SUBJECT: REAL PROPERTY ASSET MANAGEMENT

1. PURPOSE. Establish a data-driven, risk-informed, performance-based approach to the life-cycle management of real property assets that aligns the real property portfolio with Department of Energy (DOE) mission needs; acquire, manage, positively account for, and dispose of real property assets in a safe, secure, cost-effective, and sustainable manner; and ensure the real property portfolio is appropriately sized, aligned, and in the proper condition to support efficient mission execution.

2. CANCELLATION. DOE O 430.1B, Real Property Asset Management, dated 9-24-03. Cancellation of a directive does not, by itself, modify or otherwise affect any contractual or regulatory obligation to comply with the directive. Contractor Requirements Documents (CRDs) that have been incorporated into a contract remain in effect throughout the term of the contract unless and until the contract or regulatory commitment is modified to either eliminate requirements that are no longer applicable or substitute a new set of requirements.

3. APPLICABILITY.
   a. Departmental Applicability.
      (1) This Order applies to all DOE elements with responsibility for real property where DOE has a legal interest or right to use such property except for the exemptions identified in paragraph 3.c. None of the requirements in this Order will be implemented in a manner that would conflict with federal laws and regulations or other DOE directives.
      (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.
      (1) The requirements of this Order do not automatically apply to contractors. Any application of real property asset management requirements to contractors must be communicated separately from this Order. Program Secretarial Officers (PSOs) and other DOE elements are responsible to identify the contracts that involve the life-cycle management of real property assets and what requirements apply to each contract.
(2) In the event a Contracting Officer (CO) assigns responsibility for real property management to a contractor, the contractor is responsible for compliance with real property asset management requirements regardless of the entity performing the work. Affected contractors are responsible for flowing down real property requirements to subcontracts to the extent necessary to ensure compliance with the requirements.

b. Exemptions from DOE O 430.1C. The following DOE organizations are exempt from this Order with the exception of the requirement to populate in the DOE Facilities Information Management System (FIMS) for each real property asset: the minimum data fields necessary to create a real property asset record in FIMS; the data fields associated with requirements to annually submit Federal Real Property Profile (FRPP) data and occupancy data; and annually updated estimates for Deferred Maintenance and Repair (DM) and Repair Needs (RN).

(1) NNSA Deputy Administrator for Naval Reactors.

(2) Power Marketing Administrations. In accordance with Section 302 of the Department of Energy Organization Act of 1977, the Secretary operates and maintains the Power Marketing Administrations’ (PMAs’) electric power transmission systems by and through the PMA administrators. The PMAs are uniquely established within the Department by nature of their administrators’ obligations to meet statutory and public utility responsibilities for the safety, security, and reliability of electric power transmission. Administrators must determine the appropriate real property asset management program for their facilities, including consideration of appropriate parts of the criteria set forth in this Order and prudent utility industry practice.

(3) Federal Energy Regulatory Commission.

(4) The accountable Under Secretary has the authority to approve documented program-specific or location/site-specific equivalencies or exemptions from requirements of this Order based on mission needs, efficiency, or efficacy of execution without disregarding federal laws and regulations with the exception of the following:

(a) The use of FIMS for real property reporting;

(b) The use of definitions documented in this Order or included in the FIMS Data Element Dictionary;

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(c) The performance of physical inspections to identify real property deficiencies; and

(d) The collection of asset level data for: annual actual maintenance costs; and estimates for both DM and RN.

4. **REQUIREMENTS.** The life-cycle management of real property must take a data-driven, risk-informed, performance-based approach to align real property with DOE mission needs. Real property must be managed in a safe, secure, cost-effective, and sustainable manner to ensure real property assets are available, utilized, and in a suitable condition to support efficient mission execution. Real property management must apply industry leading practices, voluntary consensus standards, and customary commercial practices where practicable.

All actions involving the planning, acquisition, management, and disposition of interests in real estate must be reviewed and approved by a Certified Realty Specialist (CRS), as appropriate, prior to execution. Real estate actions, subsequent to CRS review and approval, are executed at the appropriate level of delegated authority such as authority possessed by a Real Estate Contracting Officer (RECO).

The following paragraphs set forth the requirements for real property asset life-cycle management including: planning and budgeting, acquisition, sustainment, disposition, performance measurement, and reporting systems.

a. **Planning and Budgeting.** Real property asset management planning and budgeting must ensure financial investments in real property are aligned to meet DOE mission needs and requirements. DOE elements with real property holdings must prepare annual planning guidance, carry out real property planning, and provide five-year real property planning and budgeting documentation.

(1) DOE element real property planning must:

   (a) ensure real property planning aligns with DOE strategic plans and program guidance;

   (b) ensure applicable requirements related and not limited to climate change resilience and adaptation, and sustainability\(^3\); environment, health, safety and security; earthquake risks\(^4,5\); cultural and natural resource preservation; and historic preservation are addressed;

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\(^3\) Department of Energy *Strategic Sustainability Performance Plan* (current version).


(c) include general purpose infrastructure and programmatic requirements;

(d) include the real property needs of site tenants;

(e) include surveillance and maintenance and long-term stewardship (LTS) resource requirements;

(f) identify the mission and core capability associated with all real property;

(g) determine the optimum set of facilities and infrastructure needed to maintain each applicable core capability;

(h) assess the real property portfolio against delineated program mission requirements by core capability every five years. More frequent reassessments are required if mission requirements change, the core capability assigned to an asset changes, the asset is repurposed, or there are major changes to the asset’s physical condition or use. Assessments must:

1. evaluate the relative importance and contributions of all real property to mission accomplishment;

2. employ a systematic approach to identify the real property assets that directly contribute to the accomplishment of the assigned mission or mitigation of environment, health, safety and security issues; and

3. determine mission dependency designation for each real property asset in accordance with program guidance and the Department’s FIMS Data Element Dictionary (DED).

(i) include a prioritized list of real property acquisition, sustainment, and disposition activities and projects;

(j) include the results of annual utilization surveys;

(k) include a summary of changes and the annual totals of real property acquisition and disposition building footprint;

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6 Code of Federal Regulations, 41 CFR Part 102-75.60, What are Landholding Agencies’ Responsibilities Concerning Real Property Surveys?
include the reduction or consolidation of space, specifically addressing space policy, program benchmarks for space utilization, and space assignment and utilization standards; and

rely on data from FIMS and other data collected from each program’s planning process such as the BUILDER Sustainment Management System or ENERGY STAR Portfolio Management System.

Real property planning is implemented through financial investments reflected in associated budget requests. DOE elements with real property holdings must:

(a) develop a five-year projection of financial investments required for real property acquisition, sustainment, and disposition activities;

(b) ensure annual PSO budget request includes prioritized financial investments in real property; and

(c) prepare an Integrated Facilities and Infrastructure (IFI) Crosscut Budget in accordance with guidance issued jointly by the Office of Management and Office of the Chief Financial Officer.

b. Acquisition. Acquisition of real property must be conducted in accordance with applicable federal laws and regulations. DOE acquires interests in real property using several available methods including, but not limited to, those documented in Table 1.

Table 1. DOE Available Methods for Acquisition of Interests in Real Property

| Contract |
| Federal labor |
| Purchase |

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9 Office of Management and Budget, Circular No. A-11, Preparation, Submission, and Execution of the Budget (current version).
10 Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended.
12 18 U.S. Code § 435, Contracts in Excess of Specific Appropriation.
13 40 U.S. Code § 3111, Approval of Sufficiency of Title Prior to Acquisition.
14 41 U.S. Code § 6303, Certain Contracts Limited to Appropriated Amounts.
15 Federal Acquisition Regulation, FAR Part 45, Government Property.
16 Department of Energy Acquisition Regulation, DEAR Part 917, Special Contracting Methods, Subpart 917.74, Acquisition, Use, and Disposal of Real Estate.
a. Gift or donation
b. Leasing (capital or operating lease), including alternative financing\textsuperscript{17,18}
\begin{itemize}
\item Energy Savings Performance Contracts/Utility Energy Services Contracts
\item Permit or transfer from another agency
\item Withdrawal of public domain land
\item Exchange for services (General Services Administration (GSA) authority)
\item Exchange of existing property (GSA authority)
\end{itemize}

\textsuperscript{(1)}

DOE elements must:

\begin{enumerate}
\item ensure that prior to Federal approval, real property acquisitions are supported by a mission need, a business case analysis, a current utilization survey, and life-cycle cost alternatives analysis;
\item record all planned real property acquisitions in real property planning documentation and in the FIMS Anticipated Asset Information Module (AAIM) regardless of the acquisition method or funding source;
\item ensure construction or renovation of existing DOE-owned buildings above 5,000 gross\textsuperscript{19} square feet meet federal sustainability guiding principles\textsuperscript{20} and building efficiency requirements\textsuperscript{21};
\item ensure new solicitations for DOE-leased buildings above 10,000 rentable\textsuperscript{22} square feet meet building efficiency, performance, and management requirements\textsuperscript{20}; and
\item ensure facilities regardless of ownership comply with applicable federal metering requirements\textsuperscript{23}.
\end{enumerate}

\textsuperscript{17} OMB Circular A-11, Appendix A-Scorekeeping Guidelines, Section 11- Scoring Purchases, and Appendix B, Budgetary Treatment of Lease-Purchases and Leases of Capital Assets (current year).
\textsuperscript{21} Executive Order 13693, Planning for Federal Sustainability in the Next Decade, March 19, 2015.
\textsuperscript{23} 42 U.S. Code § 8253, Energy Management Requirements, paragraph (e), Metering of Energy Use.
(2) The Department must:

(a) ensure new construction of DOE-owned building area, except at environmental closure sites, is offset by the sale, declaration of excess, or demolition of building area of an equivalent or greater size\textsuperscript{24};

(b) ensure newly constructed or leased building area, regardless of ownership, with a predominant use of office or warehouse is offset by building area of an equivalent or greater size\textsuperscript{25};

(c) ensure newly constructed, renovated, or leased building area designated for office use does not exceed the Department’s office space design standard, an average of 200 square feet\textsuperscript{26} of usable area per person, regardless of predominant use of the building; and

(d) ensure that any acquisition by lease, except when otherwise exempt, complies with the lease scoring requirements of the Office of Management and Budget\textsuperscript{27}.

c. Sustainment. DOE real property assets must be sustained by maintenance, repair and renovation activities to ensure: mission readiness; operational safety; worker health, environmental protection and compliance; security; and property preservation to cost-effectively meet program missions. DOE elements must:

(1) maintain real property assets, including the mechanical and electrical systems that are installed as part of basic building construction and are essential to the normal functioning of the facility, in a condition suitable for its intended use;

(2) establish a maintenance management program including: a computerized maintenance management system (CMMS); a condition assessment system; a master equipment list; maintenance service levels; a method to determine for each asset the minimum acceptable level of condition; methods for categorizing deficiencies as either DM or RN; management of the DM backlog; and a method to prioritize maintenance work;

\textsuperscript{24} Conference Report 107-258 accompanying the Fiscal Year 2002 Energy and Water Development Appropriation Act.
\textsuperscript{25} Office of Management and Budget, MPM 2015-01, Implementation of OMB Memorandum M-12-12 Section 3: Reduce the Footprint, March 25, 2015.
\textsuperscript{27} Office of Management and Budget, Circular A-11, Preparation, Submission and Execution of the Budget; Appendix A – Scorekeeping Guidelines and Appendix B – Budgetary Treatment of Lease-Purchases and Leases of Capital Assets.
(3) Establish technical and management processes to align the performance, functional, and physical attributes of real property facilities, structures, systems, and components in the maintenance program with associated requirements, design, and operational information, including:

(a) Processes established for all hazard category 1, 2, and 3 nuclear facilities must comply with applicable DOE standards; and

(b) For other facilities, voluntary consensus standards, including ANSI/EIA – 649, National Consensus Standard for Configuration Management or DOE standards must be applied as determined by the responsible DOE element.

(4) Comply with applicable DOE maintenance management directives28 for nuclear facilities in addition to the maintenance requirements of this Order;

(5) Ensure real property asset availability for planned use or disposition using preventive and predictive maintenance and repairs;

(6) Establish a cost-effective sustainment program to keep existing facilities in an acceptable condition, functional and sustainable in support of current missions. Sustainment programs must include: a systematic management process for planning and budgeting for known future cyclical maintenance, repair, and renovation requirements for major building components or infrastructure systems; and a mechanism to track direct and indirect funded expenditures for maintenance and repair29 and renovation at the asset level;

(7) Develop five-year forecast (by fiscal year) and update annually to identify financial investments for sustainment of real property assets to support DOE strategic plans, program guidance, and Departmental performance targets. Include consideration for desired level of service, remaining service life, current condition assessments, Energy Independence and Security Act energy and water evaluations, utilizations surveys, the mission dependency of the asset, and projected funding for DM reduction;

(8) Report asset level annual required maintenance in FIMS for the upcoming fiscal year, including the estimated fully burdened costs of predictive and preventive maintenance and repair activities;

(9) Conduct condition assessments, to determine the need for some preventive or remedial action, using industry standard graded approaches tailored to

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the inspection type and frequency that aligns with asset ownership, use, and mission dependency as follows:

(a) perform physical condition assessments on each real property asset at least once every five-year period or other risk-based interval as approved by the cognizant PSO;

(b) perform more frequent assessments for real property assets identified as mission unique or critical, or assets that pose an increased risk to life safety or the environment, or as mandated by federal, state or local codes;

(c) determine the current physical condition of each real property asset, its estimated time to failure, and the optimum period for repairs and replacement based on engineering and maintenance analyses;

(d) estimate the costs to correct deficiencies identified during the condition assessments using the DOE-funded Condition Assessment Information System (CAIS) or another nationally recognized cost estimating system that is formatted in UNIFORMAT II\textsuperscript{30} and based on annually updated unit cost data (e.g. RS Means; Building News; Craftsman Book Company; Richardson General Construction Estimating Standards). Cost estimates must be updated annually and include contractor indirect costs; and

(e) categorize deficiencies as either DM or RN. Document and report DM and RN cost estimates consistent with Federal Accounting Standards Advisory Board requirements\textsuperscript{31} and Federal Real Property Council reporting guidance\textsuperscript{32}, respectively.

(10) perform a functional assessment of each operating real property asset to determine an asset’s current physical condition and its capability to meet mission requirements at least once during any five-year period or other risk-based interval as approved by the cognizant PSO based on industry leading practices, voluntary consensus standards, and customary commercial practices;


\textsuperscript{31} Federal Accounting Standards Advisory Board Standards 42, \textit{Deferred Maintenance and Repairs}.

perform comprehensive energy and water assessments for each operating covered facility at least once during any four-year period\(^{33,34}\);

recommission\(^{20,35}\) covered facilities at least once during any four-year period, tailored to the size and complexity of the building and its system components, to optimize and verify performance of existing building systems; and

record annually the results of condition assessments, functional assessments, and real property utilization assessments in FIMS.

d. **Disposition.** DOE elements accountable for real property assets are responsible for disposition or long-term stewardship in accordance with applicable federal laws and regulations\(^{36}\) and compliance with applicable federal laws and regulations\(^{37}\) for excess real property assets. DOE elements must:

(1) identify real property assets that are no longer needed to meet mission needs and may be candidates for reuse or disposal;

(2) track annual costs, at the asset level, of maintaining excess facilities once the asset is declared excess until final disposition;

(3) screen real property assets in accordance with federal laws, regulations, and the Department’s internal process for screening real property assets prior to declaration of excess;

(4) identify excess real property that is appropriate for economic development and, if any such property is identified, annually make a list of property available to potentially-interested parties;

(5) record planned disposition of real property in five-year real property planning documentation and in FIMS;

(6) determine whether to dispose of real property by sale or lease in accordance with 10 CFR Part 770, or to dispose of it through other processes;

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(7) notify DOE Headquarters organizations (Office of General Counsel, Office of Management, Office of the Chief Financial Officer, and PSOs) a minimum of 90 days before any disposal by sale or lease out-grant made under DOE authorities;

(8) ensure physical controls, institutional controls, and other mechanisms to protect people and the environment are in place while performing disposition activities;

(9) dispose of unneeded real property assets declared excess to mission needs using demolition, sale, economic development, lease termination, interagency transfer, or other DOE-approved methods;

(10) perform real estate actions for out-grant in accordance with applicable environmental laws, regulations, and DOE directives, including:

   (a) lease out-grants under the authority in 42 U.S. Code § 7256, commonly referred to as the “Hall Amendment”, must comply with the Joint DOE/Environmental Protection Agency Interim Policy Statement on Leasing, dated June 30, 1998;

   (b) out-grants of excess property may be made if disposal by sale is not practical;

   (c) out-grants of non-excess property may be made if the out-grant does not conflict with DOE missions; and

   (d) out-grants by lease for economic development are subject to the Congressional notification requirements.

(11) complete the transfer of excess real property assets in accordance with applicable Departmental directives, including prior written consent from the receiving entity; and

(12) dispose of excess contaminated real property assets in accordance with applicable Departmental directives and federal laws and regulations.

e. Performance Measurement. The Department uses corporate performance metrics to measure real property asset management performance across all DOE elements. DOE elements use FIMS and other information systems to collect the data necessary to support the metrics. DOE elements accountable for real property are responsible for developing real property asset performance measures commensurate with their duties and responsibilities, including: identifying and assessing performance measures annually; establishing performance measures that link performance of program goals and budgets to desired outcomes; and establishing annual performance targets for real property assets, and stating expected performance outputs and outcomes in annual direction and guidance.
The Department is responsible, on an ongoing basis, for monitoring the real property assets of the agency’s profile in accordance with Executive Order 13327.

Performance Reporting. An Infrastructure Executive Committee (IEC) annually submits to the Secretary a State of General Purpose Infrastructure Report and provides Department-wide investment priorities and recommendations intended to improve the effectiveness and efficiency of DOE real property management. The IEC will provide recommendations concurrent with the Department’s budget formulation schedule including the budget crosscut process, using corporate performance measure results as well as a set of enduring performance measures to determine the effective stewardship of DOE’s real property assets such as the degree to which the Department is:

1. making the infrastructure investments it has committed to make;
2. increasing the percentage of adequate facilities;
3. decreasing DM;
4. decreasing underutilized space;
5. eliminating excess facilities;
6. decreasing the annual costs of carrying excess facilities; and
7. decreasing risk to core capabilities due to infrastructure deficiencies.

f. Reporting Systems. The Department’s corporate real property inventory system is FIMS. The FIMS system stores real property asset data, including data for the FRPP annual submission. DOE is required to verify and validate the accuracy of each FRPP submission in accordance with 41 CFR § 102-84.30, and annually submit the FRPP data in accordance with 41 CFR § 102-84.55.

1. The Department’s real property data management and reporting requirements are as follows:

   a. all real property in which DOE holds a legal interest in or right to use, including outright title, must be documented in FIMS, the Department’s system of record for DOE real property;
   b. FIMS data fields must be kept current throughout the real property asset lifecycle and align with the FIMS Data Dictionary;
   c. FIMS data must be consistent across DOE to enable comparable reporting and trend analyses;
   d. FIMS data must be used to meet FRPP requirements and the Department’s DM and other real property reporting requirements
including, but not limited to, the Agency’s yearly financial statement;

(e) real property records supporting data maintained in FIMS must be maintained in accordance with FIMS User’s Guide requirements and retained per applicable DOE directives and federal regulations;

(f) records management changes resulting in revisions to the FIMS User’s Guide must be coordinated through appropriate governance;

(g) FIMS information regarding real property assets that have been disposed of, including all related institutional controls, must be archived;

(h) a completion report or equivalent document must be developed for each disposition project and included in FIMS; the completion report/document must describe, at a minimum, project activities, final facility status, cost information, and verification and validation that specific end-point criteria have been met;

(i) FIMS data must be verified and validated in accordance with annual guidance to ensure the accuracy of data; and

(j) FIMS data validation documentation (validation forms, scorecards, corrective action plans) must be maintained for at least five fiscal years.

(2) FIMS data for each site must be annually reviewed for completeness and accuracy by a site federal representative prior to DOE’s FRPP data submittal to GSA.

(3) Retain records in accordance with established Departmental requirements.

5. RESPONSIBILITIES. DOE real property is operated and managed by qualified and experienced federal and contractor personnel at Headquarters and field locations. The paragraphs below describe the responsibilities and authorities for effective management of DOE real property assets and establish accountabilities for real property asset management from planning and budgeting, to acquisition, sustainment, and through disposition.

   a. Secretary.

      (1) Establishes corporate policy for real property asset management.

      (2) Authorizes actions to acquire title to or interest in real property by condemnation.

      (3) Accepts donations of real property assets from outside DOE.
(4) Delegates authority to acquire, manage, and dispose of real property.

(5) Designates a federal employee as the Agency’s Head of Contracting Activity for Real Property in accordance with DOE O 541.1B.

(6) Designates a federal employee as the Agency’s Senior Real Property Officer (SRPO) in accordance with Executive Order 13327.

b. Deputy Secretary.

(1) Exercises responsibility for implementation of this Order by DOE elements.

(2) Resolves real property management issues between Under Secretaries.

(3) Resolves interdepartmental real property management issues with the Power Marketing Administrations and the Federal Energy Regulatory Commission.

c. Under Secretaries.

(1) Support the Secretary and Deputy Secretary by developing real property asset management goals and processes as documented in the DOE Asset Management Plan and related documents through Program Secretarial Officers and Site and Field Office Managers.

(2) Support the Secretary and Deputy Secretary with external and internal real property asset management reporting and communications.

(3) Ensure accountability for the stewardship of real property assets.

(4) Issue supplemental directives and guidance, as necessary, to implement real property asset management.

(5) Resolve real property management issues between Program Secretarial Offices.

(6) Ensure real property budgets adequately support current and planned mission activities in an efficient, safe, secure and sustainable manner.

(7) Implement the requirements of this Order through the Program Secretarial Offices or other DOE elements.

(8) Develop procedures for approving equivalencies or exemptions from real property requirements, including notification to Senior Real Property Officer.
(9) Approve equivalencies or exemptions from real property requirements based on mission needs, efficiency, or efficacy of execution without disregarding federal laws and regulations.

d. Program Secretarial Officer/Program Office.

(1) Develops program management plans and issues internal real property five-year planning and budgeting program office guidance that is aligned with the real property requirements and as explicitly authorized by their Under Secretary.

(2) Prepares and monitors the execution of real property budgets that adequately support current and planned mission activities in an efficient, safe, secure, and sustainable manner.

(3) Develops program-specific real property performance measures.

(4) Develops real property building area offsets, as applicable.

(5) Conducts comprehensive self-assessments of asset management programs in accordance with Departmental directives\textsuperscript{38,39}.

(6) Appoints a real property officer for each site and assigns duties as applicable.

(7) Reviews and certifies FIMS data and plans submitted by the site and field office managers.

(8) Validates FIMS data prior to annual FRPP submission.

(9) Assigns representatives to the Infrastructure Executive Committee (IEC), Excess Contaminated Facilities Working Group (ECFWG), Facilities and Infrastructure Steering Committee (FISC) or any other Department-wide working group or governance body related to real property.

(10) Ensures Contracting Officers are notified when the inclusion of real property requirements into specific site/facility management contracts is required.

e. Director, Office of Management.

(1) Establishes DOE policy and guidance, in consultation with PSOs, to improve real property asset management.


Conducts management assist visits in consultation with PSOs and provides peer reviews of real property management activities and functions with Program Offices.

Reviews third party financing proposals.

Monitors building area offsets, including balances at Site, PSO/DOE element, and Departmental levels.

Screens submitted real property assets for excess and provides authorization to change the Excess Indicator field in FIMS.

Develops and administers real property asset management systems (FIMS and CAIS) and associated systems training.

Assists the Chief Financial Officer in budget formulation and ensures IFI crosscut guidance is consistent with CFO budget guidance.

Prepares IFI templates and guidance for budget formulation and supports the PSOs in preparing supporting IFI documentation.

Develops sustainability goals, requirements and guidance and tracks and reports performance data.

Assists HCAs developing contractual documents and clauses related to real property life-cycle activities and management functions.

Evaluates and recommends real property performance metrics in the areas of inventory, alignment, functionality, condition, utilization, disposition, management, and data reliability.

Develops, in coordination with PSOs and DOE elements, an annual Five-Year Rolling Timeline to accomplish real property asset management goals and objectives.

Chief Financial Officer.

Develops policies and systems for budget formulation, budget execution, finance, and accounting.

Assists PSOs with using DOE financial systems to budget and account for real property acquisition, maintenance, repair, renovation, and disposition projects and activities.

Reviews asset transfer issues including economic development transfers and land sales for less than fair market value.
(4) Certifies Federal Real Property Profile input as directed by the Office of Management and Budget (OMB)\(^{40}\).

(5) Determines the DOE capitalization threshold.

(6) Approves, for the Secretary, applications for new Payments in Lieu of Taxes (PILT) payments or revised PILT payments after obtaining the concurrence of the Office of General Counsel\(^{41}\).

(7) Estimates the Department's environmental liabilities\(^{42}\) for each active facility including the anticipated remediation costs for: contaminated facilities still in active use by programs; and retired contaminated facilities awaiting transfer to the Office of Environmental Management or another Program Office.

(8) Maintains the Active Facilities Data Collection System (AFDCS).

g. Associate Under Secretary, Office of Environment, Health, Safety and Security.

(1) Provides advice and assistance for environment, health, safety and security implementation.

(2) Provides planning, direction, guidance, and oversight for security implementation at all Headquarters buildings.

(3) Provides expert advice and implementation assistance to protect workers, the public, the environment and the Department’s material and information assets.

h. Site and/or Field Office Manager.

(1) Oversees implementation of real property asset management requirements.

(2) Ensures all assigned federal staff with responsibilities for real property asset management meet the requirements of the Federal Building Personnel Training Act and other relevant federal laws and regulations.

(3) Verifies that the Contracting Officer incorporates all applicable real property requirements and any supplemental Program Office guidance into the contracts identified with real property life-cycle activities and management functions.

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\(^{40}\) Office of Management and Budget, MPM 2015-01, Implementation of OMB Memorandum M-12-12 Section 3: Reduce the Footprint, paragraph II.2.a.i. *Certification of FRPP Data*, March 25, 2015.


(4) Ensures contract requirements for real property life-cycle activities and projects are incorporated in assurance systems\(^\text{43}\).

(5) Identifies and reports all real property assets within assigned site responsibility.

(6) Identifies and reports planned and actual expenditures, both direct and indirect, supporting real property life-cycle activities and projects.

(7) Reviews and submits FIMS data and real property planning documentation for acceptance.

i. **Contracting Officer.**

(1) Incorporates any and all applicable real property requirements and any supplemental Program Office guidance into contracts identified with real property life-cycle activities and management functions.

(2) Establishes a reporting framework to account for planned and actual expenditures, both direct and indirect, supporting real property life-cycle activities and projects.

(3) Ensures contractors implement applicable real property management requirements defined in their contracts.

(4) Appoints property administrators for contracts containing DOE real property inventory\(^\text{44}\).

(5) Oversees review and approval of contractor property management systems as applicable to contracts involving real property\(^\text{45}\).

j. **Senior Real Property Officer.**

(1) Serves as the DOE representative at the Office of Management and Budget’s Federal Real Property Council.

(2) Reviews Federal Real Property Profile for accuracy and completeness.

(3) Measures and reports real property asset management performance.

(4) Maintains a Departmental building space offset exchange in support of footprint reduction or consolidation efforts.

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\(^{44}\) Federal Acquisition Regulation, Part 42, Section 42.202, *Assignment of Contract Administration*.

\(^{45}\) Federal Acquisition Regulation, Part 45, Section 45.105, *Contractors' Property Management System Compliance*. 
(5) Prepares and submits real property asset information in response to external requests.

(6) Issues supplemental guidance, based on annual changes to internal and external requirements, including but not limited to data related to operations and maintenance of real property, Federal Real Property Profile data submission, and other reporting guidance.

(7) Assembles committees or working groups, including but not limited to, the FIMS Advisory Committee, the FIMS Data Development Committee, and the FISC to provide agency-wide real property staffing and assistance on facilities engineering and governmental real property practices.

(8) Co-chairs the Infrastructure Executive Committee with a senior-level program official.

k. **Real Property Officer.**

(1) Ensures DOE real property management is implemented in accordance with Departmental policy and directives, federal laws and regulations, and PSO guidance.

(2) Serves as DOE element site point of contact for matters related to real property management.

(3) Oversees other real property management functions as defined by the respective DOE element.

(4) Ensures and documents compliance of DOE federal employees and DOE contractor personnel who operate, maintain, and manage real property with the requirements of the Federal Building Personnel Training Act\(^{46}\) and other relevant federal laws and regulations.

l. **Infrastructure Executive Committee.**

(1) Analyzes the status of the Department’s general purpose infrastructure investments and condition.

(2) Develops Departmental real property management strategic priorities.

(3) Develops and submits an annual *State of General Purpose Infrastructure Report* to the Secretary documenting the impact of real property financial investments on performance measures.

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(4) Develops DOE-wide investment recommendations to the PSOs and Departmental leadership.

(5) Provides periodic progress reports to the Laboratory Operations Board.

m. **Excess Contaminated Facilities Working Group.**

(1) Evaluates alternatives to disposition excess contaminated facilities in a manner that ensures effective expenditure of limited budget resources and minimizes the Department’s overall risk.

(2) Reports critical information on contaminated excess facilities used for DOE decision-making.

(3) Addresses crosscutting issues relating to the stabilization/deactivation and decommissioning of excess facilities.

(4) Guides and improves the Department’s approach to disposition prioritization and planning.

(5) Develops a biennial Plan for Deactivation and Decommissioning of Nonoperational Defense Nuclear Facilities Report to Congress on excess facilities\(^47\).

n. **Facilities and Infrastructure Steering Committee.**

(1) Assists in the development and implementation of Departmental real property asset management strategic goals and initiatives.

(2) Advises on approaches that increase cooperation between Program Offices and compliance with the Department’s strategies and directives.

(3) Assists the Office of Management in evaluating and recommending real property profile monitoring in accordance with Executive Order 13327.

(4) Assists the Office of Management in the development of an annual Five-Year Rolling Timeline to accomplish real property asset management goals and objectives.

(5) Shares industry leading practices, voluntary consensus standards, and customary commercial practices for adoption by programs as appropriate.

o. **Head of Contracting Activity**\(^{48}\).

(1) Issues direction to Contracting Officers to incorporate any and all applicable real property requirements and any supplemental Program Office guidance into contracts associated with life-cycle management of real property.

(2) Ensures contract management systems, awards, and administration of contracts and financial assistance are in accordance with federal laws and regulations and DOE policies and directives.

p. **Head of Contracting Activity for Real Property**.

(1) Develops and issues policy, procedures, and guidance for real estate contracting actions.

(2) Establishes and maintains a certification program for real estate personnel.

(3) Identifies and appoints Certified Realty Specialists\(^{49}\) and issues certificates for competency in real property acquisition, leasing, management, and disposal.

(4) Identifies and appoints Real Estate Contracting Officers and issues warrants to execute actions to acquire, lease, manage, and dispose of real property in accordance with Departmental directives\(^{50}\).

q. **Certified Realty Specialist**.

(1) Reviews and approves federal and contractor real estate actions to acquire, manage, and dispose of interests in real estate prior to execution. Ensures that applicable real estate laws, regulations, and policies are observed in the decision-making process and resulting agreement or instruments.

(2) Negotiates, or manages the negotiations of, actions to acquire, manage or dispose of interests in real estate in support of Program Office decision to pursue any particular real estate action.

(3) Supports the coordination of real estate activities including, but not limited to: determining real property needs and planning for acquisition; acquiring real property assets and interests by lease or purchase; managing real property assets and interests; conducting utilization surveys; identifying


\(^{50}\) Department of Energy Order 541.1B, *Appointment of Contracting Officers and Contracting Officer Representatives*, April 21, 2004.
unneeded real property assets; screening of unneeded real property assets; and disposing of excess real property assets.

r. Senior Realty Officer.

(1) Provides review and approval of realty actions for those offices without a CRS, or when the action exceeds the authority of a CRS.

(2) Reviews and approves all leases, and occupancy agreements with GSA, with average annual rent of one million dollars or more.

(3) Executes delegated authority, as necessary, for acquisition, management, and disposal of real property.

s. Real Estate Contracting Officer. Executes, on behalf of the federal government and within the limits prescribed in his or her certificate of appointment, real estate agreements and instruments to acquire, manage, and dispose of real property assets.

6. INVOKED TECHNICAL STANDARDS. This Order does not invoke any DOE technical standards or industry standards as required methods. Any technical standard or industry standard mentioned in or referenced by this Order is not invoked by this Order. Note: DOE O 251.1D, Appendix J provides a definition for “invoked technical standard.”

7. REFERENCES. The following references are documented as information sources to support implementation of the Order.


c. Department of Energy Strategic Sustainability Performance Plan (current version). [fn. 3]


e. Executive Order 13717, Establishing a Federal Earthquake Risk Management Standard, February 5, 2016. [fn. 5]


j. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended. [fn. 10]


l. 18 U.S. Code § 435, *Contracts in Excess of Specific Appropriation.* [fn. 12]

m. 40 U.S. Code § 3111, *Approval of Sufficiency of Title Prior to Acquisition.* [fn. 13]

n. 41 U.S. Code § 6303, *Certain Contracts Limited to Appropriated Amounts.* [fn. 14]

o. Federal Acquisition Regulation, FAR Part 45, *Government Property.* [fn. 15]


w. 42 U.S. Code § 8253, Energy Management Requirements, paragraph (e), Metering of Energy Use. [fn. 23]


y. Office of Management and Budget, MPM 2015-01, Implementation of OMB Memorandum M-12-12 Section 3: Reduce the Footprint, March 25, 2015. [fn. 25]


aa. Office of Management and Budget, Circular A-11, Preparation, Submission and Execution of the Budget; Appendix A – Scorekeeping Guidelines and Appendix B – Budgetary Treatment of Lease-Purchases and Leases of Capital Assets. [fn. 27]

bb. Department of Energy Order 433.1B, Maintenance Management Program for DOE Nuclear Facilities. [fn. 28]


e. Federal Accounting Standards Advisory Board Standards 42, Deferred Maintenance and Repairs. [fn. 31]

ff. 2013 Federal Real Property Council, Guidance for Real Property Inventory Reporting, July 18, 2013. [fn. 32]


ll. DOE O 226.1, Implementation of Department of Energy Oversight Policy, current version. [fn. 38]

mm. DOE O 414.1, Quality Assurance, current version. [fn. 39]

nn. Office of Management and Budget, MPM 2015-01, Implementation of OMB Memorandum M-12-12 Section 3: Reduce the Footprint, paragraph II.2.a.i, Certification of FRPP Data, March 25, 2015. [fn. 40]


rr. Federal Acquisition Regulation, Part 42, Section 42.202, Assignment of Contract Administration. [fn. 44]

ss. Federal Acquisition Regulation, Part 45, Section 45.105, Contractors’ Property Management System Compliance. [fn. 45]


xx. Department of Energy Order 541.1B, Appointment of Contracting Officers and Contracting Officer Representatives, April 21, 2004. [fn. 50]

8. DEFINITIONS. Definitions are included in Attachment 1 to improve the understanding of real property asset management terminology. The definitions have been adopted or
adapted from federal requirements or industry standards where appropriate, otherwise definitions herein are established for Departmental use.

9. **CONTACT**, Questions regarding the implementation of this Order should be directed to the Office of Asset Management at 202-586-4539.

BY ORDER OF THE SECRETARY OF ENERGY:

![Signature]

DAN BROUILLETTE
Deputy Secretary
DEFINITIONS

1. **Active Real Property Assets.** A building, structure, or real property trailer with a FIMS status code of *Operating*, *Standby*, or *Outgranted*. A land parcel with a FIMS status code of *Active Land*.

2. **Acquisition.** The process of gaining ownership or control of real property or of an interest in real property.

3. **Alternatives Analysis.** An analysis of alternative approaches to addressing the performance objectives of an investment, performed prior to the initial decision to make an investment, and updated periodically as appropriate to capture changes in the context for an investment decision. [Office of Management and Budget, OMB A-11, *Preparation, Submission, and Execution of the Budget*, Part 7-Capital Planning Guide]

4. **Alternative Financing (AF).** A process whereby DOE and its operational elements obtain the use of privately-developed capital assets through a lease. Alternative financing may be used by the DOE itself, or by DOE Management and Operations (“M&O”) contractors with the prior approval of the DOE, to obtain the use of real property assets as appropriate. [DOE G 430.1-7, *Alternative Financing Guide*]

5. **Annual Utilization Survey.** Annual survey used to identify real property that is not utilized, is underutilized, or is not being put to optimal use and results in a determination of whether continuation of the current use or another use would better serve the public interest. [Federal Management Regulation 41 CFR Part 102-75.60]

6. **Asset.** Item, thing or entity that has potential or actual value to an organization. [International Organization for Standardization (ISO) 55000, *Asset management — Overview, principles and terminology*]

7. **Benchmarking.** The systematic process of measuring one’s performance against recognized leaders for the purpose of determining best practices that lead to superior performance when adapted and utilized. [Committee for Oversight and Assessment of U.S Department of Energy Project Management; Board on Infrastructure and the Constructed Environment; Division on Engineering and Physical Sciences; National Research Council, *Measuring Performance and Benchmarking Project Management at the Department of Energy*, 2005 from Construction Industry Institute, *Construction Industry Institute Data Report*, Austin, Texas, 1995)]

8. **Best Practice.** A method, procedure, process, or rule used to maintain quality as an alternative to mandatory legislated standards and can be based on self-assessment or benchmarking. The method or technique that has been generally accepted as superior to any alternatives because it produces results that are superior to those achieved by other means or because it has become a standard way of doing things, e.g., a standard way of complying with legal or ethical requirements.
9. Building. A constructed asset that is enclosed with walls and a roof that provides space to perform activities or store materials as well as provides space for people to live or work. [Federal Real Property Council, 2014 Guidance for Real Property Inventory Reporting]

10. Business Case Analysis (BCA). A structured methodology and document that aids decision making for obtaining best value for achieving operational requirements while balancing cost, schedule, performance, and risk by identifying and comparing alternatives including the mission and business impacts (both financial and non-financial), risks, and sensitivities. Business case analysis documents generally include: a justification for initiating a project or task; the specific performance measures that are affected by the investment and how those measures are affected the rationale for the investment; supporting analysis of alternative solutions; a recommendation; and, associated specific actions with an implementation plan to achieve stated organizational objectives and desired outcomes. [adapted from Department of Defense Produce Support Business Case Analysis Guidebook, April 2011; additional guidance can be found in Office of Management and Budget, OMB A-11, Preparation, Submission, and Execution of the Budget, Part 7-Appendicies (current version)]

11. Certified Realty Specialist (CRS). A DOE employee, in the realty specialist series, who is certified in one or more of the three specialty realty areas: acquisition, leasing, and land management and disposal. Employees so certified are authorized to prepare and implement real estate actions within certified specialty areas, and to provide the required review and approval prior to execution by a DOE official with a delegation of authority for real estate actions. Detailed guidance and procedures for becoming a CRS are found in the DOE Acquisition Certifications Program Handbook.

12. Commissioning. A systematic process (i) of ensuring, using appropriate verification and documentation, during the period beginning on the initial day of the design phase of the facility and ending not earlier than 1 year after the date of completion of construction of the facility, that all facility systems perform interactively in accordance with—“(I) the design documentation and intent of the facility; and “(II) the operational needs of the owner of the facility, including preparation of operation personnel; and “(ii) the primary goal of which is to ensure fully functional systems that can be properly operated and maintained during the useful life of the facility. [42 U.S. Code § 8253]

   a. Recommissioning. A process (i) of commissioning a facility or system beyond the project development and warranty phases of the facility or system; and “(ii) the primary goal of which is to ensure optimum performance of a facility, in accordance with design or current operating needs, over the useful life of the facility, while meeting building occupancy requirements.

   b. Retro commissioning. A process of commissioning a facility or system that was not commissioned at the time of construction of the facility or system.

13. Condition Assessment. The process of periodic physical inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action. It is a crucial
part of asset management to determine its current condition, remaining useful life and estimated cost to correct any deficiencies.

14. **Configuration Management.** A technical and management process for establishing and maintaining consistency of a product’s functional and physical attributes with its requirements, design and operational information throughout its life. [ANSI/EIA – 649-B, *Configuration Management Standard*]

15. **Construction.** A combination of engineering, procurement, fabrication, erection, installation, assembly, or demolition to create a new building, structure, or other real property asset; the addition, expansion, improvement, or replacement of an existing real property asset; or the relocation of a real property asset. Construction includes: installed equipment; related site preparation; excavation, filling and landscaping, or other land improvements; and design of the facility. [adapted from 48 CFR § 2.101; DOE Financial Management Handbook, Chapter 10; and DOE G 413.3-21, *Cost Estimating Guide*]

16. **Contracting Officer.** A person with authority to enter into, administer, and terminate contracts and make related determinations and findings; includes certain authorized representatives of the contracting officer acting within the limits of authority as delegated by the contracting officer. [DOE O 541.1, *Appointment of Contracting Officers and Contracting Officer Representatives*, current version].

17. **Contractor Requirements Document (CRD).** A document that defines the specific requirements associated with the functions, services or products provided by a contractor that will apply to contracts that include the CRD. Contractors are bound by applicable laws and regulations and the terms and conditions of their contracts and CRDs that are incorporated into contracts through the use of the clause at 48 CFR (DEAR) 970.5204-2, laws, regulations and DOE directives. [DOE O 251.1, *Department Directives Program*, current version]

18. **Core Capability.** The ability to conduct programmatic activities that would be degraded should the asset fail to perform as intended.

19. **Cost.** A monetary valuation of effort, material, resources, time and utilities consumed, risks incurred, and opportunity forgone in production and delivery of a good or service.

   a. **Direct Cost.** Any cost that is identified specifically with a particular final cost objective. Direct costs are not limited to items that are incorporated in the end product as material or labor. Costs identified specifically with a contract are direct costs of that contract. All costs identified specifically with other final cost objectives of the contractor are direct costs of those cost objectives. [Federal Acquisition Regulation 2.101]

   b. **Final Cost Objective.** A cost objective that has allocated to it both direct and indirect costs and, in the contractor’s accumulation system, is one of the final accumulation points. [Federal Acquisition Regulation 31.001]
c. **Indirect Cost.** Any cost not directly identified with a single final cost objective, but identified with two or more final cost objectives or with at least one intermediate cost objective. [Federal Acquisition Regulation 2.101]

d. **Indirect Cost Rate.** The percentage or dollar factor that expresses the ratio of indirect expense incurred in a given period to direct labor cost, manufacturing cost, or another appropriate base for the same period. [Federal Acquisition Regulation 2.101]

20. **Covered Facility/Facilities.** Facilities that constitute 75 percent of the Department’s facility energy use. [42 U.S. Code § 8253, *Energy Conservation and Production Act*]

21. **Customary Commercial Practice.** A method, procedure, process, or rule used in a particular field or profession routinely found in the marketplace for commercial products and serves. It is directly connected with the promotion, sale or supply of a product or service to or from a consumer whether before, during or after a commercial transaction in relation to a product.

22. **Decommissioning.** The final process of closing and securing a nuclear, radiologically contaminated, or radioactive material storage facility consistent with the established end state that provides adequate protection from radiation exposure and to isolate radioactive contamination from the human environment.

23. **Deficiency.** The difference between an asset’s current physical condition and its most recently configured capacity, efficiency, or capability. [adapted from APPA, *Operational Guidelines for Educational Facilities-Maintenance*]

24. **Deferred Maintenance and Repair (DM).** Maintenance and repairs that were not performed when they should have been or were scheduled to be and which are put off or delayed for a future period. [Federal Accounting Standards Advisory Board, Statement of Federal Financial Accounting Standards 42, Deferred Maintenance and Repairs] Record in FIMS only the DM cost estimates associated with real property assets.

25. **Deferred Maintenance and Repair (DM) Reduction.** A program funded separately from maintenance and repair, renovation or new construction that results from grouping DM activities, and sometimes other needs, into projects. The purpose of the program is to control a massive backlog of maintenance work. [adapted from APPA, *Capital Renewal and Deferred Maintenance Programs*, 2009]

26. **Demolition.** Destruction and removal of physical facilities or systems. [DOE O 413.3, *Program and Project Management for the Acquisition of Capital Assets*, current version]

27. **Direct Funded.** Funds allotted to a single program in support of a specific objective. [DOE Financial Management Handbook, Chapter 10]

28. **Disposal.** Permanent transfer of DOE control and custody of real property assets to a third party who thereby acquires rights to control, use, or relinquish the property.
29. **Disposition.** Those activities that follow completion of program missions, including but not limited to: stabilization and deactivation; surveillance and maintenance; and decommissioning.

30. **DOE Elements.** Headquarters elements or first-tier organizations as listed in the *Correspondence Style Guide*, Office of the Executive Secretariat. [DOE O 251.1, *Department Directives Program*, current version]

31. **Excess Contaminated Facilities Working Group (ECFWG).** A group chartered through the National Laboratory Operations Board to provide a venue for discussing and resolving enterprise-wide crosscutting issues relating to the stabilization/deactivation and decommissioning of excess facilities. The group guides and improves the Department’s approach to disposition prioritization and planning, shares and leverages best practices, improves and integrates data collection and reporting through FIMS, and is responsible for the bi-annual report to Congress on excess facilities.

32. **Excess Real Property.** Real property assets no longer required to support the Department’s needs, present or future missions or functions, or the discharge of its responsibilities. An asset may remain in the Department’s custody and control with residual or incidental use pending final disposition between the time of an excess determination and the removal of the asset from the Department’s real property inventory. Excess real property carries a designation of “Yes” in the FIMS *Excess Indicator* field.

33. **Facility/Facilities.** The land, buildings, trailers, their installed equipment, and other fixed systems and equipment installed therein, other structures and facilities, and other improvements.

34. **Facilities and Infrastructure Steering Committee (FISC).** A committee chartered by the Senior Real Property Officer to staff and assist in the development and implementation of DOE real property asset management strategic goals and initiatives. The group shares industry leading practices, voluntary consensus standards, and customary commercial practices for adoption by programs as appropriate.

35. **Facilities Management & Operations.** Activities associated with operating real property and providing facility related services. Examples of activities include: facilities operations management; facility alteration; engineering and analysis; sustainment related assessments and surveys; facilities planning; janitorial services; pest control; recycling and refuse collection and disposal; roads and grounds management; snow removal; and other similar services incurred to use a facility.

36. **Federal Real Property.** Any real property owned, leased, or otherwise managed by the Federal Government, both within and outside the United States, and improvements on Federal lands. [Executive Order 13327, *Federal Real Property Asset Management*]

37. **Five-Year Real Property Planning and Budgeting Documentation.** Planning and budgeting documentation that identifies the program’s annual and strategic mission
requirements and priorities, and links these to real property asset investments. Real property asset investments must be consistent with program missions, budgets, and planning estimates. Planning documentation identifies cost efficiencies, excess real property assets for disposition, consolidations where practicable, and addresses mission requirements through an appropriate mix of renovation, new construction, and disposal of excess real property. This documentation can constitute multi-year planning for real property.

38. **Five-Year Rolling Timeline (FYRT).** Defines actions the Department will take over the next five years to implement the Department of Energy Asset Management Plan real property goals and objectives and government-wide initiatives. It is updated yearly, adding the next year’s actions. The Department of Energy’s FYRT is designed as a ‘living-document’ and establishes specific real property management improvement activities, targets, milestones, or benchmarks aligned with the performance areas defined by DOE O 430.1, *Real Property Asset Management*, current version.

39. **Functional Assessment.** An objective review to determine the difference between an asset’s current physical condition and its capability to meet mission requirements to serve a designated function or use. Functional assessments result in designations such as adequate, substandard, and inadequate and are used to identify an asset’s functionality.

40. **General Purpose Infrastructure.** Active, real property assets providing functions, services or utilities essential to enable or support the Department’s mission at a Site. These assets are not exclusively dedicated to specific or explicit Program requirements or core capabilities; rather, these assets support multiple mission needs. It does not include: Mission Unique Facilities; User Facilities; or Programmatic Real Property.

41. **Industry Leading Practice (ILP).** Generally accepted processes, including best practices, that have been proven throughout related businesses, to be managerially and economically effective, efficient, and successful at meeting particular objectives of a contractor’s management system, and where specified, in compliance with the required Government Outcomes. The ILP should be based on empirical research, evidence and literature pertaining to that business practice, product or system as a “leading” practice. In order for a process to become an ILP, it should be widely used. Generally, there should be supporting historical data from an accepted source, e.g., trade publications, literature, etc. [Unpublished version of DoD 4161.2-M, this definition was developed by a team of DoD and NASA Employees as part of the efforts to rewrite the DoD Property Manual]

42. **Industry Standard.** A set of criteria within an industry relating to the standard functioning and carrying out of operations in their respective fields of production. In other words, it is the generally accepted requirements followed by the members of an industry. It provides an orderly and systematic formulation, adoption, or application of standards used in a particular industry or sector of the economy. Industry standards vary from one industry to another. Industry standards facilitate global as well as domestic competitiveness. It is a crucial tool for developing and meeting industry goals. For example, in the automotive industry, tire sizes and durability must fall within a standardized range. Standardization
serves as a quality check for any industry. [http://definitions.uslegal.com/i/industrial-standards]

43. Inadequacy. The difference between an asset’s current physical condition and its capability to meet mission requirements based on an analysis of current and future needs by subject matter experts (SMEs) familiar with the asset and its subsystems. Analysis may consider issues such as environment, safety, and health and/or risk, capability to perform current mission, ability to attract and maintain key staff, and the ability to meet DOE requirements. Where applicable, as for utility systems, reliability and capacity required to perform current mission should also be considered.

44. Indirect Funded. Funds derived from overhead type charges. [DOE Financial Management Handbook, Chapter 10]

45. Infrastructure. All real property that enables or supports activities or the Department’s mission at a site.

46. Infrastructure Executive Committee (IEC). A group chartered through the National Laboratory Operations Board responsible for analyzing the status of the Department’s general purpose infrastructure, formulating recommendations, preparing annual enterprise-wide investment recommendations to Departmental leadership concurrently with the IFI budget formulation. The IEC is co-chaired by the Senior Real Property Officer and a senior-level program official.

47. Installed Equipment. The mechanical and electrical systems that are installed as part of basic building construction and are essential to the normal functioning of the real property asset and its intended use. Examples are heating, ventilating, and air conditioning systems; elevators; manufacturing and processing systems; and communications systems. Installed equipment is considered part of the real property asset.

48. Integrated Facilities and Infrastructure (IFI) Crosscut Budget. A crosscut budget exhibit developed to ensure sustained improvement in real property management. It constitutes the resources required to implement acquisition, sustainment, and disposition requirements leveraging annual and five-year real property planning documentation. This crosscut budget identifies real property construction, renovation, maintenance and repair, and demolition projects by program and site. The IFI crosscut budget reflects anticipated direct costs as well as estimates of indirect costs. The IFI crosscut budget is developed in conjunction with the Department’s budgeting process. Chartered bodies such as the IEC and ECFWG use the IFI crosscut budget formulation process to make recommendations to Departmental leadership.

49. Institutional Controls. Non-engineering measures intended to affect human activities in such a way as to prevent or reduce exposure to hazardous substances. Institutional controls are almost always used in conjunction with, or as a supplement to, other measures such as waste treatment or containment. There are four categories of institutional controls: governmental controls; proprietary controls; enforcement and permit tools with institutional controls components; and information devices. For this
Order, institutional controls are those governmental controls such as deed notifications, easements, use restrictions, leases and other property interests that are inventoried as records and notes in records in the Facilities Information Management System.

50. **Level of Service.** Parameters, or combination of parameters, which reflect social, political, environmental and economic outcomes that the organization delivers. Parameters may include: include safety, customer satisfaction, quality, quantity, capacity, reliability responsiveness, environmental acceptability, cost and availability. [International Organization for Standardization (ISO) 55000, *Asset management — Overview, principles and terminology*]

51. **Life-Cycle.** The life of an asset from planning and budgeting through acquisition, sustainment and disposition.

52. **Life-Cycle Cost.** The overall estimated cost for a particular program alternative over the time period corresponding to the life of the program, including direct and indirect initial costs plus any periodic or continuing costs of operation and maintenance. [OMB Circular A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*]

53. **Long-Term Stewardship (LTS).** The physical controls, institutional controls, and other mechanisms needed to ensure protection of people and the environment at sites where DOE has completed or plans to complete cleanup (e.g., landfill closures, remedial actions, removal actions, and facility stabilization). This concept includes land-use controls, monitoring, maintenance, and information management.

54. **Maintenance.** Work required to preserve property in a condition suitable for its designated purpose including inspection, adjustment, lubrication, cleaning, and selective part replacement of components. It includes preventive and predictive maintenance. [adapted from 41 CFR 102-71.20]

a. **Predictive Maintenance (PrM).** Those activities involving continuous or periodic monitoring and diagnosis to forecast component degradation or anticipate failure so that “as needed” maintenance can be scheduled.

b. **Preventive Maintenance (PM).** Those periodic and planned actions taken to maintain a piece of equipment within design operating conditions, maintain its service life, and performed before or to prevent equipment failure.

c. Maintenance work and costs do not include the following.

   (1) Regularly scheduled janitorial work such as cleaning, and preserving facilities and equipment.

   (2) Work performed in relocating or installing partitions, office furniture, and other associated activities.

   (3) Work usually associated with the removal, moving, and placement of equipment.
(4) Work aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from or significantly greater than those originally intended.

(5) Improvement work performed directly by in-house workers or in support of construction contractors accomplishing an improvement.

(6) Work performed on special projects not directly in support of maintenance or construction.

(7) Non-maintenance roads and grounds work such as grass cutting and street sweeping.

55. **Management.** The safeguarding of the Government's interest in property, in an efficient and economical manner consistent with the best business practices. [41 CFR 102-71.20]

56. **Mission Dependency.** The value of an asset’s specific contribution to the performance of mission.

57. **Mission Unique Facility.** One-of-a-kind, physically unique, large-scale, technically complex, long-lived operations that are critical resources to the mission of the DOE and to the nation. These facilities are essential to the development of the innovative, breakthrough technologies required for DOE to deliver on its core mission. They each were specifically designed, constructed, and are being operated to provide mission-essential, unique capabilities and are not reconfigurable for alternate use. Examples of mission unique facilities include: Accelerators (Particle and Light Sources), High Performance Computing Facilities, Fission Reactors, Fusion Research Devices, High Performance Lasers, Other Large, Unique Production and Waste Processing Facilities.

58. **Modernization.** Activities that keep existing facilities relevant and updated in an environment of changing standards and missions. This includes activities that improve quality, increase capacity, extend an asset’s useful life, or enhance an asset’s value.

59. **Obsolete.** Property no longer needed due to changes in technology, laws, customs, or operations. [adapted from Statement of Federal Financial Accounting Standards 3: Accounting for Inventory and Related Property]

60. **Operation.** An ongoing endeavor or activity that uses strategic assets for a defined function or purpose. Operations (or operating) activities are ongoing and repetitive.

61. **Optimum Period.** That time in the life-cycle of an asset when maintenance actions should be accomplished to preserve and maximize the useful life of the asset. The determination is based on engineering/maintenance analysis and is independent of funding availability or other resource implications.

62. **Other Structure and Facilities (OSF).** Real property asset that is not classifiable as a building, real property trailer, or land. Including but not limited to: site utility systems used to generate, provide, or distribute services such as heat, electricity, sewage, gas, and
water; roads, walks, parking areas, and bridges; dams, retaining walls, wells and monitoring equipment; flood and storm water control systems; towers; tanks; fences; outside lighting; and, communication systems.

63. **Performance Measures.** A quantitative or qualitative characterization of performance toward an objective.

64. **Program.** A collection of organizational resources, with independent line management and specific budget authorization and appropriations, aimed at accomplishing a set of goals.

65. **Program Office.** A Headquarters organization responsible for executing program management functions, and for assisting and supporting Field Office and Sites in environment, safety and health, administrative, management, and technical areas.

66. **Programmatic Real Property.** Refers to reactors, accelerators, and similar devices used by programmatic personnel and listed in the Facilities Information Management System as “Other Structures and Facilities” under the 3000 series usage codes, such as 3009, 3209, 3221, 3251 and 3261.

67. **Programmatic Requirements.** Facilities-specific needs that are established to meet the mission of the facility or organization, inclusive of evolving technological, programmatic or regulatory demands.

68. **Program Secretarial Officer (PSO).** The head of a Program office which has responsibility for specific facilities, e.g., Environmental Management, Nuclear Energy, Science, Energy Efficiency and Renewable Energy, or Fossil Energy.

69. **Property Administrator.** An authorized representative of the contracting officer appointed in accordance with agency procedures, responsible for administering the contract requirements and obligations relating to Government property in the possession of a contractor. [FAR Part 45, Section 45.101, Definitions - Government Property]

70. **Real Estate.** Land plus any natural or artificial (man-made) improvements that are attached or have been added.

71. **Real Estate Actions.** Activities related to acquisition, management, and disposal of real property interests. Acquisition of real property interest includes, but is not limited to: fee title; public domain land withdrawals; in-grants of easements, permits, licenses, and leases. Management of real property interests includes, but is not limited to: out-grants of easements, permits, licenses, and leases; resolution of encroachments, boundary disputes, and disputes regarding the nature and extent of real property interests. Disposal of real property interests includes, but is not limited to: disposal of fee title; release or termination of in-grant easements; and establishment of institutional controls by restrictive deed covenant or easement.
72. **Real Estate Contracting Officer (RECO).** A Certified Realty Specialist who has been issued a contracting officer warrant to execute real estate actions, within prescribed limits.

73. **Real Property.**

   a. Any interest in land, together with the improvements, structures, and fixtures located thereon (including prefabricated movable structures, such as Butler-type storage warehouses and Quonset huts, and house trailers with or without undercarriages), and appurtenances thereto, under the control of any Federal agency, except—

      (1) The public domain;

      (2) Lands reserved or dedicated for national forest or national park purposes;

      (3) Minerals in lands or portions of lands withdrawn or reserved from the public domain that the Secretary of the Interior determines are suitable for disposition under the public land mining and mineral leasing laws;

      (4) Lands withdrawn or reserved from the public domain but not including lands or portions of lands so withdrawn or reserved that the Secretary of the Interior, with the concurrence of the Administrator of General Services, determines are not suitable for return to the public domain for disposition under the general public land laws because such lands are substantially changed in character by improvements or otherwise; and

      (5) Crops when designated by such agency for disposition by severance and removal from the land.

   b. Improvements of any kind, structures, and fixtures under the control of any Federal agency when designated by such agency for disposition without the underlying land (including such as may be located on the public domain, on lands withdrawn or reserved from the public domain, on lands reserved or dedicated for national forest or national park purposes, or on lands that are not owned by the United States) excluding, however, prefabricated movable structures, such as Butler-type storage warehouses and Quonset huts, and house trailers (with or without undercarriages).

   c. Standing timber and embedded gravel, sand, or stone under the control of any Federal agency, whether designated by such agency for disposition with the land or by severance and removal from the land, excluding timber felled, and gravel, sand, or stone excavated by or for the Government prior to disposition. [41 CFR 102-71.20]

74. **Real Property Asset.** Distinct parcel, building, real property trailer, other structure or facility, or interest acquired by or operated for the benefit of the Department of Energy.
75. **Real Property Trailer.** A trailer affixed to the ground or permanently connected to a utility service.

76. **Renovation.** Activities needed to keep existing facilities in an acceptable condition, functional, and sustainable in support of current missions. This includes restoring or replacing existing building systems (e.g. roofs, HVAC, electrical distribution, building controls, windows, etc.). It does not include activities to increase facility quality or capacity or to accommodate a change in the use of the facility or to accommodate regulatory or other requirement changes. It does not include activities with the primary purpose of extending an asset’s useful life or improving energy efficiency. It does not include new facility acquisition. It does not include demolishing old facilities unless the demolition is an essential part of a renovation activity.

77. **Repair.** The restoration of failed or malfunctioning equipment, system, or facility to its intended function or design condition. It may include replacement of parts, components, or assemblies. Repair does not include activities directed towards expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, its current use. [adapted from Statement of Federal Financial Accounting Standards 40: Definitional Changes Related to Deferred Maintenance and Repairs: Amending Statement of Federal Financial Accounting Standards 6, Accounting for Property, Plant and Equipment]

78. **Repair Needs (RN).** The estimated cost to restore a real property asset’s component system failures noted during a condition assessment survey to a state substantially equivalent to the most recently configured capacity, efficiency, or capability. The “needs” originate from the real property asset, not necessarily management. Repair needs will always equal or exceed DM; the difference between the two depends on each noted deficiency’s optimum period and acceptability to management. [adapted from Federal Real Property Council, 2013 Guidance for Real Property Inventory Reporting]

79. **Replacement Plant Value (RPV).** Cost to replace the existing structure with a new structure of comparable size using current technology, codes, standards, and materials.

80. **Service Life.** The normal operating life (stated in years) in terms of utility to the owner. [Statement of Federal Financial Accounting Standards 6: Accounting for Property, Plant, and Equipment (adapted from Kohler’s Dictionary for Accountants)] The Service Life is used in computing depreciation on an asset. The DOE Financial Management Handbook contains a table of DOE standard service lives for various types of property.

81. **Site.** A geographic area owned or leased by or for the Federal Government for the performance of DOE program activities. The term includes any buildings, trailers, infrastructure, land, or other improvements.

82. **Site and/or Field Office Manager.** Individual responsible for planning, programming, budgeting, and evaluation of activities in support of Secretarial office programs located on sites under his/her cognizance.
82. **Stabilization/Deactivation.** An interim process where the facility is placed in a stable known condition including removal of hazardous and radioactive material to ensure adequate protection of workers, public and environment, thereby limiting the long term surveillance, stabilization, and maintenance costs, while awaiting ultimate decommissioning.

83. **Standard.** A document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose. [International Organization for Standardization (ISO)] A Standard or Technical Standard includes all of the following:

   a. common and repeated use of rules, conditions, guidelines or characteristics for products or related processes and production methods, and related management systems practices;

   b. the definition of terms; classification of components; delineation of procedures; specification of dimensions, materials, performance, designs, or operations; measurement of quality and quantity in describing materials, processes, products, systems, services, or practices; test methods and sampling procedures; formats for information and communication exchange; or descriptions of fit and measurements of size or strength; and

   c. terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process, or production method. [Public Law 104-113, *National Technology Transfer and Advancement Act of 1995*]

84. **Surveillance and Maintenance (S&M).** Activities conducted during a period of asset dormancy when the facility is inactive. These activities maintain the facility safety envelope and may include periodic inspection and maintenance of structures, systems, and equipment to ensure that, at a minimum, any contamination is adequately contained and that the potential hazards to workers, the public, and the environment are eliminated or mitigated and controlled.

85. **Sustainment.** Maintenance, repair, or renovation activities necessary to keep a real property asset in good working order over its useful life.

86. **Transfer.** Turning a real property asset or site over to another office within the Department for reuse or to support the transition from one disposition phase to another.

87. **Useful Life.** The length of time (stated in years) an asset will be functioning. The useful life of an asset begins at the beneficial occupancy date or project completion equivalent milestone (such as construction completion or transition to operations) and ends when the asset is no longer in the Department’s real property asset database.

88. **Utilities.** Systems used to generate or distribute any services such as heat, electricity, sewage, gas, and water.
89. **Utilization Assessment.** Commonly referred to as *utilization*, is an objective review to determine the portion of a real property asset in use. It is independent of the status of an asset or space assignment. It is a measure of how an asset or facility is being used in relation to its capacity. Designations levels such as over-utilized, fully-utilized, under-utilized, and not-utilized are used to identify an asset’s utilization.

   a. *Unutilized* property means an entire property or portion thereof, with or without improvements, not occupied for current program purposes for the accountable executive agency or occupied in caretaker status only. (41 CFR § 102-75.1160; accord 45 CFR § 12a.1; 24 CFR § 581.1.)

   b. *Underutilized* means an entire property or portion thereof, with or without improvements, which is used only at irregular periods or intermittently by the accountable landholding agency for current program purposes of that agency, or which is used for current program purposes that can be satisfied with only a portion of the property. (41 CFR § 102-75.1160; accord 45 CFR § 12a.1; 24 CFR § 581.1.)

   c. *Utilized* means anything that is not defined as “unutilized” or “underutilized.”


90. **Validation.** The process of establishing evidence that provides a high degree of assurance that a product, service, or system accomplishes its intended requirements.

91. **Verification.** The process of evaluating that a product, service, or system (or portion thereof, or set thereof) meets a set of design specifications.

92. **Voluntary Consensus Standard.** A type of standard developed or adopted by voluntary consensus standards bodies, through the use of a voluntary consensus standards development. [OMB A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, January 27, 2016]

93. **Work Breakdown Structure (WBS).** A hierarchically-structured cost estimating framework or format that organizes and classifies the extent of a real property asset. Each descending level represents an increasingly detailed definition of the asset. [adapted from NISTIR 6389, UNIFORMAT II Elemental Classification for Building Specifications, Cost Estimating, and Cost Analysis] A real property asset may contain:

   a. *Component.* A single item or small piece of equipment that performs a distinctive and necessary function in the operation of an assembly. Components are usually removable in one piece and are considered indivisible for a particular purpose or use.
b. **Assembly.** A grouping of individual work items, components, or subassemblies, with appropriate quantities, to provide a basis for cost estimating.

c. **System.** A collection of assemblies that performs a given function regardless of the design specification, construction method, or materials used. Examples are: mechanical, electrical, plumbing, and fire protection systems.
ACRONYMS

AAIM    Anticipated Asset Information Module
AFDCS   Active Facilities Data Collection System
CAIS    Condition Assessment Information System
CFR     Code of Federal Regulations
CMMS    Computerized Maintenance Management System
CRD     Contractor Requirements Document
CRS     Certified Realty Specialist
DED     Data Element Dictionary
DM      Deferred Maintenance and Repair
DOE     Department of Energy
ECFWG   Excess Contaminated Facilities Working Group
FIMS    Facilities Information Management System
FISC    Facilities and Infrastructure Steering Committee
FRPP    Federal Real Property Profile
FYRT    Five-Year Rolling Timeline
GSA     General Services Administration
HCA     Head of Contracting Activity
IEC     Infrastructure Executive Committee
IFI     Integrated Facilities and Infrastructure Budget Crosscut
LTS     Long-Term Stewardship
M&O     Management and Operations
NNSA    National Nuclear Security Administration
OMB     Office of Management and Budget
OSF     Others Structures and Facilities
PILT    Payments in Lieu of Taxes
PMA     Power Marketing Administration
PSO     Program Secretarial Officer
RECO    Real Estate Contracting Officer
RN      Repair Needs
RPV     Replacement Plant Value
SRPO    Senior Real Property Officer