



NAVFAC

Naval Facilities Engineering Systems Command

NAVFAC SOUTHEAST

Performance Metrics and MAXIMO Data Management

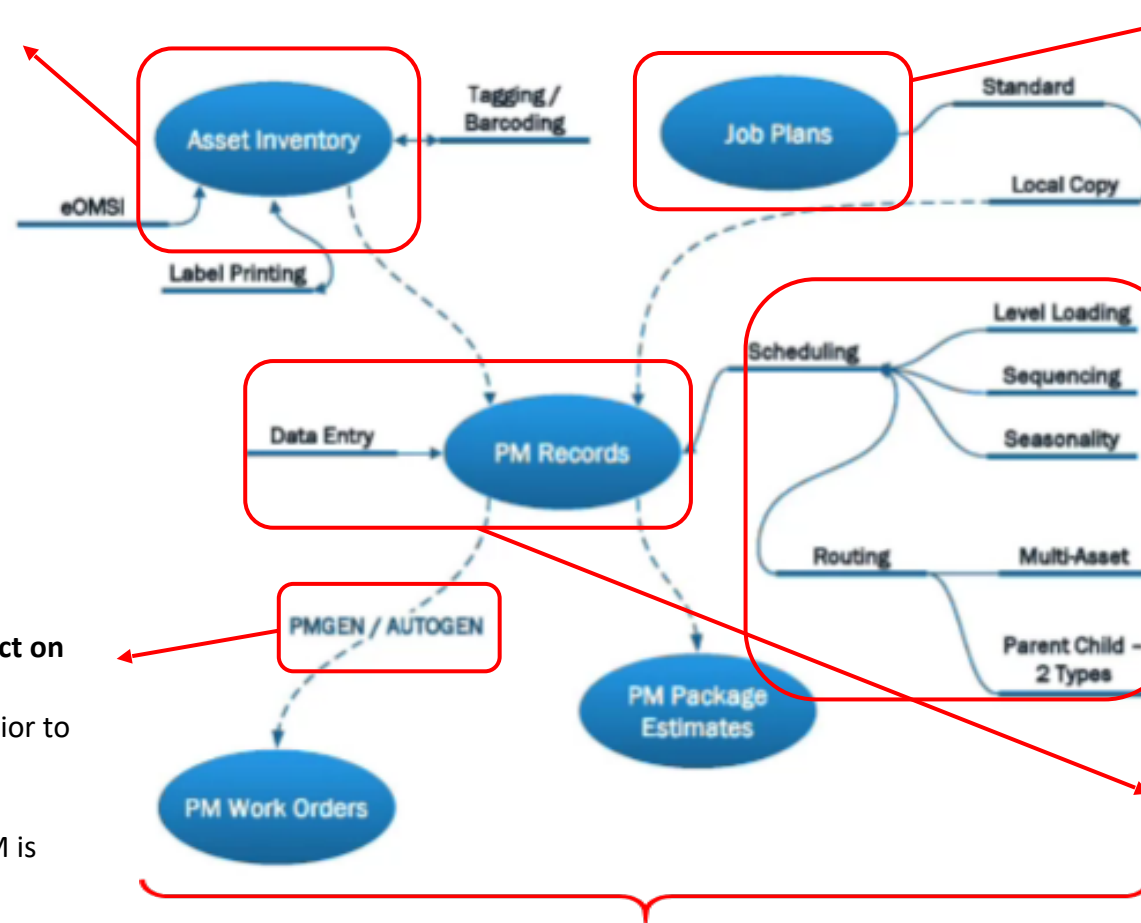
NAVFAC SE Industry Day

09 DEC 2024

Challenges with getting accurate WO data

*Assets are the #1 challenge

Without accuracy of asset data, PM records cannot be entered properly, regardless of method.



Job Plans necessary for contract oversight, but not Maximo records

Job plans in Maximo for Ktr PMs are unnecessary. However, info in the PM work order needs to call out the applicable job plan from the Ktr's PM Program Submittal

WO rules needed for PMs with routes

Though the scheduling function is not applicable to Ktr PMs, rules for how PM WOs with "routes" need to be established so that proper and comparable WO data is being submitted

*Validation of records before upload is key

SE uses RCC to validate Ktr WO data before it is uploaded into Maximo to prevent rejects. Errors in message reprocessing are difficult to manage.

*PWD and Contractor communication

None of this process works effectively unless there is active communication to support access, provide guidance, monitor data, troubleshoot errors, etc.

Contractor, COR and RBH all receive notification of rejects.

*PMs need to be scheduled to reflect on PM Status dashboard

Need contractors scheduled work prior to the beginning of the month.

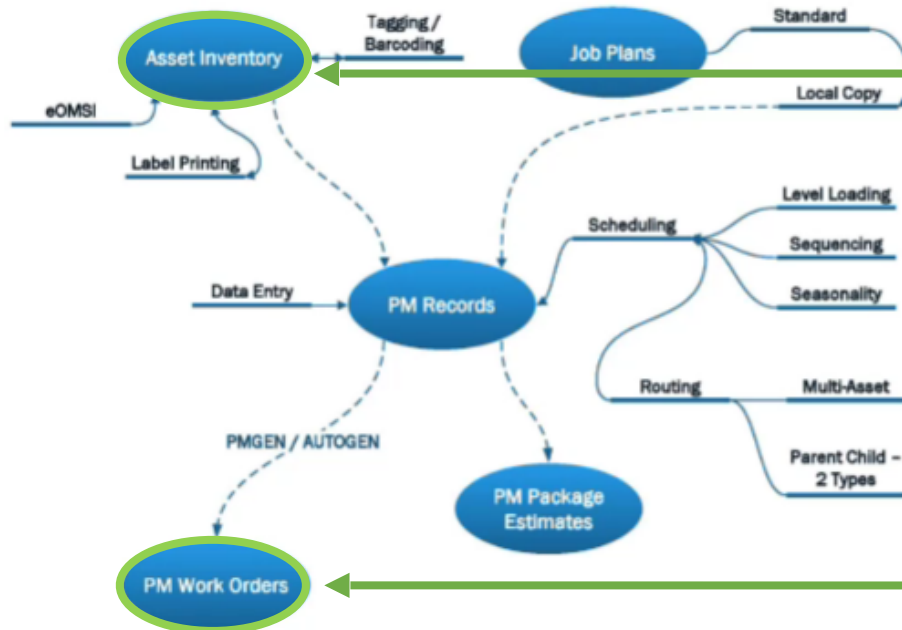
Simply sending a record after the PM is completed is not sufficient.

Flat File Work Order Data

- **Basic Flat File process**
 - Contractor submits Flat File to RCC daily (scheduled PMs, status changes/updates)
 - Automated process to update tables in Validation Tool (from COGNOS reports)
 - RCC runs Flat File through Validation Tool, rejects sent to Contractor, COR, and FEC PM
 - RCC uploads accepted Flat File into Maximo
 - Rejects resolved based on cause, Contractor will resubmit WO update in next batch
 - Maximo PM periodically checks Maximo message reprocessing for any upload failures
- **Benefits of Flat File Validation Process**
 - Greatly reduces contractor effort to enter data and eliminates potential for dual entry errors
 - Provides visibility in NAVFAC Maximo to the contractor's planned work
 - Improved quality control over the data through the validation tool, including options to implement business rules for data acceptance

Maximo Entry of Contracted PMs

Contractor CMMS – Work Management



NAVFAC Maximo – Asset Management



- **Methods of PM WO Data Entry**
 - Flat File – monthly “scheduled” PMs and status updates
 - Direct Entry
 - Build schedule in NAVFAC Maximo to generate PM WOs
 - Flat File scheduled PMs, DE status updates
 - Monthly DE of scheduled PMs, regular DE for status updates

Maximo Entry of Contracted PMs

Flat File

- **Pros**
 - Ktr manages using own CMMS
 - Validation provides some automated QC of data and business rules
 - Govt visibility in Maximo for monthly scheduled WOs
- **Cons**
 - Routine Govt labor to process FF
 - Govt & Ktr effort to reconcile WO rejects

Direct Entry – FF schedule, DE updates

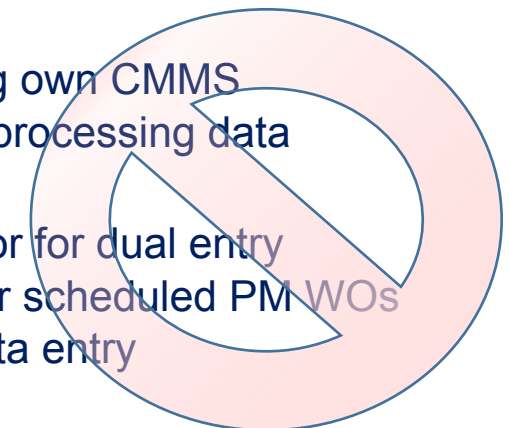
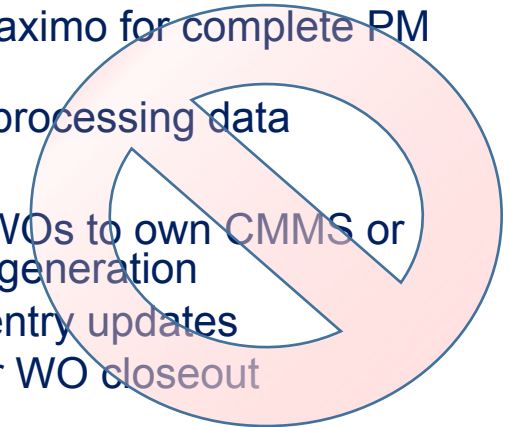
- **Pros**
 - Ktr manages using own CMMS
 - Govt visibility in Maximo for monthly scheduled WOs
- **Cons**
 - Limited Govt labor to process FF
 - Ktr labor for dual entry updates
 - Some Govt QC for WO closeout

Direct Entry – schedule in PM Module

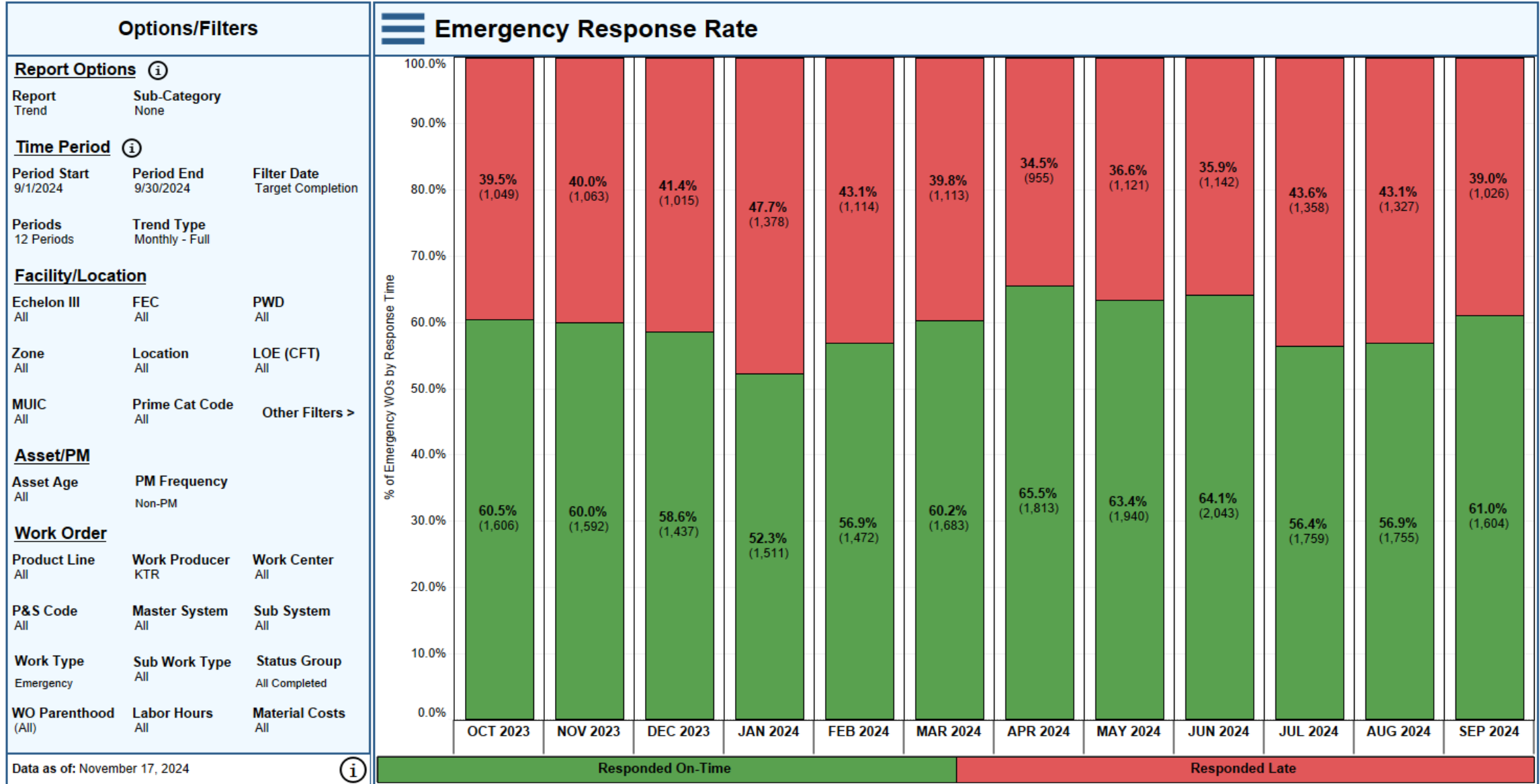
- **Pros**
 - Govt visibility in Maximo for complete PM schedule
 - No Govt labor for processing data
- **Cons**
 - Ktr must transfer WOs to own CMMS or duplicate PM WO generation
 - Ktr labor for dual entry updates
 - Some Govt QC for WO closeout

Direct Entry – generate via SR Module

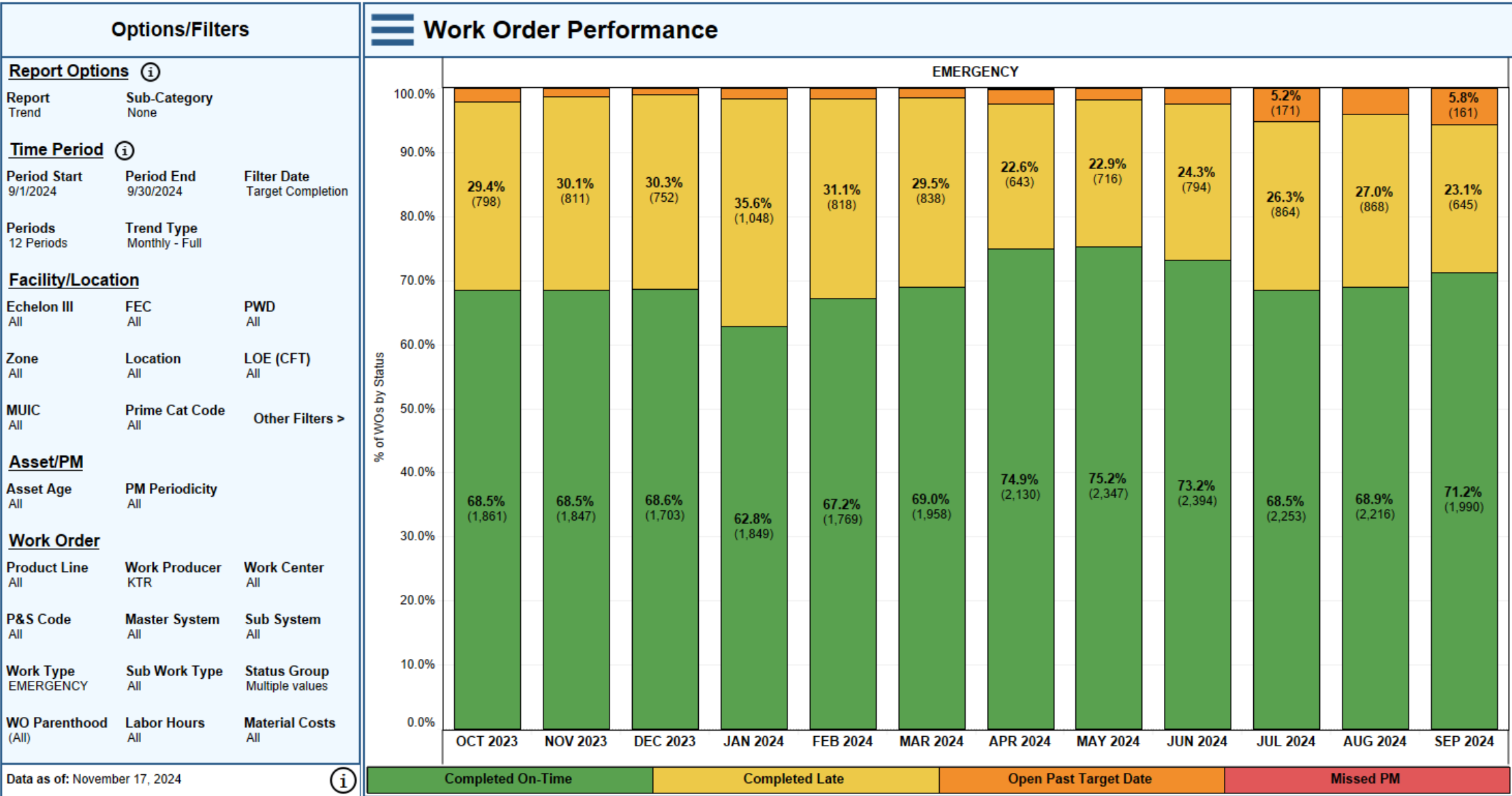
- **Pros**
 - Ktr manages using own CMMS
 - No Govt labor for processing data
- **Cons**
 - Significant Ktr labor for dual entry
 - Limited visibility for scheduled PM WOs
 - Govt QC for all data entry



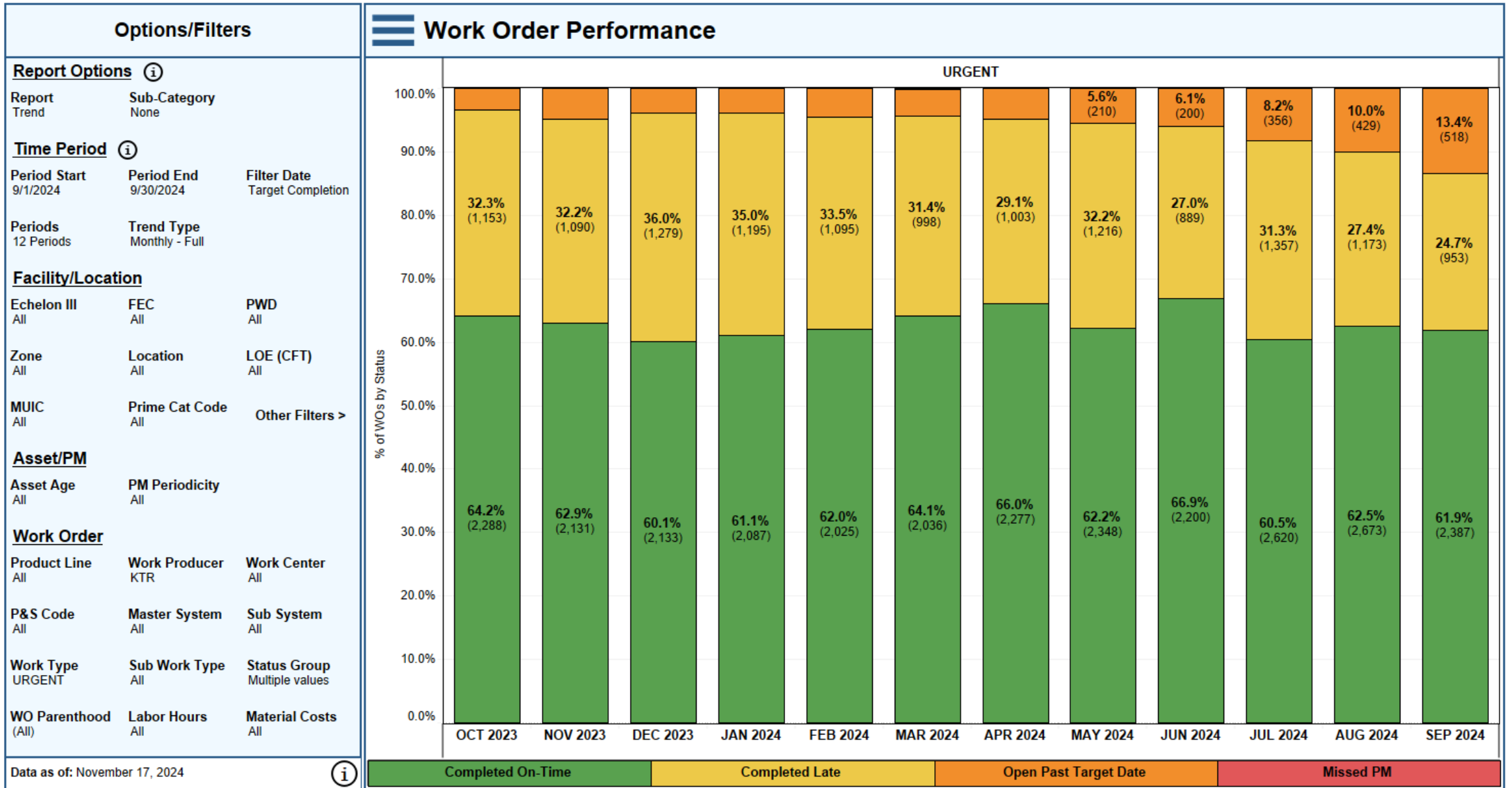
Emergency Response Time



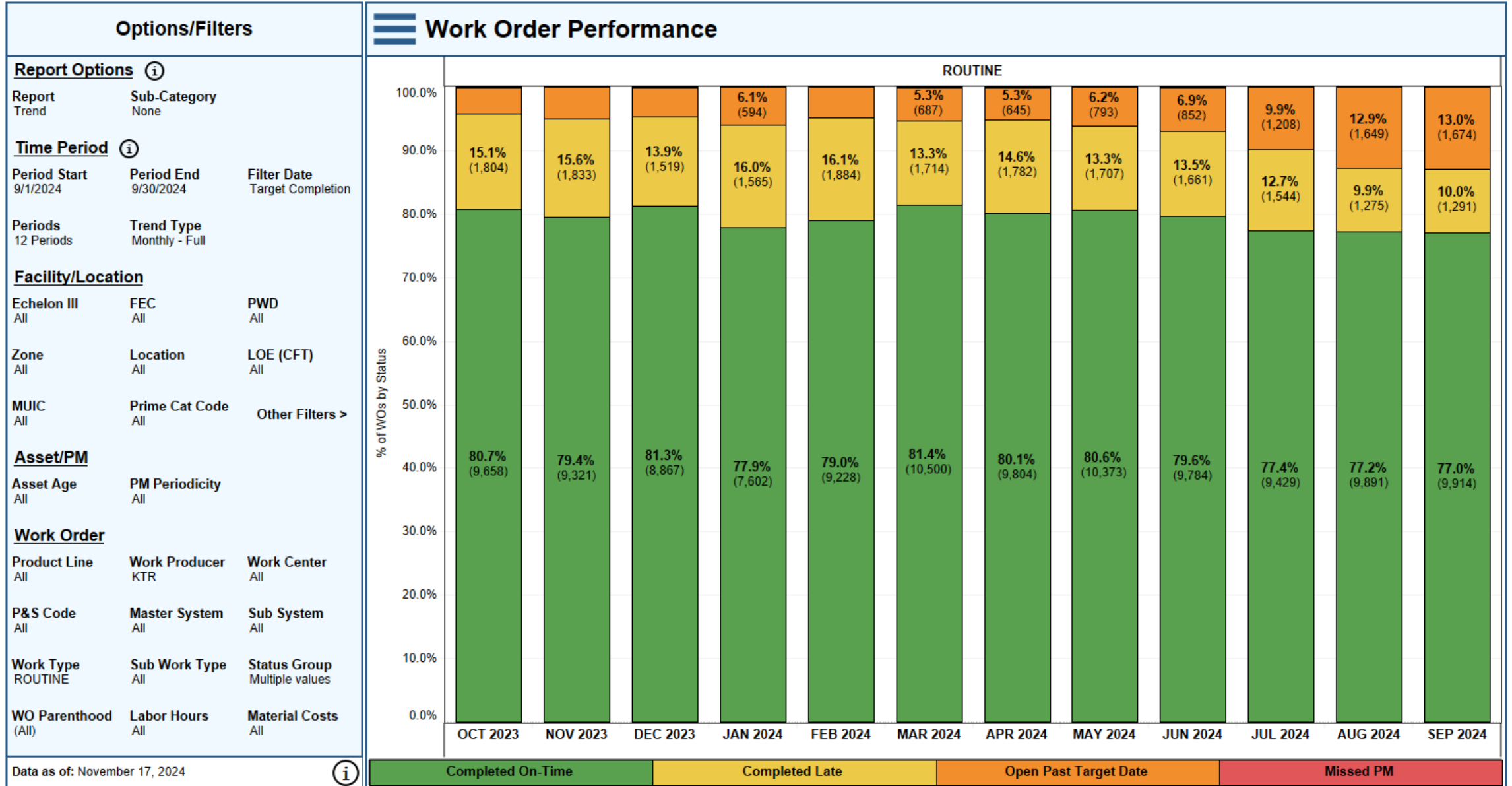
Emergency Service Order On-Time Completion



Urgent Service Order On-Time Completion

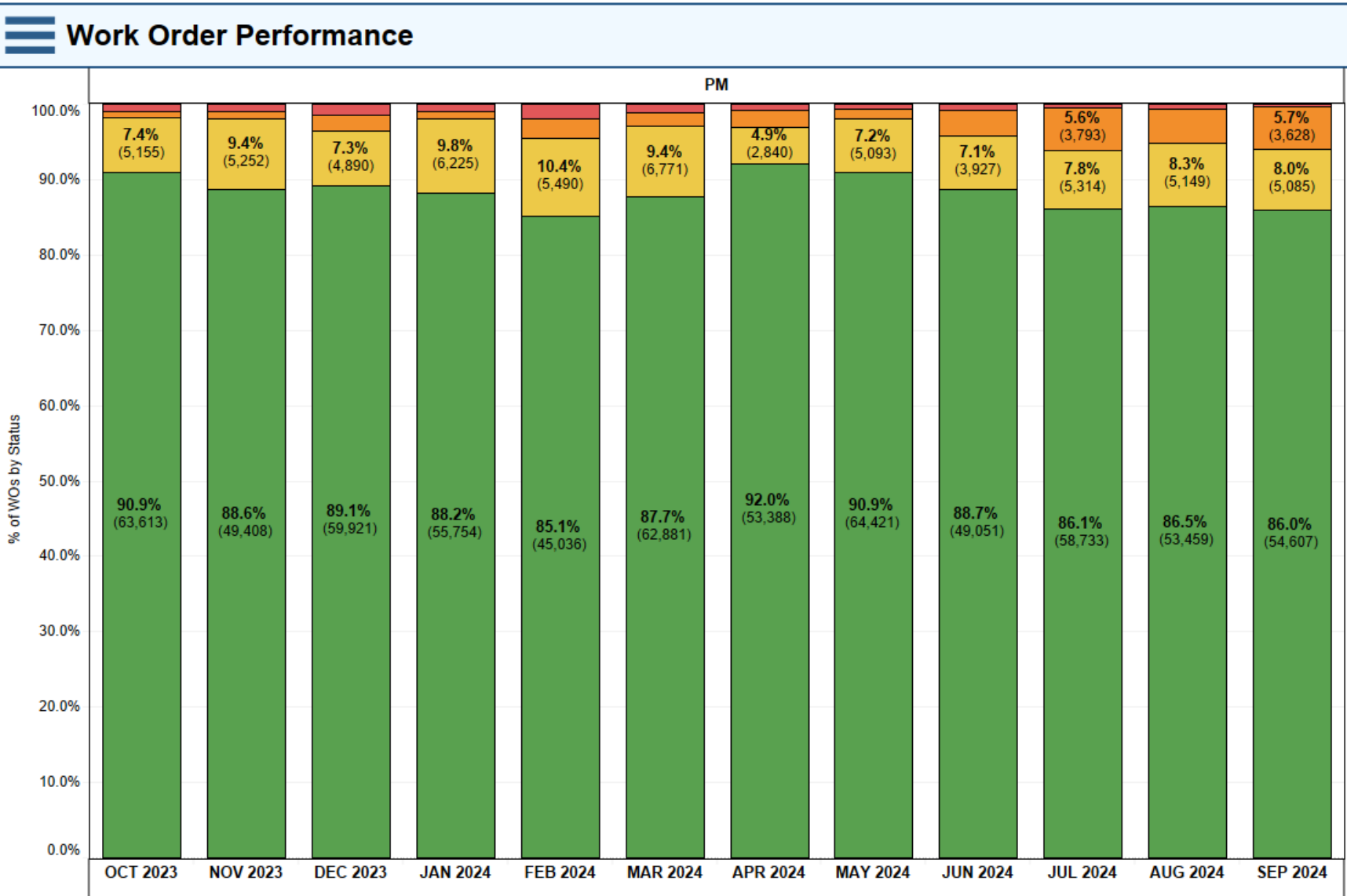


Routine Service Order On-Time Completion



PM Work Order On-Time Completion

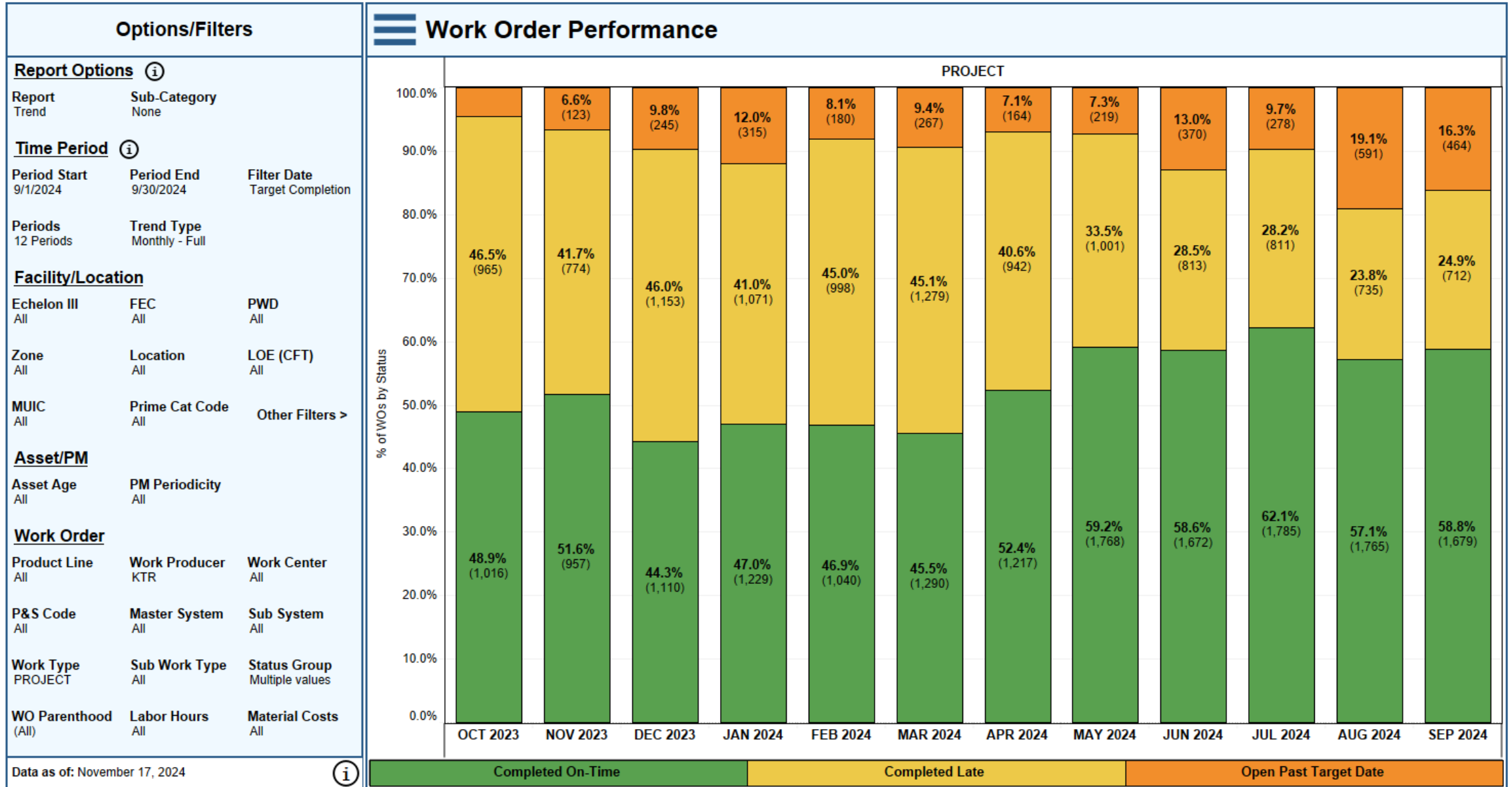
Options/Filters		
Report Options ⓘ		
Report Trend	Sub-Category None	
Time Period ⓘ		
Period Start 9/1/2024	Period End 9/30/2024	Filter Date Target Completion
Periods 12 Periods	Trend Type Monthly - Full	
Facility/Location		
Echelon III All	FEC All	PWD All
Zone All	Location All	LOE (CFT) All
MUIC All	Prime Cat Code All	Other Filters >
Asset/PM		
Asset Age All	PM Periodicity All	
Work Order		
Product Line All	Work Producer KTR	Work Center All
P&S Code All	Master System All	Sub System All
Work Type PM	Sub Work Type All	Status Group Multiple values
WO Parenthood (All)	Labor Hours All	Material Costs All



Data as of: November 17, 2024 ⓘ



Project Work Order On-Time Completion



Discussion

- **Is status quo acceptable?**
- **What are the root causes?**
- **What can we do better for you?**
- **When is it ok for us to expect more from you?**





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HVAC Maintenance

NAVFAC SE Industry Day

09 DEC 2024

HVAC PM On-Time Completion

Options/Filters

Report Options ⓘ

Report Trend Sub-Category None

Time Period ⓘ

Period Start 9/1/2024 Period End 9/30/2024 Filter Date Target Completion

Periods 12 Periods Trend Type Monthly - Full

Facility/Location

Echelon III All FEC All PWD All

Zone All Location All LOE (CFT) All

MUIC All Prime Cat Code All Other Filters >

Asset/PM

Asset Age All PM Periodicity All

Work Order

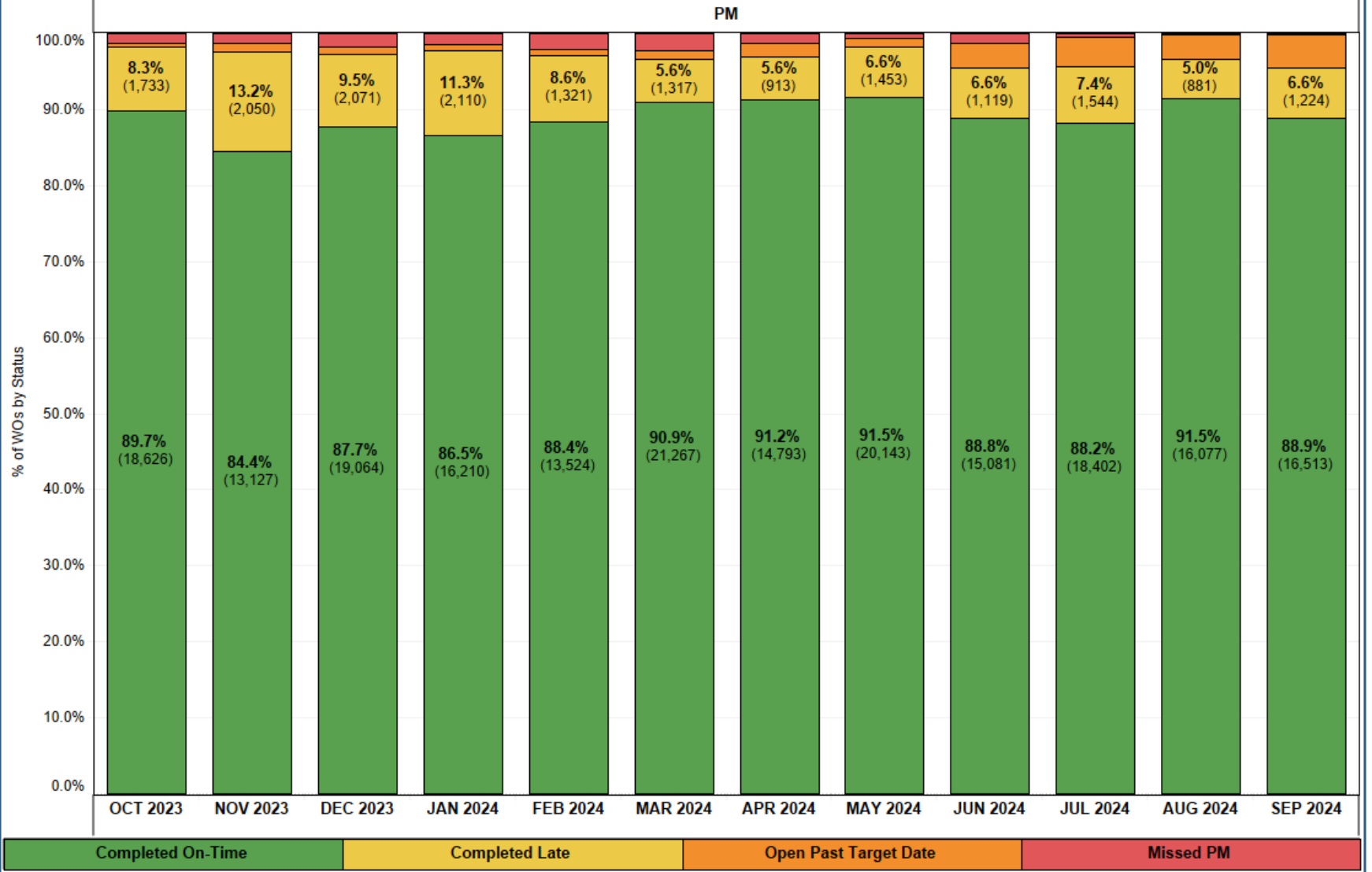
Product Line All Work Producer KTR Work Center All

P&S Code All Master System D30 - HVAC Sub System All

Work Type PM Sub Work Type All Status Group Multiple values

WO Parenthood (All) Labor Hours All Material Costs All

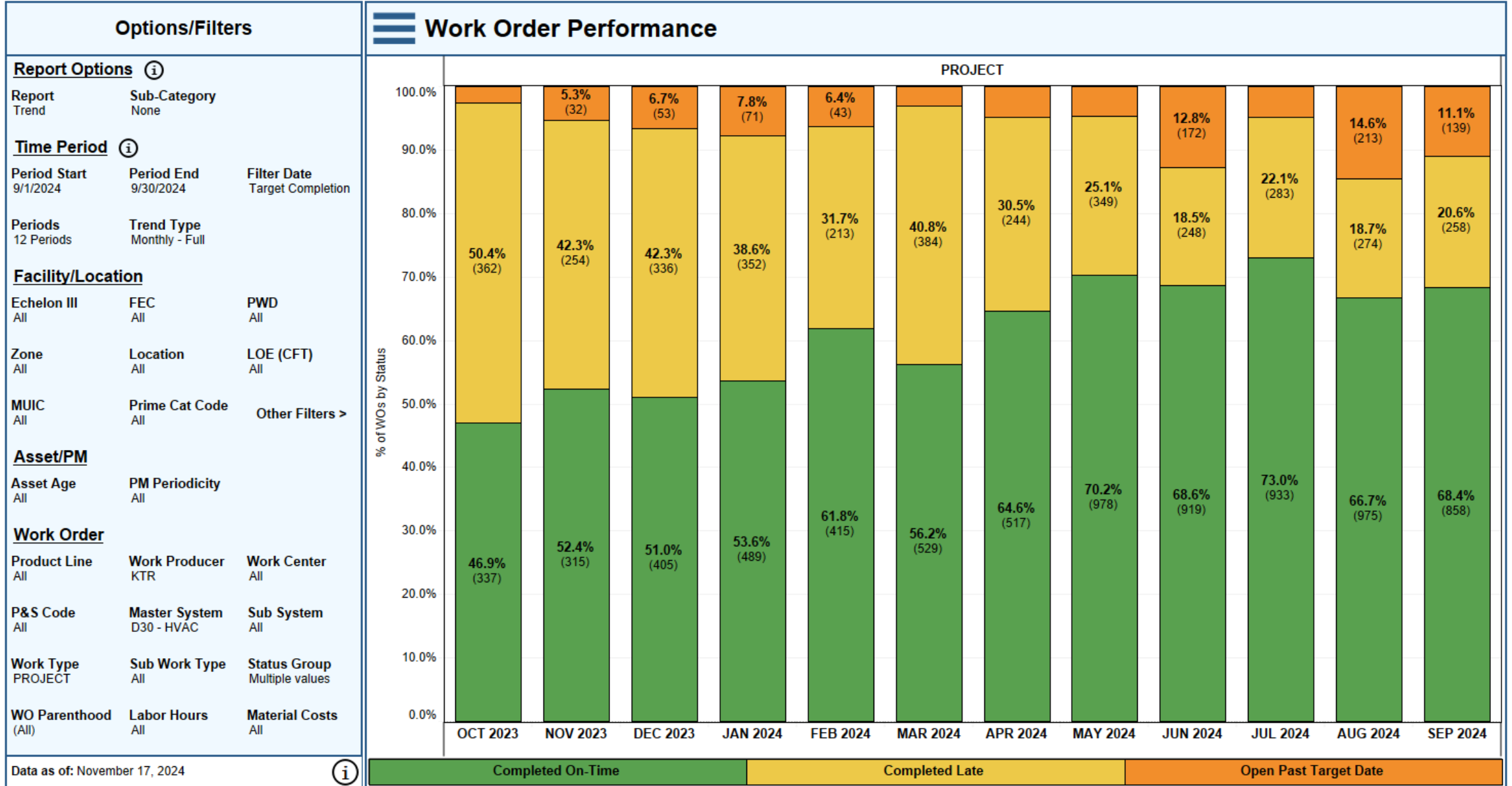
Work Order Performance



Data as of: November 17, 2024



HVAC Repair On-Time Completion



Common problems

- All HVAC systems are not being maintained
- Water treatment in chillers, boilers and cooling towers
- Condensate drains
- Indoor air quality/filter changes
- MX of humidity control systems
- Corrosion
- Inaccurate DCR (Direct Condition Rating/ICAP/UICAP)
- Poor condition rating without any repairs or notification work exceeds contract requirements

Expectations

- **Job plans**
- **PM schedules**
- **Employee qualification**
- **Employee supervision**
- **Quality Management System**
- **Notification of repair requirements**

Discussion

- **Is status quo acceptable?**
- **What are the root causes?**
- **What can we do better for you?**
- **When is it ok for us to expect more from you?**



Real Property Management and The DD1354 Process

NAVFAC SE Industry Day

09 Dec 2024

DD FORM 1354 Overview

- **The DD Form 1354, Transfer and Acceptance of DoD Real Property, is an instrument used by**
- **Military Services and WHS to accept new construction or capital improvements, to transfer real property assets between Services, or to document inventory adjustment (found on site) assets into the real property inventory.**
- **The form is part of the lifecycle of real property asset accountability business processes that crosses communities such as planning, programming, construction, contracting and real estate**

Acquisitions That Require a DD1354

- Acquisition by construction
- Capital Improvement (change in use or size) to existing facilities
- Transfer of real property between services
- Inventory adjustments (found on site)

Acquisition Type	Draft	Interim	Final
New Construction	X	X	X
Capital Improvement	X	X	X
Transfer Between Services			X
Inventory Adjustment			X

DD1354 Process UFC 1-300-08

- **Draft**

The purpose of the draft DD Form 1354 is to capture the information obtained once funding has been authorized and to forecast the changes to the real property inventory. The draft establishes the level of detail and the different components of a project, and shall be provided by the construction agent in accordance with the Services' guidelines

- **Interim**

The purpose of an interim DD Form 1354 is to allow transfer of accountability from the construction agent to the accountable Service on the placed-in-service date prior to determination of final costs

- **Final**

The purpose of the final DD Form 1354 is to establish in writing the final costs incurred for each facility in a project. All additional expenses incurred following the placed-in-service date or the date the interim DD Form 1354 was signed shall be transferred from the CIP account to the real property asset account in accordance with the final DD Form 1354

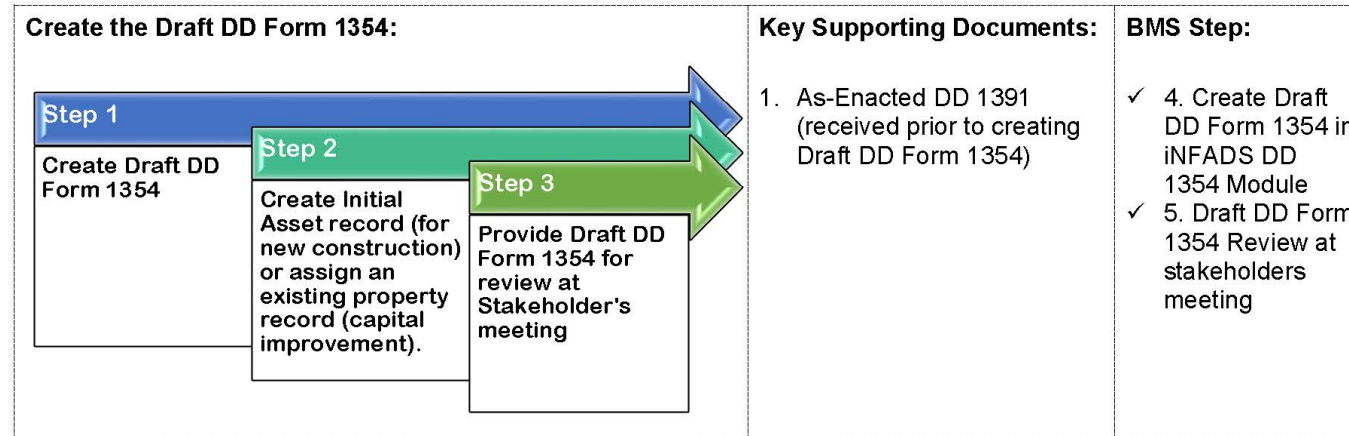
**Completed by DOR/
CM/PM/RPAO and
provided to
contractor at award**

**Contractor reviews
with Govt and
verifies accuracy of
Interim**

**Govt/contractor
verifies accuracy
and accepts assets**

Contractor Receives DD1354 Draft

Create Draft DD1354



Step Notes:

- Contractor will receive the Contractors DD 1354 during the stakeholders meeting
- The DD1354 must include each of the Real Property assets included in the 1391 utilizing the RPCS
- The Contractor must include the Quantity/Size
- The Contractor must include include costs for each asset identified on the DD 1354 totaling the awarded contract cost

Contractor Revises Input to Draft DD1354

Update Draft DD Form 1354 (as required)

Continue to update the facilities in the module throughout the Draft DD Form 1354 phase. When changes are made in the module, print a new Draft DD Form 1354 and provide to the CM/DM/Cost Engineer.

Update Draft DD 1354

The screenshot displays the DD Form 1354 software interface. At the top, it shows the project name 'BAMS CONSOLIDATED MAINTENANCE HANGAR' and the site name 'NAVBASE VENTURA CTY PT MUGU CA'. Below this is a list of facilities, including BATTERY SHOP, POTWATER SA INDUSTRIAL, SSEWER SA MAINBASE, PARKING AREA, 15KV UNDERGROUND ELE, SIDEWALKS, STORM SEWER, ROADS/BTUMNOUSMAN, COMPOSITE SHOP, SATCOM ANTENNA, DRAINAGE DITCH, FIRE PROTECTION PIPELINE, OTHER PAVED AREA, A/C MAINT HGR, SUPPLY WAREHOUSE, TRITON FORWARD OP BAS, and HYFORE AIR START SHEL.

The main table is titled 'FEAD' and contains the following data:

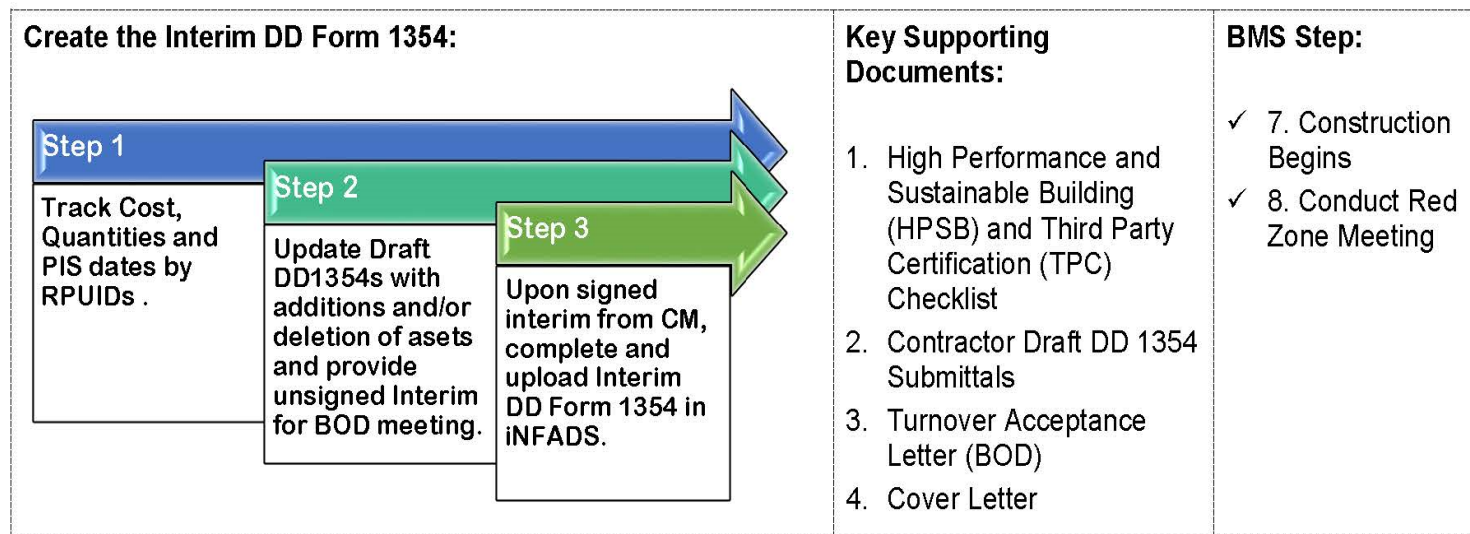
ITEM NO.	15A FAC NO.	15B RPLUD	11 CAT CODE	12 CAT CODE DESCRIPTION	13 TYPE	14 SUBS QUANTITY	16 QUANTITY	17 OTHER QUANTITY	18 ALTERNATE QUANTITY	19 COST	20 FUND SRC	21 FUND INT	22 CODE	23 ITEM REMARKS
1	385	142182	21145	APRON/SHOP/IN-NAVAR DEPOT	SF					\$0.00				
2	PWINDUST	1159147	84210	WATER DISTRIBUTION LINE, POTABLE	LF					\$0.00				
3	SMBASE	184304	85210	SANITARY SEWER LINE	LF					\$0.00				
4	201471	159259	85210	PARKING AREA	SY					\$0.00				
5	15KUG	1273371	81232	UNDERGROUND ELECTRICAL DISTRIBUTION LINES	LF					\$0.00				
6	201450	159257	85220	SIDEWALK	SY					\$0.00				
7	203821	184389	87110	STORM SEWER	LF					\$0.00				
8	280629	148001	85110	ROADS	SY					\$0.00				
9	313	1289385	21133	NON-METAL COMPONENTS SHOP (NAVAR DEPOT)	SF					\$0.00				
10	325	1273305	13410	ANTENNA - NAVIGATION	EA					\$0.00				
11	203421	159285	87120	DRAINAGE DITCH	LF					\$0.00				
12	204190	148056	84310	FIRE PROTECTION LINES	LF					\$0.00				
13	203720	184388	80235	OTHER PAVED AREAS NOT CODED IN THE 100 OR 400 SER	SY					\$0.00				
14	34	148809	21100	MAINTENANCE HANGAR - OH SPACE (HIGH BAY)	SF					\$0.00				
15	374	1273305	44110	GENERAL PURPOSE WAREHOUSE	SF					\$0.00				

At the bottom of the form, there are sections for 'STATEMENT OF COMPLETION', 'ACCEPTED BY', 'DATE SIGNED', and 'PROPERTY VOUCHER NUMBER'.

Contractor DD1354 Interim Review

Create the Interim DD Form 1354

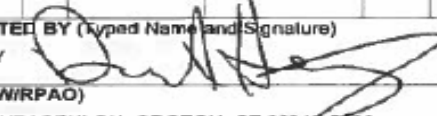
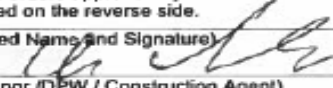
Thirty to sixty days prior to each PIS date (also known as the BOD), the RPAO will be invited to the “Red Zone Meeting”, at which time, the draft DD1354 will be reviewed with the contractor to validate the accuracy of data elements. The importance of the Interim DD Form 1354 is to ensure all of the cost, quantities, and placed in service date(s) are tracked by RPUID and provided on the Contractor’s Draft DD1354. The RPAO will use these values to create the Interim DD Form 1354.



Step Notes

- Contractor reviews the accuracy of previous input from the contractor draft 1354
- Verify accuracy of Placed in Service (PIS) date/s for each real property asset RPAO updates now interim DD1354 then contractor then signs upon verifying 100% accuracy (this is our receipt)

Example DD1354

Project UIC/Number: N00129 / 664		TRANSFER AND ACCEPTANCE OF DoD REAL PROPERTY										Form Approved OMB no. 0704-0188					
PAGE 1 OF 2 PAGES																	
The public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.																	
1. FROM (Organization Name)				2. DATE PREPARED				3. PROJECT/JOB NUMBER		4. SERIAL NUMBER		8. TRANSACTION DETAILS					
FEAD, NAVFAC MIDLAND WD NEW LONDON BOX 36, SUBASE, BUILDING 135 GROTON, CT 06349-5026				20170501				664		745		<input checked="" type="checkbox"/> Acq. by Constr. <input type="checkbox"/> Transfer btw. Services <input type="checkbox"/> Capital Imp. Inventory Adj. <input type="checkbox"/> Draft <input type="checkbox"/> Final <input checked="" type="checkbox"/> Interim		<input type="checkbox"/> Tot. Asset Placed-in-Service <input checked="" type="checkbox"/> Partial Asset Placed-in-Service			
5. TO (Organization - Installation Code and Name)				6. SITE RPSUID/CODE/NAME				7. CONTRACT NUMBER(S)		7a. PLACED-IN-SERVICE DATE							
COMMANDING OFFICER NAVAL SUBMARINE BASE NEW LONDON BOX 400, BUILDING 135 GROTON, CT 06349-5400				153 N00129 NAVSUBASE NEW LONDON CT				N40085-15-C-9610		20170421							
9. ITEM NO.	10.a. FAC NO.	10.b. RPUID	11. CAT CODE	12. CATCODE DESCRIPTION	13. TYPE	14. SUST CODE	15. UM	16. AREA QUANTITY	17. UM	18. OTHER QUANTITY	UM	ALTERNATE QUANTITY	19. COST	20. FUND SRC	21. FUND ORG	22. INT CODE	23. ITEM REMARKS
1	574	57698	17115	NAVY AND MARINE CORPS RESERVE TRAINING BUILDING	PERM	2	SF					PN	\$88,667.92	1235	07	FEE	INSTALL overhead crane
2	624	1213051	73025	GATE / SENTRY HOUSE	PERM	1	SF	64.00					\$45,947.28	1235	07	FEE	NEW Asset @Pier 1 Site
3	574E	1213057	14986	OPERATIONS SUPPORT SHED	PERM	3	SF	2,400.00	EA	1.00			\$490,448.46	1235	07	FEE	NEW Asset - HVU Storage Shed
4	600VUGL	1224650	81232	UNDERGROUND ELECTRICAL DISTRIBUTION LINES	PERM	1					LF	140.00	\$100,477.40	1235	07	FEE	NEW Asset - less than 600 KVA-secondary lines
5	574RG2	1213058	87116	STORMWATER RETENTION POND	PERM	3					MG	.02	\$72,232.73	1235	07	FEE	NEW Asset - Stormwater Retention Pond (Rain Garden)MG=millions of gallons
6	818	1171369	15522	SMALL CRAFT BOAT RAMP FACILITY	PERM	4			EA	1.00			\$41,481.61	1235	07	FEE	Increase Size - UPGRADE
7	INTFENC	550831	87215	INTERIOR FENCING (NOT CODED IN 872-10)	PERM	4				170.00			\$38,546.67	1235	07	FEE	ADD fence around Armory
8	SECLITE	1090283	81240	PERIMETER AND SECURITY LIGHTING	PERM	4				60.00	EA	4.00	\$58,337.55	1235	07	FEE	Lighting at floating pier (LF and # of poles)
9	STRMSWR	65965	87110	STORM SEWER	PERM	4				80.00			\$36,783.63	1235	07	FEE	Storm drain @Bldg 574
11	623	1211887	15520	SMALL CRAFT BERTHING	PERM	1				160.00			\$533,289.50	1235	07	FEE	NEW asset - Floating Pier
12	WTRFTSW	1269378	85235	OTHER PAVED AREAS NOT CODED IN THE 100 OR 400 SE	PERM	3	SY	335.00					\$74,212.60	1235	07	FEE	ADD paved area @ Pier 1
13	PL523	1269354	85210	PARKING AREA	PERM	3	SY	2,300.00					\$231,743.35	1235	07	FEE	ADD paved area @574
14	574A	1180623	14311	OPERATIONAL VEHICLE GARAGE	TEMP	4	SF						\$162,106.12	1235	07	FEE	Relocate / Modify
24. STATEMENT OF COMPLETION. The facilities listed hereon are in accordance with maps, drawings, and specifications and change orders approved by the authorized representative of the using agency except for the deficiencies listed on the reverse side.										25.a. ACCEPTED BY (Typed Name and Signature)				b. DATE SIGNED			
										DAVID HEINY 				20170509			
a. TRANSFERRED BY (Typed Name and Signature)						b. DATE SIGNED		c. TITLE (DPW/RPAO)				26. PROPERTY VOUCHER NUMBER					
CHRISTPHER R. SHUKIS 						20170509		RPAO, NAVSUBASENLON, GROTON, CT 06349-5400									
c. TITLE (Area Engr./Base Engr./DPW / Construction Agent)																	
SUPV GENERAL ENGINEER, FEAD, PWD NEW LONDON																	

DD Form 1354



Real Property Categorization System

- **Real Property Categorization System (RPCS):**
The DoD RPCS is a hierarchical scheme of real property types and functions that serves as the framework for identifying, categorizing, and analyzing the department's inventory of land and facilities around the world. This scheme is comprised of a 5-tier structure represented by numerical codes, with 1-digit codes being the most general and 5- or 6-digit codes representing the most specific types of facilities. (Source: Office of the Assistant Secretary of Defense for Energy, Installations, and Environment)
- The current version of the RPCS can be accessed via the Office of the Assistant Secretary of Defense for Energy, Installations, and Environment Real Property Program website [Real Property](#)

DD1354 Keys to Success

- **Important Contractor Draft information**
 - Identify all Real Property Contractor Draft
 - Ensuring the correct Category Codes are assigned to assets
 - Distributing contract award costs over all assets
 - Contractor (PM) not signing and dating Contractor Draft
- **Important review of the Interim DD 1354**
 - Ensuring the correct placed in service date is entered on the 1354 for each asset per the BOD letter. (This matters for Warranty, depreciation and programmed maintenance)
 - Interim reviewed and updated after Red Zone meeting not reviewed and signed by both contractor and Govt PM/CM
 - Ensure quantity and sizes of assets are measured accurately and correct units of measure are utilized on the DD 1354 per the RPCS

QUESTIONS?