



FY2023 PROGRAM OVERVIEW

Office of Asset Management

CAS/CAIS Annual Meeting
October 24-25, 2023

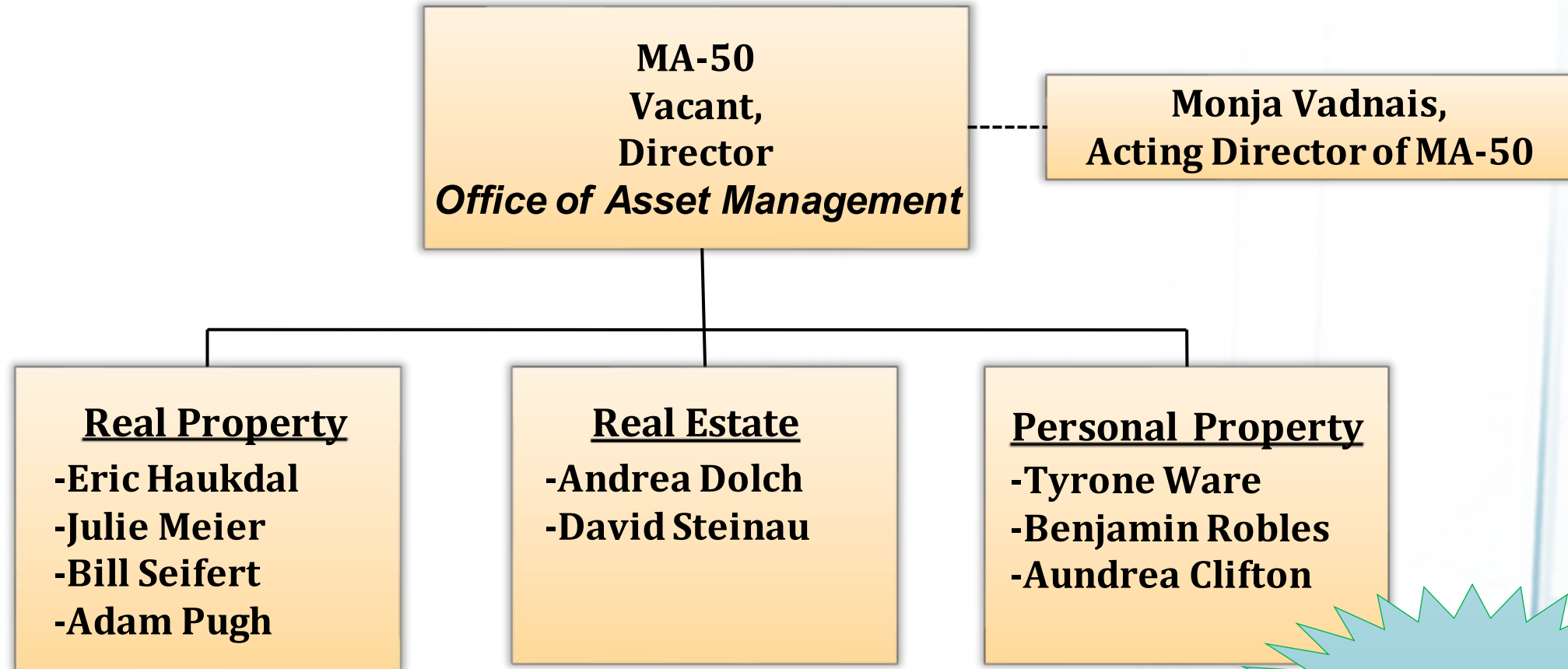


DISCUSSION POINTS

- Office of Asset Management Organizational Chart
- FY23 Repair Needs and Deferred Maintenance
- Bridge Validation Observations
- Functionality Assessment Tool
- FIMS_CAIS Helpdesk
- Meeting Highlights



Asset Management Organization



New Sustainability
Performance Office
MA-20



FY23 Repair Needs & Deferred Maint.

- Repair Needs are reported to the Federal Real Property Program.
 - FY23 total is \$19.416 billion, an increase of \$0.992 billion (or 5.38%)

\$ Millions	FY22 Active	FY23 Active	%(+/-)
Building	\$9,354	\$8,740	-6.56
Structures	\$6,657	\$8,599	+29.17
Total	\$16,011	\$17,339	+8.29

\$ Millions	FY22 Inactive	FY23 Inactive	%(+/-)
Building	\$2,213	\$1,710	-22.7
Structures	\$200	\$367	+83.5
Total	\$2,413	\$2,077	-13.92



FY23 Repair Needs & Deferred Maint.

- Deferred Maintenance is reported to the DOE Chief Financial Officer.
 - FY23 total is \$12.203 billion, an increase of \$1.466 billion (or 13.3%)

\$ Millions	FY22 Active	FY23 Active	%(+/-)
Building	\$6,063	\$6,476	+6.81%
Structures	\$3,326	\$4,463	+34.19%
Total	\$9,389	\$10,939	+16.51%

\$ Millions	FY22 Inactive	FY23 Inactive	%(+/-)
Building	\$1,223	\$1,049	-14.22%
Structures	\$115	\$193	+67.83%
Total	\$1,338	\$1,242	-7.17%

Bridge Validation Observations





Bridge Validation Observations

- Sites need to ensure that all inspections have been completed and are within the inspection cycle.
- Sites may not be required to validate all bridges and culverts but are required to conduct verification of assets in the walkthrough portion of the validation.
- Sites should assume all inspections for bridges are required and reach out to MA-50 if they believe an exception applies.
 - For example, a Seismic Vulnerability Evaluation is still required even in a low seismic zone.

U.S. Department of Energy
Washington, DC

ORDER
DOE O 437.1

Approved: 12-11-2020

SUBJECT: BRIDGE AND TUNNEL MANAGEMENT

1. **PURPOSE.** Ensure the safety, function, and efficient management of all Department of Energy (DOE) bridges, culverts, and tunnels in support of DOE missions through regular, comprehensive inspections and evaluations using resources in an effective and efficient manner and in compliance with the governing laws and regulations.¹
2. **CANCELS/SUPERSEDES.** None.
3. **APPLICABILITY.**
 - a. **Departmental Applicability.**
 - (1) This Order applies to all DOE elements with responsibility for bridges, tunnels, or culverts where DOE has a legal interest or right to use such property except for the exemptions identified in paragraph 3.c. The requirements supplement those of DOE O 430.1, *Real Property Asset Management*, current version.
 - (2) The Administrator of the National Nuclear Security Administration (NNSA) must assure that NNSA employees comply with their responsibilities under this directive. Nothing in this directive will be construed to interfere with the NNSA Administrator's authority under Section 3212(d) of Public Law 106 - 65 to establish Administration-specific policies, unless disapproved by the Secretary.
 - b. **DOE Contractors.** Except for the equivalencies/exemptions in paragraph 3.c., the Contractor Requirements Document (CRD), Attachment 1, sets forth requirements of this Order that will apply to contracts that include the CRD. The CRD or its requirements must be included in contracts for the management or operation of DOE sites or facilities that include bridges, tunnels, or culverts in the real property asset inventory.
 - c. **Equivalencies and Exemptions for DOE O 437.1.** Equivalencies and exemptions to this Order are processed in accordance with DOE O 251.1, *Departmental Directives Program*, current version. Attachment 2 establishes the basis for equivalent requirements. The accountable Program Secretarial Officer must

¹Code of Federal Regulations 23 CFR Part 650, *National Bridge Inspection Standards*; Code of Federal Regulations 23 CFR Part 650, Subpart E - *National Tunnel Inspection Standards*; Code of Federal Regulations 49 CFR Part 213, *Federal Railroad Administration Bridge Safety Standards*; and Code of Federal Regulations 49 CFR 237.71 Subpart D, *Determination of Bridge Load Capacities*.

AVAILABLE ONLINE AT: www.directives.doe.gov

INITIATED BY:
Office of Management



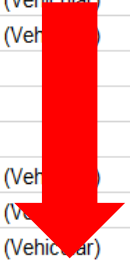
Bridge Validation Observations

DOE Bridge Data Validation Reporting Form (v1.0)					
Program Office:				Site:	
				Area:	
BRIDGE ASSET 1					
Area No / Prop ID / Name					
FIMS Data Element	FIMS Value	Source	Year of Source	Value from Source	Variance (Y/N)
Routine Inspection Date					No
Routine Inspection Frequency					No
Speical Inspection Date					No
Special Inspection Frequency					No
Underwater Inspection Date					No
Underwater Inspection Frequency					No
Posted Load Rating/Restrictions					No
Load Rating Date					No
Scour Evaluation					No
Scour Critical Plan of Action					No
Seismic Vulnerability Evaluation					No
Traffic Volume Date					No
No of Lanes on Structure					No
Size					No
Status					No
Usage Code					No
Year Built					No
ADDITIONAL COMMENTS					
NBI Number					
Size Unit of Measure					
Location (City, State and Zip)					



Bridge Validation Observations

DOE Bridge, Tunnel and Culvert Walkthrough Verification																														
Area Name	Property ID	Property Name	Status	Usage Description	Notes																									
G	601001	RR BRIDGE ON LINE M UPPER 3 RUNS CREEK	Shutdown	1469 Controlled Access Bridge (Railroad)																										
G	601002	CULVERT UNDER PLANT RR (P-AREA CANAL)	Operating	1469 Controlled Access Bridge (Railroad)																										
G	603001	BRIDGE, UPPER THREE RUNS CREEK ROAD C	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603002	BRIDGE, FOUR MILE CREEK - ROAD C	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603003	BRIDGE, UPPER THREE RUNS CREEK, ROAD F	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603004	BRIDGE, FOUR MILE CREEK ROAD 4 (603004G)	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603005	BRIDGE, FOUR MILE CREEK - ROAD A-12.2	Shutdown	1769 Controlled Access Bridge (Vehicular)																										
G	603006	BRIDGE, PEN BRANCH - ROAD A-13 (603006G)	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603008	BRIDGE, FOUR MILE CREEK-RD3 (4-32" RCCP"	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603010	CULVERT, RD A-17 (3-36 INCH, 2-8 INCH CM	Operating	2629 Culvert																										
G	603011	BRIDGE, BRANCH OF FOUR MILE CREEK-ROAD 3	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603012	CULVERT, E OF GATE 21-RD-B-6.4 (603012G)	Operating	2629 Culvert																										
G	603013	BRIDGE, TINKER CREEK - ROAD 8-1	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603014	BRIDGE, UPPER THREE RUNS CREEK-ROAD 8-1	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603015	BRIDGE, UPPER THREE RUNS CREEK-ROAD 2-1	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603016	BRIDGE, MEYERS BRANCH - ROAD 9 (603016G)	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603021	CULVERT, PEN BRANCH - RD F(72 INCH RCCP)	Operating	2629 Culvert																										
G	603029	BOX CULVERT, STEEL CRK - ROAD B (3-8X8)	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603031	BRIDGE, PEN BRANCH-RD B(2-10'X10')	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603032	BOX CULVERT, INDIAN GROVE BRANCH RD B	Operating	2629 Culvert																										
G	603034	CULVERT, BRINKLEY ROAD, CRACKERNECK	Operating	2629 Culvert																										
G	603035	CULVERT, RD A-1 2 NEAR PLT BOUNDARY	Operating	2629 Culvert																										
G	603039	BRIDGE, TINKER CREEK - ROAD 2-1	Operating	1769 Controlled Access Bridge (Vehicular)																										
G	603041	BRIDGE & SPILLWAY, KENNEDY'S POND-RD 8-11	Standby	1769 Controlled Access Bridge (Vehicular)																										
G	603042	BRIDGE, RD2 BTWN D & D-1 (3) 10'X10	Operating	1769 Controlled Access Bridge (Vehicular)																										





Functionality Assessment Tools

- FIMS User's Guide: Appendix G, Frequently Discussed Topics.

- **Difference Between Condition and Functionality and How Does It Apply to Conducting the Respective Assessments. (Continuation)**

When conducting a functional assessment, the assessment team will consider whether the asset is lacking any specific mission capabilities or features. During the functional assessment, it may help to imagine that the asset has no physical deficiencies, and the asset is in perfect working order (has no repair needs). The functional assessment will identify what is missing that is keeping the asset from fully supporting its mission requirements (or from doing so in a practical, efficient, or safe manner). The estimated cost to perform these functional upgrades represents the asset's Modernization Costs.

Also Note: the FIMS data element "Overall Asset Condition" actually takes into account the results of both the condition assessment and the functional assessment. Overall Asset Condition considers how all condition and functional deficiencies may affect the performance of the asset (as well as other portfolio level real property factors such as relative mission dependency and risk tolerance). Refer to the Data Element Dictionary for detailed guidance on managing this data element.



Functionality Assessment Tools

Functionality Assessment

Property ID:	
Property Name:	
Asset Type:	
Property Type:	

Meets Mission Requirements

	Yes	No
Examples:	<input type="checkbox"/>	<input type="checkbox"/>
Comments – What is needed to meet Mission Requirements? / Has Mission Changed?		

Quality Requirements
i.e.: Decentralizing a 15yr. old steam system to save energy

Capacity Requirements
i.e.: Adding a garage to accommodate larger equipment

Efficiency Requirements
i.e.: Replacing a 10yr. old ventilation system.

Reliability Requirements
i.e.: Installing a second feeder on a site to improve system reliability

Improved Safety Requirements
i.e.: Adding a generator backup to badging system

Interviewer: _____

Date of Assessment: _____

Personnel Interviewed: _____

Date of Next FA: _____

Real Property Asset Manager: _____

Print _____ Signature _____

Date _____

- Functionality Assessment Template developed by an EM Oak Ridge Site.
- Link to Temple: https://fims.doe.gov/caisinfo/Documents/Function_Assessment_Form.docx



FIMS and CAIS Help Desk

- FIMS/CAIS technical assistance can be obtained from one of the following resources
 - Email the FIMS/CAIS Help Desk at fims_cais_help@hq.doe.gov
 - Call the FIMS/CAIS Hotline at **(202) 287-1397**

New
Number



CAS/CAIS Meeting Highlights

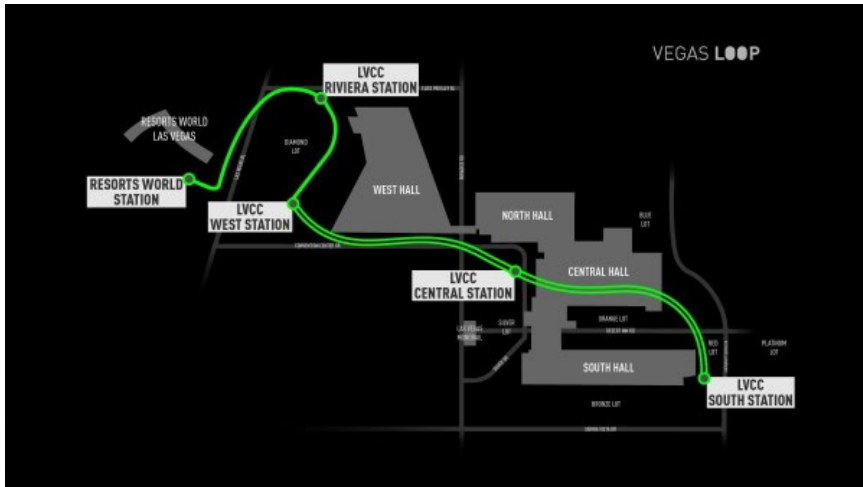
- Solar Panel Maintenance and Inspections
- Total Cost of Ownership
- Dam Inspections
- Drone Technology for Inspections
- Overview of Hanford's Condition Assessment Program
- Overview of Kansas City's Real Property
- Inspection Methodologies and RS Means Insights



QUESTIONS

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Backup-Tour Information



Meet up location: Las Vegas Convention Center West Hall out site the main entrance.

Time: 8:30am

Address: 300 Convention Center Dr, Las Vegas, Nv 89109

Note: wear comfortable shoes for walking