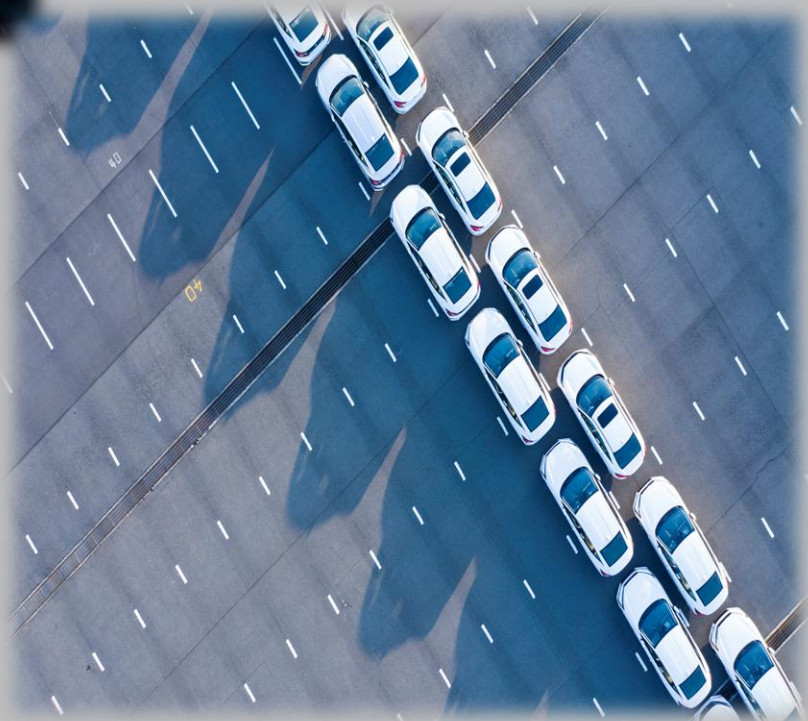




Deferred Maintenance & Property Management



*Connecting the dots...
...for sustainable asset management*



Context



- **2017 Facility Conditions Assessment (FCA) commissioned**
 - Beginning FY18 FCA used for General Services Major Mod
 - Updated & used when adopting Accelerate Memphis projects

We also gathered and updated any available facility condition assessment information for these facilities.

This study revealed that the current deferred maintenance need is approximately \$126 million dollars, which does not include dollars for over 175 buildings without an existing FCA.

To realize the full need, we recommend a Phase 2 to this feasibility study to complete the missing facility condition assessment information.



Property

Feasibility Study v. Facility Condition Assessment

- **Feasibility Study** measures building or facility's usefulness and/or purpose. The goal is to ensure the building or facility is compatible with the existing public needs and services.
- **Facility Condition Assessment**- a comprehensive evaluation of a building's systems. The purpose is to identify any existing or potential problems that affect the building's performance or integrity.
- Goal of the FCA
 - Routine and/or deferred maintenance
 - Remaining useful life on major building systems
 - Prioritized list of repairs
 - Total building replacement



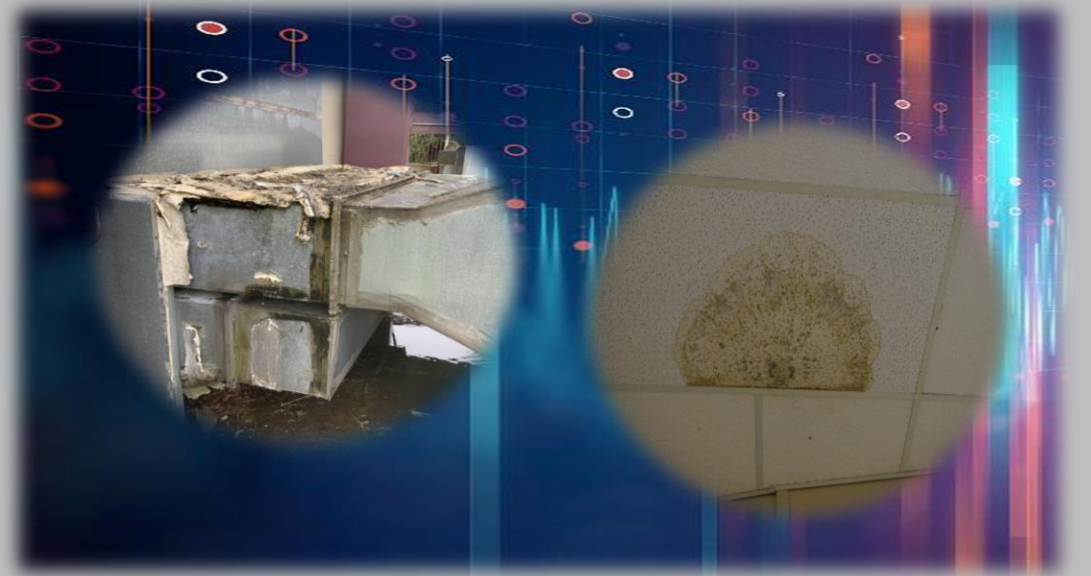
Property



Property



Problem/Opportunity



During this feasibility study, the OT Marshall and All World team worked with the Division of General Services to assemble a list of all buildings, Parks, athletic fields, and golf courses, owned by the City of Memphis. For the following public facing buildings:

- Community Centers
- Police Facilities
- Fire Facilities
- Libraries
- Large Civic Buildings

The structures listed above are approximately 4.5 million sq ft.

City of Memphis	Facility Inventory										O.T. Marshall Architects	ALLWORLD Project Management, LLC		
ID	Building Name	Address	Division	Original Construction Date	Building Square Footage	Renovation Dates	Date of Assessment	Current Deferred Maintenance Cost	Notes	Escalation	Contingency	Total Deferred Maintenance Cost (2023)	Phase	RUL Report?
20G04	City Hall	125 N. MAIN	Executive	N/A	418800	2022	2/27/2017	\$38,661,500	*Add Cladding amount	\$23,196,900.00	\$6,185,840.00	\$68,044,240.00	Phase 1	No
19P12	Cordova Library	8457 TRINITY	Library	N/A	28781	N/A	6/20/2019	\$185,113	FCA Completed	\$92,556.50	\$27,766.95	\$305,436.45	Phase 1	Yes
19P28	Cornelia Crenshaw Library	531 VANCE AVE	Library	1939	6650	N/A	6/14/2019	\$36,770	FCA Completed	\$18,385.00	\$5,515.50	\$60,670.50	Phase 1	Yes
15F25	Creative Arts Building	MISSISSIPPI	Executive	N/A	55400	N/A	11/18/2021	\$1,129,922	FCA Completed	\$169,488.30	\$129,941.03	\$1,429,351.33	Phase 1	No
15C27	Cunningham Community Center	3773 OLD ALLEN RD	Community Center	1997	18018	N/A	8/4/2021	\$150,221	FCA Completed	\$22,533.15	\$17,275.42	\$190,029.57	Phase 1	Yes
15C03	Dave Wells Community Center	915 CHELSEA	Community Center	1997	17930	N/A	8/4/2021	\$59,668	FCA Completed	\$8,950.20	\$6,861.82	\$75,480.02	Phase 1	Yes
15C04	Davis Community Center	3371 SPOTTSWOOD	Community Center	N/A	29408	N/A	8/4/2021	\$353,551	FCA Completed	\$53,032.65	\$40,658.37	\$447,242.02	Phase 1	Yes
15G06	Davy Crockett Club House	4380 RANGE LINE ROAD	Golf Clubhouse	N/A	2473	N/A	10/16/2018	\$33,325	FCA Completed	\$16,663	\$4,998.75	\$54,986.25	Phase 1	No
15C05	Douglass Community Center	1616 ASH	Community Center	1956	17772	N/A	8/4/2021	\$74,821	FCA Completed	\$11,223.15	\$8,604.42	\$94,648.57	Phase 1	Yes
15S02	Douglass Outdoor Pool	1616 ASH	Pools	1957	6329	N/A	7/31/2018	\$76,902	FCA Completed	\$38,451	\$11,535.30	\$126,888.30	Phase 1	No
D0255	East Shelby Branch Library	7200 East Shelby Dr	Library	1999	30000	N/A	6/19/2019	\$379,936	FCA Completed	\$189,968.00	\$56,990.40	\$626,894.40	Phase 1	Yes
15S05	Ed Rice Frayser Outdoor Pool	2907 N. WATKINS	Pools	N/A	4585	N/A	6/26/2018	\$116,838	FCA Completed	\$58,419	\$17,525.70	\$192,782.70	Phase 1	Yes
13F101	Fire Alarm Office	79 S. FLICKER	Fire	1956	50461	N/A	4/15/2021	\$199,160	FCA Completed	\$29,874.00	\$22,903.40	\$251,937.40	Phase 1	Yes
13F57	Fire Prevention Bureau	2668 AVERY	Fire	N/A	44655	N/A	3/22/2021	\$9,025	FCA Completed	\$1,353.75	\$1,037.88	\$11,416.63	Phase 1	Yes
13F10	Fire Station-10	148 SOUTH PARKWAY	Fire	1954	12647	N/A	4/6/2021	\$336,181	FCA Completed	\$50,427.15	\$38,660.82	\$425,268.97	Phase 1	Yes
13F11	Fire Station-11	1826 UNION	Fire	1941	13982	N/A	4/14/2021	\$184,450	FCA Completed	\$27,667.50	\$21,211.75	\$233,329.25	Phase 1	Yes
10D14 / 13F13	Fire Station-13	333 EAST PARKWAY	Fire	1973	10115	N/A	4/14/2021	\$69,383	FCA Completed	\$10,407.45	\$7,979.05	\$87,769.50	Phase 1	Yes
13F14	Fire Station-14	980 E. MCLEMORE	Fire	1983	11752	N/A	4/7/2021	\$446,486	FCA Completed	\$66,972.90	\$51,345.89	\$564,804.79	Phase 1	Yes

Property

- Division of Engineering is updating Standard Construction Manual
- Enterprise Solution- Standardized Construction Project Management purchased to track Construction (Procore)
- Enterprise Solution- Tying into the existing ArcGIS system, we worked with Division of Information Technology and AllWorld Project Management to rebuild our Property Maintenance Work Order System.



FCA - WOMs Workflow



Enhancing the General Service Work Order management system

GS FCA App



FCA Assessment
is conducted

GS Supervisor App



GS Supervisor can
evaluate and prioritize
information from FCA
Report

GS Supervisor App



GS Supervisor
makes data-driven
decisions

GS Supervisor App



GS Supervisor
creates a
workorder

GS Field App



GS Field Staff
completes the Work
Order

GS Field App



GS Field staff
reports information
and notes about the
work order to
supervisors

FCA Dashboard



Functions

- Overview of Operation
- Data-driven planning of CIP project
- Evaluate Costs



Purpose

Dashboard to quickly assess the status of the Facility Condition assessments as well as total costs

Tools

- Assessment Total
- Deficiency Cost
- Life Cycle Costs
- Property Filter

FCA Field Application

Purpose

Allows user to conduct Facility condition assessment in the field.

Functions

- Conduct Facility Condition Assessment
- Conduct Life Cycle Analysis

Tools

- Logistical Editing
- Picture Attachment
- Voice Recognition

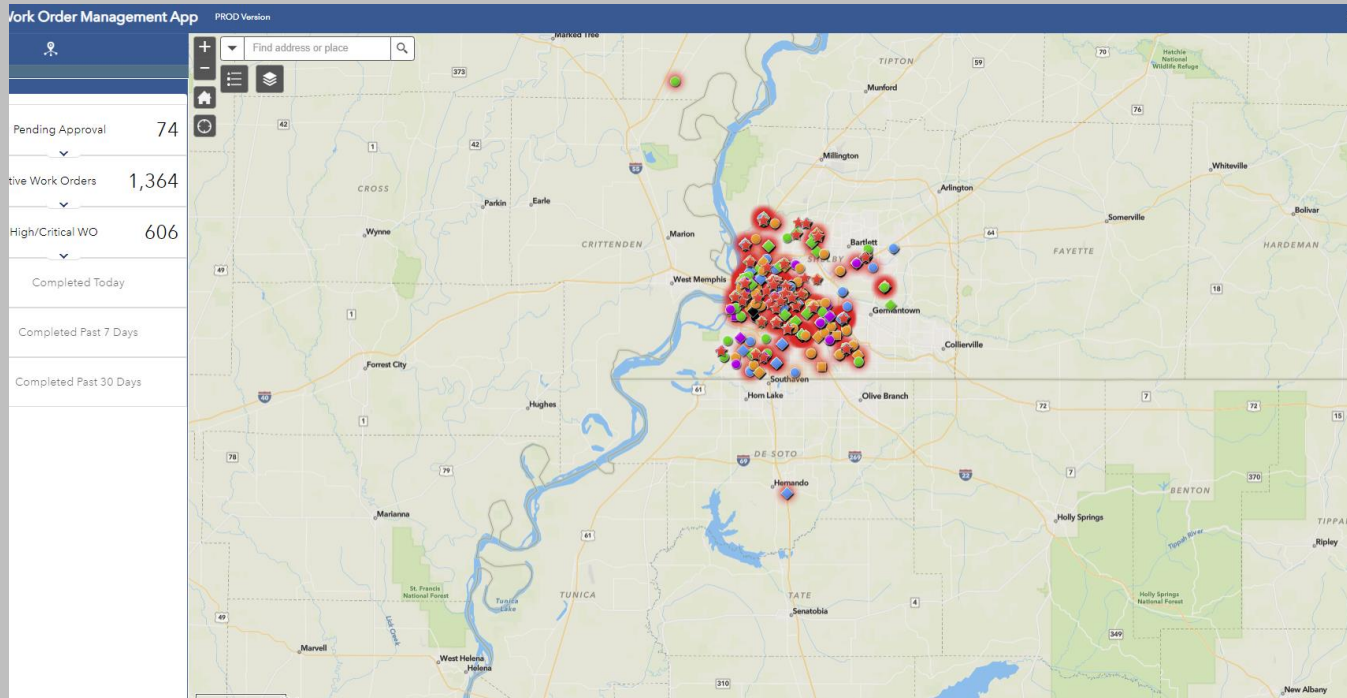


WOMS Website Application



Functions

- Creating Work Orders
- Updating Work Orders
- Creating Excel and PDF Reports



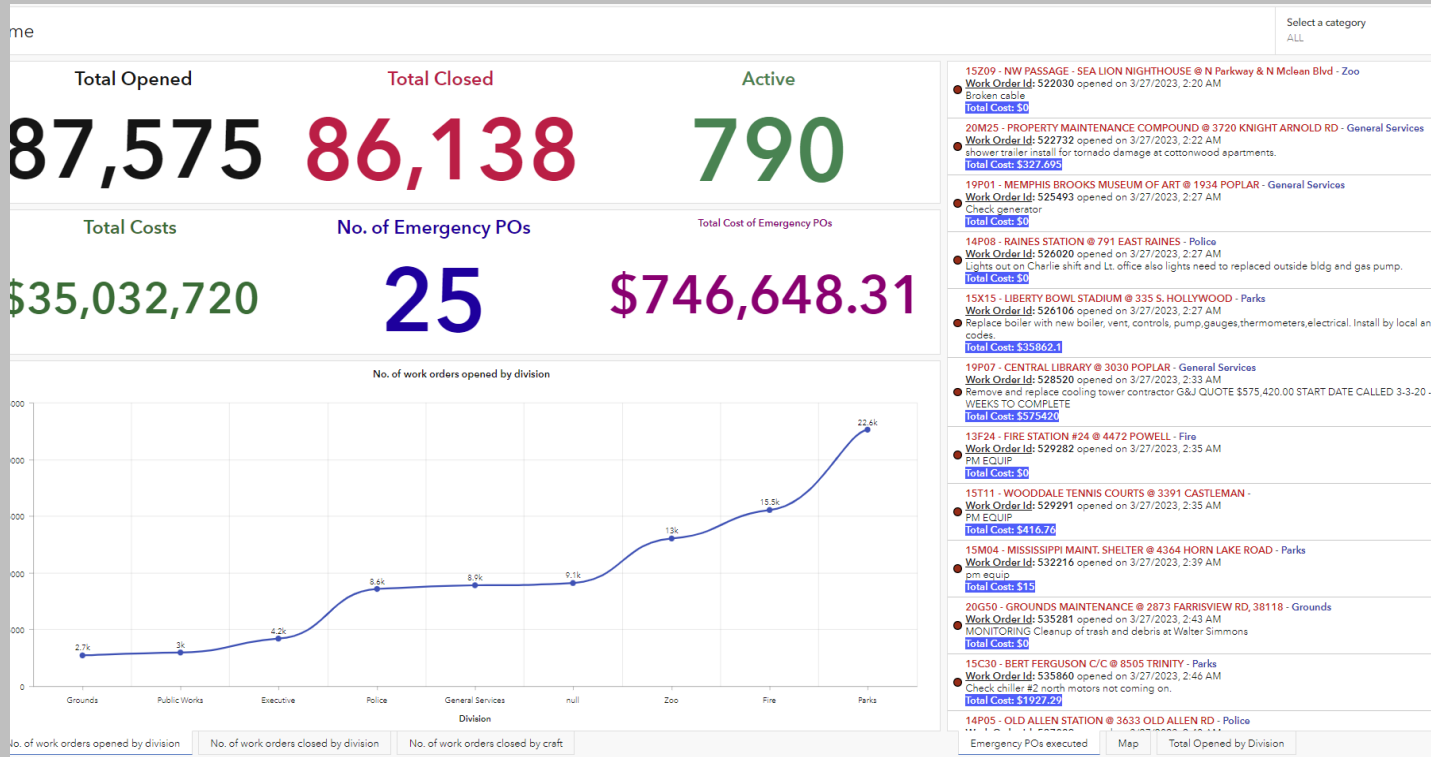
Purpose

Main Application for creating, managing and tracking effort for work orders

Tools

- Attribute Table
- Query
- Filter
- Info Summary

Dashboard Application



Functions

- Customized Overview of Operation
- Prioritized View Of Project
- Real Time Cost and Budget Evaluation

Purpose

Dashboard for quickly accessing data and gauging quality and quantity of General Service Operation

Tools

- Work Order List
- KPI Calculations
- Work Order Chart
- Filter

WOMS Field Application

Purpose

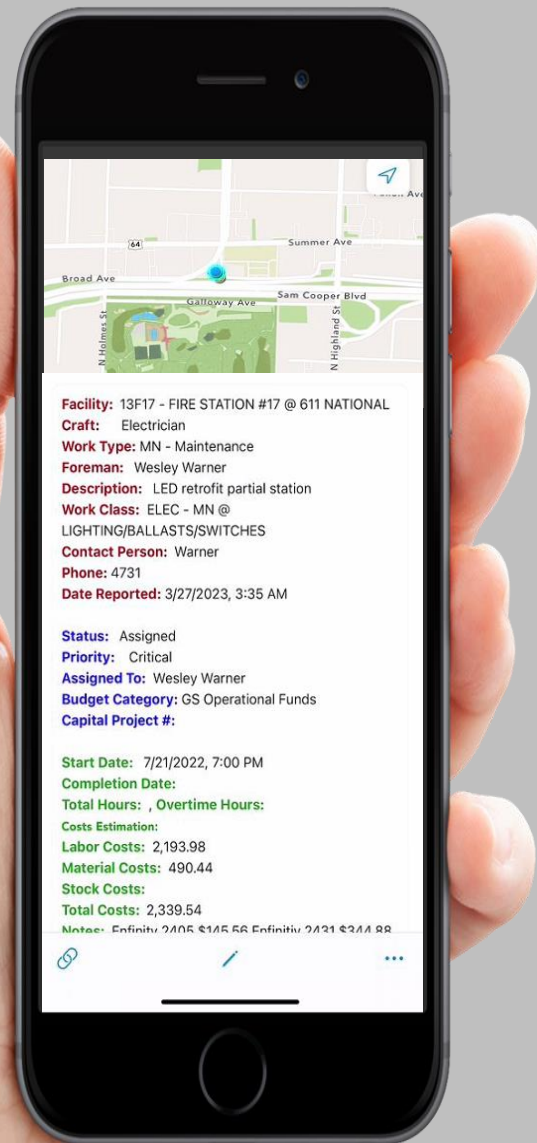
Allows maintenance team to manage and update work orders in the field.

Functions

- Updating Work Orders
- Filtering and managing Work orders

Tools

- Logistical Editing
- Picture Attachment



The way to get started is to quit talking and begin doing.

- Walt Disney



Thank You

