

CINDY STUART



Clerk of Court & Comptroller
13th Judicial Circuit

An Audit of:

**NON ROUTINE
MAINTENANCE
REQUESTS**

COUNTY AUDIT DEPARTMENT

REPORT # 396

MAY 3, 2021

May 3, 2021

The Honorable Pat Kemp, Chairman
The Honorable Harry Cohen
The Honorable Ken Hagan
The Honorable Gwen Myers
The Honorable Kimberly Overman
The Honorable Mariella Smith
The Honorable Stacy R. White



Dear Chairman Kemp and Commissioners:

The Audit Team performed an audit of Public Works' Non-Routine Maintenance Work Order Process (Audit Report #396, dated May 3, 2021). Responses to the Audit Team's recommendations were received from the Director of Public Works Engineering and Operations and have been included in the Report after each audit comment and recommendation.

The purpose of this Report is to furnish management independent, objective analysis, recommendations, counsel, and information concerning the activities reviewed. It is not an appraisal or rating of management.

Although the Audit Team exercised due professional care in the performance of this audit, this should not be construed to mean that unreported noncompliance or irregularities do not exist. The deterrence of fraud and/or employee abuse is the responsibility of management. Audit procedures alone, even when carried out with professional care, do not guarantee that fraud or abuse will be detected.

The Audit Team appreciates the cooperation and professional courtesies extended to the auditors by the Director and personnel of Public Works (PW) Transportation Maintenance during this audit.

Sincerely,

Heidi Pinner

Together, we will get to YES!

Heidi Pinner, CIA, CISA, CFE, CRMA
Chief Audit Executive, County Audit Department

CC: Bonnie Wise, County Administrator
Greg Horwedel, Deputy County Administrator
John Lyons, Assistant County Administrator, Public Works
Josh Bellotti, Director, Engineering & Operations, Public Works
Debbie Benavidez, Director, Enterprise Solutions & Quality Assurance

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EXECUTIVE SUMMARY

BACKGROUND INFORMATION

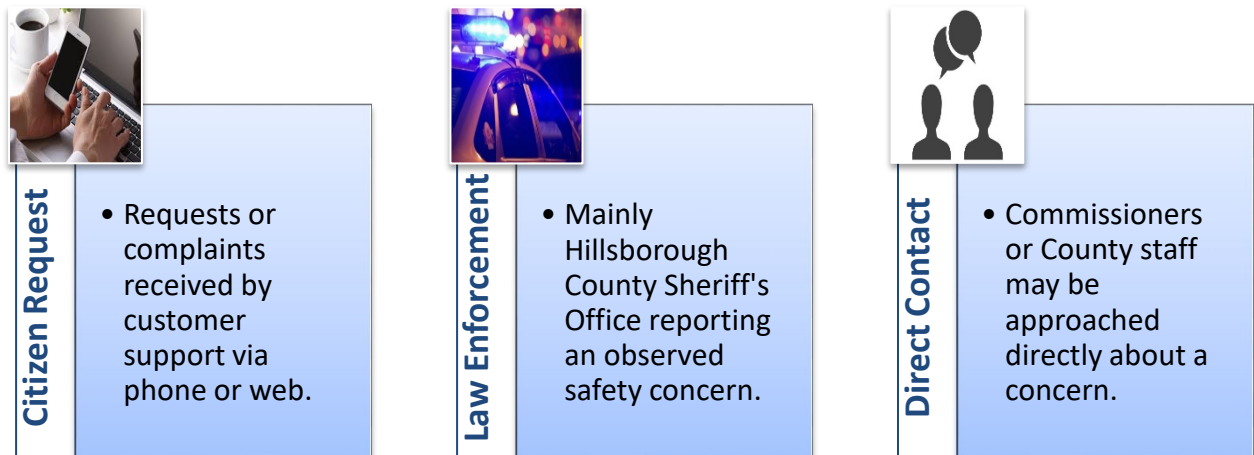
The Public Works Department’s (the Department) goal is to provide safe and efficient transportation in the county by maintaining roads, bridges, traffic signals, and street signs. The Department also maintains stormwater systems to protect the public and provides mosquito management. The Engineering and Operations Division provides maintenance, management, and engineering for transportation and stormwater infrastructure, including:

- Roadway maintenance (pot hole patching, tree trimming, ditch maintenance)
- Pavement, bridge, and sidewalk programs
- Stormwater flooding investigations
- Traffic signs, traffic signals, and roadway lighting
- Hazard mitigation
- Mosquito management



Maintenance is based on an 80/20 split between routine and non-routine work orders. Routine work orders based on regular annual maintenance account for 80% of the work performed while non-routine work orders account for the remaining 20%.

Non-routine work orders are received via:



MAINTSTAR is the work order system used by Public Works to record, assign, and track all work orders. Non-routine service requests are classified as low, public safety, or BOCC. The majority of service request work orders are classified as low.

OBJECTIVE

The objective of the audit was to determine whether or not adequate controls are in place over the intake, tracking, and follow-up for non-routine service requests/work orders.

SCOPE

The audit was conducted in conformance with the *Generally Accepted Government Auditing Standards* and the *International Standards for the Professional Practice of Internal Auditing*. These Standards require that County Audit plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for the audit comments and conclusions based on the audit objectives. County Audit believes that the evidence obtained provides this reasonable basis.

The audit period covered the dates from July 1, 2019 to August 3, 2020.

OVERALL EVALUATION

PROCESS STRENGTHS

- Non-routine service requests are categorized by receipt method (citizen, law enforcement, County staff) for tracking purposes.
- Non-routine service requests are prioritized for public safety purposes.
- Service requests/work orders are supported with labor and/or materials costs.
- Work orders are categorized by nature of service being requested for assignment to proper service maintenance unit.
- New service requests received are checked against prior requests and scheduled work to avoid duplication of work orders.

CONTROL IMPROVEMENT OPPORTUNITIES/RISKS

- Some work orders remain open for 30 or more days after completion of the work.

Full testing results are included on page 4 of this Report.

OPINION

Control Maturity Levels



The overall control environment relative to the management of non-routine work orders is at a formal maturity level. This means that the controls are well-defined, an overall control awareness exists, and procedures/processes with a formal structure are in place. Opportunities do exist to enhance this structure by closing completed work orders more timely and continuing to monitor work order allocations to ensure they remain an effective planning tool.

The exit conference was held on April 14, 2021.

Other minor concerns not included in this Report were communicated to management and/or corrected during fieldwork.

AUDITED BY

Heidi Pinner, CIA, CISA, CFE, CRMA, Chief Audit Executive, County Audit Department
 Margaret Brown, CIA, Audit Manager
 Terrell Alston, Internal Auditor

AUDIT COMMENTS & RECOMMENDATIONS

AUDIT COMMENT 1

The Non-Routine Maintenance Request process has adequate controls

The 80/20 ratio for planning routine vs. non-routine maintenance appears to be reasonable.

OPPORTUNITIES



Monitor aging work orders



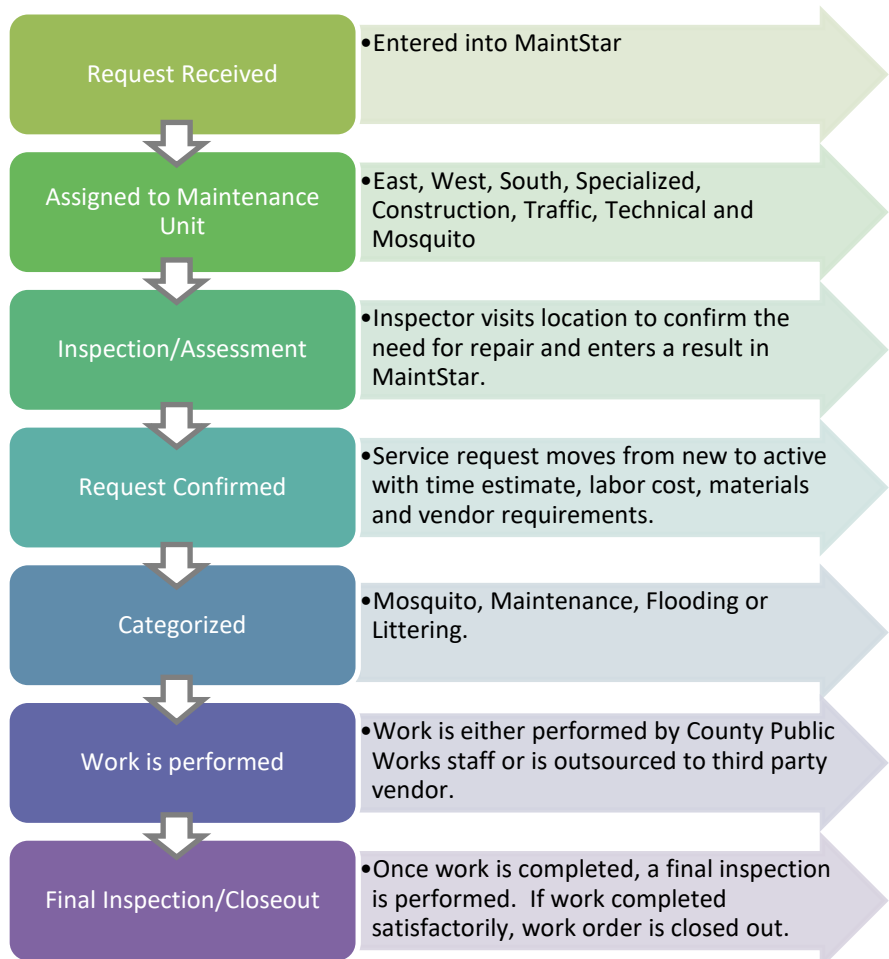
Continue monitoring the planning ratio for routine vs non-routine maintenance.

OBJECTIVE

To determine whether or not:

- Work orders were properly categorized.
- Work orders were supported with adequate and sufficient documentation.
- The length of time from receipt of service request to resolution was appropriate.
- No duplication of service requests existed.
- Multiple service requests were received for the same issue over the audit period.
- The 80%-20% allocation of routine work orders to non-routine work orders is reasonable and sustainable.

NON- ROUTINE MAINTENANCE PROCESS



When a service request is received, the Department checks to determine whether or not a similar request was previously received, was it scheduled and/or completed, or is the requested service part of the routine maintenance schedule. Once a determination is made that the service requested is for non-routine maintenance, the request is assigned to the appropriate service maintenance unit in MaintStar and is prioritized as either an “emergency,” requiring immediate action, or as “less than two weeks,” implying the request will be addressed in the near future.

The Audit Team obtained a download of all non-routine service requests/work orders received by all service maintenance units for the audit period (July 2019 – August 2020).

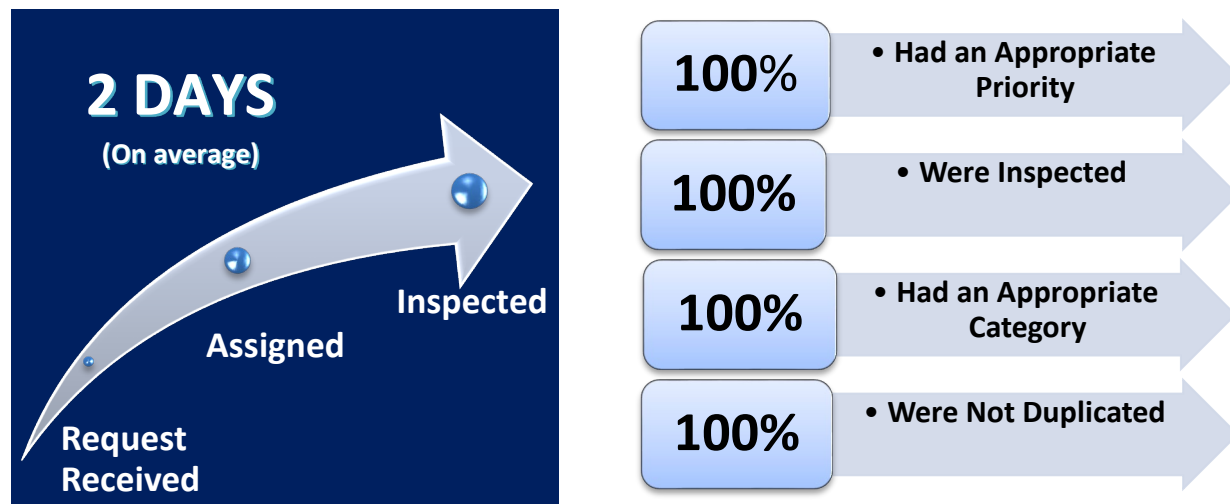
12,900 Non Routine work orders were identified

The Audit Team reviewed a sample of 25 service requests and reviewed each request to:

- Identify the number of days from the date the service request was received to the date action was performed and entered into MaintStar and assessed the reasonableness of the time frame.
- Verify that the priority code (Low, Health & Safety, BOCC) matched the description of the submitted service request and seemed appropriate.
- Verify that an inspection was performed and sufficiently documented in MaintStar.
- Verify that the service request was properly categorized (1 for “emergency” or 2 for “less than two weeks”) in the MaintStar system based on the inspector’s description of the work needed.
- Review MaintStar for duplication of submitted service requests (i.e., an issue reported more than once during the audit period).

TESTING RESULTS

It took an average of 2 days for the work orders to be inspected once a request was received.



FOLLOW-UP AND COMPLETION OF NON-ROUTINE WORK ORDERS

The Audit Team obtained a data for all work orders (routine/non-routine and open/closed) for the audit period.

24,808 total work orders were identified for the period

The Audit Team selected a sample of 51 non-routine closed work orders and reviewed the *MaintStar* record, obtained documentation, and met with staff from Public Works to:

- a. Identify the date the service/maintenance request was received.
- b. Identify the date the inspection was performed by the service/maintenance unit.
- c. Identify the work order issue/start date.
- d. Verify that labor, material, and record of work performed was documented in *MaintStar*.
- e. Verified the accuracy of third party invoices, if any, for work performed.
- f. Identify the date the work order was completed and/closed.
- g. Calculate the total length of time to complete the work order.
- h. Obtain evidence that PW staff reviewed and verified the accuracy of the work order, including review of material and labor costs.
- i. Identify the cause of delay (if applicable) and whether or not the delay reason was documented on the work order in *MaintStar*.

TESTING RESULTS

92% of the work orders were closed within 30 days

For the work order over 30 days:

- Two required staff to wait on contracted third-parties to provide necessary repair/replacement services.
- Two were completed in one day but not closed out upon completion. These work orders were opened for 62 days and 121 days.

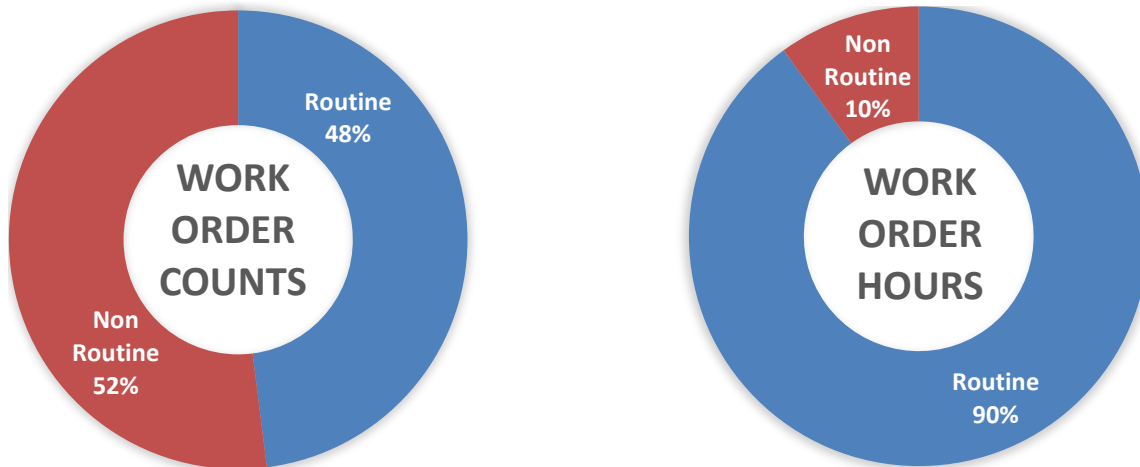
Leaving completed work orders in an “open” state does not affect the work itself but could adversely affect any benchmarking metrics the department is tracking to measure effectiveness and efficiencies.

ALLOCATION TESTING

The Audit Team obtained a download of all work orders for the period beginning October 1, 2017 through August 3, 2020 which covers Fiscal Year 2018, Fiscal Year 2019, and 10 months of Fiscal Year 2020. For each fiscal period, the Audit Team analyzed the number of routine work orders and non-routine work orders to assess the reasonableness and feasibility of the 80%-20% allocation model. Since each work order varies in the number of planned hours to complete, the Audit Team looked at both the number of work orders and the number of work order hours (i.e. labor) associated with these work orders.

Testing Results

As reflected in the tables below, the distribution of routine and non-routine work orders by quantity was 48/52 while the distribution by work order hours was 90/10 for the 3 year period.



	All Work Orders	Routine Work Orders	Non Routine Work Orders	All Work Order Hours	Routine Work Hours	Non-Routine Work Hours
Fiscal Year 2018	20,591	10,447	10,144	584,680	523,278	61,402
Fiscal Year 2019	23,010	10,021	12,989	667,831	590,952	76,879
Fiscal Year 2020	17,576	8,962	8,614	549,501	504,370	45,131

As shown in the table above, non-routine maintenance requests make up a significant portion of the maintenance work orders for Public Works. However, the majority of labor hours are spent

on planned maintenance and the portion of hours for planned vs. unplanned maintenance is reasonably consistent with the 80/20 model.

RECOMMENDATION

Management should monitor work order statuses to ensure that work orders do not remain open once work is completed. This process/procedure should also include a periodic reminder to staff of the importance of closing out completed work orders if exceptions continue to occur.

CLIENT RESPONSE:

Concur

CORRECTIVE ACTION PLAN:

The Transportation Maintenance Division will run a 30-day Work Order Aging Report from Maintstar. This report will be generated bi-weekly and distributed to the maintenance units for follow up on older work orders.

TARGET COMPLETION DATE:

June 1, 2021