

Multiple Failures in Department of General Services Management of Work Orders

November 28, 2022

A report by RSM US LLC for the Office of the D.C. Auditor



Audit Team
RSM US LLC

November 28, 2022

The Hon. Phil Mendelson, Chairman
Council of the District of Columbia
1350 Pennsylvania Avenue, N.W.
Washington, DC 20004

Dear Chairman Mendelson and Councilmembers:

I write to present the report, **Multiple Failures in DGS Management of Work Orders**, prepared for the Office of the D.C. Auditor by RSM US LLP, in response to your April 13, 2022, request for an analysis of the business processes employed by the Department of General Services (DGS) to handle D.C. Public Schools (DCPS) maintenance needs. In conjunction with an upcoming report on the modernization of Roosevelt High School, also prepared by RSM, this report assists in meeting ODCA's obligation under D.C. Code §38-2973.05 to report on DGS's management of capital funds on behalf of DCPS.

The report describes DGS's implementation and use of a Computerized Maintenance Management System (CMMS) procured from Salesforce, a cloud-based software firm. The CMMS was intended to help DGS manage work orders across the District and throughout a repair lifecycle, from initial request through completion and documentation of labor and materials, including DCPS facilities. Auditors found serious shortcomings in DGS use of the tracking system, including failure to provide documentation or be fully transparent with those initiating work orders.

Within a universe of more than 48,000 work orders reviewed the most frequent requests for maintenance were interior services (locks and doors), electrical services (lighting), and HVAC services (heating and cooling). Auditors also found that eight DCPS facilities were among the 20 District buildings or locations with the highest number of work orders, and DCPS work orders made up 43% of all D.C. work orders during the audit's timeframe.

The audit team documented shortcomings in the agency's use of the CMMS including the following:

- DGS's current use of the work order database does not fully capture work order costs. Of the total recorded expenditures of \$311.8 million between FY20 and FY21, the CMMS captured just \$31.3 million, or roughly 10% of the total. In the audit team's sample of completed work orders with vendor costs, only \$46,339 of \$150,974 in expenditures were included in the CMMS.
- The system has the ability to provide estimated work order dates, but for 17 of 25 sampled work orders, DGS supervisory personnel failed to provide requestors with an estimated completion date.
- Work order system documentation also failed to include photos. In 25 samples, three failed to provide before photos, three failed to provide after photos, and eight of the 25 samples that included photos substituted stock images from the internet rather than actual photos from the D.C. site.

- Auditors concluded that “a comprehensive preventative maintenance program has not been implemented” putting at risk that manufacturer warranties for newly installed equipment could be cancelled.
- DGS fails to meet response times for work orders. Within the various samples, 11 of 18 routine work orders were not completed within the 45-day mandatory completion time. Of the 48,356 work orders completed or closed during the audit scope, on average 55 days elapsed between the requested date and completion of the work order within the CMMS. Fully 62% of the high priority work orders were not completed within the mandatory 10 days.

Auditors recommended implementation of an inventory management system integrated with the work order tracking system and “a robust supervisory review of work orders” including an independent assessment of the accuracy and reasonableness of data entered into the DGS system.

The auditors conclude: “The current CMMS was implemented to be the central repository for all information related to maintenance work performed throughout the District. The ability to obtain, review, and analyze data from the CMMS is critical for management to effectively manage resources and monitor the District’s maintenance program. Therefore, the effectiveness of a work order system is dependent on data input by end users. The data input must be complete, accurate, consistent, and timely to realize the full benefits of implementing a CMMS.”

ODCA appreciates the partnership with and professionalism of the RSM team and appreciates as well the cooperation and collaboration on the part of DGS and the DGS leadership. We hope this report is useful to the Council in its oversight of government operations including the DGS maintenance program.

Sincerely yours,



Kathleen Patterson
Auditor of the District of Columbia

Office of the District of Columbia Auditor

Internal Audit Report: Districtwide Work Order Process Analysis

November 2022



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TRANSMITTAL LETTER

September 30, 2022

Kathleen Patterson, D.C. Auditor
Office of the D.C. Auditor
717 14th Street NW 9th Floor
Washington D.C. 20005

Pursuant to Modification #1 to our Consulting Services Agreement, dated May 9, 2022, we hereby present our internal audit report of the Districtwide work order process.

Our report is organized in the following sections:

Executive Summary	This provides a high-level overview and summary of the observations noted in our internal audit of the District's work order process.
Background	This section includes an overview of the District's work order process.
Objectives and Approach	The internal audit objectives and focus are expanded upon in this section as well as a review of the various phases of our approach and the results of our audit procedures.
Observation Matrix	This section includes a description of the observations noted during our internal audit and recommended actions.
Appendix	This section includes a detailed process map related to the District's work order process.

We would like to thank the staff and all those involved in assisting us with this internal audit.

Respectfully Submitted,

RSM US LLP

EXECUTIVE SUMMARY

Background

The District of Columbia's ("District") maintenance work order management process falls within the responsibility of the Department of General Services ("DGS"). Within DGS, several divisions and work teams are responsible for facilitating the work order management process. The Facilities Management Division ("FMD"), which reports to the Chief Operating Officer ("COO") is the District's implementation agency for all District-owned and managed facilities. FMD categorizes maintenance and repair services by seven (7) main problem types and forty-eight (48) sub-problem types.

FMD service areas include, but are not limited to, District of Columbia Public Schools ("DCPS"), municipal buildings, parks and recreation, and public service facilities (i.e., libraries and shelters). Maintenance and repairs are performed by both in-house craftspersons and third-party vendors. In addition to in-house maintenance personnel, DGS utilizes Consolidated Maintenance Contracts ("CMC") to maintain the District's most critical facilities.

To facilitate the work order management process, the District has implemented a Computerized Maintenance Management System ("CMMS") from cloud-based software company, Salesforce. The Department of General Services utilizes Salesforce's "Smart DGS" module as its work order management system of record ("SOR"). The SMART DGS platform includes work order data from 2014 to present, and functions as the central document repository for work order-related documentation.

Objectives and Approach

Scope of Work

- Conducted interviews with key personnel to obtain a detailed understanding of the District's policies and procedures, operating functions, and key performance indicators related to work order management.
- Reviewed documented policies and procedures, organizational charts, and other key process information available to further our understanding of the function.
- The detailed testing phase of our review consisted of an assessment of the design of key controls and testing of the operating effectiveness of those controls. This process was facilitated through the testing of a sample of work orders completed and/or closed by the District's facilities management team during the period of January 1, 2020 through December 31, 2021.
- Selected a sample of maintenance work orders from the District's Computerized Maintenance Management System (CMMS) and tested key controls previously identified

Reporting

At the conclusion of our procedures, we summarized our findings into this report. We have reviewed the results of our testing with ODCA and DGS representatives.

Fieldwork was performed May 2022 through August 2022.

Overall Summary / Highlights

DGS' work order management process has experienced significant change over the last ten (10) years with the emergence of Districtwide modernization initiatives, CMC programs, and the adoption of a new CMMS. While DGS has continuously adapted to new processes, the District faces many challenges as work order management continues to evolve into a more mature process. Challenges include maintaining and adapting to new systems within newly modernized facilities and implementing various process improvements recommended by business intelligence teams such as the Facilities Intake Request Service Team. Although various process improvements have been identified by DGS, many future-state recommendations have not been implemented or adopted.

During our fieldwork, we noted observations related to DGS' current utilization of the CMMS, deficiencies related to preventative maintenance procedures, work order response time and noncompliance with DGS' Service Level Agreement ("SLA"), and a lack of clearly defined Key Performance Indicators ("KPIs") for work order management.

EXECUTIVE SUMMARY (CONTINUED)

Observations Summary

Below is a summary listing of the observations that were identified during this internal audit. Detailed observations are included in the observations matrix section of the report.

Summary of Observations	
Observations	
1. Tracking and Capture of Cost Data	Through our detailed testing and discussions with stakeholders, we noted that work order cost data was inconsistently recorded in the CMMS.
2. Other Supporting Data Entry	Through our detailed testing, we noted that supplementary information and/or supporting documentation was inconsistently captured within the CMMS.
3. Preventative Maintenance	Through interviews with the Department of General Services (“DGS”), we noted that a comprehensive preventative maintenance program has not been implemented. The District currently utilizes manual processes for tracking, scheduling, and performing preventative maintenance activities, which typically occur outside of the CMMS.
4. Work Order Histories and Audit Trails	Through our detailed testing, we noted missing information related to system-generated “Work Order Histories” and the documentation of individual workflow steps within the CMMS.
5. Segregation of Duties	Through our detailed testing, we noted that certain functions within the “SMART DGS” work order management platform may not be appropriately or ideally segregated.
6. Work Order Response Time	Through our detailed testing, we noted that nineteen (19) of twenty-five (25) sampled work orders were not in compliance with the Department of General Services’ (“DGS”) Service Level Agreement (“SLA”).
7. Key Performance Indicators (“KPIs”)	Through discussions with the Department of General Services (“DGS”), we noted that while analytical monitoring is occurring, consistent KPI monitoring and reporting procedures have not been adopted.

BACKGROUND

Overview

The District of Columbia's ("District") maintenance work order management process falls within the responsibility of the Department of General Services ("DGS").

"The goal of the Department of General Services is to ensure the delivery of new or modernized, well-equipped, well-maintained, safe and secure buildings and facilities for the benefit of District residents and employees. Further, the agency's mission is to promote the efficient and effective management of the District's real estate investments and interests through strategic portfolio management, construction, and facilities management."

Within DGS, several divisions and work teams are responsible for facilitating the work order management process. The Facilities Management Division ("FMD"), which reports to the Chief Operating Officer ("COO") is the District's implementation agency for all District-owned and managed facilities. FMD categorizes maintenance and repair services by seven (7) main problem types and forty-eight (48) sub-problem types. The seven (7) main problem types are as follows:

- Interior Services (lock and door, flooring, janitorial, interior painting, fire sprinkler)
- Exterior Services (roofing, exterior painting, playground, athletic field, and window issues)
- HVAC Services (heating and cooling issues)
- Electrical Services (lighting, power, and outlet issues)
- Plumbing Services (leak, toilet, faucet, and pipe issues)
- Environmental Services (pest control, environmental, and odor issues)
- Other Services (indoor vehicle bay exhaust system, press address ("PA") and clock system, and generator issues)

FMD service areas include, but are not limited to, District of Columbia Public Schools ("DCPS"), municipal buildings, parks and recreation, and public service facilities (i.e., libraries and shelters). Maintenance and repairs are performed by both in-house craftspersons and third-party vendors. As outlined in the *FY2023 Approved Budget and Financial Plan*, DGS Facility Operations employed three hundred ninety-one (391) full-time equivalents ("FTEs") in FY 2020 and three hundred eighty-two (382) FTEs in FY 2021. Facility Operations' expenditures for FY 2020 totaled \$134.2 million, and \$177.5 million in FY 2021.

Consolidated Maintenance Contracts

In addition to in-house maintenance personnel, DGS utilizes Consolidated Maintenance Contracts ("CMC") to maintain the District's most critical facilities. The CMC Program was originally implemented to provide on-site maintenance resources for specific District facilities that posed the greatest operational risk in the event of facility shutdown or system failure. For example, facilities such as One Judiciary Square (Marion S. Barry, Jr. Building) and the Office of Unified Communications (911 & 311 call centers), which provide critical public services are managed by on-site Consolidated Maintenance Contractors. The CMC Program was eventually expanded to certain DCPS facilities in response to Districtwide modernization projects. Newly modernized facilities required increased support to facilitate the turnover process and overall maintenance of new systems.

According to DGS personnel, CMC vendors provide "turn-key" maintenance services, providing in-house personnel to perform maintenance. Each CMC vendor is contracted under a fixed-price agreement, with a reimbursable component that allows the CMC to provide immediate response for services outside of their base agreement. With maintenance personnel on-site at select locations, CMC vendors can provide on-demand maintenance services, instead of the traditional model of dispatching DGS personnel from a central location. Currently, the District utilizes seven (7) Consolidated Maintenance Contractors at twenty-eight (28) locations throughout the District.

BACKGROUND (CONTINUED)

Computerized Maintenance Management System ("CMMS")

To facilitate the work order management process, the District has implemented a Computerized Maintenance Management System ("CMMS") from cloud-based software company, Salesforce. The Department of General Services utilizes Salesforce's "Smart DGS" module as its work order management system of record ("SOR"). The SMART DGS platform includes work order data from 2014 to present, and functions as the central document repository for work order-related documentation (refer to **Observation #2** for additional information). The CMMS allows the District to manage work order activities throughout the entire lifecycle, from initial request through completion and recording of actuals (i.e., labor and materials).

Work orders are processed through an electronic workflow, which is moderated by DGS' Facilities Intake Request Service Team ("FIRST"). The workflow begins when a work order request is approved by FIRST and a work order is created in the system. Functionally, client agencies, Consolidated Maintenance Contractors, and DGS personnel can view and interact with work orders within the CMMS. The CMMS allows users to communicate directly within a given work order through various chat and comment functions. For example, DGS can request additional information from client agencies regarding the issue, and client agencies can follow-up on the status of a work order, all within the CMMS.

The CMMS is also utilized as a data analytics tool by the Facilities Intake Request Service Team. FIRST uses system-generated work order data to create various reports and dashboards within the CMMS (refer to **Observation #7** for additional information).

Facilities Intake Request Service Team ("FIRST")

DGS' Facilities Intake Request Service Team ("FIRST"), which reports to the Chief Operating Officer ("COO") is an independent group responsible for the overall administration of DGS' work order management process. FIRST was established in 2019 and is comprised of one (1) Supervisory Management Analyst, one (1) Work Order Coordinator, two (2) Management Analysts, one (1) Work Order Leader, two (2) Work Order Specialists, one (1) Work Order Data Analyst, one (1) Legislative Affairs Specialist, and one (1) External Affairs Specialist.

According to the FIRST Procedures Manual, its mission is to:

"Support all DGS divisions by managing the work order data lifecycle from request to closing. FIRST has the responsibility of work order master data management. This includes data integrity (e.g., cancelling duplicate work orders), reporting work order data, conducting data analytics, and generating dashboards."

The Facilities Intake Request Service Team is the first line of review for work order intake and supports the work order management process for DGS. FIRST members function as "Super Users" of the District's CMMS and are responsible for evaluating existing processes and identifying opportunities for enhancement and improvement.

Work Order Management Process

When a need for maintenance or repairs is identified, "client agencies", primarily individual stakeholders within DGS-managed facilities, submit a "work request" through available intake channels. Other requesting parties may include stakeholders such as District government employees, DGS building managers, DCPS personnel, DC residents, community leaders, etc. Work requests can be submitted via phone call, email, Twitter, the DGS app, or directly in Salesforce. Work requests are initially received by the Facilities Intake Request Service Team, who is responsible for reviewing the work request and determining if it is within DGS' "scope of responsibility" (i.e., a DGS-managed facility and a DGS-provided service).

BACKGROUND (CONTINUED)

Work Order Management Process (continued)

After its initial intake, the work request is then “Approved” by FIRST and a “Work Order” is created. Prior to assigning the work order to a specific work team, FIRST confirms the categorization of the work request, as either “Routine”, “High Priority”, or “Emergency”. DGS’ Service Level Agreement (“SLA”) requires that work orders are responded to and completed within a specified duration. The following table provides the response and completion times for each priority level.

Official Service Level Agreement (“SLA”)			
Priority Level	Description	Mandatory Response Time	Mandatory Completion Time
Work Request	A submission for work to be reviewed for approval by DGS.	Within 1 hour	Within 1 hour
Emergency	Issue presents an immediate health or safety risk. Impacts building or programmatic operations. Most emergency issues are auto routed.	With 2 hours	Temporary measures taken immediately to “make safe” or stabilize the issue. Permanent repair TBD based on the factors of the emergency.
High Priority	Issue presents a potential health or safety risk. Potential risk to programmatic operations pending an upcoming event. Escalated by DGS Senior Level Management.	Within 72 hours (0-3 days)	Less than 10 days unless placed on HOLD
Routine	Normal building maintenance that will not significantly impact operations. May include aesthetic issues or landscaping issues.	Within 96 hours (0-4 days)	Less than 45 days

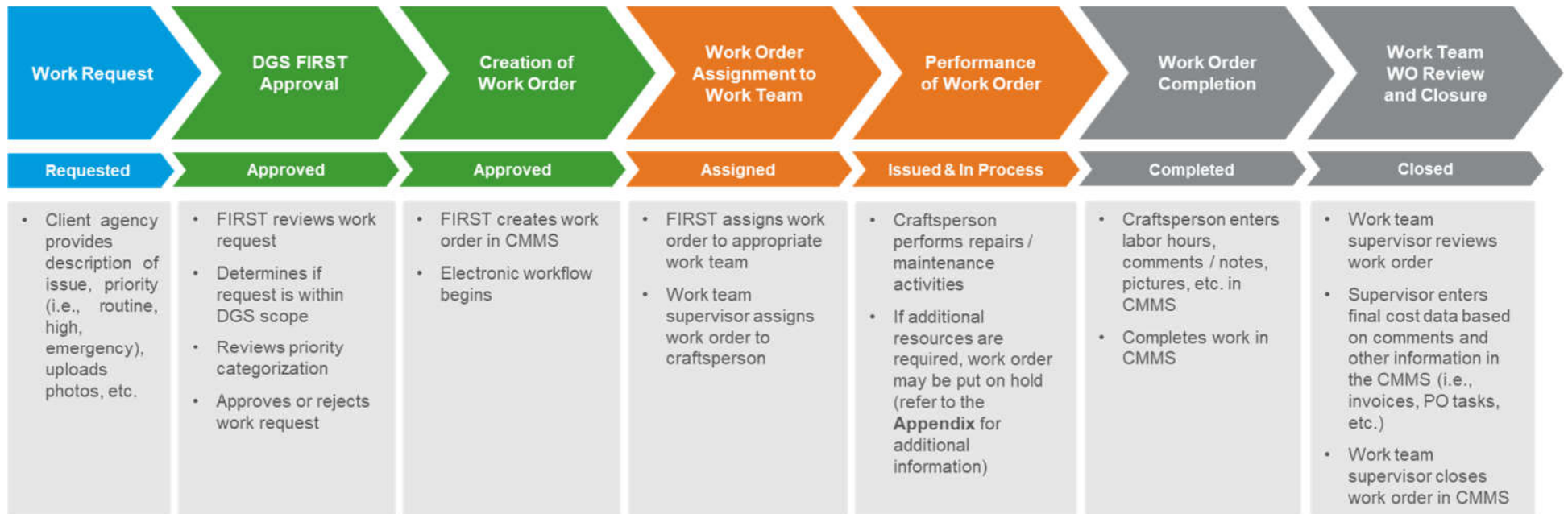
Work orders are assigned to individual work teams based on the nature of the request. Work teams include, but are not limited to, in-house FMD trade teams (plumbing, electrical, locksmith, Boiler Plant Operations-HVAC, etc.), region or area based FMD teams, CMC vendors at individual locations, and General Contract Services. Supervisory personnel from individual work teams then assign the work order to craftspersons or technicians to perform the work. If the work order exceeds the capacity or capability of in-house DGS personnel, solicitation of a third-party vendor may be required, which is facilitated by FMD Contract Support Services and/or DGS Contracts and Procurement Division (“C&P”). Work orders that require additional resources may be put “on hold” for parts, procurement, funding, labor, etc.

BACKGROUND (CONTINUED)

Work Order Management Process (continued)

When the work order is completed, the craftsperson is responsible for entering the hours spent completing the work order, description and quantity of materials used, and pictures of the completed work. Supervisory personnel then perform a final review, and “close” the work order by inputting any costs associated with the work order (refer to **Observation #1** for additional information).

The following graphic provides a high-level overview of the work order process.



Refer to the **Appendix** on page 26 for a detailed process map.

BACKGROUND (CONTINUED)

CMMS Data Analytics

RSM obtained a population of work orders requested during the period of January 1, 2020, through December 31, 2021, from DGS' Facilities Intake Request Service Team ("FIRST").

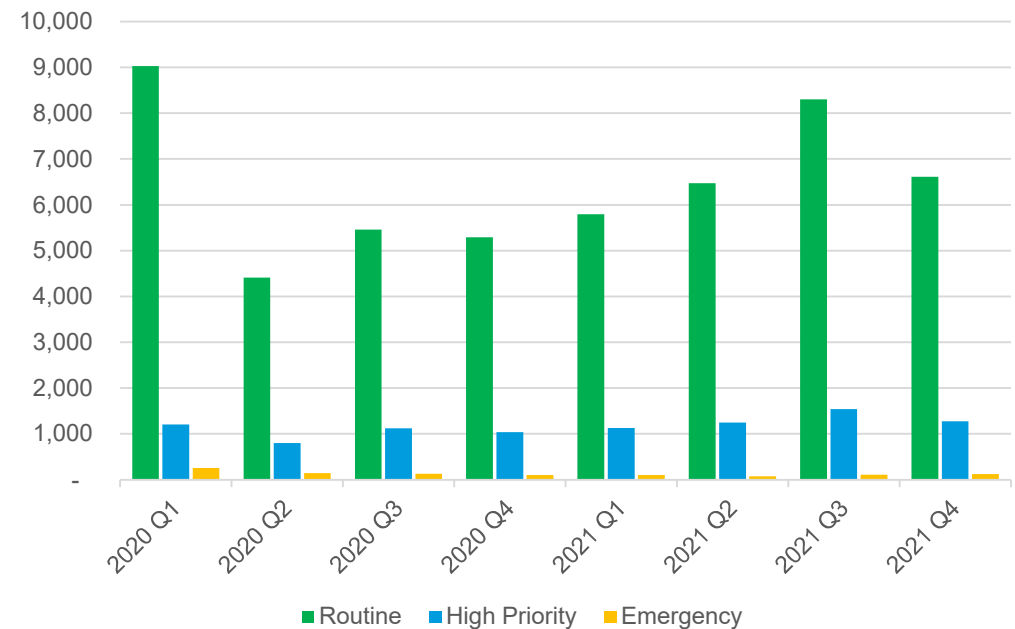
In total, **61,766** work orders were requested during our scope period. The table below includes the total number of work orders requested and the status of those work orders as of June 30, 2022.

Work Orders by Status (as of June 30, 2022)		
Status	# of Work Orders	% of Total
Closed	30,148	49%
Completed	18,208	29%
Cancelled	8,129	13%
Approved	2,020	3%
Rejected	1,381	2%
Vendor Completed	859	1%
Issued and In Process	743	1%
On Hold for Parts	79	<1%
On Hold for Procurement	77	<1%
On Hold for Funding	62	<1%
On Hold for Labor	31	<1%
On Hold for Project	19	<1%
On Hold for Access	5	<1%
On Hold for Seasonal	3	<1%
On Hold for Capital	2	<1%
Total	61,766	

Work Orders by Priority



Work Orders Requested by Quarter



BACKGROUND (CONTINUED)

CMMS Data Analytics (continued)

Work Orders by Sub-Problem Type		
Sub-Problem Type	Main Problem Type	Total # of WOs
Lock and Door	Interior Services	6,228
Lighting	Electrical Services	5,475
Cooling	HVAC Services	5,172
Heating	HVAC Services	4,311
Toilet	Plumbing Services	3,851
Building Structural	Interior Services	2,575
Pest Control	Environmental Services	2,336
Leak	Plumbing Services	2,109
Janitorial	Interior Services	1,917
Faucet	Plumbing Services	1,733
Drain	Plumbing Services	1,688
Ceiling	Interior Services	1,676
Grounds	Exterior Services	1,528
Interior Painting & Wall Issue	Interior Services	1,524
Outlet	Electrical Services	1,357
Window	Interior Services / Exterior Services	1,275
Power	Electrical Services	1,107
Turnover Management	Interior Services	1,044
Flooring	Interior Services	941
Fence and Gate	Exterior Services	883
Total		48,730

DCPS

26,425 work orders were requested related to DCPS facilities:

43%

of all work orders

Municipal

10,657 work orders requested related to Municipal facilities:

17%

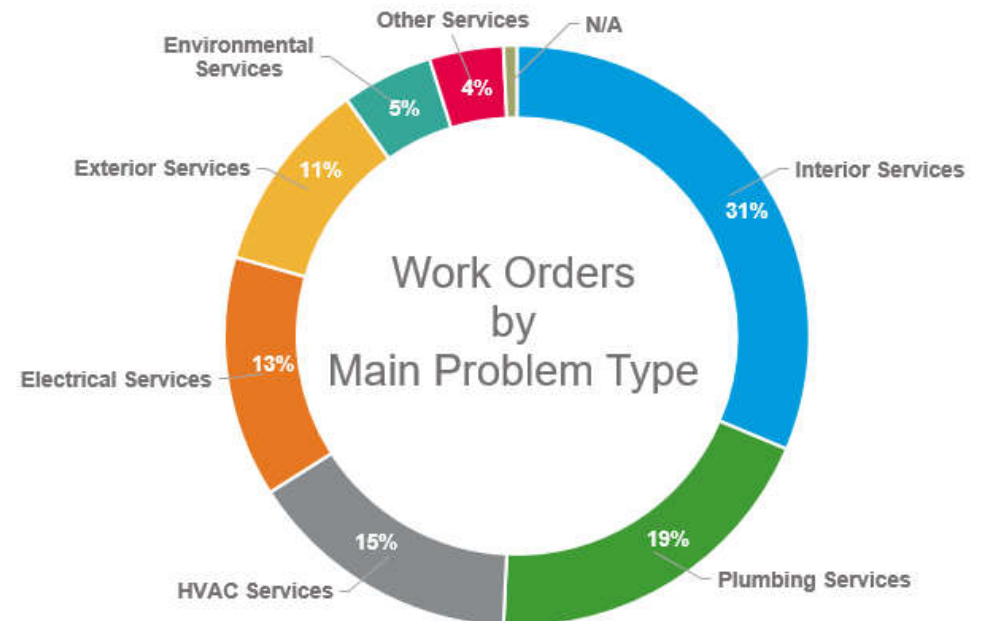
of all work orders

Parks & Rec

10,135 work orders requested related to Parks & Recreation facilities:

16%

of all work orders



BACKGROUND (CONTINUED)

CMMS Data Analytics (continued)

The following table includes the twenty (20) District buildings / locations with the highest number of work orders, and the three (3) most common work order types at each location.

Index	Building / Location	Most Common Work Order Sub-Problem Types	Total # of WOs
1	One Judicial Square (Marion S. Barry, Jr. Building)	Janitorial (362), Lock and Door (311), Lighting (185)	1,636
2	Ward 8 Short Term Family Housing (4225 6 th Street SE)	Turnover Management (285), Heating (210), Cooling (149)	1,241
3	Henry J. Daly Building	Lighting (198), Lock and Door (103), Power (82)	988
4	Department of Employment Services	Janitorial (243), Lighting (156), Cooling (94)	853
5	Browne Education Campus	Lighting (149), Lock and Door (135), Heating (83)	849
6	United Communications Center	Lighting (224), Cooling (135), Janitorial (71)	809
7	Franklin D. Reeves Center	Janitorial (104), Lighting (88), Lock and Door (73)	768
8	Ward 3 Short Term Family Housing (3318 Idaho Avenue NW)	Turnover Management (214), Cooling (67), Heating (65),	633
9	Ward 6 Short Term Family Housing (850 Delaware Avenue SW)	Turnover Management (121), Lock and Door (63), Appliances (43)	566
10	Eastern High School	Lock and Door (57), Cooling (52), Lighting (36)	507
11	Tyler Elementary School	Cooling (73), Pest Control (52), Lock and Door (43)	503
12	Columbia Heights Education Campus	Lock and Door (86), Cooling (60), Heating (38)	501
13	DGS (BPO - Boiler Plant Operations) (1325 S Street NW)	Lock and Door (83), Building Structural (83), Interior Painting & Wall Issue (58)	499
14	Ward 7 Short Term Family Housing (5004 D Street SE)	Turnover Management (207), Heating (39), Interior Painting & Wall Issue (38)	491
15	LaSalle-Backus Elementary School	Lock and Door (55), Heating (45), Cooling (44)	482
16	Roosevelt High School	Lock and Door (109), Building Structural (41), Cooling (40)	480
17	DGS FMT Adams PL Complex	Lock and Door (95), Lighting (61), Building Structural (26)	464
18	Takoma Education Campus	Building Structural (103), Lighting (36), Interior Painting & Wall Issue (28)	463
19	Anacostia High School	Faucet (44), Lock and Door (42), Toilet (37)	429
20	Ward 8 Short Term Family Housing (4300 12th Street)	Heating (65), Lock and Door (47), Turnover Management (37)	421
Grand Total of WO's			13,583

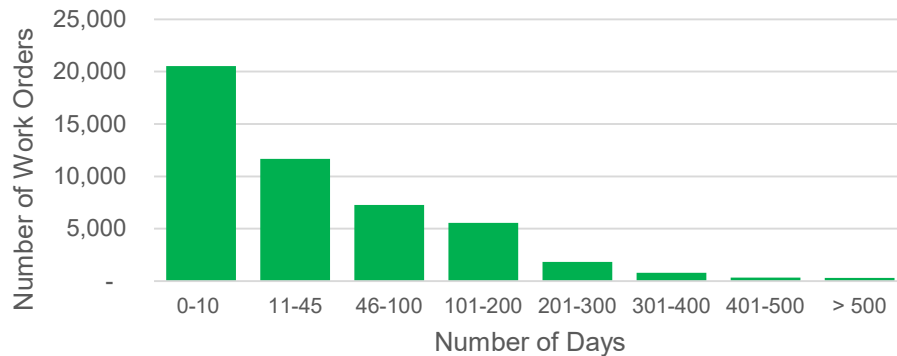
BACKGROUND (CONTINUED)

CMMS Data Analytics: Work Order Response Time

The following graphics and tables were developed using data from **48,356** work orders that were completed and/or closed during our scope period. On average, **55 days** elapsed between the date requested and completion of the work order within the CMMS.

Refer to the tables and graphs below for additional information.

Frequency Distribution: Duration Between Requested Date and Completion Date



Work Order Response Time by Priority				
Priority	Number of Work Orders	Average Completion Time	# of Work Orders Completed After SLA	% of Work Orders Outside of SLA
Routine	39,439	57.8	13,812	35%
High	7,939	51.4	4,964	62%
Emergency	978	2.8	N/A ¹	N/A ¹
Total	48,356			

¹ DGS SLA does not specify a mandatory completion time for emergency work orders. Refer to page 6 for additional information.

WO Response Time by Sub-Problem (≥ 100 WO's) ²			
Index	Sub-Problem Type	# of Work Orders	Average Completion Time
1	Electronic Security Issue	324	172
2	Roof	271	169
3	Fire Sprinkler	130	142
4	Fire Extinguisher	131	136
5	Fire Alarm	411	133
6	Interior Painting & Wall Issue	1,060	108
7	Pool and Spray Park	126	107
8	Indoor Vehicle Bay Exhaust System	136	106
9	Playground	542	99
10	Overhead Door	291	92

² Based on sub-problem categories with at least 100 work orders completed and/or closed.

WO Response Time by Sub-Problem (≥ 1000 WO's) ³			
Index	Sub-Problem Type	# of Work Orders	Average Completion Time
1	Interior Painting & Wall Issue	1,060	108
2	Heating (HVAC)	3,739	76
3	Lighting	4,410	74
4	Cooling (HVAC)	4,523	73
5	Building Structural	1,851	70
6	Outlet	1,162	57
7	Ceiling	1,364	51
8	Leak	1,733	50
9	Faucet	1,526	40
10	Lock and Door	4,725	35

³ Based on sub-problem categories with at least 1000 work orders completed and/or closed.

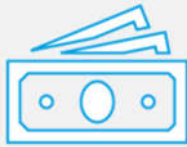
BACKGROUND (CONTINUED)

CMMS Data Analytics: Captured Costs

The following data illustrates the various costs tracked within the “SMART DGS” work order management platform.

Cost data was provided by DGS’ Facilities Intake Request Service Team (“FIRST”) for the period of January 1, 2020 through December 31, 2021.

CMMS Cost Data (January 1, 2020 – December 31, 2021)



Total Cost*

\$31.3M in total costs captured in Salesforce for the period

Refer to **Observation 1 for additional information.*



Vendor Costs*

\$26.2M in vendor-related work order costs from **83** unique vendors

Refer to **Observation 1 for additional information.*



Craftsperson Labor

\$5.1M of associated craftsperson labor costs

The table below lists the District’s Top 20 vendors by total work order amount.

Work Order Cost by Vendor		
Vendor Name	# of Work Orders	Work Order Total (\$)
Adrian L. Merton, Inc.	500	2,399,418
Protec Construction, Inc.	368	1,854,606
Al's Twin Air, LLC	282	1,492,809
Soil and Land Use Technology	377	1,147,206
RSC Electrical & Mechanical Co.	137	1,120,118
HEP Construction	461	988,759
Sequoia Row Consulting	287	823,516
RBK Construction	118	809,256
WKM Solutions, LLC	116	795,090
Advanced Air Mechanical System	85	783,384
Blue Skye Construction, LLC	150	779,408
American Construct, LLC	157	739,984
Annie's Hardware, LLC	360	737,117
A&E Heating and Air Conditioning, LLC	72	678,773
DC Life Safety, LLC	201	611,552
JL Terrell Construction, LLC	147	582,812
General Services, Inc.	153	539,349
Johnson Controls, Inc.	58	456,206
DC General Construction, Inc.	101	424,819
Maryland Elevator Services, Inc.	279	418,860
Total	4,409	18,183,042

OBJECTIVES AND APPROACH

Objective

The primary objective of the engagement was to gain an understanding of the District's work order management process, identify key controls and primary areas of risk, perform detailed testing of key controls identified, and develop improvement opportunities related to the current state of the work order process. The internal audit was performed in accordance with the scope and approach set forth in Modification #1 to our Consulting Services Agreement, dated May 9, 2022, and was limited to the procedures described therein:

Scope of Work

- Conducted interviews with key personnel to obtain a detailed understanding of the District's policies and procedures, operating functions, and key performance indicators for the following areas:
 - Work order initiation/intake, screening, and prioritization
 - Work planning and scheduling
 - Work execution and data entry
 - Work order quality control review and closeout
 - Reporting and monitoring
- Reviewed documented policies and procedures, organizational charts, and other key process information available to further our understanding of the function.
- Identified risks and controls and developed a detailed control testing script to facilitate detailed testing.
- The detailed testing phase of our review consisted of an assessment of the design of key controls and testing of the operating effectiveness of those controls. This process was facilitated through the testing of a sample of work orders completed and/or closed by the District's facilities management team during the period of January 1, 2020 through December 31, 2021. Our procedures during this phase included, but were not limited to:
 - Selection of a sample of maintenance work orders from the District's Computerized Maintenance Management System (CMMS)
 - For the sample of work orders selected, tested key controls previously identified
 - For each work order selected, reviewed relevant supporting documentation in an effort to determine the operating effectiveness of controls within the District's maintenance work order function.

Deliverables

District-wide Work Order Process Analysis Report:

- Process map for key areas
- Analytics of CMMS data
- Observations and recommendations for improvement

OBSERVATIONS MATRIX

1. Tracking and Capture of Cost Data

Observation

Through our detailed testing and discussions with stakeholders, we noted several observations related to the capture of cost within the CMMS. Detailed observations are described below.

A. Total Cost Captured in the CMMS

Through our detailed testing and discussions with stakeholders, we noted that the costs currently captured in the CMMS may not be representative of the total cost incurred by DGS for work order management.

According to the *FY 2023 Approved Budget and Financial Plan*, DGS' Facility Operations Division expended approximately \$311.8 million between FY 2020 and FY 2021. Although total recorded expenditures were \$311.8 million, only \$31.3 million, or approximately 10% of the total expended was captured in the CMMS (refer to **CMMS Data Analytics section** on page 12 for additional information). While we understand total expenditures may include items outside of work-order related expenses, this variance indicates that only a portion of work-order related expenses were captured in the CMMS.

B. Materials, Inventory, and Other Direct Costs

Through our detailed testing and discussions with stakeholders, we noted that DGS is not currently capturing all available direct cost data within the CMMS. For example, parts, inventory, or consumables items (i.e., light bulbs, filters, etc.) used in the performance of a work order may not be captured or associated with the related work order.

Currently, the District does not have an integrated inventory module linked to the CMMS and relies on a manual process to record costs. Work order material costs may be associated to a work order by using a "PO Task"; however, this process relies on the craftsperson to provide detailed comments regarding material usage.

(continued on next page)

Recommendation

In conjunction with the recommendations noted for **Observations #2 and #5**, we recommend the following:

DGS should explore options for implementation of an inventory management system that integrates with the District's CMMS. This would allow craftspersons to add inventory used in real time, rather than relying on supervisors to add inventory at a later date based on review of notes. Integration of the inventory module will also allow for the automated application of cost to the work order based on the materials entered by the craftspersons, rather than relying on supervisors to search for Purchase Orders of bulk items, calculate, and apply unit prices to work orders manually.

DGS should implement a robust supervisory review of work orders. This review should provide an independent assessment of the accuracy and reasonableness of data entered for the work order. While the CMMS workflow is currently configured to allow for this review to move work orders from the "completed" status to the "closed" status, the data presented on page 11 above indicates that these reviews are not timely and/or consistently performed. Further, the current process does not require the review to be performed by an independent reviewer (also refer to **Observation #5**). During review of each work order, supervisors should assess the following:

- Completeness of craftsperson notes to validate they accurately describe work performed (also refer to **Observation #2**)
- Accuracy and reasonableness of craftsperson hours added to the work order
- Accuracy and reasonableness of material quantities and costs added to the work order
- Accuracy and reasonableness of vendor costs added to the work order
- Completeness of attachments uploaded to the work order to validate that all invoices, appropriate pictures, and other documentation required for a comprehensive record of the work performed and costs incurred are provided.

If the supervisor's review identifies incomplete or inaccurate data, the work order should be returned to the craftsperson to make necessary updates.

OBSERVATIONS MATRIX (CONTINUED)

1. Tracking and Capture of Cost Data (continued)

Observation	Recommendation
Using comments provided by craftspersons, supervisory personnel then must manually link the work order to a specific PO and perform manual calculations to allocate the materials used to the PO Task. C. <u>Cost Entry by Supervisory Personnel</u> Through our detailed testing, we noted that work order cost data was inconsistently recorded in the CMMS by supervisory personnel. Specifically, we noted the following: - Fourteen (14) of twenty-five (25) sampled work orders were not formally “closed” by supervisory personnel through entry of final cost data. Across our fourteen (14) samples, an average of 370 days elapsed since the completion of the work order, as of August 31, 2022. - For six (6) of the fourteen (14) samples noted above, we noted that the work order had associated estimated vendor costs through a “PO Task”; however, final cost information was not captured, and supporting documentation was not provided within the CMMS. - Costs of materials used to complete the work order were not entered into the CMMS as part of work order closure. - For five (5) of the eleven (11) “closed” work orders, nominal values were entered into the system. For example, values such as \$1.00, \$0.10, or \$0.01 were recorded, which may not accurately reflect the actual costs incurred to complete the work order. Information included within the individual work orders indicated that additional costs may have been incurred. By not tracking all available cost data, the District is unable to capture the total direct cost of performing work orders, and therefore unable to assess the actual direct cost of maintaining each asset. This limits leadership’s ability to accurately forecast and budget, monitor trends, assess performance, and identify areas of concern for further investigation.	

OBSERVATIONS MATRIX (CONTINUED)

2. Other Supporting Data Entry

Observation	Recommendation
Through our detailed testing, we noted that supplementary information and/or supporting documentation was inconsistently captured within the CMMS. Specifically, we noted instances in which the following information or documentation was not provided: A. <u>Supporting Documentation for Costs</u> - For six (6) of six (6) “completed” work order samples with estimated vendor costs, vendor estimates or actual invoices were not provided within the CMMS. In total within our sample, documentation for \$100,953 in estimated costs was not included in the CMMS. - For three (3) of five (5) “closed” work order samples with recorded vendor costs, documentation was not provided to support the cost associated with the work order. In total, within our sample, documentation for \$46,339 of the \$150,974 recorded vendor costs was not included in the CMMS. - For one (1) of one (1) “closed” work order sample with recorded material costs, documentation was not provided as evidence of actual cost. Further, the information presented in the “Costs” module did not provide an itemization of the quantities and prices of the materials used. In total within our sample, documentation for \$175 was not included in the CMMS. B. <u>Estimated Work Order Completion Dates</u> For seventeen (17) of twenty-five (25) samples, an estimated completion date was not provided by supervisory personnel. As part of the work order intake, planning, and scheduling process, supervisory personnel have the ability to provide an “estimated completion date” and “estimated hours” prior to assigning a work order. <i>(continued on next page)</i>	As noted in the recommendations for Observations #1 and #5, we recommend DGS implement a supervisory review process to provide an independent and objective assessment of data entered for each work order. This review process should include assessment of craftsperson notes, hours, material quantities, vendor costs, and attachments uploaded to validate that information added by craftspersons is complete, reasonable, and accurate. Work orders should be reviewed on a timely basis to allow for the most effective assessment by supervisors. As such, performance monitoring should also be coupled with the implementation of this supervisory review process, to validate that reviews are being conducted on a timely basis. To accomplish this, a metric should be added to the current suite of monitoring reports to capture aging work orders noted as “complete” but not “closed”. If metrics reveal that work orders are not being reviewed timely, follow up should be conducted with supervisors to remediate backlogs and reinforce the critical nature of their review process.

OBSERVATIONS MATRIX (CONTINUED)

2. Other Supporting Data Entry (continued)

Observation	Recommendation
B. <u>Estimated Work Order Completion Dates (continued)</u> Through our review of the “Chatter” function within the CMMS, we noted several instances in which stakeholders from the requesting facility inquired about the estimated completion date for their work request. Estimated completion dates increase transparency between DGS and client agencies, reduce the risk of stakeholder dissatisfaction, and assist with work order prioritization and overall resource planning. C. <u>Estimated Craftsperson Labor Hours</u> For fifteen (15) of twenty-five (25) samples, estimated labor hours were not provided by supervisory personnel. As noted above, supervisory personnel have the ability to provide an “estimated completion date” and “estimated hours” prior to assigning a work order. While forecasted hours may not align with the actual hours required to complete the work, they provide a baseline for craftspersons upon assignment, and assist with overall work order prioritization and resource planning. D. <u>Photo Documentation</u> • For three (3) of twenty-five (25) samples, “before photos” of the problem area prior to remediation or completion of the work order were not provided within the CMMS. According to the FIRST Procedures Manual, “a photo of the problem is required for a work order” and “a photo of the problem should be requested if not already included in the request.” • For three (3) of twenty-five (25) samples, “after photos” were not provided as evidence of work order completion. (continued on next page)	

OBSERVATIONS MATRIX (CONTINUED)

2. Other Supporting Data Entry (continued)

Observation	Recommendation
D. <u>Photo Documentation (continued)</u> For eight (8) of twenty-five (25) samples, we noted that the images uploaded to the CMMS were not actual photos of issue and/or completed work. For example, “stock images” from the internet, or images of the DGS logo were provided in place of before and/or after photos. Photo documentation is a critical component of the work order management process. Photos of the issue should be provided by client agencies in order for DGS to obtain a detailed understanding of the problem and to determine if additional resources are required (i.e., the issues exceed the capacity or capability of in-house staff, additional parts are needed to remediate the issue, etc.). “After” photos are also critical to facilitate review of work order details by supervisors prior to closeout. E. <u>Work Order Comments / Notes:</u> For thirteen (13) of twenty-five (25) samples, we noted that the comments / notes provided by the craftsperson did not include information detailing the work performed and/or efforts to remediate the issue. Craftspersons would often leave brief comments, such as “completed” or “k” within the CMMS, which do not provide enough detail to determine how the work order was completed. Further, we noted that comments / notes regarding materials used in the completion of the work order were often not provided by craftspersons (i.e., material descriptions, quantities, etc.). As noted in the background section above, the current CMMS was implemented as the central repository for all information related to maintenance work performed throughout the District. The ability to obtain, review, and analyze data from the CMMS is critical for management to effectively manage resources and monitor the District’s maintenance program. Therefore, the effectiveness of a work order system is dependent on data input by end users. The data input must be complete, accurate, consistent, and timely to realize the full benefits of implementing a CMMS.	

OBSERVATIONS MATRIX (CONTINUED)

3. Preventative Maintenance

Observation	Recommendation
Through interviews with the Department of General Services (“DGS”), we noted that a comprehensive preventative maintenance program has not been implemented. The District currently utilizes manual processes for tracking, scheduling, and performing preventative maintenance, which typically occur outside of the CMMS. Further, automated preventative maintenance schedules are not being utilized as part of the work order management process. During our review of the “Maintenance Services” platform within the CMMS, and discussion with DGS personnel, we noted that DGS began developing a “Preventative Maintenance Services” module; however, the module is not actively utilized and is limited to select categories such as elevator and generator maintenance. Upon installation, equipment manufacturers typically provide detailed maintenance schedules for testing, diagnostics, and replacement of consumable items. When equipment is commissioned, preventative maintenance schedules should be developed based on the manufacturer’s recommendations and warranty requirements. Warranties often require documentation demonstrating that maintenance schedules were adhered to and completed by qualified technicians. If maintenance is not performed according to manufacturer specifications, the District risks voiding manufacturer warranties. In addition, insufficient preventative maintenance practices increase the risk of costly repairs, operational disruptions, and potential system failure.	We recommend DGS begin tracking preventative maintenance activities in a CMMS. This should include the import of manufacturer recommended maintenance schedules, as well as warranty requirements for each asset. The CMMS should be configured to automatically create work tasks at intervals specified by the manufacturer, which should be completed and documented within the CMMS. As an example, if a manufacturer recommends or a warranty requires a filter change every 90 days, a work task should be automatically created every 90 days so a supervisor can assign a craftsperson to complete the task. Confirmation of completion, along with upload of documentation should be noted by the craftsperson and reviewed by a supervisor. As part of a broader shift from reactive maintenance to proactive asset management, we also recommend DGS begin efforts to inventory individual assets, so that maintenance tasks can be applied to individual assets, instead of only the building / location. This approach will provide DGS with invaluable maintenance information by individual asset, asset type, manufacturer, installer, and many other categories. This data can be utilized to drive future asset purchasing decisions by DGS based on actual data regarding performance, longevity, reliability, etc. Understanding that capturing an inventory of all assets will require significant effort, we recommend DGS begin with inventory of all new critical assets installed in the District. DGS should also identify other critical assets currently in operation to be inventoried.

OBSERVATIONS MATRIX (CONTINUED)

4. Work Order Histories and Audit Trails

Observation	Recommendation
Through our detailed testing, we noted missing information related to system-generated “Work Order Histories” and the documentation of individual workflow steps within the CMMS. For seven (7) of twenty-five (25) sampled work orders, a “Work Order History” was not available within the “SMART DGS” work order management platform, despite the completion of various workflow steps. According to DGS personnel, the absence of a work order history may be due to a “system glitch” or “system error”. Further, we noted that for the eighteen (18) sampled work orders that had an associated work order history, the system-generated audit trail was not consistent across these samples and did not provide a complete accounting of events and/or actions that occurred through the workflow. Although information such as the date and time in which the work order was requested, approved, issued, and completed is captured in the CMMS, more granular details involving specific workflow steps and individual actors were not listed for the exceptions described above. CMMS platforms and systems of record have the capability to document work order activity in a central, comprehensive workflow history. Incomplete audit trails increase the risk of fraudulent activities and decrease transparency of the work order management process. Proper recordkeeping practices may provide increased accountability for individual process owners to complete assigned action items in a timely manner, and further evidence of proper segregation of duties (refer to Observation #5 for additional information).	We recommend DGS coordinate with the CMMS provider or implementation partner to assess the cause of the missing work order history information. After identification of the cause, a remedy should be implemented to prevent the future loss or mis-capture of this critical information.

OBSERVATIONS MATRIX (CONTINUED)

5. Segregation of Duties

Observation	Recommendation
Through our detailed testing, we noted that certain functions within the “SMART DGS” work order management platform may not be appropriately or ideally segregated. For eight (8) of twenty-five (25) work orders, we noted that single users performed functions that are typically segregated between administrators, supervisors, and craftspersons. Through testing of the “Work Order Histories” included in the CMMS, we noted that certain users have the ability to both complete and close work orders. Further, users were able to move the work order from an “Approved” status, to “Issued and In Process”, to “Complete”, to “Closed”. Generally, an individual should not have responsibility for more than one (1) of three (3) transaction components for work order management: • Authorization or approval of a work order • Custody of assets (i.e., the ability to order and receive parts or materials) • Recording of financial information A properly segregated workflow increases accountability related to the completeness and accuracy of the data within the CMMS. Without proper segregation of duties and user access controls within the CMMS workflow, personnel may have the ability to possess the authority and means to create a fictitious work request, order and receive materials for personal use, and close the work request, without review by a second party.	As noted in the recommendations for Observations #1 and #2, we recommend DGS implement an independent supervisory review process. To accomplish this, the CMMS should be configured to limit permissions within the software. Only craftspersons should have the ability to add information to work orders, and should be expected to add all relevant data and attachments. Only supervisors should have the ability to move a work order from the “completed” status to the “closed” status. Separation of these functions through access rights in the CMMS will facilitate an automated approach to appropriate segregation. When these duties are separated, the supervisor’s role will shift from data entry to an objective and independent review, which will help drive accountability for accurate capture of information within the CMMS. To maintain consistency with best practice software access controls, a review of access rights should be performed periodically to validate that permissions are appropriately configured within the CMMS.

OBSERVATIONS MATRIX (CONTINUED)

6. Work Order Response Time

Observation

Through our detailed testing, we noted that nineteen (19) of twenty-five (25) sampled work orders were not in compliance with the Department of General Services' ("DGS") Service Level Agreement ("SLA"). Specifically, we noted the following:

Mandatory Response Times:

- One (1) of eight (18) "routine" work orders were not approved / responded to within the 96-hour requirement
- Six (6) of six (6) "high" priority work orders were not approved / responded to within the 72-hour requirement

Mandatory Completion Times:

- Eleven (11) of eighteen (18) "routine" work orders were not completed within the 45-day requirement
- Six (6) of six (6) "high" priority work orders were not completed within the 10-day requirement

Of the 48,356 work orders completed and/or closed during our scope of period, on average, 55 days elapsed between the requested date and completion of the work order within the CMMS.

Further, 35% of routine work orders were not completed within forty-five (45) days, and 62% of high priority work orders were not completed within ten (10) days (also refer to "CMMS Data Analytics" section and SLA requirements on page 6).

In addition, through discussions with DGS, we noted that automated work order aging notifications are not generated by the CMMS, and documented procedures have not been developed for the monitoring and prioritization of aging work orders.

Recommendation

We recommend DGS add dashboard and/or reporting capabilities to the CMMS that will allow supervisors to view open work orders that are noncompliant with the SLA. This will increase visibility of current SLA statuses and help provide supervisors with knowledge of current assigned SLA statuses when assigning new work orders. Also refer to the recommendation for **Observation #7**, related to management's monitoring of Key Performance Indicators, which should include routine monitoring of compliance with the SLA.

To facilitate additional accountability, we recommend DGS consider associating work order responsiveness to performance evaluations. Through reporting, management could identify potential root cause of delays, or whether patterns exist related work orders assigned to specific teams or CMC vendors. If feasible, DGS should consider incorporation of SLA metrics into employee and vendor performance evaluations. Monitoring this metric and addressing anomalies as they arise through documented evaluations will help provide additional accountability to employees and CMC vendors related to the responsiveness and completion of work orders within DGS' established SLA.

OBSERVATIONS MATRIX (CONTINUED)

6. Work Order Response Time (continued)

Observation

Work orders that are out of compliance with the SLA are flagged and given a "Work Order Out SLA" badge within the CMMS; however, this badge is generated after the work order is already out of compliance with the SLA. Notifications are not sent to craftspersons and/or supervisory personnel when a work order is approaching the SLA.

Through review of the available "Work Order Histories" within the CMMS, we noted that three (3) of nineteen (19) work orders that were out of compliance with the SLA were either "On Hold for Parts" or "On Hold for Procurement" for part of the overall duration. However, for the remaining samples, the reason for delay was unclear based on the information available in the CMMS. As noted in **Observation #2 & #5**, many of our sampled work orders did not contain an audit trail with enough information to determine the root cause of delays.

The timely completion of work orders is critical to maintaining the District's assets, and proper functioning and safe operation of all District facilities. Delays in work order response times may lead to additional downstream impacts if problems are not addressed in a timely manner, and in extreme cases, system failure.

Recommendation

OBSERVATIONS MATRIX (CONTINUED)

7. Key Performance Indicators (“KPI”)

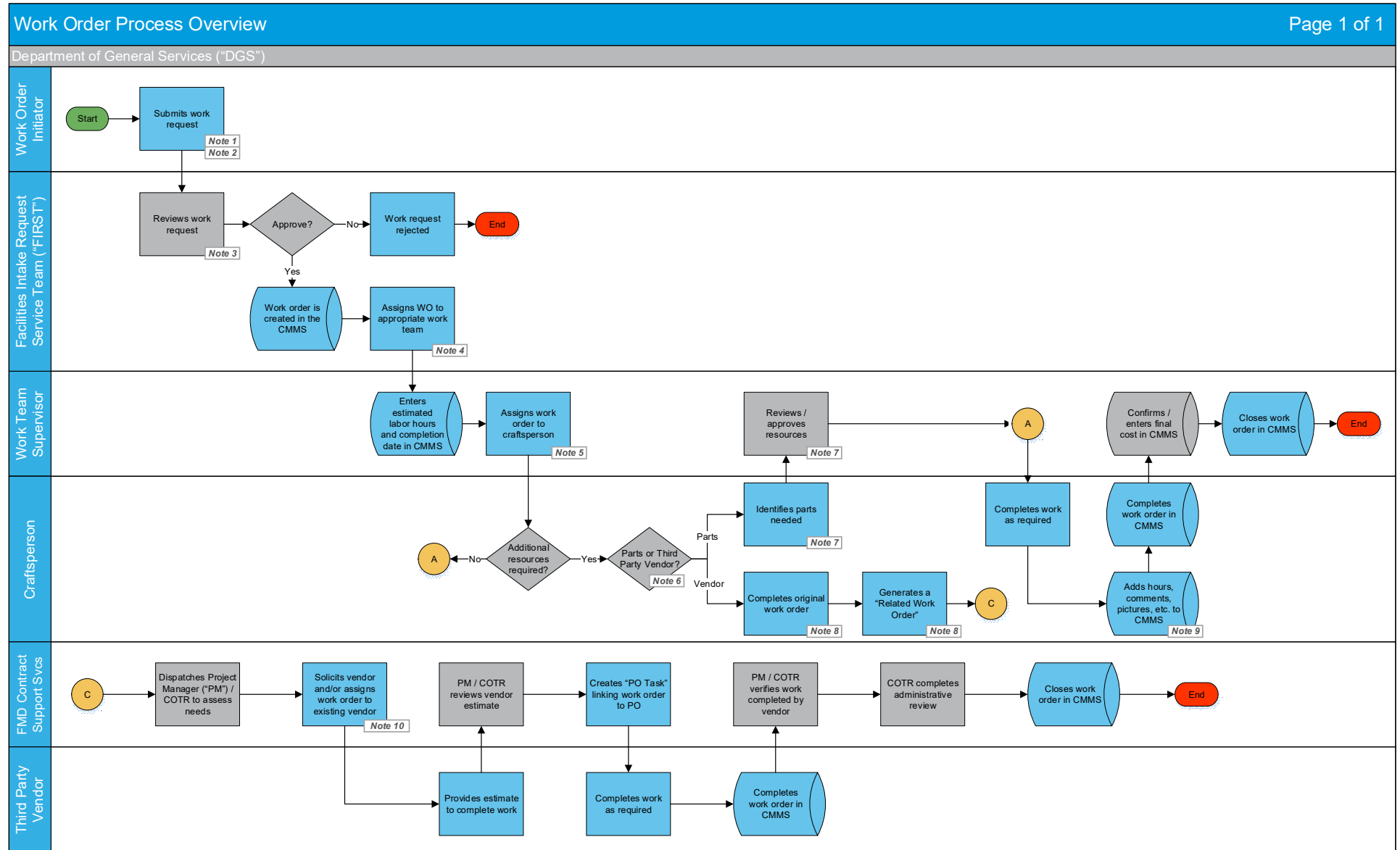
Observation	Recommendation
Through discussions with the Department of General Services (“DGS”), we noted that while analytical monitoring is occurring, consistent KPI monitoring and reporting procedures have not been adopted. Although the Facilities Intake Request Service Team frequently generates reports and dashboards using the CMMS, specific key performance indicators have not been defined or implemented to measure, monitor, and evaluate performance related to work order management. According to FIRST personnel, work order data is presented and/or provided to leadership ad hoc or upon request. Personnel also noted that work order data is often presented during daily scrums and/or monthly meetings. While we understand that some metrics are currently being presented and discussed, the reporting provided during our fieldwork showed high-level analysis such as year-to-date (“YTD”) total work orders requested versus closed, and YTD total work orders requested by work type. While these are valuable metrics to understand quantity of workload and overall accomplishments, these metrics may not dissect data to a level that allows for the identification of emerging issues within the business practice. Further, current ad hoc reporting practices are reliant on individual stakeholders having access to and viewing the reports, whether provided directly, or within the CMMS’ “Reporting” and “Dashboard” modules. Without clearly defined KPIs that align with business objectives, DGS may not be utilizing the full potential of the CMMS, and the data analytics generated by FIRST to drive meaningful conversations about performance. In addition, without structured reporting procedures, the availability of critical work order data may be limited to a small group of individuals.	We recommend DGS leadership conduct facilitated sessions to identify measurable Key Performance Indicators. After the suite of critical KPIs have been identified, management should begin monitoring performance on a consistent cadence. DGS may consider incorporating these discussions into the scrum and cluster meetings currently taking place. Monitoring discussions should be targeted to assess current performance of KPIs, identification of anomalies, and development of action plans to remediate issues identified. The identification and recurring measurement of KPIs can provide management with valuable insights to identify trends and/or emerging issues and assess performance and progress against goals. While KPIs should be specifically tailored to each organization’s goals, some examples may include the following: • Adherence to SLA (also refer to Observation #6) • CMC performance • Length of time between various workflow steps: ○ “requested” to “assigned” ○ “complete” to “closed” ○ total days “on hold” • Labor metrics to assess utilization by personnel, location, work team ○ Hours coded by craftspersons to work orders each day / week / month ○ Average hours per work order • Monthly work orders “completed” vs “closed” to identify when demand outpaces capacity (similar metric is currently being tracked) • Monthly work orders “requested” vs. “closed” to assess closure of backlog of open work orders (similar metric is currently being tracked)



APPENDIX



APPENDIX



APPENDIX (CONTINUED)

Process Map Legend

Legend: Work Order Process Overview

Department of General Services ("DGS")

Note 1: Work order initiator varies, but may include client agencies, DGS building managers, District government employees, DCPS personnel, District building managers, DC residents, community leaders, etc. Work requests can be submitted via phone call, email, Twitter, the DGS app, or directly in Salesforce.

Note 2: Work order initiator provides initial categorization of priority (i.e., routine, high, emergency).

Note 3: FIRST reviews the work request to determine whether the request falls within DGS' "scope of responsibility" and the priority level provided by the client agency aligns with DGS' definition of each priority category. FIRST may change the priority of the work order as part of the intake process.

Note 4: Work teams include, but are not limited to, in-house FMD trade teams (i.e., plumbing, electrical, locksmith, Boiler Plant Operations-HVAC, etc.), region or area based FMD teams, CMC vendors at individual locations, and General Contract Services.

Note 5: As part of work order scheduling / resource planning, supervisors and/or work team personnel may investigate the issue prior to assigning a work order to a craftsperson.

Note 6: Work order may be put "on hold" until further resources are acquired.

Note 7: A Materials and/or Services Requisition Form is completed by the craftsperson and reviewed by the Supervisor. This form is provided to an FMD Inventory Manager who reviews / approves the request and orders the requested parts.

Note 8: The original work order may be marked as completed by either the craftsperson or craftsperson's supervisor. The original work order is then linked to the "Related Work Order" to create a parent / child relationship. The related work order is assigned a different work order number.

Note 9: Vendor invoices are typically uploaded to Salesforce by the Work Team Supervisor, Inventory Manager, or other supervisory personnel.

Note 10: If the solicitation of a new vendor is required, or if a vendor who is already under contract does not have enough funding available on their current contract, division directors, in conjunction with DGS' Contracts & Procurement Division, are responsible for identifying additional funding and/or modifying existing task orders / purchase orders through appropriate procurement channels before creating a "PO Task".

Legend:

Start/End

Off-page Connector

Decision

Document

Process Step

Database

Color:

Process

Control



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Agency Comments

On October 25, 2022, ODCA sent a copy of this report to the Department of General Services (DGS) for review and comment. DGS did not provide comments on the report.

Appendix



COUNCIL OF THE DISTRICT OF COLUMBIA
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Phil Mendelson
Chairman

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April 13, 2022

Ms. Kathleen Patterson
Auditor of the District of Columbia
717 14th Street, NW Suite 900
Washington, DC 20005

RE: Dep't General Services

Dear Ms. Patterson:

I write to request that your office undertake an analysis of the business processes employed by the District's Department of General Services (DGS) to handle DCPS school maintenance needs.

Every public school complains that its maintenance needs are backlogged, that requests frequently have to be resubmitted, that repairs often necessitate callbacks, and that some major problems persist, unfixed for years. If there is a tracking system for work orders, it is a mystery, and schools are typically unaware of the status of their maintenance requests. My experience – from meeting with the agency, talking with principals, and trying to help with the more serious problems – is that: (1) there is little quality control over repairs which in turn leads to the inefficiency of call backs to fix the same problem multiple times; (2) there is no systemic efficiency (e.g., rather than a plumber fixing all the plumbing problems at once in a school, he/she makes multiple trips fixing each work order one per visit); (3) there is poor prioritization so the most serious issues (e.g., a non-working exterior door) languish rather than being fixed immediately; (4) the tracking system of work orders is inadequate or non-existent; and (5) there is poor accountability (e.g., COTRs and contractors blame each other over repairs; and DGS and DCPS point fingers at each other).

It would be helpful, both for Council oversight as well as DGS and public understanding, if there was a business process analysis that looked at how DGS handles work orders and recommends how the processes could be improved. Please work with me and Ms. LeKisha Jordan on my staff. I thank you in advance.

Sincerely,



Phil Mendelson

PM/ms

About ODCA

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