionally, they are responsible for compliance with regulatory agencies and Environmental Services, which includes housekeeping. From September 1, 2023 – December 31, 2024, Property Services

managed approximately 162,500 work orders with 47% of these work orders for corrective maintenance and 48% of the orders for preventive maintenance.

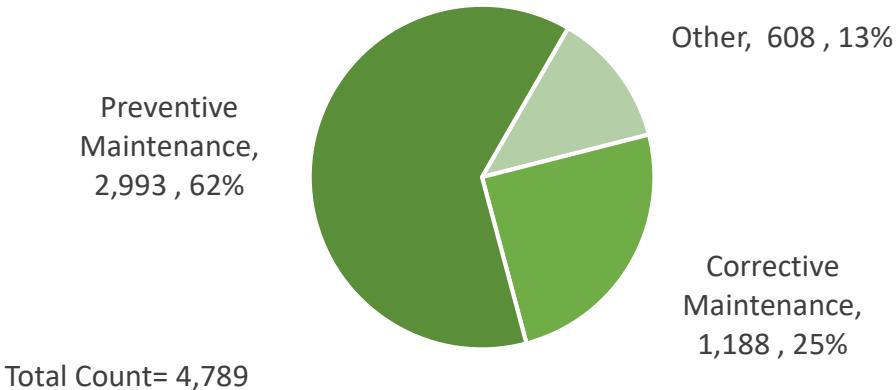


Utilities Services

The Utilities Operations division is led by the Associate Vice President of Utilities Operations, one program directors, 12 supervisors and managers and approximately 25 technicians. This division is responsible for energy operations, including the chilled water and steam, air conditioning and heating, waste management, system outages, and contract management for UTMB Health's utility providers. From September 1, 2023 – December 31, 2024, Utilities Operations managed approximately 4,789 work orders.

Utilities Services - Work Order by Type

January 1, 2023 - December 31, 2024



Management relies on a Utilities Management Plan to govern Property Services and Utilities Operations. This Management Plan details preventive maintenance administration, inventory inclusion, reporting issues to the service center, and business continuity methods. Additionally, Facilities Management relies on Maximo generated training manuals to aid in the proper use of the Maximo system.

Objective, Scope, and Methodology

The objective was to evaluate the internal controls related to work order processing and administration and assess the integrity, consistency, and operational oversight of the work order management process within the Property Services and Utilities Operation of the Business Operations and Facilities (BOF) department. Our scope included all Maximo managed work orders from September 1, 2023 – December 31, 2024. Our methodology included the following procedures:

- Reviewed policies, procedures, and training resources governing work order processing for Property Services and Utility Operations.
- Reviewed automated management reports produced by Maximo and distributed to various employees.
- Utilized data analytics to review 100% of work orders by status, type, description, and priority.
- Reviewed 100% of work orders for proper inclusion of all information necessary to effectively complete, track, and monitor work orders.

Reviewed 100% of preventive maintenance work orders for assignment of schedule to ensure timely completion of required maintenance.

Executive Summary

Facilities Management has a strong foundation in place for structured maintenance tracking and centralized documentation through Maximo. Technicians, managers, and supervisors all play an active role in the work order administration process. The audit has identified additional opportunities to strengthen the work order management process, particularly around standardizing procedures and improving data consistency. Currently, variations in how work orders are completed—such as work order prioritization levels, missing task details, responsible personnel, or completion dates—can make it challenging to track performance and ensure accountability. Additionally, delays in updating work order statuses and limited system monitoring may reduce visibility into ongoing tasks. Enhancing policies, improving data entry practices, and leveraging system tools like automated alerts and exception reporting can help support more efficient operations, better maintenance planning, and greater transparency across departments.

Detailed Results

Work Order Administration

A review of Maximo data identified blank fields and incomplete work order data indicating gaps in standardized processes for data entry and a limited understanding of which fields are required for work order administration and monitoring. Currently, Property Services and Utilities Operations rely on informal training upon hire. Maximo offers thorough training manuals for utilizing their work order program, however, the UTMB Health guidelines and requirements are not clearly defined to properly train employees. This gap in work order structure has led to incomplete work order databases which further inhibits management's ability to implement and monitor key performance indicators, work productivity and project management.

Recommendation 001 High – Work Order Standards and Training

Develop a structured work order standard plan that includes, but is not limited to, work order field requirements. Implement a training program to ensure facilities employees receive consistent instruction on work order documentation and standardized entry procedures. Implement refresher courses to reinforce best practices and improve data accuracy.

Management's Response: Property Services has an SOP for using Maximo, as well as documentation in Teams for common tasks. A new training document is being developed to be incorporated into the Annual Online Training , outlining required fields, entry requirements, and documentation standards applicable across all facilities operations.

We will also incorporate refresher courses in-person training sessions with managers and technicians aimed at reinforcing best practices and improving overall data integrity to address emerging challenges and ensure the team remains aligned with procedural standards.

Responsible Party: Ron Lloyd, Interim Associate Vice President, Property Services and Sean Finegan, Program Director, Utility Operations

Implementation Date: 9/1/25

Incomplete Data Fields within Maximo

Maximo has the capability to produce various reports to management. Property Services and Utility Operation leaders utilize reports such as “Week at Glance” that show all preventive maintenance due for the week, and “Past Due” reports. These reports serve as management’s guide to monitor and track work orders. However, these reports rely on the integrity of the data entered into Maximo. An acceptable inherent risk of incorrect data exists due to manual entry of work order details; the integrity of the data is limited to the extent of all fields being completed. In a review of both work order data sets from September 1, 2023 – December 31, 2024, Property Services has a 17% incomplete rate with key fields being “Due Date”, “Classification”, and “Work Log Description”, Utilities Operations data set has an incomplete rate of 27% with primary fields including “Priority” and “Target Start”. Additionally, the Utilities Operations data set does not include a “Completed Date”, this limits management’s ability to monitor timely completion of maintenance orders.

Recommendation 002 High – Incomplete Work Order Data:

Develop and implement standardized data entry protocols by systematically implementing mandatory fields, conducting routine work order status reviews with clear completion criteria, promoting consistent work log documentation, and optimizing preventive maintenance setups for enhanced tracking and efficiency.

Management’s Response: As part of recommendation one above, we will include standardized work order entry protocols across our work order system. This will include the introduction of mandatory data fields to ensure critical information is consistently captured, and the establishment of clear completion criteria to support routine status reviews and timely closeout of work orders.

We will also reinforce consistent work log documentation practices across teams to improve traceability and enable better analysis of service delivery and resource allocation. Additionally, we plan to optimize preventive maintenance setups, refining scheduling and tracking mechanisms to increase efficiency and accountability.

Responsible Party: Ron Lloyd, Interim Associate Vice President, Property Services and Sean Finegan, Program Director, Utility Operations

Implementation Date: 9/1/25

Outstanding Open Work Orders

An evaluation of all open work orders identified incomplete work orders ranging from September 1, 2023 to December 31, 2024. These work orders, for both divisions, varied in priority levels. Without complete documentation management is unable to determine if these work orders are truly incomplete, or if they are missing the final documentation to close the work order. The incomplete status updates skew management reports with open orders that could potentially be complete. For the period analyzed, Property Services had 1,200 open work orders and Utilities Operations had 445 open work orders.

Recommendation 003 High – Open Work Order Review

The Property Services and Utilities Operations departments should review all open work orders and update their status accordingly to improve the integrity of the data within Maximo. Additionally, a routine review process should be implemented to ensure work order status is being updated in real time.

Management's Response: A report will be built and sent out to managers monthly to show all open work orders older than 90 days. A dashboard will also be built to monitor the average age of open work orders to ensure and drive this metric downward.

Additionally, we will implement a routine work order status review protocol, which includes periodic monitoring and validation of active work orders to ensure timely updates. Clear documentation standards and training will be reinforced to help staff maintain real-time data accuracy and compliance with workflow requirements.

Responsible Party: Ron Lloyd, Interim Associate Vice President, Property Services and Sean Finegan, Program Director, Utility Operations

Implementation Date: 9/1/25

Limited Reporting

Property Services has implemented an internal standard of requiring 5% of work orders to be audited every month. Currently, Maximo is designed to automatically add the required audits to each manager's weekly assignments. When a manager completes their assigned tasks for the week, they mark these items as complete within Maximo and have achieved the 5% rule. While the assignment of 5% of work orders is automated, there is limited management reporting in place for leadership to review to ensure this rule is being met.

Recommendation 004 High – Work Order Oversight:

Develop and implement a standardized, automated compliance reporting system with dashboards and alerts to ensure consistent monitoring of regulatory requirements across both Property Services and Utilities Operations, reducing manual effort and minimizing the risk of missed audits.

Management's Response: We currently have work order audits to ensure that technicians are entering appropriate information in work orders. That data is captured in a Power BI dashboard for review by leadership. This will be included for review in our Utility Management monthly meeting. Some key KPIs included:

- Audit Completion Rate
- Task Completion Timeliness
- Open Issues
- Work Order Closure Timeliness

Responsible Party: Ron Lloyd, Interim Associate Vice President, Property Services and Sean Finegan, Program Director, Utility Operations

Implementation Date: 9/1/2025

Conclusion

We appreciate the assistance provided by the Utilities Operations and Property Services Divisions of Business Operations & Facilities and hope that the information presented in our report is beneficial.

This audit was conducted in conformance with The Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing*. Additionally, we conducted the 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 and conclusions on our audit objectives.

Observation Ratings

Priority	An issue that, if not addressed timely, has a high probability to directly impact achievement of a strategic or important operational objective of the University or the UT System as a whole.
High	An issue considered to have a medium to high probability of adverse effects to a significant office or business process or to the University as a whole.
Medium	An issue considered to have a low to medium probability of adverse effects to an office or business process or to the University as a whole.
Low	An issue considered to have minimal probability of adverse effects to an office or business process or to the University as a whole.

Report Date:

July 17, 2025

Report Distribution:

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